

Project Horizon 2020

By Rachid Baida, Aug 2019 for ISI Montreal

Company Profile:

For a quarter of a century, ABC Transportation Group has been known as a carrier who specializes in the transportation of dry goods between Canada and the USA. ... including Alaska.

Making life easier for the shipping community is a core company value. ABC has developed complementary transportation services including:

- Specialized movement of trade show displays and exhibits
- Third party cross-border and domestic freight management
- Cross-border and domestic intermodal service
- Expedited ground and air service
- Global air and ocean freight forwarding

According to ABC website, the customer service is a top priority. As an ISO 9001 registered company, the customer can rest assured that his shipments will be delivered according to their stringent quality process.

With annual 2017 sales of \$ 4 billion, considered one of top Forbes companies with more than 10000 employees headquartered in Montreal, Québec. Due to the leadership of its founder and CEO Michel Student, ABC had joined TSX stock exchange with the below Team:

- Steve Allan, CIO- Chief Information Offices
- Sarah Bishop, Finance Director
- Amelie Dorion, HR Director
- Anderson Smith, VP strategy and marketing

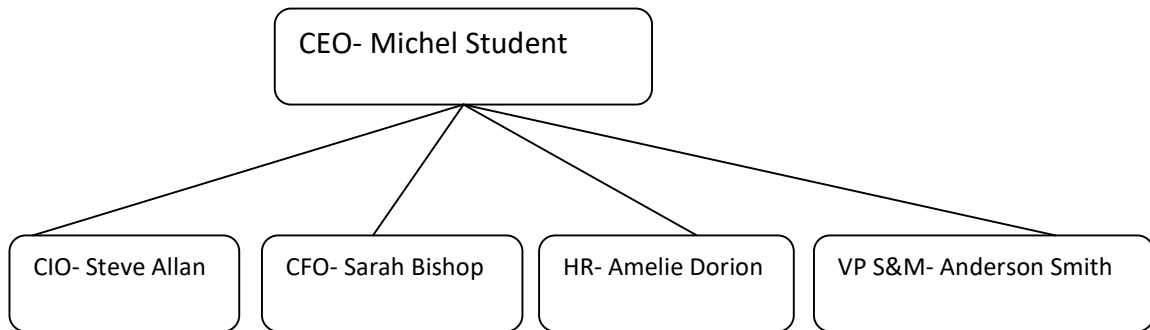


Fig 1- Organigram of ABC when joined TXS

Few years later, as many Canadian companies, ABC faced an economic crisis. Consequently, Sarah had left the company and new reorganisation was required. Michel changed the title of Finance Director to Finance and Marketing assigned to a new team member, Jacob Ali. Anderson role changed to VP strategy and leadership. New members joined under the CIO, as below:

- Mohamed Amar, Director IT and communication Canada
- Smile Wilson, Director IT and communication North America

Mohamed has engaged 3 managers under his team:

- Manager Infrastructure, in charge of network, Datacenter, telephony
- Manager Operations, in charge of day to day operations and support
- Manager applications. in charge of applications, development and integration

The context:

Recently, many customers reported issues to use the web portal of the company. The support team received daily complains about many bugs and non responding web pages. Based on the input of the manager of operations, most of issues related to capacity of servers to support multiple user connection on the same time. Actual servers are old and designed to support 1000 client on the same time, where the actual usage is doubled. The VP strategy expected a growth by 20% in the upcoming 2 years.

Indeed, the web portal was designed by an old technology (HTML5) that consumes more resources and will not support by the providers. The manager of applications raised a need to move to Java as the new platform for the portal to be more efficient and responding to the business increase.

Action Plan:

In order to resolve the problems related to IT, Steve Allan, the CIO, has engaged a specialised firm to:

- Asses the actual IT situation including servers, applications and operations
- Propose action Plan for improvement considering the future usage and needs
- Deploy and Maintain the solution

After few months of assessment and planning, the specialised firm has suggested the below plan:

Action 1- Hardware setup: need to setup 4 servers following the below activities:

- Site Survey: check space, capacity, safety, air conditioning, ...
- Power Cabling :
- Network Cabling
- Connecting and turn On the server
- Operating System Setup and configuration

Action 2: Application Setup

- Install Software
- Configure accounts and connectivity
- Development and adjustment
- Test and validation

Action 3: Migration and Go live

- Extract database from the old servers in a temporary storage area
- Review and adjust the extracted database
- Create new database in new servers
- Migrate new/extracted database to the new servers

Notes:

The 4 servers already purchased by procurement and located in 2 different sites:

- 2 servers in Montreal, Canada. Both in the same data center as below:
 - 1 server used for development
 - 1 server for production

