

BIOGRAPHICAL INFORMATION

Bud Porter
VP, Business Development
Origin GeoSystems, Inc. (A PDA Subsidiary)

Specific Responsibilities

Since August 2003, Bud has been responsible for business development at Power Delivery Associates / Origin GeoSystems. In this position, Bud directs sales and marketing efforts for what was the software division of Power Delivery Associates and now (since January 1, 2004) is a separate subsidiary, Origin GeoSystems, Inc. In this position, he advises the development staff to guide the company's Origin GIS product line, manages business partner relationships and works with company executives to explore and develop new and reinforce existing products and markets.

Past Experience

Prior to joining PDA, Bud was with ESRI, where for over six years, he was the AM/FM Industry Manager. In this position he managed AM/FM marketing for the utility and telecom markets. Prior to that, Bud was president and executive consultant for GeoCad, Inc., where he provided GIS and management consulting to telecom, government and utility companies as well as marketing consulting to software and conversion vendors. Prior to GeoCad, Bud was VP – U.S. Operations and VP – Corporate Marketing for Enghouse Systems Ltd. In these positions, he managed the U.S. staff and the company's marketing efforts. Prior to Enghouse, Bud was with Synercom Technology as Department Manager - Consulting Services, Senior Consultant and Industry Manager in the sales department. He also held engineering and corporate management positions with Continental Telephone, Southern Bell Telephone Company and Public Service Electric and Gas.

Education

Brenau College, Atlanta, GA, Graduate work towards MBA
Oglethorpe University, Atlanta, GA, BBA, Cum Laude
Georgia Institute of Technology, Atlanta, GA, EE
Newark College of Engineering, Newark, NJ, ASEE Equiv

Memberships

Geospatial Information and Technology Association (GITA – formerly AM/FM International)
GITA Sales & Marketing Committee 2002 & 2001
Strategic Planning Committee/ITAG, member since 1996 (2001 Chair)
S.E. Chapter – board member since 1994 (2001 President)
Annual Conference Principal 1995, 1989, 1988, 1986, 1985
Membership Chairman, 1986, 1985, 1984

CONSIDERING THE LIFE IN PROJECT LIFE CYCLE – THE HUMAN PERSPECTIVE

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ABSTRACT

Project managers must consider more than just technology and schedules when initiating and implementing a GIS project. The needs and dynamics of interaction between the project team members must be considered in order for a project to be successful. This paper will explore these human needs and interaction and document the individual perspectives that members of separate departments may bring into group dynamics.

It is a rare occurrence when deficiencies in the management of human interaction are blamed for a project's failure. Yet more often than not, project managers who either ignore or fail to properly identify the individual human needs of their team members can unknowingly significantly contribute to a project's failure. To the contrary, a project manager who is skilled in identifying and listening to the needs of his team members can help overcome project roadblocks and keep members pulling together to achieve project success. As more departments are involved in an enterprise GIS implementation, there are more perspectives that need to be considered. This paper will outline the divergence of these perspectives in an effort to help project managers broaden their outlook and manage their team more effectively.

INTRODUCTION

Managing a modern AM/FM/GIS project can be a major challenge. Compared to other IT projects, it can be large in scope, complex and lengthy. Project managers are usually well trained in analyzing and juggling resources, vendors and deliverables. Typically these managers are skilled in the tools and techniques associated with handling project schedules and resources. But seldom are they schooled in the human aspect of managing such a project.

In order for a project manager to be truly effective at understanding the interaction between project team members and influencers, including both project supporters and distracters, he must try to understand the needs and motivations of all involved. This is the human perspective of a project. It is seldom taught, but always needs to be learned by project managers in order for projects to progress smoothly.

Project Team Members and Influencers

Large projects such as AM/FM/GIS implementation projects always require more than one individual. Even if there is no formal project manager, there is always an individual that must take on the tasks of one. There are always company personnel and vendors to coordinate with – hardware, software, data conversion and sometimes system integrators and outside contractors or consultants. As for company personnel, usually a project team is set up comprising users along with representatives from various departments including information technology, procurement, personnel and of course, sponsoring management.

In modern, enterprise-based GIS, just the user category mentioned above can actually be many different departments including engineering, planning, operations, real estate, customer service, and marketing as well as a dedicated mapping or GIS department. The employees in each of these have their own set of needs and motivations, thus they have their own point of view. The way that they behave in group dynamics is a direct result of these often divergent points of view.

