# **Appex Corporation**

Case Evaluation 2

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### **Mission Statement**

Appex Corporation was a corporation that provided service to cellular carriers and their customers. The corporation, after the merge of two technology companies, specialized in "management information systems and intercarrier network services" (Barker 43). In order to provide this service, Appex could divide all of its services and products into either "intercarrier services (or) cellular management information systems" (Barker 44). Intercarrier services (ICS) primarily focused on online services to manage the connection of cellular providers to their customers when the customer was outside of the cellular market, otherwise known as roamers. Cellular management information systems (IS) managed the cellular providers' home market and its available customers. By separating the corporation into these two different categories, Appex began using a differentiation generic strategy and a variety of organizational strategies to provide these services to its many cellular providers, such as BellSouth, Cellular Communications Inc., and Southwestern Bell.

## **Generic Strategy**

Appex Corporation's differentiation strategy was able to thrive within their market because this strategy focuses on supporting the most cellular providers within a given market. Appex achieves this by not only being one of the only companies to provide support to the emerging idea of cellphones, but by also serving "250 markets in the United States and 34 markets in Canada" (Barker 45). By 1990, Appex was already serving the most well-known service providers and was investing in "contracts with customers (that) were multimarket, multiproduct and multiyear service agreements" (Barker 45). Based on their overwhelming presence in the cellular telephone industry, Appex was able to focus on a differentiation strategy and creating an organizational strategy to accomplish their needs.

## **Organizational Strategy**

Throughout the late 80's and early 90's, Appex experienced a variety of organizational strategies that each challenged the corporation in new ways. Before any type of organizational strategy was implemented, the company was "project-based, meaning work was organized around projects" (Barker 45). As customer complaints and spending cost increased, investors decided it was time for Appex's new COO, Shikhar Gosh, to implement a new organizational strategy. He began with two innovative structures, circular and horizontal, and then moved on to more traditional structures, functional and divisional. With the circular structure, there was no defined hierarchy within the company and information was meant to flow freely among employees and executives. However, "employees could not relate" and "were not accustomed to Appex's culture" (Barker 46). New hires could not "understand how they were meant to fit into an organization" (Barker 46) and there was a "mentality developed that the customer was the enemy" (Barker 47). With the horizontal structure, Appex also experienced a number of problems, particularly in the flow of information. When meetings were scheduled, "nobody showed up" and employees "did not respond enthusiastically" (Barker 48) to the new structure.

Finally, Ghosh abandoned the innovative structures and turned to the hierarchical structures. First, he implemented a functional structure and began organizing the company into teams. While the structure began improving "the company's basic capabilities" (Barker 49), various complications began to occur as time went on. For instance, teams were becoming "polarized" and "inhibited a working relationship" (Barker 49) between each other. Additionally, teams were developing their own standards "rather than (following) company policy" (Barker 49) to handle tasks and procedures. After receiving the suggestion from a new hire, Ghosh overlaid the functional structure with product team/business team structure in order to combat these

problems. However, this too proved to hurt the organization as "customer focus diminished" and "people became less concerned with meeting companywide financial goals" (Barker 56). Lastly, Ghosh implemented the divisional structure and created the ICS division, IS division, and operations division. By creating these separate divisions, the company saw "improved accountability, budgeting, and planning" (Barker 57) as the divisions were able to be managed by two separate department heads that could report to Ghosh. This resulted in a "great deal of cooperation" among the divisions and helped the "employees to focus on meeting financial targets" (Barker 57). However, soon the company was experiencing problems with resource allocation and sharing between divisions. With there being high walls of communication between the two divisions, the two divisions began acting as separate companies and began questioning "whether it should divide itself into functions or if that would impede cooperation within the division" (Barker 57). With this constant change of organizational structures, Ghosh had developed his philosophy that "Appex's structure should be altered regularly...every six months" (Barker 58).

