



Cross-Functional Teaming and Eradication of “Stove Piping” in Government Acquisition



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Abstract

Throughout the years, Government Acquisition has been affected by a situation called “Stove piping”, which restricts the flow of information and channels it through vertical lines of control. This results in duplication of efforts and/or delays in process tasks. This project addresses the problem through the usage of Key Performance Indicators (KPI) and visual metrics of program surveillance teams to understand and assess the tasks status, restructuring seat/office configuration to foster interaction in team members based on common program and not employee group/division, and creating an interactive shared drive/repository for deliverables with clearly defined and measurable goals to guide the team’s work. Several issues have been considered in this approach, including the complications that the human element brings to the equation, support from organizational leaders, and compliance with federal guidelines governing the handling of information and workspace policies in government facilities. This approach results in a System of Systems (SoS) with a more agile workforce and a more effective business strategy.

Introduction

Presently, government entities have been affected by a phenomenon called “Stove Piping”. In an organization, ‘Stove Piping’ virtually eliminates a cross-functional environment where the workforce can perform as a synergistic unit. Instead, the organization as a whole gets affected by the sharply defined roles and the narrow channels of control. This situation affects both private industry and Federal Government in very similar ways and sustaining this pattern establishes a “one task - one team” methodology. In spite of the current challenges that affect the government acquisition enterprise, an application of the continuous improvement methodology may not be enough to create a tangible positive effect. As for government acquisition entities, it is a challenging environment where the workforce is the main component. Based on this fact, one of the main goals is that the workforce has a degree of centrality, where collaboration through cross-functional teams can create an efficient and directed approach. After translating capability objectives into requirements, it is evident that one of the most significant challenges involves the concept of “Stove piping”, which in essence inhibits or prevents cross-organizational communication.

The objective of this project takes in consideration an increase in operational and productivity Return of Investment (ROI). By evaluating how collaboration affects processes, it is imperative to consider a reduced cycle time and how to avoid associated costs due to redundancy of efforts in an organization. The project utilizes the functionality of Key Performance Indicators (KPI) and visual metrics from the surveillance teams to understand and assess the status of the tasks. KPIs provide a quick overview of how and if the teams are attaining the goals and measurable impact that is expected.

In today’s business environment, effective cross-functional teams can be a valuable tool for meeting the expectations and performance standards [1]. This entails a change of methodology at one of the most fundamental levels; the workforce. The architecture and organizational issues have to be carefully considered. Government acquisition has a challenging architecture that is highly dependent on the type of industry that is being worked with. Cross-functionality comes into play by understanding the functionality and dependency of the elements. By establishing a flexible approach that doesn’t sacrifice one system in benefit of the other, a move in the direction of cross-function can be a reality.

Methodology

After the literature analysis, which revealed how critical the problem of “Stove Piping” is and the implications that it has in the fiscal condition of the government, an in-depth assessment of the current major program acquisition processes was completed. An evaluation of the tools that are utilized to assess the condition and progress in each program was performed, which proved the redundancy of efforts in each Program Surveillance Team (PST). For each program, with some exceptions, a division of work is completed through several types of team members, which have the responsibility of providing objective and actionable contract, technical, cost, schedule, and performance data. Some of the multifunctional specialist categories include Engineers, Contract Administrators (CA), Earned Value Management personnel, Quality Control personnel, etc. This allows for the opportunity to have multiple sources of information, identify different elements inside each team that serve as guidelines to the assessment of current condition and the desirables in the future condition and understand the various semantic definitions of each job category inside a PST.

Four in-depth interviews and a survey were conducted with PST members and others that were related to the outcome of current program surveillance processes. Figure 1 shows the response to a survey which provided insight on how the team members perceive the idea of Cross-Functional Teaming and what benefits they think are the most relevant to their team and organization.

