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# Appex Case Study Write Up

## **Case Background / Problem**

Appex Corporation was founded in May 1986 as a result of a merger between Appex, Inc. and Lunayach Communications Consultants (LLC). The LLC specialized in the design and engineering of cellular radio networks for cellular companies. In 1984, Brian E. Boyle founded Appex, Inc. and Appex, Inc. focused on management information systems for the cellular industry along with credit scoring systems for financial service companies. After the merger the company name became Appex Lunayach Systems Corporation (ALS), the merger combines LLC's engineering expertise and Appex's business and information systems expertise. In May 1989, ALS changed its name to Appex Corporation. Business Weekly rated Appex as the fastest growing high technology in the United States, in 1990. Appex saw their revenues grow nearly 1,600 percent between FY1987 and FY1990 (Fiscal year September 1 – August 31). In 1987, Appex's total revenue was totaled at \$1 million and by 1990 they increased their revenue to \$16.6 million. As of April 30, 1990 Appex, employed 172 people, but due to their rapid growth they were hiring about 10 people a month.

In May 1988, Shikar Ghosh accepted the position as Chief Operating Officer (COO) of Appex Corporation. When he accepted the position, he had an understanding that shortly there after he would be made Chief Executive Officer (CEO). Prior to accepting the COO job at Appex Ghosh was a partner at the Boston Consulting Group (BCG). While a partner with the BCG Ghosh's specialty was organizational structure, particularly how to create rapid-response organizations. When Ghosh was hired at Appex it was a relatively small company with only 25 employees and revenues totaling only \$2 million. Appex at the time of Ghosh's arrival was a loosely structured, high-technology, entrepreneurial company. Appex had a venture capitalist invest in the firm, with the hopes that Ghosh would be able turn the company around.

When Ghosh was brought on, he quickly found out that the company was running on a day-to-day basis, just doing what needed to be done in order to make money on that particular day. He noticed that there was no planning for the future. Furthermore, their was no structured hierarchy establishing who was in charge, or who someone went to if they had a question on what to do; everyone just worked together in an attempt to get their daily tasks done. Ghosh tasked himself with establishing an effective structure for Appex. Ghosh attempted to implement many different types of structures, but due to the fact that Appex was so rapidly growing, he continuously ran into problem, he changed the organizational structure of the company every six months or so. The problem that Ghosh continued to run into was trying to find a structure that would work for Appex.

# **Industry Competitive Analysis**

#### **Competitive Rivalry**

Appex does not many competitors within the cellular industry because the cellular industry was brand new and not many companies had entered the field yet. This does not mean they did not have any competitors though, some of their competitors were: GTE, Cincinnati Bell, and McDonnell Douglas. These rival companies came together to create a joint entity called ACT, to address a service need within the cellular industry. However, Appex came up with a solution before ACT causing the organization to be disbanded. According to Porter, "There are several different things that increase the intensity of rivalry that you are likely to experience: a large number of firms, slow market growth, high fixed costs, high storage costs, low switching costs, low levels of production differentiation, or high existing barriers." (Porter's Five Forces; Strategy Skills.) Differentiation is a core value of Appex because if they can stand out in the cellular industry then they will gain a competitive advantage on their competitors. For these reasons, Appex's competitive rivalry would be considered moderate.

### **Threat of New Entrants**

The threat of new companies entering the cellular telephone industry is fairly low. Although the industry was growing at a rapid rate, it would be very difficult to enter the market due to the fact that it would require a large amount of capital to gain any market share. If a company wanted to enter into the market they would need to first catch up to Appex and all that they have done in the industry, and then they would need to surpass them, in order to steal some of their market share. According to many executives within varying fields, "Cost advantages and capital requirements to enter markets are the two most important barriers to entry (Yip)." Due to how rapidly Appex is growing and producing advancements, this would be an extremely difficult task for a company to do.

#### **Threat of Substitutes**

The threat of substitutes for Appex is also low, because at this time Appex was producing the newest and best technology within the industry. One of the crucial elements that played a role in Appex gaining a large chunk of the market share was the introduction of CMIS (Appex Cellular Management Information Systems). This information systems consisted of data that included: customers, billing information, accounts receivable, credit and collection information, equipment inventory control, and cellular network analysis. Due to the fact that Appex offered such advanced products it set them apart from other substitutes within the industry because at this time competitors would not be able to offer all the same things that Appex could. Customers tend to gravitate towards the company that has the best consumer service and unmatched quality of service. (Baligh)

#### **Bargaining Power of Suppliers**

Appex did not rely on third party suppliers but rather the different divisions of Appex is what made up their suppliers, because these divisions developed new ways to improve their technology that already existed. Since Appex did not rely on third party supplier they were competing with themselves to improve what had already been implemented. Therefore, Appex's bargaining power of suppliers was low.

