Title page

Food/ beverages

Costs of operations

The firm has to consider the costs of operating for Food and Beverages and Computer Software System. This involves the costs required for covering the expenses of the business and to manage activities that are directly linked to the production of products and services. The costs included in the business are general expenses, selling expenses and administrative expenses. The compensation related expenses required for the business include payroll tax expenses and non-production employees. Two main issues faced in the management of costs of operations include;

Balancing benefits of protection against the cost of designing, implementing and using the mechanism. It is crucial to determine balance by assessing the risks of a security breach and the possibilities of its occurrence. The analysis is subjective because risks can be quantified rigorously. This requires acceptability of the procedures and policies.

Risk analysis is another significant issue faced in operating costs of the systems. It is crucial for identifying if the asset is protected or not. This includes an assessment of the potential threats and likelihood that they materialize.

Cost-benefit analysis

The first issue is resolved by the conduction of cost-benefit analysis that requires that the data resources must cost less than the value attained by the organization. The security mechanisms and computer systems added must be cost-effective. The common example is of the database that provides information of salary to the firm and when data is altered the company suffers loss (Treville, Ketokivi, & Singhal, 2017). The cost-benefit analysis represents the strongest possible integrity mechanisms that are used for protecting the data. The emphasis of resolving the issue is on saving cost and adopting the cost-efficient system. The protection mechanism adopted must be cheap and does not impose an extra cost. Evaluation of the cost of a specific mechanism depends on the method chosen for the implementation of the security service (Huang, Li, Shi, & Wu, 2018).

The overall analysis of the issue indicates that the organization must take into account the cost-benefit analysis. The adoption of the security mechanism is expensive so it is appropriate to choose the suitable mechanism that fulfils the requirements of the system (Huang, Li, Shi, & Wu, 2018).

Risk analysis

It is important for determining if the attack would cause long delays in the production of the widget and analysis of the situations between extreme cases. The database system contains all confidential data such as the salaries of the employees and technical details. Security is required for protecting the data from attackers. If it was accessible across wider networks the chances of attacks or security breach are even high. This indicates the risks of the geographically distant attackers reaching the information of the database. Risk analysis is thus critical for identifying the sensitive points and setting protocols. This is an effective way of preventing the data from a security breach. For breaking the information from the company's database the attackers will have to visit the company physically.

The risks change with time so it is important for the company to integrate new technology that prevents the systems from attacks. One of the common methods used is by encrypting the data (Bishop, 2005). It can be adopted for minimizing the possibilities of a data breach. The security code is passed only between the credential partners that eliminates the risks of a data breach. This demands huge investments that affect overall operation costs. It is thus important to find a cost-effective method for overcoming such issues.

References

Bishop, M. (2005). *An Overview of Computer Security*. Retrieved 05 12, 2019, from http://www.informit.com/articles/article.aspx?p=363728&seqNum=6

Huang, H., Li, D., Shi, C., & Wu, S. J. (2018). Quality and Operations Management in Food Supply Chains: A Literature Review. *Journal of Food Quality*.

Spring, M., Hughes, A., Masonc, K., & McCaffrey, P. (2017). Creating a competitive edge: A new relationship between operations management and industrial policy. *Journal of Operations Management, 49* (51), 6-19.

Treville, S. d., Ketokivi, M., & Singhal, V. (2017). Competitive Manufacturing in a High-Cost Environment. *Journal of Operations Management, 49* (51), 1-88.