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# Team Performance and Project Success

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**PROGRAM: PROJECT MANAGEMENT**

**MASTER THESIS**

**TEAM PERFORMANCE AND PROJECT SUCCESS**

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## **ABSTRACT**

Project Teamwork is a worthy objective aimed at accomplishing high level cooperation, productivity and success but often times this is not so. The level of performance applied towards a project work has a direct impact on the project success or failure.

Teams are the basic structure of how project activities and tasks are being organized and managed within companies and organizations. Therefore, the success or the failure of a project depends largely on the overall performance of the teams assigned to the project. This increased attention towards teams has forced many organizations to focus on improving the overall performance of the global nature of businesses and projects.

The question then is - How do we get a team to play well together at maximum effectiveness that would deliver success, given a wide range of factors which tends to affect individual team members; factors like –

- Individual differences resulting from cultural values, beliefs, norms and work practices.
- Organizational culture
- Leadership style
- Emotional Intelligence.

This study has two main objectives - first is to examine the vast literature on Team Performance with the view to uncover the factors that enable optimal team performance. And second. is to use a survey tool to determine which of these factors are more responsive in driving higher frequency of team performance that produces repetitive project success.

Keywords: Teams, Team Performance, Team Cohesiveness, Project Success, Productive Collaboration, Accountability and Trust

## **INTRODUCTION**

A successful project execution is the key business objective of many organizations. Performance is a useful term to describe the capability of a team and the processes that the team undertake. From the research of Henderson and Walkinshaw (2002), it is evident that effectiveness, pertains specifically to the accomplishment of the goals, milestones, and objectives as defined by the requirements of the context or the stakeholders. By contrast, performance pertains more closely to how well the task work and teamwork is carried out.

Well-trained and efficient project team guarantees an accurate and on-time completion of projects handed down to them. This allows the organization to take on more projects, generate more revenue without having to add more staff. Research has identified that people management drives project success more than technical issues does (Scott-Young and Samson 2004), Despite these findings, project failures have often been traced back to team performance, so the question is, 'What is team performance? How can it be measured? And how does team performance impact on project success?

According to Verma (1997), operating in the 21<sup>st</sup> century, project managers face the challenges of operating in a project environment characterized by high levels of uncertainty, cross-cultural teams, and global competition. Project teams are often made up of members from diverse corporate functions and these teams seek to integrate their diverse expertise in order to achieve the given project goals. Therefore, a clear understanding of human aspect in project management and its effective use are required to inspire project stakeholders to work together to meet and beat project objectives

Team performance can be said to be the other ingredients in a team apart from individual skills that people bring to the work. And these ingredients include

- Competence
- A precise and common goal
- Supportive structure
- Commitment/Accountability and
- Selfless contributions and mutual benefit.

Team performance measurement criteria can be based on the use of quantitative measures that provide information on the critical aspects of the team's activity. Measuring intangibles and non-financial performance measures can pose a great challenge, however, measuring it is very critical for a successful project. More than 40 years ago, McGrath (1964) advanced an input-process-outcome (IPO) framework for studying team effectiveness. These include individual team member characteristics (e.g., competencies, personalities), team-level factors (e.g., task structure, external leader influences), and organizational and contextual factors (e.g., organizational design features, environmental complexity). These various antecedents combine to drive team processes, which describe members' interactions directed toward task accomplishment

However, this research study will be focused on the quality of interactions within teams which determines the success of their collective output. The impact of team performance on project success – High team performance is considered vital to the success of project development; it is therefore important to understand which characteristics of interaction within a project team significantly influences performance. To address these issues, Hoegl and Gemuenden (2001) studied the influence of six teamwork quality (TWQ) factors – viz. communication, coordination,

balance of member contribution, mutual support, effort, and cohesion – on the success of innovative projects.

This research study will be the key factor that promotes collaboration and cohesion in teams to produce the quality construct that would deliver successful projects.

The author coming from the background of people oriented work base seeks to establish and identify ways of enhancing team performance that would always guarantee project success.

## **PROBLEM STATEMENT & JUSTIFICATION**

The purpose of this study is to identify the team performance in both traditional and agile project teams that promotes successful project implementation from start to finish. We shall be looking at teamwork as it relates to the quality of interaction among team members, their group behavior and effectiveness

Team performance is obviously important in project success. When groups work in teams, they provide major advantages and benefits like the diversity of knowledge, ideas, skills and tools and the amity among members of the team. The study by Faraj and Sproull (2000), showed a strong relationship between management of expertise and team performance. Often, teams do not work because of various reasons ranging from poor communication to unclear goals, lack of/ too much of managerial involvement, organizational culture, individual cultural differences and personal ego.

