Lawrence Technological University

College of Management

# An Investigation of Collaborative Leadership

Presented in partial fulfillment of the requirements

for the degree of

Master of Science in Global Leadership and Management

Keith Schweizer

2013

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# Report Documentation Page

*Form Approved*
*OMB No. 0704-0188*

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| 1. REPORT DATE | 2. REPORT TYPE | 3. DATES COVERED |
|---|---|---|
| **11 MAR 2013** | **Masters Thesis** | **06-02-2012 to 07-01-2013** |

4. TITLE AND SUBTITLE
**An Investigation of Collaborative Leadership**

5a. CONTRACT NUMBER
5b. GRANT NUMBER
5c. PROGRAM ELEMENT NUMBER

6. AUTHOR(S)
**Keith Schweizer**

5d. PROJECT NUMBER
5e. TASK NUMBER
5f. WORK UNIT NUMBER

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
**U.S. Army TARDEC,6501 East Eleven Mile Rd,Warren,Mi,48397-5000**

8. PERFORMING ORGANIZATION REPORT NUMBER
**#23710**

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)
**U.S. Army TARDEC, 6501 East Eleven Mile Rd, Warren, Mi, 48397-5000**

10. SPONSOR/MONITOR'S ACRONYM(S)
**TARDEC**

11. SPONSOR/MONITOR'S REPORT NUMBER(S)
**#23710**

12. DISTRIBUTION/AVAILABILITY STATEMENT
**Approved for public release; distribution unlimited**

13. SUPPLEMENTARY NOTES

14. ABSTRACT

**Research has shown if an organization wishes to maximize time, talent and tools to create value it requires the culture of collaboration (Rosen, 2007). Aligning organizational strengths combined with the right skills will create efficiency. Additionally, strong collaborative skills increase natural enthusiasm across an entire organization, and leverage effectiveness of all relationships supporting a healthy environment that is accepting to change, shared decisions, creative problem solving, and more trust across the organization (Tamm, Luyet, 2004). Research has also shown that a balanced approach may be an appropriate path in that not all collaboration creates value. Specific collaboration barriers and opportunities can be targets that produce the most benefit. (Hansen 2009)**

15. SUBJECT TERMS

| 16. SECURITY CLASSIFICATION OF: | | | 17. LIMITATION OF ABSTRACT | 18. NUMBER OF PAGES | 19a. NAME OF RESPONSIBLE PERSON |
|---|---|---|---|---|---|
| a. REPORT | b. ABSTRACT | c. THIS PAGE | | | |
| **unclassified** | **unclassified** | **unclassified** | **Public Release** | **100** | |

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2013

Submitted to Lawrence Technological University (LTU) College of Management in partial fulfillment of the degree of Master of Science in Global Leadership and Management

Submitted to the Defense Acquisition University (DAU) Midwest Region in partial fulfillment of the requirement of the Senior Service College Fellowship (SSCF) Program

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## Abstract

This research is to explore and measure the collaborative leadership style that currently exists at the Tank-Automotive Command (TACOM) Life Cycle Management Command (LCMC). It will also look at collaboration barriers and collaborative opportunities. The four main questions answered by this research are;

**R01:** What is the current collaborative leadership style among organizations at the TACOM LCMC?

**R02:** Is there a difference in perception of collaborative leadership style between the workforce and leadership?

**R03:** What opportunities exist to make collaboration more valuable at TACOM LCMC?

**R04:** What are the barriers that diminish the value of collaboration at TACOM LCMC?

Research has shown if an organization wishes to maximize time, talent and tools to create value it requires the culture of collaboration (Rosen, 2007). Aligning organizational strengths combined with the right skills will create efficiency. Additionally, strong collaborative skills increase natural enthusiasm across an entire organization, and leverage effectiveness of all relationships supporting a healthy environment that is accepting to change, shared decisions, creative problem solving, and more trust across the organization (Tamm, Luyet, 2004). Research has also shown that a balanced approach may be an appropriate path in that not all collaboration creates value. Specific collaboration barriers and opportunities can be targets that produce the most benefit. (Hansen 2009)


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The study was conducted using quantitative and qualitative research to identify and assess the collaborative leadership styles at TACOM LCMC. Data were collected via a survey and personal interviews. The level of collaborative leadership that exists was measured, barriers were identified and recommendations of what opportunities exist to increase the effectiveness of collaboration were documented.

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## Dedication

This dissertation is dedicated to the men and women of the Armed Forces of the United States of America.

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**Acknowledgements**

I wish to express my deepest appreciation to my fellow SSCF cohorts for their support and dedication. I'd also like to acknowledge Joanne, Jackie, Matt, Judy, and Tom all of whom were most helpful. And last but not least my family for all their support and for putting up with me through this process.

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## Chapter 1 Introduction

Tomorrow's leaders must be collaborative, resourceful, and able to see problems from a global perspective. More importantly, they must share a conviction that leadership for the common good is both an ethical imperative, and a practical necessity in the face of our uncertain future (Knapp, J. C., & Carter, J, 2007). There has been a significant amount of research and emphasis on collaboration over the last several years. Organizations have become larger and more complex. As organizations continue to change, collaboration will become essential for success. In 2010, the Under Secretary of Defense for Acquisition, Technology, and Logistics, Dr. Ashton Carter, issued a memorandum that called for the services in DOD to " do more without more" known as better buying power. (Carter, 2010). Better Buying Power (BBP) implements best practices to strengthen the Defense Department's buying power, improve industry productivity, and provide an affordable, value-added military capability to the Warfighter. Dr. Carter has also published a follow on memorandum "Better Buying Power 2.0" 13 Nov 2012, which continues to reflect the Department of Defense's commitment to continuous improvement in efficiencies and affordability.

During the first week of 2012 - 2013 SSCF, LTG Phillips, the Principal Military Deputy to the Assistant Secretary of the Army, briefed the current class on the importance of collaboration to the Army's acquisition efforts. He specifically stated that collaboration is needed between the Army's systems requirements and budgetary resources to ensure executable programs. He also encouraged the SSCF 2012-2013 cohort to understand friction points within the acquisition process, and develop coalitions

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of collaborative partners to address issues and increase program success. My contribution will be to look at collaboration from a leadership perspective of what leaders can do to minimize friction points or barriers, create coalitions, and optimal collaborative environments that will help realize better performance across defense acquisition.

During her attendance at the Defense Acquisition Universities Senior Service College Fellowship (SSCF) class of 2008-2009, Mrs. Jennifer Hitchcock studied collaborative successes within TACOM LCMC and to industry to determine the key factors for successful long term collaboration. Her research shed light on collaboration and its importance to the TACOM LCMC and to industry. My research will use Mrs. Hitchcock's findings as a baseline to explore the possibilities of continuous improvement.

As budgets are reduced, leaders will be called upon to increase efficiencies. Sequestration calls for $1.2 trillion in mandated cuts across the federal government over the next decade. The Pentagon's share of those cuts is about $500 billion. Overseas Contingency Operations funding is projected to decrease by $26.6 billion or 23% in 2013 due to the drawdown of the operations in Iraq and Afghanistan. This magnitude of reductions will force organizations to examine their current operations, reduce redundancies, and focus on high priority core functions.

Leaders of organizations will need to focus on what organizations do well and what adds significant value. They will need to work together on shared goals with each contributing value added work, and reducing redundancies to deliver quality and affordable products. They will need an intimate understanding of their people, and that the skills they possess are aligned with the future mission. This will require identifying the specific skills required to accomplish the mission workload, reducing redundancies,

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and allowing personnel reductions through attrition. Utilizing collaboration may create a positive environment where ideas are shared, and strengths are taken advantage of to increase efficiency. Leaders should evaluate opportunities for collaboration to ensure a positive outcome is possible, they should understand the barriers that may be present, and tailor solutions to overcome barriers and create opportunities. (Hansen, 2009) Collaborative intention is among the essential skills that an organization should possess to ensure long term success. (Tamm, Luyet, 2004).

**Background to the Study**

The term collaboration has different meanings to people. The typical definition is: "a mutually beneficial and well-defined relationship entered into by two or more organizations to achieve common goals. The relationship includes a commitment to mutual relationships and goals; a jointly developed structure and shared responsibility; mutual authority and accountability for success; and sharing of resources and rewards" (Mattessich, Murray-Close & Monsey, 2001, p.4). It is in the best interest of every organization to understand this definition and decide how it applies to their mission. In order to achieve maximum value from collaboration, leaders of organizations must be ready to understand collaboration more intimately, and execute with purpose and discipline. A disciplined collaboration approach can be looked at as a leadership practice of properly assessing when and how to collaborate (and when not to) and instilling in people both the willingness and ability to collaborate when required (Hansen, 2009).

Leaders must be able to work both vertically within their own units and horizontally across other internal and external units and organizations. When we move to a more detailed definition of collaboration, we can further define it to a cross

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organization activity, such as “collaboration takes place when people from different organizations work together in cross-organizational teams on a common task or provide significant help to each other” (Hansen, 2009, p83). Increased complexity within organizations and the tendency for crisis management has made it difficult to focus on value added collaborative endeavors.

**Problem Statement**

Several articles and books have described the theory of collaboration, and have proposed explanatory mechanisms for how collaboration is best implemented. My research will explore those theories and their applicability to the current state of the TACOM LCMC.

**Purpose of the Study**

I will evaluate what the current collaborative leadership style is at the TACOM LCMC and make an observation of what barriers or opportunities exist for collaboration.

**Research Questions and Hypotheses**

This research paper addresses four fundamental questions related to collaboration at the TACOM LCMC:

**R01:** What is the current collaborative leadership style among organizations at the TACOM LCMC?

**R02:** Is there a difference in perception of collaborative leadership style between the workforce and leadership?

**R03:** What opportunities exist to make collaboration more valuable at TACOM LCMC?

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**R04:** What are the barriers that diminish the value of collaboration at TACOM LCMC?

The two hypotheses tested as part of this research are:

**H01:** There is no difference in the collaborative leadership style among organizations at TACOM.

**H02:** Knowledge has no effect on collaborative leadership style.

## Objectives and Outcomes

This study will be conducted using a mix of quantitative and qualitative research to identify and assess the collaborative leadership styles at TACOM LCMC. The primary stakeholders are the leaders and employees of the TACOM LCMC. This research assumes all of the employees of the TACOM LCMC have the ability to increase their collaborative skills. The barriers and opportunities identified by this research could be applied to increase performance.

Collaborative Leadership style will be measured using a survey instrument. The survey will be administered to TACOM LCMC workforce and a represented Leadership set. The results of the survey will be analyzed in two ways. The first analysis will use an established scale used by Morton Hansen in his research on collaborative of over 170 businesses. The second will use an analysis of variance (ANOVA) to statistically compare the variance among organizations.

Research regarding collaborative opportunities and barriers will be approached on a qualitative basis. Once the data are gathered a thematic analysis will be accomplished.

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The thematic analysis results will be compared to the literature that was reviewed during the research period to develop tailored observation and results.

The final hypothesis regarding knowledge was selected to understand the effect that knowledge has on collaborative leadership style. The Knowledge set includes knowing your leader, your leader knowing you, knowledge of vision, collaboration training, sharing information, and insight into efficiency. I'll use Cronbach Alpha to validate that the knowledge set of variables can be interrelated with high reliability. After the data are captured I'll perform a correlation analysis and regression analysis to validate the hypothesis.

**Significance of the Study**

This study provides insights and practical applications that are useful to TACOM LCMC Leaders who are looking to increase their understanding of the importance of leadership in collaboration. The results of this study contribute to the existing literature on collaboration. The TACOM LCMC could benefit from a culture of collaboration (Rosen, 2007) if it is understood what barriers and opportunities should be focused on. A shared set of goals will lead to an environment that minimizes barriers and creates repeatable successes. Strong collaborative skills also increase natural enthusiasm across an organization. Collaborative skills leverage the effectiveness of all relationships which support a healthy environment that is accepting to change, shared decisions, creative problem solving, and more trust across the organization. (Tamm, Luyet, 2004)

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**Limitations of the Research**

The study will use a mixed methods research methodology. Quantitative and qualitative data will be collected via administration of a survey instrument to the TACOM LCMC workforce. Analysis of Variance will be used to determine differences among the surveyed groups at TACOM LCMC.

The organizations that will be surveyed are the TACOM LCMC Command Group and Staff elements, Army Contracting Command - Warren (ACC-W), Program Executive Office (PEO) Ground Combat Systems (GCS), PEO Combat Support and Combat Support Systems (CS&CSS), Tank Automotive Research, Development, and Engineering Center (TARDEC), Installation Management Command (IMCOM), and the Integrated Logistics Support Center (ILSC).

This study was conducted at the Detroit Arsenal portion of the TACOM LCMC. The results may not be applicable outside the Detroit Arsenal. This does not account for other variables that could affect collaboration. The survey instruments used to collect data are a research tool. Some bias can be expected about the collaboration reported by those surveyed.

**Validity of the Research and Reliability of the Responses**

The interview guide, and consent forms were all reviewed and approved by the Lawrence Technological University (LTU) Institutional Review Board (IRB). The final report also had to pass the U.S. Army TACOM operational security. Public affairs also reviewed that screen for validity.

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# Chapter 2 Literature Review

## Introduction

The following literature review is focused on addressing the four fundamental research questions of this thesis as related to collaboration at the TACOM LCMC. Given the current fiscal realities of our country, how important is collaboration to the success of an organization that is facing budgetary reductions? How important is leadership when it comes to collaboration? What opportunities exist that could make collaboration more effective? What sorts of barriers diminish the value of collaboration? Will tomorrow's leaders need to be more collaborative, resourceful, and able to see problems from a global perspective? How will leaders share a conviction for the common good as a practical necessity in the face of our uncertain future?

Leaders of organizations are critical to achieve value through collaboration. In Morten Hansen's book "Collaboration" he states that leaders can use three simple steps to effectively use a disciplined collaboration approach. The first step is to evaluate if opportunities exist to collaborate. Second, is to spot barriers to collaborate and break them down. Third, each collaborative endeavor should be tailored to the situation at hand in such a way that the organization maximizes benefits (Hansen, 2009). Hansen goes on further to discuss a "T" shape management approach.

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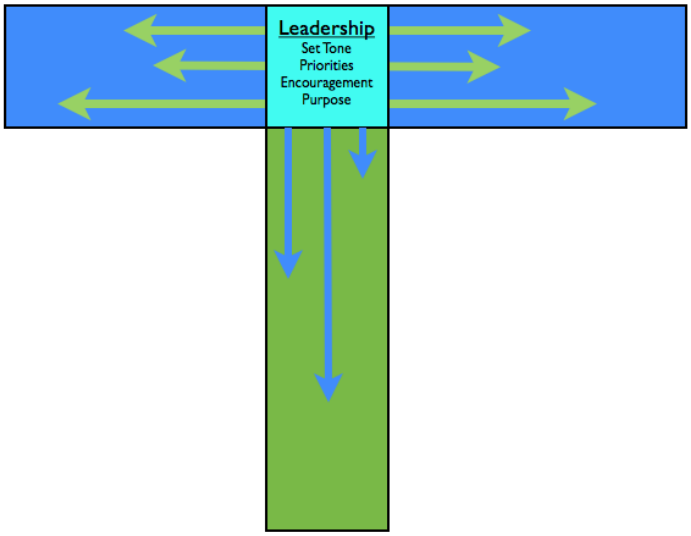


Figure 1: T Shaped Management Style

In this T shaped management approach leaders are the key to shape and understand efforts within their organizations. In the vertical column of the "T" a leader is shaping the organizational vision and creating an environment where the organization's mission can be performed successfully and add value. A leader should understand what external skills are available from outside their organization that may create efficiencies. In the horizontal column of the "T," a leader is networking across the larger business model to understand how their organization's core skills can be used in a collaborative environment to help with the success of the overall mission. At the vertical and horizontal intersection the collaborative leadership style plays an important role in how well

different skills across and organization will be used in a collaborative manner to add the most value. This conceptual "T" management style exists at all levels of the organization, and takes many different shapes based on circumstance.

**Collaborative Definitions**

Collaboration means a lot of different things to people. Below is a discussion of some of the key definitions regarding collaboration to include cooperation, coordinating, and networking. Collaboration and cooperation are important values to support the knowledge work process, for they recognize the needs regarding knowledge creation/sharing. A high level of collaboration and cooperation often helps establish a common understanding. Cooperation and collaboration also have a positive influence on other values such as trust. Coordination helps with the execution of collaboration. Cooperation and networking help create an environment where collaboration is more readily practiced.

Cooperation refers to informal relationships that exist without any commonly defined mission, structure or planning effort. Information is shared as needed and authority is retained by each organization so there is virtually no risk. Resources are separate as are rewards. Each cooperating organization remains totally independent, takes no risk, and retains total authority. (Mattessich, Murray-Close & Monsey, 2001).

Coordination is slightly more formal than cooperation because coordinating parties determine that their individual missions are compatible, and that they can work together to advance their separate, yet compatible, missions. Some risk is experienced as the parties coordinate efforts that may or may not be successful for both parties. The main

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difference between coordination and collaboration is that in coordination each organization retains its autonomy and individual authority (Mattessich, Murray-Close & Monsey, 2001).

Networking is defined as the exchange of information or services among individuals, groups, or institutions in order to cultivate productive business relationships. Networking establishes the ground work and relationships key to successful collaboration. (Sanker 2012)

Collaboration is the most formal relationship involving shared authority and responsibility for planning, implementation, and evaluation of a joint effort. In addition, the risk to each collaborating organization is greater because each member contributes its own resources and reputation (Mattessich, Murray-Close & Monsey, 2001).

