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Discuss the relationship between IT architecture, organizational structure and the problem issues at the Burlington Northern and Symantec. In what ways were the problem issues affected by this interaction? Given the culture of each company, how are their IT architectures respectively strategically positioned?

Before we can begin to answer this question, we must first define both IT architecture and organizational structure; this way, we can understand what they are independently and better understand their relationship as it pertains to both Burlington Northern and Symantec. The term "IT architecture" can be generally described as "a term applied to both the process and the outcome of thinking out and specifying the overall structure, logical components, and the logical interrelationships of a computer, its operating system, a network, or other conception" (Rouse). Likewise, organizational structure can be described as "a system that consists of explicit and implicit institutional rules and policies designed to outline how various work roles and responsibilities are delegated, controlled and coordinated. Organizational structure also determines how information flows from level to level within the company." (Investopedia). Information flow is considered to be a core competency in effective IT architectures and organizational structures, and as such, when both are effective, the business in question tends to be more productive as a result.

Both BN and Symantec struggled with issues in these core areas, the former struggled more with IT architecture, while the latter struggled more organizational structure. That isn't to say there wasn't overlap, both of these systems are closely interconnected; if one component suffers, the other will likely follow suit. An effective IT architecture facilitates information flow both internally and externally, and its functionality/utility helps dictate the structure of a company. For example, a company may use a CRM or DBMS system whose functionality demands technical expertise that may not be present in the company beforehand. Technical staff, IT security, managers, and a host of other positions will be introduced into existing company hierarchy to support such systems. Likewise, organizational structure often times dictates the nature of the IT architecture, as it will only be effective when it is suited to a company's structure. If a business has functional departments, say, accounting for example, the IT architecture will often times include functionality that facilitates responsibilities of the accountants. Furthermore, if a company is large and spans multiple locations or offices, robust IT architecture will support the functionality and communication flow between all locations, despite the organizational structure being decentralized.

At Burlington Northern, millions in resources had been poured into research and development of a new IT architecture which could holistically monitor active trains, train vitals, manage departures, and a whole host of features that company executives seemed to want, but feared their investment would be too costly for the company. Back-and-forth deliberation on cost vs. benefit quickly turned into months and even years of inaction on the company's part, which led to a lot of sunk costs. Company executives were so indecisive on how/if to proceed with the system that they actually caused financial pains for the company. A decade or more of research and development on an idle project was bound to hurt the company, especially considering that they were already falling behind formidable competition. The lack of action at the top of BN's hierarchy caused the IT architecture, which had a chance to be upgraded by leaps and bounds, to stay in the stone age instead. Even at the project's early stages, the company's IT architecture was already dated and inefficient, and this project's failure doomed it to stay that way. In short, the organizational structure of Burlington Northern, specifically the inaction of the key company stakeholders, doomed the project and the IT architecture.

Symantec suffered with a similar issue that involved the interplay of management and IT. Symantec excelled in acquisitions and aggressive growth that allowed them to be competitive in multiple software markets, however, maintaining cohesion among the growing company proved to be painful and difficult. The company was decentralized, allowing expansions and acquisitions to keep their roots at their original location to help with employee morale. This seemed like a good idea initially, but when a dozen different companies with a dozen different ways of doing things are stuck together, issues begin to arise. The chief concern among staff became the issue of communication between branches, departments, and even teams in the same building. The practice had never been standardized, so theoretically, there could have been different procedure for every single department in the company. Information should tend to flow “through the department heads to the top management” (Usmani, Fahad, et al), but people were forgoing any formal processes and speaking to executives directly to voice their concerns. In an ideal scenario, organizational structure should “clearly state who reports to whom. A subordinate cannot report directly to the manager before communicating with his immediate supervisor. This simplifies the work of executive employees so that they are not overwhelmed by the activities of the firm” (Brown). Symantec’s CEO feigned concern for the issues in communication structure, but his efforts showed no substance. He allowed too few resources to the company for a communication system to be standardized and implemented, even when just about everyone complained about issues with the phone lines and computers. He showed little interest in strengthening cohesion between departments, despite the fact that they needed to share critical information with each other. But it was Symantec’s fate that the IT architecture that could reasonably solve these issues wouldn’t be implemented, as Symantec’s CEO showed little interest for it at the time. Symantec would go on to continue acquisitions and face a major companywide reorganization in order to keep it fully productive.

