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How to Restructure and Optimize a Mid-Market IT Department for Aqilitv

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How to Restructure and Optimize a Mid-Market IT Operations Department for Agility

Abstract

Mid-market IT departments must operate in a lean manner while providing top-notch support and administration to the business units, all while being agile to keep up with new technologies. Too often, these IT departments are under-staffed or staffed in a manner that is mis-aligned with business needs. Therefore, customer service suffers in the form of lengthy wait times, a loss of trust and respect for the IT organization and the emergence of shadow IT.

This paper will detail how one mid-size enterprise restructured its IT department to provide better service and alignment to business units, while keeping staffing levels the same. It will show how moving people to positions that rely on their strengths, and streamlining like tasks under one department results in better customer service and transitions the IT department from reactive role to a proactive solution provider for the business units. It will also show how a restructuring can open up career paths and growth opportunities to staff members. Surveys will illustrate the increase in employee engagement since the restructuring has taken place.

Introduction

Alignment is defined as all activities that may contribute to tightening links between IT and business across an organization (Karpovsky). Factors such as lean budgets, disengaged employees and decentralized and shadow IT can work against IT-business alignment initiatives. This paper will discuss how a mid-size enterprise restructured its IT department to increase customer service, work within

budgets, improve employee engagement, and eradicate shadow IT, all which contributed to the IT-business alignment initiative and environment. Both IT and business processes are relatively mature on their own, but it is their alignment that holds the key to driving the business forward (Luftman). Tough choices need to be made in tough times; if a firm faces a crisis, it must reorganize to cut cost or realign organization structure with firm strategy (Aalbers).

Unhappy customers

Prior to mid-2015, the IT department, which was further broken down into the sub-departments of Network and Infrastructure, Applications and Project Management, Development, and Technical Services, had a terrible reputation among its internal customers. The general perception was that the Infrastructure group was unhelpful and unwilling to provide the necessary components to support business needs, the knowledge level of help desk staff was lacking, and the telecom department was stuck in the 1980s. Call levels were at an all-time low for the help desk, since most people assumed that their questions wouldn't be answered intelligently or helpfully. Most calls were for equipment orders, rather than technical assistance. Development was limited to operational tasks only to keep the existing applications working.

Shadow IT and decentralization

The increase in the number of unsatisfied customers led to a rise in shadow IT. When business units requested IT resources (i.e. storage, servers), and were either denied or forced to wait weeks or sometimes months for the provisioning of these services, they turned to outside and cloud vendors. Some departments hired their own internal IT support and development staff. What had once been a centralized operation had quickly become decentralized and out of control. As of 2014, 69% of organizations have a centralized IT structure. This is a marked increase, up from 62% in 2012 (Luftman).

This decentralization phenomenon further sullied the reputation of the IT Operations department, since it was the one to bring down the hammer as things went into production. Web sites coded by external providers were suddenly shut down due to security concerns. Scripts and applications developed by programmers hired by the business units were halted, since they did not conform to the development guidelines set forth by the department.

It was clear that something had to be done to turn the IT department around and make the business units believe it could be a valuable business partner.

Disengaged employees

With all of this unrest prevailing, IT staff members quickly became disengaged. They tired of being the constant messenger of bad news and countless no's. Additionally, the organization was structured in a way that was not conducive to learning and growth. The majority of the staff did only what was expected of them, often without any enthusiasm. Not surprisingly, innovation was at an all-time low. Despite the best efforts of management and the Applications group to provide training and improve morale, employees remained apathetic, and their discontent spread throughout the department.

Additionally, IT managers were not collaborating with each other on projects and initiatives. There was a level of mistrust that pervaded down into the department staff. Figure 1 shows 2015 employee engagement data.

