



# 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?

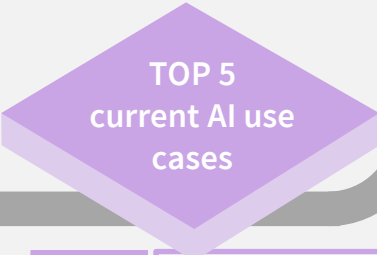
# 89%



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.**



- Cybersecurity applications
- Client-facing chatbots
- Remote onboarding
- Biometric customer identification
- Personalised advertisements



- Anti-Money Laundering (AML)
- Fraud detection
- Financial advice



- 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

# >92%

Banks tend to **partner with external technology firms for AI implementation**, while managing the **research and development stage internally.**

95%

82%

# +70%

of the respondents plan to significantly expand their **AI workforce** in the next 5 years

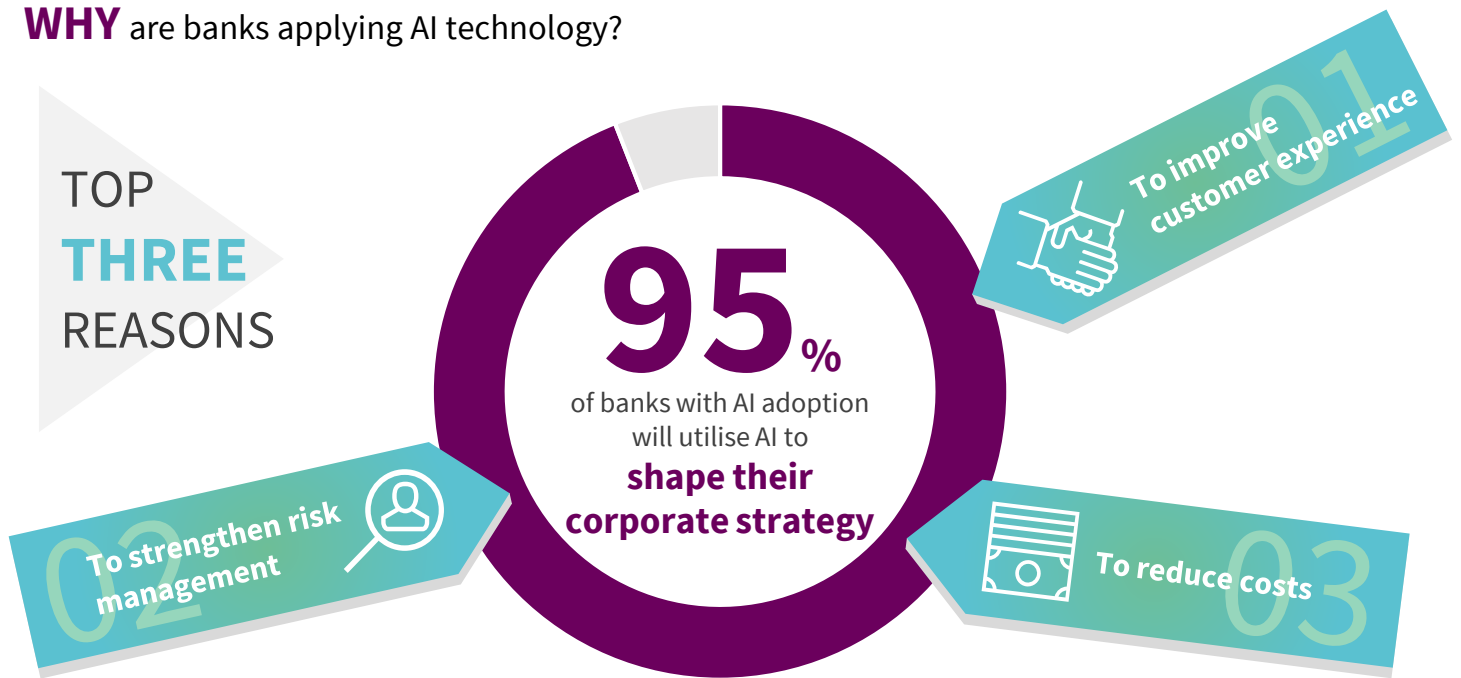


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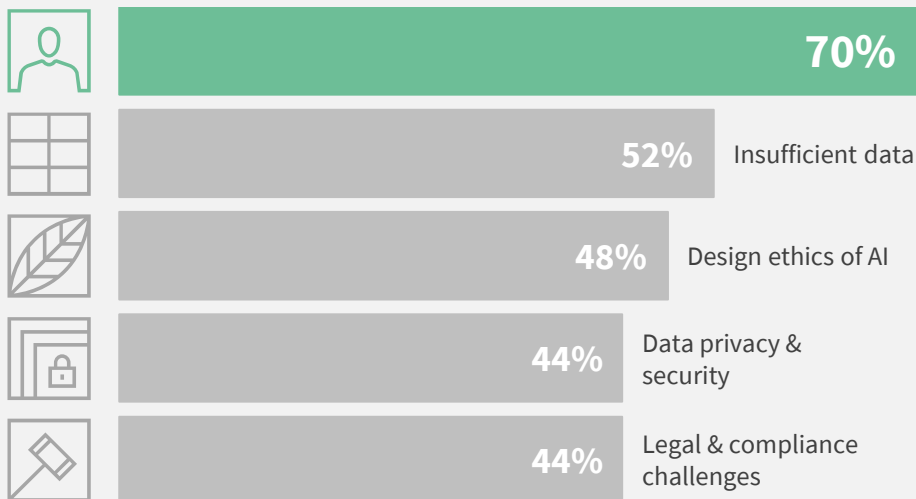
\* The Chinese University of Hong Kong has contributed to the design of the survey questionnaire.

## WHY are banks applying AI technology?



## WHAT are the barriers affecting banks' adoption of AI?

### TOP FIVE barriers identified:

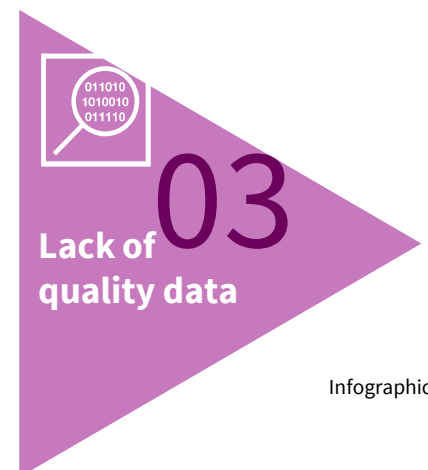
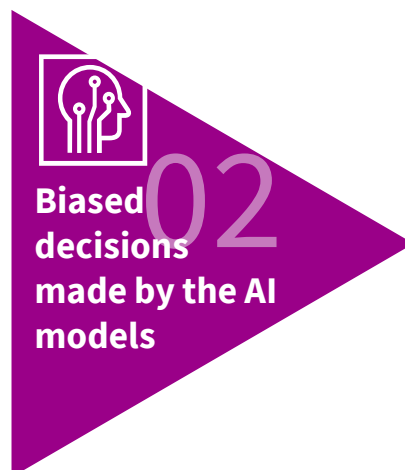
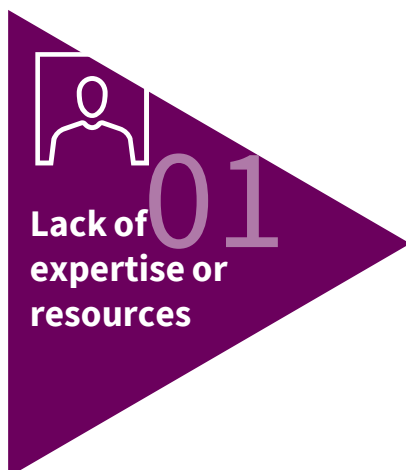


Lack of employees with AI expertise



## WHAT are the major AI risks identified by banks?

### TOP THREE AI risks identified:



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