The orion shield project analysis

" Projects account for about one fourth of the U. S. and the world's gross domestic product" (Schwalbe 2012). With that said, there are many challenges and issues that hinder the ultimate success or completion of a project. So is evident in the case of the Orion Shield Project, whose execution faced issues of technical, ethical, legal, contractual and interpersonal natures. Taking on a role that assumes responsibilities in stark contrast to newly appointed project manager Gary Allison's professional background and experience doomed the project from the start.

Not only did Gary not have the experience, he failed to research and prepare himself, prior to the project's inception, with the proper project management tools and techniques that are pertinent to the success of a project. The ethical issue of false promise, regarding the maximum temperature at which the shield could operate successfully, was apparent before planning had begun and the role of project manager was officially accepted by Gary Allison. This dishonest proclamation was unsettling to Mr. Allison but he failed to voice his concerns, therefore perpetuating his anxiety and lack of confidence of the projects success.

Technical issues, straying from strictly scientific measures which were Mr. Allison's sole forte, existed in the execution (or lack thereof) of project milestones. Contractual issues arise when Gary and is team failed to follow contract protocol and policy, regarding problems with communication and weekly data share amongst all stakeholders as well as manufacturing delay demands, and cost overruns.

Legal issues tie into the contractual breaching that served as a continuous theme of Gary's non-cohesive managerial process. Interpersonal or social issues continued to surface and resurface with the lack of initiated data share, communication, and responsiveness amongst all the project stakeholders. While, ultimately, Gary Allison achieved his personally desired outcome of being reassigned to his old position, the negative connotations and sentiments amongst his colleagues and superiors regarding his integrity are irreparable. The once proven positive working relationship between Mr. Allison's employer, Scientific Engineering Corporation (SEC), and the customer, Space Technology, is null and void. Industry networking will inevitably offer distaste for SEC, substantially lowering the likelihood of subsequent hire.

Introduction A project can only be successful if the criteria for a project's success are clearly defined and understood by all stakeholders and project team members. A foreseeable goal is necessary for streamlining the conclusion and successful delivery of a project. The exercise of establishing specific project criteria for success hints at the overarching necessity of project organization. In the case of newly appointed and inexperienced project manager Gary Allison's attempt to manage the initiation, process, and execution of the Orion Shield Project was substantially unsuccessful.

While facing the inevitable challenges of acquiring new responsibilities in reassignment, no excuses can be attributed to Mr. Allison's failure to seek resources, tools, and techniques that such a feat would require. Contrary to this acquisition of project management (PM) know-how, the lessons learned and exercised throughout the project's process were derived from negative

practices witnessed and learned. The fundamental issues projects face are defined by the PM industry as the Triple Constraint of: Scope, Time, and Cost. While these are anticipated issues and risks, there are many other challenges realized throughout the lifespan of a project. The Orion Shield project life was riddled with themes of common PM issues such as: technical, ethical, legal, contractual, and interpersonal/ social. In order to recognize the deficiencies associated with this project, we must understand the standards for PM success.

Body

With project planning comes uncertainty and uncertainty is risk. To minimize the impacts of the risks is to identify and understand the five project management process groups:

•Initiating •Planning •Executing •Monitoring & Controlling •Closing activities

During the initiation of Scientific Engineering Organization's (SEC) Orion Shield project was determined and practically driven by Mr. Allison's boss, Henry Larsen. Because this is a process which should occur prior to project planning, it serves as the foundation of all processes to follow. The inception of the Orion Shield project was founded on shaky ground. An ethical issue displayed itself from the very beginning when Mr. Larsen coerced, beyond comfort, Gary to accept and issue a dishonest statement regarding the successful functionality of the product. The scientific evidence, realized by Gary, suggests the inability of the Shield to operate successfully at the temperature range provided as a necessary measure by the customer, Space Technology.

