How Value Engineering Can Assist in Commercial Activities Studies

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ABSTRACT

Commercial Activities is a hot topic in the government today. The problem with the reemergence of Commercial Activities is that teams do not have the knowledge or expertise on how to start or manage a study. This paper will focus on using Value Engineering techniques to develop the Performance Work Statement (PWS) and Most Efficient Organization (MEO) portions of the Commercial Activities (CA) Study.

DEFINITION OF COMMERCIAL ACTIVITIES

If you started working for the government in the late 80s or early 90s, you may have never heard of the words Commercial Activity, A-76, Performance Work Statement, or Most Efficient Organization. The concept of commercial activities dates back to the 1950s when the Bureau of the Budget announce a national policy for the government to rely on the private sector for good and services whenever economically to do so.

The emphasis on commercial activities dwindled until the 1980s. During that time, the government conducted many studies that turned over functions or operations which government employees performed to the private sector. Consequently, people outside the government could bid for various contracts. The majority of the functions turned over to private contractors were in the area of public works. The government awarded jobs such as facilities maintenance, carpentry, painting, road repair,

electrical facilities (external and internal) to the private sector.

Again, the emphasis dwindled until recently. For FY 98, the Department of the Army announced the intention of studying over 14,800 positions.[1] This means that a potential of 14,800 jobs currently performed by government employees might be lost to a private contractor.

The government designed the commercial activities program as a tool to help the government make a decision of whether the government or the private sector should perform a job. A CA study is a cost comparison between what the government estimates it would pay government employees and what the government would pay a contractor to do the same job. Whoever has the lowest cost, wins the contract. The CA goals are to make the government more effective and efficient; obtain the most economical provisions of commercial products and services; and streamline the government's in-house workforce. CA studies usually save 20% whether the activity remains within the government or goes to a private contractor.

The process is lengthy, involved, and complicated and takes up to 36 months. This short paper does not cover half of the necessary ingredients for individuals involved in the process, but it is designed to help them "think" of a creative approach to completing the study.

PARTS OF A COMMERCIAL ACTIVITY STUDY

A commercial activity study is divided into three main parts: Performance Work Statement (PWS), Management Study, and Solicitation Period. In the PWS the government describes all the functional and performance requirements, location, quantity, quality, and timeliness of the work to be done. The PWS defines what is being requested, the performance standard, performance measures, and timeframes required.[2] The PWS should be performance-oriented, specifying what outputs or measures are desired and limiting directions as to how the results are achieved.[3]

After a team completes the PWS portion of the study, the next step is the Management Study where the team describes the organizational structure and staffing requirements if the government should win the study. The new organization's structure is called the Most Efficient Organization (MEO) and is the basis of the Government's in-house cost estimates. This information is procurement sensitive and the team should guard the information. From the MEO, the team develops a cost estimate that includes labor, material, and equipment cost of the organization.

After the MEO, the team moves toward the solicitation period. During this time, contractors submit their bids for the project. During bid openings, the contract specialist analyzes the government bid against the contractors bid. If the contractor's bid is 10% lower than the government bid, he wins the contract. The transition period begins. The government notifies employees of potential layoffs. The contractor is given a date when he will take over the operations.

HOW VE CAN HELP

The majority of employees who participated in CA studies in the 80s have retired. Consequently, the present CA employees have no experience and are unsure of how to conduct a CA study. CA study teams can use the Function Analysis System Technique (FAST) to help them get started. A modified FAST method will assist them in developing a skeleton PWS and MEO. Moreover, FAST diagramming allows better communication among team members because of the easy structure of using a noun and a verb.

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[1] *Study Announcements to Congress-FY97, FY98, FY99 (Department* of the Army, Assistant Chief of Staff Installation Management Website, January 1999).

[2] *OMB Circular No. A-76 - Revised Supplemental Handbook, Performance of Commercial Activities* (Executive Office of the President, Office of Management and Budget, March 1996), p. 10.

[3] Ibid., p. 11.

HOW DO YOU USE FAST METHODOLOGY?

Step One:
First Step is to brainstorm using the verb-noun technique (Fig 1).

Step Two:
The next step is to use the FAST methodology to develop a FAST diagram for the activity studied. The team should define the task function (Fig 2) and divide the functives into basic functions and supporting functions (Fig 3). Task functions are "function which fulfills or meets the overall needs and desires of the User."[4] Basic functions are essential to the performance of the task function. They fulfill the basic needs of the user. The supporting functions are essential to the success of a product or process.

The diagram is just like a normal FAST diagram. You must define the task function; branch out into the primary basic functions; and branch from the primary basic functions if needed.

You should still use the FAST methodology by asking the question, "How do you serve family?" You serve family by "reduce drug use; develop recreation; support childcare; and support family".