This research is posed to identify how these factors can be built up to become a driving force to creating a cohesive effective team that would serve as a strong pillar to a project endeavor bearing in mind that the success of any project largely depends on the effectiveness of the project team.

A lot of research papers have been written on team performance as it relates to project success and questions asked on how performance could be measured relative to quality of collaboration and cohesion within and between teams In view of the various factors that impact team performance which include communication within the team, teaming skills, trust and goodwill, task skills, organizational culture etc., the question now is, 'which of these factors exerts the most influence on team performance and a subsequent project success delivery?'. This research

therefore seeks to contribute to answering these questions, evaluating the attributes and characteristics of team performance, its measurement criteria and outcome in projects practices, processes and delivery.

## **TEAM PERFORMANCE AND PROJECT SUCCESS: A LITERATURE REVIEW**

### **Introduction**

Team performance refers to the evaluation of the results of teamwork. Such results as ability of the team to meet project goals and objectives, product creation quality, operations performance, ability of the team to function as a unit.

According to Patrick Lencioni, “Not finance. Not strategy. Not technology. It is teamwork that remains the ultimate competitive advantage, both because it is so powerful and so rare”. Given the importance of Team work to delivering successful projects, a better understanding of how teams function effectively will be valuable to educating and developing team performance. Increasingly, project management and processes require the use of highly coordinated and cohesive team that function with unity of purpose to take the project successfully from start to finish.

The Leadership Quarterly(June,2003), established that in reviewing the literature on project success and teams, we found it to have ignored the quality of performance of a project team that drives the success factor. Leaders who develop a huge quality leader-member exchange relationship with the project members are associated with project success

This review looks to explore the metrics of team performance and its relationship to project success. The metrics would more likely be based on well directed performance and outcomes as well as developed guidance in professional and social interactions among team members.

The factors influencing the success of projects are identified and presented in the following areas:

(1) applied methods, (2) people in projects, (3) and organizational context (Spalek, S. 2014)

And this shall be considered from the perspectives of all the important influences on team performance and its impact on project success. Specifically, the existing team literature is inadequate with respect to understanding the metrics that affect teams both traditional and agile teams and its actual impact on project processes and success. Team performance is subjective and can be interpreted based on the premise of application. Moreover, as teams of the future are also likely to be increasingly complex, more understanding of how traditional and agile teams in their heterogeneous nature will function in distributed, joint, and interagency environments will be critical.

Many articles have been written on teams with divergent opinions on what an effective team should and should not be. Hoel and Gemuenden (2001) described team quality as it relates to interactions that promotes performance. He described team performance as the extent to which a team is able to meet established quality, cost and time objectives. And to be able to achieve this the article examined two important factors:

- Flow of Communication within the Team – Past researches have shown the great impact of communication on team performance. For example, the research by Katz and Allen (1988) which involved 50 R&D Teams ‘demonstrates a strong positive impact of within team communication on project success’

- Coordination – promoting cohesion among team members through coordinating effective cross-functional contributions and groupthink

Further to this, many works of literature have proposed models of team performance. Some of these models highlight structure, interpersonal dynamics, talent and motivation of individual team members.

Michael Lombardo and Robert Elchinger(1995) developed the T7 Model of Team Effectiveness to represent the key facets that influence performance of work teams. And these key facets are:

- Thrust – the team goals/objectives
- Trust – in each other as teammates
- Talent – the collective skills of the team members to get the job done
- Teaming Skills – operating effectively and efficiently as a team
- Task Skills – getting the job done successfully
- Team-Leader Fit – the degree to which the team leader satisfies the needs of the team members
- Team Support from the Organization – the extent to which the leadership of the organization enables the team to perform (Driving Team Effectiveness by Kenneth P. De Meuse)

Another important factor that have frequently been linked to team performance is - cohesiveness among team members. Cohesiveness has been the central feature in studies related to teams and team dynamics and it has been found to be one of the critical influencing factors over work performance (Dyaram and Kamalanabhan-2005) Team cohesion has proved to play important role in predicting team performance and there is agreement that there is a

positive relationship between team cohesion and team performance (Michalism Karan & Tahagpong - 2007)

Patrick Lencioni conducted a study on the possible limiting factors that inhibit a team's effectiveness and efficiency and came up with the 'Lencioni Model – Understanding Team Dysfunction', under which identified 5 dysfunctions that threatens the optimal team performance:

1. Absence of Trust – an outcome of team members' reluctance at being vulnerable and not accepting their mistakes and shortfalls.
2. Fear of Conflict – Healthy and constructive conflict is a component of high performing team. And that is because conflicts in teams usually arise from varying viewpoints of the different individuals that make up a team. So a team that is not open to air their opinions will be have ineffective decisions that would negatively impact their performance.
3. Lack of Commitment – lack of clarity or buy-in prevents team members from making decisions they will stick to.
4. Avoidance of Accountability – this can be said to be avoidance of shared responsibility where team members are more individual-centric.
5. Inattention to Results – whereby the team have lost sight of their collective goal, performance dwindles

Effective work teams operate in ways that build shared commitment, collective skills, and coordination strategies. They work towards resolving their internal challenges and at noticing and exploiting emerging opportunities. And periodically, they review how they have been operating, sharing their experiences for whatever lessons learned.

