Technology, Innovation and artificial intelligence for the growth of Islamic Finance Industry

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Financial Cooperation Working Group
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Outline of the Presentation

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- Overview of Islamic Financial markets
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- Global Islamic Banking Risk Dashboard
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- Implications for Banks and Other Stakeholders
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About CIBAFI

- General Council for Islamic Banks and Financial Institutions (CIBAFI) is a international infrastructure institution, CIBAFI is a non-profit institution that constitutes the official umbrella for Islamic financial institutions in the world.

- CIBAFI was founded by the Islamic Development Bank and 30 members, following its 16 years of operations CIBAFI membership, has increased to over 120 members from 32 jurisdictions, representing Islamic Banks, market players, international intergovernmental organizations and professional firms, and industry associations, CIBAFI is recognized as a key piece in the international architecture of Islamic finance.
Overview of CIBAFI Strategic Objectives

1. Policy, Regulatory Advocacy
CIBAFI submits comments to international organisation and standard setters including:
- CIBAFI comments on IMF Working Paper on Islamic finance, consumer protection and financial stability
- CIBAFI submits its Recommendations to B-20 Turkey on SME financing and to improve global regulation of markets.
- CIBAFI Submits its Comments to the BCBS on Standardised Measurement Approach for Operational Risk, and on Simplified alternative to the standardised approach to market risk capital requirements.
- CIBAFI Submits its Comments to the IFSB on Retakaful (ED-18), Liquidity Risk Management (ED-6) and Sukuk (ED-19).

2. Research and Publications
- Global Islamic Bankers’ Survey 2015 and 2016
- CIBAFI – World Bank Corporate Governance Publication
- CIBAFI-IRTI data base.
- InFocus
- CIBAFI Briefings

3. Awareness and Information Sharing
- CIBAFI Global Forum
- International Topical Seminars
- CIBAFI Award

4. Professional Development
- Executive Programme
- Technical Workshops
- Training & Certifications
Islamic finance industry doubles in size every 5 years and CIBAFI expects that the market size will reach 4 trillion USD by 2020.
## Global Islamic Banking Top Concerns - GIBS 2016

<table>
<thead>
<tr>
<th>Category</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Macro-economic environment</td>
<td>4.31</td>
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<tr>
<td>Service quality</td>
<td>4.25</td>
</tr>
<tr>
<td>Business growth and expansion</td>
<td>4.24</td>
</tr>
<tr>
<td>Shareholder value and expectations</td>
<td>4.18</td>
</tr>
<tr>
<td>Consumer attraction, relation and retention</td>
<td>4.17</td>
</tr>
<tr>
<td>Liquidity</td>
<td>4.17</td>
</tr>
<tr>
<td>Shariah standards, compliance, and governance framework</td>
<td>4.14</td>
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<tr>
<td>Information technology</td>
<td>4.13</td>
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<tr>
<td>Corporate governance</td>
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<tr>
<td>Product offering and innovation</td>
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<tr>
<td>Human resources and talent development</td>
<td>4.02</td>
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<tr>
<td>Risk management</td>
<td>4.01</td>
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<tr>
<td>Capital adequacy, callable capital and reserve requirements</td>
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<tr>
<td>Compliance (Anti-Money Laundering, Counter Terrorist, ...</td>
<td>4</td>
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<tr>
<td>Regulations concerning Islamic finance</td>
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<tr>
<td>Cybercrime and related fraud</td>
<td>3.98</td>
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<tr>
<td>Consumer protection</td>
<td>3.93</td>
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<td>Financial inclusion, micro- and SME financing</td>
<td>3.8</td>
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<td>Islamic financial market infrastructure</td>
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<td>Investment capability</td>
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<td>Political uncertainty</td>
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<tr>
<td>Margin pressure</td>
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<tr>
<td>Back office operations</td>
<td>3.43</td>
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<tr>
<td>Competition from other Islamic financial institutions</td>
<td>3.34</td>
</tr>
<tr>
<td>Competition from conventional financial institutions</td>
<td>3.27</td>
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</tbody>
</table>

### Ratings
- Not important at all (1)
- Not very important (2)
- Fairly Important (3)
- Very Important (4)
- Extremely important (5)
<table>
<thead>
<tr>
<th>Risk Category</th>
<th>2015</th>
<th>2016</th>
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</thead>
<tbody>
<tr>
<td>Macro-economic risk</td>
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<td>Liquidity risk</td>
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<td>Political risk</td>
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<td>Technology risk and IT security</td>
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<td>3.22</td>
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<td>Default risk</td>
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<td>Credit portfolio risk</td>
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<td>Regulatory risk</td>
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<td>Rate of return risk</td>
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<td>Currency risk</td>
<td>3.06</td>
<td>3.09</td>
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<td>Competencies of people risk</td>
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<td>Strategic risk</td>
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<td>Collateral risk</td>
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<td>2.95</td>
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<tr>
<td>Money laundering and financing of terrorism risk</td>
<td>3.01</td>
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<tr>
<td>Equity investment risk</td>
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<td>2.77</td>
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<td>Commodity price risk</td>
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<td>Legal risk</td>
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<td>Misconduct and fraud risk</td>
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<td>Reputational risk</td>
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<td>Shariah non-compliance risk</td>
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<tr>
<td>Enterprise/Managerial risk</td>
<td>2.81</td>
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<tr>
<td>Transactions, process, and delivery risk</td>
<td>2.77</td>
<td>2.73</td>
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<tr>
<td>Tax risk</td>
<td>2.51</td>
<td>2.33</td>
</tr>
</tbody>
</table>