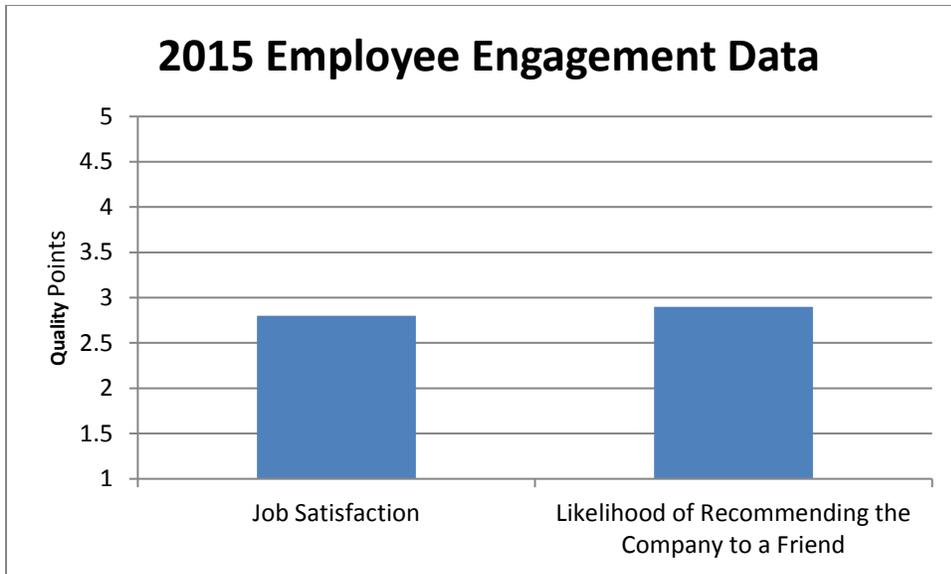


Figure 1

Moving Towards Alignment

From an IT perspective the determinants of workforce agility are flexible infrastructure platforms that support the rapid introduction of new Information Systems (IS) and the enhancement of IT competencies across the entire workforce (Breu). Croteau introduces the concept of IT competencies. The important IT competencies are connectivity, flexibility, and IT scanning (Croteau). IT competencies are meant to support the organization's strategic competencies through effective use and management of IT (Croteau). These competencies provide organization with technological configurations, IT work processes, and shared services that address strategic IT goals and sustain business application (Croteau).

With IT competencies in mind and to combat the issues outlined above and clean up the reputation of the IT department, the company hired a Director of IT Operations. IT organizations, with effective leaders, have an opportunity to position themselves at the heart of corporate strategy. The key to this positioning is the people having the appropriate balance of technical, business/management, industry, and interpersonal skills to meet the challenge that lie ahead (Jerry Luftman). The candidate selected had a

strong technical background, ten years of technical management experience and an understanding of the company's industry.

The position's goals for the first year were to alleviate the mistrust among department managers, turnaround the technical support department to make them more of a resource, present the IT department as a business partner to the business units, and increase the overall agility of the department. Since a strong IT staff and a reusable technology base are resources that together with a close IT-business partnership, provide a means for IT to deliver a sustainable competitive advantage (Tallon), the Director focused first on staffing and infrastructure changes.

Infrastructure

Infrastructure capabilities refer to centrally-coordinated reliable services shared throughout the company (Maartensson). As a step towards improvement from the perspective of technical infrastructure, the company made an investment into virtualization and storage, which made provisioning resources faster and more efficient. Agility will be enhanced when IT executives decide to enhance technical capabilities of the IT function by investing in new and more innovative IT investments that add to the scalability and flexibility of the IT infrastructure (Tallon). With the presence of a robust IT infrastructure, communication, data storage and information processing can be fulfilled smoothly and efficiently, providing a platform upon which tremendous data, documents, information and knowledge are shared and managed within and outside the firm (Wang). With the increasing use of sophisticated IT, Small-Medium Enterprises (SMEs) explore the potential of IT in value-adding, not just cost reduction (Wang).

Agile IT architectures and infrastructures allow for rapid customization and modifications of systems and the products and services they support, thereby providing agile organizations the capacity to explore and exploit market opportunities (Gallagher). Where IT infrastructure can flex in response to a change in the market or where technical skills can adapt to an urgent business need, a firm is more likely to realize increased agility (Tallon). The addition of this new hardware into the company's infrastructure was a key

step in becoming more agile and developing a partnership with the business units. IT was now able to provide technical resources more quickly and efficiently to support projects.