This review has highlighted the various considerations of team performance (effectiveness and efficiency) and how this relates to project success. And the various mix of structural factors (contextual, organizational and personnel) and process factors (task-related and team-related) that develop in interaction with the dynamics of project processes and management. The concentration of opinions being more around the professional team development.

This research however, looks to explore more development process of creating a high performing team that will effectively drive project success through building productive collaborative and cohesive team relationship that promotes healthy competition and trust and goodwill among team members and creates a work atmosphere that engenders more creativity as people tend to be more innovative when they feel supported and the team/work culture is fun.

## **PROPOSED SOLUTION APPROACH**

A summary of the literature reviews on Team Performance and Project Success:

<b><i>Source</i></b>	<b>Major Contributions</b>
<i>Patrick Lencioni 2002</i>	Examined the 5 dysfunctions of a team- trust, conflict, commitment, accountability and results – impacts on team performance
<i>Michael Lombardo and Robert Elchinger 1995</i>	Developed the T7 Model of Team Effectiveness as what drives Team Performance and they are: Thrust, Trust, Talent, Teaming Skills, Tasks Skills, Team Leader Fit, and Task Support.

<i>Hoel and Germuenden 2001</i>	Described Team Performance in relation to effective interaction through 'Flow of Communication and Coordination'
<i>Spalek. S 2014</i>	Identified the following factors as having great impact on project success – applied methods, people in project and organizational context.
<i>Dyaram &amp; Kamalanabhan – 2005</i>	Described cohesion as a central feature in team dynamics and performance

Based on the literature reviews, many researchers have analyzed various general factors that impact on team performance and this have made a comprehensive evaluation of success/failure of projects based on overall team performance somewhat vague and difficult. But in this research paper, we are looking to identify the fundamental critical factor/factors in teams that drive all other behaviors and processes that ultimately build up an effective and efficient performance that promotes project success.

Now, most Team Performance research methodology has relied extensively on subjective evaluation rather than objective evaluation. While the former allows for interpretation of team's performance, usually ranging from poor to excellent in each criterion, the later typically defies interpretation but rather has a numerical score attached to it

This study intends to use a mix of both subjective and objective metrics to evaluate and identify the most important factor that drives a more comprehensive and effective team performance

Subjective Measurement – This evaluation would focus on the intangible team quality that gives credence to their performance and this is Team behavior centered on Patrick Lencioni’s ‘Five Behaviors of a Cohesive Team: trust, conflict, commitment, accountability and results.

Objective Measurement – would evaluate some specific action in meeting project productivity totals and these include

- Quality/successful project delivery
- Quantity of projects successfully delivered per time
- Frequency of communication
- Compliance with company procedures.

The subjective measurement is focused on the team process measures which would most likely give interactions within the team that leads to collaboration and cohesion. While the objective measurement would present outcome, measures resulting from the team process measures.

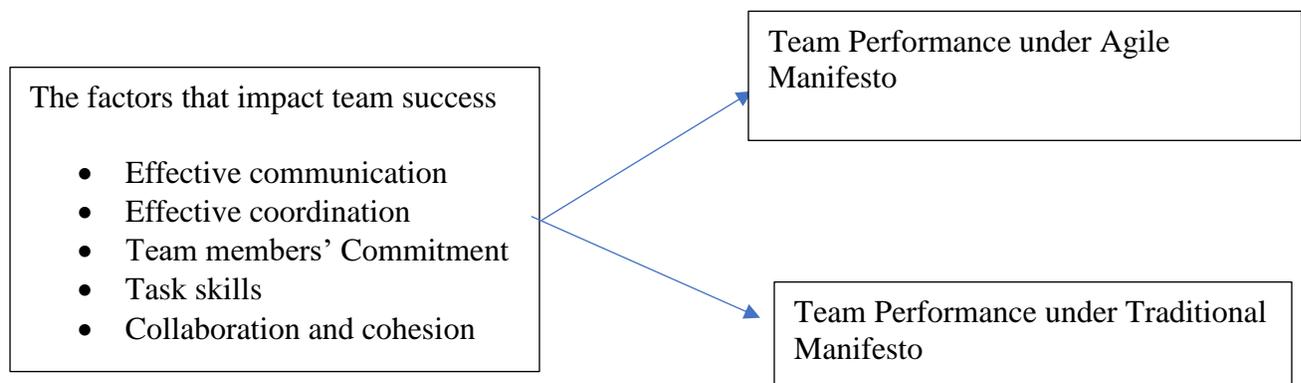
This research paper would examine these variables both in the Traditional Waterfall team and Agile team to learn more about the interactions that most impact their performance between the content of the team and the conditions imposed on them and to identify which of the five behaviors of a cohesive team is central to creating a web of unity that would drive a continuous high performance.

