

Five Best Practices for Information Security Governance

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INTRODUCTION

Data is everywhere — on mobile devices, in the cloud, in transit. The accumulation of data and the rise of businesses using data to better hone their practices is evolving rapidly as data comes from various platforms and in different forms. Data growth, new technologies and evolving cyber-threats create challenges for organisations looking to set the strategies, framework and policies for keeping all of that information secure.

Threats are increasing and evolving rapidly as criminals discover new ways to circumvent defences and target valuable data. Over 169 million personal records were exposed in 2015 from more than 700 publicised breaches across the financial, business, education, government and healthcare sectors, according to ITRC Data Breach Report¹.

The IT Governance Institute² defines Information Security Governance as "a subset of enterprise governance that provides strategic direction, make sure objectives are achieved, manages risk and uses organisational resources responsibility and monitors the success or failure of the enterprise security programme."

Overall, Information Security Governance requires organisational structure, the assigning of roles and responsibilities and defined measurements and tasks — all developed strategically and defined by the board of directors and executive management.



"How does a company deploy its resources most effectively to mitigate cyber-security risks to an acceptable level?" a piece in Bloomberg Government magazine³ asks. That's a question that only board-level decision makers can answer.

This paper aims to provide best practices and guidelines to implement strategic Information Security Governance successfully, including answers to the following questions:

- How is Information Security Governance defined?
- What are the misconceptions about Information Security Governance?
- ▶ Why is Information Security Governance important?
- Who is responsible for Information Security Governance?

WHAT INFORMATION SECURITY GOVERNANCE IS NOT

Information Security Governance should not be confused with IT management, which is primarily concerned with making tactical decisions to mitigate security risks.

Think of governance as determining who is authorised and responsible for making these security-related decisions. It is not the implementation of the policy, but the oversight and creation of the programme. It is not the enforcing of the policy (IT management's charter), but the enactment of the security policy. In short, Information Security Governance focuses on the strategic, not the tactical.

WHY IS INFORMATION SECURITY GOVERNANCE IMPORTANT?

Information Security Governance aims to set strategic measures to protect an organisation's information, which can be comprised of highly sensitive data and information: financial, legal, customer, partner, research and development, proprietary information and more. Organisations hold more and more data that could be valuable to competitors, or worse, criminals.

In recent years, cyber-criminals have made headlines with high-profile hacks and data breaches. From the Sony Pictures Entertainment hack, where criminals stole an estimated 100 terabytes of sensitive data⁴, to the Anthem Medical data breach⁵, all industries are vulnerable to an attack. A data breach can have damaging effects even long after the incident: legal liabilities, damage to brand reputation, lack of trust from customers and partners and associated revenue decreases. According to a 2016 Ponemon study⁶, the average cost of a data breach is \$4 million.

Strategic Information Security Governance is vital for all organisations to assure their customers, partners and employees that they are working with a secure company. As corporate data becomes more accessible to employees via mobile devices and the cloud, it is important for companies to keep up with security practices to make sure that the right employees have access to that data. And, of course, to make sure criminals don't have access to sensitive data.

WHO IS RESPONSIBLE FOR DEVELOPING INFORMATION SECURITY GOVERNANCE?

While security should be a concern for all teams and employees, leadership is responsible for establishing and maintaining a framework for Information Security Governance. Whether it is the board of directors, executive management or a steering committee — or all of these — Information Security Governance requires strategic planning and decision making.

TOP FIVE BEST PRACTICES FOR INFORMATION SECURITY GOVERNANCE

What follows are strategic solutions to better position an organisation for successful security governance:

1. Take a holistic approach to strategy: Before implementing Information Security Governance, take a unified view of how security has an impact on your organisation. A company-wide survey can help scope out what data needs to be protected. This can also help get early buy-in from key stakeholders.

Questions to address include:

- What data needs to be protected?
- ▶ Where are the risks?
- What strategic policies should be created?

Which teams should be responsible for carrying out these policies?

Security strategy is also about aligning and connecting with business and IT objectives. Get input from all stakeholders across the organisation — from the IT, sales, marketing, operations and legal departments — to understand their concerns and challenges, as well as to assess their skills and expertise.

Avoid cookie-cutter solutions and working in silos, which may create more obstacles and fragmented disparate security solutions. A holistic approach makes sure that the leadership — the creators of Information Security Governance — gain more levels of control and visibility.

2. Create awareness and training throughout the organisation: Setting Information Security Governance and then walking away can bring negative results, such as a lack of adoption, misunderstanding of policies, roles and responsibilities and security vulnerabilities. Continuous adherence to security governance requires awareness, education and training for all involved.