These two cases are good examples of the interplay between IT architecture and organizational structure. In both cases, decision makers prevented advances in IT that would hurt the company in varying degrees. Managers were focused on the present rather than investing in the future, which is a dangerous act that has put many people out of business. These examples also capture the difficulty for change within large companies. Adopting new architecture is expensive and time consuming, so it makes some sense for managers to be wary in the short-term. However, investments like these, which aim to improve existing processes within a company, tend to be worthwhile, even though they are a pain to implement. Symantec would benefit from analyzing their competition and their market to see how other people are creating commerce in the evolving software market. “Everything in your industry that happens outside of your business will affect your company. The more you know about your industry, the more advantage and protection you will have.” (Berry, Tim, et al). Operating in an innovative space requires an innovative company that is willing to adapt and stay ahead of competition. (Bughin, Jacques, et al).

2) Consider the following two organizations – Wal-Mart and Netflix. Given the models and theories we have covered up to this point in the course, which company is better positioned for the near future? For the next 15 years? Why?

To accurately predict which company is more equipped for the future we must first try and understand exactly who each company is, what the offer, and how they offer it. Both companies are household names, but they do exist in different markets, so this question isn't as straightforward as one may initially believe. Netflix began as a home movie delivery subscription service where they would periodically send movie titles that a customer ordered then would receive them back from their customers once finished or once the rental period ended. The idea was first created when rumored that the creator had been charged a significant late fee for a movie rented at a would-be competitor, Blockbuster (CNN).

They eventually were first to market or at least first to hit it big offering paid subscription to a digital streaming service for movies and TV shows. With competitors arising heavily like Walmart's Vudu, Hulu, and Amazon's streaming services, Netflix is forced again to adapt to the changing and diluted market. They have recently hit it big with their Netflix original series and movies. They have dished out big budgets for an ever-growing catalog of original titles. They have popular titles like Stranger Things, The Ranch, and even have had actors like Will Smith and Adam Sandler star in some of their movies(Hastings). Instead of paying royalties to the owners of the TV shows and movies they were previously making, they now can have one flat sunk cost fee that they pay to produce said content, and then can charge reoccurring monthly fees to continue selling them. They now don't have to worry about inventory levels or damaged and lost goods. They've even implemented a system that asks viewers if they're still watching in order to avoid unnecessary use of their bandwidth which further reduces the costs of streaming due to their massive amount of traffic. In fact, it's been calculated that Netflix accounts for over one third of all internet traffic in North America (Luckerson).

Unlike Netflix, Walmart has a foothold in dozens of markets, if not more, through its vast array of services. Sure, we think of Walmart as just a grocery store, but they offer services in apparel, automotive, sporting goods, banking, jewelry, electronics, and so many other markets besides groceries. Walmart has a massive number of physical stores world-wide, online sales and vending, subscription-based stores like Sam’s Club, and they even have an online streaming service called Vudu that competes with Netflix, (although, Netflix is certainly ahead of the competition at this point, with the quality and quantity of content that it offers). Walmart has been able to capture so many markets with its low-cost structure. Walmart has a diverse group of services and products that they offer while also keeping up with technology advances with their streaming services and online marketplace. Most of all, Walmart is constantly innovating the way they sell their products. They have decided that it doesn’t matter how the sale happens or where it happens as long as they facilitate it. They have even mentioned the use of Virtual Reality to conduct sales which is a very interesting perspective going forward (Kline). Walmart is the proven retail formula. They are constantly gathering and mining data to create optimal inventory levels and available stock on the shelves.

So, who is more suited for the future? I would have to say Walmart. They offer a range of services in an even larger range of markets. Meanwhile, Netflix’s only service is content streaming. Entertainment is constantly evolving, and there may come a day when people have moved on from traditional home streaming. If Netflix were to remain unchanged, it would slowly die out. It relies on its one core competency and has no fallbacks. Walmart, however, offers many other things that will continue to make them money in the future. It is unreasonable to think that people will stop grocery shopping at some point, and even if they did, Walmart still has a foothold in so many other markets that could sustain it. Walmart is operating entirely based on low cost while Netflix is operating based on differentiation. If trends change, this differentiation could put Netflix in danger. Walmart can tell its suppliers that they need to lower their cost, so they can lower the prices, and due to the massive amount of products that Walmart buys from these suppliers, they don’t have much power to resist. These two companies are both likely to thrive in their respective markets, but Walmart has the diverse enough offerings to be capable of being able to take a hit in one area and still stay afloat. Netflix needs to broaden its horizons in order to increase footholds in more markets and ensure long-term viability in the wake of changing trends. For now, the massive product base, and amount of innovation that is happening at Walmart is hard to beat (Walmart Staff). Walmart shows willingness to adapt to changing trends. For instance, they are currently developing a store with no cashiers. This cuts operating costs and also conforms to the new generation of people that prefer things such as self-check-out lines for convenience, speed, or just solitude(Green).

