



# AI-KNOWIE

KBQuest

Processing lots of different documents manually can be very time-consuming and unproductive.



## Business Challenges:



Handling various types of documents with different formats even including handwritings

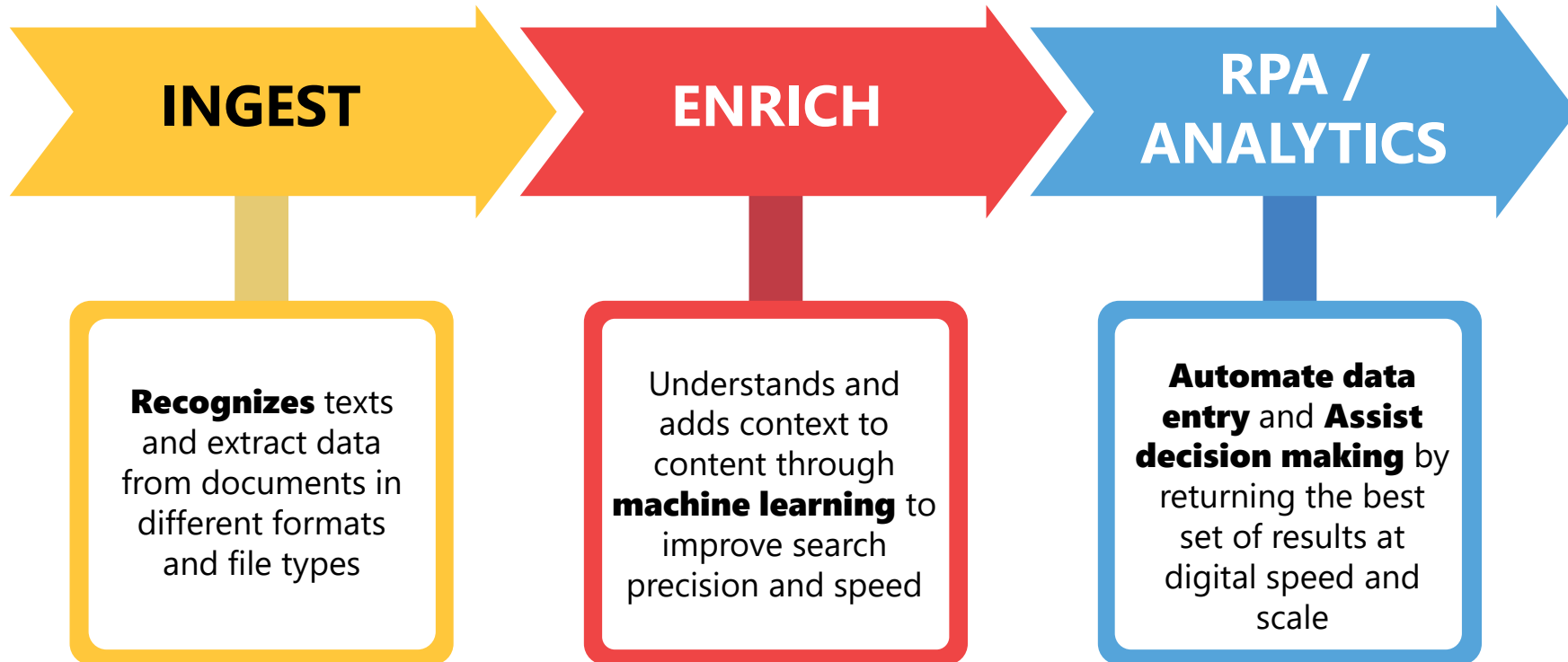


Spending long hours on analyzing multiple formats of document as well as data entry tasks

Compress your time to access knowledge, answers and insights via  
**Optical Character Recognition (OCR) and Robotic Process Automation (RPA).**



*A high volume of physical and digital documents & data*



**Recognizes** texts and extract data from documents in different formats and file types

Understands and adds context to content through **machine learning** to improve search precision and speed

**Automate data entry** and **Assist decision making** by returning the best set of results at digital speed and scale

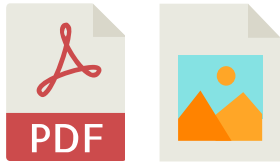


*Knowledge and insights*



With intelligent AI data extraction engine, data in documents (e.g. statements, invoice, cards, etc.) will be extracted via OCR

Train and provide feedback on the AI OCR results.



