SYSTEMS INTEGRATION IMPLEMENTATION PLAN

Name

Course

Tutor

Date

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**Systems Integration Testing**

System integration testing (SIT) refers to the process that involves the testing of the various components of the integrated software and hardware so as to examine their characteristics and behaviors of the complete system. At the onset of the system integration process, there are standards that the new system is required to meet. In that regard, before fully accepting and putting the new system into practice, it becomes of great importance to make sure that it complies with the standards. Primarily, the tests are supposed to confirm whether the interactions between the various modules of the software used are in sync (Ridula $ Rajapaske, 2011). Besides, the tests are helpful in detecting errors early and form foundations for future decision making.

 In the Google Inc project, the system integration testing activities involve both the software and hardware integration. In this regard, it examines the system to find out any errors that arise from the interfaces. Since the model adopted is a mixture of different approaches, there are chances that the interfaces may fail to complement each other. As a result, the tests on the compatibility of the interfaces are a key interest of the process. Additionally, the tests should also significantly focus on the data bus contention (Hoffer, 2012). It must make sure that there are no elements of contention problems with the data bus for that has the potential of derailing the entire system. Finally, the tests will also examine the input loads to check whether it can comfortably handle the data loads that flow through it. Additionally, it checks on the input power transients to check whether the power systems are functioning optimally.

**The final migration activities**

 Migration is a risky endeavor in systems integration. If the process is not handled professionally and cautiously, then the business may experience serious problems. In that regard, there are specific activities that must be carried out to make sure that the process does not become chaotic and cause inconveniences to the ongoing operations of the company. Firstly, the company must form a migration team that is tasked with the responsibility of making sure that the process is flawless and does not compromise the execution of the other agenda of the institutions. The team should comprise senior IT experts in the company and other executive stakeholders in the project. Their core role is to make sure that all the necessary activities are carried out and that all the laid down procedures are duly followed.

 During the migration time, there are chances that some business activities may be disturbed. In that regard, the team responsible for movement must evaluate all the risks involved and come up with the strategies that will minimize the effects of these risks on the activities of the company. That would mean a close collaboration among all the stakeholders to make sure that the individuals are on the same page and are reading from the same script (Chen et al, 2008). Moreover, the team would determine the scope of migration so as to plan what needs to be changed first and that which would come much later. It would give the entire migration process some sense of order and make it orderly. That would also entail the examination of possible movement errors with a view of making adjustments before the matter gets out of hand.

**The training activities**

 Using a new system is a challenge to most organizations. The problem arises majorly because the system integration developers are not the same people who would be manning the new regimes. Consequently, it is incredibly necessary that the management makes it a concern to provide necessary training to the staff that would be using new technology. The key considerations in training include the content of the training, the timing, the trainers and the staff members who need to receive the training.

 Regarding the substance of the training on the new technology, individuals would be provided with basic knowledge on the how to use the technology. In this case, the workers were used to a previous technology, and it means they may find difficulties adjusting to the new technology. The training should be based on both theories and practice. It is necessary to make the staff members have a rudimentary knowledge of how the technology works, on top of the training on how to use the technology. Finally, there are situations where the technology may experience minor technical failures due to a variety of errors. That will call upon the trainers to impart on them the knowledge on the necessary steps that they can take to remove the errors.

 There is a need to make sure that as many staff members as possible have knowledge of the operations of the technology. However, due to limitations both regarding resources and trainers, it will be necessary to select the most relevant persons in the company who qualify for the exercise. In that sense, the senior members of the administration emerge as the first group since they may have situations in they would have to interact with the system. Besides the senior members of the administration, the staff in the Information and Technology related departments need thorough training on how the system works. Their training must be more intensive than the other groups since, in the case of technicalities, they would be tasked with carrying out corrective practices.

**Project closeout activities**

 Project closeout activities refer to those events that take place at the tail end of the project. In this case, closeout activities will involve two sets of events. The activities include administrative closure and contract closure. Administrative closure activities include the collection of all the relevant materials associated with the project, an assessment of the project with a view of the successes and failures, an evaluation of the lessons that could have possibly been learned in the endeavor as well as transferring the project to the organization from the team members.

 Contract closeout activities include making sure that the project has met all the requirements, specifications, desires and the demands of the stakeholders, the customers, and the sponsors. Besides, it verifies whether the project team has delivered on all the objects that were stipulated for it to deliver (Ambari et al, 2008). Finally, contract closeout will examine the contractual exit strategy and check if all the measures and steps have been followed in handing over the project to the institution.

**The start and completion date**

 A system integration exercise needs not to be rushed. It requires careful planning to make sure that all the necessary inputs have been factored in and implemented appropriately. The project is expected to last a full calendar year from creation to installation. It is expected to start on the first day of June 2017 and run until the end of May 2018.

**Lessons learned from the project**

 The first lesson learned from the project is that it is not wise to rely on assumptions in systems integration. It is necessary to experiment to come up with a final idea. Another lesson obtained from the exercise is that it is always important to come up backup plans for all the activities of the company. It became apparent that strategies fail and it is important to have alternative courses of action. Finally, organizations are unique and need to have their unique systems. A system that succeeds in one organization is not guaranteed to succeed even if the groups engage in similar activities.

References

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