

MET CS782 - Assignment 5

**Switching Business Model of
Super Training Corporation**

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Overview

The Super Training Corporation delivers software (educational platforms), which allow an institution to be able to deliver educational content to their students.

By the dramatic changing in the software business over the past few years, the Super Training Corporation (STC) in order to stay in competition has decided to move the delivery educational software platforms from traditional delivery software as CD, DVD to Software as a Service model.

In order to reduce STC manufacturing costs, at the same time globalize, and increase margins for creating STC software platform, IT team in STC focus on four crucial areas included system roll out and transition, globalization & resource balance, disaster recovery and business continuity.

STC IT team realized cloud-based platforms are more cost and time efficient, and successfully roll out their SaaS platform and transition to new business model needed sufficient project planning activities. (Rhyman, 2017)

Currently, all of the employees of the STC are in the United States; however, company has decided to globalize its business due the future demands for online learning are rapidly increase around the world. In addition, STC tends outsourcing project to foreign countries and use strict resource balancing to be able to reduce its cost. (Pettinger, 2017)

Other important part of project for STC is disaster recovery plan and business continuity because these solutions help prevent STC from losing business to the competition.

System Roll Out and Transition

STC does not have to deal with all the potential implementation issues at the same time. A phased rollout allows STC IT team to adjust to the new system gradually.

In addition, information that is learned from the early stages of implementation can be used to guide the rest of the process, so that there are fewer issues as the implementation continues. (Rouse, 2014)

As mentioned before project-planning activities play crucial roles for successfully roll out their SaaS platform and transition from traditional business to new business.

Phases of Planning	
1. Initial Planning	determines project's goals, stakeholders, scope, functionality, and governance
2. System Planning	determines architecture and components needed to implement the project
3. Implementation Planning	determines how the project will be implemented, how the resulting system will be deployed and maintained, and how resulting operational and organizational changes will be effected

Table 1. Phase of planning

Project planning consists of many activities that divided into common phases, which often grouped as Initial planning, System planning and implementation planning.

Initial Planning:

This is first stage that IT team should determines project goal, stakeholders, scope, functionality and governance.

Project goal determined by STC is moving the delivery educational software platforms to Software as a Service model in order to reduce their manufacturing costs and increase margins for creating their software platform.

Stakeholder management is one of the primary concerns for STC project manager. Generally, Stakeholder Management has six critical process included:

- Identifying Stakeholders
- Assess the Stakeholders' Power
- Build Stakeholder Relationships
- Build Relationships among Stakeholders
- Communication Strategies for Stakeholders
- Lead the Stakeholders

(Work-otter, 2016)

For supporting project it is crucial to identify and connect stakeholders to the project for building effective relationships and constant communication to keep project on track and successful.

Assess the stakeholders' power in order to analyze their potential impact on the project to know how much they can hurt or help project is very valuable, as it is usually a predictor of what will or can cause them to exercise power in the future.

Building stakeholder relationships with communication strategies and educated them are vital for successfully transaction to new business, because it leads to establish strong support with stakeholders.

Defining a clear project scope is essential to the success of STC project. Because otherwise, the scope of this project will continue to be internal to the creep, while the planned strengths will be out of reach.

The scope of STC project has defined for People expecting to be able to work, learn, and study whenever and wherever they want to use educational resources and materials via the Internet.

According to the definition, functionality that define what a system is supposed to accomplish. In this case, the executive team has determined to move the delivery educational software platforms to Software as a Service model. Therefore, we can consider functionality from two different side including customer and system administration side. Online education resources or OER, which helps students in personalizing the overall learning experience, is system functionality from the customer perspective. From system administration side, we can determine system functionality such as providing routine automation; maintain security policies; troubleshooting; monitoring and technical support.

In order to address many of the key activities of initial planning, we summarize the problems, opportunities, strengths and weaknesses both STC organizational and competitive relevant to a SaaS project, in a Project POWS Chart (Problems, Opportunities, Weaknesses, Strengths). (Arakelian, 2018)