Go as far to the right as possible and remember to perform the FAST check by asking "Why" and moving from right to left to validate the diagram. The FAST diagram structures allow the team to lock inter-related groups and capture the essence of the function performed by the customer. Remember that the FAST diagram is to develop the skeleton PWS and ease communication among team members.

Step Three:
After you complete the FAST diagram for the basic and supporting functions, develop a hierarchy structure (Fig 4). The hierarchical structure will help build the PWS.

[4] *FAST Diagramming-Excerpted from Value Analysis Manual for SAVE Module II Training Session* (Seattle: Fowler & Whitestone, May 1997), p. 5.

Step Four:
The team can use the FAST diagram to further develop their PWS. When developing the PWS, the team should review the work accomplished with the organization. They should divide the task into essential and non-essential categories. The FAST diagram heads the team in the right direction because the basic functions are the essential to the performance of the function and the supporting functions are the reason the product is successful.

A critical portion of the PWS is for the team to perform job analyses on the organization. The analysis should include organizational analysis, tree diagramming, activity analysis, and data gathering. Organizational analysis is the process used to determine the accurate and complete mission statement of the function under study, and if prepared correctly, provides a foundation for determining what kinds of services are provided. Simply stated, the organization analysis provides the frameworks for determining what services (outputs) are performed by the function under study. These services or outputs become the basis for writing the PWS.

Tree diagramming determines what services the function provides. It links these services in a logical flow of activities. The tree diagramming is breaking work down into specific sub-divisions of that work. The work breakout display resembles an organization chart, but the breakout of tasks is functionally, not organizationally oriented. The FAST Diagram is already in a tree diagram format. The team can use the hierarchical structure already out lined by the FAST Diagram. The diagram outlines the functional alignment and the workflow. Furthermore, the team will have already reduced bottlenecks and redundancies. The FAST diagram removes the inefficiencies as the team validates the diagram.

Step Five:
As part of the organizational and job analysis and tree diagramming the team can take each of the section of the tree diagram and develop the manpower, supplies, and equipment needs of the section (Fig 5).

CONCLUSION

So where does FAST Diagramming help? FAST diagramming helps in the following ways:

1) defines essential and non-essential (basic & supporting functions)
2) develops a skeleton PWS
3) gives the study team a basic tree diagram to start developing organizational analysis
4) assists in the development of cost and/or workload
5) helps in the development of the MEO.

In addition, the team can use FAST diagramming to develop a diagram of the present structure of the organization or the future desired organizational structure.

REFERENCES

1. "Commercial Activities Program," *Final Draft Army Regulation 5-20,* October 1996.

2. "Commercial Activities Study Guide," *Final Draft Department of the Army Pamphlet 5-20,* October 1996.

3. "Performance of Commercial Activities," Circular *No. A-76 Revised Supplemental Handbook,* Executive Office of the President: Office of Management and Budget, March 1996.

4. "Competitive Sourcing," Headquarters, *Department of the Army, Assistant Chief of Staff Installation Management Website,* January 1999.

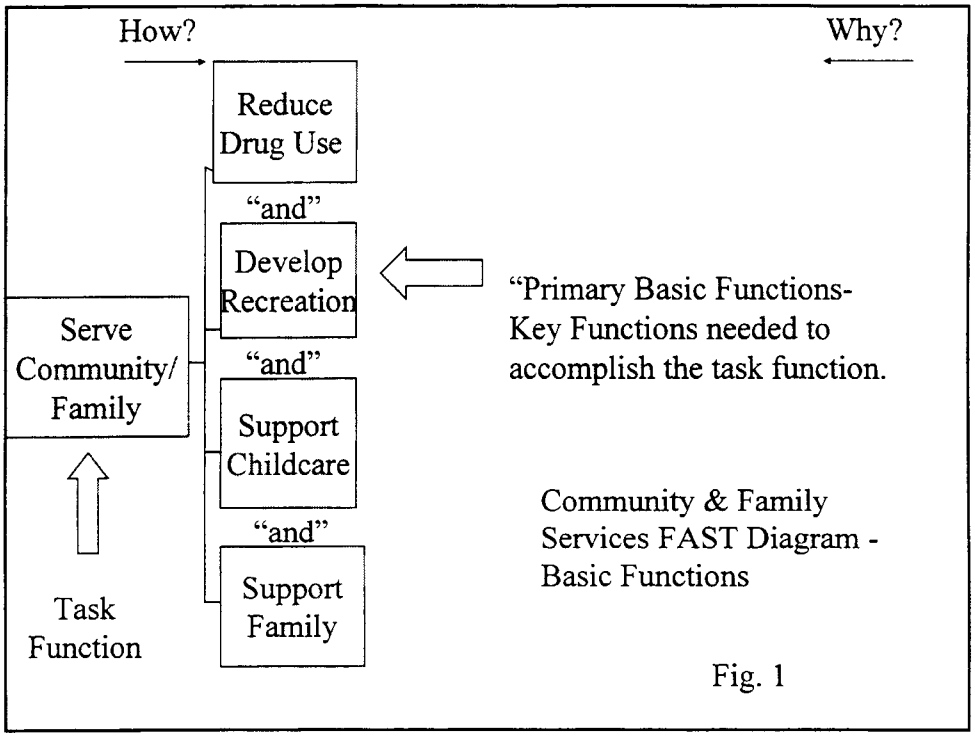
How?
Why?
Reduce Drug Use
"and"
Develop Recreation
"and"
Support Childcare
"and"
Support Family
Serve Community/ Family
Task Function
"Primary Basic Functions- Key Functions needed to accomplish the task function.
Community & Family Services FAST Diagram - Basic Functions