Disciplined Collaboration is described as the leadership practice of properly assessing when to collaborate (and when not to) and instilling in people both the willingness and the ability to collaborate when required. People from different units work together in cross-unit teams on a common task or provide significant help to one another with purpose and return on resources invested. Hansen states that the "Collaboration Premium = Return on Project - Opportunity Cost - Collaboration Cost.

Some characteristic of collaboration include;

- ✓ Two or more people
- ✓ Working toward common goal (intersection of different goals)
- ✓ Results in a product of some kind (service, document, thing, etc.)
- ✓ Combining resources to make something larger
- ✓ Sharing of finite resources

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- ✓ Mutual benefit of all parties (recognition, improved services, achieved savings, products, rewards, etc.)
- ✓ All parties share in the cost (effort, time, resources, etc.)
- ✓ Avoids duplication of effort
- ✓ Could be formal or informal (formal collaborations have a contact or written agreement of some kind)

(Czajkowski 2008)

**Collaborative scope and meaning**

Morten Hansen addresses the definition of collaboration as an action that takes place when people from different units work together in cross-unit teams on a common task or in providing significant help to each other. He goes on to say that simply sending data or information back and forth is not collaboration. To further his definition he discusses the idea of disciplined collaboration. Disciplined collaboration is described as the leadership practice of properly assessing when to collaborate (and when not to) and instilling in people both the willingness and the ability to collaborate when required. Hansen uses the T shaped illustration to show that leaders are at the intersection of the vertical and horizontal business environment. A leader plays a major role in preparing their business unit for collaboration by creating the right skills and attitudes to promote effective collaboration. Leaders can use three simple steps to create disciplined collaboration.

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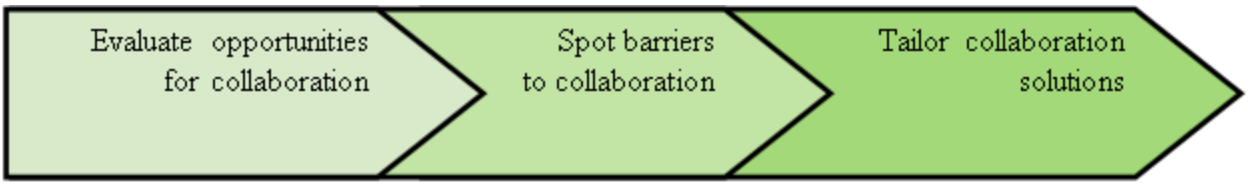


Figure 2 Three Steps of Disiplined Collaboration

**Step 1: Evaluate opportunities for collaboration**:

The goal of collaboration is not to collaborate but to obtain a higher quality product with increased efficiencies. The goal as applied to defense acquisition would be getting the warfighter quality systems in a faster timeframe at a lower cost providing increased combat overmatch and survivability. As applied to defense sustainment it would be targeted at driving down operation and support (O&S) cost to help relieve budgetary pressures.

**Step 2: Spot barriers to collaboration**

There are many barriers that prevent or reduce the effectiveness of collaboration. People can be unmotivated to collaborate as they are comfortable with the way things are or feel threatened to share information. Another is that the current environment makes collaboration too hard when there are communication barriers such that people don't know each other or other organization. One example that was given during my interviews with LCMC leadership was that cultures and reputations have been established, and an organization may be labeled uncooperative or ineffective. That label prevents collaboration from ever starting. There are many barriers leaders should understand and

analyze. Which barriers are present in their current situation? Are some barriers more critical to remove than others? Do you have enough information to develop a tailored plan to minimize barriers in their day-to-day mission environment? How does the plan to reduce barriers work with the vision, and identify opportunities for collaborative efforts?

**Step 3: Tailor collaboration solutions**

With an understanding of collaboration and the barriers that may exist, a leader can construct a vision of what opportunities exist and what could be done to create an environment that promotes collaboration. Different efforts will have different barriers and will need different tailored solutions. A leader should address any existing known barriers, and the barriers that may not be so prevalent such as barriers to motivation or ability. In the "T" shape management approach, Hansen describes how the leader is at the intersection of the organization's vertical internal efforts and the organizations horizontal external collaborative efforts. Leading across the proverbial "T" creates a lot of area to cover with many variables that affect how efficient an organization collaborates, and, in-turn, executes its mission. The more organizations involved and the more variables involved, the more complex leading collaboration becomes.

In the book Positive Leadership, Kim Cameron addresses the idea of positive deviance and how it would apply to an organization. In his example he refers to individual physiological well-being and how status may be reflected on a deviance continuum. A deviance continuum for individual physiological well-being would reflect illness for a negative deviance, health for a normal deviance, and vitality for a positive

deviance. In this, if one has a positive deviance and vitality it could be assumed it would be much more resistant to illness than if they were simply healthy. To achieve vitality and individual would have to address many variables such as eating healthy, exercise, stress reduction, which leads to an overall healthy life style. A deviance continuum can be also shown in an organizational context and specifically collaboration. In a simple example, negative deviance for collaboration would be ineffective, normal deviance would be effective, and positive deviance would be excellence. As with the physiological example steps could be taken to achieve a state of excellence in collaborative behavior. And like the physiological example if an organization is in a state of collaboration excellence it is much less likely that effort would prove to be ineffective. (Cameron 2008)

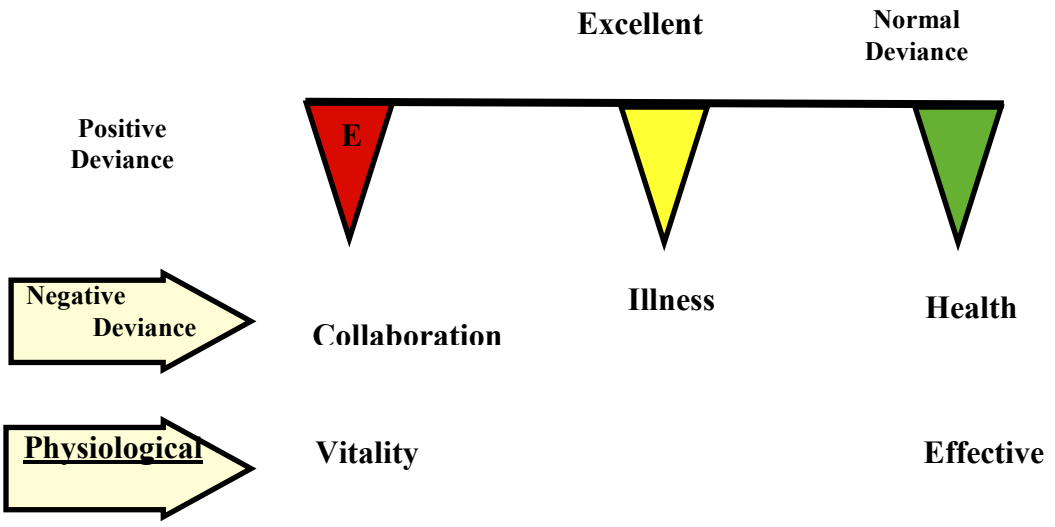


Figure 3: Positive Deviance Model

Ideas such as these should prove valuable as budgetary pressures increase and efficiency expectations rise.

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**Importance of Collaborative Leadership**

Leaders have great influence regarding the environment in which their organizations work and develop value added products and services. A leader can influence an organization in both negative and positive ways. As an example, a study was done of 60 top management teams to capture negative and positive behaviors (Losada & Heaphy). It was found that the higher performing teams had 5.6 positive behavior examples to each negative example; lower performing teams had a .36 to 1 ratio. The traits of the best performing teams are the same traits that create a collaborative environment. Higher performing teams had higher ratios in inquiry versus advocacy, others versus, and average connectivity. (Cameron 2008)

Based on Table 1, high performance organizations were found to be more balanced in inquiry (asking question and seeking others input) compared with advocacy statements (telling or advocating a position), whereas low performing teams were highly overloaded with advocacy rather than inquiry. High performance organizations were also found to have a balance in the focus on self-versus others (0.94 statements focused on others for every 1.0 statements focused on self), whereas low-performing organizations were heavily overloaded in their focus on self (3 statements focused on others' perspectives for every 100 statements focused on self). Finally, in measures of connectivity (engagement, information flows, participation), the ratio was almost twice as high for high-performing organizations as for low-performing organizations (32 compared to 18) These results demonstrate that high-performing organizations had different communication patterns than low-performing organizations primarily influenced by the positive actions among top management leaders. (Cameron 2008).

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Table 1: Positive Team Performance

| Team Performance | High | Medium | Low |
|---|---|---|---|
| Positive Statement Ratio | 5.6 to 1 | 1.8 to 1 | 0.36 to 1 |
| (supportive, encouraging, appreciation versus critical, disapproval, contradictory) | | | |
| Inquiry / Advocacy Ratio | 1.1 to 1 | 0.67 to 1 | 0.05 to 1 |
| (questioning versus asserting) | | | |
| Others / Self Ratio | 0.94 to 1 | 0.62 to 1 | 0.03 to 1 |
| (External versus internal focus) | | | |
| Connectivity Average | 32 | 22 | 18 |
| (mutual influence, assistance, interaction) | | | |
| Source: (Losada & Heaphy, 2004) (Cameron, 2008) | | | |

Jill Cleveland, finance manager at Apple, Inc., is an example of a leader who created a positive environment that fostered a high-performance, collaborative organization. The first thing she did was create an environment of trust. She had to trust her constituents and create an environment in which everyone felt safe to ask questions, take risk and learn from mistakes. She felt that leaders gain respect of their people by instilling a sense of confidence by allowing them the freedom to come to their own conclusions. Letting go of control over day-to-day activities allowed employees more creativity and freedom to explore new ideas and ways of thinking. Her employees had to know that although she would always be there for support and guidance, they were ultimately responsible for the outcome and quality of their work. She also recognized the special efforts because she knew that recognizing excellent work builds accountability as

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well as pride. Another crucial foundation for collaboration was having cooperative goals. She made sure her employees knew what they were doing and why they were doing it in order to see themselves as part of the whole as oppose to a cog in the wheel. Leaders of high-performance organizations understand that to create a climate of collaboration they need to understand and provide what the organization needs to be successful, and create a common purpose and mutual respect. The leadership of Jill Cleveland played a critical role in creating a positive collaborative environment that produced a high-performance organization (Kouzes & Posner 2007).

Different levels of success can be shown by many leaders across many business models and corporations. As companies struggle to compete in a tight economy, it is more important than ever that leaders look to safeguard their most important resource, their people's wealth of knowledge and experience. In a positive collaborative environment with everyone working towards the same goal, the perceived importance of competition between individuals, teams, and departments, which can lead to duplicative efforts, wasted resources, and lower productivity, is diminished. When material and intellectual assets are combined into one bucket to the benefit of the entire organization, the resulting success and efficiencies benefits everyone in the organization and the organization itself. (Sanker 2012)

**Barriers to Collaboration**

Hansen's research shows that four barriers block collaboration among decentralized organizations.

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1. Not Invented Here: People are not willing to seek input from others outside their unit.
2. Hoarding: People are not willing to provide information and help others when asked.
3. Search problems: People are not able to find information and the right people easily.
4. Transfer problems: People are not able to transfer complicated knowledge from one unit to another.

The first two barriers are motivational in nature and the second two are based on ability, each cause people to not collaborate well. Every situation raises different barriers. A successful leader must be able to recognize barriers that exist and tailor a solution that will create an environment that is ready to effectively collaborate.

There are many sub causes that create the "Not Invented Here" barrier to collaboration. People who work closely together develop an insular culture as they spend time with each other and exclude others. This restricts the influx of new viewpoints and reinforces their own beliefs. An insular culture makes it more comfortable to stay inside the small group to find solutions for issues that may arise with activities such as product development. An insular culture becomes very self-reliant and it forms a very deep seated belief that people need to solve their own problems. In Hansen's research, this sort of behavior resulted in decreased performance in a comparison across 120 product development teams. (Hansen 2009) Teams with not-invented-here attitudes have a tendency to develop a status gap, which puts their unit above others considered less

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worthy. This creates a barrier in that units considered as higher status would never stoop to ask for or collaborate with a lower-status group. The same is typically true for the unit dubbed as the lower status group and their resistance to reach to the higher status group for help. In this environment, all units are guarded to reveal their shortcomings, which just build upon the barrier. The not invented here barrier can be seen with the U.S. intelligent community during and post 9/11. It was simply not the norm for agencies like the CIA and FBI to share intelligence. Both agencies may be very good at their missions, but could be more effective with the right level of collaboration.

In building subculture alignment through collaboration, the dilemma of all organizations is how to maximize the contribution of each sub culture by aligning them instead of trying to judge who is right and who is wrong. If members of subcultures don't get to know each other, they will never understand each other enough to work in alignment. What leaders need to do is create vehicles- task forces, Integrated Product Teams, and various reviews that create a collaborative environment that allows subcultures to understand each other. (Hesselbein & Goldsmith)

The hoarding barrier stems from competition within the organization. Hoarding based on competition happens at the unit level and individual level. At the unit level there are often times when projects compete for funding or market share within the same basis. These units see this has direct competition and are reluctant to share information that may help. This can also be seen at the individual level. Incentives are based on individual performance which creates competition between individuals for promotions and bonuses. An individual may hold back information to ensure they get credit for it and deny their competition any advantage. Related to competition over money and

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mission is power. The fear of losing power over a perceived area of dominance is a certain cause of hoarding. Also within the hoarding barrier is the phenomena called "time famine" where people are overburdened with their own mission and any distraction would be a burden that puts them behind and at a disadvantage. When people are measured by individual performance it becomes their priority, helping others comes at least second and people will likely never feel they have time to help others.

The search barrier is influenced by company size, physical distance, information overload, and poverty of networks. The larger the size and complexity of companies, the more difficult it is to share information in a way that people can readily find, understand, and use information effectively. If a large company is separated geographically it makes it even harder. On top of that, one should consider the amount of information that is available to share. Identifying the right information to share is the most critical to reduce the search barrier. Companies have created databases and web portals to share information but do not filter what information gets shared. This creates information overload. As an example, during the attack on Pearl Harbor it was later revealed that all the information was available to predict the attack. It was determined that what stopped the people involved from understanding that the attack was pending was the plethora of irrelevant information. The noise ratio was too high to weed out irrelevant information, find the critical information, and mitigate the crisis. (Hansen 2009) Also, part of the search barrier is poverty of networks, which is not knowing the organization well enough or knowing the roles of the people in the organization well enough in order to have a network of relationships that help retrieve relevant information to be effective. Knowing

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who to talk to is a tremendous multiplier for efficiency. Many organizations simply don't know what it knows.

The transfer barrier is when units within a company work in isolation and try to transfer a product or service to another unit with-in the company. The idea is that different cultures have different language and tactics that don't easily translate. It is difficult to transfer a product or work together on a project without an established working relationship. Without previously established relationships and with very weak ties, it is easy for one unit to simply throw the project over the proverbial wall to the gaining unit without regard to their success. The gaining unit will have to use resources to solve issues that have already been addressed and may move out in a wrong direction without the adequate experience, skills or understanding of the project or product. When units know each other well and have established relationships it becomes easier to transfer projects and products.

Because organizations differ, leaders should understand the barriers they are faced with and at what level they are affecting success within their organization. Using the T shaped management approach a leader can gain understanding of what the key collaboration points are both vertically and horizontally for their organizations. With this understanding each area can be investigated to understand what barriers exist at each collaboration point. In a disciplined collaborative approach a leader could then prioritize barrier eradication and in-turn promote collaboration that has the highest returns.

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**Opportunities for Collaboration**

Hansen's research describes three opportunities or levers that reduce barriers and increase collaboration. The three levers are unifying people "Unification", cultivating "T Shape" Management, and creating a nimble "Network".

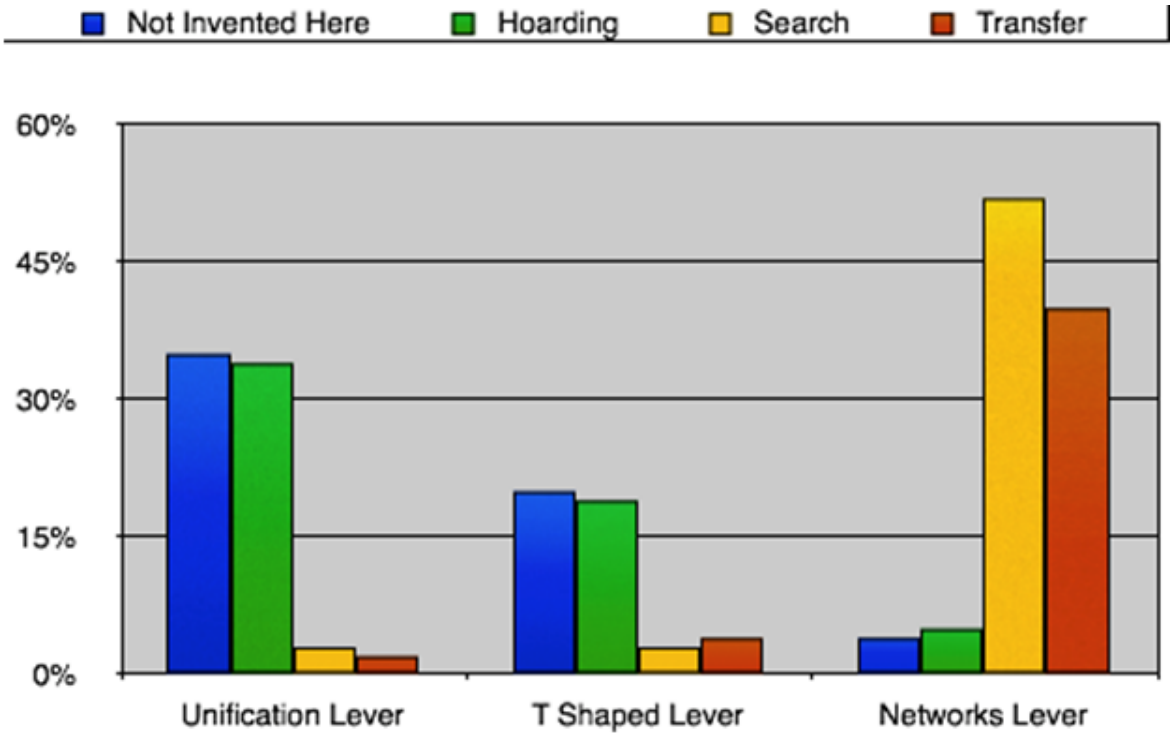


Figure 4: Barrier Reduction Levers

Hansen surveyed 107 companies measuring how the use of each of the three levers reduced collaboration barriers and increased performance. Figure 4 shows how much return each lever produces in lowering each barrier.

