Group 8 - Assignment 1

The Trilogy Project

AP/ITEC 3505 IT Project Management

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Chapter One is based on the preliminary outline of a project. The Virtual Case File (VCF) was intended to replace the ACS system to efficiently handle data sharing across the agency and investigate. Progressive elaboration was showcased post 9/11 as initial plans were adjusted due to inadequate information systems (page 4). Projects of this caliber are bound to face uncertainty, which this project was not short of, a constant need for requirements to be changed, external pressures, and 9/11. The scope was to curate a modern system that would provide a detailed yet efficient digital case management system; the timeline was initially three years until completion; the cost was over budget with additional funding needed. The stakeholders were diverse and attributed in numerous ways; some of the following were Robert Mueller, SAIC, support staff, FBI agents who would be the users and U.S. Congress. The significance of a project manager was crucial in leading the VCF project; it showed a sense of leadership, but poor planning and external pressures directly impacted the project (page 4). Ultimately, one of the massive downfalls of the project was the limited use of tools and techniques. One useful technique was the joint application development (JAD) sessions, which allowed for collaboration efforts to work with what was at hand and gather requirements from the stakeholders (page 5). The program management ideology of maximizing benefits through coordinating related projects was put into effect in the case study when the FBI Information Technology Upgrade Project (FITUP) was divided into three sub-projects known as a trilogy. The trilogy included enterprise-wide hardware and software modernization, network upgrades, and the most important VCF project (page 1). On the other hand, project portfolio management involves the collection of projects to achieve a specific business goal. This can be seen with the whole IT infrastructure being modernized to work towards the FBI’s motto, like improving national security and building a more efficient system.

The second chapter covered the Three Sphere Model for System Management, which is consistent with the three spheres of business, organization, and technology. The business sphere is shown by discussing the financial and strategic aspects of the project which demonstrated cost overruns and budget mismanagement throughout the VCF project where an estimated 170 million dollars over the set budget. The organization sphere focuses on the human elements of the project, the case study went over the different higher-up positions of the project being changed over multiple different times, and it was stated that four different CIOs and 14 different managers were involved in the project (page,8) this caused mass culture change and instability with the FBI organization. The Technological sphere focuses on the concerns of the technological feasibility of the project, this was attempted by creating a new case management and investigative system to overhaul the legacy system in the FBI. Two types of stakeholders demonstrated with this project are Congress, FBI executives, CIO, SAIC, and Office of Program Management, as the internal stakeholders are tied to Project sponsors, top executives, and support staff. The external stakeholders were FBI agents who are the end users of the project and the public population who had tax-paying dollars spent on this project. The next main concept discussed was the components of the Four Frames of the organization, and how the lack of human resources was at play in the project's failure. Mcgroddy and Lin stated that the FBI needed an adequate skill base need this project with an extreme lack of experienced project, contract managers, and senior IT members with communication skills. Finally, a major aspect that with taken about in Chapter 2 and the case study was the lack of Senior/Executive support that was shown in dealing with political issues and the SAIC's non-cooperate stance with Patton and his concerns regarding security and design issues(page 5).

Chapter 3 is on project management process groups, the first is initiation. This is where the FBI conceptualized replacing its former IT framework with a modernized system through FITUP. The project goal is to automate the ACS system, with U.S. Congress funding nearly $340 million and given an initial 3-year timeline. The next process group is planning, shown throughout the case study as poorly planned; this was advertised with the semi-competent initial planning done by the FBI, as shown by Depew’s approach of “development by taking several shortcuts in terms of planning or developing a blueprint” (Marchewka, 2010). JAD sessions were able to recover a bit but lacked end-user feedback, leading to an incomplete roadmap. The next process was execution; the VCF was to be a custom-developed system by SAIC. However, the constant changes amongst management and project plans being updated in a short amount of time led to SAIC not being well informed about the execution plan. The SAIC programmers took the spiral development approach, but unfortunately, “400 change requests were filed” (Marchewka, 2010). Through the latter stages of development, 17–19 deficiencies were found, which, upon deeper investigation, led to a total of 59 deficiencies. Another example was the flash-cut strategy, which was an overnight impulsive system overhaul without any backup plan. Furthermore, monitoring and controlling were unsuccessful because the deliverables lacked the functional requirements, resulting in the deficiencies pointed out by the arbitrator. If the approach had been monitored, the functions would have had the correct feedback upon delivery. Lastly, in the closing process, it was acknowledged by Mueller that “we did not come through with the virtual case file” (Marchewka, 2010), leading to the use of off-the-shelf software. The FBI and SAIC should have consulted each other from the beginning and adopted an agile approach that would have addressed issues iteratively along with user and stakeholder feedback before deployment.