Staffing

Another important step in increasing the department's agility and recovering its reputation was implementing staffing changes. The staff of the IT department was restructured with the following goals in mind:

1. Increase agility to be better partners with the business units

Policies and procedures were revamped and standardized. Workflows were created that allowed customer requests to be addressed quicker and in a more streamlined manner. Service level agreements were put in place, which clarified IT's responsibilities and levels of effort as well as the customer's.

Another step taken to aid in the department's agility was utilizing business analysts in a broader range of projects. Previously, business analysts were brought in for large 3rd party projects only. As part of the agility initiative, business analysts worked closely with the business units and in-house development team that supports the existing systems, therefore gaining a more in-depth understanding of business processes that occur in all business units. This knowledge has filtered through the IT department, and enhanced the overall understanding of the business. The inclusion of business analysts addresses the social dimension of alignment, and focuses on bringing IT and the business people together (Karpovsky).

2. Move from a reactive to a proactive position

The analyst in an agile team works closely with a customer to reprioritize requirements on a continual basis in response to changing circumstances. Waiting for a novice analyst to learn the systems analysis task while the project is in motion may slow down the team's overall velocity or the team's self-organization process (Prasarnphanich). To support this idea, the help desk management spearheaded the creation of a knowledge base. By presenting new staff members with a resource to help them learn and

answer customers' questions quickly and efficiently, the onboarding/training process was reduced from 6 weeks to 3 weeks.

A second step taken to focus on being proactive was the enhanced monitoring of corporate systems. The Infrastructure team invested in monitoring tools so that they could be aware of and ward off system and network troubles before they became apparent to the user community. When issues arise, the team is alerted and able to mitigate before systemic outages occur.

3. Moving the department in a more technical direction

IT is usually equated with keeping the lights on, and until 2015, that was happening most of the time. Development in mid-size enterprises tends to differ from that in larger firms as it is fragmented, focusing on operational support (Levy). Staff members were content to perpetuate that notion, and explore new technology when it was brought to their attention by an external source. To work towards the alignment goal, the IT department had to beef up its technical abilities. Businesses can rely on managerial IT capabilities or technical capabilities to boost business process agility (Tallon). In a stable environment, technical IT capabilities are more beneficial, and a close working relationship between IT and business executives may be helpful in the creation of long-term IT strategic plans or goals (Tallon). The following initiatives were put in place to accomplish that goal – the introduction of subject matter experts, a greater focus on training, a technical mentoring program and the creation of additional positions.

In an effort to enhance IT competencies, the restructure included the introduction of subject matter experts (SMEs). These employees were put in place for three reasons:

1. To solve complex problems
2. To engineer top-notch solutions
3. To serve as technical mentors to the lower-level staff members

Next, management and staff mapped out clear paths of growth and learning for each individual.

Previously, training was not a priority from a budgeting or management perspective. This restructure included doubling the training budget. Firms with a significant investment in training could find it easier to move personnel in new positions of responsibility (Tallon). Lower-level technicians were offered the same caliber of training opportunities as the technical elite. By providing training and enhancing the skill sets of the staff members who had worked in IT for a while, management demonstrated a commitment to both staff and customers. Also, the new structure afforded staff members the ability to move between and among groups as a growth path. An IT governance model that promotes ongoing learning and greater use of best practices allows firms to better prepare for change (Tallon).

SMEs were also put in a position to provide technical coaching and mentoring to the lower-level staff.

This was accomplished through on-project knowledge transfer, as well as peer-led training sessions. Staff members were surveyed on what knowledge they would like to acquire and what types of positions they see themselves growing into. Project teams were assigned accordingly whenever possible, and management allowed time for staff to pursue training opportunities.

Finally, additional positions were created to enhance the department's skill set and interoperability. In the majority of mid-size enterprises, IT is usually comprised of generalists. This model has pros and cons. While staff members can play many roles in the daily operations of the department, the ability to dive deeper may be missing. The creation of a few key positions allowed the company to bring in staff members who targeted specific areas. The Director focused on the following traits, as presented by Luftman, when hiring these new positions.