This isn't to argue that Netflix isn't equipped for the future. In fact, I think they will do very well for many more years. But the truth remains that entertainment changes, but people will always have to buy groceries. And right now, Walmart is the grocery God.

3) Combined with this exam Blackboard, there is a Powerpoint presentation (filename Colleague Core Competencies) from a large pharmaceutical outlining the annual results controls for the company's sales force, which is the sole determinant of their annual bonuses. You are a consultant asked to comment on the quality of the controls. What do you report to the senior management of the drug firm about this control set?

The purpose of controls on a sales force is to reward positive outcomes or discourage negative ones, which translates to rewards for positive performance. When people are motivated to help the company, they will thrive, which is why motivation is so effective on salespeople. If people aren't motivated to sell more products, then they won't. That's why a lot of sales representatives work on commission. By earning more money for the company, they are earning more for themselves. Otherwise, they would just do the bare minimum amount of work to get through the day in order to not over-work themselves (Chron). At the end of the day, sales are what drive the business financially, and the goal of any business is to make money now and in the future (Goldratt). The sales force is one of the most important pieces of a business especially when it comes to customer relationships. In fact, "In addition to generating income, the sales force builds trust with customers. Sales representatives engage customers at all stages of the relationship. New customers need interaction and opportunities to learn about the brand. Current customers gain trust through consistent follow-up and communication with the sales representative" (Gluck). Without good numbers, the company would be forced to go under. Commission or sales-based incentives force you to "work harder to get the sale, especially if there is a possibility that someone else could score the big account first" (Patrick). The sales team's incentives typically differ from everyday employee because a sales representative's performance is usually easier to measure due to the fact you can simply look at the numbers, while other employees are judged based on their contributions which may not be easily measurable. Typically, both sales reps and regular employees are both judged somewhat by their qualities and their interactions within the organization but then the sales force is also judged and compensated based on their sales numbers. This is why some sales forces are contractors that aren't actual employees of the company. It's easy to determine how much a salesperson has earned and it is easy to assign them specific tasks instead of being on the clock the whole day (Fishman). It also creates the ability to have pre-selected candidates with the market knowledge and prior screening you need in order to pay a sales contractor (Metler).

Midwest RBU seems to base their incentives on good employee qualities rather than simply sales performance. An employee could have every bit of those qualities mentioned and not sell a single unit. Being a sales force, it is somewhat strange to see that unit sales are not a major factor, as there is no real motivation of them to sell more products. Midwest RBU is encouraging positive employee habits with these controls in place but that doesn't necessarily translate into more cashflow going into the company. To base their incentives entirely on good qualities rather than the numbers of the sales force can translate into decent employees but terrible salespersons. With these sorts of bonuses, it's more like salespeople are on salary rather than commission, which has disadvantages. "The biggest disadvantage to a straight-salary system is that it takes away your salespeople's incentive to excel" (Strain).

With that being said, this allows salespeople to work without as much of the competitive pressure. If a particular salesman is struggling, new, learning, etc., they won't necessarily be penalized as long as management believes that they are putting forth the effort that is required to do the job.

I would personally advise incorporating sales as one of the measurements used in rating performance. The current controls are fine, but basing bonuses entirely on those controls could be an issue. Their employees have no reason to go out and secure every sale possible, as long as they conform to the internal controls, they'll receive their bonuses. Everyday employees should receive their bonuses exactly how it's set up currently, but the bonuses for the sales team need to incorporate some kind of motivation to go out and make the company money.

They may also want to narrow the amount of analysis that must be done in order to accurately assign each employee a number in each category. Some may argue that the scope of analysis is too broad, which could make evaluations lengthy. Customer feedback could also be incorporated into review. Including this could get an accurate view of how a person acts when being the face of the company as they're outside of it. In a sense, managers could see what the side of the salesman that they don't usually get to see. This would take some of the weight off of supervisors and other employees needing to monitor their own or other people's actions (Gerber).

All in all, the current controls in place most likely are fine. However, basing bonuses entirely on those for a sales team is not effective enough in creating a determined sales team that wants to go out and make the company money. While they are good employees, they may turn out to be poor salesmen. This will hurt the amount of cash flow coming into the company tremendously and cause nothing but problems.

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