## **Porter's Five Forces**

#### **Competitive Rivalry**

Appex's competition would include any company that can offer management information systems and intercarrier network services to cellular providers. Appex had a very low threat for competition within its market because of the specific nature of Appex's services in the early 1990's and the fact that the cellular industry was only 7 years old. Although Appex had several competitors such as GTE, Cincinnati Bell, and McDonnell Douglas, the company had an "ability to bring products to the market quickly and Boyle's innovative technical solutions enabled the company to compete against" (Barker 45) companies within the market. This gave Appex a

competitive advantage and allowed the threat of competition to be relatively low for them at the given time.

#### **Threats of New Entrants**

The threat of new entrants within the market was extremely high because of the quick pace in which the cellular technology industry was growing. The industry within the United States alone had grown "from 92,000 subscribers at the end of 1984 to 3.5 million at the end of 1989" (Barker 44). Because of this new and emerging market and technology, new organizations were being created in the industry that provided similar services to that of Appex. Even though Appex was able to develop innovative solutions to excel in the industry, the high demand of cellular technology and the rate of growth for the industry will always cause new entrants to be a high threat for Appex.

#### **Threat of Substitutes**

With the specific nature of Appex offering management information systems and intercarrier network services, the threat of substitutes is very low for this particular market. With the cellular market being so young, substitutes will only come from new and innovative solutions for issues within the industry. However, Appex was consistently addressing "particular service needs in the cellular industry...creating a solution and installing it in the market" (Barker 45) at a much faster rate than its competitors. This causes the threat of substitutes to be very low for Appex currently.

## **Bargaining Power of Customers**

The customers of Appex, including BellSouth, Cellular Communications, Inc., and Southwestern Bell, are all cellular providers that Appex enters into service agreements with. These service agreements are generally "multimarket, multiproduct and multiyear...that ranged in value from \$100,000 to over \$2 million" (Barker 45). Because of the terms of these agreements, Appex was

able to mitigate the bargaining power of the customer by locking them into these agreements and providing them with a variety of services. This is additionally illustrated as "customer began to complain" more frequently and many "did not receive any" (Barker 46) assistance at all.

However, Appex continued to grow at a rate of 1,600 percent and "were expected to continue to grow rapidly" (Barker 43). This displays that customers were insensitive to price and customer care but continued to invest in the company's services, eliminating their bargaining power.

## **Bargaining Power of Suppliers**

Appex's suppliers would include any company that provided any technical products to the organization as well as the employee's that provided the technical expertise to provide the company's services. While the suppliers of any technical products, such as computers, servers, and other products, have some bargaining power, the main bargaining power lies with the employees that provide the technical expertise within the company. Throughout the variety of organizational changes that Appex experiences, the "source of authority was [based on] functional...expertise" (Baker 49) rather than managerial expertise. Even though new managers were hired, "it was difficult for new managers to gain the respect of the teams because employees had not valued managerial competence traditionally" (Barker 52). This caused organizational transitions to be difficult and caused the bargaining power of the technical suppliers to be high.

### **Problem Statement**

Appex Corporations main problem was the lack of an organizational structure and then the inability to adapt to a proposed structure. Before Shikhar Ghosh was named COO of Appex, the company was operating on a "project-based [structure], meaning work was organized around projects" (Barker 45). Because of this, the company was acting as 'fire-fighting' structure and

"no development of an underlying planning structure" (Barker 46) was being utilized. Appex was beginning to "fall behind schedule...and all planning seemed useless" (Barker 46) and Ghosh saw the need for a "system of accountability...and structure" (Barker 46). This is when Ghosh began implementing several different organizational structures, including circular, horizontal, functional and divisional structures. As each structure was implemented, problems would arise and the structure would be changed within the year. This caused Appex to implement all 4 of these structures within the span of less than 3 years. The final structure, the divisional structure, was just implemented when EDS acquired Appex.. Now being a division of EDS, Appex needed to work out "its own divisional structure and structural changes in the context of its role as a division of a larger, bureaucratic organization" (Barker 58).