The overall process of this research paper includes using the Qualitative/Subjective research to gather an in-depth understanding of team behavior that promotes effectiveness and the reasons that govern such behaviors. The Quantitative/Objective research would be used to examine the numerical representations of project performance. Questionnaires will be given out to respondents for the statistical representations of the findings. Also, this study will analyze a few data from experts in this field. Data from the validation process would be used to statistically evaluate the

findings to demonstrate construct validity in the relationship between all the subjective and objective performance factors.

The target source of respondents of this research are the Traditional Waterfall Project Teams and the Agile Project Teams. This study will first investigate the effectiveness of team performance in both the Agile and Traditional Waterfall Teams.

Fig.1

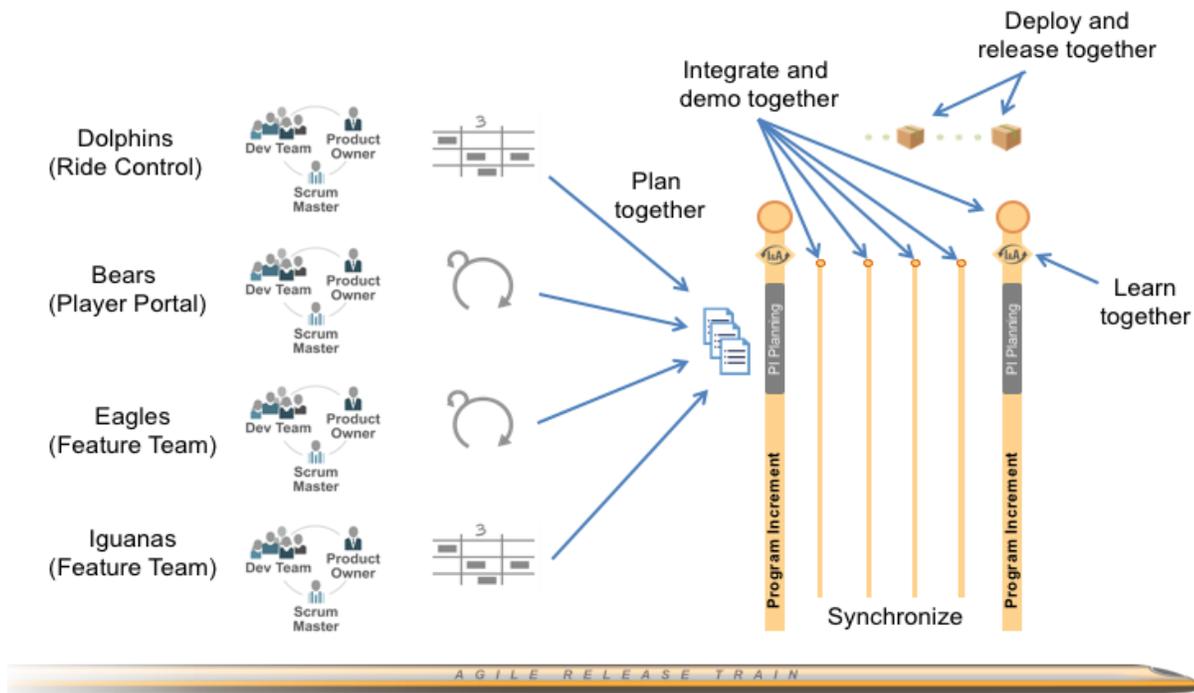


How this concept provides the basis for the collaborative team-task process and to discover the variable with the most impact on team performance and project success.

### **The Effectives of Team Performance in Agile Team**

The Agile Team is a cross-functional team of 5 to 10 members which includes the product owner, the scrum master and the development team. The teams are structured with the responsibility and skill to independently manage and build a continuous delivery of units of products to the customer.