Fig. 1

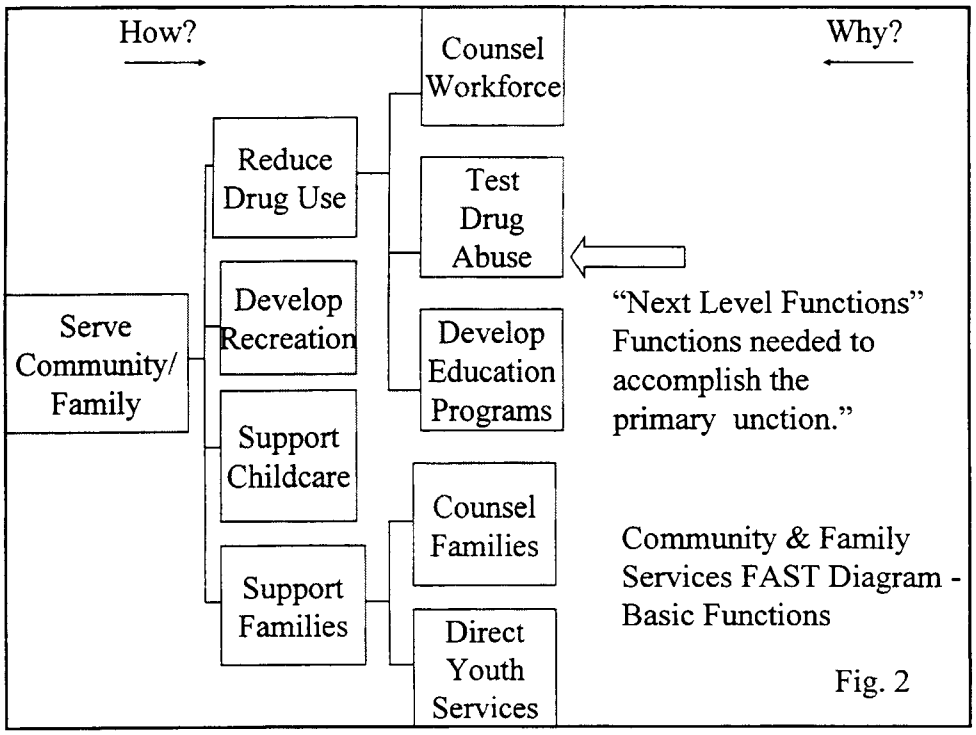
How?
Why?
Counsel Workforce
Reduce Drug Use
Test Drug Abuse
Develop Recreation
Develop Education Programs
Serve Community/ Family
Support Childcare
Counsel Families
Support Families
Direct Youth Services
"Next Level Functions" Functions needed to accomplish the primary unction."
Community & Family Services FAST Diagram - Basic Functions

