CONTENTS

List of figures viii
List of tables x
Contributors xi

Introduction to Handbook of Accounting Information Systems 1
Erik Strauss and Martin Quinn

PART 1
The accounting information systems discipline 7

1 Introduction to accounting information systems 9
   Peter Cleary

2 The evolution of accounting information systems 21
   Pierangelo Rosati and Victoria Paulsson

3 Technologies underpinning accounting information systems 33
   Gerhard Kristandl

4 Developing information systems for the contemporary accounting profession: Challenges and recommendations 50
   Andrea Crean and Noel Carroll

5 AIS as a catalyst for change 63
   Krister Bredmar
PART 2  
Organisational effects of accounting information systems  

6 Clarifying digitalisation: Strategy, transformation, and implementation  
\textit{Daniel Schallmo and Christopher Williams}  

7 Accounting information systems and decision making  
\textit{Markus Granlund and Henri Teittinen}  

8 Accounting information systems and continuous improvement  
\textit{Winnie O’Grady and Sharlene Biswas}  

9 The dynamics of Artificial Intelligence in accounting organisations: A structuration perspective  
\textit{Othmar M. Lehner, Carina Knoll, Susanne Leitner-Hanetseder and Christoph Eisl}  

10 Outsourcing of accounting information systems  
\textit{Benoit A. Aubert and Jean-Grégoire Bernard}  

11 Technological developments and new hybrid roles in accounting and finance  
\textit{João Oliveira and Paulo J. Ribeiro}  

12 Predictive analytics in accounting information systems  
\textit{Esperanza Huerta and Scott Jensen}  

13 Coding skills for accountants  
\textit{Bibek Bhatta and Martin R. W. Hiebl}  

14 Novel visualisation techniques to understand AIS data  
\textit{Lisa Perkhofer, Peter Hofer, and Heimo Losbichler}  

PART 3  
Controlling accounting information systems  

15 Data security and quality  
\textit{W. Alec Cram}  

16 Continuous auditing: Developments and challenges  
\textit{Maria Céu Ribeiro and João Oliveira}  

17 The status of robotic process automation  
\textit{Steven A. Harrast and David A. Wood}
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>Accounting information systems: Supporting business strategy</td>
<td>285</td>
</tr>
<tr>
<td></td>
<td><em>Victoria Paulsson and Malcolm Brady</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>PART 4</strong></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Future directions of accounting information systems</td>
<td>301</td>
</tr>
<tr>
<td></td>
<td><strong>Integrating AIS and contemporary technologies</strong></td>
<td>303</td>
</tr>
<tr>
<td></td>
<td><em>Brenda Clerkin and Danielle McConville</em></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Technology, the future, and us</td>
<td>318</td>
</tr>
<tr>
<td></td>
<td><em>Tadhg Nagle</em></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Challenges to technology implementation</td>
<td>329</td>
</tr>
<tr>
<td></td>
<td><em>Pierangelo Rosati and Theo Lynn</em></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>New developments in information technology: A further call for action</td>
<td>349</td>
</tr>
<tr>
<td></td>
<td><em>Joan Ballantine and Robert D. Galliers</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Index</strong></td>
<td>363</td>
</tr>
</tbody>
</table>