

# Integrated systems and solutions space systems

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Integrated Systems and Solutions Space Systems 2. Introduction Ajax is one of the many defense projects the Xebec Corporation had under Contract with the Department of Defense, it is also one of the several new projects sponsored by the Integrated Systems and Solutions division aimed at the homeland security business Xebec was confident that it could leverage its technical expertise and political connections to become the major player in this growing market Trans is the project Manager for the Ajax Project and his core team consisted of 30 software and Technical engineers.

There seemed to be a lot of conflict when the project started which might lead to the project failing. 3. Case Analysis 3. 1 Organizational structure and Culture From the Ajax case only the following roles and responsibilities are highlighted: I née Ajax project NAS a cross Functional organizational structure Walt Iran Dealing ten project Manager and 30 Employees reporting to him from different sections including Hardware and Electrical Engineers The Ajax Project Functions in a Projectiles organizational Structure. These are the characteristics of a productized organization.

A productized organization has to be dynamic and adaptive; otherwise its survival will be difficult.

In projectiles organizations, organizations arrange their activities into programs or portfolios, and implement them through the projects. Here, the project manager is in charge of his project (as in the case of Trans) and he has full authority over it. Everyone in his team reports to him. The productized organization structure is opposite to the functional organization

structure. Here, either there will be no functional manager, or if he exists, he will have a very limited role and authority.

**Characteristics of a Productized Organization Structure** The following are a few characteristics of a productized organization structure: The project manager has full power and authority over resources to be utilized in the project. He controls the budget, resources, and work assignments. The project manager has full-time team members working under his control who directly report him. When the project is completed the team is disbanded, and team members and all other resources are released. Using a Productized Structure for the Ajax Project Many project managers use a productized organization structure to administer their projects.

This type of structure groups together all personnel working on a particular project.

Project team members are often located together and under the direct authority of the project manager for the duration of the project. As an example, a design engineer, an IT specialist, and a test engineer all work on Project A, while a different design engineer and a different test engineer work on Project B: A productized structure for administering the Ajax projects. The project manager has almost total authority over the members of her team in the productized structure.

She makes assignments and directs team members' task efforts; she controls the project budget; she conducts team members' performance assessments and approves team members' raises and bonuses; and she approves annual leave. The productized structure has the following

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advantages: All members of a project team report directly to the project manager. This clarified and simplified reporting structure reduces the potential for conflicting demands on team members' time and results in fewer and shorter lines of communication.

In addition, it facilitates faster project decision making. Project team members can more easily develop a shared sense of identity, resulting in a stronger commitment to one another and to the success of the project. Consistent focus on a single project with ten same group AT team members gives people a greater appreciation AT one another's strengths and limitations, as well as a deeper understanding of and a stronger belief in the value of the intended project results.

Everyone on the team shares the processes for performing project work, communication, conflict resolution, and decision making. The productized structure enhances project productivity and efficiency because more time can be devoted to doing work rather than creating systems to support doing the work. The productized structure has the following disadvantages: Higher personnel costs: Even when several projects have similar personnel needs, different people with the same skill set have to be assigned to each one.

As a result, chances are greater that projects won't be able to fully support people with specialized skills and knowledge, which can lead to either keeping people on projects longer than they're actually needed or having to cover people's salaries when their project doesn't have enough work to support them full time. Reduced technical interchange between projects: Providing all the skills and knowledge required to reform a project by

assigning people full time to the project team reduces the need and the opportunity for sharing work experiences with people on other teams.

Reduced career continuity, opportunities, and sense of Job security: Because people are hired to work on one specific project team, they have no guarantee that the organization will need their services when their current project comes to an end. Name Role Background Qualifications Trans Project Manager Worked in the US Force 10 years' experience in project management. Based on this information Trans possessed the skills required to be an effective

Project manager Dual Degree in Mechanical and Electrical Engineering MBA University of Washington n/a Hardware Engineers Electrical Engineers summary Productized organizations are very dynamic and learn very fast. In this type of organization structure, the project manager has the main role because he is the one who manages the project.

He has been given the authority to run the project and allocate the resources. Although he may be supported by the PM, program manager, or the portfolio manager, at the end of the day he is responsible for the outcome of his project. Here is where this post on productized organization structure ends.

If you have something to add, you can do so through the comments section. References: masterpieces.

Com/2012/08/what-is-a-productized-organization-structure 3. 2 Project Selection Xebec was excited about the Ajax project as it was one of the

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project directed at designing, developing and installing . Xebec was confident that the Ajax Project would leverage its technical expertise and political connections to become a major player in this growing market. 3. 3 Risks inherent to the project Trans already had major concerns when the project Started, the first one being the chemical risks inherent to the project. Hat also the organizational culture was a big challenges for Trans as his project team was pretty much split down the middle between the Hardware and Electrical Engineers.

Besides their different skills set but they tend to look at problems differently there was no cohesion between team members another challenge was the generational difference. The design system make sense only at a theoretical level but when it had to be applied it would not be the same There is no cohesion between team members also due to Salary issues as well as Different background and opinions 3.

