History of Computing

Founding Editor

Martin Campbell-Kelly

Series Editor

Gerard Alberts, Institute for Mathematics, University of Amsterdam, Amsterdam, The Netherlands

Advisory Editors

Gerardo Con Diaz, University of California, Davis, CA, USA Jack Copeland, University of Canterbury, Christchurch, New Zealand Ulf Hashagen, Deutsches Museum, München, Germany Valérie Schafer, ISCC, CNRS, Paris, France John V. Tucker, Department of Computer Science, Swansea University, Swansea, UK The *History of Computing* series publishes high-quality books which address the history of computing, with an emphasis on the 'externalist' view of this history, more accessible to a wider audience. The series examines content and history from four main quadrants: the history of relevant technologies, the history of the core science, the history of relevant business and economic developments, and the history of computing as it pertains to social history and societal developments.

Titles can span a variety of product types, including but not exclusively, themed volumes, biographies, 'profile' books (with brief biographies of a number of key people), expansions of workshop proceedings, general readers, scholarly expositions, titles used as ancillary textbooks, revivals and new editions of previous worthy titles.

These books will appeal, varyingly, to academics and students in computer science, history, mathematics, business and technology studies. Some titles will also directly appeal to professionals and practitioners of different backgrounds.

Ashley Sweetman

Cyber and the City

Securing London's Banks in the Computer Age



Ashley Sweetman King's College London London, UK

ISSN 2190-6831 ISSN 2190-684X (electronic) History of Computing ISBN 978-3-031-07932-0 ISBN 978-3-031-07933-7 (eBook) https://doi.org/10.1007/978-3-031-07933-7

© Springer Nature Switzerland AG 2022

This work is subject to copyright. All rights are reserved by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

The publisher, the authors and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, expressed or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

This Springer imprint is published by the registered company Springer Nature Switzerland AG The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

Acknowledgements

This book is based upon my PhD research undertaken in the Department of War Studies at King's College London. For this comprehensive schoolboy from Neath, South Wales, writing those words still feels surreal.

There are so many to thank for their support along the way, including the official – who shall remain unnamed – who prompted this work by suggesting there was little understanding in government of what might happen should a bank collapse as a result of a cyberattack.

Thanks must go to Michael Goodman, Thomas Rid, Jon Agar, Richard Aldrich and John Ferris, all of whom provided support and input to this and related work as either supervisors, external examiners or interested reviewers. Thanks also to Peter Hennessy, whose writing of contemporary history provided the ultimate inspiration, and whose tea, cake and wisdom have always been gratefully received. The same must also be said for Mark, with whom many hours have been spent ruminating on cyber security, and the world, over hot chocolate.

Studying for a PhD was made far easier by being part of a cohort in the form of my Strand Group colleagues. Jack, Michelle, Martin, Eleanor and Jan all provided fun and friendship, and a commitment to teaching and writing contemporary history that was infectious. The Strand Group's visiting professors, including Iain Lobban and Simon Case, must also be thanked for sharing what they could of their knowledge and experience.

Conversations with experts have also provided vital background to this work. Among those to be thanked are Gordon Corera, Jeffrey Yost, Will Dixon, Paul Dorey, Mark Waghorne, Fred Piper and Maria Vello. I am grateful to all at Springer for their work in pushing this book through to publication.

It would be an understatement to say that meeting Jon Davis was a pivotal moment in my academic career. Thank you, Jon, for the patience to read multiple versions of this work along the way, for the opportunity to pursue postgraduate study at all, and for your friendship.

To all four of my parents, and to Amie and Lydia, I could not be more grateful for your love and support in all its forms.

And finally, Elle – for absolutely everything, including finding me a place at the Mile End Group event which set me on this path – thank you.

Contents

1	Introduction	
2	The London Clearing Banks and Computer Security: 1960–1977	25
3	BACS: 1971–1980	67
4	SWIFT: 1972–1984	91
5	Consolidating Growth: 1978–1985	115
6	CHAPS: 1972–1984.	133
7	Hacking It: 1985–1995	183
Co	nclusion	209
Bil	hliography	221