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Burlington Northern Business Case 1 Analysis

Burlington Northern's mission statement is "to provide superior service in the American mid-west railroad system by using our trains efficiently and effectively." Burlington Northern is using a differentiation-based focus strategy. A focus differentiation strategy is one of Porter's generic strategy's and it is about focusing on a certain market and changing the business to be better equipped to meet the market's needs. The differentiation part is a subcategory of Porter's focus-based strategies, it means that for a company to be more successful in the market it will differentiate or change to better meet the market's needs. Porter's five forces are important in determining a company's health. Burlington Northern's supplier's bargaining power is not a threat because included in Burlington Northern's merge in 1970 included a company that owned "substantial natural resources including extensive land grant holdings containing minerals, timber, and oil and gas." (Kaplan 1) So, these resources are available to Burlington Northern and are not a concern for supplier bargaining. Another important resource for Burlington Northern is the train cars that the Burlington Northern trains haul. These train cars are owned by the companies Burlington Northern does business with and are not a concern for Burlington Northern. The bargaining power of customers isn't something Burlington Northern should be worried about. Burlington Northern is in control of the railroads in the mid-west united states and cannot be easily substituted for another low-cost transportation option however, the threat of substitution is high and is something Burlington Northern must combat. In the current market, Burlington Northern must worry about 2 major threats trucking and other railroads. Trucking has become a substitution to train to ship since trucks deliver door to door and customers are willing to pay more for that. During a recent analysis, Burlington Northern did found that:

> " In our recent analysis, we've been surprised to find that railroads and not trucks are some of our major competitors. Since deregulation, intra-railroad competition is increasing and driving down prices at a fearsome rate. Trucks have carved off their segments fairly solidly. Railroads want to compete in these segments, but they don't, and trucks are pretty secure in them."(Kaplan 7)

So, railroads are a more concerning competition than trucks because trucks have already secured their segment in the market. The major railroad company of concern for coal competition is Union Pacific. Union Pacific has invested heavily in double tracks, new technology, and fuel-efficient engines for coal transportation. It is also believed that they have excess capacity whilst Burlington Northern is operating close to capacity on coal lines. The threat of new entrants is low. New entrants in the railroad industry would have a difficult time due to high entry barriers, for example, the amount of railroad infrastructure required to run this type of business would require many investments which will scare off new entrants to the market. The threat of intra-industry competition is present with Union Pacific being the main competitor for the coal transportation of Burlington Northern. This is an issue because coal is a major source of revenue for Burlington Northern. This is a major reason why Burlington Northern needs to differentiate itself from the competition.

Burlington Northern is comprised of three separate locations across Midwest America. One location is in Ft. Worth Texas this is where corporate activities happen such as finance, planning, and marketing reside. The Operations department is located in Overland Park, Kanas, and is the largest department at Burlington Northern. This is where the train dispatchers, operators, and their supervisors performed support activities for the company including research and development, service, engineering, and maintenance. The last location is in St. Paul Minnesota and is where other corporate activities occur such as information technology support occurs. Burlington Northern's revenues are comprised of shipping coal, agriculture, industrial products, forest products, food/consumer products, and automotive products. Burlington Northern's largest source of revenue is currently from coal shipping it represents one-third of total revenue and is a large priority at Burlington Northern. With coal shipping being a large chunk of total revenue, it is important to prioritize it. Coal also has an opportunity for increased demand: "If the U.S. government enacted the anticipated acid rain legislation, demand for the Powder River Basin's low-sulfur coal was expected to increase substantially. Managers also believed that Powder River coal had the promising export potential to Japan and other Pacific Rim nations from the west coast ports served by BN." Agricultural products are the next largest chunk of total revenue for Burlington Northern. The demand is more unpredictable than coal due to the variety of harvest times and the unpredictability in market price. To combat the unpredictability Burlington Northern implemented a marketing strategy called certificates of transportation (COT). COT was a contract that sold commitments to move carloads of grain within 3-day intervals 6 months from the future the contract was made. The COT program made the agriculture revenues more predictable. The rest of the shipping categories are all similar where they are all highly random and have a random demand. Customers of this category are willing to make tradeoffs with price and quality which puts Burlington Northern in competition with trucks.