The unification lever and the T shape lever show substantial benefit at reducing the not-invented-here and the hoarding barrier. The networks lever showed a great amount of benefit in reducing the search and transfer barriers. Each of the levers hold some opportunity to increase collaboration and performance output.

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**Unification**

Harvard psychologist, Muzafer Sherif performed an interesting experiment regarding unification. Muzafer experiment was accomplished in three phases, focused on behaviors of a group of boys at summer camp. In phase one, as the boys arrived at camp they were separated into two groups the Eagles and the Rattlers. Each group had its own identity, flag and color. During this phase they participated in bonding activities such as hikes, kayaking, and boating with no contact between the two groups of boys. In phase two the individual groups of boys were put into direct competition with each other in activities such as baseball, tug of war, and scavenger hunts. The competition became so fierce that multiple fights occurred that had to be broken up by faculty during the competitions. The competitiveness also spilled over into off hours with each of the groups playing vicious pranks on one another. By the end of the second phase, the two groups where very much at odds. In phase three the goal was to create an environment and activities that would unify the two groups back together. Using unifying goals, encouraging teamwork, and activities that could not be completed by a small group the two groups were brought back together. The boys quickly realized that they could perform better when they worked together in the larger group. This experiment held two profound lessons. The first lesson is that leaders can easily pit groups in their organizations against each other and induce competition. The second is that leaders also have the power to unite separate groups by the actions they take. Using three fundamental unification mechanisms (1) creating a unifying goal, (2) inciting a common value of team work, and (3) speaking the language of collaboration, leaders can change aspirations into concrete measures.

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A unifying goal should be concrete, simple, and measurable. It should be as simple as to have as few interpretations as possible and preferably a single interpretation. President Kennedy's unifying goal of "Land a Man on the Moon" is a great example of concrete and simple with a clear understanding of the goal. NASA's previous goal of the "United States preeminent in space" could be interpreted in many different ways. President Kennedy's goal also stirred passion and competition was directed outside the country at the Russians.

Like disciplined collaboration creating a core value of teamwork requires a balanced approached. The core values should contain liberty and freedom to create a sense of entrepreneurship, ownership and passion. Core values should also contain teamwork and cooperation to leverage skills and opportunity that will increase performance. The two sets of values are opposing in nature yet both are required. Using a disciplined collaborative approach can create a balance to realize the greatest return on performance. T Shaped management is used to create disciplined collaboration.

Many research experiments have been done in the area of collaborative language. At the University of Stanford students undertook an experiment that was based on a simple game of cooperation. Two rounds of the game were played each with different groups of students. The first group was told they were playing the community game. In the second group the students were told they were playing the Wall Street game. Both played the exact same game, just different names. In both, participants had to choose whether to cooperate or not if they cooperated the reward was much greater. In the "community" game cooperation was measured at 70% and with the "Wall Street" game only 30% chose to cooperate. The bias that was created just by the names of each game

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created dramatically different outcomes. This is a great example of how leaders can use language as a powerful tool to cultivate collaboration or unknowingly decrease collaboration.

In another example Henrik Madsen CEO of DNV a large widespread Norwegian corporation wants his people to think of DNV as a whole and not just their own areas. He challenges his people to help each other across boundaries and it has come to be an expected and reciprocated practice. His message is repeated often in that he wants people and teams that can deliver their own results and collaborate across the organization when needed. Collaboration has become part of the culture through the actions of leadership.

### T-Shaped Management

T-Shaped management is a key tool in establishing disciplined collaboration and a balance collaborative approach. There are many variables that make up the benefits and value of a balanced approach. The T-Shaped management approach lowers the importance of star players and emphasizes team players. In a Harvard case study “Rob Parson at Morgan Stanley” by Diane Burton. Rob Parson was a star producer in Morgan Stanley's Capital Markets division. He had been recruited from a competitor the prior year and had generated substantial revenues since joining the firm. Unfortunately, Parson's reviews from the 360-degree performance evaluation process revealed that he was having difficulty adapting to the firm's culture and being a team player. As the firms top performer it is easy to make the argument that Rob deserves a promotion to a top leadership role within the corporation. But what are the ramifications in putting lone stars in leadership positions will he get the most out of the organization without a firm

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understanding of teamwork and collaboration. Hansen's belief is leaders cannot build a collaborative company with lone stars. If the desired goal is collaboration across an organization leaders should focus on people that excel in a T shaped manner of simultaneously deliver results in their own jobs (the vertical part of the "T") and deliver results by collaborating across and outside the company (the horizontal part of the "T"). The opposite of the lone star is the butterfly. Butterflies are people who flutter across the organization but never deliver results. Leaders in pursuit of maximum performance for the whole organization need a balanced approach. The most effective T shaped practice understands, helps, and uses horizontal resources to gain maximum return in both individual and companywide organizational vertical goals. Leaders can grow T-Shaped management in their organizations by selecting T Shaped behaviors during hiring and promoting and changing behaviors through training, pay, and promotion. People could be rewarded for both individual performance and for their collaborative contribution to the group.

**Networks**

Building networks may produce the biggest return in performance but like collaboration it must be done in a balanced manner in order to realize maximum return. Returns must be greater than the effort to realize benefit. Networking reduces all barriers to collaboration but is especially effective at creating an environment that realizes action based collaborative opportunities that create performance reward.

Effective networking has some basic rules in order to achieve the most benefit. Network activity should be primarily focused outward or horizontally across key collaboration points. Research has shown when networking outward it is the quality and

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diversity of the networking points that provide the greatest return and not just mere quantity. Networks should consist mostly of weak ties with people that typically work outside of our vertical boundaries. Vertical networks are typically stronger but consist of people and activities we are already familiar with. Studies have shown that weak ties will produce more opportunities and a higher return. Networking with people who are bridges provide access to a vast amount of information and capability and are shown to be the best networking points. People who are bridges tend to have worked in many areas of the business and have a wide range of knowledge. Leaders can create bridges in their organizations on purpose by having certain positions assume a bridging role. Leaders can also expand job rotation opportunities across units and organization of their companies. People who spend time in different parts of the company often become excellent bridges. Once an opportunity is found it will take a network of people and influencers to come to bear on the target for acceptance and execution. It is a waste of effort to find the perfect opportunity only to be shut down due to lack of support and resources. Skills that promote collaboration become more important when in-order to accomplish complex missions, leaders must rely on the ability to work across lines of authority. Upon entering a collaboration project leaders should understand that weak ties plus complicated knowledge equals high risk. If faced with this a leader should do what they can to strengthen the ties between the teams that will be working to complete the project. Stronger ties plus complicated knowledge equals lower risk. (Hansen 2009)

For the highest return a leader should understand and actively manage networks. Network mapping has proven to be an effective tool to evaluate networks and understand

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where strong and weak points exist to include understanding high risk areas. With this information a leader can tailor their intervention at key points to ensure maximum return.

**Strength Based Strategy**

Appreciative Inquiry (AI) is a vision-based approach of open dialogue that is designed to help organizations and their partners create a shared vision for the future and a mission to operate in the present (Srivastva & Cooperrider, 1990). Today's organizations can benefit from an appreciative approach of inquiry, which invites organizational members to learn and value the history of their organization and its culture. The AI approach allows them to:

- Build on their strengths.
- Discover profitable opportunities.
- Visualize goals and strategic alternatives.
- Identify enabling objectives.
- Design strategies and tactics that are integrated with their most successful programs and supply chain partners.
- Implement a strategic plan that is a dynamic, continuous, and living document.

AI allows organizations to discover and grow the best practices of capacity building for their organizations and their partners. The AI approach to strategic planning involves identifying and building on existing strengths and profitable opportunities rather than dwelling on problems, deficiencies, weaknesses, and threats. (Cooperrider, Whitney, and Stavros 2003)

One strength-based strategy that has been used to drive collaboration across organizations is Strengths, Opportunities, Aspirations, and Results (SOAR). SOAR

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involves creating a series of conversations to gain a whole system perspective. This happens by creating a collaborative environment that brings together those connected together by the project, to include employees from across and outside organizations. It encourages participants to think about the organization as a whole system as opposed to independent parts. The SOAR framework helps conversations to focus on what happens when the organization as a whole is working at its best. It accomplishes this by addressing strengths, opportunities, aspirations and results SOAR. (Stavros, Hinrichs 2009)

**Summary**

I found there to be a tremendous amount of literature regarding collaboration that could prove to be useful. Establishing a common understanding and agreement of a collaborative approach across the vertical and horizontal boundaries of an organization would be beneficial to leaders and organizations.

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# Chapter 3 Research Methodology

## Introduction

This study will be conducted using a mix of quantitative and qualitative research to identify and assess the collaborative leadership styles at TACOM LCMC. The primary stakeholders are the leaders and employees of the TACOM LCMC. Leaders may find that it is in the best interest of the organization to have the workforce work together in a collaborative environment to drive the changes and develop the solutions that will be necessary to increase efficiency levels. All of the employees of the TACOM LCMC have the ability to increase their collaborative skills. If research indicates that the organization will benefit from collaborative skills, there will be a need to understand what leadership styles and training will increase the value of collaboration.

Collaborative Leadership style will be measured using a survey instrument. The survey will be administered to TACOM LCMC workforce and a represented Leadership set. The results of the survey will be analyzed in two ways. The first analysis will use an established scale used by Morton Hansen in his research on collaborative of over 170 businesses. The second will use an analysis of variance (ANOVA) to statistically compare the variance among organizations.

Research regarding collaborative opportunities and barriers will be approached on a qualitative basis. Once the data are gathered a thematic analysis will be accomplished. The thematic analysis results will be compared to the literature that was reviewed during the research period to develop tailored observation and results.

The final hypothesis regarding knowledge was selected to understand the effect that knowledge has on collaborative leadership style. The Knowledge set includes

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knowing your leader, your leader knowing you, knowledge of vision, collaboration training, sharing information, and insight into efficiency. Cronbach Alpha will be used to validate that the knowledge set of variables can be interrelated with high reliability. After the data are captured I'll perform a correlation analysis and regression analysis to validate the hypothesis.

**Research Questions and Hypotheses**

This research paper addresses four fundamental questions related to collaboration at the TACOM LCMC:

**R01:** What is the current collaborative leadership style among organizations at the TACOM LCMC?

**R02:** Is there a difference in perception of collaborative leadership style between the workforce and leadership?

**R03:** What opportunities exist to make collaboration more valuable at TACOM LCMC?

**R04:** What are the barriers that diminish the value of collaboration at TACOM LCMC?

Three research questions were explored to address collaborative leadership and specifically how if applies to the TACOM LCMC. I used two hypotheses to help clarify the research questions being asked.

**H01:** There is no difference in the collaborative leadership style among organizations at TACOM.

**H02:** Knowledge has no effect on collaborative leadership style.

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**Significance of this Research**

If collaboration is a valuable tool to mission success when dealing with reduced resources, TACOM could benefit from a culture of collaboration. (Rosen, 2007) Aligning organizational strengths with collaboration combined with the right training, and environment should increase efficiencies. A shared set of goals will lead to an environment that minimizes barriers and creates repeatable success. Strong collaborative skills also increase natural enthusiasm across an entire organization. Collaborative skills leverage the effectiveness of all relationships which support a healthy environment that is accepting to change, shared decisions, creative problem solving, and more trust across the organization. (Tamm, Luyet, 2004)

**Limitations of the Study**

This study was conducted at the Detroit Arsenal portion of the TACOM LCMC and the results may not be applicable outside of the Detroit Arsenal. This study is limited to the TACOM LCMC and does not account for other variables that could affect Collaboration. The survey instrument used to collect data are a research tool. Some bias can be expected about the collaboration reported by those surveyed.

**Validity of the Research and Reliability of the Responses**

The interview guide, and consent forms were all reviewed and approved by the Lawrence Technological University (LTU) Institutional Review Board (IRB). The final report also had to pass the U.S. Army TACOM operational security and public affairs review that screen for validity as well.

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**Conceptual Model**

The conceptual model below gives a graphical representation of how the research will be accomplished. Data will be collected across the TACOM LCMC in both quantitative and qualitative methods. A survey will be distributed via Email to all Detroit Arsenal LCMC members. This survey represents the main quantitative output and is designed to produce the workforce perception of their leadership collaboration style. Within the survey, there are qualitative portions that ask questions regarding barriers to and opportunities for collaboration.

The main qualitative portion will be accomplished by interviewing the top leaders of each of the organization that are located at the Detroit Arsenal and part of the TACOM LCMC. The leaders will be asked corresponding questions as asked to the workforce in order for comparisons to be made between the workforce and leadership perceptions, and also across the LCMC organizations. In other words, current collaborative leadership styles, barriers, and opportunities will be measured by both workforce and leadership perspectives for each organization. The results will be compared both quantitatively and qualitatively. Once the individual results are analyzed, I will compare the organizations collectively.

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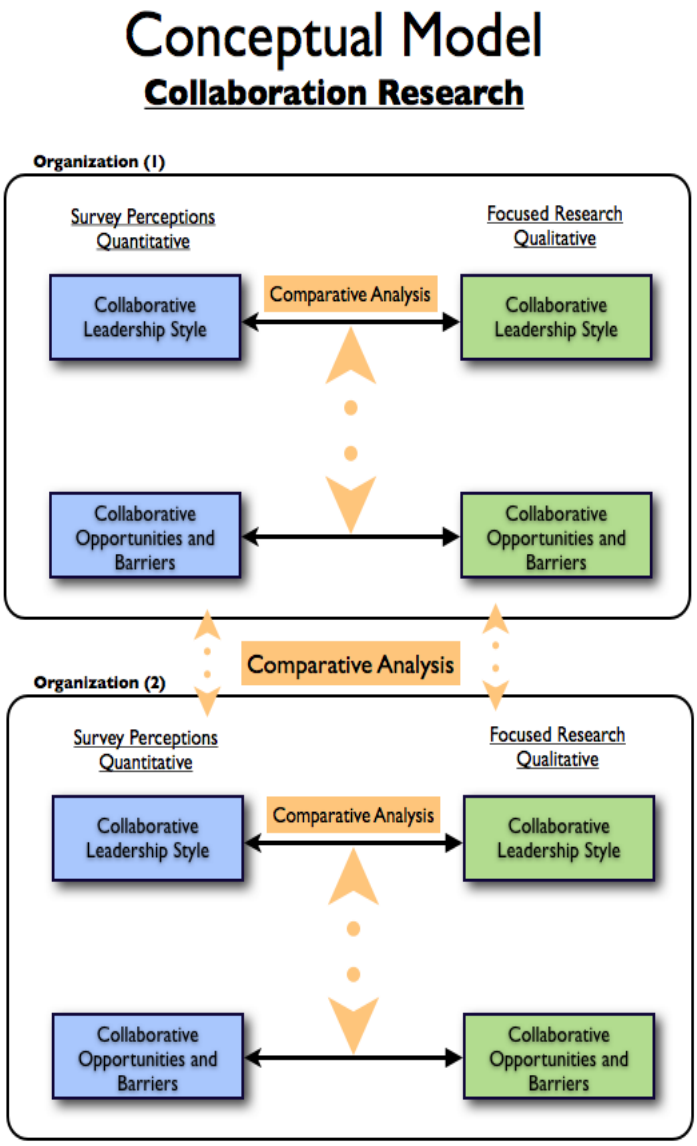


Figure 5: Conceptual Model

**Population and Sample**

The sample for this study was comprised of the TACOM LCMC workforce that voluntarily participated in the study by completing the 19-item questionnaire using Survey Monkey. I will also interview leadership from each TACOM LCMC organization. The organizations that will be surveyed are the TACOM LCMC Command

Group and Staff elements, Army Contracting Command - Warren (ACC-W), Program Executive Office (PEO) Ground Combat Systems (GCS), PEO Combat Support and Combat Support Systems (CS&CSS), Tank Automotive Research, Development, and Engineering Center (TARDEC), Installation Management Command (IMCOM), and the Integrated Logistics Support Center (ILSC). The main survey will be distributed via TACOM LCMC global email system to several thousand individuals that make up the LCMC workforce. A minimum of 30 individual responses per organization is desired. The Qualitative interviews with leadership will be made by appointment and accomplished face to face. A minimum of one senior leader per organization is desired. A standard set of demographic qualifiers will be asked to allow to compare in many different ways. These qualifiers include; Years worked at TACOM LCMC, pay grade, organization, education level, gender, and generational identity.