Identifying Human Needs and Motivations

It is easy to disagree. That is human nature. But disagreement stems from individuals being influenced by differing experiences, environmental factors, heredity and most of all, needs and motivations. Motivation is the fuel that keeps humans progressing ahead in life and not just vegetating. Need is a distant cousin to motivation. It is more primordial than motivation and includes the basic elements of existence – shelter, sustenance and sleep.

In a work environment, need, in its most basic form, can be described as survival in the organization or keeping one's job. But since jobs are relatively easy to come by in our economic environment, many people equate their needs to what are really wants, including the “need” for a comfortable office, the “need” for a good compensation package, the “need” for a rewarding position etc. Whether they are called needs or wants, they motivate people and cause individuals to interact with others differently based on the prioritizing of their own set of needs/wants.

In a work environment, motivation usually can be described by two categories of individuals – those that are motivated to keep their job and those that are motivated to excel to achieve advancement. Even the first category can be further subdivided in two – those that just want to get by (indicated by the basic survival need identified above) and those that take pride in what they do, but aren't interested in advancing. Obviously there is quite an overlap between what can be considered needs, wants or motivations. So for purposes of this paper, they will be used interchangeable. The important thing is that they are the primary factor in group interactions.

Astute project managers become aware of their project team members' motivations quickly. Unfortunately, they are very dynamic so reassessment of individuals' motivations is often necessary. The sections below will attempt to categorize fictitious team members' motivation based on their role in order to illustrate the resulting group interaction.

DIFFERING POINTS OF VIEW

Defining Typical Project Roles

Before exploring the different points of view of project team members, typical roles must be identified and described. Any attempt at categorizing these roles can result in stereotyping of individuals, but that is unavoidable. The following are strictly hypothetical and are for illustration purposes only. The point is that an assessment such as that which follows can assist a manager at identifying how to handle a particular individual or situation.

Project Manager - Bill

Responsibility: Manages project resources (personnel, vendors, consultants/contractors) and schedules.

Personality Characteristics: Analytical; able to multi-task; insightful; high interpersonal skills but somewhat argumentative; willing to work long hours

Personal Motivations: Challenge of the job; a need to control; latest technical innovations; pay-sensitive; tennis; skiing

Project Viewpoint: Views AM/FM/GIS as standard yet complex assemblage of technology, complicated by multiple internal department involvement and outside influences.

Sponsoring Management - Al

Responsibility: Profit and loss for division; oversees technology projects; manages engineers, planners and mappers

Personality Characteristics: Workaholic, bottom-line oriented; risk averse; dominant; poor people person, technical manager

Personal Motivations: Advancement through results; golf – only outlet from work

Project Viewpoint: Views project as just another product that competes for corporate funds; demands quick payback and ability to eliminate positions through productivity

Personnel Manager - Stephanie

Responsibility: Human resources representative to engineering department

Personality Characteristics: Likeable; soft spoken; family oriented w/1 small child

Personal Motivations: Doing a good job; no real desire for advancement; loves music and to find time for family

Project Viewpoint: Views project as possible impediment to keeping employees hired and happy; resistant on changing job descriptions for personnel impacted by automation

User Representative, Primary – Sam

Responsibility: Manages mapping section for department

Personality Characteristics: Easy-going; personable; religious; detail oriented; conscientious; family oriented w/2 children

Motivations: Job satisfaction; strives for advancement; attends night school; teaches Sunday school

Project Viewpoint: Views participation in project as a chance to be noticed by management and lead to advancement; some fear that the new technology will be difficult and/or overwhelming

User Representative, Secondary/Casual – Angie

Responsibility: Customer service supervisor

Personality Characteristics: Hardnosed; opinionated; very experienced and knowledgeable of procedures and departmental systems; within 5 years of retirement

Personal Motivations: Doing job in most efficient manner; no expectations of movement or advancement; loves to travel; has 4 “wonderful” grandchildren

Project Viewpoint: Views project as the way to obtain fast, accurate spatial data to help her do her job

Procurement Representative – Eddie

Responsibility: Contract Supervisor in procurement group responsible for technology projects

