Case 2: BAE Systems Case Study

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# Background

In November 1989, the construction of Denver’s new international Airport (DIA) began. It was going to be the second largest airport to be built in the United States. Denver currently at the time already had Denver’s Stapleton Airport which was able to adapt to the ever-going airplanes and passengers, but the capacities were limited due to their lack of runway layout and their inability to accommodate to poor weather condition and keeps functions running smooth in them. Denver’s political leaders and community decided it would be best to either expand the airport or replace it with a new one and after decision making, the construction of a new airport was decided, and it will be known as Denver International Airport. The new airport construction began as the city was approved construction to build the airport in Adams County Denver which would be approximately 43.3 square miles. The Master Plan in which was created stated that the airport needed to be able to expand without compromising efficiency and be able to support steady flow in all weather conditions. In the later planning stages of the construction of the airport it was decided that they would implement an airport wide baggage support system that would carry passenger bags throughout the airport to where they passengers may be further improving efficiency and lowering costs and hassles for passengers along with wait time and turn around times for airplanes. This plan was created in place of the original plan of airlines building their own baggage carriers which many had not even agreed to in the first place.

# Business Issue

As the plan for the integrated airport wide baggage support system was approved, United Airlines contract BAE Automated Systems Inc., which was an engineering consulting and manufacturing company. BAE automated systems began implementing their baggage system and soon realized that the dates they had ordinally planned for and had been enlisted to by United Airlines would not be able to be met due to many setbacks and unreasonable timelines. With ongoing problems occurring the opening of the airport was delayed three times in seven months. This caused the Mayor of Denver to approve of a backup baggage system all while charging BAE Inc a $12,000 a day penalty for not finishing the baggage system and demanded they pay for the $50 million-dollar conventual tug-and-cart baggage system that was going to be implemented. BAE was faced with deciding if they were to complete the project, knowing that it would continue to go over the original completion date or drop the contract and cut their losses.

# Industry Competitive Analysis

BAE Automated Systems is an engineering consulting and manufacturing company that is granted a contract to complete the baggage system implementation in the new construction of the Denver International Airport and is faced with competition from other companies and also with the risk of being replaced by an older, less complex baggage system and traditional ways.

# Mission Statement

BAE Automated Systems is a company providing in-house engineering, manufacturing and support that allow it to complete all its projects along with providing consulting, engineering, and management services for airport projects.

# Generic Strategy

Of the three different generic strategies, BAE must use The Focus Strategy as they need to really focus on the market in which they are in and analyze the problems they are facing and decide who they need to meet project deadlines and what they may need.

# Porters Five Forces

Using Porters Five forces will allow us to visualize the position that BAE systems is currently in, the problem they are facing, problems they could face in the future and potential solutions to these problems.

# Threat of New Entrants

As BAE Automated initially had some competition when DIA began their research to whom they wanted to contract the construction and planning of the baggage system to but after they were awarded with, they contract the threat of those the competitors was no longer an issue. As BAE began to run into issues and miss deadlines and cause delays DIA and the Mayor of Denver began looking into alternatives which caused trouble for BAE.

# Bargaining Power of Suppliers

With BAE’s main issue being the inability to meet the expected deadlines, supplies were not mentioned in issues they were facing. Many of their issues came from projects taking too long or constant changes and problems with the systems main hardware and software setups. BAE had a reputable past in the engineering and manufacturing industry for Airports so the supplies necessary were already provided.

# Bargaining Power of Customers

With DIA being BAE’s main customer in this case, they do illustrate the bargaining power in which they have with BAE and the conflicts that occur between the two companies. With DIA delays the opening date multiple times due to complications and setback from BEA they are forced to start looking into alternative solutions and applying pressure onto BEA to complete the project in a timely manner. We see this happen where they Mayor begins to charge BEA a daily fee for all the days it exceeds the deadline and charging them with the coverage over the original tug and cart system.

# Threat of Subsite Products

With this being a planning and manufacturing issue, the threat of products does not seem to be a present problem as BEA is having more trouble with dealing with the setbacks and unreasonable deadlines set for them. With this being such a niche market and require so much support and manpower a simple substitute of products wouldn’t show any threat to BEA.

# Stakeholders

With this being such a big project affecting many people I and outside the business I will cover the groups that are affected the most with the project.

# Company Executives

As the company leaders and head stakeholders for the project, the company executives have a great hand in this project and are affected by the outcomes greatly due to it being their company that they run and manage. If things go wrong or deadlines are not met, they are the ones to take the blame.

# Investors

The case study covered the financial process in which DIA had to go through with raising money for the project along with the expenses that may come with the project so Investors being those who have a huge financial hand in the project are also big stakeholders within the company.

