Contents

Preface .........................................................................................................................3
Executive summary ........................................................................................................4
Innovation case studies and examples ..............................................................................6
Introduction ...................................................................................................................7
Interview with the author ...............................................................................................14
Section 1: Innovation trends ..........................................................................................15
Section 2: Innovation and digital transformation ..............................................................21
Section 3: The impact of disruptive technologies ..............................................................27
Section 4: The application of disruptive technologies ......................................................33
    Advanced analytics and big data .............................................................................34
    Artificial intelligence ...............................................................................................36
    Open APIs .............................................................................................................38
    Blockchain/Distributed Ledger .................................................................................40
    Mobility and wearables ..........................................................................................43
    Other potentially disruptive technologies ...............................................................44
Section 5: A regional view of the research findings ..........................................................45
Innovation case studies .................................................................................................49
    Alior Bank .............................................................................................................50
    Bradesco ...............................................................................................................52
    Deutsche Bank .......................................................................................................54
    Kreditech ..............................................................................................................55
    UniCredit ..............................................................................................................57
Conclusions .................................................................................................................59
About the research ..........................................................................................................61
Online survey questions ................................................................................................62
About us .......................................................................................................................64
Preface

Efma and Infosys Finacle are proud to present the eighth annual study of innovation in retail banking. The theme of this year’s study is the emergence of new banking business models and how disruptive technologies are driving the latest developments in the industry.

We are seeing a continuation of recent innovation trends with banks making innovation a strategic priority and investing more to boost their innovation performance and counter threats from new players. While start-ups can be one of those threats, working in partnership with innovative start-ups has become a well-established strategy over the past couple of years.

Disruptive technologies are helping to accelerate the digitalization of banking and also to spur changes to banking business models. We are only just starting to see the impact of these and expect that the changes will accelerate over the next 2 to 3 years. We are already seeing a large number of start-ups and established banks launch digital only banks which can operate off a much lower cost base and provide a very different customer experience.

Regulators are also pushing for changes in the industry and are forcing the pace for the development of open APIs. These will allow new players to develop innovative services and again force banks to consider their business models. The good news is that banks are responding and more are opening innovation labs and investing in research and development.

Our study is a global study and it is striking that developments are so similar across the world. Of course there are differences in some emerging markets where infrastructure is less well developed and hence the focus is on innovation in mobile payments and basic banking services, often led by mobile operators as well as banks. Nevertheless, there are interesting examples of disruptive technologies being deployed in these markets such as machine learning in credit scoring applications.

Finally, we would like to thank all the banks who participated in the innovation survey and who agreed to be interviewed for the study. These insights are invaluable and we hope that our readers find the study to be of practical use.
Executive summary

A combination of factors is leading to the development of new business models in banking – disruptive digital technologies are emerging and being deployed in real applications, and innovative start-ups are transforming all different aspects of retail financial services. Threats to established players are coming from multiple sources but most banks are responding with more investment in innovation and in technologies like artificial intelligence. They are also partnering with innovative start-ups, or acquiring innovative start-ups. The trends we have observed are consistent around the world hence banks should have a global perspective when considering innovation trends and developments.

Focus on innovation continuing the recent trends
A majority of banks (74%) say that they have an innovation strategy which is around the same level as last year. However, innovation investment is not increasing as much as it was with only 78% of banks saying they are increasing innovation investment compared to 86% last year.

Most banks (69%) believe they are becoming more innovative, although the self-assessed innovation performance scores by area and overall have more or less plateaued. At the same time there is room for improvement – for example only about a quarter of banks believe their innovation performance is high.

The trend to work with innovative start-ups is growing. Over 40% of banks say they work with start-ups as suppliers and around 30% of banks are investing in start-ups or working with start-ups in accelerators/incubators.

Innovation and digital transformation closely linked
As a strategy for supporting digital transformation, a growing number of banks, around 20%, are now launching or considering launching a digital bank as a parallel bank to the existing operation. A small minority of around 5% are also acquiring or considering acquiring a digital only banking business.

For those banks launching digital only banks, 85% will have different products and services, and 81% will have different channel applications and back office technology and processes from the core bank. The vast majority will use the same banking license as the parent company.

The priorities for banks in their digital transformation are creating a customer-centric organisation (for 78% of banks), enhancing channels to give an omnichannel digital experience (for 74% of banks), and maximising usage of mobile and social technologies (for 68% of banks).

The biggest barrier to digital transformation is the legacy technology environment according to 50% of banks. The lack of a unified vision for digital is considered a barrier by 44% of banks, and the lack of skills and experience is considered a barrier by 38% of banks.