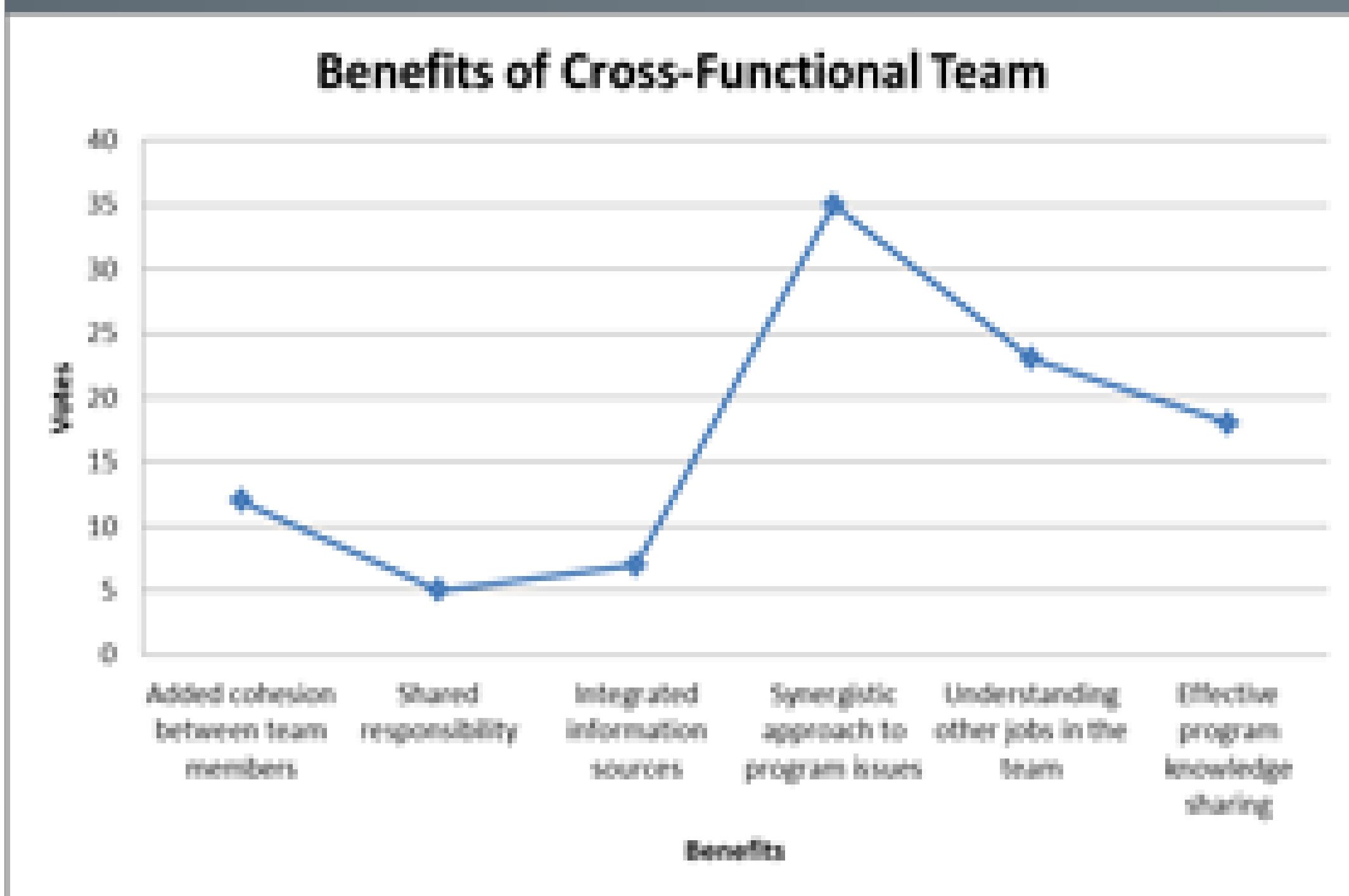


Figure 1
Survey Results

The data collection procedure followed a Grounded Theory approach which provided some guidelines for producing knowledge directly from field phenomena [2]. Such an orientation was adequate to the proposed objective of this research. The questions discussed during the interviews primarily focused on the team’s procedures as well as its impacts on integration and team/organizational performance. First, respondents were inquired about what activities demand cross-functional integration and its respective impacts over performance.

