

Preface

Today, nearly every company uses the benefits of information technology and the Internet. Therefore, many companies are required to cope with cyberthreats. Only adequate cybersecurity safeguards can protect companies properly. Inadequate safeguards and subsequent breaches or outages can lead to tremendous financial losses and serious reputational damages.

The current big challenge is not the basic decision if a company should invest in safeguards, but, foremost, how much capital it should invest in safeguards. The priority should be to conduct the business safely without impairing the value creation of the company severely. Only the right balance between financial expenditures and risk mitigation helps a company to be solid and competitive in the long term.

In order to identify this balance, it is necessary to apply a multi-disciplinary approach that is located between computer sciences and economics. Only the skillful application and combination of knowledge from both fields can fully support the decision making for the selection of adequate safeguards. On the one hand, the background and provenance of cybersecurity is of great importance. A thorough understanding of information quality and value as well as related cybersecurity principles facilitates the selection and risk-based evaluation of safeguards. On the other hand, the foundations of investment management are essential to develop a reliable monetary assessment of safeguard benefits and costs. Practically proven decision techniques provide the basis for reasonable and transparent choices between multiple safeguards.

This professional book combines well-founded backgrounds on cybersecurity and investment management and, at the same time, delivers practical approaches from the economic point of view. It supports not only interdisciplinary experts but also technical and financial experts to handle cybersecurity investments in order to cope with current cyberthreats. A multi-disciplinary approach facilitates

comprehensible decisions before investing in cybersecurity safeguards. Besides, it helps to establish valuable knowledge for the decision-making process in the cybersecurity domain.

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