General Council for Islamic Banks and Financial Institutions

المجلس العام للبنوك والمؤسسات المالية الإسلامية

CIBAFI

Global Islamic Bankers' Survey

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Beyond Digitalisation: Fintech & Customer Experience

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About the General Council for Islamic Banks and Financial Institutions (CIBAFI)

CIBAFI is an international non-profit organisation established in 2001 and headquartered in the Kingdom of Bahrain. CIBAFI is affiliated with the Organisation of Islamic Cooperation (OIC).

CIBAFI represents the Islamic financial services industry globally, defending and promoting its role, consolidating co-operation among its members, and with other institutions with similar interests and objectives.

With over 130 members from 34 jurisdictions – representing market players, international intergovernmental organisations, professional firms, and industry associations – CIBAFI is recognised as a key institution in the international architecture of Islamic finance.

In its mission to support the Islamic financial services industry as the leading industry's voice in advocating regulatory, financial and economic policies that are in the broad interest of its members and that foster the industry's development and sound practices, CIBAFI is guided by its Strategic Objectives, which are 1) Advocacy of Islamic Finance Values and Related Policies and Regulations, 2) Research and Innovation, and 3) Training and Professional Empowerment.

CONTENTS

Acronyms

AAOIFI	Accounting and Auditing Organisation for Islamic Financial Institutions
AI	Artificial Intelligence
AML	Anti-Money Laundering
API	Application Programming Interface
ATM	Automated Teller Machine
BI	Business Intelligence
CBR	Correspondent Banking Relationships
CFT	Counter Financing of Terrorism
DLT	Distributed Ledger Technology
Fintech	Financial Technology
GCC	Gulf Cooperation Council
HR	Human Resources
IFI	Islamic Financial Institution
IFRS	International Financial Reporting Standards
IT	Information Technology
KYC	Know Your Customer
MENA	Middle East North Africa
ML	Machine Learning
NPL	Non-Performing Loan
P2P	Peer to Peer
QR	Quick Response code
SME	Small Medium Enterprises

List of Tables

List of Figures

Statement by the Secretary General

Welcome to the fifth annual CIBAFI survey report. We hope this survey report will serve as an industry tool to provide both the background context for the Islamic financial industry and the framework for its progress in the coming years. The theme for this year's survey report is "Beyond Digitalisation: Fintech and Customer Experience". As the theme indicates, this year's survey addresses issues which are relevant and trending – it evaluates Islamic banks' adoption of financial technologies (Fintech) with a deep dive into current practices and challenges. It also looks at the current practices of Islamic banks in relation to customer experience.

This year's report is released under special circumstances, as the whole world is facing the global COVID-19 pandemic. It is important to note that the data analysed in this survey, from 101 Islamic banks in 35 different countries, were collected at the end of 2019 and early 2020, and as such the findings and perspectives presented were not yet influenced by the economic impact of COVID-19. Thus, except for the revenue growth expectations, other findings remain valid.

The current situation demonstrates the need and the importance of technology for different sectors including the Islamic banking sector. Within today's fast-changing and challenging environment, financial technology is a key element for the prosperity and development of the finance industry. Islamic banks thus need to embrace the benefits that come with the adoption of this technology, and manage the associated risks.

For Islamic banks in particular, it is important to increase awareness on the new technological trends and advancements, and accelerate the adoption process, in order to sustain and reinforce their position in a competitive market where customer demands for innovative services are ever-increasing, and where customers continuously expect more efficient and improved banking experiences.

These, and many more issues, are addressed in the survey by the top banking officials who share their opinions in detailed written responses. CIBAFI extends its warmest thanks to the banking officials who took the time to participate and share their views in the survey.

We hope that this report will help paint a clearer picture of the Islamic finance industry as we forge ahead into the coming years.

Dr. Abdelilah Belatik
Secretary General

Acknowledgements

The Secretariat would like to convey its sincere thanks to its member and non-member banks and financial institutions who took part in the survey and provided their valuable inputs.

We also express our gratitude to the individuals who have contributed in making this report a success. We would like to appreciate Asmaa Mansour, Maribel Lim, Dr. Muhammad Bilal, Rachid Ettaai, Zainab AlOwainaty from the CIBAFI Secretariat, and Peter Casey, CIBAFI consultant for their contributions and efforts in the different phases of production of this report. We are also thankful to Dr. Abdurrahman Yazici, Social Sciences University of Ankara, Prof. Dr. Ahmet Faruk Aysan, Istanbul Sehir University, Dr. Dalal Aassouli, Hamad bin Khalifa University, Samir Safa, Islamic Finance and Technology Practitioner, Mehmet Fehmi Eken, Islamic Development Bank, Peter Szalay as well as Path Solutions for providing valuable feedback and comments to the survey over the course of its preparation.

CIBAFI would also like to express its appreciation to its Knowledge Partner, DDCAP Group for their financial support.

We trust that the report will provide valuable insights to the Islamic bankers around the globe in measuring the pulse of the Islamic financial industry, as together, we drive it towards greater paths of success.

Dr. Abdelilah Belatik
Secretary General

Executive Summary

The CIBAFI Global Islamic Bankers' Survey 2020 has particularly focused on Fintech and its related issues. Fintech is the huge challenge facing the Islamic banking industry as it tries to keep up with the demand for more efficient ways to bank and means to improve customer experiences with user-friendly products and services.

Fintech has revolutionised the global financial industry – it has not merely changed the way consumers interact with their banking institutions, it has also upended long-established business practices and internal workflows. For many leading banking institutions around the globe, these changes have been met with elements of commotion and some growing pains.

Fintech embraces everything from high-speed algorithmic trading in financial markets to delivery of small-scale payment services through smartphones. Some of these activities involve new business models, for example, peer-to-peer lending; others involve improving the efficiency and effectiveness of existing business models, for example, the use of distributed ledger technology to improve back-office record-keeping.

Today, more than just financial services, banks are using the power of big data, Artificial Intelligence (AI), cloud, blockchain, machine learning and open banking to deliver experiences similar to those offered by technically-advanced firms in other industries.

Islamic banks, in the quest to improve their market positions and compete with their (Islamic and conventional) counterparts, are also moving beyond simple digital transformation, and embracing Fintech solutions. Against the backdrop of such an environment, there could be no better time to undertake a survey with the theme: "Beyond Digitalisation: Fintech and Customer Experience", the results of which make for fascinating reading.

Financial technologies and their impact on the banking business is an issue we previously covered in the Global Islamic Bankers' Survey (GIBS) 2018, and it is interesting to see how banks' views have changed in the last two years. Given the exponential pace of change in banking, this year, our survey took a more in-depth look into the issue, specifically at the level of Fintech adoption by Islamic banks, the structural changes that were undertaken for its adoption, the impact on banks' operations and activities as well as the plans of Islamic banks for the coming years.

The survey also looked at customer experiences in Islamic banks, particularly focusing on the key elements which impact on elevating customer experience, including the main obstacles that hinder improvements, and plans of Islamic banks for improving customer engagement in the coming years.

Islamic banks from all regions have indicated a modest positive level of optimism which is reflected in the banks' expectation on the revenue growth and the future of Islamic banking.

This cautious optimism is explicable owing to the global economic slowdown experienced in 2019 and the geopolitical issues that characterise the different regions.

The banks also shared their top concerns for the near future, with information technology appearing as the most challenging concern for banks in 2020. Islamic banking leaders who responded demonstrated that they are not only aware of the need to upgrade their operating systems and enhance the security controls around information technology, but they are also preparing the action plans needed to overcome the challenges and to harness benefits from the opportunities in coming years.

Another concern shared by Islamic banking officials is consumer attraction, relation, and retention. This is understandable in the highly competitive financial industry which is focused on new customer acquisition, expanding product penetration among existing customers and enhancing the customer experience. Banks are now facing competition from not only conventional and other Islamic banks, but also from the emergence of unconventional, Fintech-based business models. However, it is interesting to note that industry leaders are well aware of these concerns and are devising appropriate policies and strategies to overcome the challenges in the next one to three years.

The risk dashboard this year showed the biggest risk as being technology risk and cybersecurity risk, followed by credit risk and liquidity risk. It is not at all surprising that technology risk and cybersecurity risk appear strongly as the top risks for Islamic banks as they now affect virtually all aspects of a bank's business. The more entrenched Fintech becomes within a bank's systems and operations, the more exposure the bank has to technology risk and cybersecurity risk e.g. data management, malware, hacking, and spoofing attack.

Credit risk also poses a serious risk to several Islamic banks. This may be the result of a significant period of low oil prices and problems in the real estate markets of some countries, or it may be a fear factor, resulting from the global economic slowdown. Moreover, Islamic banks in some regions e.g. GCC, West, Central, and South Asia, Sub-Saharan Africa and North Africa also face higher credit risk due to the financial challenges and political turbulence that could affect the value of the guarantees provided by their customers.

But nothing showed how different geographies were affected by risk in different ways more plainly than the issue of de-risking risk, i.e. the closure of correspondent banking (CBR) relationships by risk-averse partners. The region that is most affected with a decline in CBR is North Africa where 38% of Islamic banks reported a "significant decline". About 50% of Islamic banks in the West, Central, and South Asia indicated that they had experienced "no significant change" in business because of de-risking. However, 13% of Islamic banks in GCC and 15% of Islamic banks in Middle East ex-GCC, as well as 20% of banks in Sub-Saharan Africa indicated that they had seen either significant or some decline in CBR.

On the adoption of Fintech, it was encouraging to find that 52% of Islamic bankers believe that the industry is at the same level of Fintech adoption as conventional banks, while 26% believe it is 'somewhat ahead' or 'very ahead'. The technologies dominating these views of Islamic banks are mobile banking and, for some, the related technology of open banking, especially in jurisdictions where open banking is being driven by regulation.

Islamic banks also shared that the technical skills of employees are the most significant requirement to adopt Fintech solutions while the operational areas most affected by the integration of Fintech were payment and settlement.

On the advantages that Fintech brings to Islamic banks, for operational advantages, both efficiency and scale featured the most prominent. It is interesting to see that the larger banks saw somewhat more advantages in Fintech adoption compared to smaller ones. They also gave noticeably higher priority to provide greater access to customers of a younger age demographic. It was noted that some of these banks are in countries where the aspiration, especially among younger adults, is to have and use the latest digital technology.

Many Islamic banking leaders believe that cybersecurity and data protection is the prime challenge for banks in Fintech adoption. In this case, regional divergences were more interesting than the size of banks, where both Southeast Asia and Europe seemed to have markedly lower concerns on cybersecurity and data protection than other regions, while the GCC and Europe had lower concerns with local infrastructure. With regard to actions that institutions were taking to overcome the challenges, many industry leaders stated investment or digital transformation strategies.

The survey also had intriguing insights on how Islamic banks see the significance of customer experience. About 90% of industry leaders are aware of the importance of customer experience and think that it is, either "substantial" or to a "very great extent", at the centre of the institution's activities. In coping with these challenges, banks shared their leading practices to improve customer experience e.g. product diversification, employee training and monitoring, use of social media, self-service-banking through digital platforms, and increasing security.

What comes across very clearly is that a growing proportion of customers expect banking services to be delivered digitally. Islamic banks recognise the need to meet this expectation and, in some way, to personalise their digital interactions with customers. Many banks are using customer categorisation and offering customers a more personalised experience through product flexibility, personalised communications, marketing and customer relationship management platforms.

The publication of the survey findings will allow banks to compare their strategies with their peers. More importantly, this report provides the foundation for industry leaders to look beyond digitalisation and embark on (or improve) plans for Fintech adoption, and enhancement of customer experience for the next year and beyond.

CIBAFI'S GLOBAL ISLAMIC BANKERS' SURVEY

Introduction

We are pleased to present CIBAFI's fifth Global Islamic Bankers' Survey, presenting compiled information on the state of Islamic banking from multiple dimensions and allowing CIBAFI, and the industry, to examine how the changes and evolution of the data (and industry) over the years. The data was gathered and analysed before the COVID-19 outbreak started impacting the global economy. While it is inevitable that banks' perspectives have been changed by the pandemic, its economic impacts remain profoundly uncertain. Having said that, there are still many nuggets from the survey that remain valid to stimulate intellectual discourse, and guide future actions.

The theme of the 2020 survey is "Beyond Digitalisation: Fintech and Customer Experience". This theme builds upon previous years' themes of "Sustainability, Growth Drivers, and the Regulatory Challenge" (2019), "Evaluating Future Impacts: Strategic Thinking, Branding and Financial Technologies" (2018), "Confidence, Risk and Responsible Business Practices" (2016), and "Risk Perception, Growth Drivers and Beyond" (2015).

> *We are pleased to report, once again, a substantial number of responses this year – 101 responses from Islamic banks in 35 different countries.*

A Comprehensive Survey

The CIBAFI Global Islamic Bankers' Survey was introduced in 2015. In its fifth instalment, we are pleased to report, once again, a substantial number of responses this year – 101 responses from Islamic banks in 35 different countries. Although a little lower compared to the 2019 survey (106 responses), the 2020 responses still represent a significant improvement from the 83 responses from 35 countries received in 2015. Furthermore, the reduction this year is largely due to a smaller number of responses from entities that are not, strictly speaking, Islamic banks. This makes this year's data clearer and more focused on the priorities and concerns of the Islamic banking community. Together with the data gathered in 2015, 2016, 2018 and 2019, this new set of data helps provide a comprehensive scope of both the progress made and the challenges faced by Islamic banks over the period. The survey also aims to shed light on emerging trends in Islamic finance, allowing the industry to be better prepared for the years ahead.

This year, the survey comprised four main areas:

- The CIBAFI Islamic Banking Confidence Index;
- The CIBAFI Islamic Banking Risk Dashboard;
- Fintech Adoption within Islamic Banks; and
- Customer Experience within Islamic Banks.

CIBAFI hopes that the results of the survey will provide Islamic financial institutions a comprehensive picture of the industry's ever-changing landscape, as well as insights on Islamic banks' view and adoption of Fintech and customer experience's elevation. This report also aims to give a deeper look into current practices and challenges faced.

Table 1. **Respondents by Region and Country**

Group	Region	Respondent's Countries	Number of Respondents (Islamic banks) in this Group
Group 1	**GCC**	Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, UAE	**16**
Group 2	**Middle East ex-GCC**	Egypt, Iraq, Jordan, Palestine, Syria, Yemen	**22**
Group 3	**Southeast Asia**	Indonesia, Malaysia	**7**
Group 4	**West, Central, and South Asia**	Afghanistan, Bangladesh, Pakistan, Sri Lanka	**14**
Group 5	**North Africa**	Algeria, Libya, Morocco, Sudan, Tunisia	**27**
Group 6	**Sub-Saharan Africa**	Burkina Faso, Djibouti, Guinea, Kenya, Mauritania, Nigeria, Somalia, South Africa	**8**
Group 7	**Europe**	Bosnia Herzegovina, Germany, Turkey, UK	**7**
Total number of Respondents (Countries and Banks)		**35 Countries**	**101 Islamic Banks**

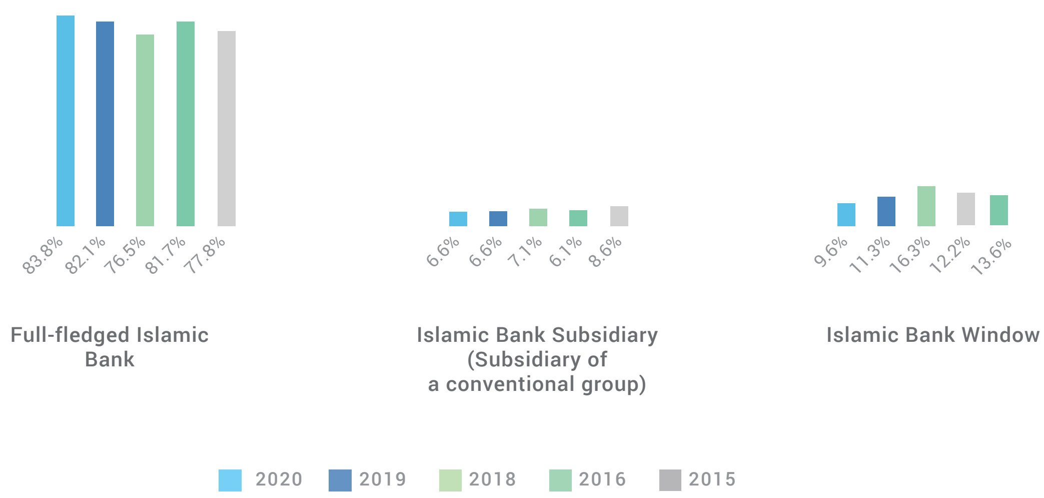
The distribution of responses this year is somewhat different from that of 2019. For example, there is a reduced percentage of responses from the GCC and an increased percentage from West, Central and South Asia. This needs to be taken into consideration when comparing aggregate data on subjects where there are material regional differences.

Survey Methodology

The CIBAFI Secretariat sent questionnaires to the CEO's offices of CIBAFI member and non-member Islamic banks, and final responses were received in February 2020. The survey, therefore, reflects the views of the Islamic banking community for the period of end-2019 to the beginning of 2020.

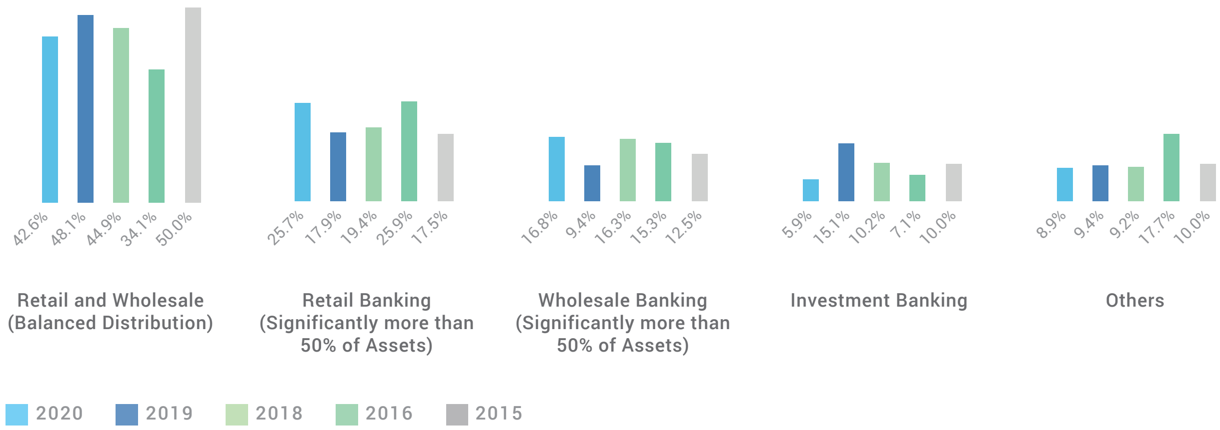
As in previous years, in Parts I and II of the survey, questions were predominantly related to confidence, concerns and perceived risks. In Parts III and IV, questions were related to current practices and challenges faced, especially with regard to the adoption of financial technologies and customer experience's elevation. This allows readers to track the changes and development of attitudes over time. All parts of the survey comprised both closed- and open-ended questions. The open-ended questions allowed industry leaders to share their insights, with more in-depth and detailed written responses. The responses of the questions in the general information section show that this year, around 84% of the respondents were full-fledged Islamic banks, 7% were Islamic bank subsidiaries, and around 10% were Islamic banking windows of conventional banks.

fig 1. **Global Banking Operations**



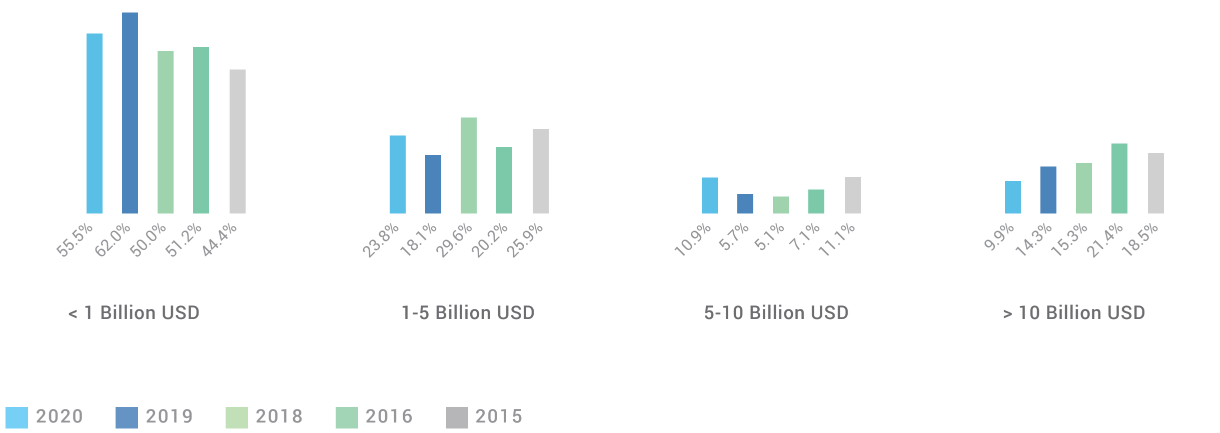
Somewhat less than half (43%) of respondents indicated that the bulk of their activities are both retail and wholesale with balanced distribution, while 26% indicated that significantly more than 50% of their assets lie in retail banking. Another 17% mainly deal with wholesale banking, while 6% of respondents indicated that investment banking is their core business. The remaining 9% of respondents deal in other types of businesses.

fig 2. **Global Core Business**



Similar to the previous year, the majority of respondents are managing Islamic assets totalling less than USD 1 billion – 55% compared to 2019's response of 62%. Meanwhile, less than a quarter of respondents (24%) said their assets are between USD 1 to 5 billion compared to 2019's response of 18%. A significant increase is noted this year in respondents (11%) having assets totalling between USD 5 to 10 billion compared to almost 6% last year. The remaining 10% respondents are managing assets over USD 10 billion.

fig 3. **Size of Total Islamic Assets**



PART I

CIBAFI ISLAMIC BANKING CONFIDENCE INDEX

CIBAFI Islamic Banking Confidence Index

The Trend of Positivity Continues

This year's survey is the fifth edition from which CIBAFI has undertaken to produce the CIBAFI Islamic Banking Confidence Index. This index has proven vital in demonstrating financial institutions' confidence in the Islamic banking sector, both globally and within the context of different jurisdictions in varied geographical locations.

In understanding the index, the results with a score of 1.00 is classified as "extremely pessimistic", 2.00 as "pessimistic", 3.00 as "fairly optimistic", 4.00 as "very optimistic", and 5.00 as "extremely optimistic".

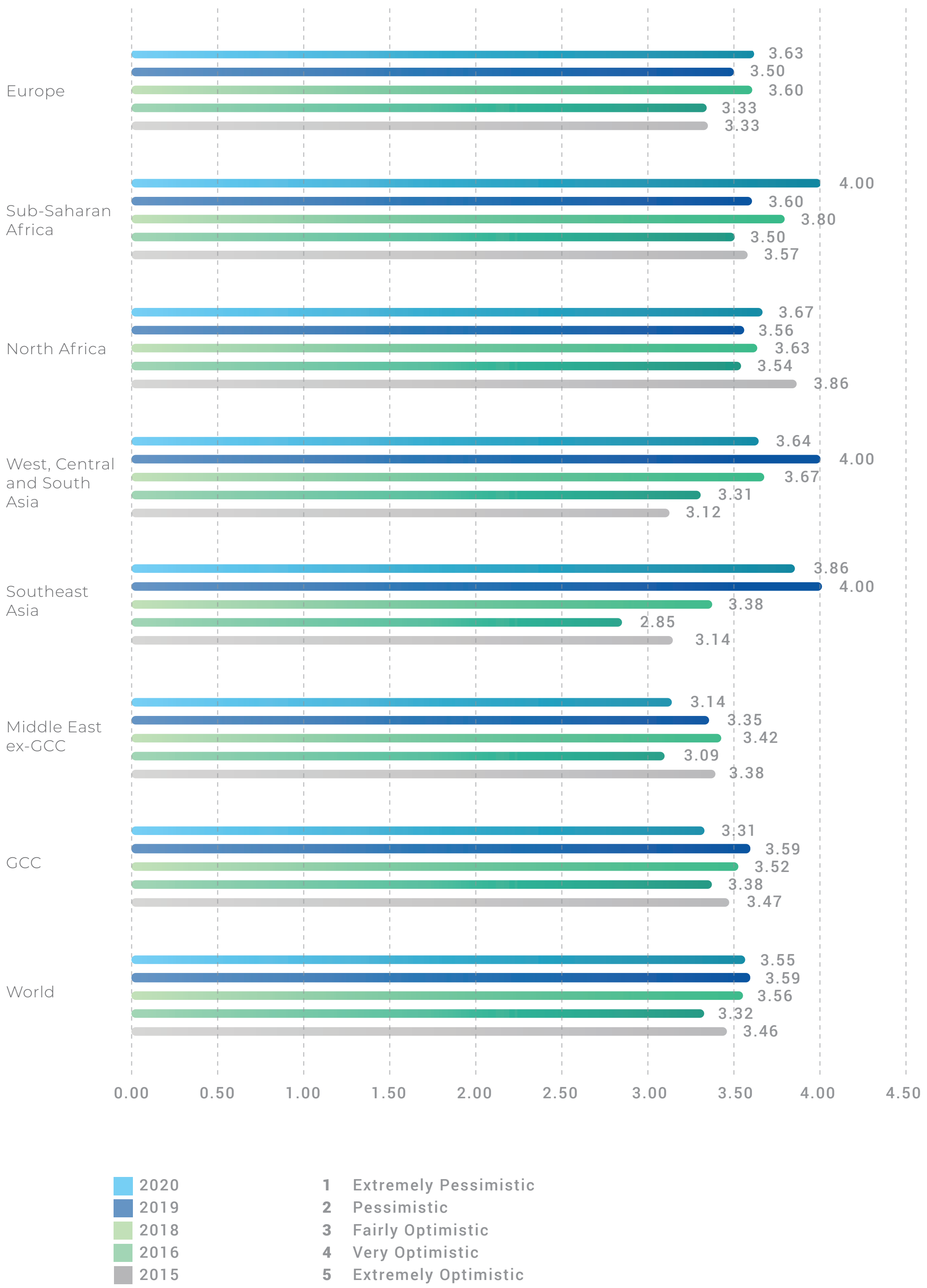
Institutions' Overall Outlook on the Future of the Financial Sector

When asked the question, "How optimistic are you about the future of banking in your jurisdiction in 2020?", the overall trend of the institutions' responses was positive. Globally, the responses averaged 3.55, which is not significantly different from the score of 3.59 in both 2019 and 2018. However, the score is seen as a positive upward trend from the 2016 and 2015 scores of 3.32 and 3.46, respectively.

Countries with the most notable increases in optimism were those in Africa and Europe. North Africa showed a score of 3.67 compared to the 2019 score of 3.56. Likewise, the European respondents showed a rise to 3.63 for 2020 from 3.50 for 2019. Sub-Saharan Africa showed a surprising jump to a very positive score of 4.00. This indicates a remarkably bright view of the future of banking in these two regions.

