2021

Midterm Exam

SPRING SEMESTER

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Question 1

At face value, Appex and Burlington Northern seem like extremely different companies. On one hand, Appex was a cellular network company that was seeing rapid growth in the 1980s. Burlington Northern, on the other hand, was a rail company losing out to the trucking industry and needed to find ways to remain competitive. However, both companies can find solutions to their problems by evaluating the relationships between their architecture and organizational structure. In Burlington's case, they have the organization but not the architecture. For Appex, they have the architecture but not the structure. We will compare these relationships to see how they impact the issues each company was facing.

Burlington Northern is a low-cost provider who was struggling to compete with trucking companies. To better compete, they began developing and testing a system known as ARES. Employees of the company loved the system for its safety benefits and that it provided more reliable delivery times. However, executives of the company were reluctant to implement the system due to the costs associated with it and the risk that comes with being the first to implement ARES. This is because, as Cash mentions, "executives face a less certain future when designing an IT architecture… [it] must also be sufficiently flexible and adaptable to accommodate to technical, strategic, and environmental changes over time" (Cash, et. al and Fried 172).

In its current state, Burlington Northern has very little IT architecture and is structured as a functional organization. Decision rights, which are "the authority to initiate, approve, implement, and control various types of strategic or tactical decisions" (Cash, et. al and Fried 105), are delegated to the executives of the company. There is a strong culture at Burlington

Northern. The company also is based on routine, which Cash defines as “standard operating procedures and direct supervision” (Cash, et. al and Fried 105). Knowing this, any future IT architecture that is implemented should be centralized. This is because Drucker says “information-based organizations need central operating work” (Cash, et. al and Fried 135). A centralized IT architecture, where data flows bottom-up and information flows top-down is the best choice for companies that use low-cost leadership as their generic strategy.

Burlington Northern is a low-cost provider as mentioned previously. Another problem with the company were its finances. Even if executives were on-board with the idea of implementing ARES, it is questionable whether or not they actually had the capital to afford it. As Goldratt said, “Bad cash flow is what kills most of the businesses that go under” (Goldratt and Cox 52). This caused the company to struggle to keep their architecture in line with their strategy, similar to Appex.

Appex was a fast-growing company but faced issues trying to provide differentiation along with a divisional organization. Appex had IT architecture all over the place but wanted to make their architecture more centralized. Unfortunately, this doesn’t really work with being a divisional organization, as the architecture needs to be decentralized. Cash touches on this by saying “a key issue in [divisional] structure is the degree of autonomy granted to divisions in making decisions” (Cash, et. al and Fried 109).

Because Appex is a divisional organization, the culture of the company is a bit weaker, but still stronger than a matrix organization. Morgan says that “organizations are mini-societies that have their own distinctive patterns of culture and subculture” (Morgan 125). This can be a problem for companies, as divisions tend to cause a “reduction in efficiency due to a loss of scale economies… specialization may also be weakened, since employees identify with and invest in the division rather than with a functional specialty” (Cash, et. al and Fried 109 - 110).

As we can see, Burlington Northern and Appex have problems that ultimately require IT architecture solutions. For Burlington Northern, they want to implement a system but their low-cost strategy and hesitancy from executives is making it difficult for that to happen. For Appex, executive want to add more centralized IT architecture to have economies of scale. However, being structured as a divisional organization has made it difficult for it to happen for them. Both companies have to adjust their strategies to better match their IT needs.

Question 2

Walmart and Amazon are two massive retailers who will heavily compete over the next 15 years. Walmart is a low-cost provider with thousands of brick-and-mortar locations all across the United States. They have also begun to dive into e-commerce options by allowing online ordering, which is known as clicks-and-mortar. “A clicks-and-mortar model is an Internet business model conceived when a bricks-and-mortar model is already in place” (Affuah and Tucci 7). Walmart’s ordering options allow you to choose whether to have items shipped to home or picked up in store, and they offer in-store options such as curbside pickup or retrieving orders from customer service and/or a tower near the front of the store.

Walmart has been in business since the 1960s and have one of the strongest supply chains in the world. As part of the internet enabled business model, retailers like Amazon instead have to strategize via differentiation and it is almost impossible to compete with companies like Walmart on pricing. For example, “in delivering value to customers, it is always important to keep asking how much it costs to deliver the value” (Affuah and Tucci 73). This essentially means that businesses must consider the cost of providing value to their customers. Also, according to Adams, “Every customer wants to get the best product at the lowest price” (Adams 132). It is more expensive to ship items directly to individual homes than to one store. However, with Amazon’s own investments into supply chain and operations, it won’t stop them from trying to compete against Walmart.