Personality Characteristics: Quietly stern; good listener; stickler for details

Personal Motivations: Always looking for a better job; recently married; plays tennis

Project Viewpoint: Views project as quite a challenge with significant work to add new spatial vendors to “approved list”, create a number of new agreements, and manage a complex RFP, evaluation and selection process

Information Technology Lead – Steve

Responsibility: System Administrator assigned to project

Personality Characteristics: Obsessive compulsive; workaholic; technologically insightful; shy

Personal Motivations: Technology itself; loves to know how everything works; single; loves movies and skateboarding

Project Viewpoint: Excited about project – will enable him to configure a significant amount of new hardware, software and networking equipment

Conversion Vendor – Tony

Responsibility: Sales associate for a major data conversion company

Personality Characteristics: Outgoing; talkative; personable and persistent; single

Personal Motivations: Social aspects of his job; commissions; tennis

Project Viewpoint: Views project as a way to exceed his sales quota

Software Vendor – John

Responsibility: Regional account manager for GIS software vendor

Personality Characteristics: Assertive; multitasking; “morning person”; avid golfer; married for many years, but no children

Personal Motivations: Winning; travel and interpersonal interactions; drive to be the best manager in company

Project Viewpoint: Project would solidify his region as top among company

Outside Consultant/Contractor - Jamie

Responsibility: GIS consultant for smaller firm specializing in CAD and GIS projects

Personality Characteristics: Analytical; good people skills; reserved, good listener; single

Personal Motivations: Variations in job from one project to the next; travel; loves rock music, concerts and dancing

Project Viewpoint: Views project as a challenge – largest to date; would be good for the resume

GROUP INTERACTIONS

The following are examples of the types of interactions that can occur between team members due to project related situations or problems.

Evaluation Team Meeting to Determine Vendor Selection Criteria

Scenario: An evaluation team, consisting of Bill, Sam, Angie and Eddie has been assembled to assess the proposals and demos provided by the various software vendors. A functionality/cost matrix with weighting factors is to be created so that the team can grade the vendors to determine a final vendor selection.

Interaction: Al, the division vice president, has appointed Bill the project manager for the new AM/FM/GIS project and has directed that Sam be his department's team member to represent the primary class of user. In addition, Angie has been appointed by her department head to serve on the team as the customer service team member, to represent the view/query user class. Eddie, from procurement, is on the team to make sure that the team does not give preferential treatment to one vendor over another. These members constitute the vendor evaluation team or subcommittee.

In the first meeting of the evaluation team, Al charges the group with their responsibility to find the best possible vendor that meets the company's requirements for the least amount of cost. He adds that the vendor should have a proven track record – “careful of start-up companies with ‘hot applications’ and promising the moon.” He reminds the group that the project must provide a quick return on investment or the discretionary funds earmarked for this project might be used elsewhere. His final comment before leaving the meeting in Bill's hands is “Do whatever you must to make this project successful, or you might find yourself evaluating the latest technology at Burger King.”

Once Al has left the room, Bill tells the group that Al's last comment was his attempt at humor and not to take it too seriously. But Sam and Angie are not smiling. Bill then asked Eddie to go over the procurement's department guidelines for evaluating technology vendors. Eddie methodically outlines the company's policies, telling them to be careful not to accept anything of value from the vendors and not to disclose proprietary information outside the company. He finishes by saying that he will monitor the vendor evaluation process and advise them on appropriate procurement procedures and contracts.

Bill has heard the pitch from procurement before, but he can detect that Sam and Angie are a bit overwhelmed by both Al's and Eddie's comments. So he quickly tries to get down to business and refocus both user representatives to the main task at hand – assigning weighting factors to the functionality matrix. A few hours later, the matrix is complete, but the mood remained somber throughout the meeting.

User Subcommittee Issue Regarding Data Model Changes

Scenario: The user subcommittee comprised of Bill, Sam, Angie, Steve and Jamie must report to the full project team on the changes that must be made to the data model and user interface

provided by the software vendor. The following illustrates some of the problems that might occur from this group trying to achieve a consensus.