- Collaboration/teamwork
- Business analysis
- Technology architecture
- User relationships

- Oral communications

An application architect was hired to document applications, systems and interfaces. This enhanced the understanding of how the company's application portfolio was intertwined, and also provided a clear platform for further application development based on standards. Standardization, openness and integration of systems become most critical IT competence in mid-sized enterprises (Wang). Creating a standardized approach to the design of systems used across business units enables greater agility at an organization level, since system changes can be implemented en masse (Gallagher). This was the goal of the Application Architect position.

An IT Operations Manager came onboard to handle the administrative tasks of the department. Previously, the technical managers were responsible for items like license management, staff time tracking, inventory management and annual reviews. The addition of the IT Ops Manager alleviated the need for the technical staff to do this. Now, the technical employees can operate where their talents lie, and the department and company make out better.

The last position that was added to IT Ops was a security analyst. Until 2016, security was spread across many groups within the overall department. The addition of a security analyst centralized security under IT, which led to the creation of standards and enhanced the overall security position of the company. It also took security out of the hands of the generalists, and allowed them to become more focused on other technologies.

4. Restore the reputation and order to the department

As previously mentioned, IT Ops was fraught with mistrust and discontent. The employees' discontent was perhaps the largest contributing factor to the department's bad reputation. While the steps outlined above helped to restore some engagement, there were still a few issues that had to be dealt with. For example, those employees who could not or would not move in the direction the department was moving,

or those who continued to “just get by”. As part of the restructure, these positions were eliminated or the employees were terminated.

The Technical Service Manager (see Appendix A) was one such position to be eliminated. The person in this position had been a long-time employee and was a subscriber to the school of “we’ve always done it that way”. She was unable and unwilling to get onboard with the initiatives enacted to achieve alignment, and her toxic attitude was hampering progress both across the department and within her own staff.

Additionally, she did not fit with the drive to make the department more technical. She had stopped growing technically many years before, which was a problem for her staff. She was not able to provide any technical direction to them. Also, since she was a long-time employee, her purview had grown to include a large portion of the IT resources offered to customers. It was her group that was the point of contact for all customer service matters, which as described above, consisted of apathetic, disengaged workers. To compound these issues, she organized her staff so that each employee had only 1 area of responsibility. Her staff was unnecessarily large(see Appendix A), and by pigeonholing staff members, their growth paths were limited. Tallon states that managerial capabilities affect the design of a flexible IT infrastructure using hardware, software, networking, and IT skill-based resources to minimize the downside risk of rigidity traps that might otherwise damage or restrict agility (Tallon). Since she did not possess such capabilities and was contributing to such rigidity traps, her position was eliminated.

With the elimination of the Technical Services Manager position, the Help Desk Manager was able to focus on the following traits, presented by Luftman, in the staff members that were retained or hired.

- Technical knowledge
- Problem solving
- Collaboration/teamwork
- Functional area/industry knowledge
- Technology architecture

The restructure allowed for the elimination of three additional positions within the Technical Services group, based on multi-threading the capable employees, moving some of the responsibilities to other groups and the promotion to Help Desk Manager of the former supervisor who had experience in operating and managing enterprise-class technical support.

The final step in restoring the department's reputation was a joint effort between the Applications group and the Help Desk to provide regular training and technology briefings. IT now publishes a bi-monthly newsletter that includes project updates, employee profiles and helpful tips for applications in the portfolio. Additionally, the department started a "Put Technology to Work" initiative that consists of a half day of 15 minutes sessions showing how to be a power user of the company's core business applications (i.e. email, calendar, document scanning). This is offered once per quarter and has been well-received and well-attended. Also, in the spirit of communicating and educating, the department participates in National Cyber Security Awareness month every October.

Over the past two years, the IT department has emerged from its perceived dark corner of the company to be a presence and resource for customers and business units.

Results

The restructured organization (see Appendix B) has been operational since mid-2016. In the time since reorganizing, the IT department has experienced a dramatic turnaround. Employee engagement has increased, turnover has decreased, business partners are more satisfied with IT services and there is a true alignment between the department and other areas of the business.

Figure 2 shows employee engagement data from early 2017. Job satisfaction increased by 33% as a result of the restructure. Also, the likelihood of current staff members recommending the company to friends seeking employment increased 25%. Another successful benchmark is that in the 6 quarters preceding the

restructure, the IT department averaged 1 resignation per quarter. Since implementing the new organization, there have been no resignations.