Unlike in 2019, where a significant decline in optimism was noted in only one region, the 2020 results showed two regions having a significant decrease in optimism. The most significant decline was seen in the West, Central, and South Asia region, from 4.00 to 3.64, followed by the GCC, declining to 3.31 from 3.59. The Middle East ex-GCC also showed a decline from 3.35 to 3.14. The decrease in Southeast Asia was minimal.

fig 4. **Overall Industry Optimism Level**



Positive Optimism Towards the Future of Islamic Banking

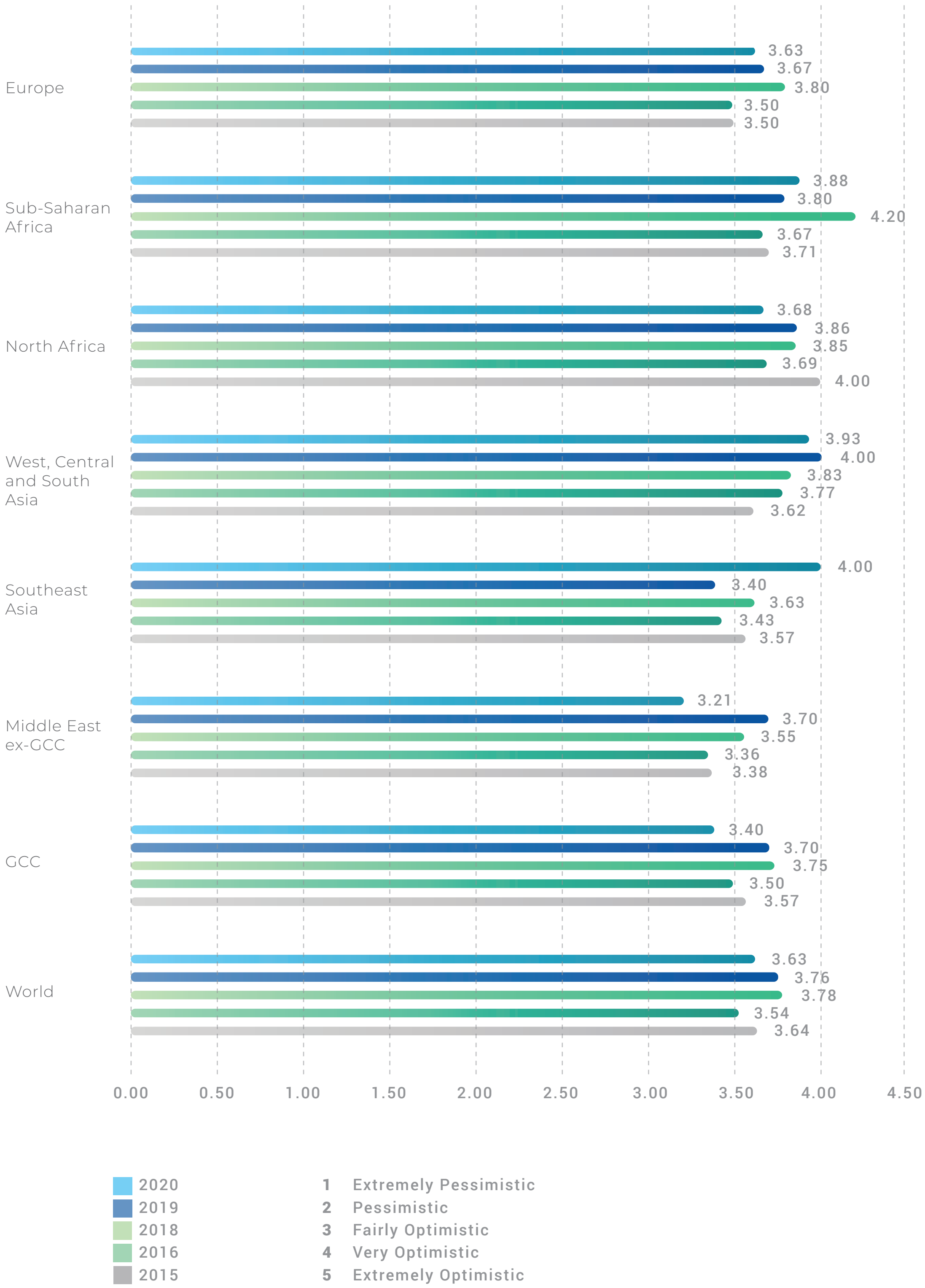
The next question asked was to determine the banks' optimism level on the future of Islamic banking in particular. The 2020 results showed a continuous decrease in confidence, in line with the 2019 sentiments. The highest confidence score was observed in 2018. However, the 2020 score showed banks are still more confident on the future of Islamic banking compared to the 2016 score. Some regions reported even more optimism than 2019, while others showed more negative sentiments. The picture becomes clearer when the levels of optimism are examined by region.

Two regions showed a boost in optimism – Southeast Asia and Sub-Saharan Africa. Southeast Asia showed a significant increase to a very positive score of 4.00 compared to 3.40 in 2019, a stark improvement from its lowest confidence score of 3.43 in 2016. Sub-Saharan Africa showed a marginal increase in 2020, but at 3.88, its score is still lower than its best score of 4.20 in 2018.

Declines in confidence were experienced by the majority of the regions including the GCC, Middle East ex-GCC, West, Central, and South Asia, North Africa and Europe. The Middle East ex-GCC reported the most dramatic fall in optimism from the 2019 score of 3.70 to a modest score of 3.21 in 2020. This is the lowest score recorded for the region in all the CIBAFI surveys. This was followed by the GCC with a decline to 3.40 from 2019's score of 3.70. The remaining regions experienced less significant decreases compared to the last year's scores. The results may reflect the impact of the weak growth rate that characterised the global economy in 2019, particularly in regions which experienced some serious geopolitical tensions.

2020 is characterised by a restraint in optimism about the future of banking, indicating a modest positive level of optimism.

fig 5. **Islamic Banking Industry Optimism Level**

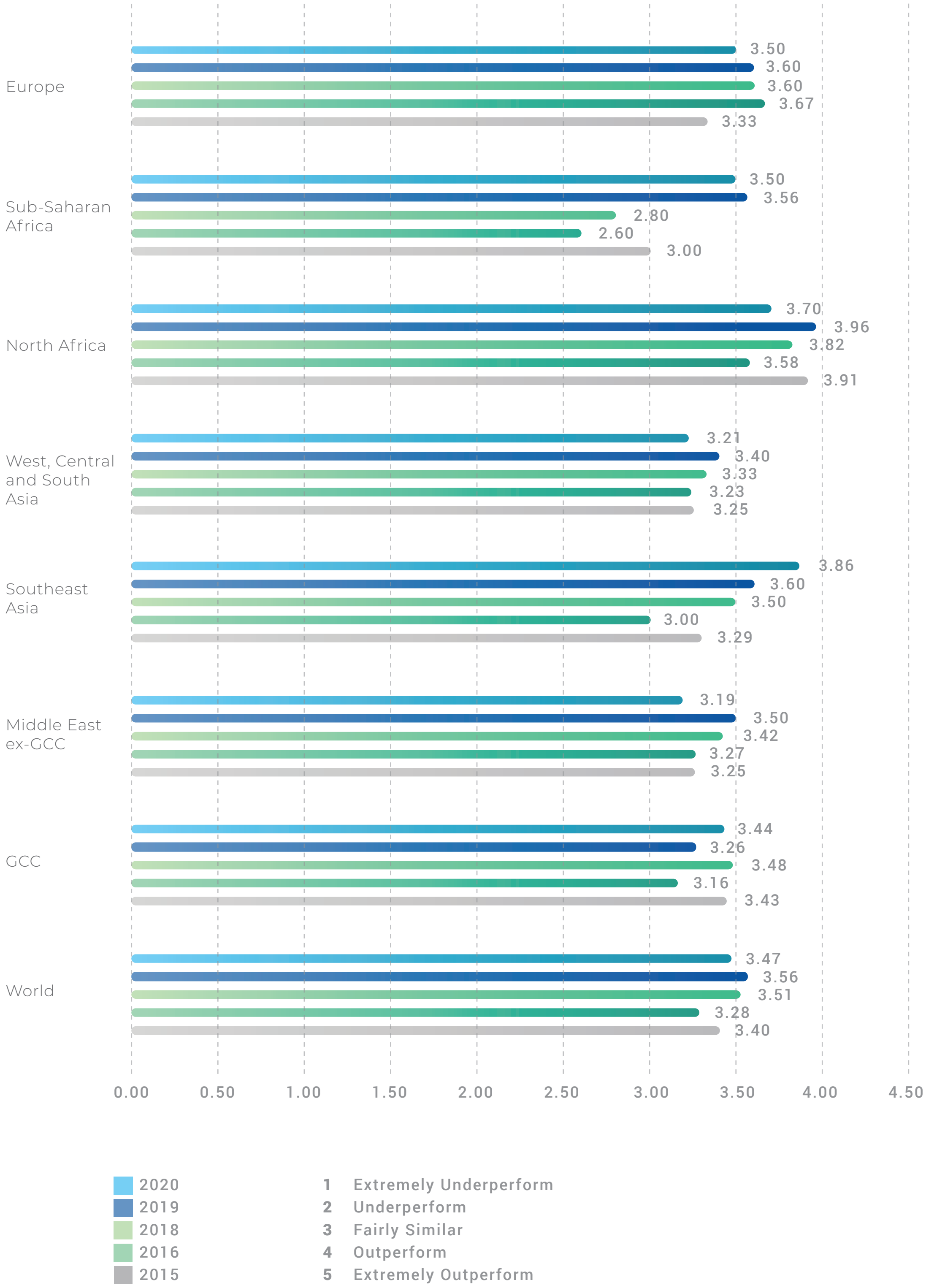


Continued Cautious Optimism for Revenue Growth

The final dimension of the confidence index is a question on the institution's level of confidence on their revenue growth in comparison to their banking competitors in the same region. In 2020, the restraint observed in the overall optimism on the future of banking – Islamic banking in particular – was also reflected in the banks' expectations on revenue growth. Overall, the level of optimism remains modestly positive with a small overall decrease on last year's scores. The only regions that reported increases in confidence were Southeast Asia (up to 3.86 from 3.60) and the GCC (up to 3.44 from 3.26). This latter is surprising, given that the region showed a significant decline in the optimism level on the future of both banking generally and Islamic banking in particular. Furthermore, the survey essentially reflects conditions prior to the COVID-19 pandemic, whereby the respondents' responses relating to revenues would have been largely superseded by the effects of the pandemic on both local and global economies.

> *The cautious optimism about the future of banking is reflected in banks' expectations on revenue growth.*

fig 6. **Revenue Growth Expectation**



Islamic Banking Concerns for Upcoming Years

The next section of the confidence index highlights the biggest concerns of banking executives in the coming year – what new challenges are expected to arise and which issues will gain priority based on the experiences of previous years. In the 2020 survey, two additional challenges were added on top of those already in the previous years' list. The survey gave Islamic banking leaders a list of 25 possible challenges and they were asked to assign a score of severity to the challenges they felt would be facing their institution in the next one to three years. The scores range from 1.00 to 5.00 – with 1.00 considered "extremely not important" challenge, and 5.00 considered "extremely important".

The results showed an increase of severity in almost all the challenges. While some of the smaller changes may be the effect of changes in the sample from year to year, it does appear that Islamic banks were overall becoming more concerned with the challenges they are facing. The reasons are, however, difficult to identify. For example, the level of concern for political challenges has increased slightly, but that for the macroeconomic environment has declined. With the available data, it is not easy to find an overall narrative that can explain this.

> *The level of severity given by banks to concerns in the coming year increased, with technology and customer issues at the top.*

Information Technology as Rising Challenge

In 2019, concern for shareholders was the foremost challenge on the minds of most bank leaders. However, in 2020, "information technology" concerns rose to prominence, receiving a score of 4.30 compared to 2019's score of 4.11. This year's score is the second highest score, after the score of 4.31 recorded in 2018.

The results show that with all the opportunities that technology offers for the different sectors including the banking sector, it also comes with challenges and risks. Cyber security attacks and data protection are the most significant challenges associated with the adoption of technology by banks. Some of these issues are discussed in more detail later in this report, particularly in Part III of this Survey.

This trend was also seen in the open-ended responses, where most of the banks cited that information technology is associated with challenges and opportunities, and that action plans are needed to overcome the challenges and benefit from the opportunities. A bank from the GCC mentioned that "with the fast level of change in technology and innovation, a bank needs to upgrade its systems and also enhance the security controls around it", while another bank from Southeast Asia mentioned that "advanced technology in financial services (Fintech and digital banking) is now the key for banking business growth".

Continuing Precedence of Customer Issues

The priority given to customer attraction, relation, and retention is similar to last year, making customer-related issues the second main challenge for banks. However, this year's score shows a boost in severity with an increase to 4.26 compared to the 2019 score of 4.13. The results also indicate a focus on customers with the high ranking of "service quality" and "product offering and innovation" metrics. Both ranked in the same position as last year but with an increase in severity. Product offering and innovation is ranked fifth and service quality is ranked seventh, with scores of 4.18 and 4.16 respectively.

Managing Risks Becoming a Top 3 Concern

In this year's survey, risk management moved three positions up to rank in third compared to its sixth position in 2019. This year's score increased to 4.23 compared to 4.05 in 2019. The open-ended responses from banks also indicate their concerns regarding risk management in which a bank from Southeast Asia linked with the adoption of technology, cited that "The adoption of advanced technology by the bank must be protected with adequate and proper risk management to avoid business disruption". On the other hand, for another bank in the GCC, risk management was largely about credit risk – "The industry will face the pressure of the slowdown of global economy which will lead to defaults of facilities. By introducing a robust risk management system and procedures we will filter these". These and other responses showed that banks are aware of the importance of taking measures to manage their potential risks. A bank from Sub-Saharan Africa said that to manage risks, "strict implementation of internal policies and regulatory guidelines are necessary".

fig 7. **Global Islamic Banking Top Concerns**

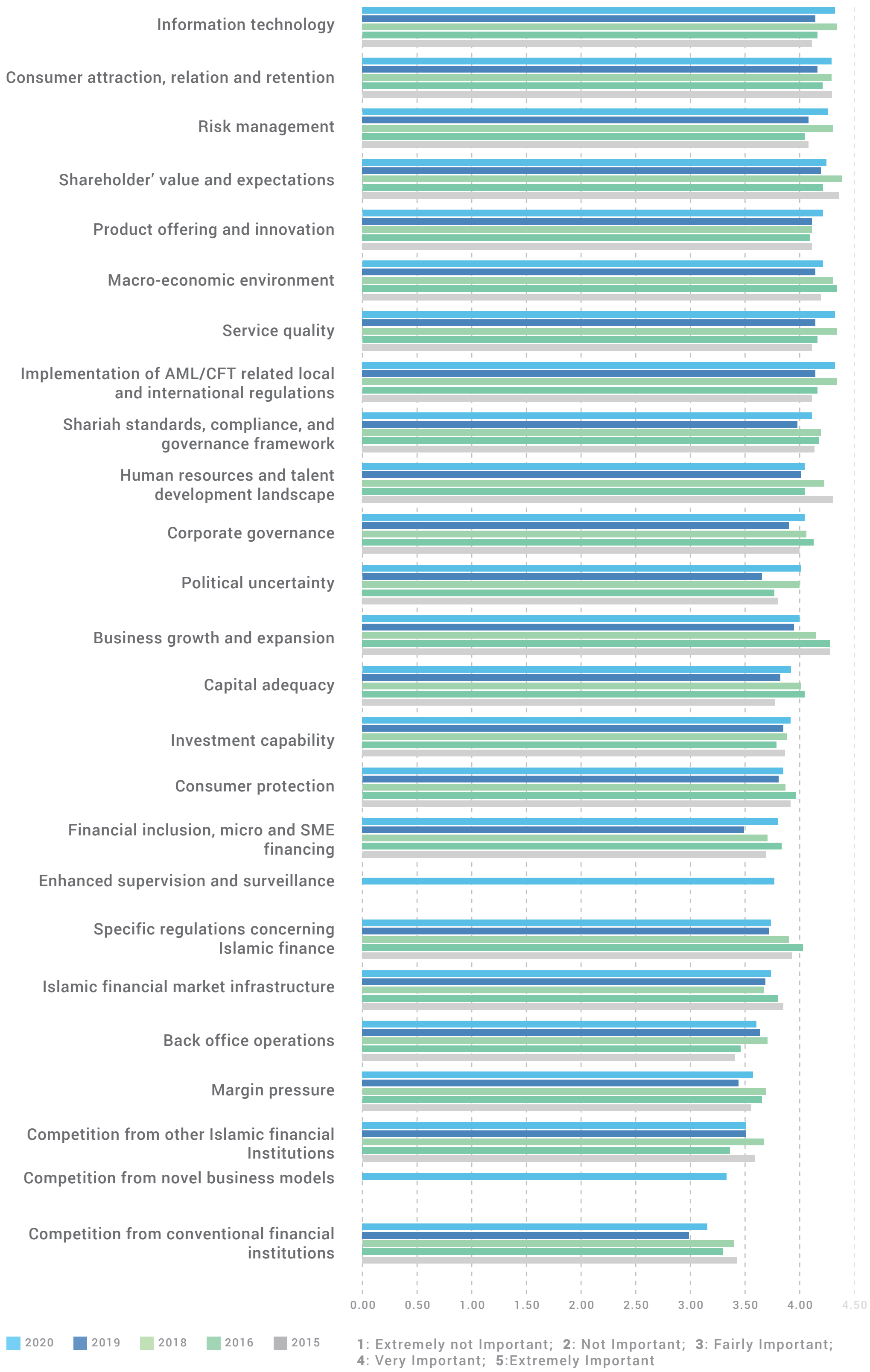
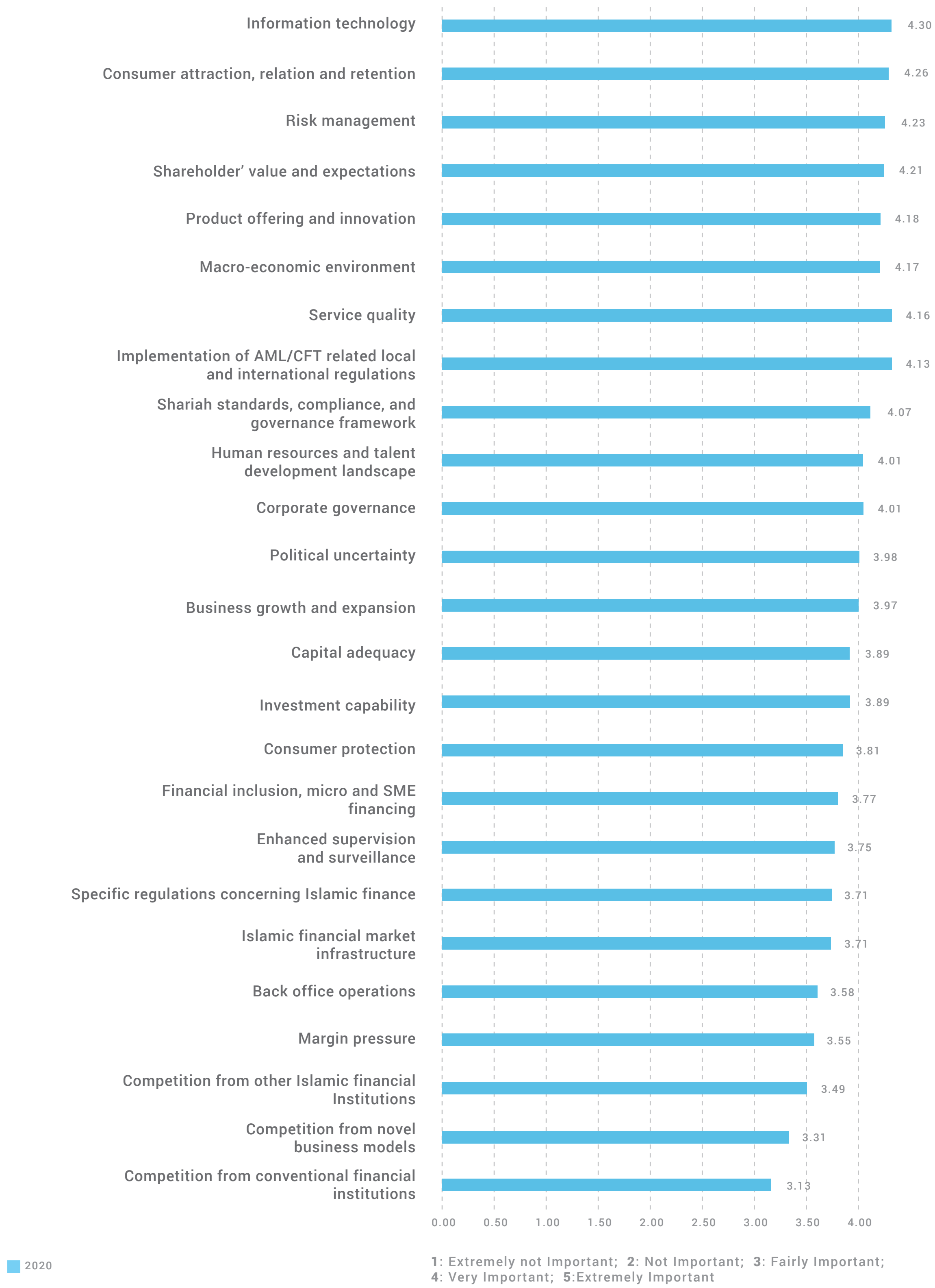


fig 8. Global Islamic Banking Top Concerns (2020)



1: Extremely not Important; **2**: Not Important; **3**: Fairly Important;
4: Very Important; **5**:Extremely Important

Regional Concern Variations

As with many dimensions of the survey, there are common concerns across demographics, but there are certain concerns which can be identified and understood when looking at the regional breakdown. In many cases, respondents share common top concerns with the banks in other regions, however, it was also observed that some top concerns are unique to a specific region.

All regions stated concern on information technology, with different levels of priority. Four regions, in particular, were chiefly concerned that information technology could have an effect on the banks' businesses. The Middle East ex-GCC and European regions scored information technology concern at 4.48 and 4.43 respectively, with both indicating it as the most immediate concern. A bank from Middle East ex-GCC mentioned that "Business technology is still considered a recent experience in [the country's] market, but with high level of importance, due to the unprecedented rapid development in the world". The same bank continued by giving examples of the use of technology within the bank's operations such as "completion of financing operations and the use of robots to accelerate the implementation of operations and reduce risks through business modelling to avoid human errors".

In Europe, a bank identified information technology alongside product offering as critical success factors of the bank citing that "Product offering and innovation with information technology are the main concerns of our bank in the next one to three years. To succeed in these areas, we have constructed the vision of "sustainable digital banking". In fact, these areas are inseparable and subsidiary".

For other two regions – Southeast Asia and North Africa – information technology came in second position with a score of 4.14 and 4.46, respectively. The speed that of technological development plays a role in raising the level of severity of the challenges associated with information technology. A bank from North Africa said that "The fast development of technology requires resources and capabilities".

Banks in the GCC, West, Central, and South Asia and Sub-Saharan Africa were most concerned about risk management in the coming one to three years, with scores of 4.27, 4.21, and 4.83, respectively. This was also the number one concern for the GCC and Sub-Saharan Africa regions.

> *Business technology is still considered a recent experience in market, but with high level of importance, due to the unprecedented rapid development in the world.*

Many of the regions indicated consumers, services, and products in their ranking of their most pressing concerns. Consumer attraction, relation and retention was ranked among the top three in the Middle East ex-GCC, Southeast Asia, North Africa and Sub-Saharan Africa regions with scores of 4.29, 4.29, 4.42 and 4.50, respectively. These high ratings underscore the perceived importance of retaining and attracting consumers in highly competitive markets in the coming years. Along the same lines, the Middle East ex-GCC, West, Central, and South Asia, and Europe rated product offering and innovation as one of highest priorities, with scores of 4.33, 4.21, and 4.43, respectively.

Some institutions expressed concerns regarding the macro-economic environment, although overall this has slipped somewhat in priority. Banks from the GCC and North Africa gave it a high score, allowing it to rank in third position in the GCC with a score of 4.13 and in first position in North Africa with a score of 4.48.

> *Many of the regions indicated consumers, services, and products in their ranking of their most pressing concerns.*

Other important challenges mentioned were shareholders' value and expectations, for which banks from the GCC gave a score of 4.25, making it their second most prominent concern. Meanwhile, West, Central, and South Asia cited Anti-Money Laundering / Counter-Terrorist Financing at the forefront of their probable challenges in the coming years with a score of 4.64.

Table 2. **Major Concerns of Islamic Banks across Regions**

Geographical breakdown of the top concerns[1]

Group	Top Concerns	Score
Group 1 GCC	- Risk management	**4.27**
	- Shareholders' value and expectations	**4.25**
	- Macro-economic environment	**4.13**
Group 2 Middle East ex-GCC	- Information technology	**4.48**
	- Product offering and innovation	**4.33**
	- Macro-economic environment	**4.29**
	- Consumer attraction, relation and retention	**4.29**
Group 3 Southeast Asia	- Consumer attraction, relation and retention	**4.29**
	- Information technology	**4.14**
	- Service quality	**4.14**
	- Human resources and talent development landscape	**4.14**
	- Financial inclusion, micro and SME financing	**4.14**
	- Shariah standards, compliance, and governance framework	**4.00**
	- Business growth and expansion	**4.00**
	- Shareholders' value and expectations	**4.00**
Group 4 West, Central, and South Asia	- Implementation of AML/CFT related local and international regulations	**4.64**
	- Shareholders' value and expectations	**4.29**
	- Product offering and innovation	**4.21**
	- Rik Management	**4.21**
	- Investment capability	**4.21**
Group 5 North Africa	- Macro-economic environment	**4.48**
	- Information technology	**4.46**
	- Consumer attraction, relation and retention	**4.42**
Group 6 Sub-Saharan Africa	- Risk management	**4.83**
	- Service quality	**4.83**
	- Consumer attraction, relation and retention	**4.50**
	- Shariah standards, compliance, and governance framework	**4.50**
	- Consumer protection	**4.50**
	- Information technology	**4.33**

[1] For every group, the top three concerns are identified, including all concerns with the same score, even if that means that more than three are listed in total.

Group 7 Europe	- Information technology	**4.43**
	- Shareholders' value and expectations	**4.43**
	- Product offering and innovation	**4.43**
	- Capital adequacy	**4.29**
	- Risk Management	**4.29**
	- Consumer attraction, relation and retention	**4.29**
	- Macro-economic environment	**4.14**
Global	- Information technology	**4.30**
	- Consumer attraction, relation and retention	**4.26**
	- Risk management	**4.23**

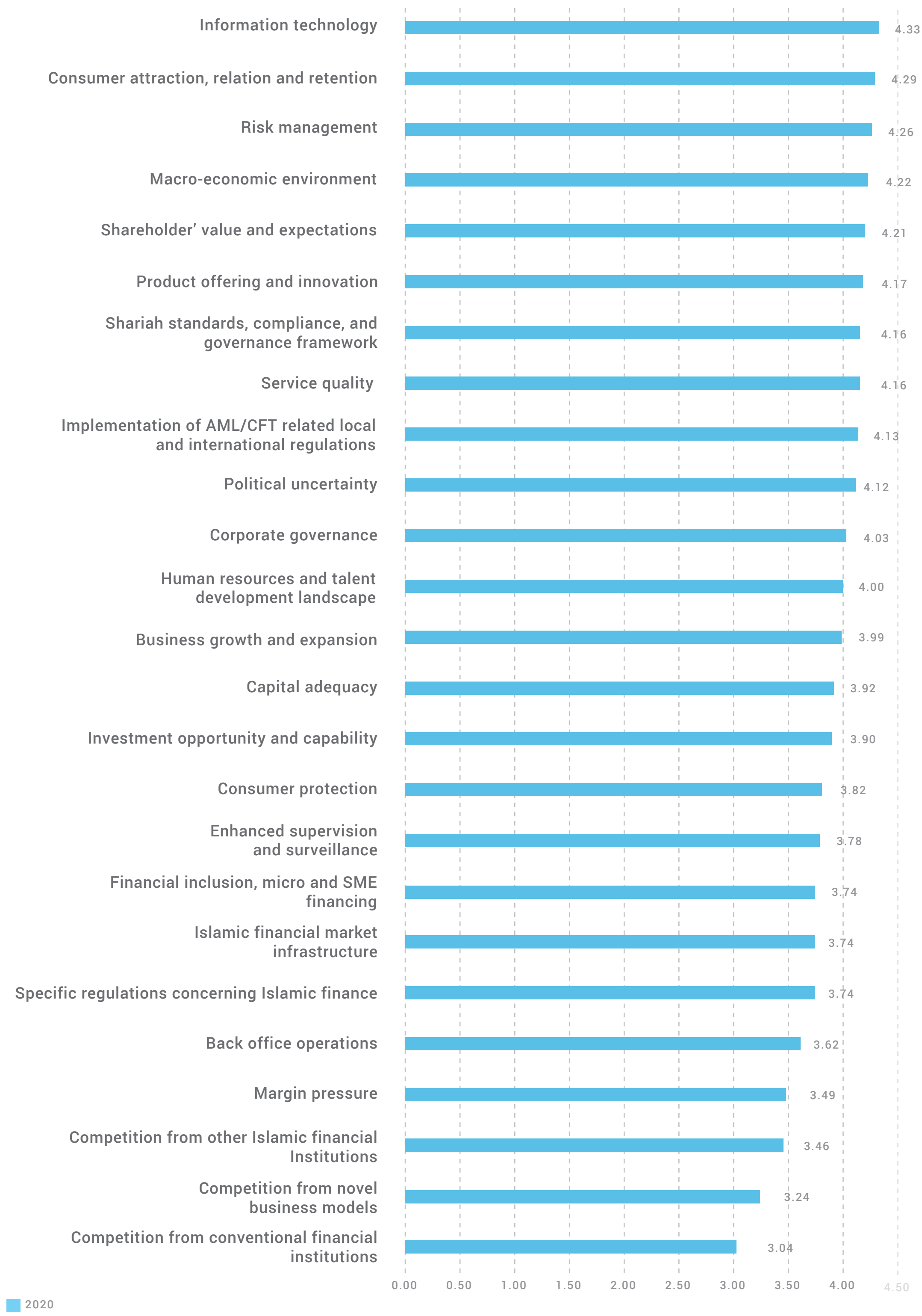
1: Extremely not Important; **2**: Not Important; **3**: Fairly Important;
4: Very Important; **5**:Extremely Important

Differences by Bank Size

When we examine how the size of a bank plays a role in top banking concerns, we see a difference in terms of priorities. Small banks are more concerned about information technology, consumer attraction and retention, risk management, and shareholders' value and expectations, while larger banks' order of priority was shareholders' value and expectations, product offering and innovation, information technology and service quality.