Issues to Project Plan , Concept and Schedule The project Plan was built on around five series of tests, with each test being a more rigorous verification of total systems performance 3. 5 Issues with Team Cohesion MAMBO guide. 2013 Project Management Institute, Inc describes Cultures and styles as a group phenomenon known as cultural norms, which develop over time. The norms include established approaches to initiating and planning projects, the means considered acceptable for getting the work done, and recognized authorities who make or influence decisions.

Organizations are systematic arrangements of entities persons and/or departments) aimed at accomplishing a purpose, which may involve

undertaking projects. Much the organizational culture was a big challenges for Trans as his project team was pretty much split down the middle between the Hardware and Electrical Engineers. Besides their different skills set but they tend to look at problems Transiently tenure was no cohesion Detente team memoirs another canalling was generational difference. 3. Salaries Scales not aligned between Team Members The design of the Ajax project and the concept has never been applied before Systems integration was a big challenge .

7 Project Contracts Electrical Engineers are at premium salaries, hardware engineers resented their new hires salaries which were comparable to what they were earning 20 years after working for Xebec. More money could only me made based on Project Performance 3. 8 Critical Success Factors 4. Recommendations 4. 1 Solutions and Recommendations to Organizational Culture and Performance 4.

1. The effect of organizational culture on project success It is a truism that two organizations using the same project management practices and structures will have different levels of success with them. Clearly, there's a lot more to project success than project management. Despite this, most studies of project success tend to focus on project level, or operational, variables such as level of user involvement, use (or not) of a formal methodology, reliability of estimates etc (Note: these variables have been taken from the oft quoted Standish Report).

As important as these factors are, they fail to take into account that projects live and evolve in a wider environment which includes the sponsoring organization.

A recent paper entitled, *New Product Development Projects: The Effects of Organizational Culture* published in the December 2007 issue of the *Project Management Journal*, studies the effect of organizational culture on project success with specific reference to new product development (NYPD) projects. I summarize and review the paper below.

The authors claim that despite the importance of NYPD projects for the long term success of an organization, the effect of strategic level variables (organizational culture, organizational strategy, management involvement etc. ) on project success has not been widely studied. They suggest this might be so because these variables are hard to define, quantify and measure.

Further, on reviewing the existing literature, they find that the few published, organization-oriented studies tend to focus on the end result of the development process (i.e. The product) rather than on factors affecting the project. Hence the motivation for their study. Incidentally, they note that there has been some work on the effect of national culture on NYPD project performance, but these studies find no correlation between the two.

To measure something as elusive as organizational culture, you first have to pin it down by defining it. The definition does not have to be all-encompassing, but it needs to be precise enough for people to have a common understanding of what you're talking about.

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To do this, the authors created a set of questions based on various definitions of organizational culture available in the literature. The resulting questionnaires were mailed out to various organizations engaged in NYPD projects. The responses received (from over a hundred organizations) were analysed using exploratory factor analysis, enabling the authors to group ten dimensions into ten dimensions of organizational culture:

Positive work environment: this includes factors such as openness to new ideas, employees feeling valued as individuals, open discussion with superiors encouraged etc.

Management leadership: this includes factors such as clear goals set and responsibilities delegated, employees have input in decision making, incentives offered to work on new ideas, high-risk high-return projects encouraged etc.

Results orientation: this includes factors such as employees are pressured to finish work, correct procedures more important than correct results etc.

Customer-based: the customers are satisfied with the product. This can also be classed as Customer Satisfaction. Commercial success: the product makes money Technical success: the product works as intended.

Note that these variables are actually a subset of those suggested by Griffin and Page. Project success was measured by getting upper management in the surveyed companies to rate product success along each of the above dimensions.

Finally, the authors correlate organizational culture to product success (for the surveyed companies) using correlation and regression analysis. The <https://assignbuster.com/integrated-systems-and-solutions-space-systems/>

results (which are really no surprise) indicate that: Positive work environments and management leadership are strongly correlated with each other and with the three measures of product success.

That is: Strong management leadership and positive work environments go hand-in-hand. Companies with positive work environments (and, by implication, strong management leadership) have better commercial success with new products, enjoy better customer satisfaction and have greater technical success than those with less positive work environments (and, by implication, weak leadership). Results orientation is not strongly correlated with any of the other variables.

If this seems surprising at first sight, take another look at what goes into making up this variable and it will seem less so!

Although the paper focuses on NYPD projects, I think the conclusions – especially those pertaining to customer satisfaction and technical success – apply to other projects as well. Further, though the conclusions may be obvious to many, such research is important because it lends analytical backing to otherwise intuitive notions. It does this by: Defining (albeit, in a limited way) what is meant by organizational culture and project success. Studying the relationship between the variables that make up the two.

Defining variables and quantifying relationships can give us a sense for which organizational culture variables are the most significant determinants of project success. So, although the study is a preliminary one (as the authors themselves admit), the work is a useful step in understanding the

relationship between projects and the larger environment in which projects live and breathe.

References: Bellies, W. , Sandra, A. Z. , and Taken, O. 1. , New Product Development Projects: The Effects of Organizational Culture, Project Management Journal, 38 (4), 12-24 (2007).