After that, they were questioned about the structural characteristics and possible benefits of cross-functionality and also with reference to how these teams proceed in order to integrate internal functions toward the accomplishment of common goals. After an in-depth analysis of the information provided by the team members, an educated approach to the management of these teams was completed by gaining insight on how they see cross-functionality and how involved they would like to test the strategic theory principles in their teams.

This procedure was performed to look for patterns that support the “Stove Piping” environment in the organization and develop the best course of action that, if extrapolated, could have deep changes in how the Government Acquisition Enterprise operates. This strategy was defined with three (3) approach points:

- Use Key Performance Indicators (KPI) and visual metrics of program surveillance teams to understand and assess the tasks status.
- Restructure seat/office configuration to foster interaction in team members based on common program and not employee group/division.
- Create an interactive shared drive/repository for deliverables with clearly defined and measurable goals to guide the team’s work.

Such procedure provided a variety of elements concerning implementation strategies and impacts, as presented in the next section.

Results

In the organization surveyed, several teams were evaluated in the process of implementation and adaptation to a more cross-functional environment. Therefore, several teams’ characteristics were identified through content and program type analysis. These characteristics were divided into three main categories of the evaluation framework, as shown in Table 1.

Table 1
Main Categories of Evaluation Framework

Category	Characteristics
Team Procedures	Occurrence, Mechanisms and Periodicity
Application Context	Team’s Environment and Specific Goals
Power Distribution	Concentration or Balancing of Power among Team Members

Based on the content of Table 1, it is possible to draw some insights about the influence of Cross-Functionality over the internal integration of the project and the eradication of “Stove Piping” in the PSTs. The development and implementation of this project was certain to cause issues with personnel simply because of how human nature reacts to change. Some modifications to the project included reviewing various initiatives that have been discussed throughout the years without success. The reality of project implementation that hinders the continuity of success lies in the fact that there’s no sustainment plan that solidifies the techniques in the workforce.

Additionally, a support mechanism in order to establish a sustainment approach once the changes have been made became a priority. It is evident that periodic revisions in order to monitor morale and project tasks that were improved during the development and implementation of the project are of great importance. Cross-Functional Teaming reduces hierarchical centralization [3], conflicts and language barriers [4], speeds-up processes, as well as helps to maintain focus on the organization’s broad goals [5]. As these earlier literature findings, a primary observation was that the Government Acquisition enterprise, and specifically the PSTs, make different choices in terms of the goals

and tasks of the cross-functional teams, the timing impact of their decisions (short or long term), connection with processes, strategies and structure definitions, formality or informality prevalence and power structure. The new interactive shared drive will cement the benefits by having a cross-functional initiative readily available in each computer that creates a more effective process status communication system. Moreover, relevant program information can reinforce the program data in order to maximize the predictive insights of the operational surveillance efforts.

Discussion

This research provides an exploratory framework regarding the organization of cross-functional teams and the implications that “Stove Piping” has in a limited scope government acquisition facility. During the course of this project, multiple conversations have taken place. One aspect of the conversations was common; having a cross functional team is necessary, but there’s no clear way forward to achieve it. It’s certain that dealing with people and their workplace is a very personal thing for many employees and many employees have been working for many years in the same place and doing the same thing and resent the changes that a project can do to their “habitat” The approach has been to educate and challenge them to change, since in the end it’s about the relationship between the organization and them. This project’s sustainment plan will continue periodic revisions in order to monitor morale and project tasks that were improved during the development and implementation of the project.

The teams’ procedures may be categorized in terms of occurrence, mechanisms and periodicity. The application context is concerned with the processes that the cross-functional team deals with, and the achievement of goals related to these processes expected results. The decision power among teams may be unbalanced, and the decisions may be pointed to the interest of one single area. However, a more balanced sharing of power among members may favor inter-functional integration and the achievement of common firm goals. Therefore, procedures aligned with a cross-functional approach in place of a “Stove Piping” approach may reflect in the achievement of positive impacts and the execution of surveillance plans that support the mission.

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