Case: Burlington Northern

Megan Balcom

Case 1

CIS 410

September 7, 2016

Mission Statement:

Burlington Northern specializes in transportation of a variety of goods in the segments of industrial products, forest products, automotive products, coal, intermodal, food and consumer products, and agricultural commodities all throughout the United States of America via railways (Case 1, pg. 2).

Generic Strategy:

Cost leadership, a strategy where a company aims to be the lowest cost producer in their market – is the generic business strategy that Burlington Northern uses. Due to ramifications of deregulation in 1980, Burlington Northern is compelled to be a cost leader to be able to withstand a fight with direct competition of other railway transportation providers (Case 1, pg. 7).

Organizational Strategy:

A functional organizational strategy is one where unique business functions are segmented in order to improve management of the company as a whole. This is the strategy that Burlington Northern utilizes; their three segments include corporate, additional staff and operations. In addition to the ideological segmentation, each segment is also geographically separated. Corporate (Fort Worth, TX) contains the CEO, COO, in addition to other corporate functions like labor relations, marketing, and finance. Additional staff (St. Paul, MN) is responsible for Information Search Services. Operations (Overland Park, KS), the largest department of Burlington Northern, contains operators, train dispatchers, as well as supervisors of both, and also oversees engineering, maintenance, and research and development (Case 1).

Porter's Five Forces:

1. **Buyer Power**

Customers have a decent level of bargaining power due to the direct correlation between customer satisfaction and the amount they are willing to pay in exchange for a reliable and high standard service. In this situation, Union Pacific is who Burlington Northern has to outdo in order to retain loyal customers, or risk losing customers in their seven areas of services transported (Case 1, pg. 4)

2. **Supplier Power**

Ninety percent of the coal that Burlington Northern transports comes from the Powder River Basin. This is potentially dangerous for Burlington Northern, because if new government regulations were to come into effect and greatly limit the amount of coal extracted from this Basin, all of the suppliers would leave to find a less regulated resource site. Since agriculture and coal are the two highest grossing business sectors for Burlington Northern, it is very important that easy access to the Basin remains a reality for the prosperity of their business operations. Also, because such a high volume of supply exists in the Basin, if a natural disaster were to occur and wipe out or damage the coal and agriculture there, Burlington Northern might be scrambling for a supplier after putting all of their eggs in one basket, which could impact customer satisfaction.

3. **Competitive Rivalry**

Union Pacific, Burlington Northern's main competitor, made sizeable investments in new infrastructure and technology, which included fuel-efficient engines for the transportation of

coal (Case 1 pg. 4). Because coal is ordered in mass quantities, customers might be more interested in using Union Pacific knowing that their cost may be lower overall because of more fuel-efficient engines for the transport of such a heavy good. Additionally, if Union Pacific could prove that their new infrastructure and technology delivers goods faster than its competitor, Burlington Northern would face a serious threat from its rival.

4. Threat of New Entry

For a new company to enter into the railway industry would be a large undertaking. The sheer amount of capital required just to break into the market would be a barrier to new entrants. Additionally, the particular skills and expertise required to be successful in operating a railway transportation business would be a barrier as well. However, if a new entrant were to make it past the capital obstacle, and there were a railway domain expert, combined with a business and technologically savvy team, then Burlington Northern may be at risk of replacement in the industry.

5. Threat of Substitution

Burlington Northern does face a number of potential substitution threats. Airplanes, boats, and other railways companies are some of these substitution threats because of their ability to transport large quantities of goods quiet fast, despite weather conditions, but with a few exceptions. The trucking industry would be another substitution threat, especially because of certain deregulation ramifications which allows the trucking companies to lower their rates and modify the trucks to be larger and carry more goods. However, coal is still predominately

carried via railway, so until that practice changes, Burlington Northern may not face many substitutes for coal transportation. But, if clean and renewable energy takes a larger market share in the future of the energy industry, Burlington Northern may face other threats of substitutes in the future depending on how the clean energy is generated and stored.

Problem Statement:

For Burlington Northern to have its entire business work in harmony, it needs to have an answer to the question, "what kind of railroad should we be?". Once this answer is clearly defined, each segmentation of the company will be able to align objectives, and work together in harmony towards goals of having a competitive advantage. Despite the resources invested into ARES, issues are common with documentation and the flow of communication of this project. These issues can be overcome, however leaders of the project need to come to a sound, unanimous understanding of why and how ARES came to be. When Burlington Northern has an answer to the first question, then answering the questions about ARES will be able to be answered properly (Case 1 pg. 14)

Stakeholders:

1. **Customers**

If Burlington Northern does not have customers to transport goods for, then it ceases to exist as a business. Management may vary to a certain extent in terms of what its overall goals for the business are, however the main goal that has to be achieved by Burlington Northern is that customers are pleased with the services that the company provides and want to use Burlington Northern for all of their railway transportation needs.

2. **Employees**

Employees of Burlington Northern are directly impacted by business choices made, and those choices are a result of customer feedback. If customers are happy and have a demand for the services that Burlington Northern provides, then the amount of jobs needed to meet customer demand and wage of those jobs can be expected to both increase.