**Research Instrument**

The quantitative survey to the workforce will be developed and administered via Survey Monkey (Appendix1). The questions in survey monkey are derived from Morten Hansen's book Collaboration (2009). These questions were used in Hansen's research in determining the collaborative style of 162 high performing executives. The leadership interview survey (Appendix2) mirrored the workforce survey. It will be accomplished face to face with a set of interview questions and a graphic sheet to help with the conversation.

The results of the survey will be captured. The data from the surveys will be averaged by organization of both the perceived workforce collaborative style rating and the leadership team of each organizations rating. Results will put each in a category as

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depicted in Table 2 below. The workforce perceived calculation will then be compared with the leadership perception calculation.

Table 2: Collaborative Leadership Style Scale

| | Lowest | 2nd Lowest | Median | 2nd Highest | Highest |
|---|---|---|---|---|---|
| Redefining Success | 4-16 | 17-19 | 20 | 21-23 | 24-28 |
| Involving Others | 4-13 | 14-17 | 18 | 19-22 | 23-28 |
| Accountability | 4-17 | 18-19 | 20 | 21-23 | 24-28 |
| Total | 12-49 | 50-57 | 58 | 59-64 | 65-84 |
| Implication / Style | Not a collaborative leadership style | A fairly low collaborative style | A Modest collaborative style | A pretty good collaborative style | An excellent collaborative style |

**Interview Guide**

The interview guide for leadership interviews as derived and developed using Morten Hansen's book Collaboration (2009). The questions were documented in word and a printed hard copy was used for the interview. I also used a graphic PowerPoint sheet to help explain some of the key points and concepts of the interview.

**Quantitative Research**

I will use both Excel and the Minitab tools to analyze the results of the surveys.

**Qualitative Research**

I will use thematic analysis of qualitative data; thematic analysis is a method for identifying, analyzing and reporting patterns (themes) within data. (Braun & Clarke, 2006)

## Reliability and Validity

I will measure reliability by using Cronbach's Alpha and measure the internal consistency to see if answers are stable and if the responses are consistent. Validity will be measured using face validity. I will validate that the words have been written correctly to measure the variability of interest.

## Summary

This chapter discussed the research methodology used to explore and answer the research questions and test the hypotheses identified. It started with the statement of purpose, research questions, and hypotheses. Next the sample population surveyed was described. The procedures used to conduct the research were discussed including IRB approval, the survey instrument and data collection methods.

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# Chapter 4 Results

## Introduction

This research paper addresses four fundamental questions related to collaboration at the TACOM LCMC:

**R01:** What is the current collaborative leadership style among organizations at the TACOM LCMC?

**R02:** Is there a difference in perception of collaborative leadership style between the workforce and leadership?

**R03:** What opportunities exist to make collaboration more valuable at TACOM LCMC?

**R04:** What are the barriers that diminish the value of collaboration at TACOM LCMC?

I conducted surveys and interviews with two target sets of participants, first the TACOM LCMC leadership and second the TACOM LCMC workforce at large. The leadership was given personal interviews comprised of both quantitative and qualitative data. (Appendix 2) The interviews contained a set of the same questions that were given to the workforce. The workforce completed an electronic survey via Survey Monkey (Appendix 1). The survey was comprised of items that assessed the demographic characteristics of the workforce and the perception of their organizations collaborative leadership style. The workforce survey also had a section to provide qualitative data regarding opportunities and or barriers found within their organizations relative to collaboration. The two sets of data; the workforce set and the leadership set were compared in a quantitative manner with the Minitab and Excel tools and a qualitative

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manner through thematic analysis. The survey data were analyzed using regression-based inferential statistics and structural equation modeling to test the following research hypotheses concerning the collaborative leadership styles.

**H01:** There is no difference in the collaborative leadership style among organizations at TACOM.

**H02:** Knowledge has no effect on collaborative leadership style.

This chapter first presents the demographic characteristics of the sample. This is followed by the reliability and validity tests of AL (hypothesis Ho1).

## Demographic Characteristics of the Sample

The sample for this study was comprised of the TACOM LCMC workforce approximately 8000 personnel who was invited to voluntarily participate in the study by completing the 19-item questionnaire using Survey Monkey. Of the 833 workforce members who started the survey, 93 did not complete it. Thus, the final sample size was N = 740.

As shown in Table 3, the sample was comprised of approximately 63% males. Approximately 42% of the sample worked in the LCMC for 1-5 years, and over 54% of the samples were GS 12-13 equivalents. Over 80% reported completing undergraduate or graduate college degrees. The Baby Boomer generation was the predominate generation with over 50% combined with Generation X of 34% these two generation made up over 80% of the respondents.

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Table 3: Workforce Survey Demographic Data

| Characteristic | n | % |
|---|---|---|
| **Sample** | **740** | **100.0** |
| **Org** | **Count** | **Percent** |
| ACC | 190 | 25.68 |
| ILSC | 208 | 28.11 |
| IMCOM | 46 | 6.22 |
| Misc | 21 | 2.84 |
| PEO CS & CSS | 35 | 4.73 |
| PEO GCS | 87 | 11.76 |
| TACOM Staff | 34 | 4.59 |
| TARDEC | 119 | 16.08 |
| **Years Worked** | **Count** | **Percent** |
| < 1 Year | 27 | 3.65 |
| > 20 Years | 164 | 22.16 |
| 1-5 Years | 309 | 41.76 |
| 11-15 Years | 63 | 8.51 |
| 16-20 Years | 23 | 3.11 |
| 6-10 Years | 154 | 20.81 |
| **Grade** | **Count** | **Percent** |
| GS 1-8 | 44 | 6.07 |
| GS 12-13 | 397 | 54.76 |
| GS 14-15 | 134 | 18.48 |
| GS 9-11 | 149 | 20.55 |
| SES | 1 | 0.14 |
| **Education** | **Count** | **Percent** |
| High School | 66 | 8.92 |
| Assoc | 58 | 7.84 |
| BS | 283 | 38.24 |
| MS | 322 | 43.51 |
| PhD | 11 | 1.49 |
| **Gender** | **Count** | **Percent** |
| Female | 274 | 37.28 |
| Male | 461 | 62.72 |
| **Generation** | **Count** | **Percent** |
| Baby Boomer | 378 | 51.50 |
| Gen X | 249 | 33.92 |
| Gen Y | 99 | 13.49 |
| Traditionalists | 8 | 1.09 |