# Denver Residents

The study also covered the increase in Denver residents due to oil, real estate, and tourism industries so adding one of the largest airport hubs in America will have a significant impact on the residents lives along with Denver’s economy which will correlate back to them. Alongside this the article covers how in the beginning stages of the construction of DIA, many local companies and firms were employed and contracted to support the community and help implement them into the large project.

# Denver Politicians

Although they did not have a direct hand in the project, the case covered how politicians used the airport to push their agenda and get better support for the community to begin planning and starting the project and telling the community that they planned to do it.

# Contractor Employees

The workers of the companies contracting including BEA are directly affected by this as it serves as their main source of work. If a company contract is drooped many employees could lose their jobs along with the implementation of the new system where they are in threat of being replaced by machinery.

# Alternatives

BEA is stuck in a bad spot with they situation they were placed in due to them missing the deadlines and causing multiple delays. They would have to make a decision that will benefit them and or cause them the least amount of damage which leads me to three alternatives that they could consider.

# Leaving the Project

The article covered how Gene Di Fonso, President of BAE, considered dropping the project and cutting their losses which could be a suitable alternative but does also have big setbacks. With them dropping the deadline they will no longer have to worry about dealing with the deadlines and the project in general and continue their other endeavors, but it will be at a huge financial toll as they will have to cover all the fees charged by the mayor along with lose all the money the invest into the project originally. Alongside this their reputation will take a hit due to them no being able to complete such a project in which they were accepted to complete.

# Changing the Project

Another alternative they could consider is to change the project, making it simpler or restructuring to allow it to fit in the deadlines required. BEA went into the project full knowing how big the project was and how much it required, and they also knew the time provided to complete was inconsiderate and unreasonable so maybe changing it to fit more into the time zone would be better for them and the airport for it to open on time or simplify it to make things easier on all ends.

# Sourcing outwards

A more reasonable but less cost-efficient alternative would be to outsource to different companies to help further up production and help assist BEA in completing the project with the original plans in mind helping the airport function at its best.

# Impact on Stakeholders

Each alternative affects some stakeholders differently and others similarity. With these alternatives they can even introduce new stakeholders into the project.

# Leaving the Project affect

If BEA chose to drop the contract, then company executives will be faced with finding an alternative company to complete the project or decide to change the project in total. Investors can be affected depending on the financial issues BEA causes. Denver Residents will be forced to wait longer for the completion of the airport but may be offered contracts if they have the firms or companies that may be required in the latest changes. Politicians will not be affected as they will still push airport itself. Contractor employees will be affected the most as BEA employees will lose their jobs and other employees that are hired will gain jobs.

# Changing the Project affect

If BEA choses to change the project, the affects will not be as major as dropping the project but can have small affect on all the stakeholders. Company executives will be faced with providing reasoning for the change in the project and help with producing a new plan. Investors wont really be affected unless problems cause more money. Denver Residents may benefit if the project is completed earlier due to the changing in the project. Politicians will not be affected and changes in the project may affect contracted employees depending on their field of work and whether more jobs will be added or jobs that are no longer required will be dropped.

# Sourcing outwards affect

If BEA choses to outsource than they can provide more jobs to other firms and companies bringing in new stakeholders. Many of the stakeholders will benefit as outsourcing can speed up the production and engineering allowing for earlier start time and better functioning system, but investors may be required to invest more due to the increase in demand for workforce.

# Alternative Recommendation

With the alternatives provided all being good choices although they each affect the stakeholders differently. The alternative that seems the most reasonable would be to source outwards for the project allowing for outside companies to come in and help with the production of the project. As BEA stated, the project being completed is not the problem but the deadlines that are stated. The deadlines are unreasonable and from the beginning BEA knew they would not be able to meet the deadlines stated. If BEA is able to find companies that can help in the areas that are causing them trouble, then it will be able to help them focus on other areas and complete the project quicker. Alongside this, it was stated that a lot of construction and demolition had to be done due to the project being implemented so late in the building stages of the airport. BEA could outsource a demolition company or construction company to help with those. Alongside this the software engineers can also be outsourced to better help with the baggage systems technical parts. Many fields that cause trouble can be outsourced further increasing production and helping meet their deadlines. While it may cost more, completing the project, and having such an advanced system in what is going to be the biggest airport in the United States would benefit them greatly rather than having a simpler system or relying on or airline careers that hadn’t agree to those terms yet. The reason I ruled out dropping the project is due to the cost and effect on BEA’s reputation. The cost would take a big hit on BEA along with them losing their reputation for such big projects. I did not choose changing the project because simplifying it would only defer from the airport. Aving such a complex system would only benefit them especially with future proofing so adding a more basic system would only cause them to need improvements in the future which could cause more trouble.

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