3. **Stock Holders**

If Burlington Northern does not keep its customers happy, the value of the company's stock will be impacted negatively, and valuable investors may lose confidence and sell their stock and leave the business entirely. Conversely, if Burlington Northern's performance is positive, stock value will go up, and investors will be interested in becoming involved with the business.

4. **Management**

Management within Burlington Northern have a large role in determining what happens to the company as a result of the choices they make. By making decisions based on what goals they think Burlington Northern should strive towards, they also have to be overall aiming towards keeping customers happy and coming back, as well keeping other stakeholders happy as a result of their decisions. Since management drives the direction of the company, if Burlington Northern falls behind to their competition, it is ultimately management's fault.

5. **ARES R&D Team**

The ability of the ARES research and development team to create an automated railway control system that can be proven to be valuable and useful will drive Burlington Northern's decision on whether or not to implement the technology throughout the business. If the rollout of this innovation is successful, the entire business could see new areas of potential growth and

development in the future. However, if the technology fails to be implemented, the ARES R&D team will be disbanded.

Solutions:

1. **Keep current leadership; proceed with total ARES execution**

By not changing leadership, those in charge at least have some understanding of ARES, and by not bringing in new leadership would signal an effort to prevent more holes of communication within Burlington Northern.

2. **Bring in new leadership; proceed with phases of ARES execution**

By cleaning house and starting fresh with new leadership on the project, but still using other people within the company to fill these roles who have a specialization in each functional area, ARES can be examined and implemented in the most meaningful way for Burlington Northern. Having feedback from these functional area experts would help save Burlington Northern money by not spending a large amount to bring in an operations manager from the outside to try to fix the problems, but instead by relying on their own understanding of each area of business.

3. **Do nothing (Business as usual)**

Burlington Northern would not implement any of the ARES project and would not deviate from their traditional company practices.

Impact on Stakeholders:

Solution 1 (Keep current leadership; proceed with total ARES execution):

This is a risky alternative because of how final and concrete it is. By committing to the ARES implementation, employees are going to have to learn about the new system, which will take

some time and they may resent having to incorporate it into their work. Stockholders would likely be weary due to the large ROI – it is so large that it may seem too good to be true ($15 million invested that is expected to have a $350 million payoff). While that would be a great ROI, if it fails, then all stakeholders will be upset in some capacity. Customers would be happy to have the tracking feature of the ARES system, but because it is not refined in the manner that a team doing it in iterations would have, there may be features that customers either don't want to see, or don't need them at all. The R&D team would be pleased that they contributed to the company with a new product, but they may end up being overworked to train and maintain the system as-is. Management would ideally be able to harness information from ARES that they could not before, and the new information could lead to more informed business decisions.

Solution 2 (Bring in new leadership; proceed with phases of ARES execution):

By utilizing the new technology provided by the ARES project, all stakeholders would be impacted in a big way. From a stockholder's perspective, ARES is a tool to help increase productivity, which in turn creates more revenue for Burlington Northern. Like other businesses, their goal is to make money and survive their competition (The Goal). For employees at Burlington Northern, having the new ARES system in place would mean that they are likely happier at work because their job is more safe and less repetitive. This is similar to in The Goal when the plant workers begin to see the benefit of optimizing their production system after having new subject matter experts take a look at the system and work in iterations to make it better, even if it meant learning and adjusting to a new system for a short amount of time.

Solution 3 (Do nothing):

In the scenario that Burlington Northern were to do nothing, no major disruptions would be felt immediately amongst its customers, stock holders, employees, management or ARES R&D team; but, that is not to say the future impact of choosing to do nothing would not have disastrous effects. If Burlington Northern becomes passive and too comfortable on how they operate today, they put themselves at a great risk of being overthrown due to their unwillingness to change (Kalakota). While they would be okay for the short term, technological changes alone could quickly prove their current operations to be outdated and become an obsolete name in railway transportation of goods.

Conclusion:

Solution 2 (Bring in new leadership; proceed with phases of ARES execution):

Out of the three possible solutions, this is the best one for Burlington Northern because it would follow many of the same principles outlined in The Goal, which ultimately ended up saving the company. By bringing in new, expertise leadership from inside the company, the operations management can be understood in a holistic way. Having these people collaborate and identify the true problem areas of the flow of operations is invaluable. The information created by this new leadership can absolutely help drive the ARES implementation by helping to refine its features and think critically about how and why each segment of the business, as well as stakeholders, would use it. Understanding what kind of railway company they want to be is the first step, and without having leaders in the company determine the answer to this, any new system implementation is not going to help solve any of the company's issues if they do

not know what their main goal is. This alternative also minimizes financial risk and reduces potential disgruntled employees.

Works Cited

Burlington Northern Case. *Management Information Systems Course Pack*. 2016

Goldratt, Eli. *The Goal*. 1989

Kalakota, Ravi. *e-business 2.0: Roadmap for Success*. 2001