A high volume of physical and digital documents & data



Recognizes texts and extract data from documents in different formats and file types

Date	Transaction Details	Deposit	Withdrawal	Balance
日期	進支詳情	存入	支出	結餘
22-Sep	2018 B/F BALANCE 承前轉結			231.89DR
24-Sep	ATM TRANSFER (22SEP18) 櫃員機轉賬收入	1,000.00		
	ATM WITHDRAWAL (22SEP18) 櫃員機現金提款		700.00	68.11
27-Sep	ATM TRANSFER (27SEP18) 櫃員機轉賬收入	100.00		168.11
28-Sep	EPS070466 (27SEP18) 易辦事		159.00	
	7-ELEVEN HK (1294) 利息支出		2.60	6.51
2-Oct	AXA GENERAL HK LTD HO117227 自動轉賬支出		112.05	105.54DR
4-Oct	UNAUTHORIZED OD CHARGE 未經授權透支收費		120.00	225.54DR
5-Oct	BROADEASE LIMITED S015 薪金	4,800.00		
	ATM WITHDRAWAL (05OCT18) 櫃員機現金提款		300.00	
	CR TO 555-717792-292 轉賬支出		2,200.00	
	NA0552595156(05OCT18) 文費支出		374.00	1,700.46

Date	Transaction Details	Deposit	Withdrawal	Balance
22-Sep	2018 Ber			231.89DR
24-Sep	ATM TRANS	1000.00		
	ATM WITHD		700.00	68.11
27-Sep	ATM TRANS	100.00		168.11
28-Sep	(27SEP18)		159.00	
	DEBIT INT		2.60	6.51
2-Oct	AXA GENER		112.05	105.54DR
4-Oct	UNAUTHORI		120.00	225.54DR
5-Oct	BROADEASE	4800.00		
	ATM WITHDR		300.00	

With Machine Learning, extracted data will be further processed and enriched.

Take loan application assessment as example: AI helps categorizing the transaction types relevant to loan assessment.

Date	Description	Deposit	Withdrawal	HKD Balance
7-Dec	BALANCE FROM PREVIOUS STATEMENT			4,785.00
8-Dec	ATM CARD ADVANCE CR-SCB	10,000.00		14,785.00
8-Dec	STY SAL-PRESIDENTIAL HOME COMMISSION	29,248.09		44,033.09
8-Dec	TRANSFER WITHDRAWALNTRF		0.78	44,032.31
8-Dec	INTERNET BANKING			
8-Dec	OCEAN ALLIED FINANCE	4,096.00		39,936.31
8-Dec	JC-TELEBT DEBIT 728548 HKIC	10,000.00		29,936.31
8-Dec	JC-TELEBT DEBIT 361476 HKIC	10,000.00		19,936.31
8-Dec	TRANSFER WITHDRAWALNTRF		16,949.31	3,007.00
8-Dec	INTERNET BANKING			
9-Dec	JC-TELEBT CREDIT 363470 HKIC	7,100.00		10,107.00
9-Dec	JC-TELEBT DEBIT 195370 HKIC		3,007.00	7,100.00
9-Dec	JC-TELEBT DEBIT 992018 HKIC		7,100.00	0
10-Dec	COM CASH DEP-SCB	500		500
10-Dec	COM CASH DEP-SCB	500		1,000.00
10-Dec	JC-TELEBT DEBIT 679290 HKIC		500	500
10-Dec	JC-TELEBT DEBIT 990600 HKIC		500	0
11-Dec	COM CASH DEP-SCB	500		500
11-Dec	JC-TELEBT DEBIT 309854 HKIC		500	0
11-Dec	COM CASH DEP-SCB	500		500