Amazon has introduced several innovations in the last few years to try and better compete with Walmart. They own distribution warehouses all across the country and offer two-day delivery nationwide. In select cities, they offer one-day or even same-day delivery. Amazon has their own air cargo services, Amazon Air, which allows them to transport goods at the lowest price possible. They also have their own fleet of ground delivery drivers for packages. Owning their own fleet of drivers, similarly to Amazon Air, means Amazon only has to pay for the operating costs of transporting goods and doesn’t have to pay a markup to companies like UPS or FedEx. Amazon has also begun experimenting with drone delivery service.

Comparatively, Walmart achieves such low prices by working directly with manufacturers rather than distributors. They also hold almost no inventory besides what’s on the shelves of their stores, which keeps their holding costs as low as possible. Goldratt mentions that even adding robots to a production line doesn’t increase productivity “if your inventories haven't gone down … and if your company isn't selling more products—which obviously it can't, if you're not shipping more of them—then you can't tell me these robots increased your plant's productivity” (Goldratt and Cox 34). Although Goldratt’s quote focuses on robots, Walmart similarly would not see an increase in productivity or more orders simply by holding more inventory. They need to sell more inventory to become more productive.

Walmart also has the advantage of brick-and-mortar locations. This is particularly useful for the section of Walmart that sells groceries, as a lot of people shop for groceries (especially produce and meat) based on tacit knowledge. Tacit knowledge is the ability to know how something should be based on its looks, taste, smell, etc. According to Affuah and Tucci, “carrying out transactions over the Internet becomes a problem when the tacit knowledge on which the transactions rest cannot be encoded into a form that can be put onto the Internet and transmitted” (Affuah and Tucci 45). This essentially means that people will not make certain purchases over the internet because they need tactic knowledge before making a purchasing decision.

However, Amazon has hundreds of warehouses and distribution centers across the country which are used for preparing orders and holding inventory. Compared to Walmart though, they are quickly catching up in terms of being able to compete and soon potentially outperform on the supply chain side. With Walmart's supply chain power and Amazon's growing logistics in mind, I believe Walmart is better positioned for the near future, but Amazon is better positioned for the next 15 years.

As we've mentioned time and time again in class, Walmart is a low-cost provider and has one of the strongest and most advanced supply chains in the world. It is difficult for any e-commerce business to be a low-cost provider like them, including Amazon. So, in the short term, Walmart is still better positioned for the near future. Their movement into the e-commerce business though allows them to leverage their existing supply chain with the economics of zero. This means it essentially costs nothing to provide a means of selling over the internet. According to Affuah and Tucci, "[the Internet] allows instantaneous, low-cost interactive communication" (Affuah and Tucci 37). This has allowed the company to remain more competitive against Amazon, as shoppers can either choose the convenience of online shopping or the low costs of shopping at a Walmart store.

Amazon has recently invested a lot of money into operations and their own supply chain. As a result, they've likely taken on some debt from purchasing land for warehousing, aircraft, trucks, vans, and the increased hiring as a result of their increase in operations as well. Compared to Walmart, Amazon has one of the best e-commerce platforms and will likely be able to pay off their debts quickly. Since Amazon is also an internet company, they will be able to leverage AI technology and their AWS platform to make better operations decisions than Walmart can. This is why in the next 15 years Amazon seems better positioned than Walmart.

Also, as Amazon continues to expand their product offerings and extend their mix, they will compete with other companies and offer services that Walmart does not provide. Amazon has been extending their product mix since the beginning. Although they were initially an online bookstore, they quickly extended. "On June 11, 1988 [sic], Amazon extended its product line by introducing compact disks" (Affuah and Tucci 226). They also expanded on their product lineup by adding toys and other products to their mix. Amazon leveraged their brand to expand into more markets. In November 1998, "Amazon introduced a video and gift section on its website… several hundred gift items were added, ranging from Barbie dolls to Nintendo video games. Most of the gift items were chosen because they related either to what Amazon.com offered in books, music, or videos or 'because they would appeal to [their] regular customers'" (Affuah and Tucci 227).

