

Burlington Northern : Case 1

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Introduction of Burlington Northern

Burlington Northern is a railroad company that was created in 1970 with thousands of railway cars and trains and is both worth millions as well as operates with millions. It is a very interesting setup with Operations headquartered in Overland Park, Kansas, the corporate side located in Ft. Worth, TX and the IT staff based out of St. Paul, MN. Their revenue is derived from shipping large quantities of goods that are typically inexpensive. Some of these being: coal, agricultural commodities and industrial products. They make the most off of these three types of goods. Since they can ship so much product they have a high ceiling to make profit. The easiest way to continually return large profits is to find ways to decrease the cost of shipping which is what they are looking to do in this situation. This project was named ARES, standing for Advanced Railroad Electronics System.

The Problem

There are many issues that Burlington Northern currently faces. Of course they are still doing fine at this point in time but outdated “technology” or lack there of has been prevalent and can be seen more and more as the years roll by. Many of the problems Burlington Northern faces can be solved by the possible implementation of ARES. This then leads to a problem of deciding whether or not to implement ARES and whether or not the money spent would benefit the company in the long run and how much would it do so. They have already invested \$15,000,000 into this project. Is spending the rest worth it?

Porter’s Five Forces

Competitive Rivalry: The competitive rivalry of Burlington Northern is certainly a special case. Typically there are multiple companies vying for the position in the market. When it comes to this case though, the one rival BN has to lookout for is Union Pacific. They are the only company that can match the size and shipping that BN does on a day to day and yearly basis. Therefore, the competitive rivalry would be medium. Any significant problems and they could lose their business to UP. Keeping at a steady pace though or any small hiccups, their place as a top two competitor will be retained.

Threat of New Entrants: The threat of new entrants is pretty low. Because of the large capacity for business the Burlington Northern holds, any up and company would take a large sum of time to catch up. In this Burlington Northern can adapt and overcome any issues and better their technology and business processes to stay ahead of possible new entrants.

Threat of Substitutes: The threat of substitutes is extremely high. It does not cost much to ship these goods and there are plenty of ways to get them across the country. Therefore, finding different companies and methods to ship these products would be fairly easy. This means that Burlington Northern has to be at the top of their game to retain customers and continue to grow their clients.

Bargaining Power of Suppliers: The bargaining power of the supplier would be high as well. BN and UP both hold significant positions in the shipping industry. Because of this they hold a lot of leverage in the industry. If they were to decide to up their prices, many would still have to pay to ship their products. This works very well for Burlington Northern because “Increased costs can usually be passed on to the buyers” (Tanwar

13). Meaning if they choose to implement ARES they can subsidize some of the costs by passing it to their customers.

Bargaining Power of Consumers: For the most part the bargaining power of customers is low. If they want to go to one of the big two they will have to pay the price of those that are set. They could go to alternates but they may not carry the product where it all needs to go.

Stakeholder Analysis

Shareholders: Shareholders are anyone that has ownership or stock in Burlington Northern. The effect that this decision ARES brings has a large influence on what happens with the shareholders. If implementation goes well and the money is well spent shareholders could benefit massively on a monetary level. If the opposite happens and the money is wasted, share prices could plummet leading to huge losses of money for the company and shareholders.

Employees: Employees are exactly what is mentioned, these are the employees of Burlington Northern. The effect on these employees is whether or not they continue to have a job and what kind of pay they would be making. ARES being successful could mean more positions open in the company, better salaries or even bonuses.

Unsuccessful introduction of ARES has the possibility of leading to layoffs, pay-cuts and poor morale around the worksite.

Customers: Customers are people that utilize Burlington Northern as their shipping company. ARES would be extremely beneficial to customers if implemented correctly. It would allow tracking of their shipments and a guarantee of better shipping methods. Whether ARES is implemented or not and how it is implemented can shift the consumer

view. If it leads to better shipping results more customers would come, whereas if it's a waste of money or they choose not to implement ARES the customers could look elsewhere.