Extracted data

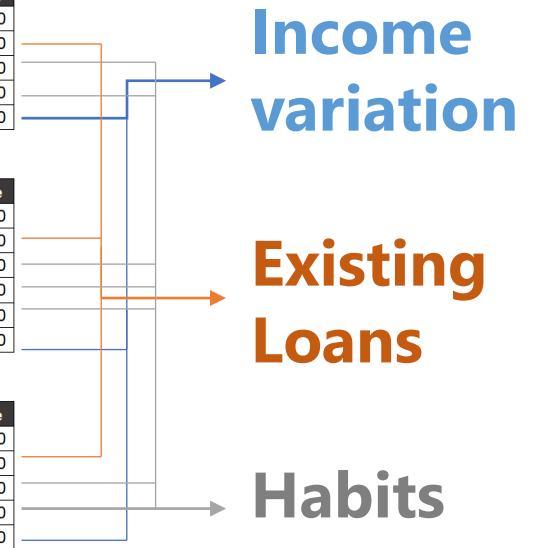


Understands and adds context to content through machine learning to enrich the

Date	Description	Deposit	Withdrawal	HKD Balance
1-Dec	BALANCE FROM PREVIOUS STATEMENT			6,050.0
1-Dec	UNION FINANCE B0401001199A		4,500.0	1,550.0
4-Dec	PPS030533 (3DEC18) THE HONG KONG JOCKEY		500.0	1,050.0
11-Dec	PPS030533 (10DEC18) THE HONG KONG JOCKEY		1,000.0	50.0
31-Dec	IMC SHANGHAI A P SCH SALARY	8,425.0		8,475.0

Date	Description	Deposit	Withdrawal	HKD Balance
1-Jan	BALANCE FROM PREVIOUS STATEMENT			8,475.0
1-Jan	UNION FINANCE B0401001199A		4,500.0	3,975.0
11-Jan	PPS030533 (10/JAN19) THE HONG KONG JOCKEY		1,200.0	2,775.0
18-Jan	PPS030533 (17/JAN19) THE HONG KONG JOCKEY		1,500.0	1,275.0
25-Jan	PPS030533 (24/JAN19) THE HONG KONG JOCKEY		1,000.0	275.0
31-Jan	IMC SHANGHAI A P SCH SALARY	5,200.0		5,475.0

Date	Description	Deposit	Withdrawal	HKD Balance
1-Feb	BALANCE FROM PREVIOUS STATEMENT			5,475.0
1-Feb	UNION FINANCE B0401001199A		4,500.0	975.0
5-Feb	PPS030533 (4FEB19) THE HONG KONG JOCKEY		500.0	475.0
12-Feb	PPS030533 (11/JAN19) THE HONG KONG JOCKEY		400.0	75.0
28-Feb	IMC SHANGHAI A P SCH SALARY	6,300.0		6,375.0



Dashboard based on the extraction result can be defined to get insight.  
RPA can help integration to any systems.

Robots provide options for users to integrate the system non-intrusively.

Date	Description	Deposit	Withdrawal	HKD Balance
1-Dec	BALANCE FROM PREVIOUS STATEMENT			6,950.0
1-Dec	UNION FINANCE 80401001199A		4,500.0	1,550.0
4-Dec	PP930533 (2DEC19) THE HONG KONG JOCKEY		500.0	1,050.0
11-Dec	PP930533 (10DEC19) THE HONG KONG JOCKEY		1,000.0	50.0
31-Dec	BAC SHANGHAI A P SCH SALARY	8,425.0		8,475.0

Date	Description	Deposit	Withdrawal	HKD Balance
1-Jan	BALANCE FROM PREVIOUS STATEMENT			8,475.0
1-Jan	UNION FINANCE 80401001199A		4,500.0	3,975.0
11-Jan	PP930533 (10JAN19) THE HONG KONG JOCKEY		1,000.0	2,975.0
18-Jan	PP930533 (11JAN19) THE HONG KONG JOCKEY		1,500.0	1,475.0
25-Jan	PP930533 (24JAN19) THE HONG KONG JOCKEY		1,000.0	275.0
31-Jan	BAC SHANGHAI A P SCH SALARY	5,200.0		5,475.0

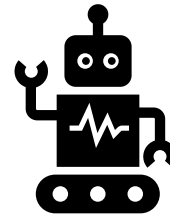
  

Date	Description	Deposit	Withdrawal	HKD Balance
1-Feb	BALANCE FROM PREVIOUS STATEMENT			5,475.0
1-Feb	UNION FINANCE 80401001199A		4,000.0	975.0
5-Feb	PP930533 (4FEB19) THE HONG KONG JOCKEY		300.0	475.0
12-Feb	PP930533 (11FEB19) THE HONG KONG JOCKEY		800.0	75.0
28-Feb	BAC SHANGHAI A P SCH SALARY	6,300.0		6,375.0

