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*Appex*

Case Analysis

Appex provides services that allows cellular carriers to manage their “home” and “roam” markets. There services can be divided into two categories: Intercarrier Services (ICS) and cellular management Information Systems (IS). Intercarrier Service systems assist in managing the cellular carrier subscribers service, at home and roaming. Cellular management information systems (IS), are designed to manage a cellular carriers service in its home market.

According to the case, the customers were generally in multiple markets, involved with multiple products, and were under multiple year service agreements. Appex served 250 markets in the United States and 34 markets in Canada. In 1990, Appex became the fastest growing technology company in the United States. Appex revenues grew 1600 percent from 1987 -1990 which was phenomenal growth that resulted in several organizational changes. According to Morgan and the contingency theory “Organizations need to adapt to environmental circumstances.” [1] Appex’s environment expanded rapidly and required Appex to adopt a strategy that led to organizational change.

In accessing Appex using the five forces model, buyers (cellular carriers) that used Appex’s products and services had low bargaining power, due to multiple year service agreements. These multiple year service agreements contained high switching costs for the buyer of the service. Appex enjoyed high bargaining power because there were little or no substitutes for their service. According to the case, some of Appex’s competitors tried to establish a joint entity called ACT, which would address a particular service need in the cellular industry. It was disbanded as a result of Appex providing the service need before the ACT system entered the market. A customer would more than likely have to go with Appex’s service because it is potentially the only service meeting that need in the industry. Appex also provided a service critical to the endpoint. This service was called Intercarrier Settlement and it facilitated the settlement of roaming charges between cellular carriers in different markets.

The threat of new entrants into Appex’s markets was low due to the fact that they were in 250 markets in the United States and 34 markets in Canada. New entrants would be risking their investment because of Appex’s high bargaining power, created by high switching costs and multiple year service agreements.

The threat of substitutes was low due to the only substitute provided by competitors was ACT. ACT could have provided what the cellular industry needed at the time, but this was disbanded due to Appex creating a solution and entering the market before the competition. The threat of substitutes will stay low as long as they can fix their organizational structure and sustain their ability to bring products into the market quickly.

Appex’s competitors mentioned in the case were GTE, Cincinnati Bell, and McDonnell Douglas. If Appex can stay ahead of these competitors by entering products and services into the market before their competition, they will maintain their competitive edge.

The generic strategy of Appex is differentiation because of the theory of economy of scale. Appex has a core product and continues to spread into different markets due to the need of roaming transactions to be split amongst cellular carriers.

The mission of Appex is to provide cellular carriers information technology to help maintain “home” and “roaming” of cellular carriers customers at a competitive cost. Appex has tried many organizational structures starting with a circular structure and concluding with a divisional structure, before being acquired by Electronic Data Systems (EDS). Neither the circular, horizontal, functional, or divisional structures seemed to work in the long run for Appex.

Bringing me to my first problem area, the implementation of the circular structure. The central concepts to an organizational structure are very important and need to be taken into account when designing organizational structures. According to Cash “The central concept Division of Decision Rights addresses who should make which decisions.” [2] The problem with Appex using this circular structure was it created a gap in the Division of Decision Rights. The case stated that the employees did not know the power structure and who had the authority to make decisions. This was the downfall of the circular structure being implemented in Appex’s environment.

The second problem area was the implementation of the horizontal structure, which again the concept of Division of Decision Rights deemed it flawed. Horizontal structures have none or little management between staff and executives. This structure lacks control just like the circular structure. The only way of achieving control is by establishing a bureaucratic structure or machine like structure. According to Morgan “Bureaucracies ensure control and thinking is done by managers and doing is done by employees”. [3] This would provide a baseline of control to build on but still was not a long term fit for Appex.

Bringing me to the third problem area, implementing a bureaucratic or functional type of structure. This type of structure is best suited for large and stable environments, which Appex is not in. Appex was in a rapidly growing environment that was not necessarily considered stable. According to the case, this structure worked for a few months and helped focus Appex on completing tasks. However, management issues soon began to occur because Appex promoted individuals that were skilled in their task, but had little management experience. They had no management experience because they did not need it when Appex was a small organization. The managers put in place were given no respect because they previously operated without them. According to Apes Demonstrate Basic Facts about Humanity “Because that’s the way it’s always been around here.” [4] Employees not wanting to let go of traditional strategies have always been a problem for organizations. Appex expanding the functional structure by adding product teams created the same issue that was in the circular, and horizontal structure. The Division of Decision Rights was flawed. According to the case no one knew who had the right to decide a product feature. Business teams were created to help with the resource allocation problem and who makes the decisions, but with so many processes, it was extremely inefficient for Appex.

The fourth problem was the divisional structure implementation. Appex split their two services (ICS) and (IS) into separate divisions that had one head. According to the case, it improved accountability, budgeting, and planning and kept employees focused on meeting financial targets. The CEO spent less time addressing day to day operations. However, resource allocation was still a problem, just like with the functional structure. The divisions began to act as their own small businesses and grew high walls creating independence from one another. Due to these high walls another structural change was soon to come. To complicate matters more the recent buyout of Appex by Electronic Data Systems (EDS) made it more difficult to choose which organizational structure to adopt, considering EDS had a divisional structure already established.

My solution to the failed attempts of the 4 organizational structure implementations, is to create a matrix based structure within their own division at Electric Data Systems (EDS). According to the case Appex is project based and a matrix organizational structure is projectized. Also, the buyout has already put them in a division based structure, so the best thing to do is adopt the functional structure aspects. This will also fix many of their problems they had trying to implement the other 4 organizational structures. One of their problems was Division of Decision Rights being flawed. According to Cash “Division managers and functional managers have equal authority within the organization, and employees report to both of them.” [5] This would fix the issue because authority is spread between more than one division head. According to the case the division only had one head. This improves timeliness because employees have an increased chance to talk to a boss. Also, resource allocation is not an issue, the ability for workers to work on dual products increases efficiencies. According to Cash “criteria for accessing effectiveness includes efficiency for organizational structures.” [6] For example, in the case there were people from development in all divisions and people from operations in all divisions, so the discrepancies stated in the case between development and operations can be dealt with faster.

The stakeholders affected in the organizational restructuring are the entire Appex and (EDS) organizations. The effects on the stakeholders from the implementation of a matrix organizational structure would be positively impacted because there would be less conflict of employees. According to Cash “the basis of authority is having the ability to negotiate skills and resources.” [7] In the case there were many times where resource allocation was an issue amongst employees. Also, Cash states “decision rights are shared in a matrix structure.” [8] In the case employees were conflicted with who can make decisions in many of the other four organizational structures I discussed. In the matrix structure decision rights are more evenly dispersed. For example, functional managers, division managers, and project managers are all involved. One conflict that I mentioned earlier in the functional form is trying to get rid of “because that’s the way it’s always been around here.” It is one of the hardest habits to get rid of in an organization. A solution I thought of is to make sure your communicating clearly and make sure everyone around you understands the new structure and business process.

To conclude, the organizational structures, circular, horizontal, functional, and divisional were not good fits for Appex’s environment, because of decreased efficiencies, Division of Decision Rights was flawed, resources allocated unorganized, and employee disapproval of the organizational structures were wide spread. The Matrix based structure should be implemented within the (EDS) division, because it improves on everything stated above and is supported by my solution. This creates the best fit for Appex’s environment. According to Morgan “know that environments select organizations for survival and are the most powerful force in their survivability. Survival of the fittest.” [9]

Sources

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*Apes Demonstrate Basic Facts about Humanity*

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