Midterm Exam

Fall 2024

CIS 410-50-4248

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20/Oct/2024

1. What are the challenges of implementing IT architecture in organizational structure? How does IT Architecture impact organizational structure?

Using IT in an organization may bring many difficulties. One immediate challenge is the Silo department. IT architectures are specialized tools requiring experts to handle and maintain. Often, the IT department manages IT resources within the organization. As a result, IT departments may have different characteristics than other departments. Differences in language, such as technical terms and the method of operation, may create a sense of distinctiveness—a Silo mentality. Although there are many other contributors to the formation of a Silo department, the Silo mentality of individual members stimulates the isolation process. When a Silo department is created, it may rapidly spread across the organization through comparison and competition. To minimize silo mentality, strong leadership and open communication among departments are critical. However, in small organizations or small teams that require concentration, the Silo effect may be beneficial in the short term because it eliminates possible distractions. Organizations with prolonged Silo departments may experience chronic problems leading to disconnection and decentralization.

Another challenge is the use and charge of the services. In IT, there are two major ways to charge: Chargeback and Showback. While Chargeback sends out bills to the users and Showback only sends out the usage reports, the pros and cons of each method create a dilemma. Depending on the scale of an organization, one method tends to have an advantage over the other. For example, small organizations where multiple small-sized departments work together may benefit from Showback due to their limited size and budget. In large organizations, multiple departments may quickly drain IT resources if there is no strict control over them. Under such conditions, better cost management through Chargeback and keeping each department responsible for their use of technology is the key to protecting the IT department from overloading. Each charge method has an impact on the organizational structure through how departments budget funds and execute projects.

Furthermore, challenges may include compatibility with existing systems and the users' willingness to change. Technology pet peeves may trigger resistance against new technology while preserving the legacy methods. These obstacles may hold back the movement toward modern tools, making the system outdated and open to security risks. In other words, up-to-date systems could change the organization's structure and operations in accordance with the new features and security practices.

Reference:

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1. What are the benefits of IT security in organizational structure? How does IT security impact IT architecture? What are the challenges of implementing IT security in organizational structure.

Cybersecurity is critical in organizations, as proved by the Target case. Organizations handle and store critical data, such as personal records and confidential information. As a result, many cyberattacks are directed at organizations. Being able to protect highly valued information alone is the greatest benefit of IT security. Not only does it prevent security breaches, but it also enhances the organization’s public reputation as trustworthy. This opens opportunities to do business with partners who have strict security and privacy standards.

There are several ways to achieve a secure environment. Lines of defense play a critical role in maintaining overall security. The first line of defense directly manages risks, and the second line of defense oversees the former. However, even with well-constructed defense lines, the organization may face vulnerabilities through the human error of its employees and vendors. Human is one of the greatest challenges in cybersecurity. Social engineering greatly increases the chances of lowering the barrier to the attacks. In Target's case, a phishing email sent to one of the employees at Fazio, Target’s third-party vendor, was the root cause of a breach. With such a simple mistake, Target's defense-in-depth failed. This emphasizes the importance of access management practices such as zero-trust and the CIA (confidentiality, integrity, and availability) triad. Fazio was a prime example of the violation of these principles. They had too much access to the system, which did not require Target’s supervision or confirmation, allowing BlackPOS to spread through the internal network with ease.

Failure to implement cybersecurity affects the organization through financial loss and disaster recovery. Unfortunately, maintaining high security can be challenging and demanding. Even though Target had the access to FireEye, one of the best systems, the managers placed trust in themselves rather than the advanced modern software. This underestimation of modern security and over-trust of legacy security measures led to a total bypass of Target's risk management framework. The managers trusted their security and ignored the initial warnings. Here, one may notice how IT security impacts the existing IT architecture. If there is a pre-existing belief or tradition that collides with the introduction of new cybersecurity tactics, the organization is required to make a change, which the managers may not welcome.

Reference:

CyberSecRealm. (2023, October 28). Cybersecurity: Defense in depth and zero-trust model. *Medium*. <https://medium.com/@cyberseccybersec838/cybersecurity-defense-in-depth-and-zero-trust-model-c5eec0b32a34>

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1. 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?

Overall, the control set covers core aspects of an evaluation system for the sales force. However, given that this will be the only measure for the annual bonuses, a closer look at each criterion is necessary to prevent potential flaws.

First, a drug firm may have a different work environment compared to other firms. With this generalized control set, some aspects may not be applicable. For the sales force, they may not necessarily have something to work on out of context, which several criteria are looking for. The ability to make decisions under stress and uncertainty with limited information fits better with decision-makers and development teams, not so much with the sales department. They should have thorough knowledge of their product as they engage in sales activities. The market may be uncertain from time to time, but that is out of the sales force’s control and should not be used to measure the individual’s performance for a bonus. Furthermore, sales heavily depend on the client side. The section named ‘Grows Self’ includes a criterion for an active engagement. As the sales force must face their clients, this may sound true. But, sometimes, waiting on others to open their minds and decide may be the only option available to the sales force. Regardless of the outcome, an effective sales attempt should be considered and respected to encourage the employees. As there is a risk of abusive channel-stuffing to inflate the sales figures with the intent to receive more bonuses, a protection layer against such behavior is necessary.

The set does not specify the details of the bonus. Kumar mentions the importance of sales performance incentive programs. These programs give the sales force a clear milestone that they can aim for. Without a concrete objective, abstract figures like “good” or “excellent” instead of a measurable amount, such as revenue, quota, or various rates, can lead to unfair evaluation.

Next, the document does not include a continuous feedback system. It is critical for the sales force to receive constant or periodic feedback to self-evaluate their performance. This feedback should be specific and actionable. Providing no quarterly reviews may diminish the effect and cause the employees to overwork and burnout or underperform and be left behind because of a vague evaluation system. The employees may not know what to do to improve. Employees must constantly be reminded where they are and how they are doing for optimal output.

Finally, the differentiators are, again, slightly apart from the sales department. It is unlikely for individual sales personnel to have a national-level influence. Due to a less collaborative environment, the commitment section loses its value. Although a good role model may inspire their colleagues to be like one, that may not translate to making team members move. Therefore, this section will need adjustments to better align with appropriate evaluation methods for the sales force, as some appear to be too extreme.

Reference:

Experts, D. (2024, July 30). *Sales workflow*. DealHub. <https://dealhub.io/glossary/sales-workflow/>

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