Burlington Northern

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Executive Summary:

Burlington Northern is considering investing in a new control system for its railroad to increase operational efficiency. The goal is that the increased efficiencies will allow the company to pursue other customers in markets previously unavailable to the industry due to the unreliable delivery times. The purpose of this report is to determine if the investment in the development and implementation of this new system would be beneficial to the organization and a good use of company resources.

It is recommended that the company not invest in this new control system in any form. It would be a better use of company resources to pay down its debts first. This would buy the company time and potentially extra capital that it could then use in buying an alternative system that has already been developed. This would prevent Burlington Northern from incurring the first mover premium tied to the development of a new technology.

Problem Statement:

Burlington Northern has two major problems its facing, service times and financial liabilities. The company has determined it must make major financial investments to increase its service's reliability. It has developed a new system for managing trains to increase their reliability called Advanced Railroad Electronics System (ARES). With this greater service reliability ARES provides, it will open up new opportunities to untapped markets and increased rates for its services. ARES will help to facilitate just in time inventory management that its customers are starting to require. Gerald Grinstein, Chief Executive Officer of the company, told shareholders that its new strategic focus was on reducing the financial liability of the company. Burlington Northern must also reduce its financial debts, which is at odds with its need for massive investments to implement the new ARES system.

Industry Competitive Analysis

Mission Statement

Burlington Northern is a logistics company that focuses on the reliable transportation of coal and agricultural products.

Generic Strategy

Burlington Northern is pursuing a differentiation strategy. It is focusing on trying to set itself apart from others in the industry by becoming more reliable in delivery times. This new reliability will help to promote brand loyalty. Another advantage it allows is access to compete in new markets such as food transportation where just in time delivery is a requirement. If it can make this transition to having reliable delivery times, according to *Porter's Generic Competitive Strategies*, the company or business unit may then charge a premium for its product.

Organizational Structure

Burlington Northern has a standard organizational structure. However, its company's leadership is split across different locations. This could be an issue, but according to *Building The Information-Age Organization*, Organizational structure, information technologies, control systems, and human resources enable skillful general managers to extend their reach and to affect their organizations' destiny. So, if managed well, it should not be an issue. One of the more concerning issues is that most of the top management has recently entered into their roles, leaving a gap in commitment to previous projects undertaken by past executives.

Porter's Five Forces:

Competitive Rivalry

Burlington Northern faces competitive rivalry in the rail industry. Their main competitor is Union Pacific. Union Pacific has invested a substantial amount of money into upgrading its rail system. They have mainly invested in a heavy-duty double track rail system and more fuel-efficient engines. Union Pacific has excess capacity with their double track rail lines, while Burlington Northern is at their single line capacity. According to *The Goal*, the idea is to make the flow through the bottleneck equal to demand from the market. Burlington Northern will have to expand its capacity if it plans to compete with Union Pacific for new customers.

Threat of New Entrants

Burlington Northern does not face a high likely hood of new competitors entering the industry. The large capital investment cost to set up a competing railroad is a significant barrier to entry for most other organizations.

Threat of Substitutes

Burlington Northern faces potential substitutes competing for parts of its operations in the coming years. The main substitute of concern is the trucking industry. With trucks being able to go door-to-door, customers are willing to pay the extra cost for the higher level of service. According to *Porter's Five Forces*, this can be a significant issue as it constrains the ability of suppliers to raise prices.

Bargaining Power of Suppliers

Burlington Northern has a relatively low buying power with its suppliers. It does not command a large market share in its industry. Its biggest expense is its workforce, which is unionized, leaving little room for negotiation. It is a price taker when it comes to fuel purchases for its trains, which is another big expense for the company.

Bargaining Power of Customers

Burlington Northern's customers have quite a lot of buying power. Burlington Northern's main revenue source comes from the coal it transports where the customers own their train cars. The customers have a low switching cost to other rivals in the industry or to substitutes, such as trucks.