## **Stakeholders**

#### **Customers**

The customers for Appex Corporation were the "approximately 75 [cellular providers], including BellSouth, Cellular Communications, Inc., and Southwestern Bell." (Barker 45). Appex served a number of markets in the United States, Canada, and were looking to expand abroad. Any cellular provider within those markets and utilized Appex's services were a customer of the company.

#### **Executive Team**

The executive leaders of Appex included any upper level management, such as the Brian Boyle, Shikhar Ghosh, and the heads of the divisional departments created in August 1990. These executives were constantly identifying "a problem and propose a solution" (Barker 58) to Ghosh, causing them to have a high stake in the organizational structure of the company.

#### **Employees**

All other employees fall into this category, including engineers, developers, senior-level managers, administrative employees, and any other person who is not consider an executive. By 1990, Appex "employed 172 people, of whom 153 were salaried and 19 were compensated on an hourly basis" (Barker 43).

## **Electronic Data Systems**

Electronic Data Systems (EDS) acquired Appex toward the end of 1990 and had to follow requirements such as EDS's "financial planning systems, resource allocation systems, and administrative procedures" (Barker 58). As a division of EDS, EDS had a huge stake in the organizational structure of the company.

## **Solutions**

## **Adopt a Matrix Structure**

A matrix organizational structure can be seen as a hybrid of the functional and divisional organizational structures, both of which have been attempted by Appex in the past. This structure would address some of Appex's major problems; handling the rapid growth of the industry, lack of cooperation between the divisions and resource allocation. With the matrix structure, an employee would be assigned to both a functional area and a project or team. This would keep the divisional structure of the organization while also allow the divisions to intermingle with one another on projects. This type of structure is ideal when the organization needs both "technical expertise within functions and tight horizontal coordination across functions" (Cash 37).

Additionally, Appex was experiencing problems with resource allocation between the divisions "were not always perceived as equitable" and "that divisions wanted control over all their resources; they did not want to share" (Barker 57). The matrix solution has a flexible resource strategy and is best suited for environments that are complex and uncertain, like the cellular

industry at this time. This also help in the rapid growth of the industry as this structure allows a company to "meet multiple demands from [their] environment" by adapting to changing "competitive, regulatory, and resource conditions" (Cash 37). However, the matrix structure could also create an unclear line of authority and continuing complexity of the company's organizational structure. By combining two organizational structures and the divisions, the company creates an unclear line of authority in decision making and report for its employees. This could cause for decisions to be made by the wrong manager or for employees to miss important information regarding their work. This could only add to the confusion that many employees have in regards to the organization of the company.

## Disband the Operations Division and continue the Divisional Structure

With this solution, Appex would continue to use the Division structure that was previously implemented but instead of three main divisions, the ICS and IS divisions would absorb the operations division. This approach, proposed by Ted Baker, would allow each division to have their own form of operations, with "data processing being the exception" (Barker 58). This will help to solve Appex's resource allocation problem as each division would have access to its own line of operations but could create more distance between each division as they continued "to act like small companies" (Barker 57). Additionally, each division would have to decide on a organizational strategy within their department.

## Continue to change the Organizational Structure every 6 Months

As a part of the philosophy created by Ghosh, this structure would continue to change as the business changes. This idea is based on what Ghosh observed as a necessity because the organization "needs to change the structure to match the people and the business with the structure (Barker 58). By enacting this, Appex would be able to address the rapidly changing

environment of the cellular industry but could also create confusion as these structural changes "created some anxiety among employees" (Barker 58).

## **Solutions Impact on Stakeholders**

#### **Solution 1**

### Customers.

Adopting the matrix structure would positively affect the customer as there would be a higher system of accountability based on the combination of the functional and divisional structures. Employees would separate into specific, but functional groups that would allow job roles to be more clearly defined. This would allow for better responsiveness to customer needs.

## **Executive Team**

The matrix structure would rely heavily the successful implementation of Appex executives.

Because of this, if the structure fails to implement correctly, the executives could be blamed and subsequently let go because of failure to perform. However, if implemented correctly, this would allow the informal structure of Appex to thrive and for the executives to be positively affected by the structure.