Ultimately, even if Amazon takes the lead in retail in the next 15 years, Walmart will not be disappearing any time soon. Their grocery side of the business will keep brick-and-mortar locations afloat. Their development into e-commerce and in-store pick up will also give consumers who want to make orders online more options to get their orders, especially when they need an item immediately. Amazon and Walmart will continue innovating to compete against each other, but neither is on the verge of collapse either today or 15 years into the future.

Question 3

Midwest RBU's incentive structure is built upon three premises: core competencies, performance rating, and differentiators. Because there is a scale across the three premises, there are several controls that influence employee behavior and subsequently an employee's annual bonus. Because of this, the company must ensure they any control system have fits their environment, as "people tend to act in ways that affect measures, especially when rewards are linked to measures" (Cash, et. al and Fried 147).

One measure the organization uses is based on core competencies. The core competencies define the ideal behavior and responses of an employee. These tie into people control, where "managers increase the likelihood of achieving desirable outcomes by… training employees to strengthen skills or reinforce values" (Cash, et. al and Fried 143). By providing this list of core competencies, employees know how management expects them to behave and perform. This will provide the criteria that management uses to evaluate and award bonuses to workers. Morgan says that work culture can influence people, as "large organizations are likely to influence most of our waking hours" (Morgan 117).

Since organization have such a large influence on employee behavior, it is important that they handle that power responsibly. Another part of the control system involves measures, which require data and "may also measure the performance of people, activities and organizations outside the firm" (Cash, et. al and Fried 145). When creating measures, the company must also provide evaluation criteria.

Since there is a scale on the performance rating and differentiator scales, "processes must also be developed for identifying, developing, and periodically reassessing appropriate benchmarks" (Cash, et. al and Fried 147). This is also known as evaluation criteria. When employees have a solid criterion for what they are being evaluated on, they are more likely to behave in that way. However, this type of behavior may not be best for the organization as a whole. When incentive structures are based on an individual's performance, they tend to behave in ways that benefit them the most. This usually does not match with what is best for the company.

Goldratt mentions this when he says "Almost everyone who has worked in a plant is at least uneasy about the use of cost accounting efficiencies to control our actions" (Goldratt and Cox 4). Goldratt, along with many other people, realize that numbers do not tell the whole story. He also says "We do have lots of measurements that are supposed to tell us if we're productive. But what they really tell us are things like whether somebody down there 'worked' for all the hours we paid him or her to work… whether the output per hour met our standard for the job" (Goldratt and Cox 49).

Since we are examining sales positions, what matters most to employees is how many sales they can get and their value within a certain time frame. While organizations certainly care about making sales, they're also concerned with creating long term relationships with customers. This difference in goals between the employee and the organization means that the organization may not see the best results possible, whereas they would if they gave employees goals that focused more on the long-term goals of the company.

For example, "in order to achieve coherence… it is necessary to assign responsibility for developing both financial and nonfinancial performance measures" (Cash, et. al and Fried 149). With all of this in mind, numbers and performance should not be the only determinant of award bonuses. The company seems to understand this since they also measure nonfinancial performances such as influence, competency, consistency, approach, and commitment. This makes the company stand out since "few companies have developed a clear definition of the data that can be used for developing measures of… activities and outcomes" (Cash, et. al and Fried 148).

Overall, I think this is a high-quality control set. They have measures of performance, which include sales data and nonfinancial performance. They have criteria defined in terms of budgets and a sliding scale on their differentiators, such as ranging from "never" to "always" for their consistency scale. While their core competencies are rigidly defined, the control set is still good since this isn't a financial measure.

Midwest RBU should continue using the scale and criteria they have to determine bonuses. There is a good mix of work performance for the individual along with performance that benefits the company as a whole. It would also be good to know whether the bonuses awarded are in the form of cash, stock options, profit sharing, etc. Cash bonuses based on performance make an individual perform best for themselves. However, stock options and profit sharing means that the company as a whole has to do well for an individual to be awarded.

Bibliography

Adams, Scott. *The Dilbert Principle*. New York: HarperCollins, 1996.

Affuah, Allan and Chris L Tucci. *Internet Business Models and Strategies*. New York: John E. Biernat, 2003.

Cash, et. al and Fried. "Building the Information Age." n.d.

Goldratt, Eliyahu M. and Jeff Cox. *The Goal*. The North River Press, 2014.

Morgan, Gareth. *Images of Organization*. n.d.