Do Nothing Option

One of the options Burlington Northern can consider is doing nothing when it comes to pursuit of ARES. The ARES project is extremely costly and would cost around \$325,000,000. The upside to this would be saving hundreds of millions and not having to completely overhaul the way the company and shipping operates. This would allow business to continue at the usual pace and not have any major hiccups. One issue that would be raised would be the money already invested going to waste. At the time around \$15,000,000 was already invested in the ARES project. That's a lot of money going to a project that wouldn't be implemented. Though, when looked at a scale of how much money would still be needed, it is only a small fraction. The other major issue with implementing no changes to business would be the lack of emerging technology. Of course the main premise of this project is to update a lot of the old fashioned ways that Burlington Northern is still going about business, as well as the lack of GPS. Not using ARES could save jobs for current employees since more hands on workers would be needed. Customers on the other hand would be negatively affected since the technology and shipping methods would become outdated, resulting in longer shipping times, lack of shipping tracking and train information.

Option A : Full Implementation of ARES

The first option when it comes to implementing ARES is to fully implement every aspect of the project. It is a large sum of money, but the significant impact of ARES

would be massive for the future of Burlington Northern. Costs would be reduced when it comes to how many employees are needed on a day to day basis. When it comes to incoming and outgoing logs and tracking of the trains it would all be automated, reducing user error. GPS would be beneficial to both BN and the customers paying for their services. Safety issues are another issue directly benefited by the potential usage of ARES. Trains would be safer due to the consistent update of the health of parts on the train. This allows workers to be knowledgeable of what could potentially become a problem and what needs to be worked on. Because of all of these the shipping and processing times are cut drastically. As well as having the downtime of the hundreds of trains reduced. "Technology: that's really what it's all about. We have to stay on the leading edge of technology" (Goldratt 45). ARES is a technological overhaul of most of the BN process. Getting caught up to UP and then ahead would be massive for BN when it comes to gaining new customers. The only downside of implementation is the \$325,000,000 and any possible issues while introducing ARES, as well as potential backlash for layoffs once ARES is introduced.

Option B : Partial Implementation of ARES

An additional option would be to pick and choose separate parts of the ARES project to implement, while leaving out others. For instance, one of the largest costs would be the implementation of significant technology on trains to monitor the health of them. With hundreds of trains, doing so would be tedious and costly. Leaving out something like this would allow the company to still save a large sum of money. They could still implement GPS onto trains to still benefit their customers and their business processes. What could become an issue with this is the limitation. Morgan says, "it is

often very difficult to organize in any other way” (Morgan 10). Meaning, if applying that quote to partial implementation, whoever makes these decisions could overlook other parts of ARES to implement since it doesn’t fit with their idea of the organization and process.

Recommendation

My recommendation to Burlington Northern would be to implement the full introduction and usage of ARES. The benefit of the technology that ARES brings in is too great to pass up on. The total cost, which is very high, is still worth the outcome that would be full implementation of ARES.

Technology plays such a large part in the world and any large technological advancement will be such a huge benefit to the future of businesses. It reduces the errors of humans and speeds up business processes which cannot be passed up on. There should be no more issues with logs on departures and arrivals of trains. Live updated information on a train and products shipment would be available with the GPS. Finally, the technology that allows train issues to be monitored is huge. It allows the trains to be at their healthiest and shipping time to be updated correctly and fixes be handled swiftly. Therefore, ARES should be implemented to the full extent to benefit both Burlington Northern as a business and their customers. This should go well as long as Burlington Northern “has sufficient cash and quality personnel working on it” (Tanwar 16). But if not implemented well there could be some issues. Like Goldratt said about his plant “I’m running what should be a good plant” (Goldratt 26). He went on to talk about how he had good technology and people but it still didn’t seem to be working. Care should be taken to ensure that the ARES project is setup, implemented and

continued to run sufficiently or else all effort was wasted. In the end Goldratt asks the best question “But is money making the only goal?”(Goldratt). He concludes that it is and how he shouldn’t necessarily worry about anything else. In order to maximize profit into the future and better Burlington Northern, they should full invest in ARES.

Works Cited

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