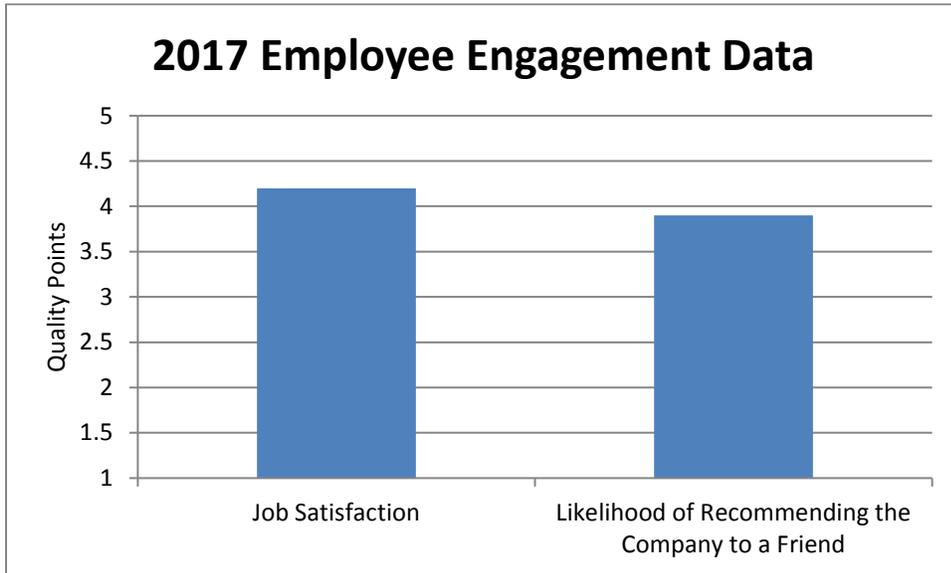


Figure 2

In addition to the benefits mentioned above, the relationship between IT and the business has improved. Customers have provided positive feedback on many fronts. The help desk staff is now more respected, and due to the tiering that was implemented, issues are handled by the appropriate staff members, resulting in short resolution times and fewer open tickets. Additionally, infrastructure needs in support of business projects are provisioned within hours and not days.

Most importantly, business leaders have been seeking out IT as a consultant to their projects. For example, the Sales organization wanted to implement a Customer Relationship Management (CRM) system. Marketing had attempted a CRM project in 2014-2015 with limited success. This Sales project was a rebrand and relaunch of the technology. Sales brought in IT at the beginning of the process, and IT

was able to provide sound technical recommendations and support for the project. The relaunch was considered a major success, and Sales, which comprises 33% of the employee population, and IT are now true partners. Additionally, IT functions developed in Marketing during the initial project were folded back into the IT department. As a 1958 study by Leavitt and Whistler predicted that information technologies were likely to encourage large organizations to recentralize (Doherty), shadow IT was being eliminated.

Conclusion

The main function of IT is to provide a process for solving complex problems involving knowledge management within and between the business units of an organization (Jablokow). By providing this function, IT is aligned with the business units, and has the agility to provide support to them through infrastructure, knowledge and consulting.

Through a restructure of the Operations functions within an IT department, this company was able to accomplish that ultimate goal. Prior to the restructure, IT was viewed as a barrier to progress. Business units found ways around the internal IT department to get their needs and projects accomplished. Within the IT organization, morale was low, innovation was non-existent and mistrust was pervasive. By investing in infrastructure and reorganizing departments and the people within them, the Director of IT was able to alleviate these issues. Staff members were afforded opportunities for mentoring and training, which increased morale, engagement and retention. The business units changed their perceptions of the department and came to view IT as a solution provider and partner. This new partnership led to the elimination of shadow and decentralized IT. Overall, restructuring and enhancing the technical competencies of the IT department has led to increased agility within the entire organization.

Recommendations for Further Study

To gain a better understanding of the potential or longer-term results of a mid-size IT department reorganization, employee engagement surveys should be distributed quarterly and the results analyzed singularly and cumulatively. Additionally, the introduction of formal customer service feedback mechanisms will enhance supporting knowledge and allow for immediate correction where necessary.

