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# Cybersecurity on a Budget

# Farah Almangour

Saudi Aramco, Dhahran, Saudi Arabia

Abstract: What are the encounters in reducing cybersecurity risk? How much should CEOs budget for cybersecurity to protect their organization? How can a company protect critical information resources? What type of processes and procedures work best for an organization? We hear these types of questions nowadays on a regular basis. Budgeting for cybersecurity is not an easy nor a fun task to be done. It is barely a new concept but most of the CISOs do not have an immeasurable budget. Because no matter how many tools an organization uses or how good an organization think their cyber hygiene is, there is always a room for development.

Keywords: Cybersecurity, Budget, Risk, threat.

#### I. INTRODUCTION

Nowadays, CEOs, executives and top managers at most firms worldwide realizes that cyber risk is one of the important topics on their agendas. They understand that as cyber threats increase, reducing cyber risks becomes costlier for organizations around the world. However, management could still help their organization in reducing cyber risks with minimal resources. This could be accomplished by implementing few guidelines that I will be sharing in my article.

## II. BODY

Risk is basically a mixture of vulnerability, threat, probability and impact. A company could reduce cybersecurity risks through, conducting a risk-based and risk assessment security strategy for their organization. Every organization must perform a risk assessment, in order to set the baseline threats to build a risk value-based risk reduction plan and results in decreasing the enterprise risk. In addition, one of the most critical results from an insufficient cybersecurity program is a data breach, as the financial impact could be extensive and effect the actual costs and reputation for a company. Thus, to control external and internal incident communication and minimize damage, it is very important that every company has a well-practiced incident response plan. Moreover, to reduce risks with slight resources, an adequate framework should be at the top of any CISO. A cybersecurity framework such as the National Institute of Standards and Technology (NIST) Cybersecurity Framework is one of the well-known frameworks that improves cybersecurity and promote the resilience and protection of any business. For management to be on top of everything, a periodic risk management report must be shared to management, which includes important points and issue that the organization is facing. Furthermore, management should not underestimate the importance of a cybersecurity awareness and education training program to educate his/her employees on latest cybersecurity trends. Last but not least, to help in reducing cybersecurity risks, every company must strongly manage access controls to use multi-factor authentication and control privileged account management.

### III. CONCLUSION

Benjamin Franklin once said, "an ounce of prevention is worth a pound of cure" and when it comes to cybersecurity, by detecting vulnerabilities, cyber risks, and using realistic measures to protect information, networks and assets, companies must implement rational level of due care and due diligence. Nowadays, in order to reduce cyber risks in every organization, budgeting for cybersecurity has shifted from "nice to have" to "need to have". In conclusion, reducing cyber risks within a company with minimal resources, shall be the ultimate mission for every CISO.

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