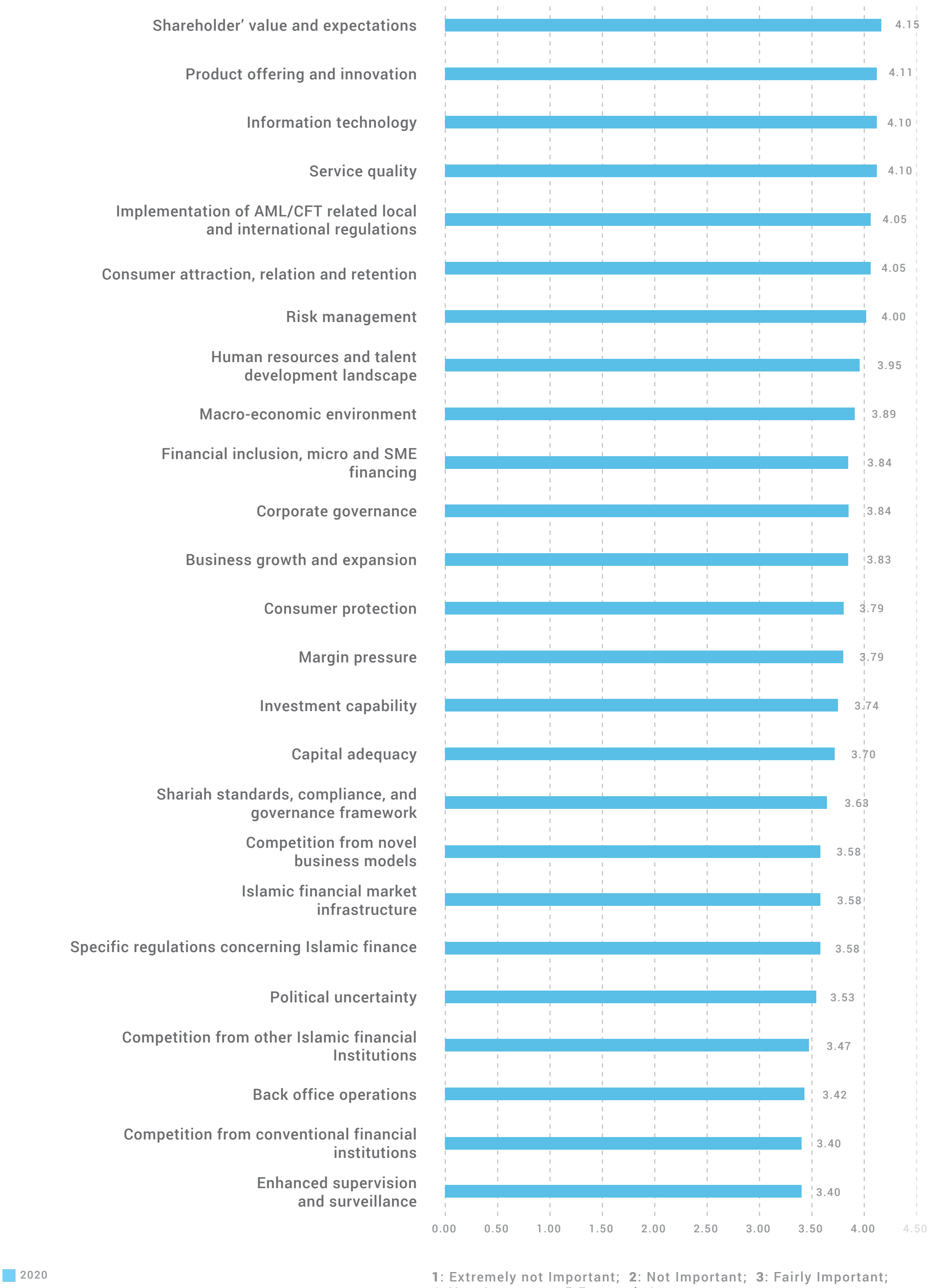
Bigger differences can, however, be seen in some of the middle and lower ranking items. Financial inclusion ranks 10th for large banks, but 18th for small ones. Shariah standards rank 7th for small banks, but 17th for large ones. Differences like these may be largely a matter of geography; large banks are particularly concentrated in the GCC and Southeast Asia, and absent from North Africa and Sub-Saharan Africa. This suggests that they may be operating in more developed Islamic finance environments. However, size can also mean two things – that they are more capable of shaping their own environments, and that they will be called upon to make a greater contribution to governmental and societal objectives.

fig 9. **Top Concerns in Islamic Banking – Small Banks**



1: Extremely not Important; **2**: Not Important; **3**: Fairly Important; **4**: Very Important; **5**:Extremely Important

fig 10. Top Concerns in Islamic Banking – Large Banks



1: Extremely not Important; **2**: Not Important; **3**: Fairly Important; **4**: Very Important; **5**:Extremely Important

Suggested Strategies to Overcome IFIs' Top Concerns

In order to present the most comprehensive report possible, the CIBAFI survey also asked top leaders in the Islamic banking sector which of the two issues (from the list above) that they foresee as the most important for their bank to focus on, and which strategies, if any, would be helpful in addressing potential problems. As expected, many of the issues shared can be better understood and analysed using a regional lens.

Information Technology Featured Prominently

Information technology was one of the top three challenges for many regions and was referenced by banks in all regions in their open-ended responses. Banks in the GCC, Middle East ex-GCC, North Africa, and Sub-Saharan Africa were all concerned about how the rapid development of technology could affect the banks' business. Banks from different countries, such as Bahrain, Bangladesh, Iraq, Saudi Arabia and Turkey, highlighted their action plans to overcome the challenges associated with technology adoption.

With regard to the strategies adopted by banks to tackle issues related to information technology, a bank from Middle East ex-GCC mentioned "The bank initiated to include in its strategic plan multiple projects to implement modern systems such as internet banking, business intelligence and others". A bank from West, Central and South Asia was more specific: "Our ICT Security Policy has been updated considering latest security threats worldwide incorporating international best practices for ICT security standard. We deployed two Next Generation Firewalls (Cisco & Palo-alto) to secure our entire physical network". The banks' strategies relating to information technology are examined in more detail in Part III of this report.

> *Banks in the GCC, Middle East ex-GCC, North Africa, and Sub-Saharan Africa were all concerned about how the rapid development of technology could affect the banks' business.*

Focus on Consumer and Product Offering

A common theme gathered from these responses is that consumer attraction and retention proves challenging for banks and is in some cases, is related to the product offerings. Banks from different regions consider consumer attraction alongside product offering as a priority and a critical success driver. A bank in North Africa said "The bank's capital is the deposits of its consumers. Thus, attracting consumers is affecting the bank's success".

Adopting policies and strategies that take into consideration offering suitable and innovative products is needed to overcome issues related to consumer attraction and retention. A bank from Europe cited "Product offering and innovation with information technology are the main concerns of our bank in the next one to three years. For success in these fields, we have constructed the vision of 'sustainable digital banking'. Through our start-up centre, we will support our customer relations, product development and new products". Another bank in West, Central, and South Asia said that "Consumer attraction, relations and retention are among the major challenges. Thus, the bank invests in continuous training, development of the employees and R&D to overcome the issue". Also taking into account evidence from Parts III and IV of the survey, it appears that for some banks attracting and retaining consumers is closely related to technology – mobile banking in particular. For some customers, this is considered a high priority service. At the same time, the ease of switching banks makes it of great concern.

Consumer attraction, relations and retention are among the major challenges. Thus, the bank invests in continuous training, development of the employees and R&D to overcome the issues.

Macro and Business Growth Concerns

Some regions, specially the GCC and North Africa shared in depth their concerns regarding the macro-economic environment, business growth and expansion, and what kind of initiatives banks are undertaking to reduce the severity of these issues (though of course prior to the shock of the COVID-19 pandemic).

A large bank in the GCC said, "Due to the economic slowdown worldwide, the bank needs to expand operations in different regions efficiently, with lower cost and better services". The same bank also mentioned, "Business growth and expansion is affected by the high competition in the market. Thus, the bank needs to provide better services and move toward digitalisation". Additionally, another large bank from the same region said, "Opening new branches in strategic locations to expand our branch network".

Digitalisation was also one of the strategies mentioned by one bank from West, Central, and South Asia, which cited, "Business growth and expansion through focusing on digital initiatives on customer reach, acquisition and service, with a dedicated Digital Banking Unit".

Banks from North Africa indicated that their growth may be impacted by macro concerns associated with political issues. A bank from the region said, "The macroeconomic environment is not predictable and, alongside political instability in most of the countries of the region, have a significant impact on the growth of the volume of credit provided by banks operating in the region, as well as an expected rise in the size of defaults". The bank continued saying "To overcome this, banks must apply Basel III".

Issues Specific to Islamic Banking

Some banks had concerns about Shariah compliance. A bank from the GCC highlighted the Shariah issue was due to new reforms in the country, especially when it comes to dealing with foreign investors. The bank said, "Because the country intends to open its markets to foreign investment, the absence of agreed Shariah standards governing Islamic banking work, with its financing and investment sides, leads to uncertainty while dealing with foreign investors".

The issue of Shariah was also highlighted in the open-ended responses provided by banks in West, Central, and South Asia. As a solution to overcome this issue one bank cited, "Regular follow-up and supervision by internal and Shariah auditors. Follow Central Bank's guidelines". In the same context another bank from the same region said, "We adhere to the country's Islamic Banking Guideline circulars, we have a Shariah Supervisory Committee headed by prominent Islamic Scholars and our Shariah Inspection and Compliance Division is conducting inspection on operational activities of the Bank routinely round the year. Finally, Shariah Supervisory Committee meetings are held frequently to oversee Shariah standards and the relevant regulatory framework".

PART II

CIBAFI ISLAMIC BANKING RISK DASHBOARD

CIBAFI Islamic Banking Risk Dashboard

The CIBAFI Islamic Banking Risk Dashboard presents a unique perspective of Islamic banks on the level of risks faced by their institutions from a defined series of 20 types of potential risks within the next one to three years. This dashboard allows an analysis of the challenges on the banks' radars, both globally and regionally, as well as how their views of the prospective risks have changed over the years. Each bank was asked to assign a score of 5.00 to indicate "extreme risk" and a score of 1.00 to indicate "no risk at all".

While the Global Islamic Banking Top Concerns dashboard in Part I covers global concerns/challenges faced by banks within their respective environments, as well as big-picture items such as concerns about Islamic banking mechanisms, the Islamic Banking Risk Dashboard is intended to reflect the risks associated with the functioning of the banks themselves. To this end, political, macroeconomic, and other risks are foregone in the pursuit of an understanding of which risks the banks expect to affect its day-to-day operations in the next few years.

To keep the survey consistent, the dimensions of risk remain the same as the previous year.

Technological Risks at the Forefront

Consistent with the findings of the 2019 report, technological risks remained at the forefront of banks' perceptions. Last year, technology risk and cybersecurity was placed in the second position with a score of 3.36[2]. However, in 2020, Islamic banks identified it as the most concerning risk with a score of 3.47 (see Figure 11) which is the highest since 2015.

This increasing trend in technological risks scores in recent years is plausible given the rise of e-banking services and their related threats. The observation that technological risks appear strongly as a source of concern for Islamic banks is perhaps not surprising, as technology and cyber-security now affect virtually all aspects of a bank's business. The more entrenched technology becomes within a bank's systems and operations, the more exposure the bank has to technological risks like data management, malware, hacking, and spoofing attacks.

Technological risks remained at the forefront of banks' perceptions.

[2] Please note that since 2019, Technology and Cybersecyrity risk were seperated to have Technology risk and cyber security risk alone. For comparison reasons, we have aggregated them above using the average score.

Moreover, when we look deeper into the types of technological risks, it becomes clearer that the cyber-security risk is the number one risk, with a slightly higher score of 3.56, whereas other technology risks are in third place with a score of 3.38.

It thus makes perfect sense that at a time when banks are striving to expand their customer base and offer new financial products and services, cyber-security risk would be a pressing concern. In Part III of this report, one of the key areas of expansion is the provision of mobile services, for which we see different security risks from those associated with fixed branches and ATMs. Furthermore, while banks can learn, train, and adopt new technologies on their own terms, the threat of a cyber-breach is much more unpredictable, and could have disastrous consequences for consumer relations as well as a bank's overall trustworthiness and goodwill – which they have worked so hard to earn.

Rising Concerns on Credit Risk

On the risk dashboard, credit risk appears as the second most concerning risk for the Islamic banks. In 2019, credit risk score was 3.30, while this year that number rose to 3.43. This may be the result of a significant period of low oil prices and problems in the real estate markets of some countries, or may be due to fear factor – as the result of the global economic slowdown.

There is also some evidence from other sources that the need to implement IFRS 9, or its AAOIFI equivalent, has focused the attention of management more firmly on how the bank handles credit risk.

As one of the banks from GCC group said that, "With the expected economic challenges in the foreseeable future the major two risks that are envisaged are the credit risk and collateral risk" and therefore the bank is taking "Appropriate measures that include close monitoring of the exposures and the value and quality of the collateral".

Moreover, in confronting financial difficulties, banks are taking appropriate measures as shared by one bank from the GCC that said, "[Our] bank is facing credit risk on account of the ongoing financial challenges [and therefore the] bank already has in place enhanced underwriting processes and the financing portfolio is being closely monitored". Another possible reason is the political turmoil and instability in some of the countries that may affect the quality of its assets and increase non-performing financings, potentially leading to financial distress for banks. One bank from the Middle East ex-GCC region noted that, "Since bank financing is the main banking product, [possible] defaults can lead to the bank's inability to finance new projects and expand their grants, and the political instability could affect the value of the guarantees provided by the customers."

A Slight Decrease in Perceived Liquidity Risk

Another notable risk perceived to be of high severity is liquidity risk. However, in comparison to 2019, the liquidity risk score dropped from 3.38 to 3.26 in 2020, and its overall position on risk dashboard moved from first to the third slot. The liquidity risk score this year is the lowest recorded in the last three years. Banks appear to be slightly more confident in managing their liquidity risk through effective portfolio management and raising funds by means such as issuing Sukuk and attracting more deposits. There is certainly evidence of increased Sukuk issuance from the financial sector in 2019. It is also possible that the way in which regulators have implemented the Liquidity Coverage Ratio and Net Stable Funding Ratio may have somewhat eased Islamic banks' concerns about the portfolio management options available to them.

However, liquidity risk remains a significant concern for many Islamic banks in 2020 as stated by an Islamic bank from the European region, "We believe liquidity risks will be prevailing in the next years. To mitigate the liquidity risk, we are developing and finding different paths for stronger liquidity by issuing Sukuk, establishing portfolio management company and increasing performance goals in terms of the collection". A bank from West, Central, and South Asia region placed liquidity risk among their top concerns and shared its mitigation strategy by, "Close monitoring and through the management of funds inflows/outflows and overall managing assets and liabilities through discussion outcomes of various management meetings".

> *We believe liquidity risks will be prevailing in the next years. To mitigate the liquidity risk, we are developing and finding different paths for stronger liquidity by issuing Sukuk, establishing portfolio management company and increasing performance goals in terms of the collection.*

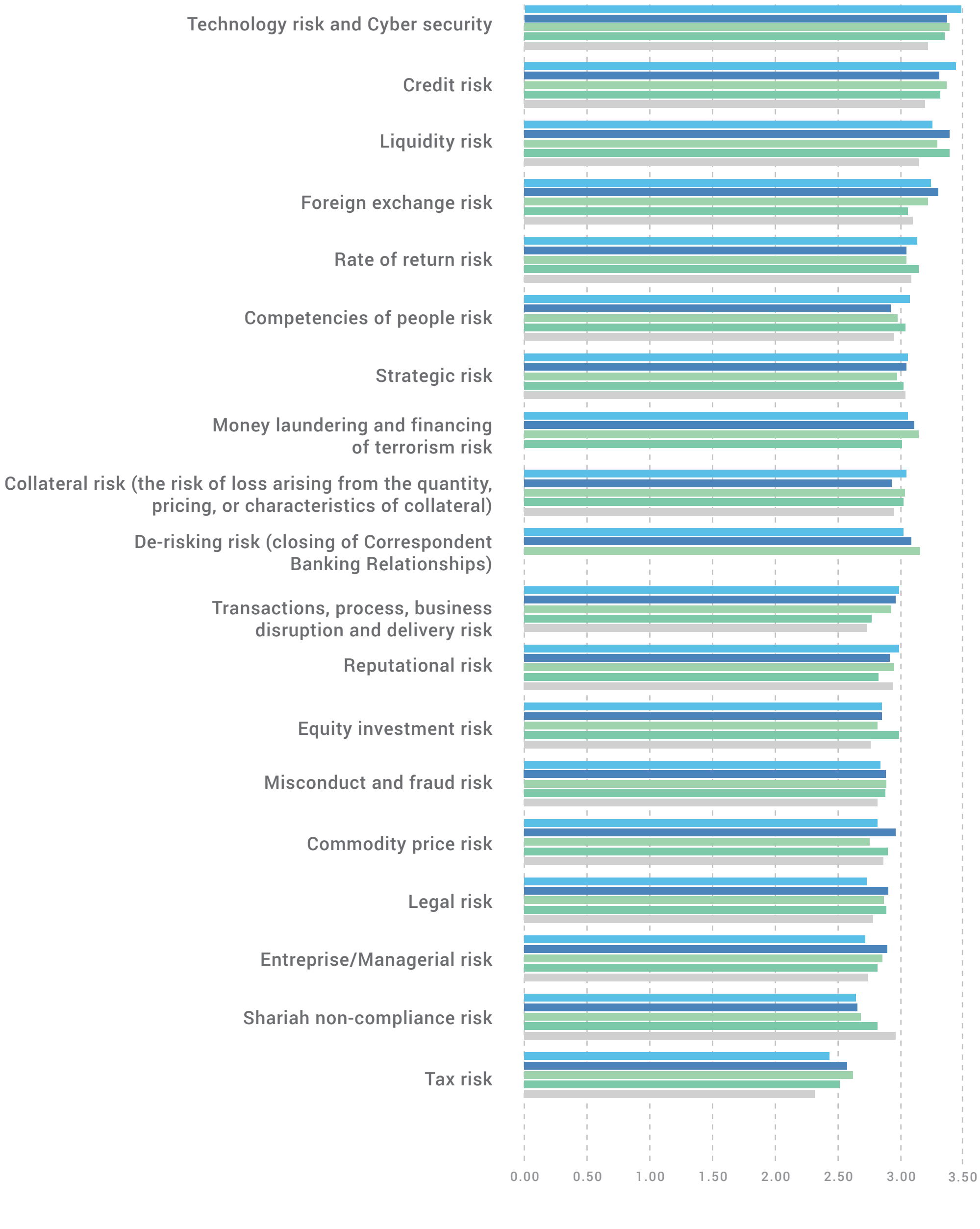
Shariah Non-compliance Risk and Tax Risk at All-time Low

In 2020, Shariah non-compliance risk and tax risk hit the lowest of all time with scores of 2.65 and 2.44, respectively. It is encouraging that banks are relatively confident in managing the Shariah non-compliance risk. It also indicates that banks feel comfortable with their Shariah boards and operating in accordance with Shariah within their respective jurisdictions.

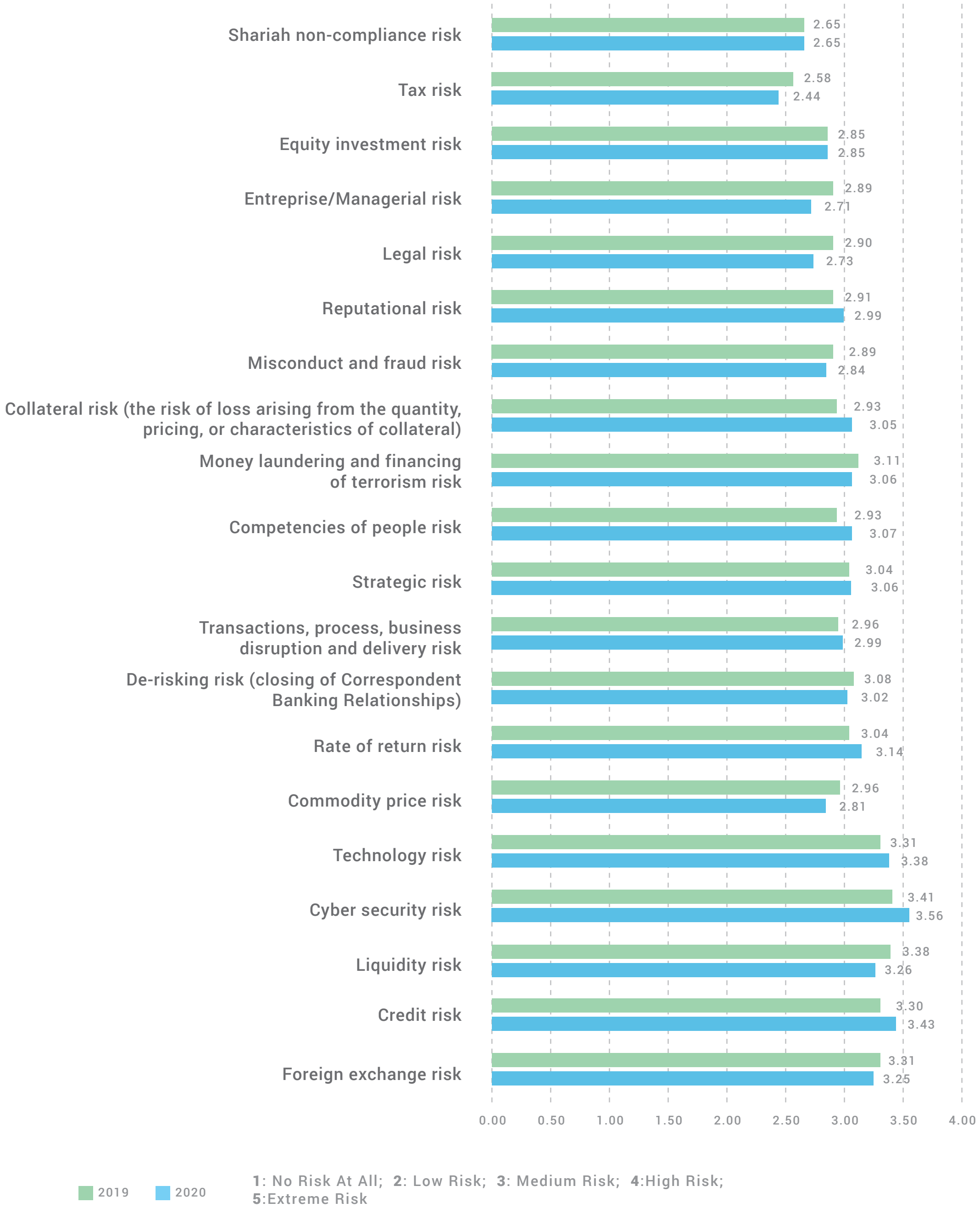
Since the 2015 survey, there has been a downward movement of the Shariah non-compliance risk score in terms of importance. Similarly, tax risk is of the least concern to most banks on the risk dashboard. This could be either because the tax systems in which they operate are straightforward, or because jurisdictions are recognising the need to adapt tax codes appropriate for Islamic banking.

> *Banks feel comfortable with their Shariah boards and operating in accordance with Shariah within their respective jurisdictions.*

fig 11. Global Islamic Banking Risk Dashboard (2015-2020)



1: No Risk At All; **2**: Low Risk; **3**: Medium Risk; **4**:High Risk; **5**:Extreme Risk *fig 12.* **Global Islamic Banking Risk Dashboard (2019-2020)**



1: No Risk At All; **2**: Low Risk; **3**: Medium Risk; **4**:High Risk; **5**:Extreme Risk

A Closer Look at Different Geographical Regions

The regional data breakdown allows an in-depth look at the top risks cited by Islamic banks in different geographical regions. For data analysis purposes, "technology risk" and "cyber-security risk" were listed separately. The data shows that the North African region has given relative prominence to foreign exchange risk, credit risk and liquidity risk. This may be influenced by the fact that this region includes Sudan, which has particular political and economic issues, partly arising from international sanctions. In Southeast Asia, strategic risk is again at the top of the table, and Shariah non-compliance risk moves up into the middle of the rankings. A bank from the Southeast Asia region elaborated on its strategic risk exposure stating that, "The bank is heading towards new business environment, post-corporate action initiative, which is still ongoing pending regulator's approval".

In Sub-Saharan Africa, cybersecurity risk ranks the highest, while tax risk the lowest among all regions. West, Central, and South Asia give surprising prominence to equity investment risk, while the GCC region has cybersecurity risk and credit risk at the top of the table. In the European region, cybersecurity risk is at the top of the table followed by foreign exchange risk, while in the Middle East ex-GCC region most prominent risks are cybersecurity, technology, strategic and de-risking risk. This last may be due to the political issues affecting several countries in the region, which may make foreign banks more reluctant to deal with them.

Cyber-security Risk in Focus

Cyber-security risk is a very important class of emerging risk in the global financial sector. In recent years, losses from cyber-breach events saw a spike, which aligns with the growing attention cyber-security risk has been receiving. Unsurprisingly, Islamic banks from most of the regions (5 out of 7) reported cyber-security risk as the most concerning risk they will face in the next few years. Banks' responses to cyber-security risks are discussed in Part III.

Islamic banks from most of the regions (5 out of 7) reported cyber-security risk as the most concerning risk they will face in the next few years.

Technology Risk: A Key Concern

Technology risk also recorded as important for many regions. The Middle East ex-GCC, Southeast Asia, West, Central, and South Asia and Sub-Saharan Africa regions placed technology risk in the top three risk positions in the risk dashboard.

In elaborating this risk, a bank from the GCC stated that, "Due to technological advancement and rapid changes in the associated risk factors, [technology risk] is ranked in the extreme [risk] range" and therefore can be, "Mitigated by applying rigorous control measures and related policies". Two other banks from the GCC region shared their strategic initiatives to mitigate technology risk as, "Implementation of a state-of-art new core banking system to mitigate such risks" and "Introducing various measures to protect all our [banks] systems and networks [that are] not limited to anti-virus and intrusion prevention systems". Banks' responses to this risk are discussed in detail in Part III.

> *Implementation of a state-of-art new core banking system to mitigate such risks and introducing various measures to protect all our systems and networks [that are] not limited to anti-virus and intrusion prevention systems.*

Credit Risk is of High Importance

On a global scale, credit risk can be seen as the second most concerned risk, not far behind cyber-security at the top spot on the risk dashboard. However, the picture is even clearer when the regional data is observed with a close lens. It appears that in some regions (i.e. GCC, Southeast Asia, West, Central, and South Asia, Sub-Saharan Africa, Europe and Middle East ex-GCC), credit risk is in the top priority of Islamic banks showing high risk scores. This is arguably due to regional economic and political instabilities or other financial challenges.

On mitigating the credit risk, a bank from GCC stated that, "We keep the NPL under 2% all the time through various provisions. We also make sure that we have [sufficient] collateral assets". A bank from West, Central, and South Asia region shared its credit risk mitigation strategy that, "The bank embarked adoption of a more rigorous credit risk management framework over the next three years. The plan includes strict enforcement of Lines of Defence Model with enhanced oversight on each business lines' risk acceptance criteria and credit risk management strategies".

Another bank from the same region explained that, "Considering the volume of financing and slowdown in the economy, credit risk is a major risk. However, the bank is managing this [credit risk] through refined risk appetite, comprehensive policies and procedures, four eye principles, risk rating criteria, concentration limits and comprehensive documentation, collateral management and effective management". However, banks in Southeast Asia appeared less concerned, showing the lowest credit risk score. This could perhaps be due to either regional economic and political stability, or the possibility of having other more pressing risk priorities.

Liquidity Risk and Foreign Exchange Risk

A comparison with 2019's results shows that liquidity risk has slipped from being the second highest perceived risk (with a score of 3.38) to the third this year (with a score of 3.26). At the regional level, Southeast Asia and North Africa cited liquidity risk as their most significant risk for the next one to three years – with Southeast Asia rating it at 2.86 and North Africa noting a high score of 3.69. Other regions, for example, GCC and West, Central, and South Asia and Middle East ex-GCC have not listed liquidity risk among their top risk of concern, but nonetheless gave it high scores of importance of 3.27, 3.07 and 3.24, respectively.

A bank from the Middle East ex-GCC group shared its strategy to mitigate liquidity risk stating that, "The bank is working to diversify services and intensify advertisements and other efforts to attract deposits". A bank from the North African region said that it had developed the use of the Wakalah bi Al-Istithmar contract to allow it to raise funds from both Islamic and conventional banks, as well as other financial institutions.

Foreign exchange risk was also a prominent risk in North Africa and Europe. Consistent with the 2019 results, the North African region showed the highest concern over foreign exchange risk with a score of 3.92. This, and its liquidity score, may be partly attributable to the sanctions imposed on Sudan, and hence its limited access to global markets. Europe rated the risk as their second most prominent concern with a score of 3.29.

A bank from North Africa stated its strategic initiative to mitigate foreign exchange risk where, "Policy has been adopted [by the bank] to maintain a long position on foreign currencies to avoid any losses if the expected local currency value deteriorates". Another bank from the same region mentioned two approaches to mitigate this risk: "(i) Follow-up with the international exchange before approving operations to avoid exchange rate fluctuations, and (ii) review the bank's policy for buying and selling currencies to avoid any losses arising from currency price fluctuations".