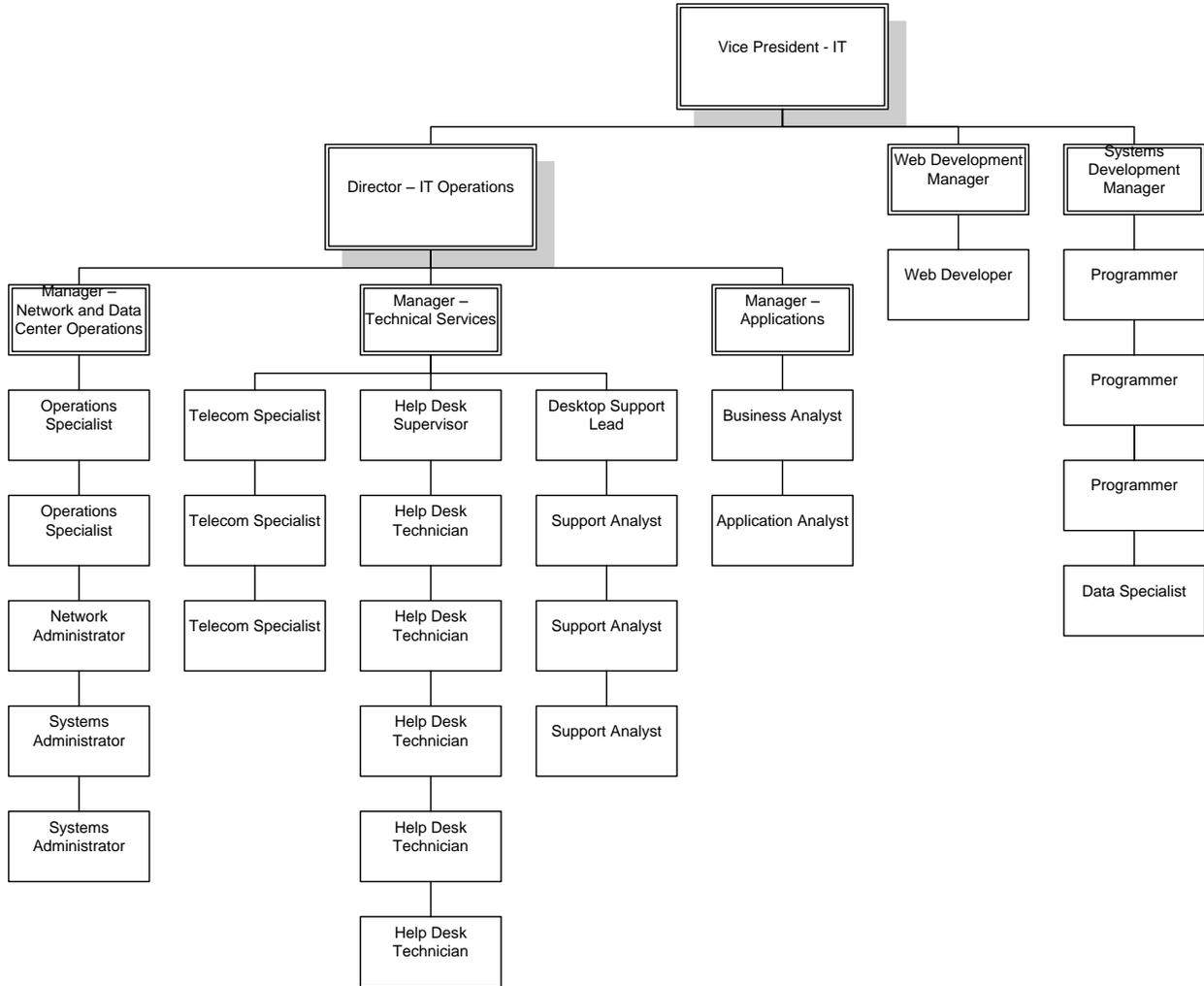
A longer-term project may be to follow the training and mentoring of staff members and map their career progression through the organization over a period of months and/or years.

Finally, a similar restructure can be implemented within the company's development organization, which is shown in Appendices A and B, but was not included as part of the restructure in 2016.

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Appendix A



Appendix B