Security is not just a concern for IT. It's everybody's responsibility.

- Are your employees bringing their own devices to work?
- Are they using approved apps?
- What are their attitudes toward handling the company's sensitive data?

Frequent company-wide surveys, security seminars and education on security best practices are ways to keep security in mind for all employees.

Although developed by the board of directors, executive management and steering committees, Information Security Governance is for all employees in the organisation. Governance creates policies and assigns accountabilities, but each member is responsible for following the security standards.

Awareness, training and education for security best practices must be continued. For example, an organisation can send selected team members to security training conferences to learn the latest industry techniques. With the new knowledge gained, these individuals can then share their insights with the larger organisation.

- **3. Monitor and measure:** Information Security Governance requires constant assessment and measuring.
- ▶ What policies are working?
- ▶ Which policies are not?
- Which teams or individuals are not following the security policies?
- ► Are the number of security incidents having an impact on the company's reputation to customers and partners?

Measuring the performance on Information Security Governance efforts makes sure that objectives are being achieved and resources are managed appropriately.

- ▶ How often do you test your security measures?
- ▶ How often do data breaches occur?
- ▶ What is the response time for incidents?
- Which security policies are working and which ones are not?

For example, an organisation might hold mock data breach scenarios to see how well the teams hold up. The results can showcase what a company needs to work on and what they have nailed down.

4. Establish open communication between all stakeholders:

It's vital that all stakeholders feel they can communicate directly with leadership. Working in silos risks obfuscating important communication relating to security governance.

If a data breach occurs, do employees at any level of the organisation feel comfortable enough letting the leadership know? Or will they attempt to shield the top from any negative news?

Open communication promotes trust while augmenting visibility throughout the organisation. To further enhance engagement, consider creating a steering committee comprised of executive management and key team leads to review and assess current security risks. Members might include leaders from the IT, finance, PR, marketing, legal and operations departments. Regular steering committee meetings can make sure that there is ongoing adherence to the security policies. For example, if a new security policy is created, department leads, who are part of the steering committee, can make sure their teams implement the policy.

5. Promote agility and adaptability: The digital landscape is evolving rapidly as new platforms impact the way we do business. Your Information Security Governance, while establishing solid policies and guidelines, must be open to adaptation. An organisation should monitor and measure the overall strength of the security policies. Questions to ask include:

- What's working?
- What's not working?
- ▶ What can we change?

For example, an employee in the IT security trenches may have the hands-on experience and insights on the effectiveness of a particular security policy. If the leadership is receptive to hearing the team member's feedback and suggestions, there should also be agility in making those changes.

CONCLUSION

Successful Information Security Governance doesn't come overnight; it's a continuous process of learning, revising and adapting. While every company may have its specific needs, securing their data is a common goal for all organisations. Emerging technologies and cyber-threats will continue to evolve. Data breaches and security incidents will happen. Rather than scrambling after a security breach, organisations must put proactive and strategic Information Security Governance at the forefront. The goal for all companies should be to deliver information security and to reduce adverse impacts and risks to an acceptable level. Threats and incidents will occur, but with a strategic Information Security Governance plan in place, you strengthen your organisation's security posture while protecting your valuable information.

SOURCES:

- "Data Breach Reports," ITRC, 29 December 2015, http://www. idtheftcenter.org/images/breach/ DataBreachReports_2015.pdf
- "Information Security Governance: Guidance for Boards of Directors and Executive Management" 2nd Edition, IT Governance Institute, 2006, http://www.isaca.org/knowledge-center/research/documents/ information-security-govenance-for-board-of-directors-andexecutive-management_res_eng_0510.pdf
- "Why cyber is a boardroom issue," Tom Skypek, 21 April 2016.
 Bloomberg Government, http://about.bgov.com/blog/why-cyber-is-a-boardroom-issue/
- 4. "The Sony Hackers Still Have A Massive Amount of Data that Hasn't Been Leaked Yet," Business Insider, James Cook, 16 December 2014, http://www.businessinsider.com/the-sony-hackers-still-have-amassive-amount-of- data-that-hasnt-been-leaked-yet-2014-12
- **5.** "Insurance Giant Anthem Hit by Massive Data Breach," CNN Money, Charles Riley, 4 February 2015, http://money.cnn.com/2015/02/04/technology/anthem-insurance-hack-data-security/
- "2016 Cost of Data Breach Study," 2016 Ponemon Study, http:// www-03.ibm.com/security/data-breach/









Information Security Governance sets strategic measures to protect an organisation's information.

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