

# Cyber Security

An Introduction for Non-Technical Managers



**JEREMY SWINFEN GREEN**



# CYBER SECURITY

*This publication provides a detailed analysis of some of the key cyber security risks facing business today, and provides useful guidance on how to develop an effective strategy to address them.*

Andy Williams, Cyber Connect UK

*Advances in technology bring enormous benefits but also pose significant risks. Managing these risks will challenge all organisations, whatever their sector or size. This book is a welcome addition to the guidance available and, importantly, emphasises the role of behavioural issues as well as technical solutions to achieve effective cyber security.*

Carolyn Williams, The Institute of Risk Management

*Jeremy Swinfen Green has succeeded in creating a cybersecurity book that is both well written and uses the language of business management. This is just the right reference for managers who need to understand key cybersecurity concepts and threats and how they can manage the risks.*

Paul Dorey, Royal Holloway, University of London, UK;  
former CISO, BP PLC



# Cyber Security

An Introduction for  
Non-Technical Managers

Jeremy Swinfen Green  
*Mosoco Ltd, London, UK*



GOWER

© Jeremy Swinfen Green 2015

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without the prior permission of the publisher.

Jeremy Swinfen Green had asserted his right under the Copyright, Designs and Patents Act, 1988, to be identified as the author of this work.

Published by  
Gower Publishing Limited  
Wey Court East  
Union Road  
Farnham  
Surrey GU9 7PT  
England

Gower Publishing Company  
110 Cherry Street  
Suite 3-1  
Burlington, VT 05401-3818  
USA

[www.gowerpublishing.com](http://www.gowerpublishing.com)

### **British Library Cataloguing in Publication Data**

A catalogue record for this book is available from the British Library.

### **The Library of Congress has cataloged the printed edition as follows:**

Green, Jeremy Swinfen.

Cyber security : an introduction for non-technical managers / by Jeremy Swinfen Green.

pages cm

Includes bibliographical references and index.

ISBN 978-1-4724-6673-0 (hardback) -- ISBN 978-1-4724-6674-7 (ebook) -- ISBN 978-1-4724-6675-4 (epub) 1. Business enterprises--Computer networks--Security measures. 2. Computer security. 3. Corporations--Security measures. 4. Computer crimes--Prevention. I. Title.

HF5548.37.G737 2015

658.4'78--dc23

2015010130

ISBN 9781472466730 (hbk)

ISBN 9781472466747 (ebk – PDF)

ISBN 9781472466754 (ebk – ePUB)



Printed in the United Kingdom by Henry Ling Limited,  
at the Dorset Press, Dorchester, DT1 1HD

# Contents

Introduction 1

## **PART I INTRODUCING CYBER SECURITY**

1 Cyber Security and Cyber Risk 5

2 A Holistic Approach to Cyber Security 19

3 The Scope of Cyber Security 31

## **PART II THE MAIN THREATS TO CYBER SECURITY**

4 Systems Risks 47

5 People and Networks 67

6 Cloud Computing 79

7 Bring Your Own Device 89

8 Protecting People 101

9 Keeping Data Secure outside the Office 111

## CYBER SECURITY

10	Social Media Risk	123
11	Who is Stealing your Organisation's Identity?	141
12	Disposing of Data Safely	149
13	The Internet of Things	155

## **PART III MANAGING CYBER RISK**

14	Developing a Cyber Security Strategy	163
15	Picking the Right Team	171
16	Getting Prepared	175
17	Developing a Risk Register	181
18	Managing the Impact of Cyber Incidents	191
19	Responding to Incidents	199
20	Digital Governance	211
	<i>Afterword: Looking from the Past to the Future</i>	229
	<i>Glossary</i>	233
	<i>Index</i>	241

Cyber Security

Biblioteka Główna  
Akademii Sztuki Wojennej

26712/III (CB)



03-026712-000-0

*Czyt.*  
*004.056*

An Introduction to  
**JEREMY SWINFEN**

Cyber security involves the protection of organisations caused by cyber attacks, which can result in lost revenues and profits as well as indirect damage through lower employee morale, and reputational damage.

Cyber security is often thought to be the domain of the IT department, but in fact, cyber risks are found across organisations – as well as our lives in the homes of employees or the business systems of organisations.

In order to manage these threats, organisations need to take a holistic approach, employing appropriate technology to defend IT systems, but also strengthening business processes and addressing the understanding, motivation and behaviour of employees.

Ultimately cyber security is the responsibility of every single employee in an organisation from the newest intern to the Chief Executive. Unfortunately, many managers outside IT feel they are ill-equipped to deal with cyber risks or even to question IT specialists, and for this reason the damage from cyber incidents is often worse than it needs to be. This book aims to solve that problem. As well as offering practical advice that does not rely on any understanding of computer code or technology, the author guides readers through the processes that will enable them to identify and manage such threats and help protect their organisations.

**About the author**

**Jeremy Swinfen Green** is Director of digital transformation consultancy Mosoco Ltd.

He has over 20 years' experience of digital business. He was early into the digital media space, founding digital media agency Multimedia Dimensions in 1993, advising Omnicom on one of their first digital ventures BMP interAction in 1994 and joining Aegis as digital media director in 1995. He has advised a wide variety of public and private sector organisations on their digital business strategies. In addition as leader of several digital businesses, he has had hands-on experience of the issues surrounding cyber security, data compliance and business continuity as experienced by SMEs.

He is a member of the Performance and Finance Board of TechUK (the UK's trade organisation for the Technology Industry) and a member of the Institute of Risk Management's cyber security SIG.

Cover image: © maxkabakov / iStock.

**GOWER**  
www.gowerpublishing.com

ISBN 978-1-4724-6673-0

9 781472 466730