Figure 6: Workforce Survey Particapation Total Count

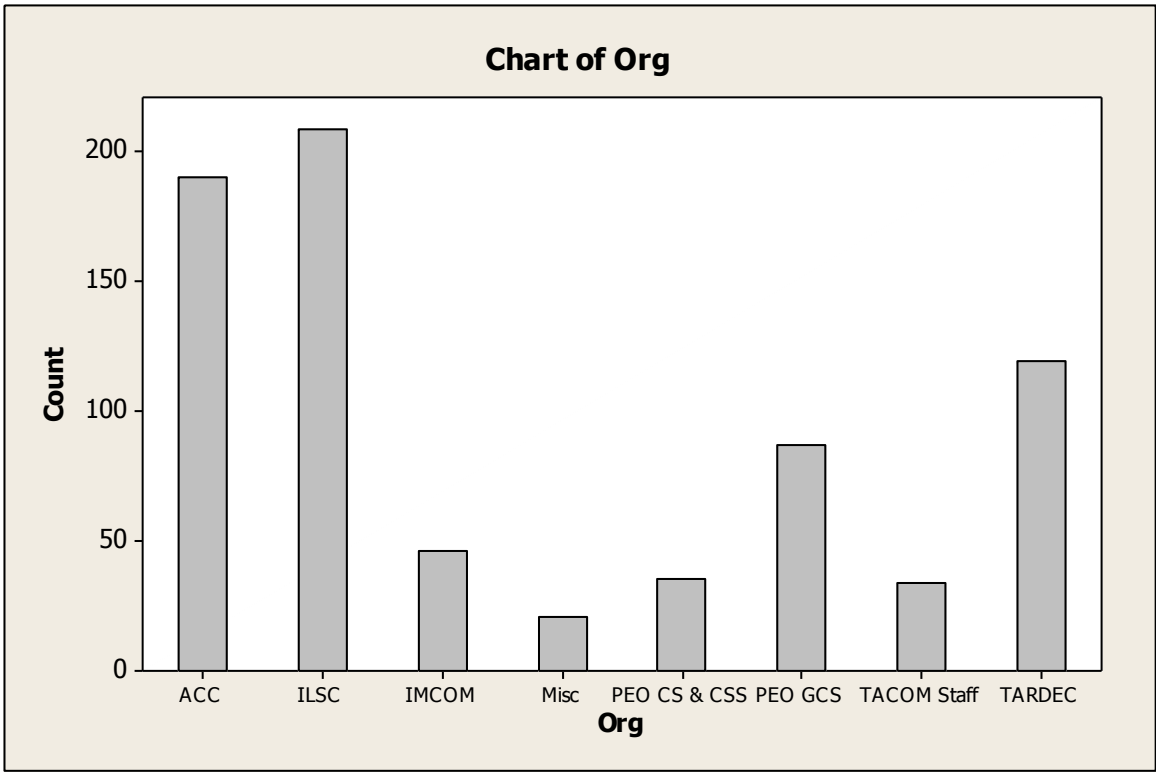



Figure 6: Workforce Survey Participation Percentage

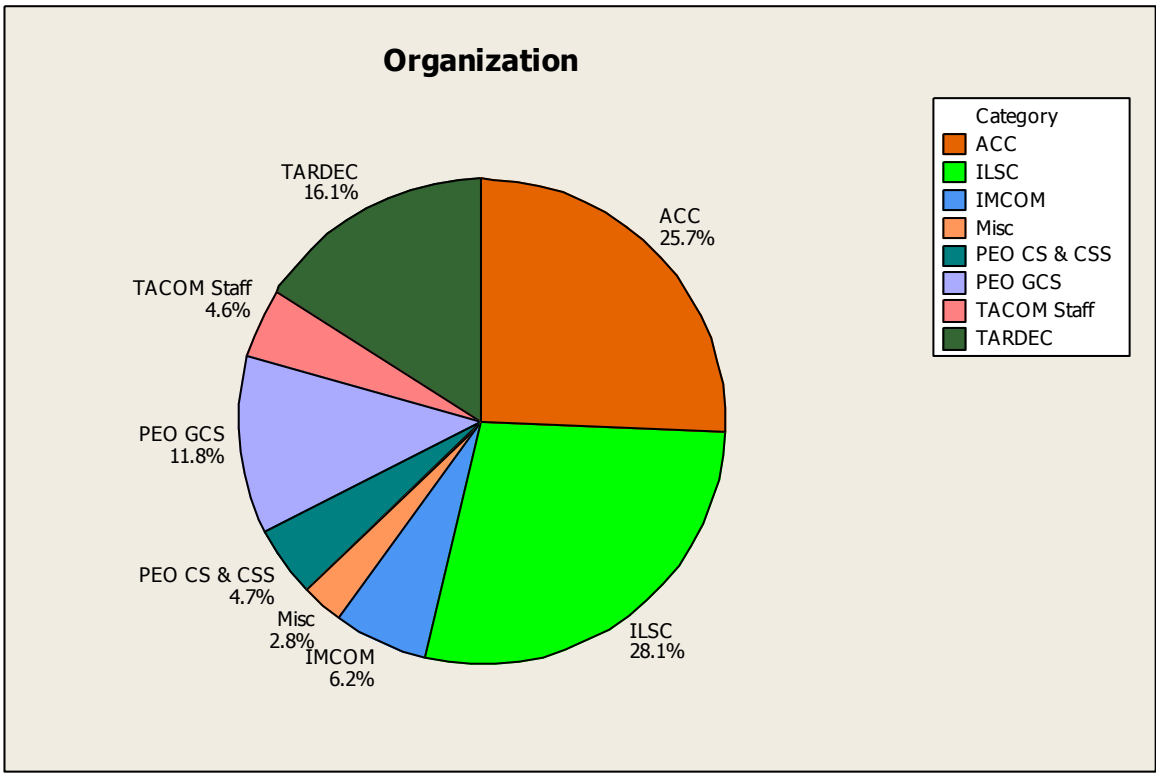



Figure 7: Workforce Survey Years Worked

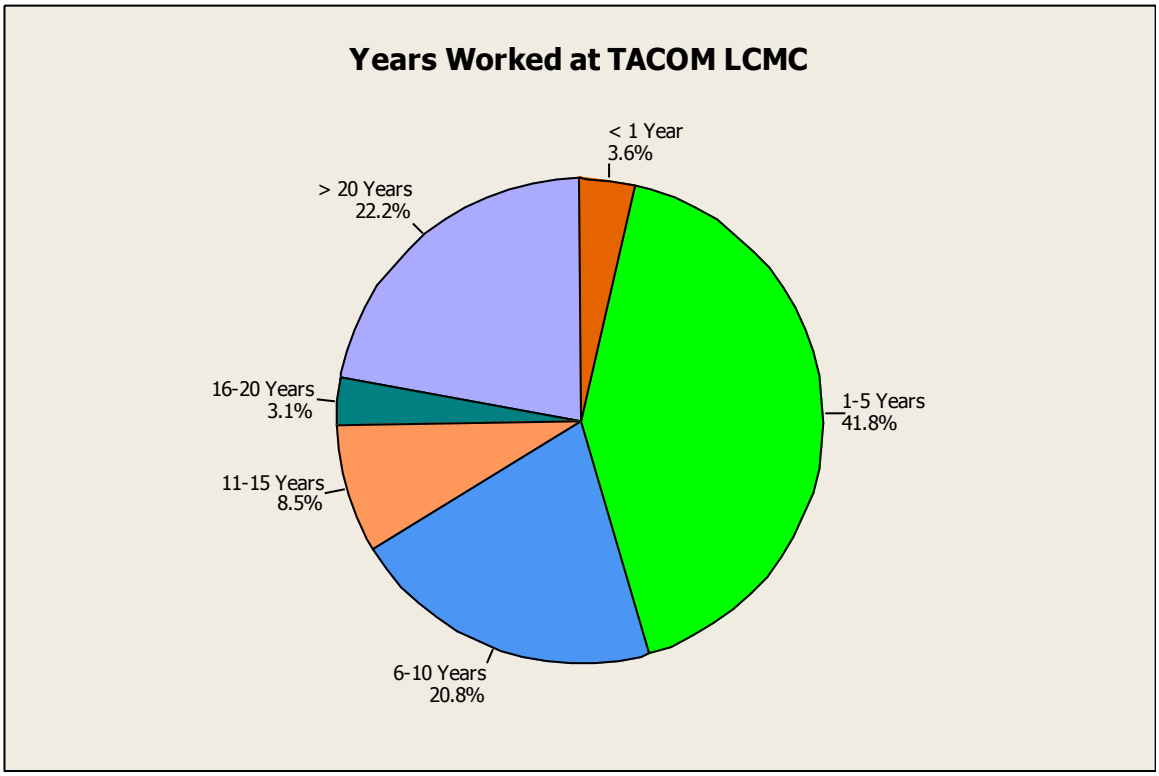



Figure 8: Workforce Survey Grade

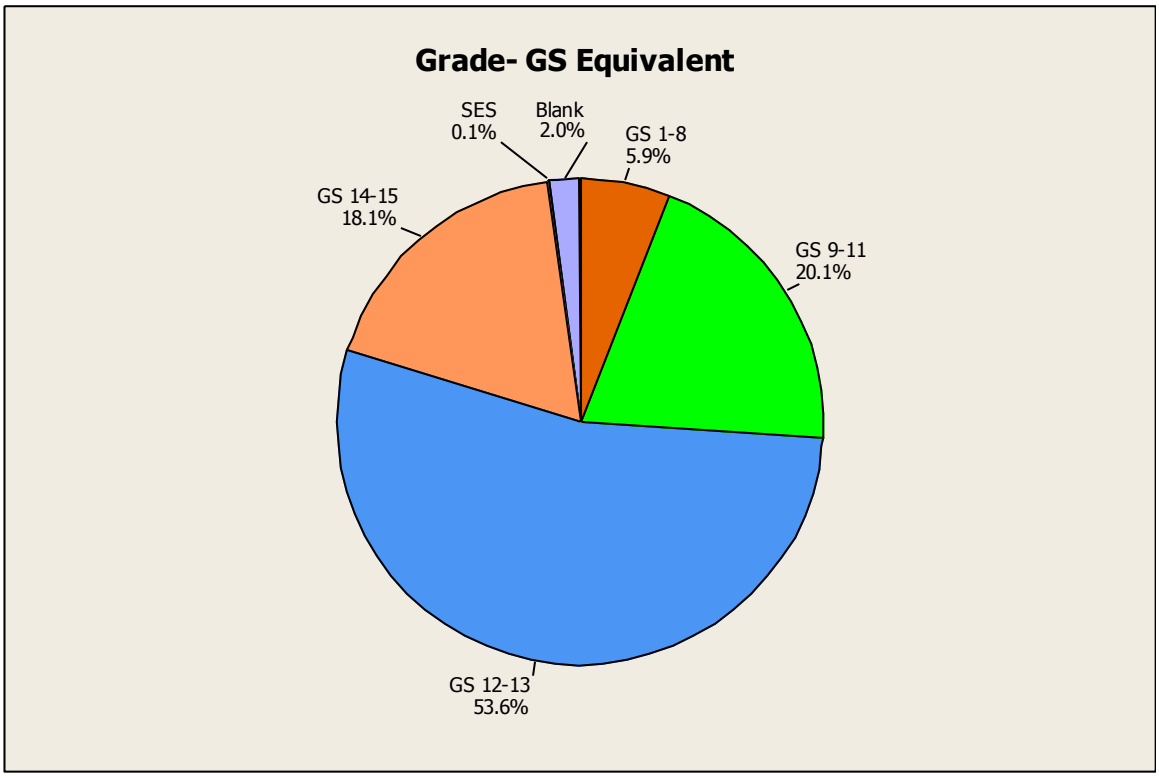



Figure 9: Workforce Survey Education

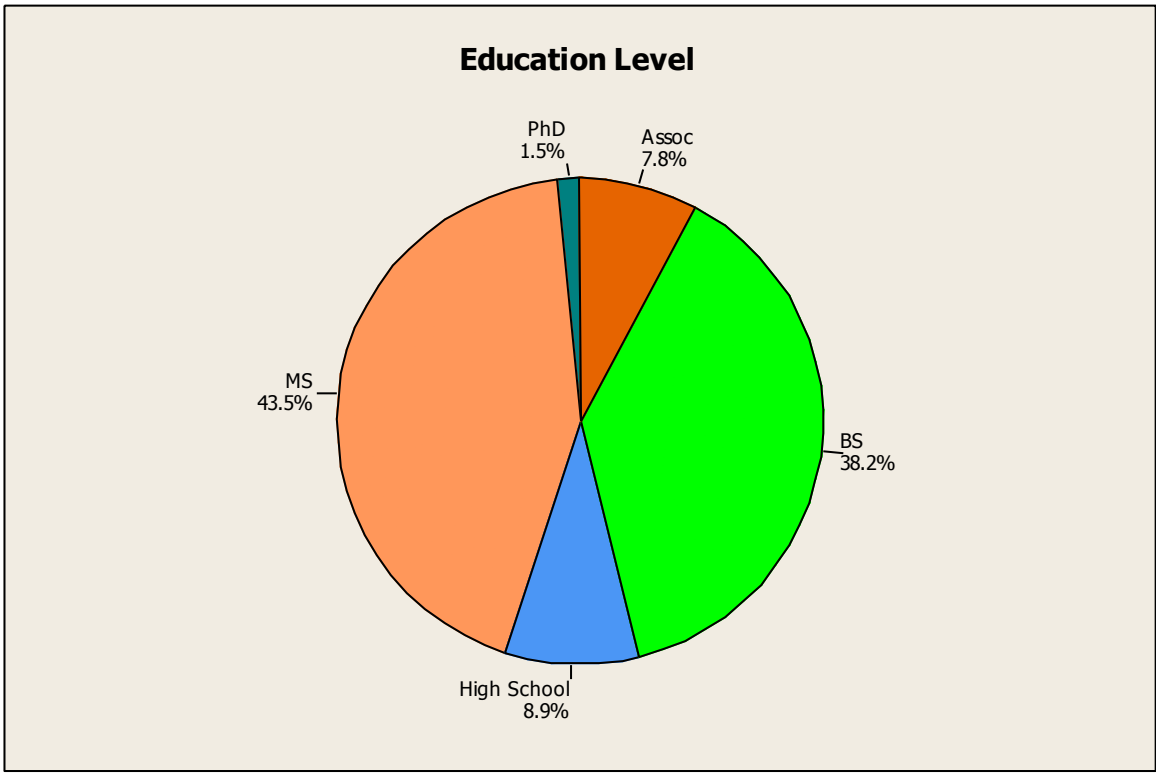



Figure 10: Workforce Survey Gender

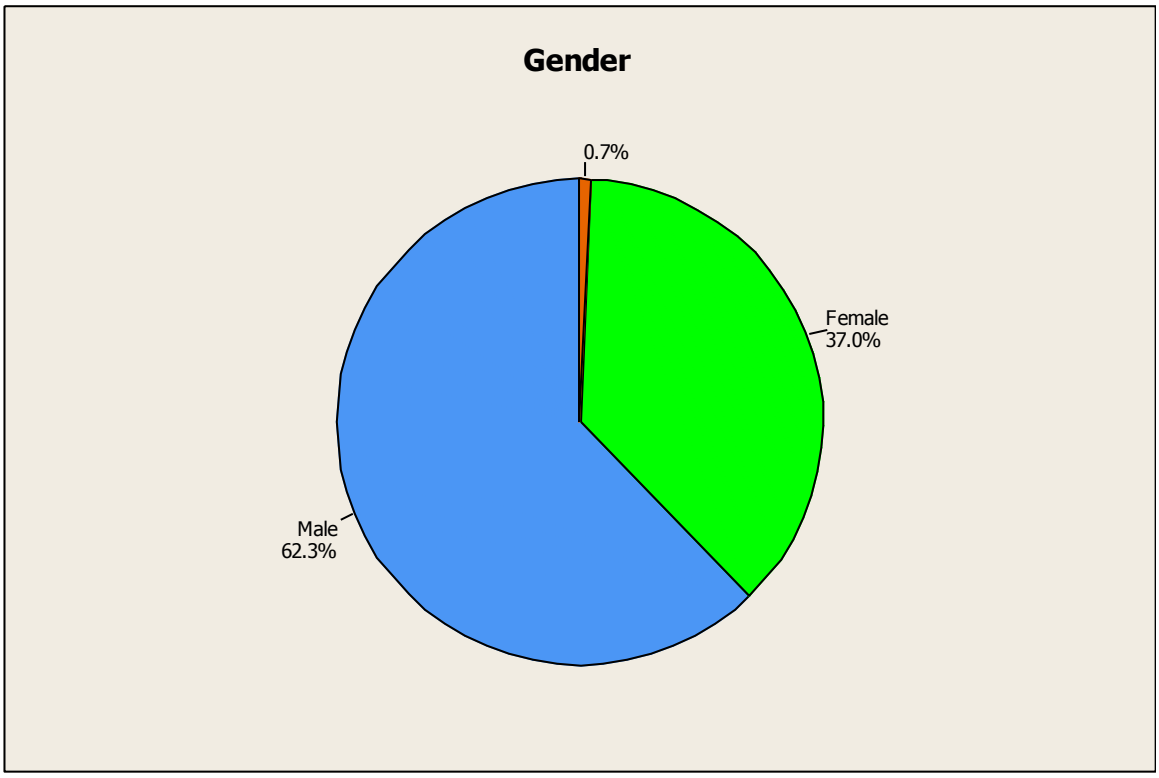
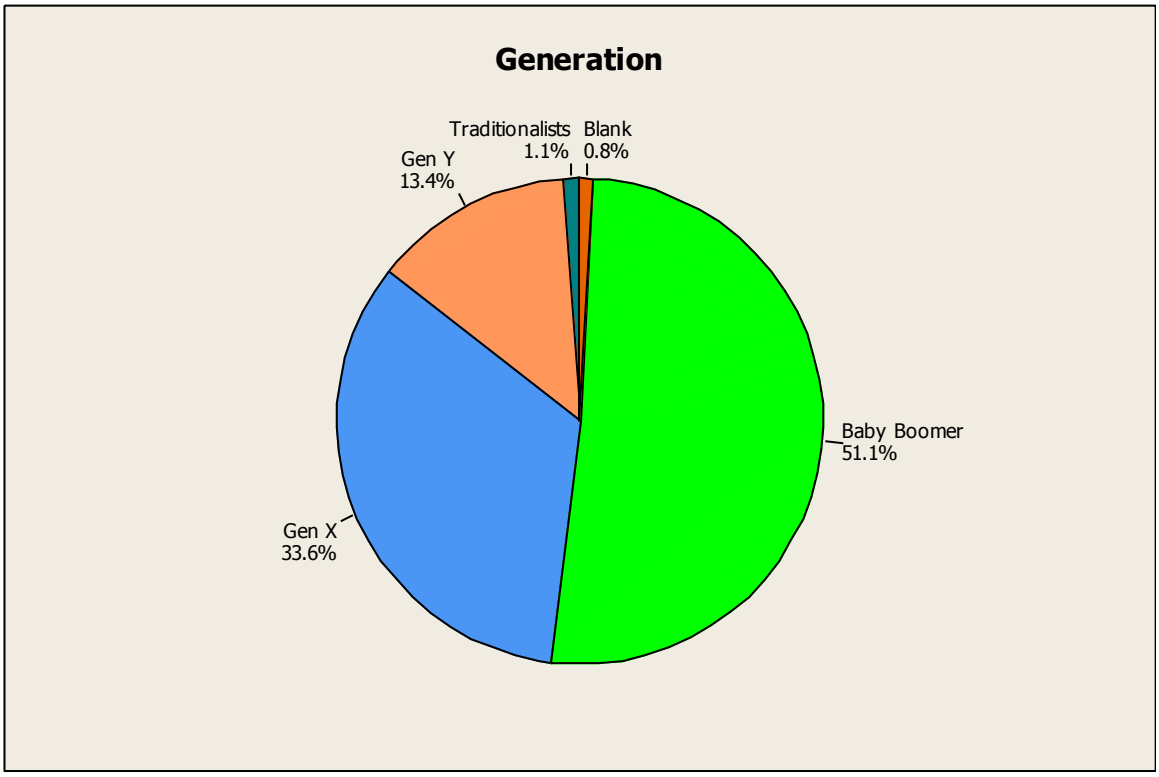



Figure 11: Workforce Survey Generational Breakdown

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**Reliability and Validity**

I had 18 quantitative survey questions total and one qualitative for both the workforce and leadership. The 18 questions were put into four categories. Category 1 Redefining Success had four questions; Category 2 Involving Others had four questions; Category 3 Being Accountable had four questions; Category 4 Knowledge had six questions. Categories 1 through 3 were individually evaluated and then used to define current TACOM LCMC Leadership style in the collaborative grand total as shown in Table 4.2 below.

As a measure of internal consistency, Cronbach's alpha assesses how reliably survey or test items that are designed to measure the same construct actually do so. Higher values of Cronbach's alpha suggest higher internal consistency. A historical benchmark value of 0.7 is commonly used to suggest that at least some of the items measure the same construct. However, benchmarks usually depend on the standards in your subject area and the number of items.

I used cronbach alpha to prove the data were in alignment and could be grouped together.

***Item Analysis of Org Goals, Own Agenda Inverse, Big Picture, Common Ground***

```
* NOTE * 692 cases used, 48 cases contain missing values

Cronbach's Alpha = 0.8672

 Redefining Success  (4 items)
```

```
   Leader org. goals ahead of ind. goals
   Leader preoccupied with own agenda
   Leader get people to see big picture
   Common Ground
```

***Item Analysis of Empathize, Allow Debate Early, Overrule Inverse, Involve***

```
* NOTE * 678 cases used, 62 cases contain missing values


Cronbach's Alpha = 0.8758


 Involving Others (4 items)
   Empathize with people
   Encourage open discussion early
   Overrule the team's decisions
   Look for ways to involve people
```

***Item Analysis of Take Responsibility, I am Res, Accountability, People res for O***

```
* NOTE * 693 cases used, 47 cases contain missing values


Cronbach's Alpha = 0.8458


 Being Accountable (4 items)
    Take responsibility for mistakes
    Use language such as I'm responsible
    Demand accountability from others
    Make sure others take responsibility for own actions
```

Base on the Cronbach Alpha, reliability and validity of the data were proven and could be combined into the target groups as shown above I use the tailored data set to analyze the research questions and hypothesis.

**Current Collaborative Leadership Style**

**Reasearch question R01:** "What is the current collaborative leadership style among organizations at TACOM LCMC?"

**R02:** Is there a difference in perception of collaborative leadership style between the workforce and leadership?

The data were up loaded to an excel spread sheet Means were calculated by combining questions into categories as identified in Table 2. The total scores were then inputted into Table 4 below.

Table 4: Collaborative Leadership Style

| CAT | ORG | Redefining Success Bigger Goals | Involving Others Total | Being Accountable Total | Collaboration Grand Total |
|---|---|---|---|---|---|
| Workforce | ACC | 20.3 (Modest) | 19.2 (Pretty Good) | 19.3 (Fairly Low) | 58.8 (Pretty Good) |
| Leader | ACC | 26 (Excellent) | 25 (Excellent) | 24 (Excellent) | 75 (Excellent) |
| Workforce | ILSC | 18.2 (Fairly Low) | 16.8 (Fairly Low) | 17.3 (Low) | 52.3 (Fairly Low) |
| Leader | ILSC | 24.4 (Excellent) | 21.5 (Pretty Good) | 22.65 (Pretty Good) | 68.55 (Excellent) |
| Workforce | IMCOM | 20 (Modest) | 18.9 (Pretty Good) | 18.8 (Fairly Low) | 57.7 (Modest) |
| Leader | IMCOM | 27 (Excellent) | 21 (Pretty Good) | 28 (Excellent) | 76 (Excellent) |
| Workforce | Misc | 18.6 (Fairly Low) | 16.6 (Fairly Low) | 18.7 (Fairly Low) | 53.9 (Fairly Low) |
| Leader | Misc | 18.6 (Fairly Low) | 16.6 (Fairly Low) | 18.7 (Fairly Low) | 53.9 (Fairly Low) |
| Workforce | PEO CS & CSS | 19.4 (Fairly Low) | 17.8 (Modest) | 19.6 (Modest) | 56.8 (Fairly Low) |
| Leader | PEO CS & CSS | 24.6 (Excellent) | 20.9 (Pretty Good) | 25.4 (Excellent) | 70.9 (Excellent) |
| Workforce | PEO GCS | 19.2 (Fairly Low) | 17.6 (Modest) | 18 (Fairly Low) | 54.8 (Fairly Low) |
| Leader | PEO GCS | 24 (Excellent) | 21 (Pretty Good) | 23 (Pretty Good) | 68 (Excellent) |
| Workforce | TACOM Staff | 18.6 (Fairly Low) | 18.1 (Modest) | 18.3 (Fairly Low) | 55 (Fairly Low) |
| Leader | TACOM Staff | 22.5 (Pretty Good) | 20.5 (Pretty Good) | 22 (Pretty Good) | 65 (Excellent) |
| Workforce | TARDEC | 18.7 (Fairly Low) | 17.8(Modest) | 17.5 (Fairly Low) | 54 (Fairly Low) |
| Leader | TARDEC | 21 (Pretty Good) | 19 (Pretty Good) | 20.8 (Pretty Good) | 60.8 (Pretty Good) |

As shown in Table 4, the workforce perception of collaboratvie leadership falls at the fairly low to modest level. The leadership perception of collaborative leadership style was pretty good to excellent. The figure below graphically shows the percieved collaborative leadership style from the workforce and leadership from each organization.

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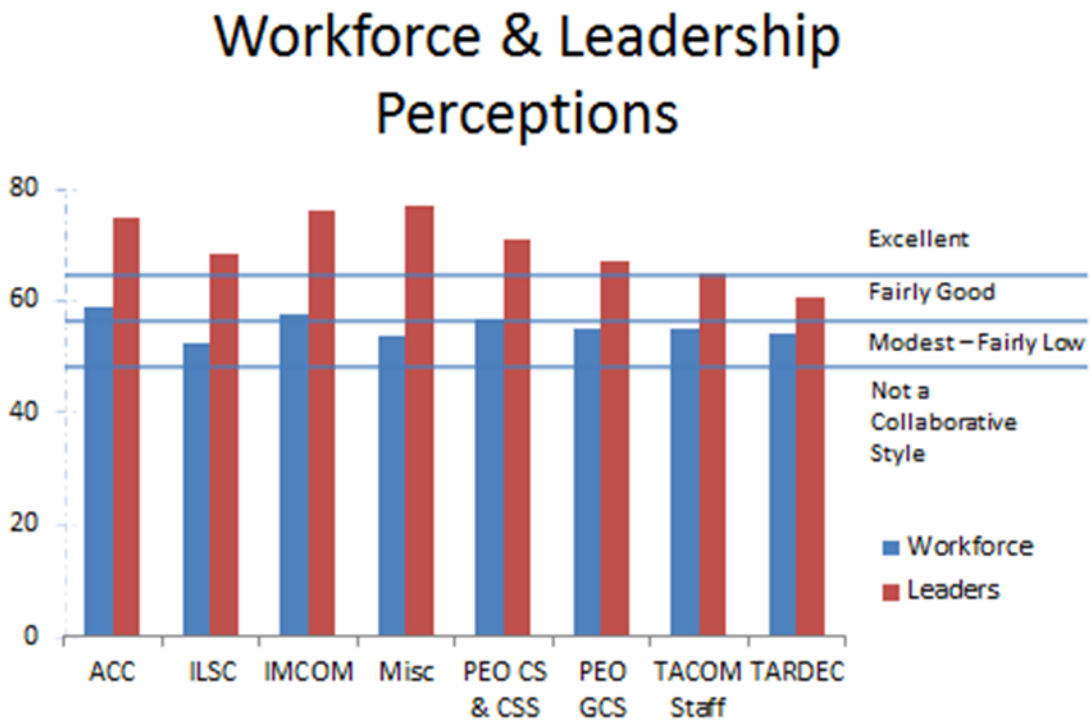


Figure 12: Workforce & Leadership Perceptions

As shown above in Figure 14 and Table 4, the perception between the workforce collaborative styles is different than the leadership perception. I also performed an ANOVA analysis to validate if there was a difference of workforce vs. leader perceptions statistically.

**Hypotheses Testing Results**

**Hypothesis Ho1:** H01: There is no difference in the collaborative leadership style among organizations at TACOM.

**R02:** Is there a difference in perception of collaborative leadership style between the workforce and leadership?

I wanted to understand if there was a difference between the workforce perception and the leadership perception in defining collaborative leadership styles. I used ANOVA below to validate if there was a difference of workforce vs. leader perceptions statistically.