Interaction: Bill, the project manager, starts the meeting anticipating that much of the input for data model changes will come from Sam, the primary user. Instead Sam is rather quiet and when directly asked his opinion, goes off on a tangent about his main concern, that of training and the amount of on-line help available within the system. Sam explains his concern that he and his people may have to work extensive overtime to learn the system when it is first installed. Bill argues that the issue of training is not a subject for this meeting, but tells Sam that he understands his concerns and will schedule a separate meeting to see if the amount of training scheduled is adequate. Sam gets quiet again.

In the silence that follows, Angie, from customer service, says that she has a significant number of changes that need to be made to the model and user interface to “improve user friendliness and usability”. She also states that she can’t understand some of the functionality that was in the requirements document and asks if all of that is really necessary – she wants to “keep it simple”. She looks to Sam, but he remains quiet. Jamie, the consultant, sensing that changes to the requirements document could result in additional consulting work beyond the scope of her contract, volunteers to revisit the requirements and usability issues, under a change order.

Bill responds to this discussion with the statement that functional requirements cannot be changed at this stage in the project. Sam finally breaks his silence and agrees with Bill. After all, he was one of the people who determined the functionality specified in the RFP. Bill then turns to Steve, from IT, to ask about the work involved in administering and maintaining a model different from the “standard”. Steve goes into a detailed description of object and feature classes and what tools he would need to administer changes.

The meeting quickly gets out of hand. Steve continues to push for the purchase of additional system utilities. Angie gets annoyed that her suggestions were quickly dismissed and renews her argument about eliminating functionality. Jamie says she agrees with Angie. Then Sam becomes more vocal about defending the functions specified. Bill finally quiets the group and begins to refocus them on the details of the data model.

Problem Arises at Project Implementation Status Meeting Causing Delays

Scenario: During a monthly project implementation status review meeting the conversion vendor, Tony, reveals that the electronic data delivery that was scheduled for the previous day would be delayed at least 10 days.

Interaction: At this month’s status meeting with the full team present, Tony, the conversion vendor, reports that the current data delivery will be delayed for at least 10 days. Bill pulls out the latest Project schedule to determine the delay’s impact. He immediately notes that user training was scheduled for the following week. Stephanie, the personnel manager, responds that the training schedule was critical. It would be best for the employees if there were no lag between training and applying their knowledge to the live system. This would not be possible without data. Stephanie is annoyed at the delay and the impact it will have on the personnel scheduled for training.

Bob, the software vendor, who is responsible for supplying the trainer, suggests the possibility of rescheduling training. He mentions that a trainer may be available in three weeks, but the company would have to pick up the difference in travel costs. Bill indicates that the project will be severely impacted because subsequent tasks would also have to be delayed. He tells Bob that his flexibility is appreciated and will take him up on the offer. He then pleads with all team members to let the group know as early as possible when any delays are anticipated.

CONCLUSIONS AND SUMMARY

In the first scenario, what can be learned is that insensitive comments can cut deeply. Even when intended as a joke, negative comments or threats can severely impact individual performance. A project manager cannot totally avoid disparaging comments within group dynamics, but he can certainly become sensitive to their effect and not contribute himself.

In the second scenario, the result of a somewhat unstructured meeting is loss of control by the leader. While arguments and taking sides are common elements of group dynamics, having and sticking to a detailed meeting agenda can reduce the possibility of a meeting getting out of hand. Also, the technique of active listening by the leader can reduce frustration among group participants. Active listening is the technique of rephrasing the speaker's comment or question by the listener and adding an acknowledgement or affirmation. This is done to illustrate to the speaker that the listener understands and affirms the validity of that viewpoint.

In the third scenario, the value of sharing information or news (especially bad news) in a timely manner can make a significant difference in a project's schedule and ultimately, its success. Certainly, the data delivery delay was known well before its due date, or in this case, a day after its due date. It is human nature to delay or cover up bad news. But this can mean disaster to a complex project where most tasks have dependencies to other tasks. Prompt communications of schedules delays are paramount.

The three fictional scenarios depicted in this paper illustrate how human needs and group dynamics are very important parts of project management. While there is no right or wrong way to interact with individuals, skilled project managers understand the value of relating to peoples' feelings when in a group environment. Therefore, the intent of this paper was not to provide a how-to for handling the human perspective, but to identify the value of recognizing its importance. Ignoring project team member's personal characteristics, motivation and project viewpoint can significantly negatively affect the outcome of a project. Taking those characteristics and motivations into consideration is the best way to manage the human perspective of project management.