# 2018

CIS 410-02

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# [BURLINGTON NORTHERN: THE ARES DECISION]

Case 1.1

# **Executive Summary/Mission Statement**

Burlington Northern Corporation is an organization that was formed in 1970 by the merger of four different railroads. In addition to their broad railroad system, its ownership of raw materials such as coal, minerals, timber, oil and gas, and other substantial industrial products has generated revenue up to \$4,000 and net income of approximately \$250 million. To make the company more efficient and effective, managers and executives ponder over whether or not implementing the ARES (Advanced Railroad Electronics System) is the best solution, as a means of securing a long-term success. They wish to reduce costs as well as increase the amount of goods it can deliver per train. Taking the main decisions into consideration will determine the best course of action and how the company will later benefit from them.

### **Problem**

The question that BN faces in this case is whether or not it's worth investing in a new technology as a means of possibly improving the efficiency and utilization of trains and railroads. The issues with BN's system, however, are dealing with reliability of delivery, and most importantly their efficiency of information systems. In their current asset utilization, reduction in average cycle time causes reduction in the number of sets required to carry a given amount of coal, which then reduces capital investment. (Coursepack) It is crucial to know that service and capital intensity are the two ultimate challenges a railroad industry faces. Although the system may be sensitive to cycle time, arrival time precision was not considered as much, so through this process coal could be disposed of without waiting for official unloading facilities or warehouse space.

# **Industry Competitive Analysis**

#### **Industry Rivalry**

It is obvious that Burlington Northern was in need of some form of new technology to keep up with its competitors, as their major competition in coal includes other railroads. Using Porter's Five Forces Analysis, the industry rivalry exists mostly amongst Union Pacific, which had made substantial investments in efficient fuel engines and heavy-duty double track, which enabled excess capacity. Severe competition also exists amongst the trucking industry, as this has taken over the transportation of more and more contested commodities. Even though they charge as much as three times more than railroad service, their competitive advantage includes going door-to-door, which increases the profit of their service level.

#### Threat of substitutes

As far as the threat of substitutes goes, the air transport industry is the farthest it could potentially go because it is the most useful for long distances not to mention it also saves time being the quickest shipping option ever invented. Unlike railroads and road transportation, construction other than airports is not needed for airspace.

## Bargaining power of suppliers and buyers

Regarding the amount of resources the company ships, BN's primary suppliers include agricultural commodities such as grain and coal businesses. Although they face little competition from trucks, randomness in shipments and pricing put a significant amount of pressure on the railroad system. However, they are low-cost and have low time sensitivity. As far as the buyers

go, the grain-producing regions of Midwest and Great Plains and industrial engineers serve as the standard customers.

#### Barriers to entry

Because massive railroad systems cost an unbelievable amount to construct and maintain, along with the difficulty of utilizing land, new entrants to the market are fortunately not as likely.

However, trucking can produce a great deal of profit if entered, not to mention it has a substantially lower initial cost of entrance than most industries.

#### **Stakeholders**

The main stakeholders that come to mind in this case would have to include the business executives, as they are entitled to make most of the crucial decisions. Because employees, such as maintenance crews and office personnel, which are lower in the hierarchy still have a say on what happens in their system, they are also included. Anyone who has significant interest in Burlington Northern, also known as the shareholders, will also have some role in the stakeholder area. Ultimately anyone whose job could potentially suffer from implementing certain alternatives is considered a stakeholder because in this case everyone is held accountable in some way for the trains.

### **Alternatives**

This case has a few different options it could decide to implement into the system, including moving forward with the ARES methods, merging with another company, or ultimately doing nothing. No matter which alternative is chosen by the organization, it's vital to keep in mind that a communication network and some form of control segment must be components of the system either way despite all of the potential benefits that can be gained. It is also important to stay somewhat cautious and gain some form of assurance that whatever choice that is made is the right one.

# **Impact on Stakeholders**

Taking each alternative into consideration, the effect it would have on stakeholders in regards to accepting the ARES would be a rather submissive response. The organization will most likely see large changes such as an increase in the money coming in, also known as throughput, and a reduction in inventory and operational expense, also known as the ultimate path towards achieving the goal of a business, to make money now and in the future. (The Goal). If the ARES alternative proves to be successful, it is predicted that more money will be made as stock rises, not to mention a competitive advantage will be gained. However, if it were to fail, executives would most likely be removed and take most of the blame for money that is lost.

#### **Best Course of Action**

Based on what I've acquired from this case, doing nothing is probably the better way to go so that no difference is made to daily operations as the potential benefits from ARES are certainly

not guaranteed. Employees will maintain their current positions so no drastic change in that area as well. By accepting the ARES method, service and reliability are more likely to be improved and cost is more likely to decrease, but the employee rate will most likely go down which will cause a significant amount of stress for others. As far as merging with another company, vigilance will be needed as sharing costs can be risky. Either way, it is obvious that there is room for improvement at Burlington Northern, but going with the newest technology may not be the best solution. According to Brock Strom, transitioning an existing technology to the railroad is definitely not the way to go. But moving on to something different before analyzing what you have first has proven to be a catastrophe in most businesses, so before proceeding with a decision, perhaps conducting an outside audit of a certain proposal is a closer step towards deciding on an alternative.