**One-way ANOVA: Collaboration Grand total versus CAT**

```
Source  DF     SS     MS      F      P
CAT      1  562.3  562.3  19.19  0.001
Error   14  410.2   29.3
Total   15  972.5

S = 5.413   R-Sq = 57.82%   R-Sq(adj) = 54.80%

                          Individual 95% CIs For Mean Based on
                          Pooled StDev
Level   N    Mean  StDev  ----+---------+---------+---------+-----
Leader  8  67.269  7.340                    (------*------)
Totals  8  55.413  2.176  (-----*------)
                          ----+---------+---------+---------+-----
                           54.0      60.0      66.0      72.0

Pooled StDev = 5.413
```

The above data shows a P value of 0.001 which shows a statically significant difference in the means in collaborative leadership style perspectives among the workforce and leadership. The perspective of collaborative leadership style is significant different among the workforce and leadership.

I also used ANOVA to show if there is a difference in collaborative leadership styles across the different organizations of the TACOM LCMC.

Analysis of variance (ANOVA) is used to investigate and model the relationship between a response variable and one or more predictor variables. The predictor variables are qualitative (categorical), and no assumption is made about the nature of the relationship. In effect, analysis of variance extends the two-sample t-test for testing the

equality of two population means to a more general null hypothesis of comparing the equality of more than two means, versus them not all being equal.

I performed a one-way analysis of variance on the data on three groups; redefining success, involving others, being accountable and the grand total of the three sections combined.

***One-way ANOVA: Redefining Success Bigger Goals versus ORG***

```
Source  DF     SS    MS     F      P
ORG      7   21.0   3.0  0.22  0.970
Error    8  109.8  13.7
Total   15  130.8

S = 3.705   R-Sq = 16.04%   R-Sq(adj) = 0.00%

                                 Individual 95% CIs For Mean Based on
                                 Pooled StDev
Level         N    Mean  StDev  -----+---------+---------+---------+----
ACC           2  23.150  4.031          (--------------*--------------)
ILSC          2  21.300  4.384     (--------------*--------------)
IMCOM         2  23.500  4.950           (--------------*--------------)
Misc          2  21.300  3.818     (--------------*--------------)
PEO CS & CSS  2  22.000  3.677       (--------------*--------------)
PEO GCS       2  21.600  3.394      (--------------*--------------)
TACOM Staff   2  20.550  2.758   (--------------*--------------)
TARDEC        2  19.850  1.626  (--------------*--------------)
                                 -----+---------+---------+---------+----
                                   16.0      20.0      24.0      28.0

Pooled StDev = 3.705
```

The above data shows a P value of 0.970 which statically shows no difference in the means in redefining success among the organizations.

***One-way ANOVA: Involving Others Total versus ORG***

```
Source  DF     SS    MS     F      P
ORG      7   20.6   2.9  0.25  0.956
Error    8   92.3  11.5
Total   15  112.9

S = 3.397   R-Sq = 18.22%   R-Sq(adj) = 0.00%
```

```
                                Individual 95% CIs For Mean Based on
                                Pooled StDev
Level         N    Mean  StDev  --------+---------+---------+---------+-
ACC           2  22.100  4.101           (-------------*-------------)
ILSC          2  19.150  3.323    (-------------*-------------)
IMCOM         2  19.950  1.485      (-------------*-------------)
Misc          2  21.300  6.647         (-------------*-------------)
PEO CS & CSS  2  19.350  2.192     (------------*-------------)
PEO GCS       2  19.800  3.111      (-------------*------------)
TACOM Staff   2  19.300  1.697    (-------------*-------------)
TARDEC        2  18.400  0.849  (-------------*-------------)
                                --------+---------+---------+---------+-
                                     16.0      20.0      24.0      28.0

Pooled StDev = 3.397
```

The above data shows a P value of 0.956 which statically shows no difference in the means in involving others among the organizations.

***One-way ANOVA: Being Accountable Total versus ORG***

```
Source  DF     SS    MS     F      P
ORG      7   38.3   5.5  0.32  0.923
Error    8  135.7  17.0
Total   15  174.0

S = 4.119   R-Sq = 21.99%   R-Sq(adj) = 0.00%
```

```
                                Individual 95% CIs For Mean Based on
                                Pooled StDev
Level         N    Mean  StDev  -----+---------+---------+---------+----
ACC           2  21.650  3.323       (------------*-------------)
ILSC          2  19.975  3.783    (------------*------------)
IMCOM         2  23.400  6.505          (-------------*------------)
Misc          2  22.850  5.869         (-------------*------------)
PEO CS & CSS  2  22.500  4.101         (------------*------------)
PEO GCS       2  19.500  2.121   (------------*------------)
TACOM Staff   2  20.150  2.616    (------------*-------------)
TARDEC        2  19.150  2.333  (------------*-------------)
                                -----+---------+---------+---------+----
                                  15.0      20.0      25.0      30.0

Pooled StDev = 4.119
```

The above data shows a P value of 0.923 which statically shows no difference in the means in being accountable among the organizations.

***One-way ANOVA: Collaboration Grand total versus ORG***

```
Source  DF    SS   MS     F      P
ORG      7   175   25  0.21  0.972
Error    8   944  118
Total   15  1120

S = 10.87   R-Sq = 15.64%   R-Sq(adj) = 0.00%

                                  Individual 95% CIs For Mean Based on
                                  Pooled StDev
Level         N   Mean  StDev  -------+---------+---------+---------+--
ACC           2  66.90  11.46          (--------------*--------------)
ILSC          2  60.42  11.49     (--------------*--------------)
IMCOM         2  66.85  12.94          (--------------*-------------)
Misc          2  65.45  16.33         (--------------*-------------)
PEO CS & CSS  2  63.85   9.97       (--------------*--------------)
PEO GCS       2  60.90   8.63     (--------------*--------------)
TACOM Staff   2  60.00   7.07    (--------------*--------------)
TARDEC        2  57.40   4.81  (--------------*--------------)
                                  -------+---------+---------+---------+--
                                        48        60        72        84

Pooled StDev = 10.87
```

The above data shows a P value of 0.972 which statically shows no difference in the means in collaborative style among the organizations.

The results of the ANOVA analysis prove H01 in that there is no statistical difference in the collaborative leadership style among organizations at TACOM LCMC. While statically there is no difference there are slight differences when compared with the methodology that was used to measure collaborative leadership style. The figure below shows the differences by organization and leader versus workforce using Hansen's methodology.

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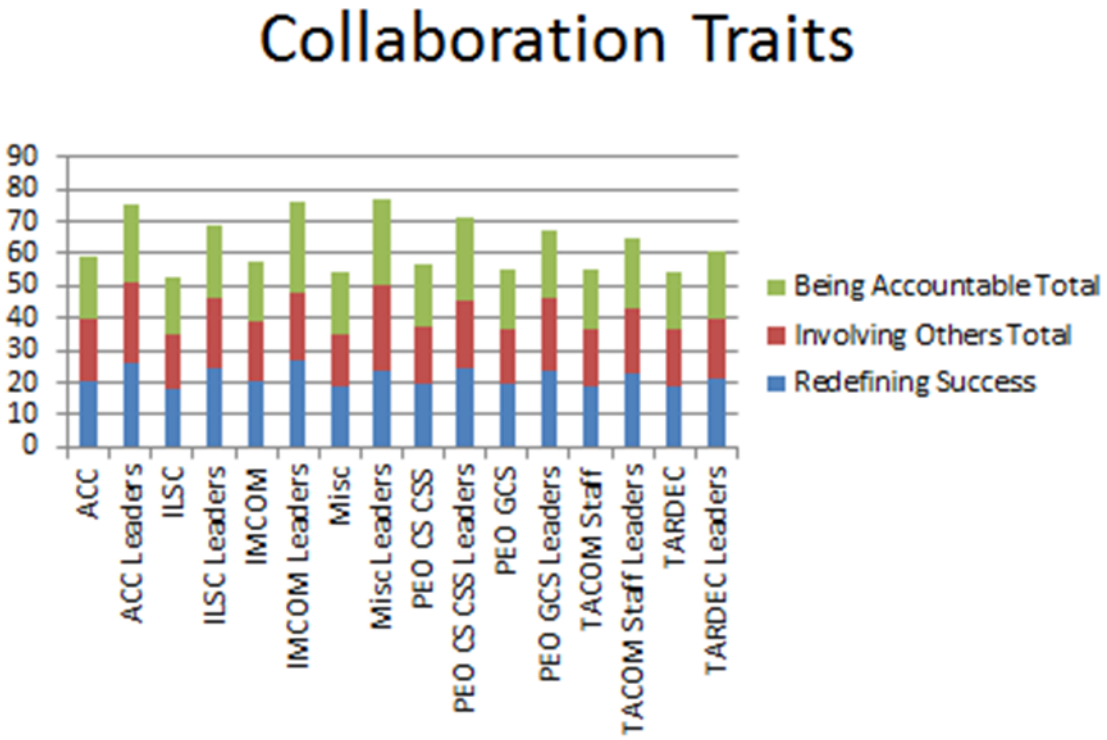



Figure 13: Collaboration Traits

The data reflected in Figure 15 shows difference across the organizations of the TACOM LCMC. It also shows that leaders of the LCMC have a higher level of perceived collaborative leadership style than the workforce.

**Hypothesis Ho2:** H02 Knowledge has no effect in the collaborative leadership style.

To analyze H02 I performed a correlation analyses in calculating the Pearson product moment correlation coefficient between Collaboration style and Knowledge set.

The Knowledge set includes knowing your leader, your leader knowing you, knowledge of vision, collaboration training, sharing information, and insight into efficiency.

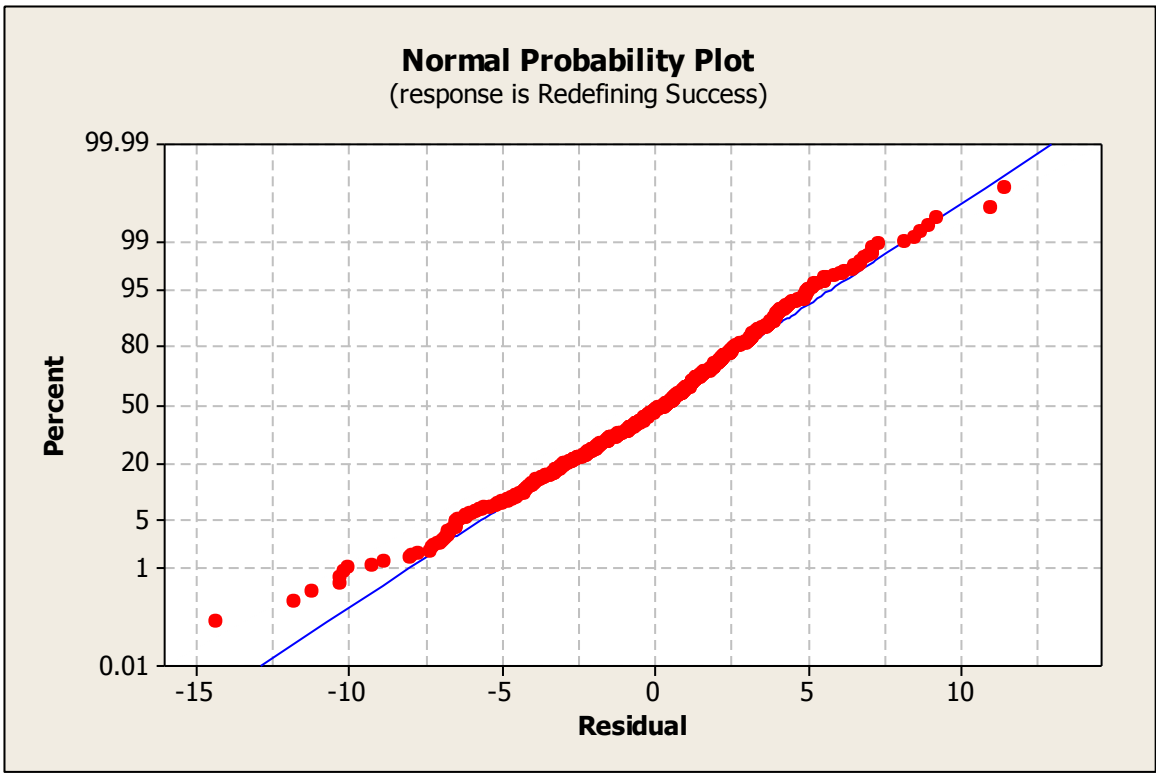
I used the Pearson product moment correlation coefficient to measure the degree of linear relationship between these two variables. The correlation coefficient assumes a value between -1 and +1. If one variable tends to increase as the other decreases, the correlation coefficient is negative. Conversely, if the two variables tend to increase together the correlation coefficient is positive.

***Correlations: Redefining Success, Knowledge***

```
Pearson correlation of Redefining Success and Knowledge = 0.784
P-Value = 0.000
```

**Regression Analysis: Redefining Success versus Knowledge**

```
The regression equation is
Redefining Success = 3.19 + 0.584 Knowledge

681 cases used, 59 cases contain missing values

Predictor     Coef  SE Coef      T      P
Constant    3.1877   0.5024   6.34  0.000
Knowledge  0.58399  0.01772  32.96  0.000

S = 3.48382   R-Sq = 61.5%   R-Sq(adj) = 61.5%

Analysis of Variance

Source           DF     SS     MS        F      P
Regression        1  13187  13187  1086.52  0.000
Residual Error  679   8241     12
Total           680  21428
```




The results of the correlation analysis show a strong relationship between Knowledge and Redefining Success. The regression analysis shows there is a relationship between the level of Knowledge and the level of Redefining Success as defined by the regression equation. The relationship can be quantified by using the regression equation output to show that the level of Knowledge has a direct effect on the level of Redefining Success.

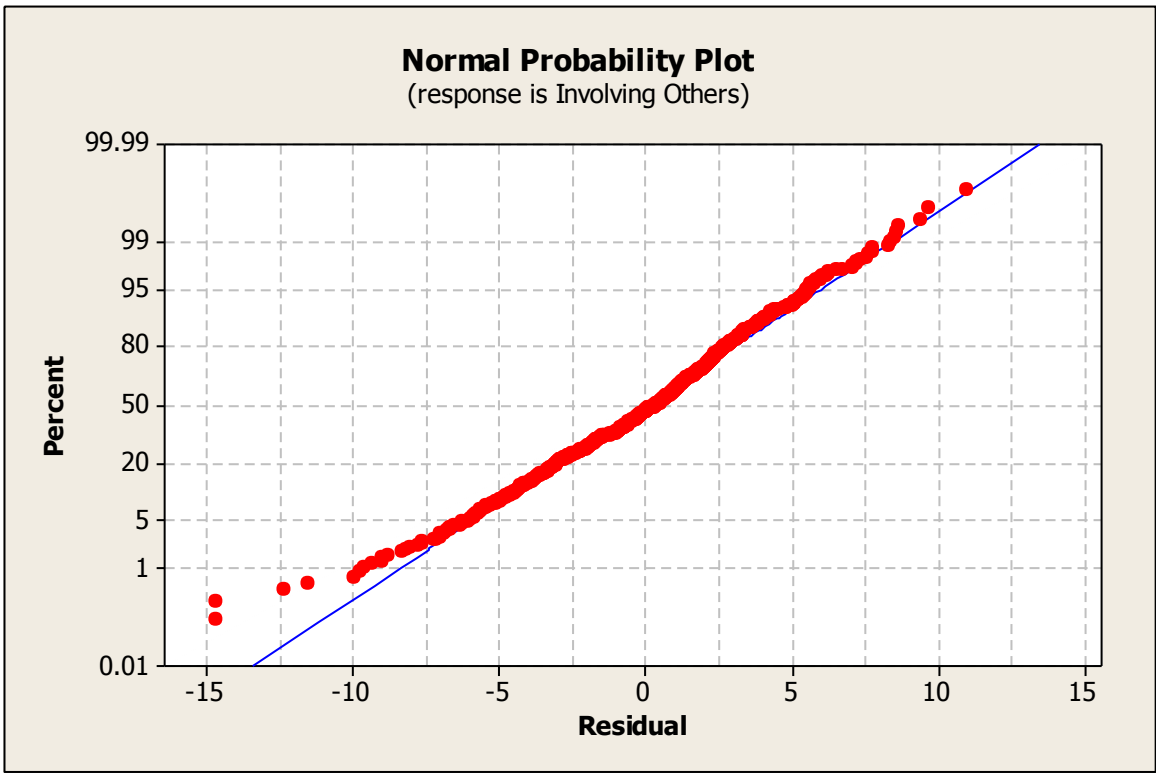
***Correlations: Involving Others, Knowledge***

```
Pearson correlation of Involving Others and Knowledge = 0.776
P-Value = 0.000
```

**Regression Analysis: Involving Others versus Knowledge**

```
The regression equation is
Involving Others = 1.80 + 0.591 Knowledge

666 cases used, 74 cases contain missing values

Predictor      Coef   SE Coef       T      P
Constant     1.7965    0.5296    3.39  0.001
```

```
Knowledge   0.59128   0.01865   31.70   0.000

S = 3.62532   R-Sq = 60.2%   R-Sq(adj) = 60.2%

Analysis of Variance

Source           DF     SS     MS        F      P
Regression        1  13210  13210  1005.10  0.000
Residual Error  664   8727     13
Total           665  21937
```