1 2 valuing lean Diversity Despite the team diversity it is the project managers responsibility to ensure that there is integration between team members. Globalization, changes in demographics, and the need for individuals with unique skills are causing changes in the composition or diversity of project teams. Diversity is differences among people. Diversity is about acknowledging, understanding, and valuing differences and creating a work environment that recognizes, respects, and harnesses differences among team members for the benefits of accomplishing a shared goal, such as the project objective.

However, differences can create barriers to team performance.

Miscommunication and misunderstanding may be more likely to happen between people who are different. If the differences within the project team are not valued as a strength, they can lead to low morale, diminished trust, reduced productivity, greater tension, and suspicion and become a serious impediment to team performance. Team members should feel valued and have a sense of belonging. Diversity of the team brings unique ideas and perspectives to projects. Each team member has unique experiences, skills, and values to bring to the team.

Such differences can lead to more creative, faster, and higher-quality problem solving and decision making.

Chances are that most project teams are diverse in more ways than you think. The following are some dimensions of diversity: Age or generation. Many teams have a mix of members of various age groups? younger, older, and in-between. Three or four generations can be represented on a team. Each generation has different experiences that shape values and perspectives and thus responds to different motivational factors.

Older team members may value security, a strong work ethic, and adherence to rules and may prefer face-to-face meetings, whereas younger members may value work/life balance and informality, dislike close supervision, and prefer electronic communications with others.

References ; Clement and God page 345: Valuing Team Diversity 4. 2

Recommendations on Project Selection Process The right project has to be selected before resources are allocated. After careful market analysis, demand analysis, technical analysis and financial analysis, the project manager selects a project from the various alternatives in hand.

The project manager considers a selection criterion that better meets the objectives and interests of the organization. The project selection model should be realistic, capable, cost effective, flexible, easy to use and easily computerized. Criteria for Project Selection Models Realism Capability Costs Flexibility Ease of Use Easy Computerizing Project Selection Models Non-numeric Models Numeric Models Analyzing the Uncertainty of a Project RISK Assessment Simulation Analysis Window-of-opportunity Analysis Project <https://assignbuster.com/integrated-systems-and-solutions-space-systems/>

Proposal Technical Nature of the Project Plan of Implementation Plan of Administration and Logistics Description of the Group 4.

Recommendations on Project Selection Process 4. 2 Solutions to Project Selection Problems Behavioral Strategy Line managers to be called into a meeting covering authority, accountability and accessibility pertaining to projects Revisit or implement a Vision and Mission statement for the company with clearly defined goals and share with all employees Adopt the To-Be Value System, identifies weak points within leadership, and appoints new leaders. Self-assessment for individuals in respect to their weaknesses and strengths.

Adopt the eight dimensions of Psychological Climate Life coaching and leadership skills, which assess the current behavior within the organization, provide the necessary and assistance to motivate individuals and create potential leaders. Encourage staff to meet more often to communicate about the projects and get the real feeling of the progress of the projects and understanding. Implement training session or workshops for teachings on how to strengthen weak matrix organizational structure but one can build a great relationship if they keep a friendly manner and an open mind.

Which is what Jeff needs to familiarize himself with. A Mentors and increased training programmers might be a solution towards resolving the issue of one person being so good at his work that he gets overworked just so that the organization's reputation stays in tact. Advancing other engineers would go long way for the company's reputation. It is crucial for the organization to

always acquire, develop and manage the team members inputs in regards to strategy.

Note: It is important to realism that “ Human Resources, people are the most intangible assets in any organization” Essential perspective on PM, disc 1, section 2.

Topic: People (Presented by Dry Ruche Steen) 4. 5 Solution to Risk

Management Issues Teach new employees on the culture of the business and the proper channels to follow when conveying issues. When you're working in a new environment, you need to make a real effort to understand the cultural backgrounds, beliefs and attitudes of the people around you.

If you don't, you'll struggle to get things done. Some people - those with high “ cultural intelligence” - are good at spotting cultural differences, and they adapt their behavior accordingly. This is a key skill when working with new people and business culturally diverse groups.

It's very possible to develop cultural intelligence. “ Culture intelligence” is defined as someone's ability to adapt successfully to a new cultural setting. Common sense and sensitivity play an important role newer. E may not immediately understand ten reasons for a colleague's behavior, Introduction of the Organizational Project management Note: Successful Implementation of projects in the category of Organizational Project management deliver radical or innovative transformation and change regarding the organizations behaviors, structures and operations, resulting in improved value chain performance. ” Organizational Project Management Projects Programs

Portfolios Scope Projects have defined objectives. Scope is progressively elaborated throughout the project life cycle.

Programs have a larger scope and provide more significant unifies.

Portfolios have an organizational scope that changes with the strategic objectives of the organization. Change Project managers expect change and implement processes to keep change managed and controlled. Program managers expect change from both inside and outside the program and are prepared to manage it. Portfolio managers continuously monitor changes in the broader internal and external environment. Planning Project managers progressively elaborate high-level information into detailed plans throughout the project life cycle.

Program managers develop the overall program plan and create