The key stakeholders in Burlington Northern are employees, investors, and customers. They are all impacted by the decisions we make at Burlington Northern. Burlington Northern has a plethora of issues that need fixing. To start the technology currently being used is from the 1920s and is 50 years old at this point. Also, several noticeable bottlenecks in the train shipping process are slowing down Burlington Northern's through put. According to Goldratt's book, the goal bottlenecks hurt production: "“What you have learned is that the capacity of the plant is equal to the capacity of its bottlenecks," says Jonah." (Goldratt 164) Bottlenecks are a point in the business process that has a limited capacity and limit the production amount. A major bottleneck of Burlington Northern is the one-way train tracks. Trains have to go off onto a sidetrack and wait for some trains to pass. If there is any delay whatsoever there can be a massive ripple effect that slows down many trains at once all due to only one train being behind. Another issue is dispatchers. Dispatchers are assigned 20-30 trains at once and a better than average dispatcher can only prioritize 5-7 trains at once and the rest of the trains are unprioritized. Also, dispatchers are assigned trains by certain locations so once a train leaves their location, they no longer care about it, it becomes another dispatcher's issue. Another major issue is how the trains are tracked. Clerks are the main means by which trains are tracked. Conductors gave the train driver a piece of paper that he would give to the clerk upon arrival at the station the clerk would then have to manually type in the time at which the train arrived at their computer to the database. The issue with this is that if the clerk were at all busy, he would delay entering the data this leads to insane variability on the train data. A train could arrive somewhere an hour earlier than the clerk entered, and the data would then be an hour off. The main issue with these is the inefficiency that it causes. So much time is wasted that if better managed could help create better service to differentiate Burlington Northern from its competition. Inefficient procedures impact all the stakeholders by limiting profits and reducing potential revenue and customers.

The main solution to improve efficiencies at Burlington Northern is the ARES system developed by RND to track trains within 100 feet. ARES has some issues the main one being the cost to Burlington Northern and the fact that it's hard to see the actual value of this system. ARES will cost a varying amount to Burlington Northern due to the degree to which it is installed, The focused installation cost 360 million, the base strategy cost 406 million, and the expansion strategy cost 576 million. To me, there are 3 major options regarding implementing the ARES system no integration, focused integration, and base integration of the system. The first option, not integrating the system is a potential option because of how high the cost is. If the ARES implementation fails it could be catastrophic for Burlington Northern. News of their failed implementation would reach the stock market and cause share prices to plummet and could negatively impact relations with customers causing a decrease in the number of sales completed. Also, a marginal improvement in the current processes could still yield major efficiency improvements without a 360-million-dollar price tag. The second option is to partially implement the system using the focused installation which is risky but not a bad idea. If ARES is implemented successfully the return could easily pay for itself. With better service, Burlington Northern can charge more for its shipments which would increase profits. Also, ARES would decrease costs for Burlington Northern and this would also increase profits. Increased profits would positively impact all shareholders, Stock prices would increase making investors happy, customers would get a better service, and employees could get paid more. The last option is the expanded installation of the ARES system this system would be the most efficient ARES system. This solution is the most expensive investment from Burlington Northern and would cost them

576 million, but it would be even more efficient than the focused- strategy this could make Burlington Northern even more efficient than just the cost-focused strategy. This strategy would reduce operating costs even further and thus increase profits. The only issue with fully implementing ARES is the additional cost of 506 million dollars and if Burlington Northern invests that amount it generates a great amount of risk Fried mentioned in his book Managing Information Technology in Turbulent Times that “In fact, history has shown that maintenance and enhancement activities represent over 70 percent of the lifetime cost of an application.”. (Fried 325) so the ARES system is most expensive during the maintenance phase.

In my opinion, the best option for Burlington Northern is to integrate the focused ARES system. This will help achieve more reliable and faster service which allows Burlington Northern to further differentiate from their competition. According to Fried in his book Managing Information Technology in Turbulent Times: “User satisfaction increases as the IS organization becomes more helpful.” (Fried 285) with the implementation of ARES user satisfaction will increase due to it helping manage Burlington Northern’s trains. Also according to Fried “Only about half of the companies feel they are getting their money's worth from IT investments.”(Fried 274) So the implementation of ARES must go smoothly. That is also why to reduce risk from full implementation I chose the focused implementation. Fried also said, “Some resources or applications transcend business units or business processes.” ARES can transcend the current business process of Burlington Northern by upgrading their 50-year-old equipment and reduce the chances of train breakdowns which would increase the safety of workers at Burlington Northern. Fried also talked about how: “This is not new;

the capabilities have existed (and have been applied since the early 1960s) for information technology to reshape the corporation.” (Fried 321) The ARES system could completely reshape

Burlington Northern and set the president for other railroad software systems. Fried also said “it is now more necessary for the executive to have access to external information such as stock market reports, competitive information, and news. Managing the corporation in "real-time" requires a blend of internal and external information.” (Fried 322) And Burlington Northern is lacking important internal information about their trains due to the current inaccuracy of their current system.

Overall, I think the ARES system would play a vital role in differentiating Burlington Northern from the current market and its competitors. ARES successful implementation would also reduce costs and increase efficiencies which would in turn increase revenues for all stakeholders.

Works cited

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