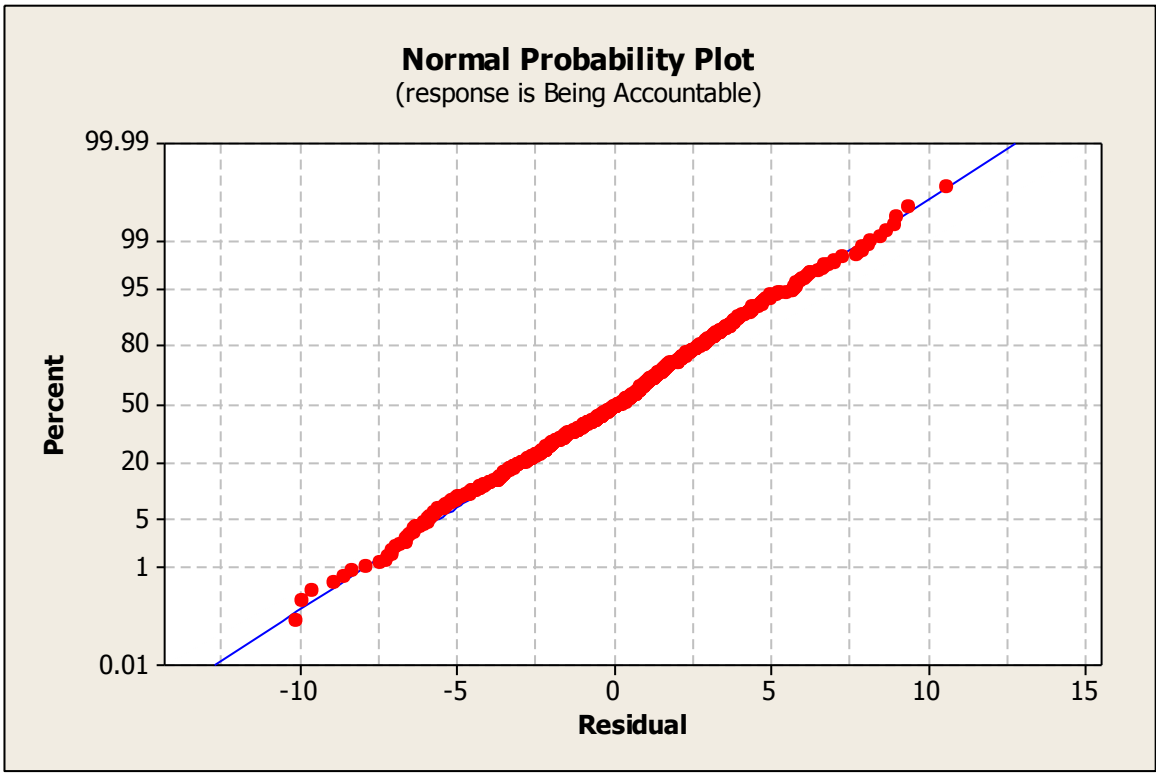

The results of the correlation analysis show a strong relationship between Knowledge and Involving Others. The regression analysis shows there is a relationship between the level of Knowledge and the level of Involving Others as defined by the regression equation. The relationship can be quantified by using the regression equation output to show that the level of Knowledge has a direct effect on the level of Involving Others.

***Correlations: Being Accountable, Knowledge***

```
Pearson correlation of Being Accountable and Knowledge = 0.772
P-Value = 0.000
```

**Regression Analysis: Being Accountable versus Knowledge**

```
The regression equation is
Being Accountable = 3.12 + 0.553 Knowledge

679 cases used, 61 cases contain missing values

Predictor     Coef  SE Coef      T      P
Constant    3.1185   0.4966   6.28  0.000
Knowledge  0.55309  0.01751  31.58  0.000

S = 3.43106   R-Sq = 59.6%   R-Sq(adj) = 59.5%

Analysis of Variance

Source           DF     SS     MS       F      P
Regression        1  11740  11740  997.23  0.000
Residual Error  677   7970     12
Total           678  19709
```



The results of the correlation analysis show a strong relationship between Knowledge and Being Accountable. The regression analysis shows there is a relationship between the level of Knowledge and the level of Being Accountable as defined by the regression equation. The relationship can be quantified by using the regression equation output to show that the level of Knowledge has a direct effect on the level of Being Accountable.

The results of the correlation analyses disprove H02 Knowledge has no effect in the collaborative leadership style.

**Qualitative Thematic Analysis Testing Results**

Qualitative data were collected to address research questions:

**R02:** What opportunities exist to make collaboration more valuable at TACOM LCMC?

**R03:** What are the barriers that diminish the value of collaboration at TACOM LCMC?

The Qualitative data collected were analyzed to address two specific research concerns in relation to collaboration. The first was what opportunities exist to make collaboration more valuable at TACOM LCMC? The second was what are the barriers that diminish the value of collaboration at TACOM LCMC? The results derived from the qualitative questions bridge the gap between the survey data and actual employee experiences.

Data Analysis includes thematic analysis of qualitative data, “Thematic analysis is a method for identifying, analyzing and reporting patterns (themes) within data” (Braun

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& Clarke, 2006, p. 79). A theme represents something important about the data in relation to the questions being asked (Braun & Clarke, 2006). This study uses a deductive (theoretical) approach, also known as top down method to analyzing qualitative data, which includes three critical steps, 1) perceiving a theme or pattern, 2) encoding the pattern, and 3) interpreting the pattern. Moreover, Boyatzis (1998) approach to thematic analysis provides the framework for analysis.

I collected data from both the TACOM LCMC workforce and the leadership. Each group was asked "What currently promotes or prevents greater collaboration in your organization". I received feedback from 414 workforce members and 21 leaders, across all the organizations from the TACOM LCMC. The data were analyzed for patterns and categorized into categories that reflect the general theme of the data.

Workforce breakdown:

ACC 83 comments

| Promotes | Count | Prevents | Count2 |
|---|---|---|---|
| Leadership | 11 | Knowledge* | 13 |
| Coworkers | 7 | Leadership | 9 |
| Knowledge Sharing | 6 | Relationships* | 9 |
| Collaborating | 3 | Communication | 6 |
| Tools | 3 | Morale | 3 |
| Communication | 2 | Change | 3 |
| Relationships* | 2 | Workload | 3 |
| Work Space | 2 | Priorities | 2 |
| Training | 1 | Silos | 2 |
| | | Tools | 2 |
| | | Training | 2 |
| | | Trust | 2 |
| | | Competition | 1 |
| | | Location | 1 |
| | | Org Structure | 1 |
| | | Rules | 1 |
| | | Work Space | 1 |

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ILSC 128 comments

| Promotes | Count | Prevents | Count2 |
|---|---|---|---|
| Coworkers | 7 | Leadership | 32 |
| Collaborating* | 4 | Relationships* | 20 |
| Team Building | 4 | Knowledge* | 13 |
| Knowledge Sharing | 3 | Communication | 10 |
| Leadership | 2 | Self Interest | 6 |
| Co-location | 1 | Workload | 6 |
| Communication | 1 | Change | 5 |
| Customer | 1 | Silos | 5 |
| Meetings* | 1 | Hoarding | 4 |
| Morale | 1 | Training | 4 |
| Recognition | 1 | Collaboration | 3 |
| Relationships | 1 | Tool | 2 |
| Self-Initiative | 1 | AMC Structure | 1 |
| Skills | 1 | Attitudes | 1 |
| Tools* | 0 | Coworkers | 1 |
| | | Egos | 1 |
| | | Leadership visit remote sites* | 1 |
| | | Trust * | 1 |

IMCOM 27 comments

| Promotes | Count | Prevents | Count2 |
|---|---|---|---|
| Leadership | 4 | Leadership | 4 |
| Communication | 3 | Relationships | 3 |
| Collaborating | 2 | Workload* | 3 |
| Coworkers | 1 | Change | 2 |
| Goals | 1 | Egos | 2 |
| Knowledge Sharing | 1 | Knowledge * | 2 |
| | | Complexity | 1 |
| | | Coworkers<br>Silos* | 1<br>0 |

MISC 12 comments

| Promotes | Count | Prevents | Count2 |
|---|---|---|---|
| Coworkers | 1 | Change | 2 |
| Knowledge Sharing* | 1 | Leadership | 2 |
| | | Silos | 2 |
| | | Communication* | 1 |
| | | Hoarding | 1 |
| | | Reactionary attitude | 1 |

PEO CS CSS 18 comments

| Promotes | Count | Prevents | Count2 |
|---|---|---|---|
| Communication | 1 | Communication | 3 |
| Coworkers | 1 | Relationships* | 3 |
| Leadership* | 1 | Change | 2 |
| Meetings | 1 | Competition | 1 |
| Collaboration* | 0 | Coworkers | 1 |
| | | Knowledge* | 1 |
| | | Leadership | 1 |
| | | Rules | 1 |
| | | Silos | 1 |
| | | Teamwork | 1 |
| | | Trust* | 1 |
| | | Workload | 1 |

PEO GCS 55 comments

| Promotes | Count | Prevents | Count2 |
|---|---|---|---|
| Leadership* | 6 | Leadership | 15 |
| Meetings* | 3 | Relationships* | 8 |
| Tools* | 3 | Hoarding | 6 |
| Team Building* | 2 | Workload | 6 |
| Communication* | 1 | Knowledge* | 5 |
| Coworkers | 1 | Communication | 4 |
| Skills | 1 | Silos* | 3 |
| | | Competition* | 2 |
| | | Efficient planning | 1 |
| | | Nepotism | 1 |
| | | Trust* | 1 |

TACOM Staff 22 comments

| Promotes | Count | Prevents | Count2 |
|---|---|---|---|
| Workspace | 2 | Leadership | 4 |
| Collaborating* | 1 | Communication* | 2 |
| Empowerment | 1 | Relationships* | 2 |
| Knowledge Sharing* | 1 | Competition | 1 |
| Meetings | 1 | Coworkers | 1 |
| Purpose | 1 | Funding | 1 |
| Leadership* | 0 | Knowledge | 1 |
| | | Lack of diversity | 1 |
| | | Silos | 1 |
| | | Trust | 1 |
| | | Workspace | 1 |

TARDEC 69 comments

| Promotes | Count | Prevents | Count2 |
|---|---|---|---|
| Collaborating* | 6 | Leadership | 8 |
| Leadership* | 3 | Communication* | 7 |
| Environment | 2 | Knowledge | 7 |
| Attitude | 1 | Silos | 7 |
| Communication | 1 | Workload* | 6 |
| Coworkers | 1 | Hoarding | 3 |
| Freedom | 1 | Non value task | 3 |
| Knowledge* | 1 | Competition* | 2 |
| Networking | 1 | Location | 2 |
| Relationships | 1 | Relationships* | 2 |
| Rotations | 1 | Trust* | 2 |
| Success | 1 | Attitude | 1 |
| Trust | 1 | Change | 1 |
| | | Coworkers | 1 |
| | | Egos | 1 |
| | | Funding | 1 |
| | | Inefficiencies | 1 |
| | | Lack of priority | 1 |
| | | Meetings | 1 |

**Total Top 15 Combined**

| Title Promotes | # | Title Prevents | #2 |
|---|---|---|---|
| Leadership* | 27 | Leadership | 75 |
| Coworkers | 18 | Relationships* | 47 |
| Collaborating* | 16 | Lack of Knowledge* | 42 |
| Knowledge Sharing* | 13 | Lack of Communication* | 33 |
| Communication* | 9 | Workload* | 25 |
| Meetings | 6 | Silos* | 21 |
| Team Building | 6 | Lack of Change | 15 |
| Tools | 6 | Hoarding | 14 |
| Relationships* | 4 | Trust* | 8 |
| Work Space | 4 | Competition | 7 |
| Environment | 2 | Self Interest | 6 |
| Skills | 2 | Training | 6 |
| Attitude | 1 | Coworkers | 5 |
| Colocation | 1 | Egos | 4 |
| Customer | 1 | Tool | 4 |

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The above results clearly show leadership as a major contributor to both promoting and preventing collaboration. The items above with an "*" show that leadership identified the same category in their qualitative data. The results of the Workforce Qualitative thematic analysis show five major themes that have the biggest perceived effect on promoting and or preventing collaboration. Both the workforce and leadership had the same top 5 in slightly different order. The order shown below represents the workforce results. The only difference in leadership result was that leadership was in the number 5 position and each of the other categories' moved up one slot. The thematic analysis of leadership interviews showed a trend in which all leaders felt or have been told by community members that the TACOM LCMC is one of the top collaborative organizations within the Army Acquisition community.

| Workforce | Leadership |
|---|---|
| • Leadership | • Relationships |
| • Relationships | • Knowledge |
| • Knowledge | • Communication |
| • Communication | • Workload / Collaborating |
| • Workload / Collaborating | • Leadership |

The 5 categories above are further defined below to clarify how the remarks both promoting and preventing were categorized in the thematic analysis.

Leadership: Remarks that attributed a condition, activity, or action to leadership at all levels.

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Relationships: Remarks that specifically addressed relationships, partnerships or interaction between organizations.

Knowledge: Included a broad range from training, understanding of vision, mission, roles, responsibility, and understanding the big picture.

Communication: Communicating, sharing information, involving others and understanding different perspectives.

Workload / Collaborating: The effects of too much workload and the act of working together in collaboration.

Below is a sampling of unedited responses I received and assigned to each of the categories. These remarks are unedited and raw and should be considered in that frame of reference.

**Leadership:**

**Promotes**

"Employees in this department have an open relationship with leadership, and know that they can bring ideas and foresight on issues to the senior leader's attention. That leader makes informed decisions regarding the issue, taking their data into consideration while ensuring mission accomplishment is maintained or enhanced in the process. His decisions in areas that have high visibility by employees comes with an explanation as to why the decision was made, why courses of action were chosen."

"Great team leader with well-rounded background in leadership and management that knows how to form strong teams and reach full potential."

"People appreciate recognition. Our Leader is a great people person and expresses his appreciation to others every chance he gets."

**Prevents**

“Leaderships inability and Unwillingness to fully understand issues brought to their attention to be resolved. IPT level work is collaborated on, but as soon as leadership gets involved efforts do not move. Lack of trust to be effective retards collaboration”

“The Leadership! Leadership is atrocious in TACOM as a whole. Leaders never hold themselves or employees accountable for their actions. They do not want to improve things because it is "too hard". The common phrase always heard when someone asks why we do something is "that’s the way it’s always been done". My question is that if it’s always been done wrong, why are we not working to fix it?”

“There are a few "favorite" stars that are given all the info and allowed to complete the majority of the tasks. The rest of us hardly exist.”

“Some percent of high level leaders are more concerned with their own area than the organization as a whole. Many are afraid to fail (enforced by prior leadership). Large percepts of high-level leaders do not like high-risk projects so they put up barriers so they do not have to do them. Culture is still one of contracting everything out instead of our internal folks being asked to get their hands dirty (and possibly failing as they learn).”

**Relationships:**

**Promotes**

“A culture of partnership between the PM's, RDEC's and the ILSC. Mutual respect and a history of cooperation built up over many years, facilitate our collaborative environment.”

“Personal relationships trust, when people know and have affinity towards another person - you can see them talk more and work together more.”

“Persons with strong collaboration skills promote greater collaboration by forming IPTs or setting up meetings that do this.”

**Prevents**

“There is good collaboration within my team and to a greater extent within my division, however, outside those areas there is very little collaboration (even though we work with our customers who are outside of our division). The problem is, there is an attitude of "we vs. them"... I see it all the time between contracting and the PM's and sometimes even between contracting and engineers. Part of the problem is that each group has their mission (and I'm sure they work hard on their goals) but they don't consider the other teams mission. Contracting has a very specific set of rules, guidelines and even laws that we must adhere too, other teams often say "we don't care about the FAR" they just "want

it done". As a former project manager, I see a lot of problems that would be fixed by promoting a far more collaborative working environment, as well as helping each other understand the role we all play in the process and what each team is expected to adhere too. Would really like to see more integration, but I know it would be very difficult in the beginning. Hopefully, the long term benefit would be worth it."

"The ACC and much of the ILSC leadership we work with is too parochial, hidebound and unimaginative."

"There is no collaboration. It's not with my immediate rater, but with program management. What I/we have to say doesn't matter. Some goals & objectives placed on my performance objectives are not up for discussion. Morale is at the same level as congressional production; NONE."

"Segregated facilities and separate agendas of logistics management between the PM (supervisors) and ILSC matrixed managers. Logistics is and has always been the last priority in the Acquisition minds of program management."

"Persons who believe they know what's best for their area (division or PMO) prevent collaboration by not reaching out to other organizations/depts to get input and subject matter expertise. The problem this creates is that it is people dependent, not process dependent. Executive level (PEO/DPEO/PM/DPM) leads by example; however the management below this level often does not seem to reach outside their areas to other PMs or the APEO staff as often."

"The PM/DPM has a solid, simple message and objectives. The division chiefs within the organization don't follow the vision and do their own thing."

"Internally, TACOM has failed to achieve a matrix organizational philosophy. The command needs to continue to evolve toward that type of structure. A key piece to achieving that goal is to overcome the generational challenges and implement meaningful change management. The managerial reliance on structure, combined with individuals' pursuit of pay growth, places technical competency at odds with managerial and leadership competencies."

**Knowledge:**

**Promotes**

"We understand our overall objective and who we are supporting. We do what we need to do to get the job done."

"Organizational behavior is changing to the positive. A greater understanding of what others do, what they can do, and what their challenges are, is coming to the fore front."

"Always having most current important mission and organization information."

**Prevents**

“With all the regulations and "red-tape" it seems even workers with lots of experience in their job struggle to come up with the right way to accomplish a task. It'd be nice to have some place on the Portal to add discoveries (something that took a long time to figure out) or hints arranged by topic. I can only assume that when I'm struggling for the right way (or simply the only way) to do something that someone else has already been thru it. I've only been here about 1 year and I've already shared several "discoveries" with my co-workers.”