## **Employees**

Employees could have a negative impact from this solution because of the complexity of the line authority from having a functional manager and a project manager. Employees would continue to not know who to report to and the two managers could have differing views regarding the organization. However, the matrix strategy also states the authority lies with the experts of the organization which is exactly how the employees operate currently (Barker 52). If implemented correctly, the employees could be positively affected as the line of authority becomes more in line with the employees culture.

### Electronic Data Systems

As a well-defined, bureaucratic organization, the matrix structure may not fit within the organizational structure of EDS. If this structure cannot perform with EDS's already defined structure, Appex could continue to lose money and would negatively affect EDS. This would lead to Appex executives being laid off and a new, more structured organizational strategy being put into place in the Appex Corporation.

#### **Solution 2**

#### Customers

With a set organizational structure in place, customers could see a positive result as a line of authority would be established. However, with past organizational structures, the customer is often seen "as the enemy" (Barker 47) and this culture could continue to foster with any organizational structure.

## **Executive Team**

The executives would be positively impacted by absorbing the operations division because resource allocation would be easier to manage by each division executive. Instead of sharing resources, each division would have their own level of support from operations. Additionally, it would be the executives' responsibility to ensure the divisional structure succeeds as their jobs may depend on it.

#### **Employees**

The employees would have a positive affect from this solution as each division would have its own resources to handle business processes. New employees could be hired for each division, creating new jobs and allowing for new ideas to develop as new individuals are hired.

Additionally, this structure is less confusing and could reduce employee anxiety as the structure has already been in place.

## Electronic Data Systems

Just as with the first solution, the divisional structure could not align with EDS's organizational structure and could cause confusion within the company. This would have the same affects as the organization could lose profits and have to make strict changes to Apex current functions.

#### **Solution 3**

#### Customers

The customers would be negatively affected with this solution as with each organizational change, the customer importance is diminished. As employees become more stressed and new employees are hired, training and asset management become a priority while customer relations are reduced.

## **Executive Team**

The executive team would continue to switch roles and the line of authority would become confusing as team leaders are moved into different roles. This could create confusion for employees and would diminish the authority of the executives as they are moved to divisions that do not fit their expertise. For example, when the CFO was made head of IS, members of ICS group believed he "secured funds for the IS group" (Barker 57), creating friction between the groups in the organization.

#### **Employees**

The employees would continue to experience the anxiety and stressed that is caused by reorganization within a company. Employees would be less likely to stay, which is already

apparent by the constant hiring and training conducted by Appex. Employees would be confused and continue to cost the corporation money as the turnover increases.

## Electronic Data Systems

As a larger, bureaucratic organization, this type of organizational structure would not fit within EDS's requirements as it would negatively affect EDS in all aspects of business. As a division of EDS, Appex would have to adopt a set, structure organizational strategy that would allow Appex to meet EDS's requirements.

### Conclusion

With the recent acquisition of Appex to EDS and the overall problems facing the corporation, implementing the second solution would be the best option for Appex's organizational structure. This solution would allow for Appex to continue as an already established divisional organizational structure while eliminating a costly division. By absorbing the operations division into the ICS and IS divisions, resource allocation would be more established for each division and the overall function of the divisions would thrive independently instead of creating friction with the organization. Additionally, the divisional structure is a more well-known organizational structure and would more than likely fit within the structure of EDS. This would allow for more control over Appex's strategy for executives and employees while also meeting the requirements of the new owner of the organization. This will also help to eliminate the stress of the employees and customers as an established organizational structure will begin to change the culture of Appex from a 'fire-fighter' organization to a planning and executing organization. Finally, the matrix structure and change the structure every 6 months would create confusion, complexity and uncertainty within the organization that could lead to unwelcomed consequences from EDS. A divisional organizational strategy will work well within the cellular industry because it allows

for the coordination of actions to develop innovative products, satisfy the expectations of clients, maintain market segment, and support rapid response and adaptability to changes in products, markets, customers, and regions.

## Works Cited

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