Artificial Intelligence (AI) in Retail Banking

The HKMA conducted a survey* on AI application in Q3 2019 among the Hong Kong banking industry. The results are proved valuable for understanding the existing AI landscape for retail banks in Hong Kong.

TO WHAT EXTENT are banks in Hong Kong adopting AI technology?

89% of respondents have adopted or plan to adopt AI applications.

WHAT are the AI use cases? - NOW & FUTURE

The trend is to extend the application of AI from customer related to risk management use cases.

TOP 5 current AI use cases:
- Cybersecurity applications
- Client-facing chatbots
- Remote onboarding
- Biometric customer identification
- Personalised advertisements

What’s coming in the near future…
- Anti-Money Laundering (AML)
- Fraud detection
- Financial advice

Still at the exploration stage…
- Know-Your-Customer (KYC)
- Operational automation
- Credit scoring

HOW are banks developing their AI capabilities?

Total capital investment in AI in the next 5 years will rise by +70%.

>92% of the respondents plan to significantly expand their AI workforce in the next 5 years.

Infographics by:

* The Chinese University of Hong Kong has contributed to the design of the survey questionnaire.
WHY are banks applying AI technology?

TOP THREE REASONS

01 To improve customer experience
02 To strengthen risk management
03 To reduce costs

95% of banks with AI adoption will utilise AI to shape their corporate strategy.

WHAT are the barriers affecting banks’ adoption of AI?

TOP FIVE barriers identified:

<table>
<thead>
<tr>
<th>Barrier</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of employees with AI expertise</td>
<td>70%</td>
</tr>
<tr>
<td>Insufficient data</td>
<td>52%</td>
</tr>
<tr>
<td>Design ethics of AI</td>
<td>48%</td>
</tr>
<tr>
<td>Data privacy &amp; security</td>
<td>44%</td>
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<tr>
<td>Legal &amp; compliance challenges</td>
<td>44%</td>
</tr>
</tbody>
</table>

WHAT are the major AI risks identified by banks?

TOP THREE AI risks identified:

01 Lack of expertise or resources
02 Biased decisions made by the AI models
03 Lack of quality data

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