Agile teams are known for their collaborative nature



Teams plan together, integrate and demo together and learn together (Scaled Agile Inc, Sept.26,2017)

Performance in Agile Teams is hinged upon the agile platform which promotes team effectiveness through the following practices:

- Self-organizing – motivates the team to deliver their top performance. This stems from being empowered to make and take important decisions. It makes the team take ownership in ways they never would before as they see themselves entrusted with the mandate to deliver success. Contrary to a hierarchical system where the success or failure of the project falls on the Manager who alone takes all the decisions.
- Co-Located- most agile teams are co-located and this promotes relationship management face to face communication and interactions. Trust is gained more quickly, problems are

resolved on the spot, questions and feedbacks are easily assessed and team members are at hand for support and coordination

- Cross-functional – Project success to a large extent is achieved through cross-functionality. This is because cross-functional teams keep a continuous flow of work. The Business domain experts in the team give continuous feedback which helps to shorten the cycle time and guides the team members when to stop overdoing on a feature so that business value can be realized in a timely manner
- Mutually Accountable – each scrum role has a clear form of accountability: the development team is accountable for nits of deliverables; the Product Owner is accountable for ensuring maximum value of work and the scrum master is accountable for removing impediments.
- Team Swarming – having many team members work on an item together rather than a handoff, to ensure a successful delivery
- The Boys Scout Rule – which states, ‘always leave the campground cleaner than you found it’. To the agile team, it is to always leave the code base in a better state than you found it, even when found in a bad state (regardless of who made the mistake)
- Use of Slacks within Sprints – This is a relaxation time that promotes creative ideas, bonding, trust and innovation
- Excellent Communication Skills- for example this is seen through two key meetings:
  - ✓ the team’s Daily Stand-up Meetings. The purpose of the daily standup meeting is for the team to communicate each day on work progress, impediments and dependencies with the view to working towards getting tasks done. The meeting

usually addresses 3 questions: ‘What tasks did we work on yesterday?’; ‘What would you commit to today?’ and ‘Do you have any impediments?’

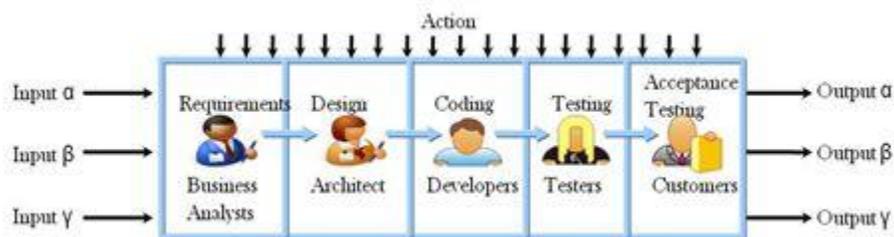
- ✓ Also, the Sprint Retrospect Meeting which is This is the last part of the ceremonies that happens in the life cycle of agile iteration and the objective is to inspect and adapt the activities so far and talk about what needs to be improved.

- The Scrum Manifesto of, ‘One for all and all for one’ .s
- **Share experiences.** Great Development Teams share experiences with peers. This might be within the organization, but also seminars and conferences are a great way to share experiences and gather knowledge. Of course, writing down and sharing your lessons learned is also highly appreciated. And yes, for the attentive readers, this is exactly the same as for the Product Owner.

## The Effectiveness of Team Performance in Traditional/Waterfall Team

The Traditional/Waterfall team is usually a large team and often follows the structure of the organization which is ‘top-down’ which means that the management sets the pace for the team.

The major characteristics of the team that lends credence their performance are:



([pinterest.com/jjpharm86](https://pinterest.com/jjpharm86))

- Team Functionality – the teams are made up of a group with common expertise working towards the project goal. The advantage of a functional team is that it offers a high level of specialization, they become experts within their functional area, A worker who is an expert in his functional area can perform tasks with a high level of speed and efficiency. But teamwork is usually lacking, while team members often perform with a high level of efficiency, they have difficulty working well with other units. If a project calls for cross-functionality, team member may become territorial and unwilling to cooperate with each other resulting to infighting which would most likely cause projects to fall behind schedule.
- Hierarchical Team Structure – the team is managed by a project manager, who tells team members what to do, Even though clear lines of communication is established yet the interactions between team members are reduced as the team members all look to the project manager for information and directives.

## **SELECTION OF RESEARCH METHOD**

After reviewing the two types of teams-Agile and Traditional/Waterfall in Project Management and what constitutes effective ness in their performance, we took careful consideration to identify appropriate strategy to use for this research. The methodology selected for this research is based on the desire to match the research findings with the strategy that would accurately achieve the goal of this research.