#### **Bargaining Power of Customers**

In the cellular telephone industry, customers have an extremely high level of bargaining power. There are several competitors within the market that provide a similar type of connectivity. Therefore, in order to stay profitable within this industry Appex is forced to remain competitive within their desired market. For example, Appex must continue to competitive pricing and offer the most innovative technology on the market.

# Stakeholders

### Employees

The people working for Appex have a particularly high vested stake in the decisions made determining the companies' organizational structure. Dependent on which organizational structure that is chosen it could involve new chains of command, or new daily tasks added into their work schedule.

#### Shareholders

The shareholders have potential to be affected by which organizational structure that is chosen because the chosen structure will have an effect on Appex's returns or profit. They have a vested interest because the shareholders potentially could make or lose money.

### Customers

The customers have a stake in the decision made regarding the organizational structure because dependent on the structure chosen it will have an effect on the services they provide. The decision made could either increase or decrease the efficiency in which their services are provided.

#### **Appex Corporation Management**

The management of Appex has an interest in the decision made because regardless of which organizational structure is chosen, it will change the way in which the company currently operates. Whether this increases or decreases the rate of return is the reason that Appex management is a shareholder.

#### **EDS / General Motors**

EDS recently acquired Appex which makes them extremely vested in the decision made regarding the organizational structure.

## Alternatives

# **Implement a Matrix Organizational Structure**

Ghosh in his time at Appex has implemented a large variety of different organizational structures but switching to a matrix structure is one that has not yet been experimented with. The company would benefit from the bureaucratic structure of having functional sections of the company as well as having the different divisions of the company. (Cash) Because organizations that use the matrix structure are able to rapidly assemble teams to meet a demand. Implementing a matrix structure would help relieve some of the day-to-day issues that are currently present within Appex, such as infighting. The matrix structure would help diminish problems like these through the establishment of divisional structure.

The matrix structure has a potential to positively impact all of Appex's stakeholders. The employees would have structure, which in turn would make their jobs easier and more enjoyable leading to an increase in efficiency. The shareholders stand to make money due to the increased flow of income. The customers would be happy because if there is an increase in efficiency because that would mean that there would be an increase in productivity of Appex. Management and EDS would be pleased with the implementation because it would increase revenue and productivity.

### **Return to Project Structure**

In the early days of Appex the company had a project structure implemented. At this time, Appex as a whole was a small sized company, so the project structure was manageable and effective. As the company grew this organizational structure became too hard to control due to Ghosh being new to the company and not having a full grasp on how to operate the company efficiently this structure did not work. But if they returned back to the project structure Ghosh may have better luck. The reason they may have more success with the project structure the second time around is because they would be able to combine some new and old ideas, and Ghosh has a better grasp on how the company works so he would be able to structure the teams in a more efficient way basing them off of interpersonal relationships could ignite loyalty within the company potentially leading to new product ideas and a slew of other benefits.

In this case, employees would benefit because the restructuring would lead to them being put into teams in which they are working alongside people who they have a interpersonal relationship with. Shareholders would be skeptical because although there is a potential for the project structure to work there is also potential for chaos to ensure like before. Customers would be skeptical as well because of the potential for the project structure to increase or decrease profitability. Management and EDS would be happy because Ghosh will have decided on a restructuring and it will have been based on building loyalty among employees and bolstering development of new products.

### **Do Nothing**

Doing nothing at all would mean that Appex would continue to use their current organizational strategy, divisional structure. While a restructuring seems like it would put the organization back on track, there would be no long-lasting solution that would be the effect of restructuring Appex Corporation as a whole. Appex is having many problems with this structure such as: resource allocation, poor communication flow across divisions, and that each division started to act like small companies. (Cash) All of these problems are solvable, therefore there is a potential that Appex can do nothing and continue to run their business under a divisional structure. For Appex to continue to be successful, under the divisional structure, these problems would all have to be addressed and resurrected.

The employee's happiness in this decision solely rests in the managements ability to resolve the issues stated above. The shareholder would like not back this decision because their ability to make money solely rests in their ability to resolve all the problems that are presented by the divisional structure. The customers would most likely not back the decision because Appex would be focused on fixing thing internally and potentially lessening their attentiveness to their clients. Management and EDS would most likely not appreciate the decision because it does not fix the problem that was present, they still would be using the same organizational structure.

# Recommendation

Personally, I would recommend that Appex implement the matrix structure. A way that the matrix structure would help Appex is by fixing their problems with resource allocation. The matrix structure would help with resource allocation by ways of evenly spreading their resources across all divisions. "The fully developed matrix is team driven, in that priority is given to business, program, product, or project areas, with functional specialism providing support." (Morgan) Another benefit would be the distinct chain of command, with the use of the matrix structure every person would have two people they would be reporting too, forcing them to collaborate more, which in turn would start to help them with their communication problems. Due to the fact that Appex is a technology-based company there is bound to be many environmental changes within the organization; there are many reasons for environmental changes some of which being consumer demand and rival advancements. The matrix structure is structured in such a way that it handles environmental changes very well, which is huge in the technology field because technology is ever changing.

# Works Cited

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