	Competitive	Organizational
Problems	<ul style="list-style-type: none"> - By the dramatic changing in the software business, delivery software as CD and DVD is outdated. - The manufacturing costs are high in traditional model 	All of the employees of the STC are in the United States, which, It costs a high salary to the company.
Opportunities	<ul style="list-style-type: none"> - Improve productivity by moving to new business - Elimination of CD & DVD manufacturing production and distribution cost - Improve feasibility, cost, quality, consistency and reliability by integrating the SaaS application with the customer's 	<ul style="list-style-type: none"> - Reduction cost due elimination of manufacture and distribution staff related to CD & DVD - Cost effectiveness & productivity by Outsourcing part of software development tasks and technical support
Weaknesses	<ul style="list-style-type: none"> - STC should provide sufficient bandwidth in order to cover future demands - STC should improve infrastructure related to SaaS platform such as data center, network infrastructure / connectivity and security, hardware, backup and monitoring tools 	<ul style="list-style-type: none"> - STC should provide and update their recovery plan, business continuity and SLAs related to SaaS platform - STC should adapt its organization for outsourcing and expanding its market by globalization - STC should training employees for new SaaS platform
Strengths	<ul style="list-style-type: none"> - Cloud based application via internet is very common - Fast growing market around the world 	<ul style="list-style-type: none"> - STC can provide service anywhere and anytime - Strong relationship and customer service via SaaS platform

System Planning:

System Planning can divide into three major parts including system design & evaluation, feasibility & impact analysis, and commitment.

In system design & evaluation phase, we need to answer,

How should the educational SaaS application design to run?

What are the different categories of users who will access the SaaS application?

In feasibility & impact analysis section, we need to address risks specific to the system, economic analysis, and estimate time to build system. We need also to address; how should the application respond to: scalability, security and failover issues?

Finally, in commitment phase we should determine committing to system architecture, technology and components.

Once STC IT team complete understanding of the business requirements for creating educational SaaS application, the next step is to build the infrastructure of following items included data center, network infrastructure / connectivity and security, hardware and backup and monitoring tools. (Pal, 2015)

A data center is a repository that houses computing facilities like servers, routers, switches and firewalls, as well as supporting components like backup equipment, fire suppression facilities and air conditioning. A data center may be complex (dedicated building) or simple (an area or room that houses only a few servers). Additionally, a data center may be private or shared. (Techopedia, 2015)

Network infrastructure is the hardware and software resources, which provides the communication path and services between users, processes, applications, services and external networks or internet.

A STC software-as-a-service that is described, as scalable has an advantage because it is more adaptable to the demands of its clients. (Techopedia, 2015)

Implementation Planning

In this phase, we are addressing in detail how the STC SaaS project will implement, how the resulting system will deploy and maintained, and how resulting operational and organizational changes will effect. (Arakelian, 2018)

According to the figure 1, there are many methods to deploy a new system relative to the existing one. These affect cost and risk.

STC approach for deployment of new business is combination of the Pilot and Phase approach—that is, a Pilot or Phase can run with both with delivery software as CD & DVD and a SaaS system. When we insure that new system is working well then eliminate old system and run just new system. This may be less costly than a full Parallel approach.

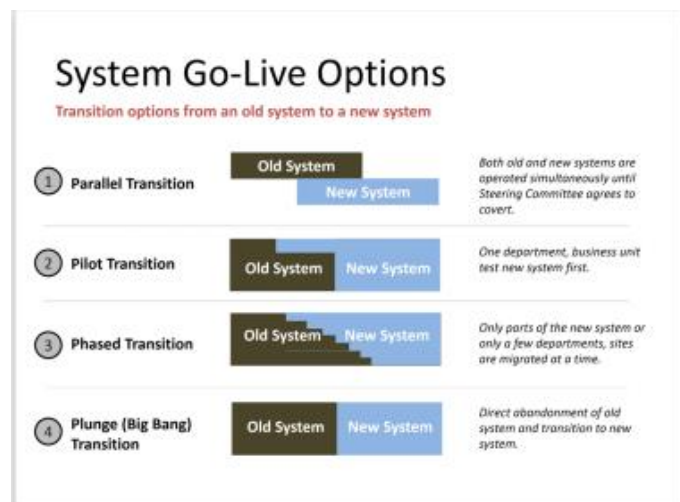


Figure 1. Transaction options from an old to new system (Rollout Project Template)

Globalization and resource balance

Currently, all of the employees of the STC are in the United States; however, Project Manager in STC tends outsourcing project to foreign countries because the labor costs, especially in India and China, are so much lower and company wants to use strict resource balancing to be able to reduce its cost. They realize outsourcing part of software development tasks and technical support activities significantly cause of cost saving in developing of SaaS project. Cost effectiveness & productivity are the most important reason for outsourcing. (Continuity Center, 2016)

Other advantage to outsource company's workforce is employment of technical or sell staff in different time zone can provide better customer service because they available to work commensurate with the working hours of that geographical region.