Table 3. **Major Risks of Islamic Banks across Regions**

Geographical Breakdown of the Top Risks		
Group	**Top Risks**	**Score**
Group 1 GCC	- Cyber-security risk - Credit risk - Rate of return risk	**3.60** **3.47** **3.29**
Group 2 Middle East ex-GCC	- Cyber-security risk - Technology risk - De-risking risk (closing of Correspondent Banking Relationships) - Credit risk - Strategic risk	**3.62** **3.52** **3.52** **3.33** **3.33**
Group 3 Southeast Asia	- Strategic risk - Liquidity risk - Competencies of people risk - Rate of return risk - Cyber security risk - Technology risk - Credit risk - Reputational risk	**3.00** **2.86** **2.86** **2.86** **2.71** **2.71** **2.71** **2.71**
Group 4 West, Central, and South Asia	- Cyber-security risk - Credit risk - Equity investment risk - Rate of return risk - Technology risk	**3.64** **3.64** **3.36** **3.29** **3.29**
Group 5 North Africa	- Foreign exchange risk - Cyber-security risk - Credit risk - Liquidity risk - Technology risk	**3.92** **3.69** **3.69** **3.69** **3.65**
Group 6 Sub-Saharan Africa	- Cyber-security risk - Credit risk - Technology risk - Rate of return risk - Money laundering and financing of terrorism risk - Collateral risk (the risk of loss arising from the quantity, pricing, or characteristics of collateral) - Foreign exchange risk - Reputational risk	**3.83** **3.50** **3.50** **3.50** **3.50** **3.50** **3.33** **3.33**

Group 7 **Europe**	- Cyber-security risk - Foreign exchange risk - Credit risk	**3.43** **3.29** **3.14**
Global	- Cyber-security risk - Credit risk - Technology risk	**3.56** **3.43** **3.38**

* For every group, the top three concerns are identified, including all concerns with the same score, even if that means that more than three are listed in total.

De-Risking Effects in Depth

De-risking is the phenomenon of financial institutions terminating or restricting business relationships with clients or other financial institutions to avoid, rather than manage the risk[3]. This may be caused by economic or regulatory concerns. The economic concerns typically centre around profitability, low-risk appetite and excessive compliance cost. Regulatory concerns typically focus on perceived high risk, whether it is a country or a customer, including in particular the possible breach of Anti Money Laundering (AML) and Countering Financing of Terrorism (CFT) requirements.

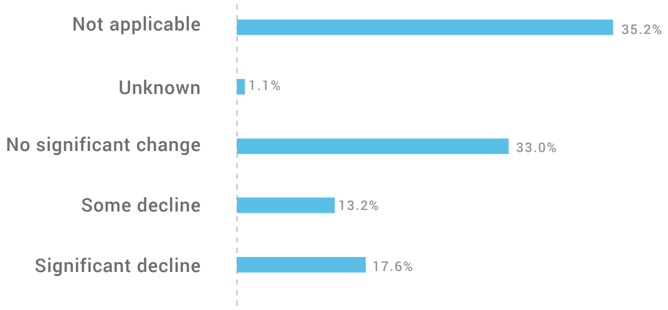
De-risking risk in the risk dashboard shows a declining trend from the last two years. In 2019, the de-risking risk scored was 3.08, and this year, the score slipped slightly to a still-significant score of 3.02. Therefore, to fully explore the issue of de-risking risk and to understand its effects on banks' strategies in the past year, Islamic banks were asked, "To what extent did your institution experience a decline in correspondent banking relationships (CBR) as a result of 'de-risking' over the last year?". The results show that 17.6% of the responding banks said that they had witnessed a "significant decline," while 13.2% stated that they had experienced "some decline".

Around one third of the respondents (33.0%) reported "no significant change" in their correspondent banking relationships as a result of de-risking measures that had been taken.

This year there has been a substantial increase in those responding "not applicable" (around 35.2%). A significant proportion of these banks are smaller subsidiaries or Islamic windows (of conventional banks) that participated in the survey, and these do not have exposure to CBR.

[3] Financial Action Task Force (FATF) definition of de-risking risk

fig 13. **Decline in Correspondent Banking Relationships (CBR)**

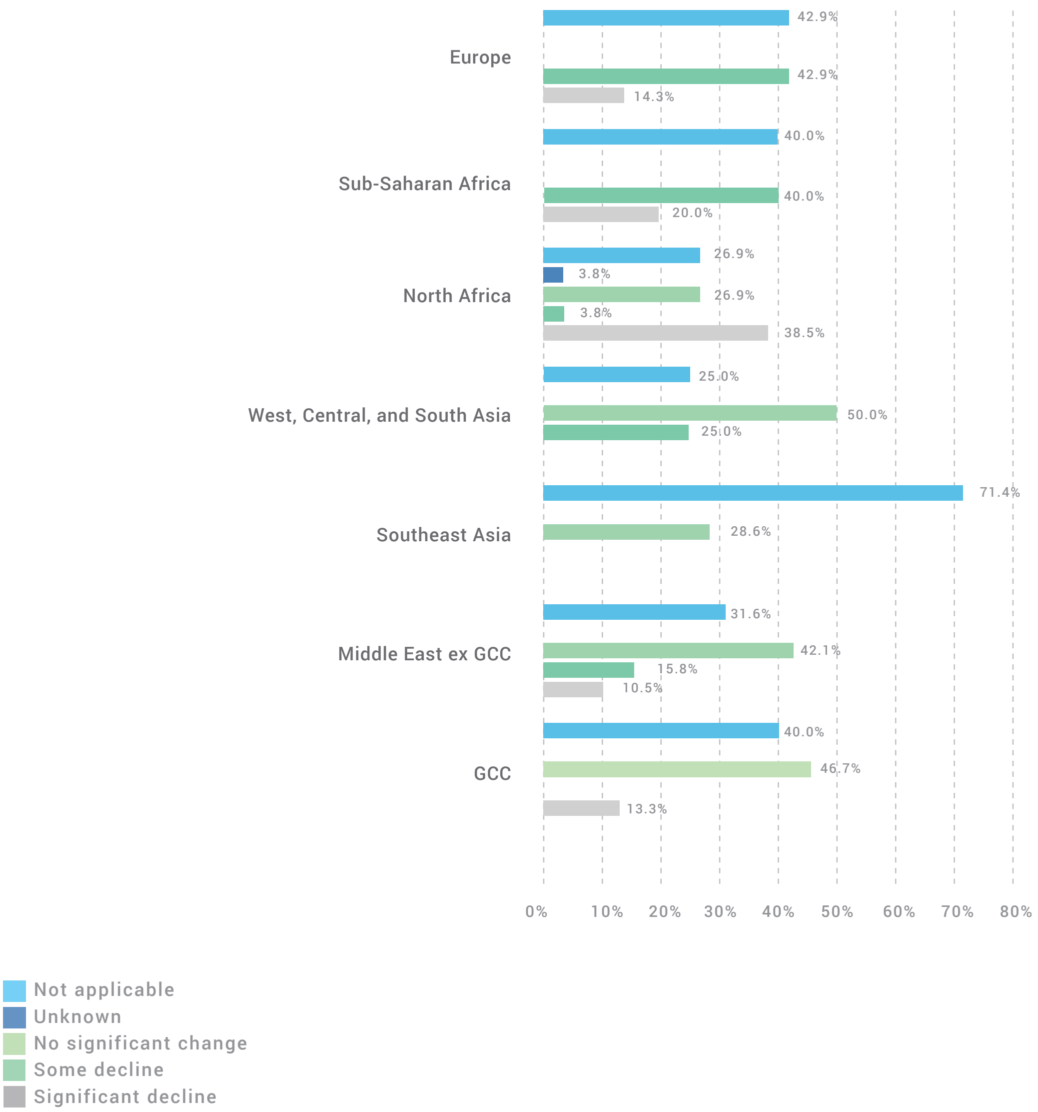


Regional Breakdown of De-Risking Effects on CBR

At the regional level, the region that was most affected with a decline in CBR is North Africa. A total of 38.5% Islamic banks from North Africa region reported a "significant decline" in CBR, indicating that the majority of respondents have experienced negative effects as a result of de-risking over the last year. The banks in the North African region highlighted four main concerns that contribute to a decline in CBR i.e. shortcomings in the bank's provision of information (KYC), AML and CFT risks, high-risk customers (politically affiliated), and regulatory non-compliance (local and international). The second most affected region was Sub-Saharan Africa where 20.0% of Islamic banks reported a "significant decline". The Middle East ex-GCC region showed a similar trend with 10.5% of respondents reporting "significant decline" in CBR as a consequence of 'de-risking' over the last year.

Moreover, the GCC (13.3%) and Europe (14.3%) regions have reported "significant decline" which indicates that the Islamic banks in both regions have similar experiences of negative effects of de-risking on their CBR. The West, Central, and South Asia region reported a decline of 25.0% of their banks (25.0% "some decline" and 0% "significant decline"), whereas Southeast Asia reported the most dramatic fall in negative effects on their CBR from 2019's surprisingly high 20.0% to this year's 0% in both categories of "some decline" and "significant decline".

fig 14. **Decline in Correspondent Banking Relationships (CBR) - across Regions**



De-Risking Effects on Products and Services

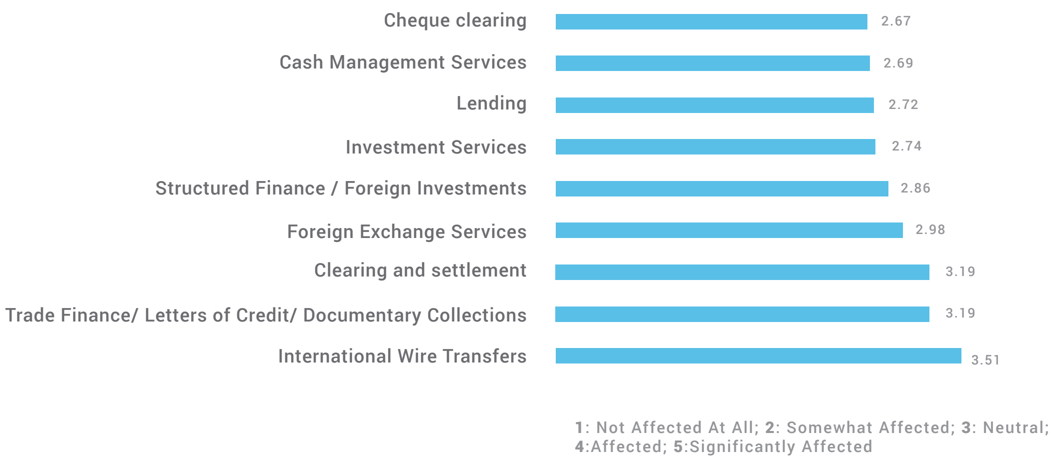
De-risking affects services and products offered by the financial institutions. At worse, de-risking can cause the termination of various banking products and services – e.g. cheque clearing and settlement, cash management services, international wire transfers, trade finance and conducting foreign currency-denominated capital – which may turn be catastrophic for a bank's operations. More commonly, it will increase a bank's operational costs, regulatory compliance and technological costs. On the bigger scale, de-risking poses risks to economic growth and development through the hindrance of access to international financial markets for payments, trade and commerce.

To have a deeper look at de-risking risk, Islamic banks were asked, "To what extent were the following products and services affected in your institution as a result of de-risking (closing of correspondent banking relationships)?" with values ranging from 1.00 (not affected at all) to 5.00 (significantly affected).

The findings show that the top affected banking service for this year was International Wire Transfer with the highest score of 3.51, followed by Trade Finance/ Letter of Credits/ Documentary Collections with a score of 3.15 and Foreign Exchange Services in third with a score of 3.07. This pattern is very similar to that of 2019. However, what is puzzling is that all the scores increased from 2019, despite the reduction in the overall score for de-risking risk. This could be a sampling effect as the question was only answered by those who did not answer "Not Applicable" to the previous question. The rankings may, therefore, be more informative than the absolute scores.

> *The top affected banking service for this year are International Wire Transfer Trade Finance/ Letter of Credits/ Documentary Collections and Foreign ExchangeServices .*

fig 15. **De-risking Effects on Products and Services**



De-Risking Effects: The Banks' Responses

It is encouraging that Islamic banks have undertaken various measures to mitigate the de-risking risk. A bank from the West, Central and South Asian region stated that, "The bank has been meticulously ensuring compliance with KYC and AML-related policies to mitigate de-risking effects. As for the strategic initiatives, the bank has been making constant efforts to establish new correspondent banking relationships along with aiming to improve its local and international ratings". Another bank from the region explains that, "We are opening nostro accounts at new entities in different currencies to serve our clients. However, negotiations are underway with global correspondent banks updating them with our efforts in improving AML/CFT environment".

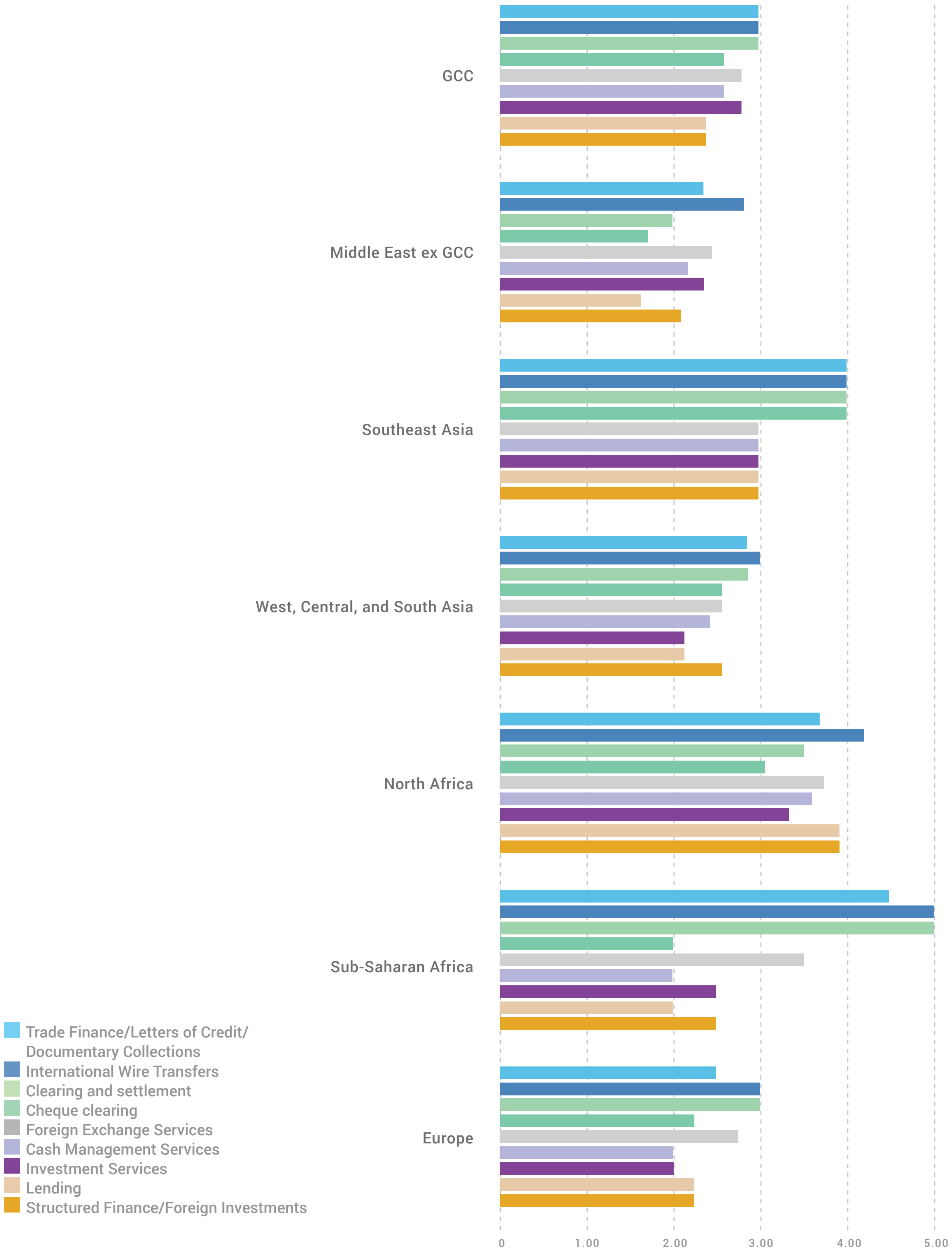
A bank from the North African region shared that its approach is to, "[Look] for regional opportunities to offset the effects of risk avoidance and seek to establish foreign branches of the bank at the regional level". Another bank from the same region shared its multilevel strategy to mitigate de-risking effects as: "(i) The [de-risking] risk is determined from the source of the problem [and is contained] in its limit, (ii) identifying the risks through identification [process] based on objectives and [common risks] classification, and (iii) [undertaking] an evaluation after identifying the potential risks. An evaluation process must be conducted in terms of their severity in causing the losses and their probability of occurrence". Another bank from North Africa stated that, "The organisation plans to adopt the technical systems necessary to avoid all [potential] risks as well as the measures against money laundering, non-compliance and operational risks (as this money is associated with terrorism)".

A bank from Middle East ex-GCC noted that on the issue of de-risking, "The bank developed a three-year strategic plan that covers all potential risks [e.g. de-risking risk] and a mechanism to mitigate each risk and address the deviations that appear during the application of these plans".

From the European region, a bank elaborated that in managing the de-risking effects, the bank is, "Creating a strategy to increase the intra-business volume within the group as well as with other financial units will be helpful for sustaining and strengthening the correspondent banking relations. Acting as a whole by all units in the group would increase the possibility of better relationship management with other financial institutions. In this regard, the leadership and coordination of the head-office to increase the trade finance volume is crucial. Dealings of the group banks as a whole with some leading banks may create a performance perception at their counters and this may eliminate the excuse of low business volume raised by leading banks that cause the termination of relationships at the end". Therefore, "To cope with the negative actions related to de-risking policies that are taken by the global and local correspondent banks, our banking group is encouraged to take the following steps:

1. Designing and coordinating the standard compliance policies that will be followed and strictly obeyed by all group banks accordingly;
2. Creating a strategy for all group banks to standardise their operations and to increase coordination between them to avoid any kind of compliance risk; and
3. Establish a centralised supervision mechanism to regularly supervise whether all units' transactions are fully compliant with international regulations".

fig 16. **De-risking Effects on Products and Services across Regions**



PART III

FINTECH ADOPTION WITHIN ISLAMIC BANKS

Fintech Adoption within Islamic Banks

The financial services industry is, in general, being transformed by a series of new technologies, all linked to digitalisation, and commonly bundled under the term "Fintech". Fintech embraces everything from high-speed algorithmic trading in financial markets to delivery of small-scale payment services through smartphones. Some Fintech activities involve new business models, for example peer-to-peer lending, while others involve improving the efficiency and effectiveness of existing business models, for example the use of distributed ledger technology to improve back-office record-keeping. As Fintech adoption continues to evolve, at some points, it is even unclear how far business structures and models will be transformed. One example is machine learning, as to whether its reliance on large data sets will result in a shift of power in the financial services industry towards the so-called "Big Tech" firms, which have access to large volumes of data about individuals.

One thing for certain, whether or not there are fundamental changes in business models, Islamic banks will at the very least face competition from other Islamic, and conventional, banks who are adopting new technologies. Very few banks, if any, will be able to ignore Fintech's threats and opportunities.

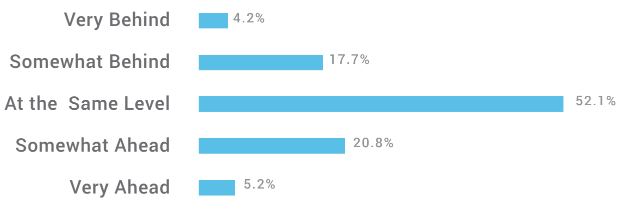
This survey asked questions about Fintech in a number of editions. This year, in addition to the more general questions in Parts I and II, the survey looked specifically at the level of Fintech adoption by Islamic banks, the structural changes undertaken for its adoption, it's impact on banks' operations and activities, as well as the plans of Islamic banks for the coming years.

Level of Fintech Adoption

Banks were asked about the level of adoption of Fintech and related digital transformation in Islamic banking compared to conventional banking in their own jurisdictions. Banks responses show that on average it was thought to be at the same level, with about as many thinking that it was either behind or ahead.

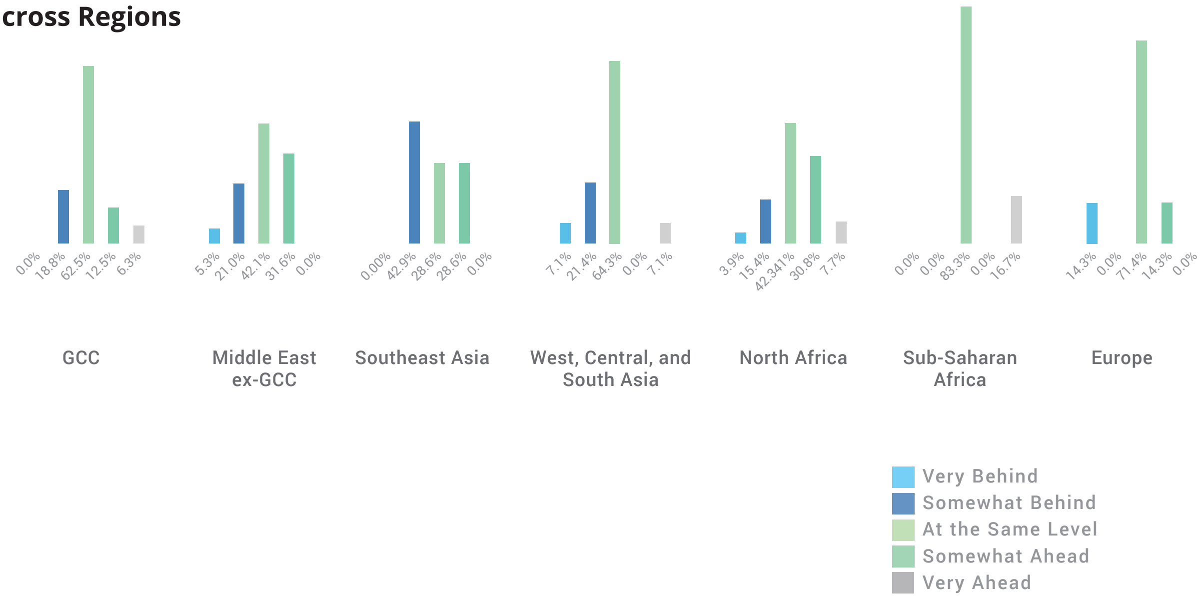
Islamic banks will at the very least face competition from other Islamic, and conventional, banks who are adopting new technologies.

***fig 17.* Level of Adoption of Fintech and Related Digital Transformations in Islamic Banking**



The picture was, however, very different between regions. Of particular note are the numbers in Southeast Asia, which thought Islamic finance was lagging, and those in North Africa which thought it was ahead. In some of the larger regions, of course, these numbers could be obscuring significant national differences, but it is difficult to probe these reliably.

***fig 18.* Level of Adoption of Fintech and Related Digital Transformations in Islamic Banking across Regions**

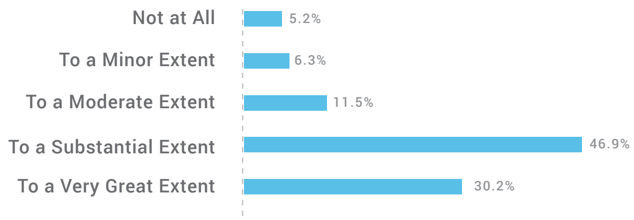


> *Islamic banks putting Fintech and digital transformation at the core of their activities.*

Fintech at the Core Banking Activities

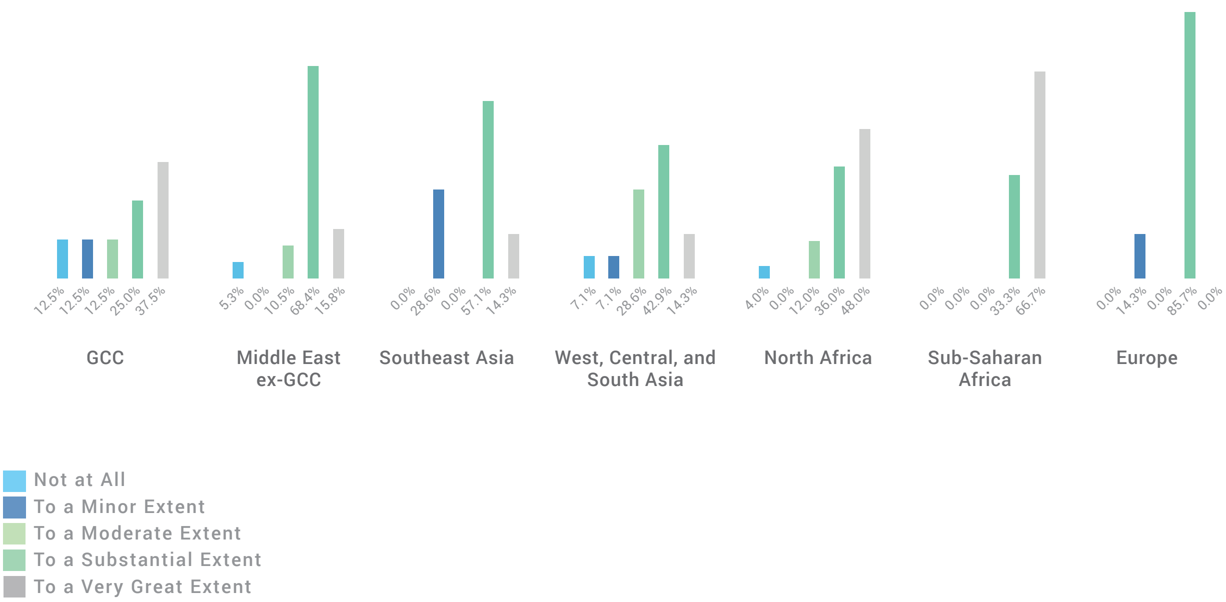
Banks were then asked to what level their institutions were putting Fintech and digital transformation at the core of their activities. Perhaps unsurprisingly, most institutions said that they were doing so either to a "Substantial extent" or "To a very great extent". All those who answered "Not at All" or "To a Minor Extent" were small banks.

fig 19. **Fintech and Digital Transformation at the Core of Institutions' Activities**



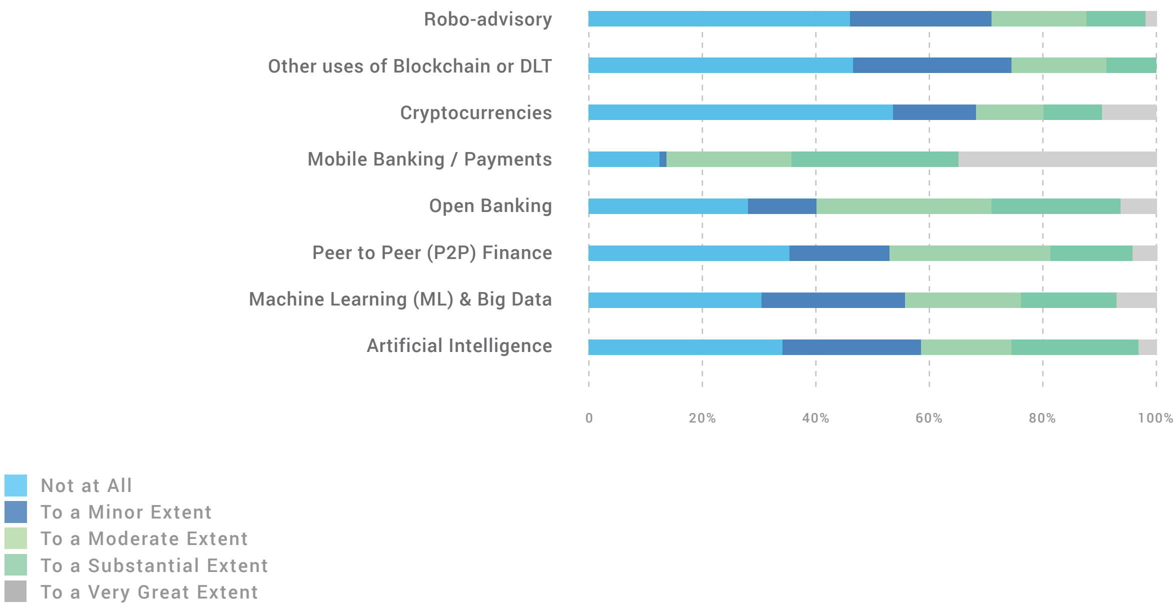
The regional variations were also interesting, with the GCC apparently more conservative than other regions, and both North Africa and Sub-Saharan Africa most enthusiastic towards new technologies.

fig 20. **Fintech and Digital Transformation at the Core of Institutions' Activities across Regions**



To see what this means in practice, institutions were asked to what extent they were currently implementing certain named Fintech trends, on a scale from 1.00 (Not at All) to 5.00 (To a Very Great Extent). The overall data for each Fintech trend can be seen below.

