Effective Information Security Policy

Fahad Jasim Alanezi

Dhahran, Saudi Arabia

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Abstract: With the growth of technologies, interconnected systems and digitalization, establishing an effective information security policy becomes a crucial step for organizations toward protecting their data and information asset from unauthorized access, cyber threats, and data breaches. To ensure the policy is both practical and widely adopted, it should be well-structured, aligned with the organization's business objectives and clearly communicated. The key steps to endorse and implement effective information security policy include engaging senior management to help prioritize information security across the organization, align with business goals and risk management strategy, communicate and enforce the policy, and conduct regular review and update. This research paper is going to define the information security policy and how to be effective. Also, it will provide the characteristics of successful information security policy, the associated responsibilities with the entities in the organization and the lifecycle of this policy.

Keywords: Information Security Policy, policy lifecycle, Policy Development, Policy Adoption, publication, responsibilities, characteristics.

I. INTRODUCTION

Information Security Policy is an essential factor for organization to protect sensitive information and information asset as it provides direction and structure. Information Security Policy is how the organization is going to protect these critical assets and to ensure the compliance of legal and regulatory requirements. This can be achieved by establishing an effective information security policy which requires successful policy characteristics. These characteristics build strong information security policy for organizations to be endorsed, and demonstrate how the policy is aligned with the organizations' objectives. The Policy Lifecycle is the main driver for effective information security policy as it associates positions with the responsibilities.

II. INFORMATION SECURITY POLICY

Information Security policy is a set of rules and guidelines that govern how an organization manages, protects and handles its information asset. The objective of the information security policy is not only limited to the organization and its asset, it also, provides protection to its customers and third parties from intentional or accidental damage, misuse or disclosure of sensitive information. Also, it safeguards the Confidentiality, Integrity and Availability (CIA) of information.

III. CHARACTERISTICS OF SUCCESSFUL INFORMATION SECURITY POLICY

Successful information security policy must be endorsed, relevant, realistic, attainable, adaptable, enforceable and inclusive. Below are the more details on these successful characteristics:

A. Endorsement:

To obtain successful information security policy, organization management should demonstrate commitment to the policy by serving as role models. Effective contribution, taking actions and continues communications are main driver of the endorsement for information security policy. International Journal of Computer Science and Information Technology Research ISSN 2348-120X (online)
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B. Relevant:

Relevant information security policy must provide support to the objectives of the organization and must be also relevant to those who must comply. This information security policy should be carefully written in order to be reasonable and understandable for all related entities, and to ensure the adherence to it.

C. Realistic:

Realistic means the information security policy make sense. This can be achieved by well developing the policy, acknowledge challenges and provided continues awareness to all relevant entities.

D. Attainable:

Implementing successful policy requires involvement of organizations groups/individuals whom the policy applies on. They provide input and information which help in building attainable information security policy.

E. Adaptable:

With the growth of the business in worldwide, organizations should always look for policy improvement and should accept challenges and conduct risk assessment and measurement for adaptable information security policy.

F. Enforceable:

Administrative and technical controls should be in place to enforce information security policy. These controls offer compliance status and consequence of policy violations.

G. Inclusive:

It's crucial for organizations to involve external parties to the information security policy process. As organizations are open to work globally, the policy should cover international laws and regulations to be followed by the external partners.

IV. INFORMATION SECURITY POLICY LIFECYCLE

The information security policy lifecycle consists of four processes, Develop, Publish, Adopt and Review. Each process has its own tasks which are carried out by responsible entity.

The following Figure 1.1 shows the information security policy lifecycle associated with its tasks:

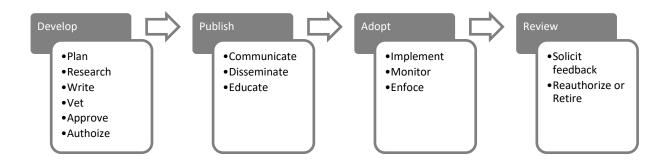


Figure 1.1 Information Security Policy Lifecycle

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The following table I shows the responsibility of each position in the information security policy lifecycle:

TABLE I: Information Security Policy Responsibilities

Position	Develop	Publish	Adopt	Review
Board of Directors and/or Executive Management	Communicate guiding principles. Authorize policy	Champion the policy	Lead by example.	Reauthorize or approve retirement
Operational Management	Plan, research, write, vet, and review	Communicate, disseminate, and educate	Implement, evaluate, monitor and enforce	Provide feedback and make recommendations
Compliance Officer	Plan, research, contribute and review	Communicate, disseminate, and educate	Evaluate	Provide feedback and make recommendations
Auditor	Monitor			

A. Policy Development:

The policy development phase has six main tasks: planning, researching, writing, vetting, approving and authorizations. The **planning** task identifies the main objective and context of the policy. The **research** task focuses on defining requirements of the policy. The **writing** task must be conducted effectively to ensure that it can be understood and accepted by audience. In the **vetting** task, relevant entities must take effective part to scrutiny the information security policy such as law, HR, auditors and information security experts. The **approval** task mandates all impacted organizations to contribute and review the information security policy in order to obtain the required support in implementing and adhering to the policy. The last task is the **authorization** which executive management concurs the policy.

B. Policy Publication:

The information security policy has to be published and communicated to the organization to introduce its objective and execution. This allows the organization entities to accept and adhere to the policy. Also, the organization is required to provide proper communication method to address the policy to the employees enabling them to understand it well. For example, the management makes the information security policy available to the employees and they can endorse online training to clarify the rules and responsibilities for each relevant entity.

C. Policy Adoption:

The adoption is a very critical stage. It starts with announcing the information security policy, monitor its execution and performance. Launching a Key Performance Indicator (KPI) for the policy helps the organization to maintain the progress of adopting and adhering to the policy, and conduct gap analysis if not meeting the target.

D. Policy Review:

Organization changes are taking place depending on the worldwide changes and challenges. Thus, the management should carry out regular reviews and updates to the information security policy to be in-line with the changes.

V. CONCLUSTION

This paper discussed the important factors of the effective information security policy in order to help the organizations to ensure that all stakeholders understand their rules and responsibilities. Successful characteristics of information security policy led to have operative information security policy. Also, they govern the process of developing, maintaining, monitoring and reviewing the policy to achieve its objectives. The lifecycle of the information security policy clarifies the responsibilities for each positions enabling them to focus on their part and to collaborate with associated positions. The effective information security policy helps the organization to safeguard sensitive information and organizations' information asset from unauthorized access, damage and disclosure of information as well as its reputation.

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