Chapter 4 focuses on strategic planning. The FBI was able to detect a lack in its management system but did not have a strategic view of interlinking its objective through information technology, leading to foggy investments and constant change within the plan. A project charter is crucial for formulating a successful project, the absence of it can create foundational problems, as we can see with the VCF. There was no project charter thus objectives and stakeholder ideas were not efficiently communicated, The JAD session was an attempt to curate detailed requirements but was lacking and not able to fulfill the objective due to the failure of cohesive adaptability. One of the biggest hindrances to the project was the inconsistency with directing and management work. Throughout the project lifespan, there were frequent changes in leadership, where various routes were taken, an example would be Mueller replacing Freeh, and post 9/11 Mueller wanted “the three-year schedule be put into overdrive so that Trilogy project could be completed” (Marchewka, 2010). Being able to sustain an authoritative leadership can be tough especially due to uncertainty within boundaries, but heedlessness in directing can create a negative snowball effect. The case study highlighted impulsive poor decisions like the flash-cut strategy for expedited service, 59 deficiencies overlooked by SAIC for fast completion, and the compounding of inadequacy leading to the scope of the project altering. Adapting to changes is vital for the project's success. The VCF project was the pinnacle of incorrect practices of change management procedures. From the start adaptability to changes was a struggle and “in the time that SAIC has been working on the Trilogy project, the FBI has had four different CIOs and 14 different managers” (Hayes, 2005). This was an adequate demonstration of how a failed project, having no sense of correct documentation, poor procedures, ineffective planning, and poor communication ruined this project by all measures.

Chapter 5 goes over Project scope management and includes five major processes: scope statement, requirements collection, work breakdown structure development, and scope validation and control. The investigation into the VCF project at the FBI reveals from the start, this program experienced difficulties with most of its essential activities, such as identifying a defined scope. A clear project charter coupled with project scope statements would have given a clearer defined scope, one that would meet the project goals. During the planning stage, over six months, the FBI was able to gather more than 800 pages of requirements through JAD sessions. It becomes detrimental to list every single, extended or exhaustive set of requirements and the project could have benefited from benchmarking which is essentially a comparison of ideas or practices from other related projects in the industry for collection of these requirements. The VCF was one of the three components that constituted the larger project known as the Trilogy Project which was split into three subprojects, each of which was managed by a different team. However, the authors outlined that there was poor coordination and accountability when implementing the decision. The project should have incorporated a WBS dictionary, to offer a high degree of integration and interconnectivity between all the teams involved from one end to the other. This project has been a candidate for poor scope validation at all stages and the result was exemplified by an inability to complete deliverables on time. Especially the problems of scope creep could have been alleviated, thus helping to keep the project afloat and always deliver the indicated results within the stated scope. The final change element relates to controlling the scope of a project because most projects will, probably, experience change or some form of alteration. These trends should have been properly managed and controlled through the use of variance such as (planned/actual) to ensure that changes that occurred were within the scope.

Chapter 6 goes over Project time management and includes four major processes: a project schedule, sequence, activity duration, and resources. FBI’s VCF project failed to achieve its schedule of three years within its allocated budget due to several reasons. The project schedule could have benefited immensely from having SMART milestones, Gantt charts, and utilizing CPM and PERT analysis. Milestones are the key to success for large projects, they should be specific, measurable, and realistic, VCF had many missed milestones because they did not utilize the SMART criteria effectively. Gantt charts are useful for defining start and finish dates for project activities and should have been utilized for effective scheduling. The critical path method would have been effective in avoiding delays, ensuring focus remains on the most important activities. Lastly, PERT would have provided a realistic time estimate for project completion. There was no set accountability or duration for activities in VCF as stated in the case study; this could have been avoided by utilizing a three-point estimate, to provide realistic activity duration estimates. FBI did not have the required resources to achieve its project goals: they lacked experienced project managers (human resources) and needed an approved budget for changes (external constraints). Resource breakdown structure should have been utilized. The chaos and mismanagement of the project show a lack of proper sequence of activities and dependencies. A network diagram should have been utilized to ensure that project activities followed a proper sequence, and all dependencies were accounted for. In summary, high expectations combined with a lack of flexibility and preparation led to Trilogy's demise. Our suggestions would be to employ more reasonable expectations, adhere to the project time management technique, employ an agile strategy, and have a consistent, experienced IT expert oversee the project and senior management to effectively integrate their work.