The research approach for this study is as follows:

**Conduct Literature Review** – a review of various literatures on related topics were extensively performed and analyzed. The sources were the internet, library databases, and books from notable authors. From these reviews, we were able to identify some important behavioral factors that are relevant in team performance.

**Develop Survey Instrument** – based on the findings from the literature reviews and identification of the problem statement in page of this paper, questionnaires were developed based on the identified most important factor in the behavioral/interactive pattern of both the Agile and Traditional Project teams. The survey questions consist of items measuring the level of impact of each of the interactions that affect team performance with the view to identifying the behavioral factor or interaction that has the most impact on team performance. The survey questions are aimed for both Agile and Traditional Project Teams.

**Perform Data Collection** - The questionnaires were distributed to two different target respondents; - the Agile and Traditional/Waterfall Teams. The Team Performance survey is distributed through email to members of the project teams. And responses were also collection through email.

**Perform Data Analysis** – as soon data are collected, analysis are conducted using the appropriate qualitative analysis to answer the research questions established for the study.

**Develop a Team Performance Model** – we identify the result of the analyses and develop the outcome into a model that sums up of the interaction that fuels team performance and project success.

This methodology -web- based survey-is preferred because it provides an advantage of:

- a wider reach and speedy data collection given that it is administered online

- No cost of paper, mailing and data entry
- Data from web-based surveys are usually accessible in real time in graphic and numerical format
- Follow up with responders is quite easy
- Data from web-based surveys can easily be transferred into data analysis

### **Sample Population.**

The population of this survey are team members from Agile and Traditional/Waterfall Teams working in various sectors. The sampling design is convenience sampling where the respondents are selected based on their accessibility and availability. And are asked for voluntary participation through email. The criteria used is that respondents are currently working on projects as part of an Agile or Traditional Team member

### **Survey Administration**

To ensure a high response rate, a cover letter attached to the questionnaire was sent to the responders explaining the purpose of the survey questions. Duration of 5 days was given to the responders and gentle reminders were sent out to those who had not yet responded by the fourth day. And a thank you email sent to those that already turned in their response.

## DATA ANALYSIS AND DISCUSSION

The data obtained were analysis using descriptive statistics. Respondents are divided into the two team of agile and traditional waterfall.65% of Respondents were from the traditional waterfall team while 35% belong to the agile team. The 20 different research questions were identified as essential to look at team performance based on all the behavioral factors uncovered with the literature review to determine which of the factors contribute the most towards the effectiveness of performance in a team.

For each research question, detailed explanation are given for better understanding of the analysis as shown in Table 3.1

no	Information Research question can uncover	Survey Question	Overall Satisfaction	Frequency	Percentage %
RQ1	Using the team methodology to assess its dependency on the test factors	Select the practice that best describes your team	Agile = Traditional=	7 13	35 65
RQ2	Methodology that inspires greater achievement	Self-managed teams get more work done than hierarchical teams	Yes No Neutral	14 5 1	70 25 5
RQ3	Correlations between effective communication in a team and performance (value that drive team performance)	A climate of open and honest communication drives team effectiveness more than skill and effort	Yes No Neutral	15 5 0	75 25 0

RQ4	Value that drives team performance - Collaboration	Team performance is at its peak when team members depend on each other more than working independently on tasks	Yes No Neutral	12 5 3	60 25 15
RQ5	Value that drives team performance - Honesty and Vulnerability	Openly giving and accepting of constructive criticism among team members is more of a function of trust than obligation	Yes No Neutral	16 2 2	80 10 10
RQ6	Value that drives team performance - Collaboration	Support more than obligation drives performance in teams	Yes No Neutral	13 7 0	65 35 0
RQ7	Using outcomes to rate performance	Collaboration drives team success more than skill and effort	Yes No Neutral	14 5 1	70 25 5
RQ8	Value that drives performance- Trust	Trust more than obligation drives accountability in teams	Yes No Neutral	17 3 0	85 15 0
RQ9	Using outcomes to rate performance	Team cohesiveness is founded on trust than skill and competence	Yes No Neutral	12 6 2	60 30 10
RQ10	Value that drives performance – Open and Honest Communication	Your team members are always passionate and free in their discussions of both work and personal issues	Yes No Neutral	10 8 2	50 40 10