***fig 21.* Implementation of Fintech Trends**

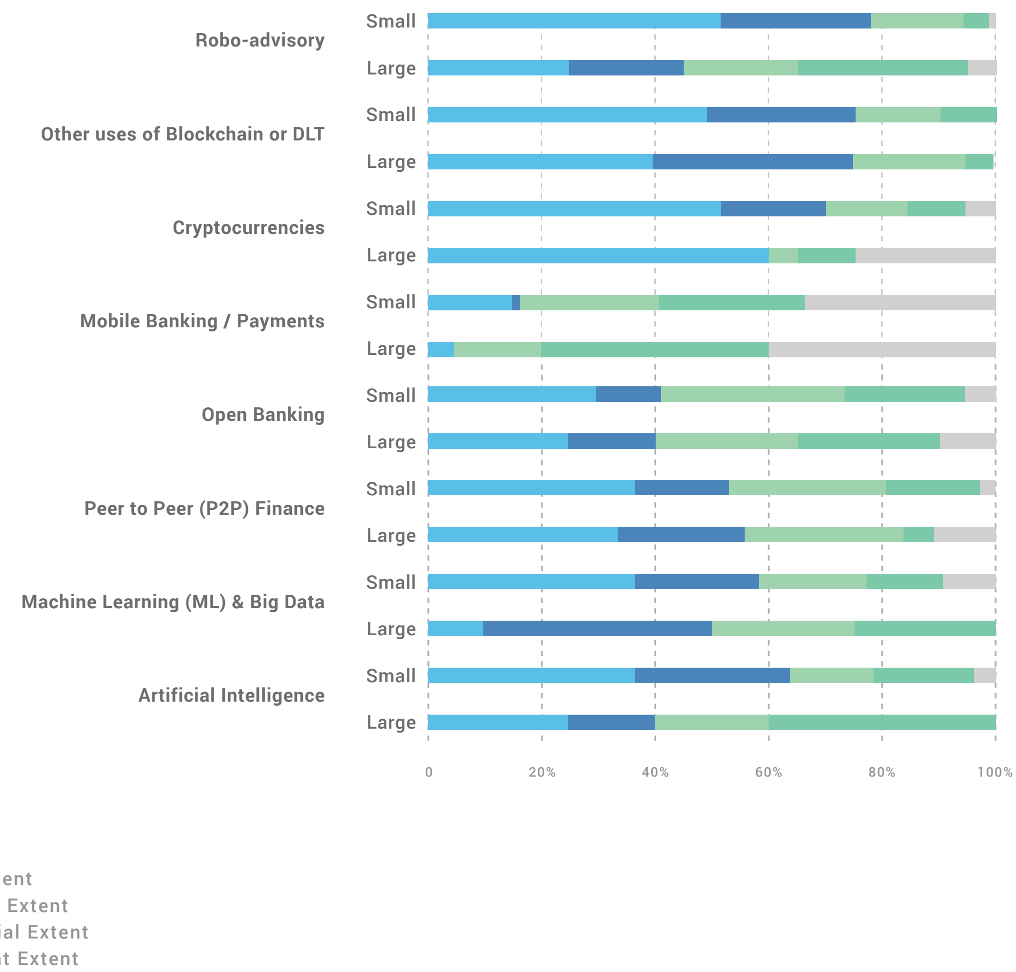


The technologies dominating the thoughts of Islamic banks are those related to mobile banking and, for some, open banking.

Mobile banking/payments clearly has, by a long way, the highest level of implementation. On the other hand, cryptocurrencies, other uses of distributed ledger technology (DLT) and robo-advisory have lower implementation levels. Some of these responses are unsurprising – cryptocurrencies, for example, the future of which is uncertain, and which in some jurisdictions, there are restrictions on banks in engaging with them. Similarly, with robo-advisory, as some Islamic banks have very limited investment business, which is the area in which robo-advisory is obviously most useful. The distribution for P2P implementation implies that this is an area in which banks make either at least a moderate commitment or none at all. Again, this is unsurprising, since a bank might be expected to make a decision either to have this as part of its business offering or to leave it to others. However, with regard to open banking which recorded a similar polarisation, this is a little disconcerting. While the results may well be related to developments at regulatory level in the relevant jurisdictions, it does not appear that open banking does is likely to grow internationally.

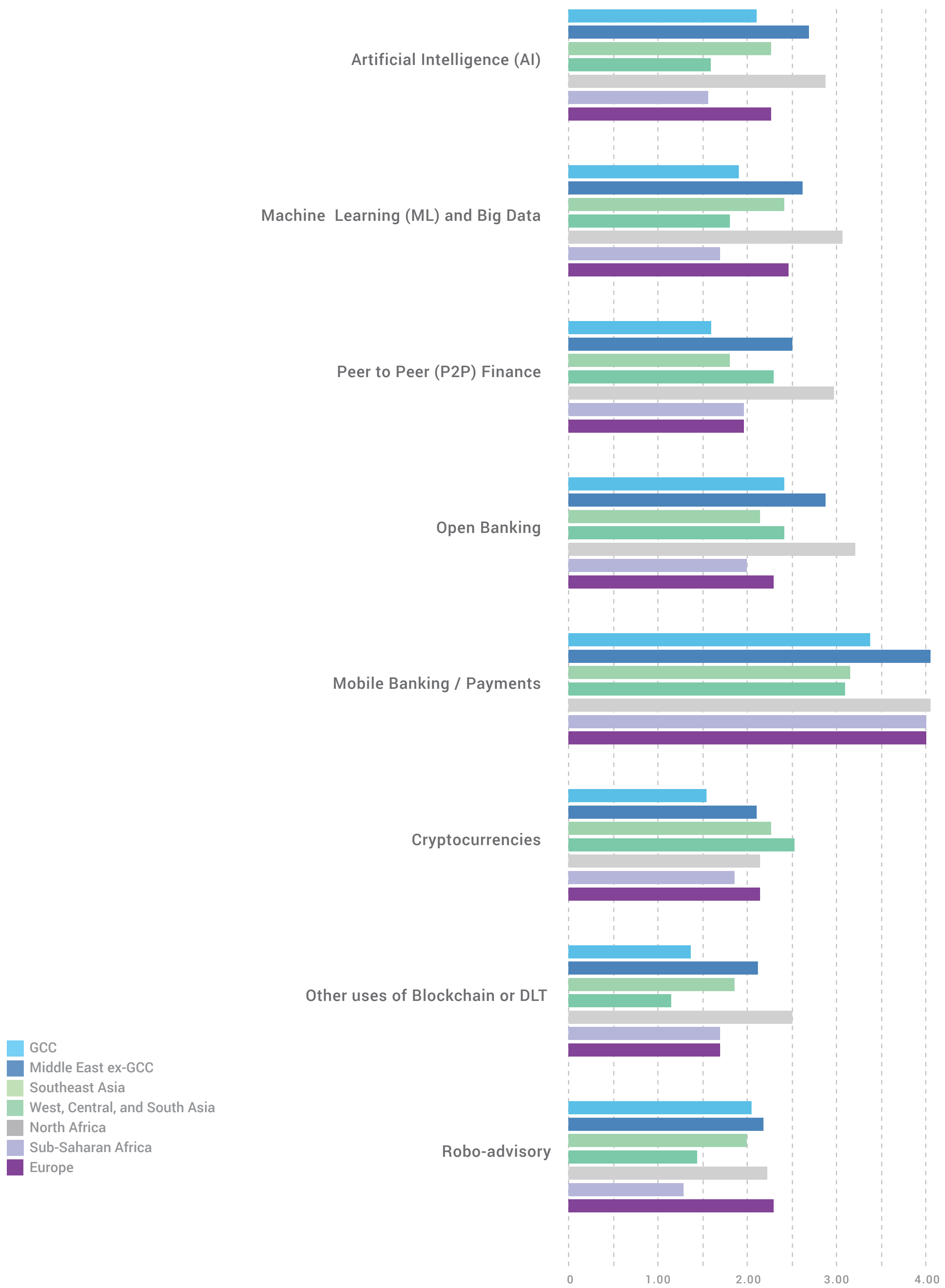
There were marked differences between large and small banks in some areas. In particular, large banks were much more likely to be involved with artificial intelligence, machine learning/big data and robo-advice. They were also more likely to be involved with P2P financing.

***fig 22.* Implementation of Fintech Trends - Small and Large Banks**



It is difficult, for reasons of space, to show the regional data in the same detail, and a composite score has therefore been calculated for each technology.

fig 23. **Implementation of Fintech Trends across Regions**

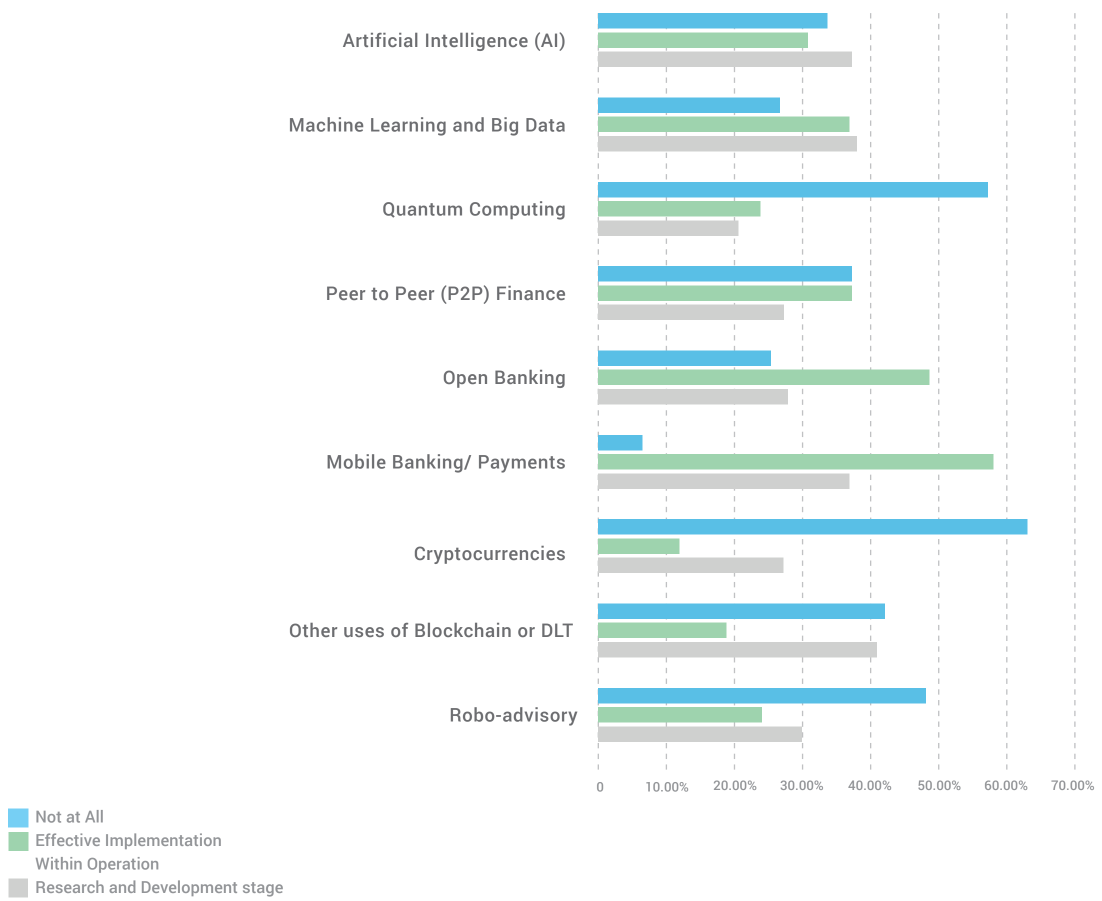


In general, the Middle East ex-GCC and North Africa tend to have high scores for most technologies, with West, Central and South Asia and Sub-Saharan Africa on the other side of the spectrum. However, the strong commitment of Sub-Saharan Africa to mobile banking and payments technology is very noticeable. Somewhat surprisingly, West, Central and South Asia shows the highest levels of commitment to cryptocurrencies – even though the overall level is not high and the full data[4] show considerable polarisation, with 54% of banks not at all involved, 31% involved to a very great extent, and very little in between.

Fintech Trends in Upcoming Years

Looking forward, it was asked which technologies banks were planning to explore or implement in the next three years. The responses displayed considerable enthusiasm for the implementation of new technologies, including some that may well not be ready for operational deployment within that time period.

fig 24. **Fintech Trends Planned to be Implemented in the Next Three Years**



[4] Appendix - Survey Findings: Region-Focused

The two technologies that stand out as areas in which banks expect to have effective implementation within their operations are mobile banking/payments and open banking. The two in which more than half of the respondents expect no involvement at all are cryptocurrencies and quantum computing.

Differences between large and small banks were notable. Large banks were more likely than small ones to implement mobile banking, open banking and machine learning – which is perhaps predictable given their larger resources. It is also perhaps predictable for small banks to think that they are less likely to be involved with cryptocurrencies, other uses of distributed ledger technology or robo-advice. However, it is puzzling that the only banks that think they would be implementing quantum computing were small ones, which being a difficult and speculative technology, it would realistically be likely to be implemented by larger players first. This response could suggest that some small banks are unduly optimistic about its development.

> *Large banks were more likely than small ones to implement mobile banking, open banking and machine learning – which is perhaps predictable given their larger resources.*

fig 25. **Fintech Trends in Large Banks**

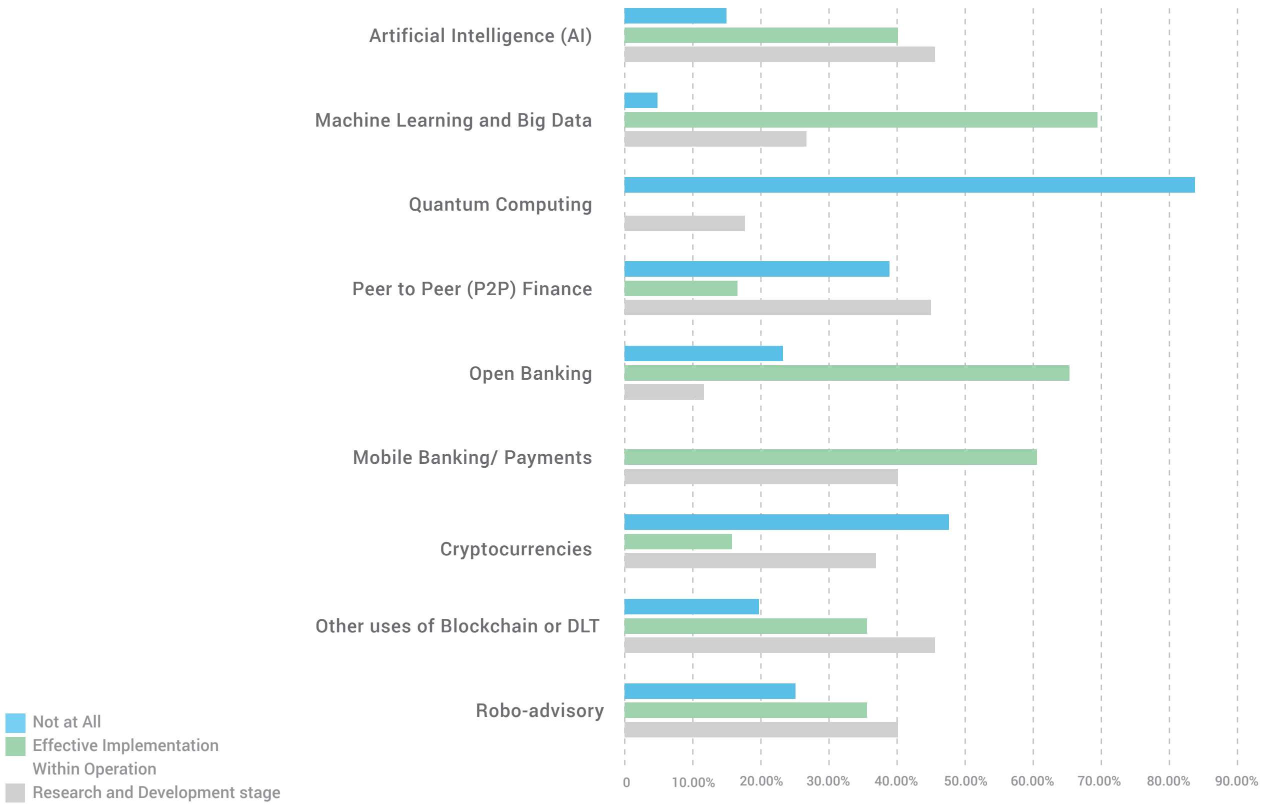
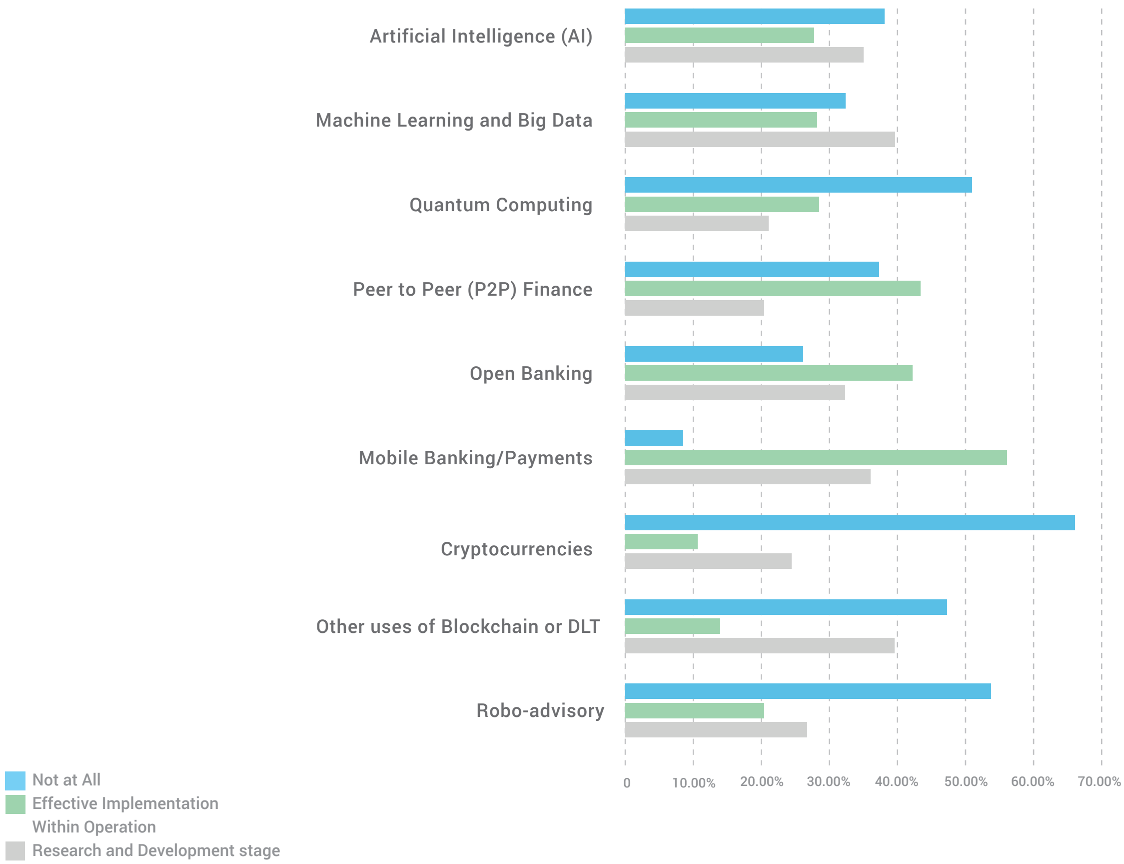


fig 26. **Fintech Trends in Small Banks**

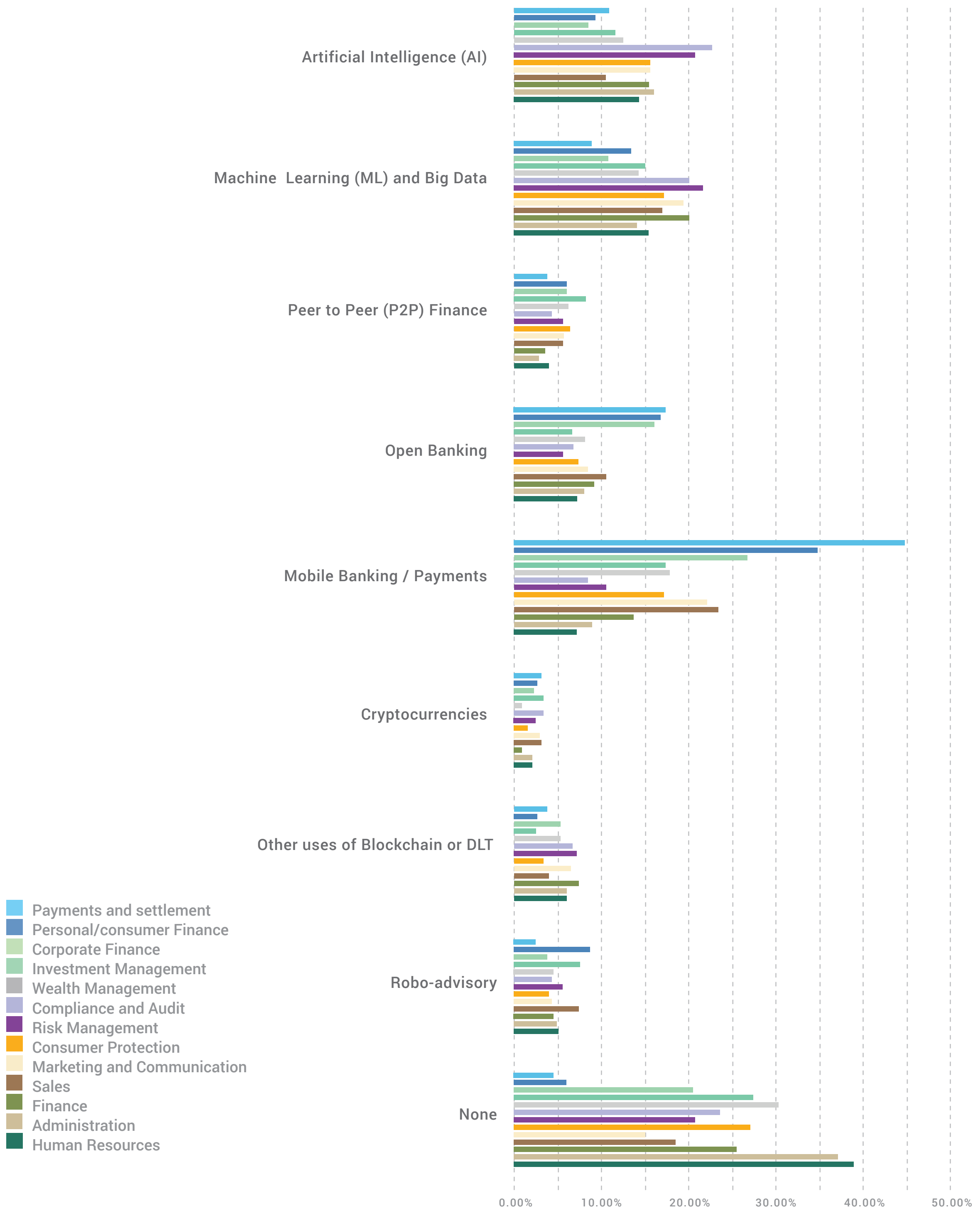


The regional patterns recorded are very divergent. Overall, GCC banks were the most optimistic about the rate at which they expect to adopt new technologies, and the Middle East ex-GCC the least optimistic. The results from Europe were particularly diverse, with very high scores for some technologies and low ones for others. This may reflect the niche nature of some European banks' business models. The results from North Africa were also hard to understand – with low scores for some advanced technologies, like artificial intelligence and machine learning, and high scores for quantum computing and distributed ledger technology (See Appendix - Survey Findings: Region-Focused for details).

Specific Areas of Fintech Integration

The respondents were asked about the specific areas in which new technologies were expected to be applied.

fig 27. **Areas in Which New Technologies are Expected to be Applied**



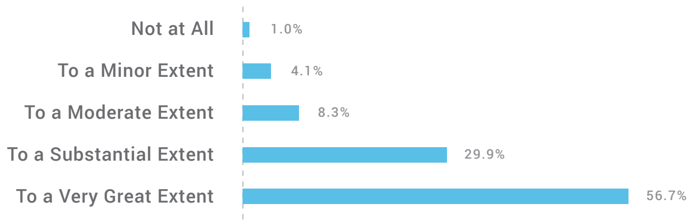
It is perhaps unsurprising that some technologies – notably mobile banking/payments and open banking – are expected to be applied as they mainly focus on the bulk of day-to-day customer activities of payment and settlement, personal finance and corporate finance. What is perhaps less obvious is that the expected uses of artificial intelligence (AI) are largely in the compliance/audit and risk management functions, while the uses of machine learning and big data seem to be largely in the "back-end" functions.

To enable greater understanding of the responses, the banks were asked for specific examples of how the technologies will be implemented in particular areas. While some of the responses were too vague to be useful, others did give a picture of banks applying a wide range of technologies in well-thought out strategies. One bank in the GCC gave the following examples: "Retail customer onboarding with AI identity verification; analytics on user spending and consumer financing; big data for financial analytics; robo-advisory for investment management in terms of setting up investment portfolios; open banking to verify customer net-worth for financing and credit card applications". A bank in West, Central and South Asia said, "Mobile apps are the strongest touch point for consumers and thus we can integrate it with ancillary applications to provide payments and real-time settlements to our merchant. On the basis of big data, we can evaluate the consumer's behaviour and can offer personal/consumer loan products with the help of the mobile app as it will be integrated with all the back-end systems. Robotic process automation can be the game changer as it can automate the various department's existing processes and thus speed-up the manual processes with a set of routines defined in system. It also reduces the chances of errors and provides utmost accuracy. A European bank gave the examples of AI for text analysis in call centre conversations and customer complaints; using DLT to transfer digital assets representing a quantity of physical gold within a particular platform, and open banking to facilitate e-commerce payments using APIs". On the other hand, no respondent gave an example of how either cryptocurrencies or quantum computing might be used, and no respondent gave an example of the use of new technologies in human resources. Overall, the examples given suggest a strong focus on mobile applications in customer facing contexts, with the application of AI and big data for analysing customer behaviour, improvements in payments systems, and the automation of back-office processes, as the principal areas for development.

Mobile banking/payments and open banking – are expected to be applied as they mainly focus on the bulk of day-to-day customer activities of payment and settlement, personal finance and corporate finance.

One of the risks that has been consistently prominent on the risk dashboard has been cybersecurity. Respondents were therefore asked to indicate to what extent they were putting cybersecurity at the forefront of their business strategies, and what specific measures were they taking to ensure it. As expected, the risk dashboard data showed that the ratings were very high, with over 87% of respondents, saying either "To a Very Great Extent" or "To a Substantial Extent". There was no material difference based on the size of a bank. By region, cybersecurity appears to have somewhat lower priority in Southeast Asia, and higher priority in Sub-Saharan Africa and Europe, though the relatively small numbers responding from these regions make it difficult to be confident of the actual reality.

fig 28. **Cybersecurity at the Forefront of Institutions' Business Strategy**



Respondents were also asked to elaborate on specific initiatives. Some of the replies were very unspecific, with some respondents saying that they were simply following the instructions of their regulators. However, one bank in the GCC gave more detail stating that, "The bank is doing its best to apply the latest technologies to protect confidentiality of its assets. We are following and adapting several international information security standards like ISO 27001, PCI/DSS standard and other risk management standards. The bank is applying the layered security approach, that ensures security controls are in place at different endpoint levels. The bank is insured against electronic and computer crimes that could arise from outside or inside the bank". A bank in Southeast Asia said, "Basic level security – e.g. use of strong passwords, control access, put up a firewall, use security software, update of programmes and system regularly, monitor for intrusion/ intrusion detectors, raise awareness".

The bank is doing its best to apply the latest technologies to protect confidentiality of its assets. We are following and adapting several international information security standards like ISO 27001, PCI/DSS standard and other risk management standards.

A bank in West, Central and South Asia said, "We have a dedicated department for Information Security, which comprises of skilled resources having CISA, CISM, CHFI, ISO 27001, CEH certifications. To safeguard the bank's information assets various controls have been implemented to prevent, detect, and respond to cyber-attacks which includes but not limited to multiple firewalls, APT, AV, EDR, etc. In addition to security devices best practices such as ISO 27001, PCI DSS, CIS and NIST are referred to for processes and practices. Third party experts are engaged on an annual basis to perform penetration test for the continuous strengthening controls and improvement of the bank's security posture". Some other banks in the region gave broadly similar responses, sometimes citing the same standards.

One European bank gave a particularly comprehensive response, approaching the issue from the standpoint of security strategy rather than technical standards:

"Identity validation: An appropriate identity validation mechanism is established for the transactions performed via information systems. Which identity validation mechanism is going to be used is decided according to the risk assessment result to be carried out by top management.

Incontestability and assigning responsibility: The bank uses techniques including means of incontestability and segregation of duties for the critical transactions realised within the scope of information systems and of which scope to be determined by the bank.