Outsourcing also has many benefits for STC such as expanding to new market around the world, growing business faster, and using native staff for better customer service activities and cultural or religious adaptation. (Riggins, 2017)

In addition, Outsourcing can lead to better disaster recovery and business continuity because Outsourced infrastructures are far more reliable and stable.

It is worth mentioning that globalization and outsourcing can involve some challenge and disadvantage.

The first issue can consider, is losing some control. When company work out to external agencies, they are losing control of how those tasks are being monitored and performed. Security risk is other concern about STC outsourcing. Because STC plans to outsource processes that require personal data, they could be placing the privacy of others or security of their business at risk by passing that data on to other people.

Reduce quality control is other disadvantage of outsourcing approach. That means the work STC send out may come back quickly, but will lack the standard and quality that customers have come to expect from products or services. (Riggins, 2017)

Disaster recovery

STC IT team provide a framework of sections that a disaster recovery plan should include. (Brian, 2016)

- **Contingency plan policy statement:**

This document is a formal policy that gives certain people like the executive manager in STC who created SaaS plan be the leader of its implementation if disaster strikes.

- **Business impact analysis**

Some components of STC business like customer-facing side of STC application are more important than other parts such as analytics tool while a disaster happen. Then during a disaster immediately bring up customer side application is vital for keeping business continue.



Figure 2. Framework of disaster recovery plan

- **Preventative controls**

Preventative controls are systems that alert STC IT team to a potential disaster or automatically take steps to prevent or mitigate disaster.

- **Recovery strategies**

Recovery strategies are processes that enable STC to return system to its ideal working state. It might include restarting application or moving data, isolated cloud servers, or importing data backups.

- **Emergency response**

This section of STC document details steps to respond immediately for emergency condition like damaging application by malicious code or failed hardware, company would need to begin repairing their systems.

- **Testing and training**

A plan is only useful if it works. By testing it regularly, STC can identify gaps. Which pieces aren't working? What tasks are missing? Training involves educating the right people to respond to the plan and implement the process. Both testing and training improve the plan's effectiveness.

- **Plan maintenance**

STC disaster recovery plan should be a living document. As STC business and product change, they will need to add or remove components of the plan. Review their plan at least quarterly to make sure it still protects their SaaS.

Business continuity

There are certain tasks that CIO of STC should consider for business continuity.

First, determine crisis team structure where indicate which personnel of STC will participate in emergency action. Define exactly for what each of them will be responsible and what specifically will have to do in an emergency.
(Business Continuity, 2014)

Second, collect the customer's requirements based in the SLA such as the maximum duration of service interruption, the minimum acceptable level of service after its resumption and the time that service is back to normal.

Third, gather resources used to provide this service. Mark the ones that are necessary to meet customer requirements

Fourth, development of early warning systems is essential for STC business, where such indicators given result from the impact of crises on people, property, information, or the environment.

Fifth, define critical business functions in a Business Continuity plan by conducting a Business Impact Analysis (BIA). The Crisis Team may simply develop and implement Business Continuity crisis strategy appropriate to the situation.

(Davidson, 2012)

Sixth, do the gap analysis - between the demands / expectations of the client, and the possibilities of meeting them based on the risk analysis, and consider how to fill these gaps. (Davidson, 2012)

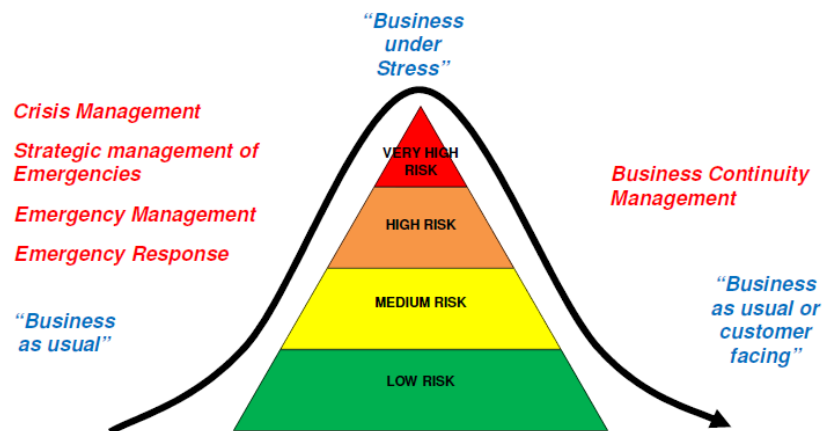


Figure 3. Business Continuity Management

Seventh, prepare the worst possible scenario; along the solutions, that crisis team decide to use to address gaps.

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