When a project manager does not support the project it is responsible for, the project will inevitably fail. With faith in execution comes the driving force perpetuating a project forward in compliance with milestone achievement. The process of planning seems to be almost completely non-existent in this scenario. Here is where roles of team members are defined, a scope is drafted and agreed upon by all involved stakeholders, and contractual metrics are realized and mapped out. There are various tools and techniques attributing to the success of a project which, Mr. Allison failed to use as a resource for effective project management. Tools and techniques such as Gantt charts, flow charts, and project network diagrams are often utilized by successful projects. These tools allow for progressive talking points and goal visualizations necessary to propel a project forward.

In execution, Mr. Allison failed miserably. Every decision made was an impulsive, emergency response founded on no substantial consideration or collaboration amongst team members and stakeholders alike. By relinquishing all administrative duties associated with the project, a lack of uniformity and data-share was vividly apparent. Gary ran over budget not once, but twice during the duration of this project, causing his corporate heads to shell out large additional sums of money unanticipated at the project's inception. The monitoring and controlling process was also lost to Mr. Allison. Business operation protocol was not followed such as providing relevant and necessary materials to expected meeting attendees between SEC and Space Technology.

Also, when it came to present their findings and material, he only showed for his technical portion of the review while forgoing being in attendance for the

administrative portion. With the ultimate responsibility of the project on Gary's shoulders, one would think he would concern himself more readily with all aspects and functions of the project's life. By failing to communicate substantial findings attributed to the diminished lifespan of the shield with his co-workers and superiors, he sealed his coffin.

Project Issues

The recurring issues the Orion Shield project faced were evident in themes of technical, ethical, legal, contractual and interpersonal natures. Examples of project hindrances are as follows: •Technical: Amongst many other problems technical problems met by this project, the overarching demonstration of technical failure was that the product simply did not test. There is no room for argument here. Basic science, chemistry did not allow for all the components to operate normally.

•Ethical: Gary didn't really believe in the project in the beginning, especially when he found out that they were making false promises of delivery on a product that no matter how many times it was tested was not viable under the measures provided for its composition. This theme was revisited during the closing stages of the project when Gary learned about the unexpected lifespan of the completed Orion Shield product and failed to communicate these findings with the other stakeholder groups, most importantly the superiors of his organization.

•Contractual: There were many contractual breaches evident here such as the failure of weekly briefings to the customer, relaying findings and progress of established milestones, the lack of response effort with respect

to addressing raised concerns by the customer by email and voicemail. The cost overruns that the project assumed were significant and problematic for the customer and provider alike.

•Interpersonal/ Social: the technical Interchange meeting folks spoke to Gary's unavailability and non-existent responses to issues. This may have to do with the fact that the other office project personnel employees were handling all administrative aspects of the project. Mr. Allison wasn't even present when his team presented the administrative data. Conclusion

The customer's distaste for Gary's project management effort led them so far as to express the desire to assume the administrative data themselves and having one of Gary's chief project engineers to present the technical data. No agendas were sent out to the group prior to meetings, allowing for an extremely small window for listening to, understanding, and accepting the proposal put forth by the team. The handouts should have been provided to the project stakeholders before the meeting. Failing to provide the necessary resources that all involved project members need and rely upon, steals from them the opportunity to bring forth questions, concerns, and/ or comments that could inevitably prove to be relevant down the road or as an afterthought immediately following the meeting.

To further understand the issues at hand, there exists underlying reasons that support them, that support Mr. Allison's ineptitude. Many individuals who take on the management of a project for the first time underestimate the task they are taking responsibility for. The failure to seek applicable, helpful resources is inexcusable here. Another underlying reason may lie in

the motivation to assume such a task. Some take it on for the recognition, some for the possible salary increase, and some who think they are qualified without acquiring the necessary tools for project success.

Recommendations for Success

If Mr. Allison were to give project management another go (which this author is almost completely certain he will not), there are a few key contributions that should have been made on his behalf as project manager. Mr. Allison should have exhausted all resources, research, and references attributed to PM success before beginning phase one of the project. A proper budget plan incorporating a contingency plan could have allowed for all of the unforeseen cost issues. The delegation of authority and task assignment was missing in this process as well. Overworking himself on a tier one (bottom) level of a project left no room for the execution of his top tier responsibilities, ultimately derailing the entire project. Having no knowledge of the status of administrative duties relevant to his project, allowed for a communication breakdown among all groups and parties involved.