- 2 servers Dallas, US. Both in the same data center as below :
 - 1 server used for UAT
 - 1 server for production (backup of Montreal)
- The 3 actions are interrelated and have to be done sequentially.
- Network links are already up and running between the 2 sites: Montreal and Dallas.
- Video to help network room and cabling: <https://www.youtube.com/watch?v=-sk-zjRfXSk>

The Scope:

Implement the 4 servers to the different location by 6 months starting in next Month.
Considering the below estimates:

Estimation: For 1 server

Site Survey	1 week, 40 hours
Power Cabling	3 weeks, 20 hours
Network Cabling	3 weeks, 20 hours
Connecting and turn On servers	1 week, 40 hours
Operating System Setup and configuration	4 weeks, 200 hours
Install Software	1 week, 40 hours
Configure accounts and connectivity	1 day, 2 hours
Development and adjustment	4 weeks , 200 hours
Test and validation	3 days, 20 hours
Extract database from the old servers	2 weeks, 100 hours
Review and adjust database	3 days, 10 hours
Create new database	1 day, 2 hours
Migrate new database to the new servers	2 weeks, 20 hours

To simplify calculation, student can use 100\$ as rate per hour. Except, the setup of operation systems and configuration, that will be done by one integrator for all servers, rate 200\$/hour. Please note that the integrator has to be in the network room to initiate the configuration, after that, he can proceed with configuration remotely.

All activities related to the software, will be handled remotely by a Dev team, 70\$/hour. Database team will be in charge of all aspects related to databases remotely. Rate: 80\$/hour.

There is team of technicians that can proceed with cabling and connection in each site.

The site survey will be done by the server provider, already included in the initial price. For the purpose of planning, this activity should be zero dollars.

Project Shutdown and Outage:

There are 2 weeks during end of July and 2 weeks at the end of Dec, where all projects are in freeze and most of employees will be on vacation. Only 4 hours of outage are tolerated by business and operations team.

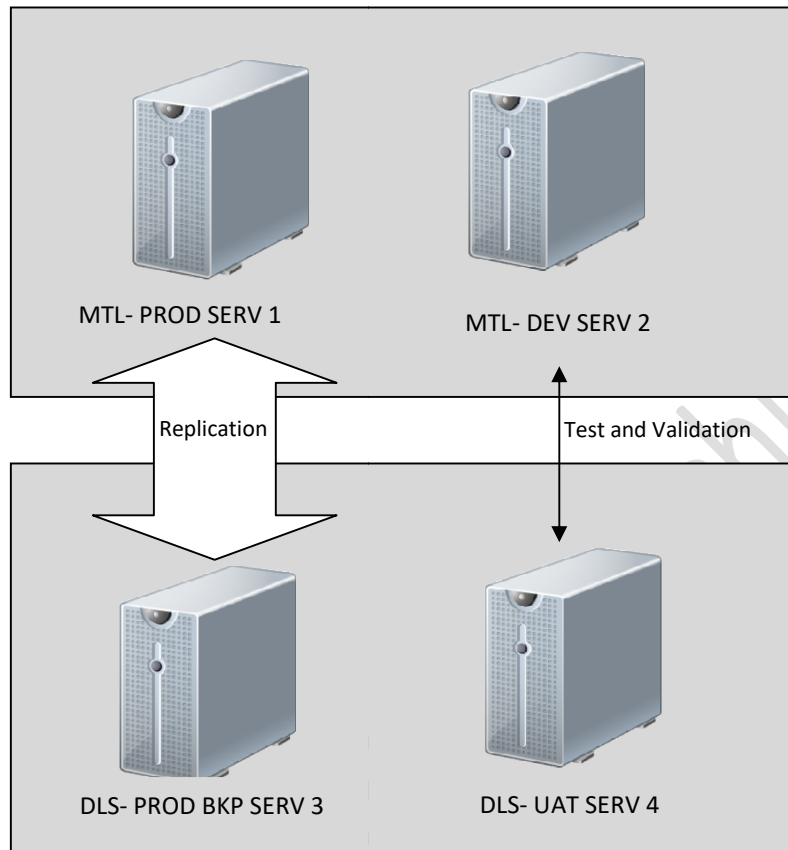


Fig 2- Servers setup

Assignment:

Build the required documents in order to succeed the project in 6 months as below:

- The project charter
- Stakeholders analysis
- Org chart
- Constraints and Assumptions
- WBS, PBS
- The project plan (Ms Project)
- The Risk register and Issue register
- The Communication Plan
- The project budget
- Prepare PowerPoint presentation for the executive members.