Segregation of duties: The segregation of duties and responsibilities principle is applied in improving, testing and processing system, database and practices relating to information systems, the duties and responsibilities assigned are reviewed periodically and if necessary updated in accordance with the segregation of duties principle. Processes and systems are designed so as to not to enable a critical transaction to be entered, authorised and completed by one personnel or support service institution.

Authorisation: The bank establishes an appropriate authorisation and access control for access to databases, practices and systems relating to information systems. Accordingly, authorisation level and right of access are assigned appropriate to user, party and systems intervening the activities in the information systems.

Establishing audit trails: Necessary techniques are used so as to prevent deterioration of integrity of audit trails and if any, to determine any deterioration. Measures are taken so as to protect record system against any unauthorised systematic and user intervention.

Update programmes and systems regularly: The bank updates contain vital security upgrades that help protect against known bugs and vulnerabilities.

Monitor for intrusion: The bank uses intrusion detectors to monitor system and unusual network activity. If a detection system suspects a potential security breach, it generates an alarm, such as an email alert, based upon the type of activity it has identified.

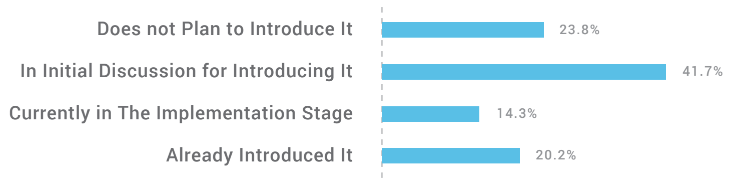
Raise awareness: The bank provides all employees with regular cyber security awareness and training".

Overall, while it was clear that some banks have very strong strategic and technical understanding and are aiming to follow best international practice, others displayed a much lower level of sophistication. In some cases, this amounts to reliance on their regulators directions on what they should do. In other cases, the approaches to cybersecurity appears to not go beyond those that a reasonably sophisticated individual might take (use of commercial anti-virus programmes etc.). It is of course very possible that some responses understated their positions – either due to the individual responding to the survey being personally less familiar with the technical details or the bank's reluctance to share details. However, in a period where banking is rapidly becoming digitised and in some regions, for example Sub-Saharan Africa, mobile technology is being relied upon to leapfrog a stage of development, it does appear that some Islamic banks need to advance their approach to cybersecurity very considerably.

Prospects of Open Banking

The survey also asked how far along jurisdictions were introducing open banking, what the challenges were, and how they planned to mitigate them. Only 20% of banks said that open banking had already been introduced, with a further 14% saying it was in the implementation stage. A large majority of the remainder indicated that initial discussions were under way. Introduction to open banking was most advanced in Europe, followed by the GCC and the Middle East ex-GCC.

fig 29. **Introduction of Open Banking**



Introduction to open banking was most advanced in Europe, followed by the GCC and the Middle East ex-GCC.

In sharing the challenges, respondents indicated that some of the challenges identified were broadly strategic and others broadly technical. For example, three Islamic banks in the same GCC country made the following comments:

"Given the market size, it is very challenging to work on multiple standards introduced or implemented by each and every bank. The role of aggregators is still at an infant stage and banks that are looking to invest early in this space will find it very challenging to find adequate return on the investment".

"The key challenge is the implementation of innovative solutions that make use of open banking to deliver practical, real-world solutions to problems faced by customers. The bank is mitigating this by approaching potential partners to develop joint solutions".

"The main concern is how we can preserve the confidentiality and integrity of the data belonging to our clients that will be available to any external party that will connect us with open banking. We have clearly in mind the regulations that govern that, especially the data protection law recently released by our national authorities. To be on the safe side, a contract has been signed with open banking service providers to ensure the security of the data in transit between the bank and that service provider".

A bank in West, Central and South Asia said, "One of the main challenges facing open banking is security as it allows third party vendors to access consumer data. Secondly, lack of education and awareness around open banking's capabilities has made consumers less likely to consent to their data being shared, limiting banks' and Fintech's ability to innovate. In order to overcome these issues, the security elements PCI-DSS[5] must be considered while designing the open banking architecture platform which can ensure maximum security". On the other hand, some banks in different regions indicated that the main issue was their limited competency in this area. It is also clear that many banks see open banking as something that may be forced on them by regulators, rather than something they are keen to undertake for commercial reasons. One bank in Europe said, "We are obliged to have this. However, it is of little relevance due to our size".

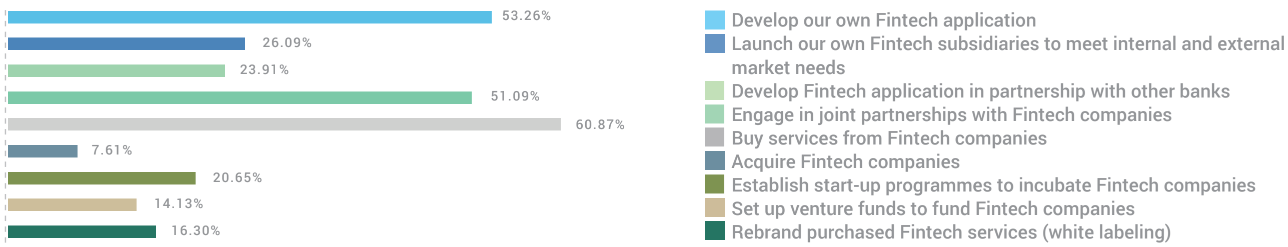
[5] Payment Card Industry Data Security Standard.

Integration Strategies for Fintech Solutions

Fintech will require transformation across many areas of Islamic banks. Banks were asked to identify, from a list provided, which strategic approaches they were taking to integrate Fintech solutions. This was another question to which multiple answers were possible.

The most favoured approach to integrate Fintech is to buy services from Fintech companies.

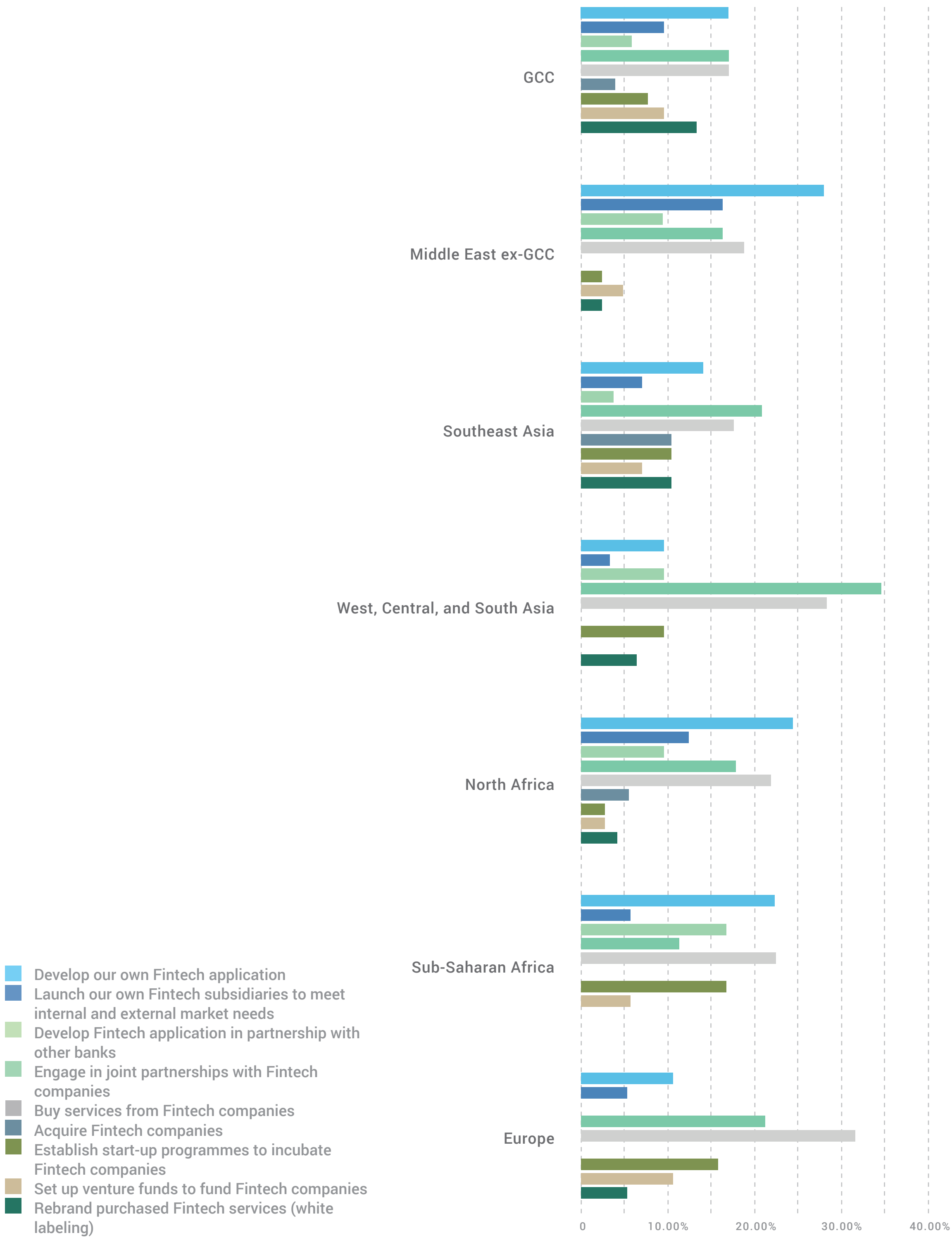
fig 30. **Strategic Approaches to Integrate Fintech Solutions**



It is clear that the most favoured approach is to buy services from Fintech companies, with in-house development and joint partnerships with Fintech companies not far behind. On the other hand, there was little enthusiasm for acquiring such companies.

Large banks were pursuing more in favour of these options than small ones, showing an average of 4.9 against an average of 3.9 for the small banks. They were much more likely to be pursuing or exploring the somewhat lower-ranking options such as establishing incubator programmes or venture funds, and rebranding products from Fintech companies.

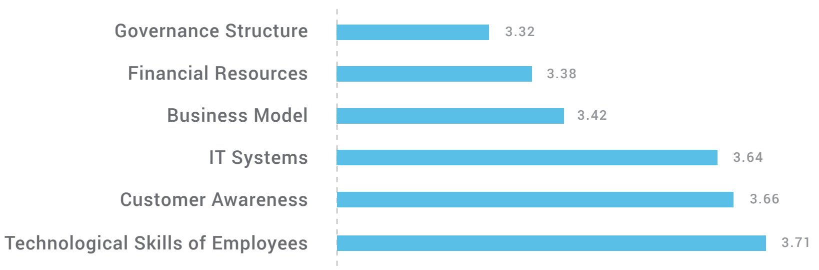
fig 31. **Strategic Approaches to Integrate Fintech Solutions across Regions**



The regional variations were interesting and occasionally surprising, even allowing for low response numbers in some regions, and a lack of large banks in others. For example, the option of developing Fintech applications in-house, which scored relatively highly in almost all regions, had a low score in West, Central and South Asia. Launching Fintech subsidiaries, which scored relatively low in most regions, scored high in North Africa and relatively high in the Middle East ex-GCC, both regions which tend to be characterised by smaller bank sizes. This is surprising, but the reasons are hard to ascertain given the limitations on responses to the questions actually asked.

Banks were also asked about the level of change required in particular areas, on a scale from 1 to 5, with 1 being the lowest, and 5 the highest. The technical skills of employees were the most significant, closely followed by customer awareness and IT systems. Large banks saw greater demands in the area of customer awareness, and the business model came closely behind technological skills, but in general they tended to give higher scores than smaller banks, perhaps reflecting the greater challenge in managing change in large organisations. Overall, the scale of the challenges was assessed most highly in Sub-Saharan Africa and lowest in Europe.

fig 32. **Level of Change Required by Institutions to Adopt Fintech Solutions**



Most Affected Areas by Fintech Integration

Banks were also asked about specific changes they had been made, or would be making in the near future, in these areas to adopt Fintech solutions. Although the focus of the question was more on the internal and operational changes, it was noted that a number of the answers highlighted new products and applications that the bank expected to launch. However, several banks did elaborate on staff training initiatives, in some cases connecting with global consultancy and IT firms. Others mentioned making new hires to equip themselves with the required skill set.

One bank from the GCC stated, interestingly, that it had established a new "innovation lab" where Fintech developments will take place away from the IT department. The same bank has also established a new Fintech fund that will invest in new technologies with a mandate to implement new ventures in the Middle East and North Africa. A bank in Europe said that it had established a digital transformation and innovation team on its business side specifically to make links with Fintech, while another said that it had invested in various Fintech products and companies. Some banks, however, were clearly still in their early planning stages. A bank in the Middle east ex-GCC said that it was contracting with specialised companies to develop plans to fully develop the technological environment, while another referred to a "study to determine the general frameworks on which changes will be made".

As to the timeframe needed for the changes, most banks seemed to have a timeframe of one to two years, although a substantial number also mentioned three to five year horizon. Some banks regarded change as a continuous process, while others said that they had not yet set a timeframe.

Asked about the human resources needed, most banks acknowledged the need for more human, and sometimes financial resources, but in general were relatively unspecific about numbers or detailed skill sets. However, one bank in the Middle East ex-GCC said that it would require up to 30 employees and financing of around USD 1 million. Another bank in Southeast Asia expected to need 100 employees. A bank in North Africa estimated a figure of USD 1 million for development of the current human resources together with the use of designers and consultants. A bank in West, Central and South Asia said, "We currently lack seasoned AI experts, and require a few data scientists on-board. There are tools we need to acquire such as a BI tool, as well as a need to upskill our team in ML, data science and cloud technologies". It is clear that the resource demands will be quite substantial for some banks. One bank, in North Africa, referred specifically to, "The need to increase both its capital and the volume of deposits if it is to undertake the change".

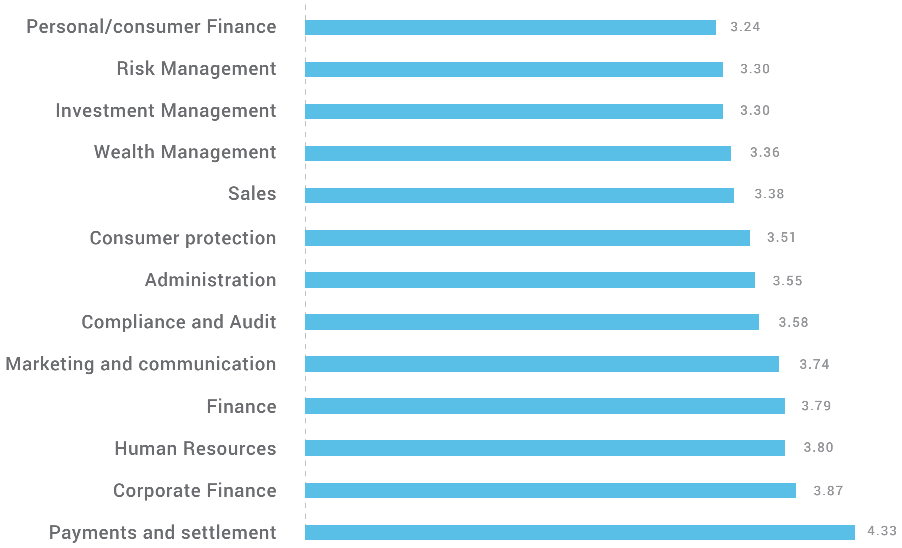
When asked about the measures and actions being undertaken specifically within the institution's IT structure to allow for efficient implementation of new Fintech technologies, a bank in West, Central and South Asia said, "We have been already updated and equipped our IT infrastructure with the updated servers, firewall and network routes/switches. We are still in process to update other necessary hardware and software components in the upcoming months for efficient implementation of Fintech". Another bank in the same region referred to the specific software they have implemented: "DDOS Protector, NBA, PLOALTO, FTD, LEM, IBM Power Tech".

One GCC bank referred to structural change within the IT Department where they, "Separate the 'Development' from the 'Day-to-day Maintenance' functions within the IT Department. While the setup may not look efficient, the two functions will not be able to perform and deliver if they remain combined within one team". A European bank said, "In the coming period, we are establishing a new company for our IT department. Together with this company, Fintech will focus more on the issue and expand our possibilities". These comments, and some of those reported earlier, indicate a recognition that fundamental change is likely to require a dedicated team, and is difficult to manage concurrently with the existing operational systems.

Banks were asked to what extent (on a scale of 1 to 5) particular areas would be affected by the implementation of Fintech solutions.

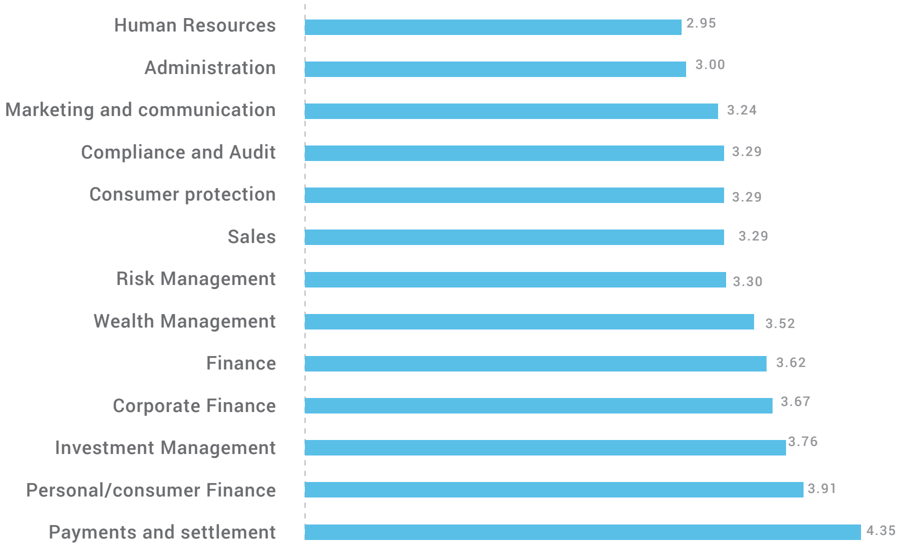
All areas scored relatively high, with payment and settlement clearly at the top.

fig 33. **Areas Affected by Fintech Integration**



All areas scored relatively high, with payment and settlement clearly at the top. There were, however, some significant differences between large and small banks. Large banks tended to put the internal, non-customer-facing, functions such as administration, HR and compliance towards the bottom of the ratings.

fig 34. **Areas Affected by Fintech Integration for Large Banks**



On the other hand, for small banks, business lines like wealth management and investment management showed low scores, along with corporate finance. It is, however, possible that this may reflect that small banks have limited business activities in those areas.

***fig 35.* Areas Affected by Fintech Integration for Small Banks**

Banks were also asked to give two examples of how particular areas would be affected in their institutions. It is not surprising that some of the responses overlapped with earlier comments, particularly in areas such as mobile payments. However, banks also mentioned the use of Ripple (a variant of DLT) in payment reconciliation systems, the use of analytics and AI in marketing and communications, and AI-powered robo-advisory tools to give customers a better understanding of their investment performance.

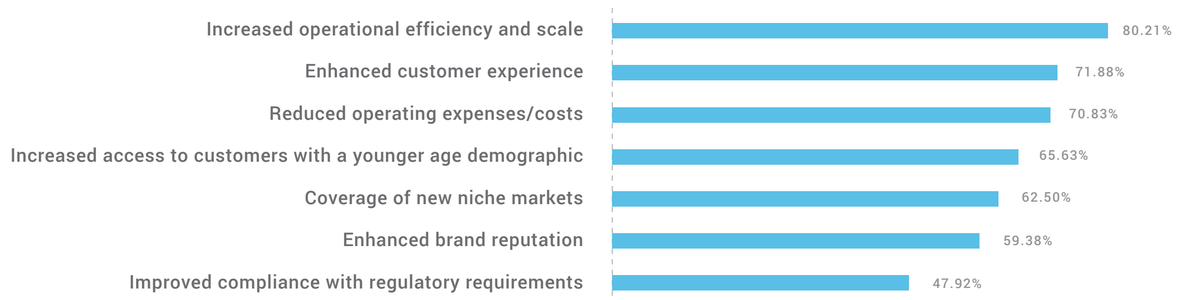
From a strategic point of view, one bank in the GCC is expecting a potential minor loss of market share due to Fintech and telecoms companies providing financial services. A bank in Southeast Asia, however, expected that it would be using Fintech infrastructure and resources for sales. It would be using less human marketing/sales resources itself, leading to a more standardised process and faster credit decisions. A bank in West, Central and South Asia saw ways of becoming more involved with customers' transactions – "By applying big data on consumer interest and behaviour, we can get the customer interests, customer spending habits and preferred consumer products and based on data analysis we can on-board those merchants for discounts or customised products which can fulfil customer frequent needs. This will help the bank to increase the customer footprint and achieve the business targets".

Banks also noted risks of various kinds. A bank in Sub-Saharan Africa said, “Risk issues are the core problem of all Fintech advancements such as virus and cybersecurity. In addition, compliance and audit are challenging the way these Fintech are working and how the management implemented without any compromise”. Other comments, made at this point in the survey or elsewhere, indicated that a common issue for banks partnering with Fintech was the need for some contractual control over their partners’ behaviour, for example with regard to data security and whether the partners could be trusted to adhere to their contractual obligations.

Banks’ Response on Fintech Advantages

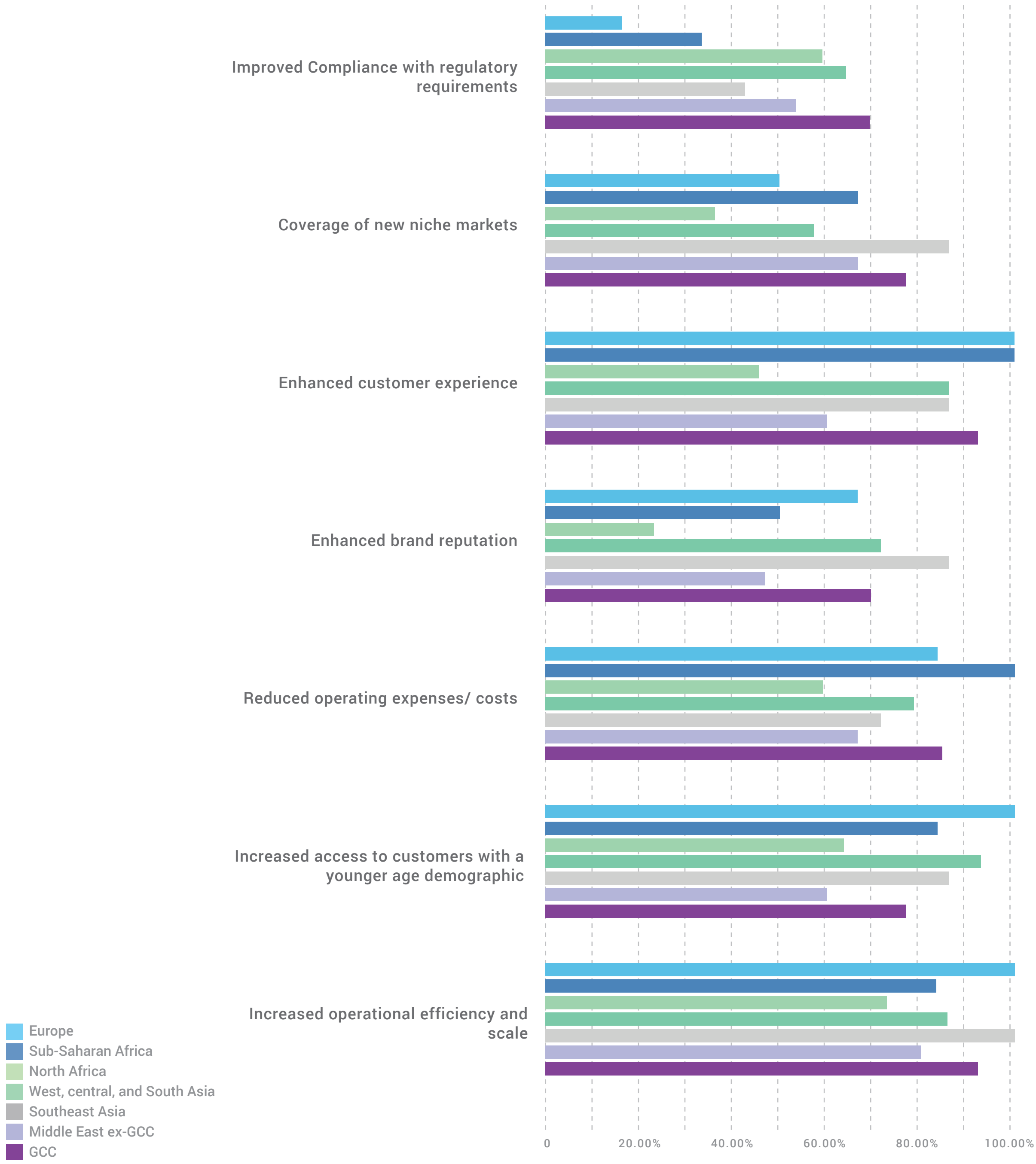
Banks were asked what advantages Fintech was bringing to the Islamic banks, either currently or in the future. Banks indicated that operational advantages, in terms both of efficiency/scale and cost featured highly, though customer-related advantages were also prominent.

fig 36. **Advantages from Fintech**



Large banks saw somewhat more advantages than small ones and gave noticeably higher priority to access to customers with a younger age demographic.

fig 37. Advantages from Fintech across Regions



With Fintech partnerships it was possible to reach new markets which previously were outside the bank's risk assessment criteria.

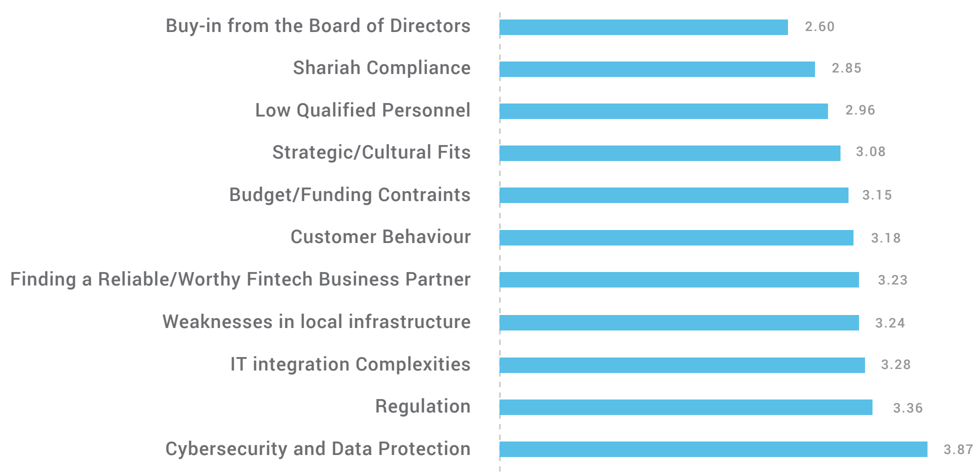
The most significant feature of the regional data is that banks in the Middle East ex-GCC and in North Africa generally saw fewer advantages from Fintech than those in other regions.

Challenges of Fintech Adoption

When asked for examples of advantages, and which technologies were producing them, Islamic banks often answered only one half of the question and were sometimes unspecific. As a result, it was rarely clear that a particular technology was delivering a particular advantage. However, one bank in the GCC gave an example of DLT making it possible to follow financial transfers. A bank in Southeast Asia said that with Fintech partnerships it was possible to reach new markets which previously were outside the bank's risk assessment criteria. A bank in West, Central and South Asia said that card-less ATM transactions not only improved customer experience but also saved in terms of card printing and distribution, and reduced the risk of lost card and other card-related fraud. A European bank mentioned a direct internet purchase system using QR codes, which it believed was proving attractive to a younger demographic. A number of banks made the point that digital banking was something now demanded by customers, implying that its introduction was necessary, at the very least, for defensive reasons. At the same time, it needs to be recognised that banks vary greatly in their technology levels. For example, one bank in North Africa referred to the introduction of ATMs as something that was making a positive impact on customer service.

Banks were then asked about a series of challenges, which they needed to score on a scale of 1 (Not Challenging At All) to 5 (Extremely Challenging).