“It seems quite a few folks have their own agendas and do not share their information with others.”

“Lack of knowing who to go to for questions can also inhibit collaboration.”

“The structure and the little knowledge of how everything works together.”

“Willingness to share information and to see the "big picture"”

**Communication:**

**Promote**

“Attitudes and communication skills”

“Communication and understanding the personnel that work for you.”

“Our old weekly VTCs, they have been culled out to every other week”

“Clear communication of goals and direction”

“The communication and information keeps the workforce reasonably informed of what is going on potential policies and orders.”

“open communication (listening & talking)”

**Prevent**

“Lack of communication/clarification of ideas and correlation/implementation of activity based thinking.”

“100 % hands down.. Communication. I still feel like it's 1970 whereas knowledge is power "so I’m going to keep everyone in the dark and maintain all the power"”

"Communication and understanding of leadership goals. Goals are published but there is not a clear understanding what they mean to the personnel out on the floor."

"Lack of communication between different business groups...As discussed in my recent LOE class, would be great if the business groups had an annual open house to promote collaboration and networking."

"Lack of communication. Too many differing people involved with same issue unknown to others."

**Workload / Collaborating:**

**Promote**

"I believe we work hard and collaborate as needed/when needed! I believe we are doing an excellent job in this area."

"Involvement in IPT's."

"As a price analyst collaboration is promoted by working closely with the contractor, program management office, and contracting. I don't feel anything is preventing collaboration; it's more of a choice of each individual to follow through on collaborating."

"Working together on joint projects"

"Encouraging all team members' participation in their thoughts and ideas to solve and/or prevent small problems from becoming larger challenging issues."

"Due to the worldwide aspect of our teams support, we MUST have collaboration, otherwise we would fail."

"For example, when investigating a solution for an issue, group one could fix a problem most efficiently from a cost and timing perspective, but they did not have the requirement that group 2 had and therefore could not fund the solution. The requirement would take years to be added. So, as the independent, I had to pull the groups together and figure out how group 2 could fund a product that is essentially a replacement part for group 1's product."

**Prevent**

"Taking initiative and contributing ideas or skill sets is discouraged and not acceptable under current management."

"Workloads are high and time demands on any individual already great. Some tasks will need to be dropped from workload to allow time for collaboration."

"time constraints (spend so much time doing budget and chartsmanship drills, we are mentally exhausted and don't give the high priority work our best efforts), overloaded by non-critical and poorly thought out tasks coming down, lack of strategic direction and lack of strategic (not creative, - but strategic) thinkers leading change."

"Employees buried with huge projects that don't often allow for collaboration with other teammates who are also buried with their own efforts. i.e. helping someone on their effort means you fall behind in yours and vice versa. Also clear roles and responsibilities are blurred at times."

**Summary**

This research has successfully answered the four fundamental research questions regarding TACOM LCMC collaboration. It also proved the two research hypotheses as summarized below.

**R01:** The current collaborative leadership styles among organizations are shown in Table 4. Styles ranged from fairly low to excellent among the organizations at the TACOM LCMC?

**R02:** There was a difference in perception of collaborative leadership style between the workforce and leadership.

**R03:** Many opportunities were identified to make collaboration more valuable at TACOM LCMC.

**R04:** Many barriers were identified that diminish the value of collaboration at TACOM LCMC?

**H01:** Statistically there is no difference in the collaborative leadership style among organizations at the TACOM LCMC.

**H02:** Knowledge has a considerable effect on collaborative leadership style.

# Chapter 5 Conclusion

## Introduction

This thesis adds to the significant amount of research and emphasis on collaboration that has been performed over the last several years. As organizations continue to change and adapt to current situations, collaboration is effective at creating efficiencies and reducing barriers. In today's defense environment of budgetary pressures and reductions, it is critical for the defense community to look for ways to increase efficiencies. This is highlighted with the better buying power initiative and current sequestrations actions. The research has found that collaboration creates efficiencies and more vibrant corporations. The current TACOM LCMC collaborative leadership style as shown by this research to be at average to above average in many areas. TACOM LCMC is acknowledged as one of the better collaborative organizations within the Army Acquisition community.

An excellent example of creating efficiency through collaboration was given by a strategic service company focused on providing management and technology consulting to clients. Several years ago they went from a multiple profit and loss (P&L) center organization to a single P&L center organization. This move created an environment that went from competitive P&L centers to a collaborative environment where different centers were task organized in support of a single P&L goal. There were other actions instituted that would drive collaboration to include, pulling talent from across the organization to assemble the best teams to support critical request for proposals or delivering products and services to clients. Collaboration was part of each associates

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performance reviews and they were held accountable for execution. Associates were also called on to provide 360 feed-back to leadership. They measured recruiting and retention of employees. Leadership owned leadership training of their associates and developed their careers with rotations and stretch assignments across the company. This change did not come without great effort and many partners could not adapt and left the company. The rewards of their efforts were client satisfaction, employee satisfaction which is reflected in a significant growth in profits and shareholder value. My research has shown many similar examples of successful collaboration.

**Leadership**

This research has shown that leadership is one, if not, the most important action in increasing collaboration in an organization. To answer research question R01 current leadership style at the TACOM LCMC, Hansen's methodology of measurement shows the TACOM LCMC to have an average collaborative leadership style. Based on my research there are many actions that could be taken to move towards an excellent collaborative leadership style. As we saw in Cameron's research creating a positive leadership environment with actions that create positive deviance. Leaders have a great influence regarding the environment. It was found that the higher performing teams had 5.6 positive behavior examples to each negative example; lower performing teams had a .36 to 1 ratio. The traits of the best performing teams are the same traits that create a collaborative environment. Higher performing teams had higher ratios in inquiry versus advocacy, others versus, and average connectivity. Leaders can specifically evaluate opportunities for collaboration, spot barriers to collaborations, and tailor collaboration solutions to increase the effectiveness of collaboration.

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**Barriers**

In answering research question R04 the barriers that diminish the value of collaboration, this research shows there are four major barriers that block collaboration among decentralized organizations.

1. Not Invented Here: People are not willing to seek input from others outside their core unit.
2. Hoarding: People are not willing to provide information and help others when asked.
3. Search problems: People are not able to find information and the right people easily.
4. Transfer problems: People are not able to transfer complicated knowledge from one unit to another.

The first two barriers are motivational in nature and the second two are based on ability, each cause people to not collaborate well. Every situation raises different barriers. A successful leader must be able to recognize barriers that exist and tailor a solution that will create an environment that is ready to effectively collaborate.

People who work closely together develop an insular culture as they spend time with each other and exclude others. This restricts the influx of new viewpoints and reinforces their own beliefs. In building subculture alignment through collaboration, the dilemma of all organizations is how to maximize the contribution of each sub culture by aligning them instead of trying to judge who is right and who is wrong. If members of subcultures don’t get to know each other, they will never understand each other enough

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to work in alignment. What leaders need to do is create vehicles- task forces, Integrated Product Teams, and various reviews that create a collaborative environment that allows subcultures to understand each other. (Hesselbein & Goldsmith)

At the unit level there are often times when projects compete for funding or market share within the same basis. These units see this has direct competition and are reluctant to share information that may help. This can also be seen at the individual level. Incentives are based on individual performance which creates competition between individuals for promotions and bonuses. An individual may hold back information to ensure they get credit for it and deny their competition any advantage. Related to competition over money and mission is power. The fear of losing power over a perceived area of dominance is a certain cause of hoarding. Also within the hoarding barrier is the phenomena called "time famine" where people are overburdened with their own mission and any distraction would be a burden that puts them behind and at a disadvantage. When people are measured by individual performance it becomes their priority, helping others comes at least second and people will likely never feel they have time to help others.

The search barrier is influenced by company size, physical distance, information overload, and poverty of networks. The larger the size and complexity of companies, the more difficult it is to share information in a way that people can readily find, understand, and use information effectively.

The transfer barrier is when units within a company work in isolation and try to transfer a product or service to another unit with-in the company. The idea is that different cultures have different language and tactics that don't easily translate. Without

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an established working relationship between units it is difficult for them to work together when the time comes to work together on a project or transfer a product for further development it is very difficult. Without previously established relationships and with very weak ties, it is easy for one unit to simply throw the project over the proverbial wall to the gaining unit without regard to their success. The gaining unit will have to use resources to solve issues that have already been addressed and may move out in a wrong direction without the adequate experience, skills or understanding of the project or product. When units know each other well and have established relationships it becomes easier to transfer projects and products.

Because organizations differ, leaders should understand the barriers they are faced with and at what level they are affecting success within their organization.

**Opportunities**

In answering research question R03 regarding what opportunities exist to make collaboration more valuable, this research has brought to light many opportunities to increase collaboration. While leaders can easily pit groups against each other they more importantly have the power to unite separated groups by the actions they take. Using three fundamental unification mechanisms (1) creating a unifying goal, (2) inciting a common value of team work, and (3) speaking the language of collaboration, leaders can change aspirations into concrete measures.

A unifying goal should be concrete, simple, and measurable. The core values should contain liberty and freedom to create a sense of entrepreneurship, ownership and passion. Core values should also contain teamwork and cooperation to leverage skills and opportunity that will increase performance. The two sets of values are opposing in nature

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yet both are required in balance. Leaders can influence collaboration by the language they use and the emphasis they place on collaboration. Leaders can challenge their people to help each other across boundaries to the point it becomes an expected, reciprocated, and measured practice. Collaboration can become part of the culture through the actions of leadership.

Leaders can also promote collaboration emphasizing team players versus individual accomplishments. Leaders can build a collaborative company by growing leaders that can work both vertically within their organization and horizontally across multiple organizations. Leaders can promote collaborative behaviors during hiring and promoting and changing behaviors through training, pay, and promotion. People could be rewarded for their collaborative contribution and then individual performance.

Building networks may produce the biggest return in performance but like collaboration it must be done in a balanced manner in order to realize maximum return. Network activity should be primarily focused outward or horizontally across key collaboration points. Research has shown when networking outward it is the quality and diversity of the networking points that provide the greatest return and not just mere quantity. Vertical networks are typically stronger but consist of people and activities we are already familiar with. Studies have shown that weak ties will produce more opportunities and a higher return. Networking with people who are bridges provide access to a vast amount of information and capability and are shown to be the best networking points. People who are bridges tend to have worked in many areas of the business and have a wide range of knowledge. Leaders can create bridges in their organizations on purpose by having certain positions assume a bridging role. Leaders can

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also expand job rotation opportunities across units and organization of their companies. People who spend time in different parts of the company often become excellent bridges. For the highest return a leader should understand and actively manage networks.

**Applications for Practitioners**

The findings in this study are extremely useful to leaders of organization such as the TACOM LCMC. Applications of the results for leaders are summarized here in chapter 5 and in detail throughout this research paper and the references cited.

With the information from this study a leader can derive several data points that could be useful in establishing an approach to increase collaboration to become more efficient and add value in the coming years of budget constraints. A leader could develop a collaboration framework to track and prioritize action and progress. Below are potential initiatives and ideas that might be considered in the near term to increase collaboration. One method could be establishing strength based IPTs in the top 5 areas with the highest potential to increase collaboration.

a. Leadership forum to share ideas and drive improvements
b. Leadership Training
c. Improve relationships internal and external
d. Performance Evaluation and Rotational Method
e. Knowledge and Communication Tools
f. Establish a baseline of top level metrics to understand status, progress, efficiencies.
g. Roles, Responsibility, Core Capabilities, and Product understanding

h. Target Highest Return on Investments

These initiatives above could be used as a start to populate a framework of improvements over time to increase the value of collaboration and measure the results of actions.

This research also has the potential to be applied outside the TACOM LCMC across the Army and Defense Acquisition communities. Multiple organizations perform similar missions; strong cultural barriers have been established and reflect insular behaviors. Exploring opportunities for collaboration could diminish barriers and produce needed efficiencies for the future.

**Recommendations for Future Research**

This study strongly suggests a balanced collaborative approach is a benefit to organizational efficiency. Follow on research is highly recommended to look into a simple set of metrics that can be applied and tracked for an organization that will measure collaborative progress and returned value. The data used in this study could be used on an annual basis to measure change in collaborative leadership style. Further research could make refinements to make it simpler and easier to measure on a routine basis to give leadership the pulse of the organization. Research could also explore collaboration opportunities outside of the TACOM LCMC. The standard acquisition process has been replaced by several initiatives during the past decade's war on terror. Is there a balanced collaborative approach that can take lessons learned from initiatives and activities such as the Rapid Equipping Force (REF), Mine Resistance Ambush Protected (MRAP), and Special Operations Command Acquisitions that create efficiencies and opportunities? I suspect there is great opportunity and benefits to be realized by reducing collaborative barriers across the defense acquisition community.

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## Appendix A

## Survey Questionnaire

1. **Which organization do you work for at the TACOM LCMC?**
    - **LCMC Staff Element**
    - **ILSC**
    - **TARDEC**
    - **PEO GCS (Core)**
    - **PEO GCS (Matrix from another organization)**
    - **PEO CS/CSS (Core)**
    - **PEO CS/CSS (Matrix from another organization)**
    - **Army Contracting Center – Warren**
    - **Other**
2. **How many years have you worked at TACOM? <1 yr 1-5 6-10 11-15 16-20 >20**
3. **What is your GS equivalent Grade Level 1-8 9-11 12-13 14-15**
4. **What is your highest educational level achieved? HS Assoc BS MS PhD**
5. **What is your gender? Male Female**
6. **What year were you born? Prior to 1946 1946-1964 1965-1980 1981 or later**

Please answer the following questions regarding your leader, specifically the person who provides you day to day guidance regarding your mission. Answers should be on a scale of 1 - 7, (1=Not At All) ( 2= Very Little) (3= Some) (4= Average) (5= Slightly Above Average) (6 Well Above Average) (7 = To A Great Extent)

1. **How well do you know your leader?**
2. **How well does your leader know you?**
3. **Does your leader have a well-known and compelling vision?**
4. **Does your leader put the organizations goals ahead of her/his individual goals?**
5. **Is your leader preoccupied with her/his own agenda to the exclusion of the larger organizational goals?**

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6. **When confronted with a situation where people disagree, is your leader able to get people to look at the bigger picture?**
7. **Is your leader good at finding common ground among people who have different goals and agendas?**
8. **Does your leader empathize with people who have different views?**
9. **Does your leader encourage open discussion and debate of issues early in the process?**
10. **Does your leader often make decisions alone or overrule the team's decisions?**
11. **Does your leader look for ways to involve people as opposed to just telling people what to do?**
12. **Does your leader take responsibility for mistakes?**
13. **Does your leader frequently use language such as I'm responsible?**
14. **Does your leader demand accountability from others?**
15. **Does your leader make sure others take responsibility for their own actions?**
16. **Does your leader actively look for ways to increase efficiencies?**
17. **Does your leader actively share information?**

Please answer the following questions regarding collaboration, as defined:

Collaboration: "a mutually beneficial and well-defined relationship entered into by two or more organizations to achieve common goals. The relationship includes a commitment to mutual relationships and goals; a jointly developed structure and shared responsibility; mutual authority and accountability for success; and sharing of resources and rewards"

Collaboration Answers should be on a scale of 1 - 7, (1=Not at all) (2= Very Little) (3= Some) (4= Average) (5= Slightly Above Average) (6 Well Above Average) (7 = To A Great Extent)

18. **Has the training you have received prepared you to work collaboratively?**
19. **How would you rate the overall level of collaboration in your organization?**

OPEN ENDED QUESTION

1. What currently promotes or prevents greater collaboration in your organization?

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## Appendix B

## Leadership Interview Questionnaire

Please answer the following questions regarding your leader, specifically the person who provides you day to day guidance regarding your mission. Answers should be on a scale of 1 - 7, (1=Not At All) ( 2= Very Little) (3= Some) (4= Average) (5= Slightly Above Average) (6 Well Above Average) (7 = To A Great Extent)

1. **How well do you know your people?**
2. **How well do your people know you?**
3. **Do you have a well-known and compelling vision?**
4. **Do you put the organizations goals ahead of her/his individual goals?**
5. **Do you find yourself preoccupied with your own agenda to the exclusion of the larger organizational goals?**
6. **When confronted with a situation where people disagree, do you get people to look at the bigger picture?**
7. **Are you good at finding common ground among people who have different goals and agendas?**
8. **Do you empathize with people who have different views?**
9. **Do you encourage open discussion and debate of issues early in the process?**
10. **Do you often make decisions alone or overrule the team's decisions?**
11. **Do you look for ways to involve people as opposed to just telling people what to do?**
12. **Do you take responsibility for mistakes?**
13. **Do you frequently use language such as I'm responsible?**
14. **Do you demand accountability from others?**
15. **Do you make sure others take responsibility for their own actions?**
16. **Do you actively look for ways to increase efficiencies?**
17. **Do you actively share information?**

Collaboration: "a mutually beneficial and well-defined relationship entered into by two or more organizations to achieve common goals. The relationship includes a commitment to mutual relationships and goals; a jointly developed structure and shared responsibility; mutual authority and accountability for success; and sharing of resources and rewards"

Collaboration Answers should be on a scale of 1 - 7, (1=Not at all) (2= Very Little) (3= Some) (4= Average) (5= Slightly Above Average) (6 Well Above Average) (7 = To A Great Extent)

18. **How would you rate the overall level of collaboration in your organization?**

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OPEN ENDED QUESTION

1. What currently promotes or prevents greater collaboration in your organization?

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