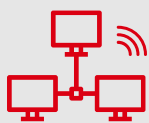


WHAT IS AI?

The ability of machines to perform tasks in ways associated with intelligent beings.

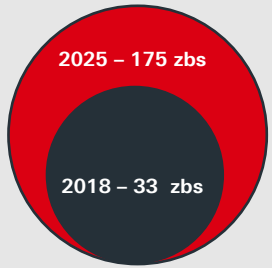
WHAT IS ML?



Machine learning is a subset of AI that focusses on using data-first, statistical techniques to enable machines to learn without being explicitly programmed

Global Data Growth 2018 - 2025

IDC Data Age 2025 study
Sponsored by Seagate, November 2018



zbs = zettabytes

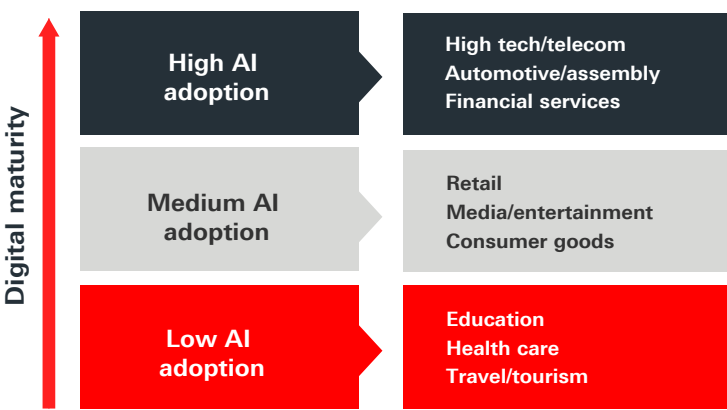
AI could:

\$13 trillion additional economic activity by **2035**

Source: McKinsey Global Institute. Notes from the AI Frontier, September 2018



Who is using AI and ML so far?



Source: McKinsey Global Institute.

The value of AI.

Senior executives say:

- 48%** ↑ revenue and profits
- 46%** ↑ customer experience
- 40%** ↑ decision-making
- 39%** innovate products
- 38%** ↓ costs

Source: PWC. AI Predictions 2019

Why is AI/ ML relevant to treasury?

Limited resources

45% treasury departments have <5 FTEs

High levels of manual processing

Source: Treasury Strategies. 2018 State of the Treasury Profession Survey

Data and analysis

Turn data into analysis and insights

Need for strategic thinking

What problems could it solve?

Cash flow forecasting

2016 - 2018

#1 priority for treasurers

Source: Treasury Strategies. 2018 State of the Treasury Profession Survey

Cash management

77% auto-matching hit rate <80%

55% using or planning to use AI for credit to cash

Source: FIS. Corporate Liquidity Receivables Management Report, 2018

Fraud and control

59% treasurers very or extremely concerned about cybersecurity

Source: ACT. Business of Treasury, 2018

Opportunity

Improve accuracy and timeliness
Get a better view of surplus cash

Data

Complete, correct and cleansed historic, budget and forecast data

Techniques

AI-based predictive analytics

Opportunity

Auto-reconciliation & straight through processing to enhance sales & working capital
Reduce costs to process payments

Data

Banking remittance data, historic receivables and forecast invoice data

Techniques

Use algorithms to match data and identify and fill gaps

Opportunity

Reduce fraudulent payments
Minimise impact of external and internal cyber threats

Data

Historic and forecast payment data, including bank account numbers and beneficiaries

Techniques

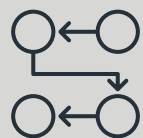
Identify outliers via pattern recognition; use workflow alerts to manually deal with exceptions

NEXT STEPS



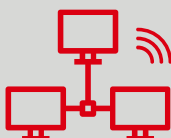
Assess & organise data

Make data accessible and identify the 'golden source'; create a data taxonomy



Identify use cases

Model use cases that offer the greatest value; identify gaps in data or techniques



Introduce data skills

Connect with internal data engineers or introduce specialist skills to treasury



Learn by doing

Use banks to help you test, learn, iterate and deploy

Where do I find out more?

Contact your HSBC Global Cash and Liquidity Management sales representative or go to gbm.hsbc.com/insights/technology