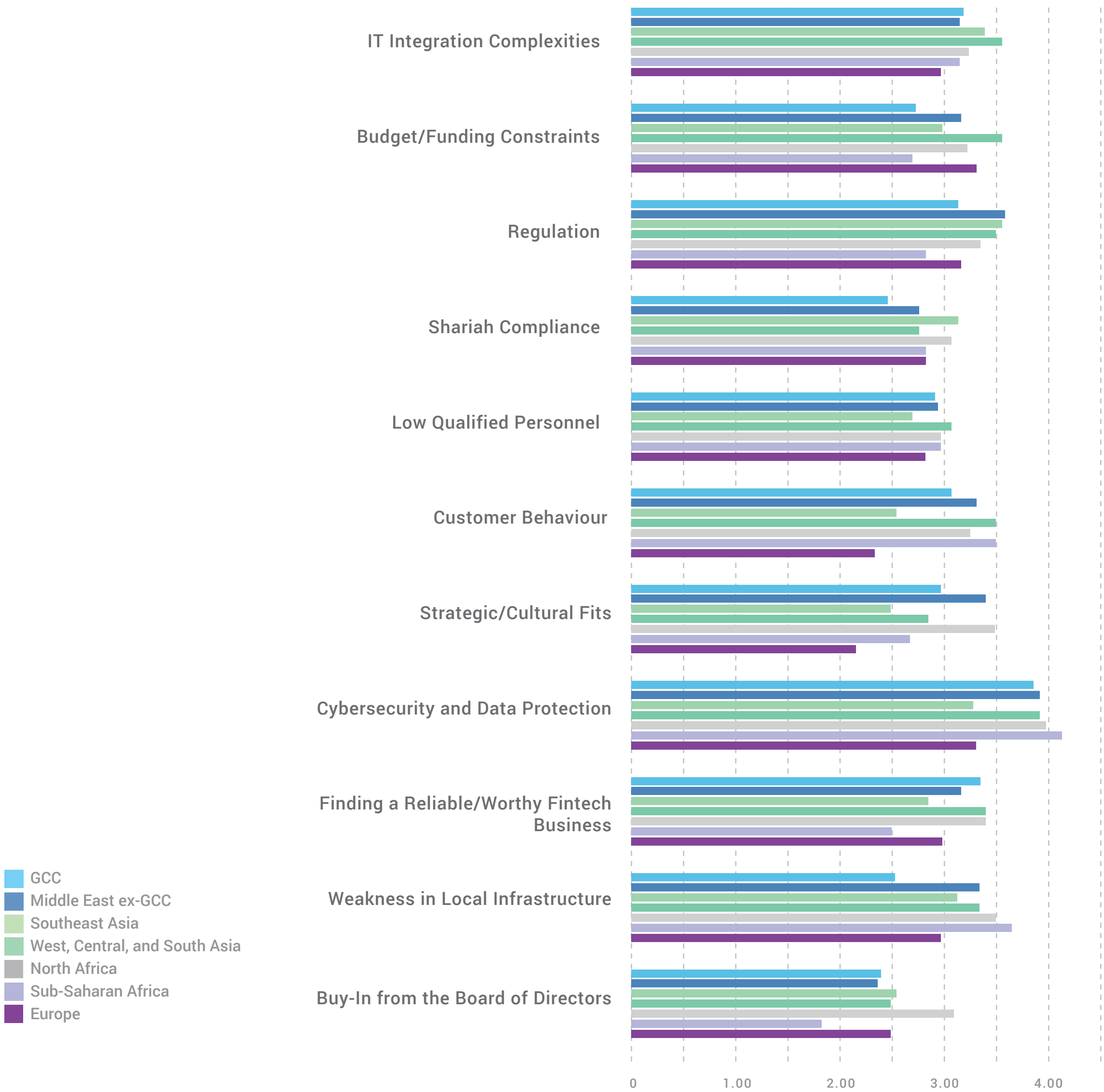
fig 38. **Challenges of Fintech Adoption**



It was clear that the most important challenges indicated were cybersecurity and data protection, followed by regulation, with a number of other issues quite closely grouped. The scores were, however, modest, suggesting that many of the challenges could be overcome.

In this case, the regional divergences were more interesting than those of bank size. Both Southeast Asia and Europe seemed to have markedly lower concerns with cybersecurity and data protection than other regions, while the GCC and Europe had lower concerns with local infrastructure.

***fig 39.* Challenges of Fintech Adoption across Regions**



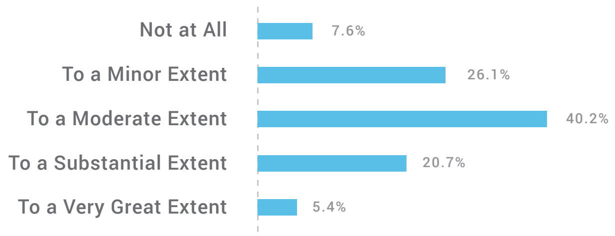
When asked what actions institutions were taking to overcome the challenges, many wrote in terms of investment or of digital transformation strategies. However, there were some relatively elaborate strategic descriptions. One bank in the GCC wrote: "Hiring of new young resources with entrepreneurial aspirations to lead creative initiatives; revise and challenge existing processes to think of creative ways to improve efficiency; working with multiple solution providers and start-ups to conduct proof of concept exercises; hire and in-source employees to improve internal IT development capabilities both on mobile and web applications". Another bank in West, Central and South Asia said, "Since most of our IT systems, including our core banking system, are in-house software, integration complexities are manageable. Our regulators are opening up to the possibilities of Fintech and have already brought out a number of policy frameworks to enable banks to roll out Fintech services with lot more agility. We have regular publications, infographics, posters and other materials for customer education in most of our touch points such as branches, ATM booths, agent outlets etc. For the last few years, we worked very closely with our Board of Directors to get buy-in and already benefit from their relentless support for Fintech adoption. In terms of collaboration with third parties, it is a cultural issue, therefore, we have not been able to see anything significant on that front yet. However, with the Board's support, and our incessant efforts, 2020 will be make or break year for third party collaboration. We have started talks with other banks to create a consortium that can work to face the Fintech challenge together".

Competition from Novel Business Models

One much-discussed issue is the extent to which banks, including Islamic banks, face competition from new business models based on the new technologies now becoming available. In general, Islamic banks, while concerned, did not perceive themselves to be under major threat.

Hiring of new young resources with entrepreneurial aspirations to lead creative initiatives; revise and challenge existing processes to think of creative ways to improve efficiency; working with multiple solution providers and start-ups to conduct proof of concept exercises; hire and in-source employees to improve internal IT development capabilities both on mobile and web applications.

fig 40. **Competition from Novel, Technology-enabled, Fintech-driven Business Models, whether employed by Established Businesses or Start-ups**



This picture was, however, quite variable across regions. Levels of concern appear particularly high in North Africa and Sub-Saharan Africa, while the picture in Europe is more polarised than in other regions.

***fig 41.* Competition from Novel, Technology-enabled, Fintech-driven Business Models, whether employed by Established Businesses or Start-ups across Regions**

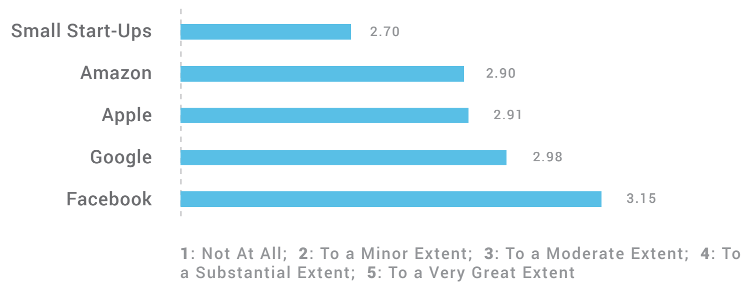
Banks were also asked about the specific new business models from which they faced competition. The most prominent were banks and payment systems based entirely on digital banking, though crowd-funding and robo-advice in wealth management also featured. In some countries, there was particular concern about telecoms companies acquiring banking licences and using their technological expertise to capture substantial parts of the payments market quickly. One bank in the GCC made the interesting point that wealth management was becoming increasingly borderless, leading customers to look outside the MENA region for wealth management products which they could now access easily on apps, noting that, "Younger generations are less concerned with proximity of the service provider as long as they get the convenience and 'tech-y' customer experience". Overall, however, it was clearly the area of payments in which banks felt most vulnerable.

Asked how some of the "Big Tech" companies might impact on competition in the Islamic banking industry, a number of banks did not see any imminent threat and believed that these companies were generally focusing their attention in other areas. However, this view was by no means unanimous. One bank in Sub-Saharan Africa said, "These big tech companies, will, in a few years, make some banks disappear physically and more than 10% will stay only online". Another bank, in the GCC, said, "Big tech firms haven't been focusing on Islamic banking yet, but they will be able to reach out to mass customers with borderless offerings. The convenience that big tech companies can provide is not something that banks can match given how fast the companies move. Banks are also confined with regulatory standards that are not necessarily faced by big tech firms especially in small jurisdictions (within MENA) where regulators willingly invite big tech firms to host their platforms with simplified conditions to boost inward investment, branding and job creation opportunities". Another interesting point is not all banks see the entry of big tech firms as negative. One bank, in Southeast Asia, said, "Big tech companies entering Islamic banking industry is actually good news if it ever happens. We and other Islamic banks in our country may work together to solve the unbanked issue, to alleviate poverty, etc". Another bank, in West, Central and South Asia said, "Big tech companies already have a greater customer base and instead of competing with them, we can make available our API on an open banking platform which can be used by these big tech firms for payments".

When asked specifically about how great a threat specific companies, or types of companies, pose to the Islamic banking sector, it was clear that Facebook was regarded as the biggest threat, with small start-ups at the bottom of the list. However, all the threats were banded together fairly closely and none rated above moderate. This is less than what might have been expected, given the concern expressed in some publications about the ability of such companies to disrupt the financial services sector. While banks did not give reasons for their views, but it may be that they feel confident that they occupy a distinctive position in the market.

Levels of concern were generally higher among large banks than small ones.

***fig 42.* Companies that Represent a Threat to the Islamic Banking Sector**



We asked about cryptocurrencies, and how they would affect policies and regulations of the banking system. Responses were essentially speculative, with little clear pattern. In so far as there was any consensus, it seemed to be that regulators in jurisdictions where cryptocurrencies were not forbidden entirely, would bring them within the regulatory spectrum – especially to mitigate money laundering and terrorist financing risks. If they did so, it might well be that officially sanctioned cryptocurrencies would find a place in the banking system. However, this would probably be driven by approaches taken in the major global economies.

Asked whether financial technologies would contribute to having a more sustainable Islamic banking industry, some respondents looked at sustainability as referring to issues like environmental impact and the sustainable development goals. They pointed particularly to financial inclusion, and the ability of technology to bring banking to remote locations with more straightforward on-boarding of new customers. Others dealt with the impact on the industry generally, for the most part reiterating points that have already been made, and mostly seeing the impacts as similar between Islamic and conventional banking. A few banks did, however, see specific advantages for Islamic banking because of the need for transactions to be executed in precise forms and sequences to ensure Shariah compliance. As one bank expressed it, "Given how Islamic banking is based around ensuring the chronology of transactions being executed (i.e. Buy > Offer > Sell etc.), there is a significant upside on adoption of multiple forms of financial technologies going forward. The ability to match and control the execution with almost zero errors can really boost and simplify Shariah-compliant transactions like never before. An example will be in securing most types of plain vanilla financing contracts such as auto and mortgage financing. Another area that will benefit from financial technology is in the space of trade finance (issuance of letters of credit and letters of guarantees) where international transactions can happen securely and easily without tampering with the processing steps required to keep the trade transaction Shariah-compliant".

Drawing some of the threads together, banks were asked for their views on the prospects of Fintech and its adoption in Islamic banks in the coming one to three years. Opinions varied, even within the same region – from those seeing no impact within that timescale to those seeing a pressing demand for new technologies and "a huge uptake". Once again, mobile services, particularly payment services, are the key feature.

Overall, it is clear that the new technologies dominating the thoughts of Islamic banks are mobile banking and, for some, the related technology of open banking. These technologies have the potential to massively change the bank-customer relationship – replacing face-to-face interactions through branches with electronic ones – and possibly, with the relationship being partly "captured" by others, big tech firms can pose a potential threat. This is also significant because, in a period of low returns on savings and financing, the benefits that many customers derive from their bank accounts are primarily the facilitation of payments in both directions. Banks face the real threat of losing customers if they do not satisfy them in this area. As we shall see in the next section, the experiences that customers want from their banks are diverse, but there is a strong focus on the efficiency of payments.

Beyond these areas, Islamic banks tend to focus on the technologies that will enhance or improve efficiency though a minority has expressed active interest in other areas, especially where these align with particular parts of their business such as wealth management.

PART IV

CUSTOMER EXPERIENCE WITHIN ISLAMIC BANKS

Customer Experience within Islamic Banks

The Importance of Customer Experience

It is a common observation of respondents that customer experience is, in many instances, a key determinant for customer's in selecting their bank, often ahead of more traditional values like loyalty and price. This is partly the result of technology, which has transformed the way many customers use banking services. Technology has changed customer expectations, which means that they evaluate banks against a new set of criteria as opposed to the more traditional ones. At the same time, the traditional barriers to switching banks are being eroded in many countries, again with technology as an enabler. Some banks are responding competitively, rethinking the customer experience for the new environment, and often using new technology themselves. This in turn, puts pressure on their competitors to respond.

While these issues are usually discussed in terms of retail banking, the expectations of commercial customers are also changing, especially as their personal interactions with banks become more and more digital. At the same time, increasingly digital processes in areas such as international trade also lead them to expect banking services to evolve in response to this new environment.

Some banks, of course, have always dealt with relatively small numbers of very large clients, whether large businesses or ultra-high-net-worth individuals. For these banks, customer experience tends to have a different meaning – with individual relationships and personalised service at the fore. But it is no less important for that.

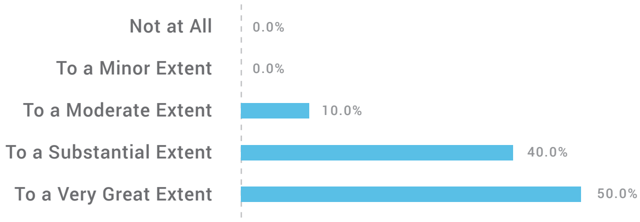
It might seem at first glance that Islamic banks may have some immunity from the pressures to change as they occupy a unique position in providing Shariah-compliant banking to customers – where the Shariah-compliant factor represents the most important value in the relationship. However, that would be a seriously misleading conclusion. First, Islamic banks are in competition with each other, and customer experience would give a key competitive advantage. At the same time, evidence suggests that for many customers compliance with Shariah is not over-riding factor. Customers weigh it in with other factors, including cost and convenience, but also customer experience.

This part of the survey, therefore, explores how Islamic banks view the customer experience in the light of the challenges and opportunities created by new technology, the steps they are taking and the issues they face.

Improving Customer Experience

Banks were asked to what extent customer experience was at the centre of their institution's activities. Unsurprisingly, almost every institution said it was, either to a substantial or to a very great extent.

fig 43. **Customer Experience at the Centre of the Institution's Activities**



The industry leaders are aware of the importance of customer experience and think that it is, either substantial or to a very great extent, at the centre of the institution's activities.

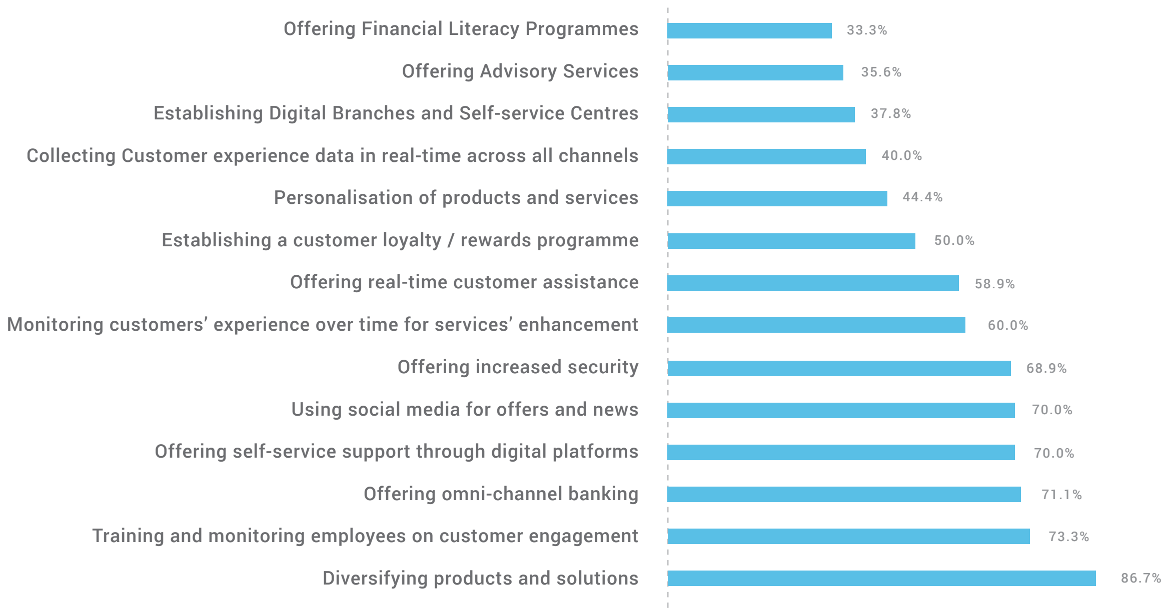
There was, however, a notable difference between larger and smaller banks, with 72% of the larger banks giving a score of 5, against 43% of the smaller ones. The banks that gave a score of 3 were all small banks.

There were also regional differences, though given the low numbers in some regions, their validity is questionable. There did, however, appear to be less emphasis on customer experience in the Middle East ex-GCC, and more emphasis in West, Central and South Asia, than the global average.

When asked which practice, (from a series of practices where respondents could indicate as many as were relevant), the institution was focusing on to offer an improved customer experience, the leading practices indicated were product diversification, employee training and monitoring, omni-channel banking, self-service banking through digital platforms, use of social media, and increasing security. There were particularly low scores for financial literacy programme, advisory services, digital branches and self-service centres, and collecting customer experience in real time.

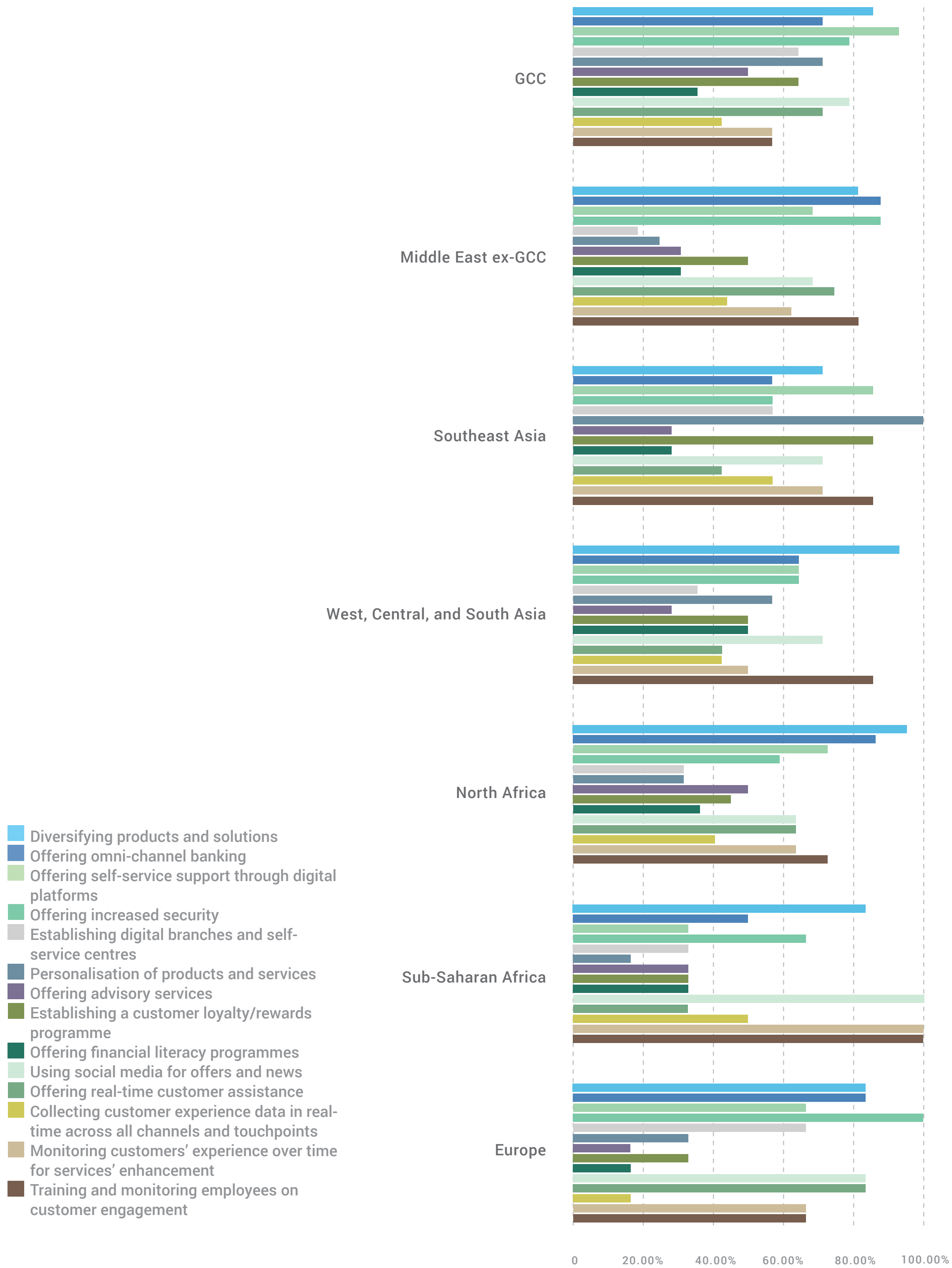
The leading practices indicated to improve customer experience were product diversification, employee training and monitoring, and omni-channel banking.

fig 44. Practices to Improve Customer Experience



Large banks scored more highly than small ones on each practice (though only marginally in some cases). The majority of large banks identified ten of these practices as the ones on which they were focusing on, whereas for the majority of small banks identified only six practices. The areas where large banks were markedly more engaged than small ones were largely those related to digitisation. These included self-service support through digital platforms, increased security, establishing digital branches and the use of social media and real-time customer assistance.

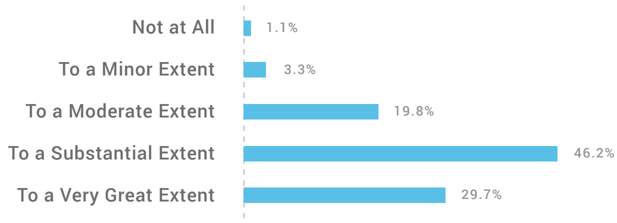
fig 45. **Practices to Improve Customer Experience across Regions**



Customer Categorisation

Banks were asked how far they used customer categorisation when focusing on improving customer experience, and what categorisations they used. It was clear that categorisation was a highly relevant factor – 46% said they used it to a substantial extent, with significant numbers of banks in each of the categories on either side. Large banks placed somewhat more emphasis on customer categorisation than small ones. The only strong regional divergence was that banks in Sub-Saharan Africa reported placing even more weight on customer categorisation than banks in other regions.

fig 46. **Use of Customer Categorisation to Improve Customer Experience**



Banks generally reported a primary client classification into personal and business customers (though there were some banks that specialised in business banking). Among businesses, the most common categorisation was by size – generally size of the business, though for some, the scale of the relationship with the bank. This was closely followed by the business sector and after that the type of transaction. Interestingly, one bank in the Middle East ex-GCC reported looking at the business career site as a source of information. One bank in North Africa also reported a particular interest in identifying small community bodies (associations, groups, civil society organisations, etc).

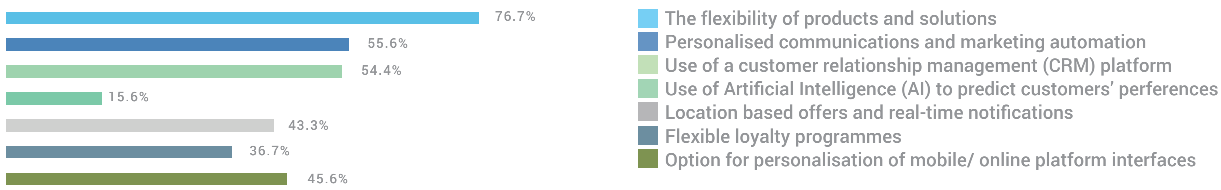
The classification of individual customers was more diverse. The size of the relationship with the bank was the most common, especially if one includes wealth or income as proxies. Age was reported several times, with one bank in West, Central and South Asia mentioning that senior citizens were particularly identified. Occupation was also reported several times, as was location, with one bank in West, Central and South Asia reporting a classification into metro, urban and rural customers. Gender also received multiple flags, with two banks (one in West, Central and South Asia and one in North Africa) particularly mentioning initiatives to improve financing for women. On the flip side, another bank in North Africa mentioned specifically that it did not classify by gender. Just one bank, (in Sub-Saharan Africa), mentioned religion as a factor in classification. Interestingly, one bank from the GCC mentioned explicitly the need to move away from traditional classifications based on gender, age, etc. and to focus more strongly on product type.

Personalising Customer Experience

When asked which, from a number of options, banks used for personalisation of the customer experience, with multiple answers possible – product flexibility was the leading option. This was followed by personalised communications and marketing, use of a customer relationship management platform, and options for personalisation of mobile and other interfaces. The use of artificial intelligence to predict customer preferences came at bottom of the list.

> *Product flexibility was the leading option used by banks for personalisation of the customer experience.*

fig 47. **Options for Personalisation of Customer Experience**



There was less difference between large and small banks than might have been expected, though large banks were markedly more likely to use a customer relationship management platform and location-based offers and real-time notifications. Interestingly, small banks were more likely to report personalised communications and marketing, perhaps indicating that some of them are small enough to know customers individually.

Once again, the regional data for this question needs to be approached with some caution given the small number of respondents in some regions. However, it does appear that the Middle East ex-GCC is well behind the average in the use of customer relationship management platforms, but well ahead in location-based offers and real-time notifications. Southeast Asia stands out in flexible loyalty programmes, and Sub-Saharan Africa in options for platform personalisation, perhaps reflecting the strong emphasis on smartphone banking in that region.

What Customers Seek

When banks were asked how they would describe their customers in terms of their acceptance and adoption of innovative and digital solutions, perhaps a surprisingly high percentage of banks (50%) described their customers as really interested in digital solutions. Only 9% described their customers as less confident and difficult to convince, with a further 8% saying that their customers valued the human touch (as already suggested, it is possible that these latter respondent banks may be specialising in large businesses or ultra-high-net-worth individuals).

fig 48. **Customers' Acceptance and Adoption of Innovative and Digital Solutions**

The differences between large and small banks were minimal, but the regional data showed more variation. In particular, both Southeast Asia and West, Central and South Asia were indicated that customers were less confident with digital solutions, and also that they preferred the personal touch. This was also the case in Europe, though the unusual nature of Islamic banking in some countries makes it hard to interpret the data. North Africa and Sub-Saharan Africa reported particularly high percentages of customers enthusiastic for digital solutions.

fig 49. **Customers' Acceptance and Adoption of Innovative and Digital Solutions across Regions**

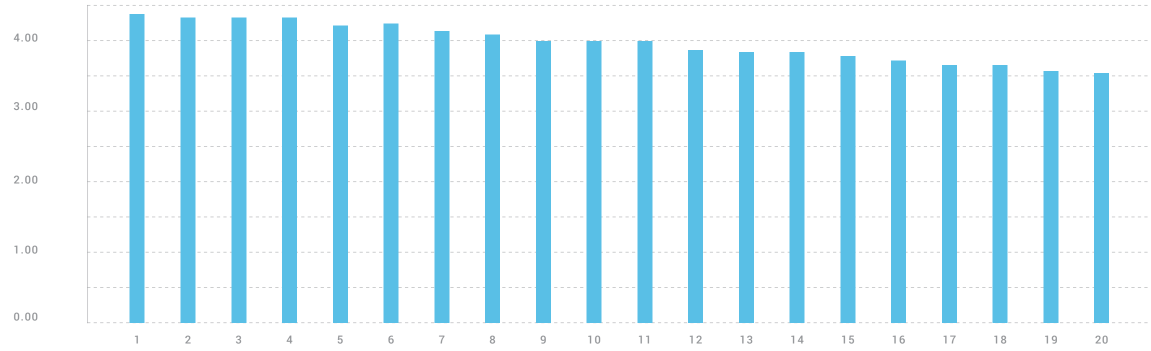
When banks were asked whether these digital preferences varied by customer type, most banks did not set out any specific differences, though some acknowledged that variations existed without saying what they were. Several banks from different regions did, however, note that younger customers were more familiar with technology, and some were positively attracted to advanced solutions. Two banks in West, Central and South Asia indicated that urban customers were more likely to adopt digital banking services, while rural ones still prefer face-to-face interaction with staff.

The Banks' Responses: Activities and Obstacles

Banks were then asked about the importance of a number of possible elements for elevating customer experience - and asked to score them on a scale of significance. The overall scores (from highest to lowest) are shown in the figure below. Interestingly, transparency in Shariah compliance came topped the list, followed by increased security and customer support/problem resolution, with innovative products and Fintech solutions only just behind. The least significant elements were advisory services, loyalty programmes, "Customer voice" programmes and financial literacy programmes.