Disruption threats high but not increasing
The threat of industry disruption from technology companies is believed to be high by 48% of banks. A similar number, 47%, perceive the threat from start-up challenger banks to be high. Overall, the threat level from new competitors is perceived to be similar to last year.

The most disruptive technologies for the industry are believed to be advanced analytics and big data, open APIs, and artificial intelligence. Most banks say these are having a significant impact now or will do over the next 2 years except for artificial intelligence where the impact is likely to take longer.
Blockchain/distributed ledger technologies are expected to have an impact by fewer banks (only 47%) and over a longer time. Internet of Things is expected to have a significant impact by only 38% of banks.

In order to access these technologies, 74% of banks say that working with innovative start-ups as suppliers or partners is of high relevance. Also of high importance is internal research and development according to 46% of banks.

**Convergence of innovation trends and developments across regions**

Banks in low income countries are lagging in terms of their adoption of an innovation strategy but more are increasing investment in innovation than banks from middle or high income countries. They are also less concerned about the impact of disruptive technologies and are therefore unlikely to be currently focused on working with technologies like open APIs or artificial intelligence.

It is very clear that common developments are taking place in all parts of the world with the launch of digital banks, alternative lenders and various kinds of payment systems. This is happening in countries ranging from the United States to Brazil, China, Australia and South Africa. How these developments are taking place does vary to some extent, with technology and e-commerce companies taking a lead in China for example.
About us

Efma

As a global not-for-profit organisation, Efma brings together more than 3,300 retail financial services companies from over 130 countries. With a membership base consisting of almost a third of all large retail banks worldwide, Efma has proven to be a valuable resource for the global industry, offering members exclusive access to a multitude of resources, databases, studies, articles, news feeds and publications. Efma also provides numerous networking opportunities through working groups, webinars and international meetings. True to its vocation, Efma has recently developed an Innovation portal which aims to identify and award the most innovative projects in the retail financial services arena.

For more information: www.efma.com

Infosys

EdgeVerve Systems, a wholly owned subsidiary of Infosys, develops innovative software products and offers them on-premise or as cloud-hosted business platforms. Our products help businesses develop deeper connections with stakeholders, power continuous innovation and accelerate growth in the digital world. We power our clients’ growth in rapidly evolving areas like banking, digital marketing, interactive commerce, distributive trade, credit servicing, customer service and enterprise buying.

Finacle is the industry-leading universal banking solution from EdgeVerve Systems. The solution helps financial institutions develop deeper connections with stakeholders, power continuous innovation and accelerate growth in the digital world. Today, Finacle is the choice of banks across 94 countries and serves over 848 million customers – nearly 16.5 percent of the world’s adult banked population. Finacle solutions address the core banking, e-banking, mobile banking, CRM, payments, treasury, origination, liquidity management, Islamic banking, wealth management, and analytics needs of financial institutions worldwide. Assessment of the top 1000 world banks reveals that banks powered by Finacle enjoy 50 percent higher returns on assets, 30 percent higher returns on capital, and 8.1 percent points lesser costs to income than others.

For more information: www.finacle.com

About the author

Michael Pearson is a strategy and corporate development expert with 30 years’ experience working for and advising financial institutions worldwide, developing new ventures, and investing in start-ups. Michael founded Clarus Investments in 2006 to advise financial institutions on strategy and to invest in early stage ventures. Michael is also the author of the Efma Yearbook, which is an analysis of trends in the global retail banking industry. Michael has an MBA from Harvard Business School.
All Rights Reserved. Efma, EdgeVerve Systems Limited, Infosys Finacle, their services mentioned herein as well as their respective logos, are trademarks or registered trademarks of their respective companies. All other company, product and service names and logos mentioned are the trademarks of their respective owners and are used herein with no intention of trademark infringement. No part of this document may be reproduced or copied in any form or by any means without written permission from Efma and Infosys Limited.

Disclaimer

The information contained herein is general in nature and is not intended, and should not be construed, as professional advice or opinion provided to the user. This document does not purport to be a complete statement of the approaches or steps, which may vary accordingly to individual factors and circumstances, necessary for a business to accomplish any particular business goal.

This document is provided for informational purposes only; it is meant solely to provide helpful information to the user. This document is not a recommendation of any particular approach and should not be relied upon to address or solve any particular matter. The information provided herein is on an “as-is” basis. Infosys and Efma disclaim any and all warranties of any kind.
Innovation in Retail Banking

October 2016