Key Stakeholders:

Customers

Customers are interested in reducing the cost they have to pay for goods and services while maintaining expectations for the services provided. Current customers will remain unaffected by the proposed solution.

Suppliers

Suppliers are interested in the prompt payment of goods and services purchased. Suppliers will benefit from the proposed solution of continuing efforts to pay down financial obligations.

Employees

Employees are interested in reducing the complexity and stress of their jobs while operating in a safe working environment. The research and development team is looking forward to implementing its solutions to the problem. Employees will likely be upset by the proposed solution and morale will suffer over the short term.

Stockholders

Stockholders are interested in the most value the company can generate for their shares. Stockholders have been told that the company is going to focus on paying down its financial debts. Doing so will make the company more valuable, which will increase the value of the stockholder’s shares. Stockholders will be happy with the proposed solution.

Solutions:

Do Nothing

If Burlington Northern decides to do nothing and continue operations as normal, no increased risk will be undertaken. This will benefit the suppliers and stockholders the most because Burlington Northern will be able to continue focusing on paying down its financial obligations. Suppliers will benefit from receiving payments for goods and services rendered, which will help to build goodwill between the companies. As a result of the company having less debt, stock prices will rise, making the investors happy. However, this will upset the employees who worked on the research and development of the ARES system. Along with all the employees who wanted a new system to help with safety and productivity concerns. Most of Burlington Northern's current customers won't be affected by this solution as they are already locked into long term contracts for the current service level provided.

Partial Implementation of ARES

If Burlington Northern decides to do a partial Implementation of ARES, the company will be able to quickly start offering slightly increased service reliability at a fraction of the price that the whole system would cost. This option provides a low level of risk because most of the investment will focus on tangible assets that are already known to the industry. It is unclear the ramifications this will have on stakeholders. Suppliers will likely be indifferent on this matter. Stockholders will probably be split on this issue. Some will see it as a small investment in the company's future, while others will see it as unneeded spending when they should be focusing on paying down the company's debts. Employees may like the new system, but they will now have to balance using two different systems simultaneously, causing added complexity to their jobs. Customers may like the more reliable times but will likely get upset if the company fails to maintain that expectation across the organization's entire rail system.

Full Implementation of ARES

If Burlington Northern decides to fully Implement ARES, the increase in service reliability will lead to cost savings and a potential competitive advantage. Burlington Northern will also be able to pursue new markets. However, this option is risky because the cost of development is not truly known and most development projects take longer to complete than estimated, resulting in increased costs. According to Managing information technology in Turbulent Times, controlling IS costs while reshaping business processes through the use of information technology is a critical issue. Suppliers and stockholders will likely get upset with this action because they will either not receive payment as quickly or the value of their shares will go down. Employees of the company will like this action because they will benefit from the increased safety and productivity of the new system. They will also feel like management has been listening to their concerns. Customers will like this new system because it will offer more control over when they receive their products.

Recommendation:

Burlington Northern should do nothing. The company has already made plans to its stockholders to pay down a large percentage of its financial debts in the coming years. The company will lose respect if it turns around and goes into more debt the following year. The company already has long term contracts with its key customers. The company should focus on surviving till it can pay down its debts. This will put the company in a better position in the long run. The company will then be able to take advantage of the standardized ATCS system that is on the horizon at a significantly lower cost than developing its own solutions. According to E-business 2.0, the goal of new business design is for companies to create flexible outsourcing alliances.

The reason the partial ARES system was ruled out was because of its complexity. It will require the organization to manage two systems for operation at once, which will eventually lead to issues and conflict. Customers will not know which system they are on and have unreliable expectations across the organization as a whole for delivery times. According to *The Goal*, If you don't provide a quality product all you've got at the end is a bunch of expensive mistakes.

The reason the full ARES system was ruled out was that it has a large risk associated with it. The ARES system does not have top level management support and will probably fail at an organizational level. The system's true development cost and implementation time frame are unknown. The company could also face legal issues with stockholders, after giving them the expectation that the company was focusing its efforts on paying down its debts.

Sources

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