

Burlington Northern Case Analysis

TURNER BARNETT

CIS 410-50 CASE 1

Introduction

The Burlington Northern Railroad was created in 1970 by the merger of four major United States railroads. The company mainly focuses on coal as their primary source of revenue, but also transports a wide variety of products.

Burlington Northern has a problem with some of their trains being delayed, and they are looking into investing in a new railroad system known as Advanced Railroad Electronics System (ARES) to possibly reduce the delay time. ARES allows for the company to take more control over the schedules and precise locations of where each train is, so that they would be able to plan more efficient and effective routing.

Mission

The mission of Burlington Northern is to be able to transport their product to their customers in a timely manner by maximizing efficiency and effectiveness and minimizing delay and risk.

Porter's Five Forces Analysis

Threat of New Entrants: Low

The threat for new entrants into the railroad industry is very low because of the large amount of capital funding required for entry. A new entrant would be required to purchase transportation means for the entire transportation process, including railways, trains, truck to store products, etc. The cost of entry is extremely high, which reduces the threat of new entrants into the railway transportation industry.

Threat of Substitute: Low

The threat of substitutes stems from trucking companies, as well as transportation means by water. These may be of minor concern to Burlington Northern Railroad as fuel prices play a major role in the efficiency and competition between these forms of product transportation. In Samuel Prince's article titled "Porter's 5 Forces: KSU's Position in the US Freight Rail Industry", it is stated that trains are nearly four times as fuel efficient than trucks and are a much quicker form of transportation in comparison to water transportation. This makes it hard for other forms of transportation to compete on the same level of railway transportation.

Bargaining Power of Suppliers: High

The overall bargaining power of suppliers for the Burlington Northern Railroad industry is very high. As trains and trucks require a good amount of fuel keep them going, the fluctuation of fuel prices can be a factor in the power of the suppliers. The bargaining power of suppliers is also high in the fact that most of the products being transported by the railroad industry come from suppliers. If a supplier finds a company paying more for their supply, they can choose to supply their product to them instead.

Bargaining Power of Customers: High

As the transportation market becomes more competitive, customers have a choice in choosing which company they buy from, lowering overall prices.

Competitive Rivalry: High

Rival companies such as Union Pacific can form competitive advantages in terms of reducing overall costs for transportation and making the transportation process quicker than their rival. Having the competitive advantage of time can be a huge factor in selling off the company product.

Stakeholders

Burlington Northern Company:

The company is taking a risk by implementing the ARES project, and if all goes well in implementation and process, the company will benefit in overall efficiency and effectiveness.

Burlington Northern Employees:

Burlington Northern employees are major stakeholders in the business as they impact the overall flow of the business processes for transportation. If implementing ARES negatively impacts the employees, the business is negatively impacted.

Burlington Northern Customers:

The customers of Burlington Northern are major stakeholders as they purchase product from Burlington Northern. The customers may be affected by the implementation of this new system, may it be through product pricing or time it takes to receive product.

Alternatives

Do Nothing:

In this alternative, the company can decide to not invest their money into ARES and continue with the current system. With this alternative, the company will retain the current problems that the system has with delayed trains but will be able to use their money to improve their current system with few risks.

Invest into ARES and implement the system in segments:

In this alternative, the company can decide to invest into the ARES system, and implement the system in batches throughout the company. This alternative allows for each branch of the company to test and get accustomed to the new system. This could also result in increased costs as the system is being implemented over a long period of time.

Invest into ARES and fully implement the system into the company:

In this alternative, the company can decide to fully invest into the ARES project, implementing the system throughout the entire Burlington Northern company. Fully investing and implementing the entire ARES system has a high-risk factor, but can also result in a high reward scenario, in which the company fully implements the system, the employees have no issues being accustomed to the new system, and the company reduces costs all around the board and eliminates the delayed transportation issues. This alternative brings the highest amount of risk, as the entire system is being reworked and employees may have issues adapting.

Effect of Alternatives on Stakeholders

Do Nothing:

Burlington Northern will move forward with their current system, minimizing the transportation delays as much as possible. If Burlington Northern was to do nothing by not investing into the ARES system, the employees will stick to the current system and will continue to improve on their work to minimize delays. The customers of Burlington Northern will likely back out of business practices if they are not satisfied with the delays in the current system.

Invest into ARES and implement the system in batches:

If Burlington Northern was to invest into ARES and implement the system in segments, the employees will slowly adapt and get accustomed to each implementation of the ARES system as it is implemented. The customers of Burlington Northern will have to decide if it is worth for them to buy from Burlington Northern based on how the new implementations. Burlington Northern will have to decide how and when each segment of ARES is to be implemented and take those factors into account when conducting business processes.

Invest into ARES and fully implement the system into the company:

Burlington Northern will have to implement programs to help employees understand the new system and will potentially have to hire/fire employees where it is needed. The company will have to invest more money into implementing these programs, furthering their possible debt if the

implementation is a failure. If Burlington Northern was to invest into ARES and fully implement the system all at once, the employees will have to adapt to the changes in the system and will have to learn how to operate under the ARES system. The customers of Burlington Northern will have to decide whether it is worth for them to purchase from Burlington Northern based on how well they implement the ARES system.

Best Alternative

The best alternative that Burlington Northern can choose to minimize risk is to do nothing. If the company were to not invest in the ARES system, the company will not have to change anything with their current system and will not have to invest 350 million dollars into a system that is uncertain to be beneficial to the company. When investing 350 million dollars into implementing ARES, there is a great amount of risk involved as a large amount of money is being invested into an entirely new system. Companies must be careful when implementing an entirely new system as there are many things that can go wrong in implementation. The alternative to implement ARES in segments is not optimal, as this requires more money and time investments. The longer it takes to implement a system, the more money a company needs to invest to implement the system. In this case, the safest alternative is to simply do nothing, as it minimizes risk and does not require such a large investment to “possibly” give a good return on investment.

Work Cited

Barker. *Management of Information Systems*. Burlington Northern Case. 2019.

Porter, Michael. *Porter's Five Forces*. 2013.

Prince, Samuel. *Porter's 5 Forces: KSU's Position in the US Freight Rail Industry*. 2016.