RQ11	Value that drives performance - Vulnerability	Your team is comfortable with acknowledging their mistakes to one another	Yes No Neutral	7 10 3	35 50 15
RQ12	Value that drives performance	Focus on tasks alone yields greater team performance than focusing on tasks and relationships	Yes No Neutral	8 12 0	40 60 0
RQ13	Value that drives performance	Team performance is high when members show consideration for the needs and feelings of each other more than their individual tasks	Yes No Neutral	15 5 0	75 25 0
RQ14	Correlations between effective communication and performance	Members explore differences with enthusiasm and welcome healthy debates	Yes No Neutral	10 7 3	50 35 15
RQ15	Using relationship outcomes to rate performance	Team members display high level of corroboration and mutual support	Yes No Neutral	15 2 0	75 25 0
RQ16	Value that drives performance	In my team, we are able to work through differences without damaging relationships	Yes No Neutral	12 6 2	60 30 10
RQ17	Methodology that inspires greater achievement	We are more committed to results when we reach decisions on our own than when told what to do	Yes No Neutral	17 2 1	85 10 5

RQ18	Methodology that inspires greater achievement	In my team, we see success as a collective achievement	Yes No Neutral	12 6 2	60 30 10
RQ19	Value that drives performance	My team culture can be summarized as, 'one for all and all for one'.	Yes No Neutral	10 8 2	50 40 10
RQ20	Success rate assessment	How would you describe your team performance?	High Performing Good Average Dysfunctional	11  6 3 0	55  30 25 0

## Trust Based Communication

The survey questions – RQ 3, 5 ,10,11,14 and 16, were grouped under this category. The questions were formulated with the view to identifying which Team Performance factor that has the greatest variation amongst project teams in relation to effectiveness in communication that would drive high performance. The questions assessed the following hypothesis:

- Is communication fundamental to building trust in teams
- At what level would communication be said to be effective
- How challenging can open and honest communication be

## **Methodology and Performance**

For the team methodology category RQ1 was used to find out the number of respondents in each of the project teams – Agile and Traditional Waterfall. The 20 questions were meant to elicit the thought patterns of individual members with the view to discovering the level on impact each of the team types creates upon the members. And how this is reflective upon their behavioral patterns. Specifically, RQ 2,15, 17 and 18 probed into the impact of the agile and traditional work culture on the teams and how it affects their performance as a team. For example, the RQ2 which is, ‘Self-managed teams get more work done than hierarchical teams? Is very central to identifying the variance that most impacts team performance. And it addresses one of the most pertinent question in this research study which is – Is it leadership or trust in a team’s capability that delivers project success?

## **The Relationship Quotient in Team Performance –**

Under this category are RQ 4, 6, 7, 8,9,12, 13, 15 and 19. These questions were used to assess the overall impact on performance when team have and maintain good relationship among themselves. Often times, relationship conflict is more disruptive than task conflict. RQ 19 for example - My team culture can be summarized as, ‘one for all and all for one’ – is one of the agile manifestos that emphasis the importance of collaboration, cohesion, trust and goodwill among team members as a sure way of delivering project success.

## FINDINGS

The results of the analysis are reported in the four following sections – the first section is the description of the Respondents or Participants, the next three sections would give a descriptive analysis of the findings uncovered under the four categories outlined in the analysis section which are; Trust and Communication, Methodology and Performance and finally, The Relationship Quotient in Team Performance.

The Study Participants –

the data were collected from participants from the Agile and Traditional/Waterfall project teams. Out of the 20 respondents, 13 were from the Traditional Team while 7 belonged to Agile Team giving us a ratio of 65:35.

### Category 1 – Trust Based Communication VS Skill and Professionalism

No	SURVEY QUESTIONS	Percentage of Respondents (%)		
		Agree	Disagree	Neutral
RQ3	<i>A climate of open and honest communication drives team effectiveness more than skill and effort</i>	75	10	15
RQ5	<i>Openly giving and accepting of constructive criticism among team members is more of a function of trust than obligation</i>	80	10	10
RQ10	<i>Your team members are always passionate and free in their discussions of both work and personal issues</i>	50	40	10
RQ11	<i>Your team is comfortable with acknowledging their mistakes to one another</i>	35	50	15
RQ14	<i>Members explore differences with enthusiasm and welcome healthy debates</i>	50	35	15
RQ16	<i>In my team, we are able to work through differences without damaging relationships</i>	60	30	10
	<i>Average percentage</i>	58.3	29.1	12.5

The 6 questions listed above were posed to identify the level of impact of trust in achieving effective communication in a team. And we have percentage average of 58.3 respondents agreeing to the hypothesis, 29.1 in disagreement and 12.5 with no view on the subject and this shows the following findings:

For RQ3, open and honest communication drives high performance in teams. And at the heart of every open and honest communication lies trust. An effective communication is much more than a group of people sitting round a discussion table. Trust increases communication and vice versa.

RQ5 and 10, illustrates that where team members are free with each other in expressing their opinions, it creates a striving environment for teamwork for to have an environment where team members. For when constructive criticisms are given and taken, growth and success become inevitable.