Fig. 2

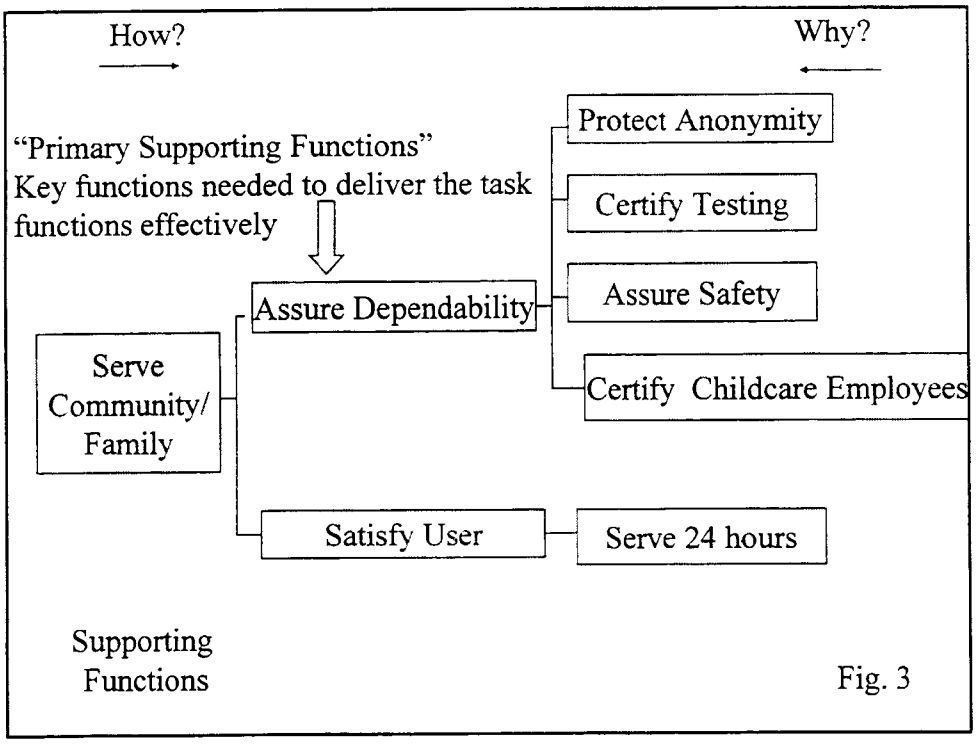
How?
Why?
"Primary Supporting Functions"
Key functions needed to deliver the task functions effectively
Protect Anonymity
Certify Testing
Assure Safety
Assure Dependability
Certify Childcare Employees
Serve Community/ Family
Satisfy User
Serve 24 hours
Supporting Functions

Fig. 3

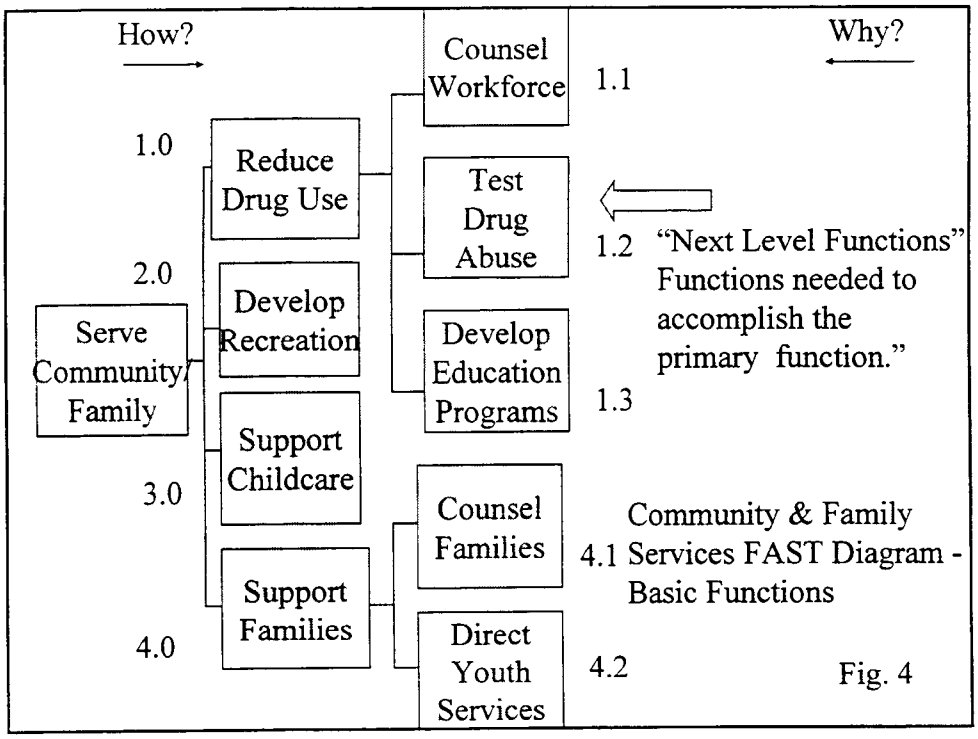
How?
Why?
Counsel Workforce
1.1
1.0
Reduce Drug Use
Test Drug Abuse
1.2 "Next Level Functions" Functions needed to accomplish the primary function."
2.0
Develop Recreation
Serve Community/ Family
Develop Education Programs
1.3
Support Childcare
3.0
Counsel Families
Community & Family
4.1 Services FAST Diagram - Basic Functions
Support Families
4.0
Direct Youth Services
4.2

Fig. 4

Organizational Structure

1.2 Test Drug Abuse ($350,000)
Workforce:
Drug Abuse Coordinator, GS-102-11
Education Coordinator, GS-101-11
Equipment:
Organic Analyzer
Supplies:
Computer (2)
Testing Cups (2500)
Workload (annual):
2,000 Test conducted
1,150 Students extended educational courses
40 Extended educational courses conducted

Fig. 5