> *Transparency in Shariah compliance, increased security and customer support / problem resolution, with innovative products and Fintech solutions are the top elements considered Important for Elevating Customer Experience.*

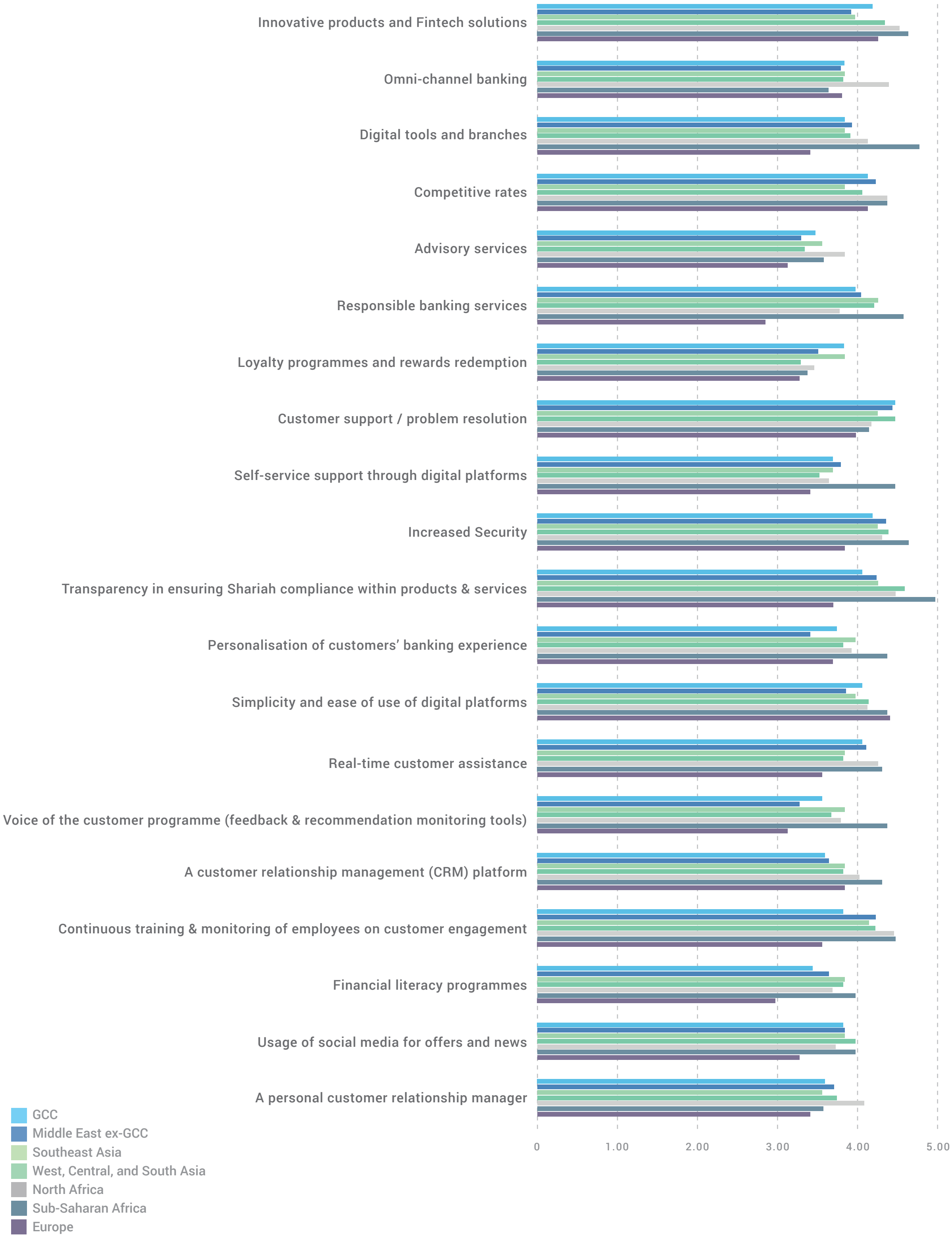
fig 50. **Elements Considered Important for Elevating Customer Experience**



1 Transparency in ensuring Shariah compliance within products & services
2 Increased Security
3 Customer support / problem resolution
4 Innovative products and Fintech solutions
5 Competitive rates
6 Continuous training & monitoring of employees on customer engagement
7 Simplicity and ease of use of digital platforms
8 Real-time customer assistance
9 Omni-channel banking
10 Digital tools and branches
11 Responsible banking services
12 A customer relationship management (CRM) platform
13 Usage of social media for offers and news
14 Personalisation of customers' banking experience
15 A personal customer relationship manager
16 Self-service support through digital platforms
17 Financial literacy programmes
18 Voice of the customer programme (feedback & recommendation monitoring tools)
19 Loyalty programmes and rewards redemption
20 Advisory services

Large banks stood out a little from this overall pattern – showing innovative products and Fintech solutions as their top priorities, closely followed by increased security, and customer support/ product resolution. Some interesting regional differences were noted (even allowing for the fact that some regions tended to give consistently higher overall scores than others). Customer support/problem resolution came first in the GCC, followed by innovative products and solutions, increased security and competitive rates. It was in West, Central and South Asia and in Sub-Saharan Africa that Shariah transparency was identified as most important, while Sub-Saharan Africa also displayed a particular interest in digital tools and branches.

***fig 51.* Elements Considered Important for Elevating Customer Experience across Regions**



Additional light was thrown on this by asking respondents specifically what initiatives they were planning to improve their customer experience in the next one to three years. Only a minority of respondents provided comments, and the responses were diverse, ranging from the technical through the operational to the strategic. For example, one GCC bank stated, "Digitizing the banking services; focusing on alternative channels; conduct studies to understand customer needs" as their priorities.

On the more technical end, a bank in West, Central and South Asia shared, "Our omni channel app will provide complaint ticket generation, real time chatbot support. We are doing away with the customer's need for carrying a card, and all our ATM booths are equipped with cardless transaction features. Newer versions of our app will allow customers to freeze/unfreeze accounts/debit/credit cards and apply for an SME loan from their mobile app".

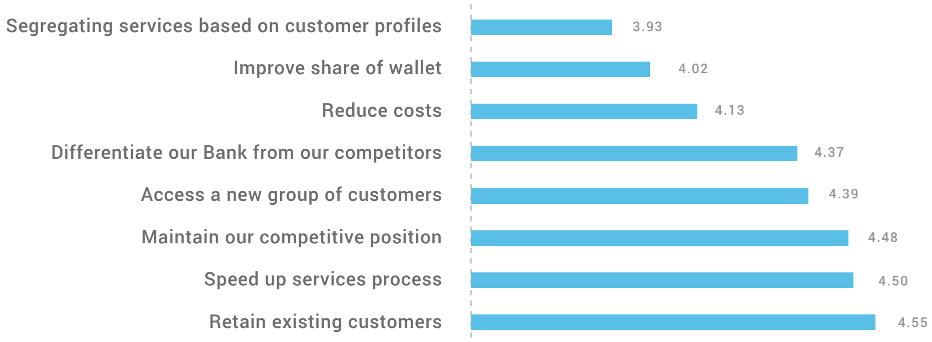
On the more operational side, a bank in North Africa said they would, "Conduct marketing studies to understand customers' needs and develop adequate products/services, solutions; conduct customer satisfaction barometer to track continuously the level of satisfaction and take corrective measures; train employees on service quality". Another bank in Europe said, "Our customer experience approach is firstly about establishing a healthy and dynamic measurement model and then constructing the experience in the best way in line with customer expectations thanks to the data and insights obtained from our approach. In order to achieve this goal, in our current model, we can measure box office transactions, experience of being a new customer, third month experience of a customer, call centre experience in real time, and share the results within the bank. Our short-term goal is to establish the aforementioned system with critical touch points in all segments and all product journeys. In addition, we plan to establish more efficient customer experience practices through our employee experience management systems". Meanwhile, a bank in Southeast Asia said that they plan to, "Build a new division that will force improvement in customer experience".

At the strategic end, a bank in the Middle East ex-GCC said their plans were to, "Offer a variety of products that meet the desires of the public, best services, less time, less effort". Another said, "Develop a financial inclusion strategy; access to the customer". One in Sub-Saharan Africa said, "Putting the customer first as a strategic approach to deliver excellent customer experience".

Putting the customer first as a strategic approach to deliver excellent customer experience.

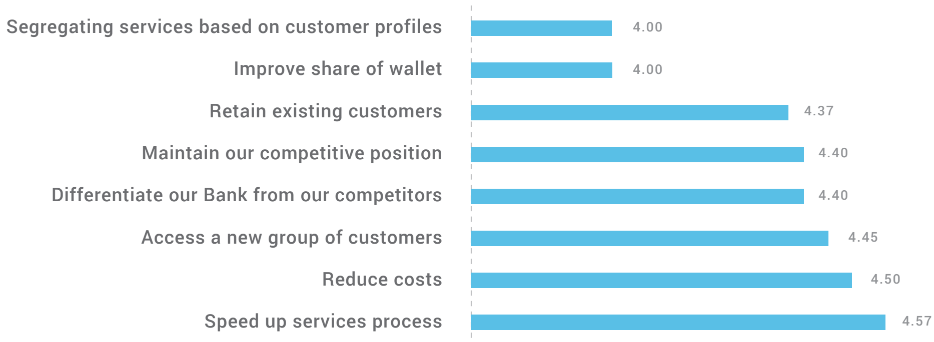
Banks were also asked about the objectives of offering improved customer experience, and the obstacles to doing so. Overall, the higher-ranking objectives were seen as essentially defensive, with retention of existing customers and maintaining the bank's competitive position ranking higher than accessing new customers or increasing the share of wallet.

***fig 52.* Objectives of Institutions in Offering Improved Customer Experience**



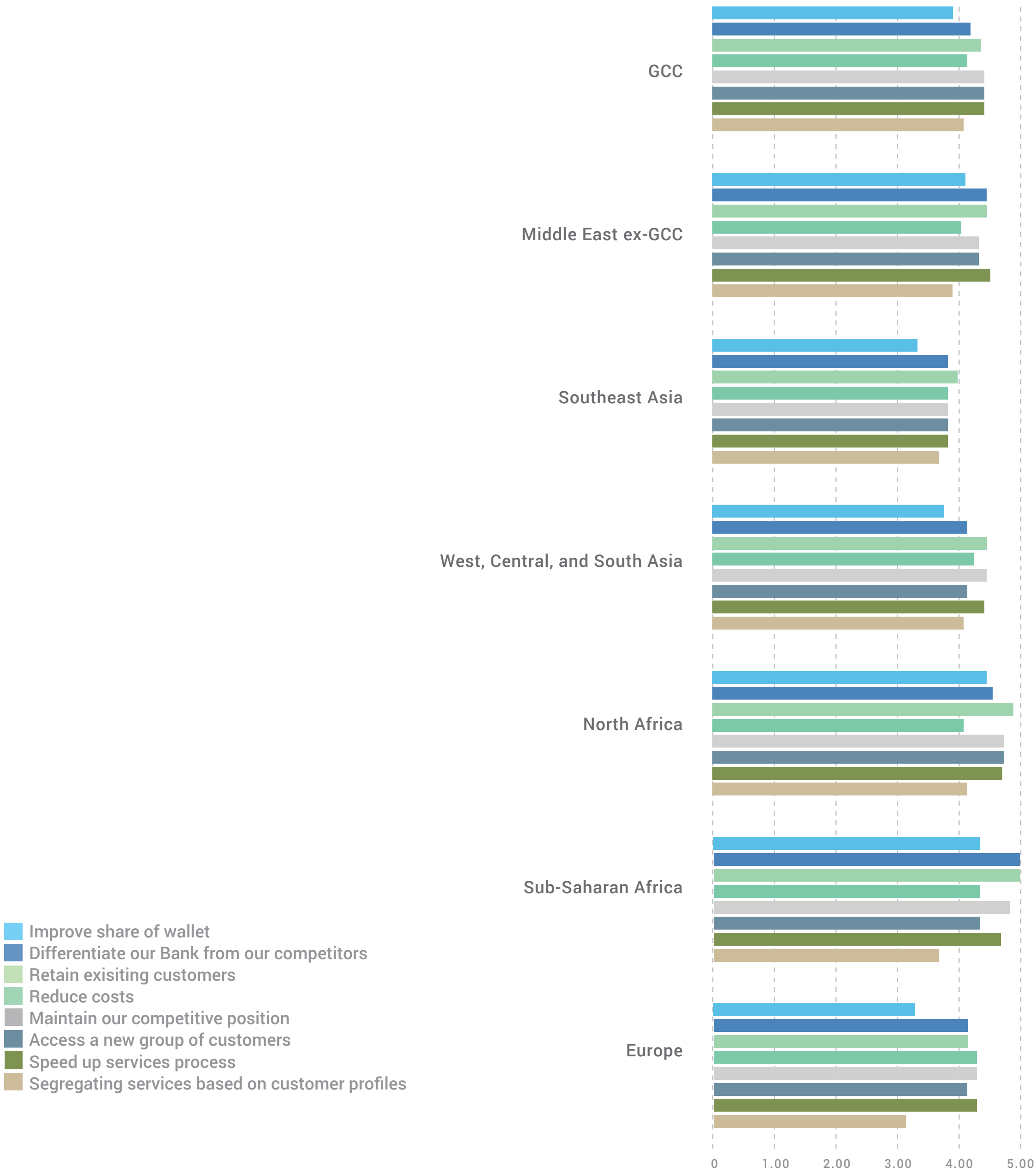
Here, however, the differences between large and small banks were quite marked. In particular, larger banks gave much more emphasis to operational efficiencies, and for them accessing new customers ranked ahead of retaining existing ones.

***fig 53.* Objectives of Institutions in Offering Improved Customer Experience in Large Banks**



There were also regional differences, though it is hard to identify any systematic pattern.

fig 54. **Objectives of Institutions in Offering Improved Customer Experience in Large Bank across Regions**



With regard to obstacles faced in offering improved customer experience, it is worth noting first that even the highest score was only 3.22, implying that obstacles impeded banks' ability to deliver the best customer experience to only a moderate extent. This obstacle with the highest score was related to the technological capabilities of the bank. This was followed by the lack of data to deliver personalised experiences, the emergence of new money laundering and terrorist financing methods and, perhaps associated with this, increased regulatory compliance. Inability to manage the diversity of customers' cultural expectations came bottom of the list.

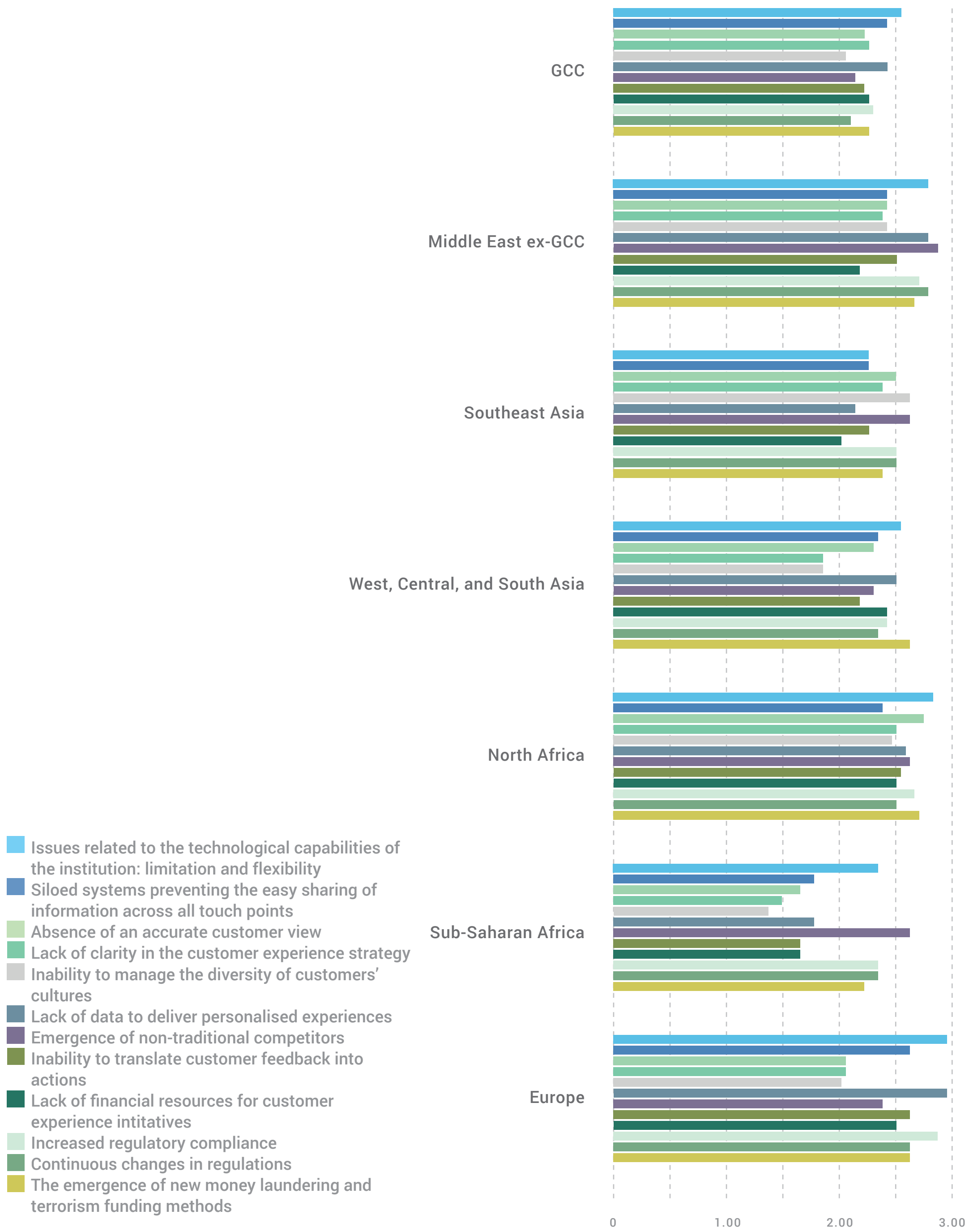
> *It is worth noting first that even the highest score was only 3.22, implying that obstacles impeded banks' ability to deliver the best customer experience to only a moderate extent.*

fig 55. **Obstacles faced by Institutions in Delivering the Best Customer Experience Possible**

Small banks reflected broadly the views set out above, with only slight variations in the ordering. For large banks, all scores tended to be lower, indicating that larger banks feel more able to manage these obstacles. Issues related to technical capability continued to top the list. Other notable challenges followed – including the emergence of new money laundering and terrorist financing methods and emergence of non-traditional competitors.

The results also demonstrated interesting regional differences.

***fig 56.* Obstacles faced by Institutions in Delivering the Best Customer Experience Possible across Regions**



The regional patterns are quite diverse, but it is difficult from the data to identify the underlying causes. Technological issues were identified as the topmost (or near the top) obstacle in all regions except Southeast Asia. In the latter region, managing cultural diversity came very high, despite it being near the bottom of the list globally. Non-traditional competitors were seen as a particular threat in Southeast Asia, and also in Sub-Saharan Africa and the Middle East ex-GCC.

Finally, banks were asked whether there were any special features of respondent banks that raised special issues in improving customer experience. This was predominantly to ensure that the survey recognises the diversity of Islamic banking and its business models. Some of the responses focused on customer type – for example, three banks in North Africa pointed out that they had a substantial focus on microfinance, while one in West, Central and South Asia pointed to an emphasis on small- and medium-sized enterprises and consumer products. Other responses pointed to their competitive position, where one bank, again in West, Central and South Asia, pointed out that as the largest Islamic bank in its country, with rapid growth and an increasing branch network, customer expectations were higher. Another bank, from the same region, pointed to its large number of bricks and mortar branches, "Which means we face a bigger challenge than our competitors to provide our customers with a unified experience, as some of our rural branches suffer from a lack of infrastructure support". On the other hand, a bank in Europe, largely serving wealthy clients from its home region, said that, "A very small client base means that new initiatives are not cost effective".

Overall, the main feature that stands out from this section of the survey is the diversity of cultural expectations which Islamic banks are dealing with. Some are in countries where the aspiration, especially among a younger, so-called "millennial" generation, is to have and use the latest digital technology. Others have a substantial client population, often in rural areas, that still favour face-to-face interaction, and where the challenge is to improve this over a wide network of branches. Others are dealing with predominantly business clients, or with ultra-high-net-worth individuals, for whom expectations are again different.

Many banks are also dealing with diverse customer expectations – with differences between urban and rural clients, across age groups, and across types of business. Some also have a significant financial inclusion agenda – whether generally or with a specific priority such as women entrepreneurs. For many of these banks, customer segmentation and the tailoring of products and experiences are critical. Some banks conclude that there may be new methods of using technology, to both segmentalise customers in possibly novel ways, and also to tailor and deliver enhanced customer experience. For others, understanding customer needs remains a more basic matter of essentially having personal interactions.

What is clear, however, is that a growing proportion of customers expect banking services to be delivered digitally and over mobile devices, principally smartphones. The large majority of banks recognise the need to deliver this, and in some way to personalise their digital interactions with customers, in part replacing the informal personalisation often delivered through local branches. But for many, even this will be a challenge, especially due to limited staff capacity and understanding. A further important challenge is posed by new money laundering and terrorist financing threats, which must be understood and managed without too severe an impact on the experience of legitimate customers. On top of that, all these measures should be observed and implemented without impacting the integrity of Shariah compliance, on which Islamic banking's appeal and reputation rest.

CONCLUSION AND RECOMMENDATIONS

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CIBAFI Islamic Banking Confidence Index 2020

As a general observation, 2020 is characterised by a restraint in optimism about the future of banking and Islamic banking in particular, indicating a modest positive level of optimism which is reflected in the banks' expectations on revenue growth. This cautious optimism, even prior to COVID-19, is completely understandable due to the economic decline experienced in 2019 and the geopolitical issues that have characterised different regions around the globe.

The restrained outlook on how the success of the financial sector and Islamic banking is translated into the increased level of severity given by banks to concerns in the coming year. Given the rapid developments in technology, especially mobile technology, and the associated challenges and opportunities, respondent banks had indicated "information technology" as their topmost concern followed by consumer attraction, relation and retention. These who may be linked – since advances in technology have made it easier for clients to move between banks.

These issues were particularly important for small banks. Larger banks were, however, marginally more concerned with meeting shareholders' expectations and their product and service offerings.

CIBAFI Islamic Banking Risk Dashboard 2020

The risk dashboard this year saw cybersecurity risk remaining a frontrunner in the risks facing Islamic banks, and is consistent with the 2019 dashboard in which cybersecurity risk also featured prominently. This is perhaps not surprising given the major technology changes that are affecting all banks across the globe, and, in particular, the new challenges posed by mobile, and (for some), open banking. Most banks stated in their detailed written responses that cybersecurity is on their radar and that they are applying control measures to address cybersecurity concerns, though the sophistication of their responses varies widely.

Credit risk appeared as the second-ranked risk of concern. In some instances, this seemed to reflect Islamic banks' concerns in relation to the macroeconomic challenges and political environment in which they operate. Another notable risk perceived of high severity is liquidity risk. Many banks expressing concern about managing their liquidity risk, with some sharing their mitigation strategies to prevent liquidity crisis. These include close monitoring and effective portfolio management, raising funds in the capital markets and attracting more deposits.

Fortunately, Shariah non-compliance risk showed an all-time low in this year's survey, which indicates that banks feel comfortable with their Shariah boards, and that they are operating in accordance with Shariah within their respective jurisdictions.

Since 2018, the de-risking risk has shown a declining trend, with a slight decrease this year. However, this lower score is considered at a still-significant level. Many regions are still reporting that their banks have suffered a decline in CBR as a direct result of de-risking practices. Similar to 2019, the region most affected by this risk is North Africa followed by Sub-Saharan Africa. The products and services most affected are international wire transfers, clearing and settlement, letters of credit/documentary collections and foreign exchange services.

The risk profiles of course vary by region, and often within regions. This is particularly the case where banks are subject to external influences such as sanctions, or to macroeconomic ones like oil prices or currency variations. It is clear from banks' comments that for some these influences are dominant.

Fintech Adoption within Islamic Banks

Islamic banking, like its conventional counterpart, is faced with major technological challenges. A range of new technologies has emerged in recent years, some of which have been enthusiastically promoted. While some banks, particularly smaller ones, still seem to be adopting a lackadaisical attitude towards Fintech, it appears that many are now evaluating the technologies most likely to be relevant to their businesses and, equally importantly, the particular functions and services to which they may be applied.

The technologies dominating the thoughts of Islamic banks are those related to mobile banking and, for some, open banking. The latter is especially so in jurisdictions where open banking is being driven by regulation. These technologies have the potential to massively change bank-customer relationships, replacing face-to-face interactions through branches with electronic ones and/or, possibly, with the relationship being partly "captured" by other parties. This is significant because, in a period of low returns on savings and financing, the benefits that many customers derive from their bank accounts are primarily the facilitation of payments in both directions. In this case, the failure of banks to not satisfy their customers in this area, may result in the customers walking away. On the flip side, the adoption of these technologies implies an opening of banks' networks to outside players – perhaps accounting for the enhanced concerns on cybersecurity risks.

Some other technologies seem to be finding their way, at least initially, into the back-office rather than customer-facing applications. As examples, big data and machine learning seem likely to find their appeal in areas like investment management, and distributed ledger technology appealing to increase efficiency in back office record-keeping and perhaps KYC functions.

On a few technologies, Islamic banks appear quite polarised – such as cryptocurrencies and peer-to-peer financing. In some cases, at least, this may be the result of strategic decisions about the business models a bank wishes to adopt.

There has been much public discussion about the extent to which the banking industry may be disrupted by new players, with Big Tech firms among the possible threats. For the respondent banks, the levels of threat from new entrants appear manageable, with start-ups posing less of a worry than the Big Tech firms (where Facebook headed the list). Written comments also suggested concerns that telecoms companies might be able to use their mobile technology skills to capture the customer interface.

Where radical changes in technology are being implemented, their management is enormously important. Commenting on this, a number of banks argued that such technologies were best implemented by specialist teams, separated from those supporting the existing IT infrastructure of the bank.

Customer Experience with Islamic Banks

At a time where changing banks is becoming ever-easier, and where technology is changing the way in which customers interact with their banks – providing satisfactory customer experience is of critical importance to customer attraction and retention.

Overall, the main feature that stands out from the survey questions on this subject is the diversity of cultural expectations which Islamic banks are dealing with. Some banks are operating in countries where the aspiration, especially among younger adults, is to have and use the latest digital technology. Others have a substantial client population, often in rural areas, that still want face-to-face interaction, and where the challenge is to improve this interaction over a wide network of branches. Another group of banks may be dealing with predominantly business clients, or with ultra-high-net-worth individuals, for whom expectations are again different.

Many banks are dealing with diverse customer expectations – with differences between urban and rural clients, across age groups, and across types of business. Some have a significant financial inclusion agenda – whether general or with a specific priority, for example women entrepreneurs. For many of these banks, customer segmentation and the tailoring of products and experiences is critical. Some banks are embracing the new technologies – exploring and using it in both ways to segmentalise customers in possibly novel ways, and also to deliver enhanced customer experience. For other banks, understanding customer needs remains a more basic matter of essentially personal interactions.

What is clear, however, is that a growing proportion of customers expect banking services to be delivered digitally and over mobile devices, principally smartphones. Islamic banks recognise the need to meet this expectation and in some way have to personalise their digital interactions with customers. In doing so, they are in part replacing the informal personalisation often delivered through local branches. However, for many banks, this poses a challenge – especially so due to limited staff capacity and understanding. A further important challenge is posed by new money laundering and terrorist financing threats, which must be understood and managed without too severe an impact on the experience of legitimate customers. On top of that, all this is to be implemented without impacting the integrity of Shariah compliance, on which Islamic banking's appeal and reputation rest.

RECOMMENDATIONS

CIBAFI's recommendations to our members that emerge most naturally from this year's survey are focused on technology and the customer experience.

In the coming years, the vast majority of banking transactions will be carried out digitally, with the bulk of them on mobile devices. This phenomenon will be driven by both economics and customer expectations. While the pace of this transition will vary, all Islamic banks need to be prepared to deliver their services in this way.

For most Islamic banks, the dominant customer experience will no longer be that delivered through physical branches. Islamic banks need to be ready to deliver a first-class customer experience electronically, including to a tech-savvy generation who are already experiencing this from other businesses.

Open banking creates competitive opportunities, but it also opens up the possibility that customer interface and much of the day-to-day payments business will be captured by other providers. Islamic banks need to be able to provide a full range of banking services, including account integration, mobile wallets, etc. whether alone or in alliance with Fintech firms.

Both mobile banking and open banking require bank networks to be open to a much wider range of external users, which in itself will create new risks to a bank's business. Islamic banks need to be ready and start implementing the highest levels of cybersecurity, following international standards where available. They need to be pro-active in this, and not simply to wait for instructions from the regulators.

With regard to other technologies, it is unrealistic for many banks to have practical capabilities in all areas. Nor is it possible for banks to be pursuing all possible applications of any one technology. In light of this, Islamic banks need to strategically decide which new technology/ies they will pursue, and in which part of the business the technology will first be applied.

Where Islamic banks decide to not pursue a particular technology or application, they may nevertheless keep a watching brief. Where the decision is made to maintain a watching brief over a technology, it should include the strategic options should the bank decide to engage with it at a later juncture – including the possibility of buying the technology through acquisitions or collaborative ventures.

General Council for Islamic Banks and Financial Institutions

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