RQs 11 brings out a very important formidable factor in building a high performing team. weakness and vulnerability are often seen as having the same connotation, but there cannot be a true dependence without vulnerability. The question now becomes, ‘How can a project team overcome the fear of letting down their guard in order to forge a force a dependency and oneness that is merged with success’.

RQs gives further illustration to the benefits of humanizing communications as a highpoint of performance.

**Category 2 Methodology and Performance: Individuals and Interactions over Processes and Tools.**

No	SURVEY QUESTIONS	Percentage of Respondents (%)		
		Agree	Disagree	Neutral
RQ2	<i>Self-managed teams get more work done than hierarchical teams</i>	70	25	5
RQ15	<i>Team members display high level of corroboration and mutual support</i>	75	25	0
RQ17	<i>We are more committed to results when we reach decisions on our own than when told what to do</i>	85	10	5
RQ18	<i>In my team, we see success as a collective achievement</i>	60	30	10

The questions listed under category 2 were designed to probe into the culture that creates a conducive environment for teamwork to thrive. And the results show a greater number of the

respondents are in agreement that trusting a team to self-manage and organize themselves actually yield a higher productivity than when told what to do. And confers on them the responsibility of success or failure. We have an average of 72% of participants agreeing to the facts presented, 22% in disagreement and 2% with no opinion.

RQ2 -Self managed teams get more work done than hierarchical team – highlights the contrasting work environment in the agile team and traditional waterfall teams. This contrast analysis which have been carried out by many scholars have always ended in favor of the agile team which are known to be self-managed and self-organizing because what their management is saying is that they respect the autonomy of the team and trust them to deliver the stated project goal.

### **Category 3 THE RELATIONSHIP QUOTIENT IN TEAM PERFORMANCE VS SKILLS AND COMPETENCE**

No	SURVEY QUESTIONS	Percentage of Respondents (%)		
		Agree	Disagree	Neutral
RQ4	<i>Team performance is at its peak when team members depend on each other more than working independently on tasks</i>	60	25	15
RQ6	<i>Support more than obligation drives performance in teams</i>	65	35	0
RQ7	<i>Collaboration drives team success more than skill and effort</i>	70	25	5
RQ8	<i>Trust more than obligation drives accountability in teams</i>	85	15	0
RQ9	<i>Team cohesiveness is founded on trust than skill and competence</i>	60	30	10
RQ12	<i>Focus on tasks alone yields greater team performance than focusing on tasks and relationships</i>	40	60	0
RQ13	<i>Team performance is high when members show consideration for the needs and feelings of each other more than their individual tasks</i>	75	25	0
RQ19	<i>My team culture can be summarized as, 'one for all and all for one'</i>	50	40	10

The more robust the relationship between team members the more the team will operate as a unit. The questions under this third category seek to identify the relationship factor in team performance; good working relationship gives rise to team collaboration

At the core of collaboration is trust. Trust needs to be evident in the relationships – how work is done, how words are spoken, and how the results are accounted for. Without trust, collaboration falls apart quickly and, sometimes, irreparably – Jon Mertz, April 24,2013



In collaboration, the group not only work together, they also think together, trust each other, respect the opinion of others and engage in discussions towards the final product

Now that does not derogate the importance of work skill and competence. But collaboration advances team competence through task interdependence and exchange learning among team members.

## **CONCLUSION**

The objective of this research was to use hypothetical data to identify and establish the primary factor/s that anchors all other factors that drives team performance and project success.

And to do this, this study examined many literatures written on the subject

The team performance factors obtained from the literature reviews study are: flow of communication within teams, coordination, thrust, trust, teaming skills, task skills, and team support from the organization and in contrast to this factor, we also examined the factors that hinder team performance, using Patrick Lencioni's model of the 5 Dysfunctions of a Team. These factors were used to develop the Team Performance Survey aimed at assessing team performance using the principles of the agile and traditional/waterfall teams as reference models.

Our research through the findings from the survey questions indicates that in a high trust environment, team members' performance is at their peak

- Trust enables teams to engage in effective communication that is consistent and meaningful leading up to commitment and inter-dependence among team members
- Trust-based work environment creates, develops and sustains accountability and good results in teams
- Collaboration and cohesion are effective in a trust based relationship among teams is and drives performance and success.

Finally, when people evaluate the trustworthiness of others, they often focus on three things: ability (skills, competencies, characteristics), benevolence (motivation to do good) and integrity

(adherence to acceptable principles) (Mayer, 1995). And in a team, this is what creates effectiveness and the drive for a collective success.

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