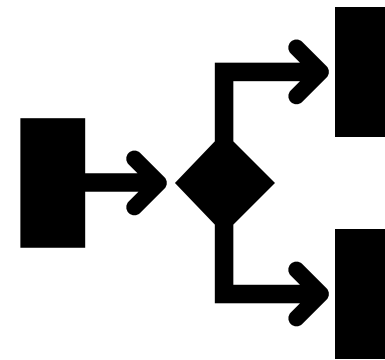
Categorized Data



Automate the data entry process and Assists your decision making by returning the best set of results at digital speed and scale



RPA



- CRM
- ERP
- 3<sup>rd</sup> Party Systems

Dashboard based on the extraction result can be defined to get insight.  
RPA can help integration to any systems.

Custom dashboard with AI capabilities helps decision making based on extracted and enriched data from previous steps

RPA / ANALYSIS

Automate the data entry process and Assists your decision making by returning the best set of results at digital speed and scale

Date	Description	Deposit	Withdrawal	HKD Balance
2-Dec	BALANCE FROM PREVIOUS STATEMENT			6,950.0
1-Dec	UNION FINANCE (0401001)199A		4,500.0	1,550.0
4-Dec	PP9030533 (2DEC19) THE HONG KONG JOCKEY		500.0	1,050.0
11-Dec	PP9030533 (10DEC19) THE HONG KONG JOCKEY		1,000.0	50.0
31-Dec	BAC SHANGHAI A P SCH SALARY	8,425.0		8,475.0

Date	Description	Deposit	Withdrawal	HKD Balance
1-Jan	BALANCE FROM PREVIOUS STATEMENT			8,475.0
1-Jan	UNION FINANCE (0401001)199A		4,500.0	3,975.0
11-Jan	PP9030533 (11JAN19) THE HONG KONG JOCKEY		1,000.0	2,775.0
18-Jan	PP9030533 (11JAN19) THE HONG KONG JOCKEY		1,500.0	1,275.0
25-Jan	PP9030533 (24JAN19) THE HONG KONG JOCKEY		1,000.0	275.0
31-Jan	BAC SHANGHAI A P SCH SALARY	5,200.0		5,475.0

Date	Description	Deposit	Withdrawal	HKD Balance
1-Feb	BALANCE FROM PREVIOUS STATEMENT			5,475.0
1-Feb	UNION FINANCE (0401001)199A		4,000.0	975.0
5-Feb	PP9030533 (4FEB19) THE HONG KONG JOCKEY		300.0	475.0
12-Feb	PP9030533 (11JAN19) THE HONG KONG JOCKEY		400.0	75.0
28-Feb	BAC SHANGHAI A P SCH SALARY	6,300.0		6,375.0

Categorized Data

### Personal Loan Application Overview Dashboard

**OUTSTANDING APPLICANTS**  
5218

**SUGGEST TO APPROVE**  
2510

**ADDITIONAL DOC NEEDED**  
1805

**MANUAL REVIEW NEEDED**  
903

**OUTSTANDING APPLICANTS**

Application #	Application Date	Loan Amount	Suggestion / Follow Up
20190800502	28 Aug 2019	HKD 50,000	SUGGEST TO APPROVE →
20190800521	30 Aug 2019	HKD 50,000	ADDITIONAL DOC NEEDED →
20190900012	01 Sep 2019	HKD 50,000	MANUAL REVIEW NEEDED →
20190900020	01 Sep 2019	HKD 50,000	SUGGEST TO APPROVE →

**APPLICANT RESIDENTIAL LOCATIONS**

**RECOMMENDATION FROM AI-KNOWIE**

- We noticed a trend on the average amount of loan application is **reducing**.
- We noticed a trend on the total number of application is **increasing**.

**LOAN APPLICATION TREND 2019**

Month	Average Loan Amount	# of Applications
Jan	~4,500	~500
Feb	~5,000	~400
Mar	~5,000	~400
Apr	~4,500	~400
May	~5,500	~400
Jun	~4,500	~400
Jul	~4,000	~400
Aug	~3,500	~400
Sep	~3,500	~400
Oct	~3,000	~400
Nov	~3,000	~400
Dec	~2,500	~400

Powered by AI-KNOWIE