Not important at all (1) Not very important (2) Fairly Important (3) Very Important (4) Extremely important (5)
Overview of Digital Innovation and Fintech

- **Global investments in Fintech grew by 27% reaching $28.3bn in 2016 (22.3 in 2015)**

- **Digital Innovation across different areas of the financial sector are as follow:**

  **Deposits, Lending and Capital Raising**
  - Crowd-sourcing ideas and funding them through crowdfunding
  - Peer 2 peer lending
  - Internet-only banks

  **Investment Management**
  - Automated processing and dissemination of investment advice
  - Artificial Intelligence

  **Payment services and market infrastructures**
  - E-money and mobile money products
  - Application program interfaces
  - Use of distributed ledger technologies (Blockchain)

*Source: CIBAFI, Accenture, World Bank Group*
Financial service industry still uncertain about fintech and innovative financial products and services, and if represent a threat or an opportunity.

**Threats**

- Business model (The intermediation role of bank)
- Business disruption (Consumer banking and payments, insurance, asset and wealth management)

**Opportunities**

- Enhance efficiencies
- Reduce costs
- Expand access to financial services
CIBAFI believes:

- Artificial Intelligence (AI) and smart data are on top of the list to be watched for in coming 3 years.
- The use of Distributed Ledger Technology such as blockchain technologies will continue to increase especially in developing markets.

Artificial Intelligence (IA) and Data Analytics

- Provide data collection, aggregation and storage services, advanced data analytics and personal finance management directly to customers.
- Banks use advanced data analytics to research customer needs, provide real-time service delivery and enhance their risk management.

Distributed Ledger Technology (DLT)

- Facilitating value transfer exchanges between parties without the need for intermediation, increasing the efficiency of the intermediary functions, by reducing settlement times or improving the transparency of recordkeeping and reporting. It also focus on banks’ back office operations.

Governments increasingly developing and applying regulatory sand box, including U.K, Australia, U.S., Hong Kong, Malaysia, Singapore, Switzerland, Thailand, Bahrain and United Arab Emirates.
Implications for Banks and Other Stakeholders

**Risks on consumers**
- Data privacy
- Data security
- Discontinuity of banking services
- Inappropriate marketing practices

**Risks on banks**
- Strategic and profitability risks
- Increased interconnectedness between financial parties
- High operational risk
- Third-party/vendor management risk
- Compliance risk including failure to protect consumers and data protection regulation
- Money laundering – terrorism financing risk
- Liquidity risk and volatility of bank funding sources
Implications for Banks and Other Stakeholders

Opportunities to consumers

- Financial inclusion
- Better and more tailored banking services
- Lower transaction costs and faster banking services

Opportunities to banks

- Improved and more efficient banking processes
- Innovative use of data for marketing and risk management purposes
- Potential positive impact on financial stability due to increased competition
CIBAFI and Fintech related activities

- **CIBAFI Global Forum 2016**: special session on FinTech & Digital Financial Services
- **CIBAFI Global Forum 2017**: special session on Leveraging the industry growth with technology and innovation.
- **CIBAFI Global Takaful Survey 2018**, focused chapter on Insurtech.
- **CIBAFI Briefing Jan, 2017** Rethinking Values for Sustainable Growth – focus on Fintech.
- **CIBAFI Briefing (coming soon)**- Blockchain and cryptocurrency.
- **CIBAFI comments on BCBS CD Sound Practices**: Implications of fintech developments for banks and bank supervisors“.

CIBAFI has taken number of initiatives with regards to the Fintech and Technological innovation from 2016:
Key Issues and Recommendations

Fintech stakeholders (including Islamic finance industry stakeholder) may wish to consider the following points:

- To what extent will the regulators encourage and facilitate such innovative products and services offerings within the context of Fintech, and how they ensure the safety and soundness of the financial system without hampering the innovation and its potential benefits?

- Some issues related to consumer protection and compliance with applicable laws and regulations, including anti-money laundering and countering financing of terrorism (AML/CFT) regulations.

- Shariah scholars position is still not clear with regards to some innovative products and services offerings within Fintech ecosystem and cryprocurrencies in particular.

- Readiness and ability of human resources to work in Fintech environment
THANK YOU