



# SmartDoc

## 智慧文档系统

by :  
Shenzhen Zhizhong Tongsheng Technology Co., LTD

---

Date: July 5, 2025

wangyizhe@intellnet.cn



Smarter, faster and better-all in one

# What is Intelligent Document Processing (IDP)?

Addressing the Challenges of Unstructured Data Processing. In the banking industry, manual processing of unstructured data is both time-consuming and costly, with high error rates. By leveraging artificial intelligence and machine learning, banks can automate data extraction, classification, and processing to transform it into structured insights. This IDP solution streamlines operations, boosts efficiency, and enhances accuracy.

# The next generation of intelligence

Subordinate	core competence	Representative technologies
1st generation	character recognition	EasyOCR
Second generation	Layout analysis + text recognition	Layout LMv3
3rd generation	Multimodal + reasoning + learning	ABBYY Vantage
Now	Vision + zero sample + autonomous learning	The next generation of intelligent engines



# Customer Stories

No.1


## CFO Jade | One of the top 30 chemical companies

A key focus of our attention lies in whether the system has genuinely reduced costs after its launch. In terms of supplier settlements, we have consistently performed well. I will continue to reflect and explore whether our current management methods are more scientific and efficient. Compared with industry peers, how to enhance work efficiency and maintain competitive advantages remains a constant concern for us.

Asia Pacific Financial Shared Service Center, responsible for accounts receivable and payable in Malaysia, Thailand, Taiwan, Japan, Singapore, Hong Kong and other regions.



Efficiency



Method



# Customer Stories

No.2

## CFO Monica | A semiconductor leader

Previously, to streamline payment processes, some purchases were registered as consignment sales. This practice stemmed from the fact that most finance department staff were gentle-tempered women who often tolerated such irregularities to expedite problem resolution. However, after the new system went live, these practices became effectively regulated. While normal purchasing procedures remained as convenient as consignment sales, it eliminated manual adjustments in the ERP system, significantly reducing the need for labor-intensive corrections.

Singapore and the Mainland of China have a total of five entities, including supplier payments and expense management.



cooperate

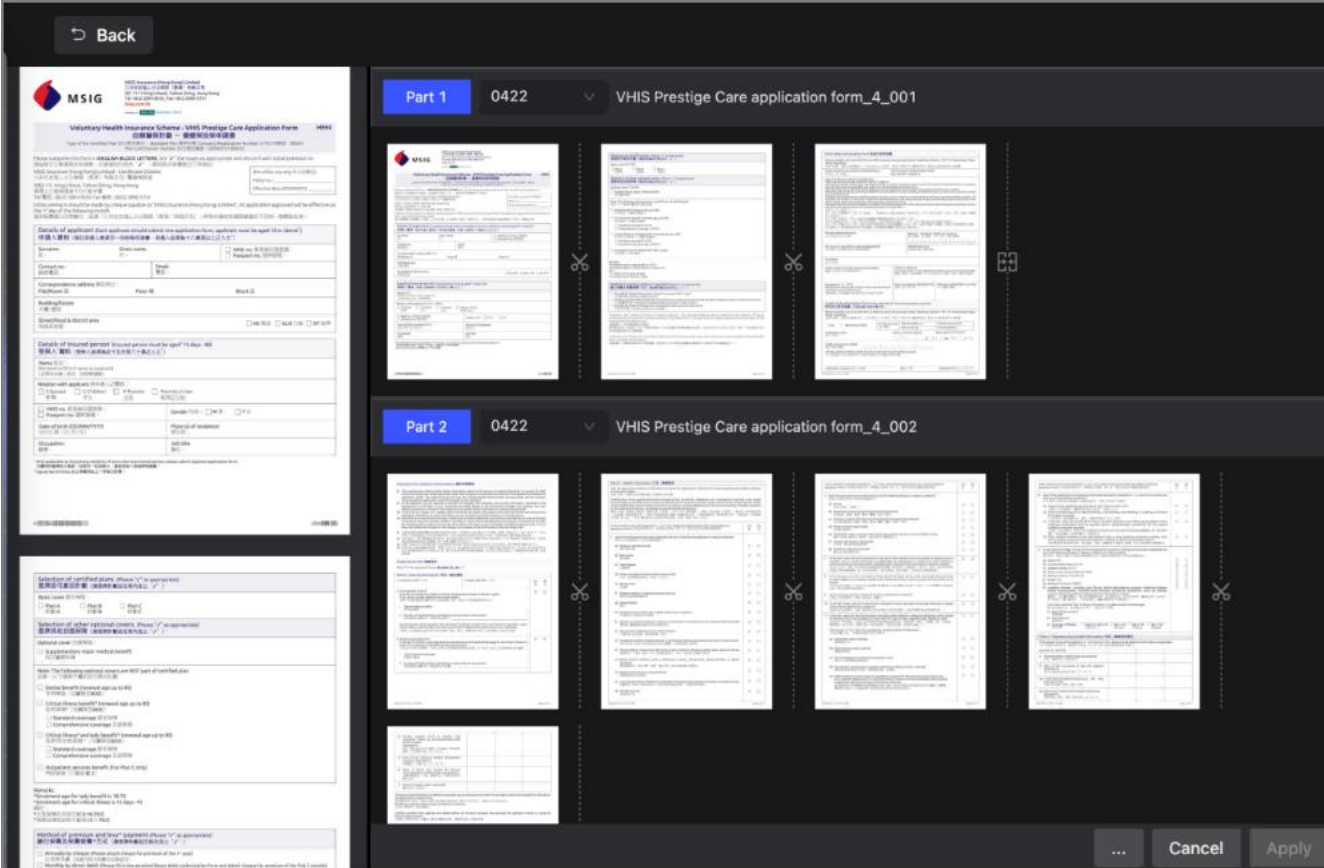
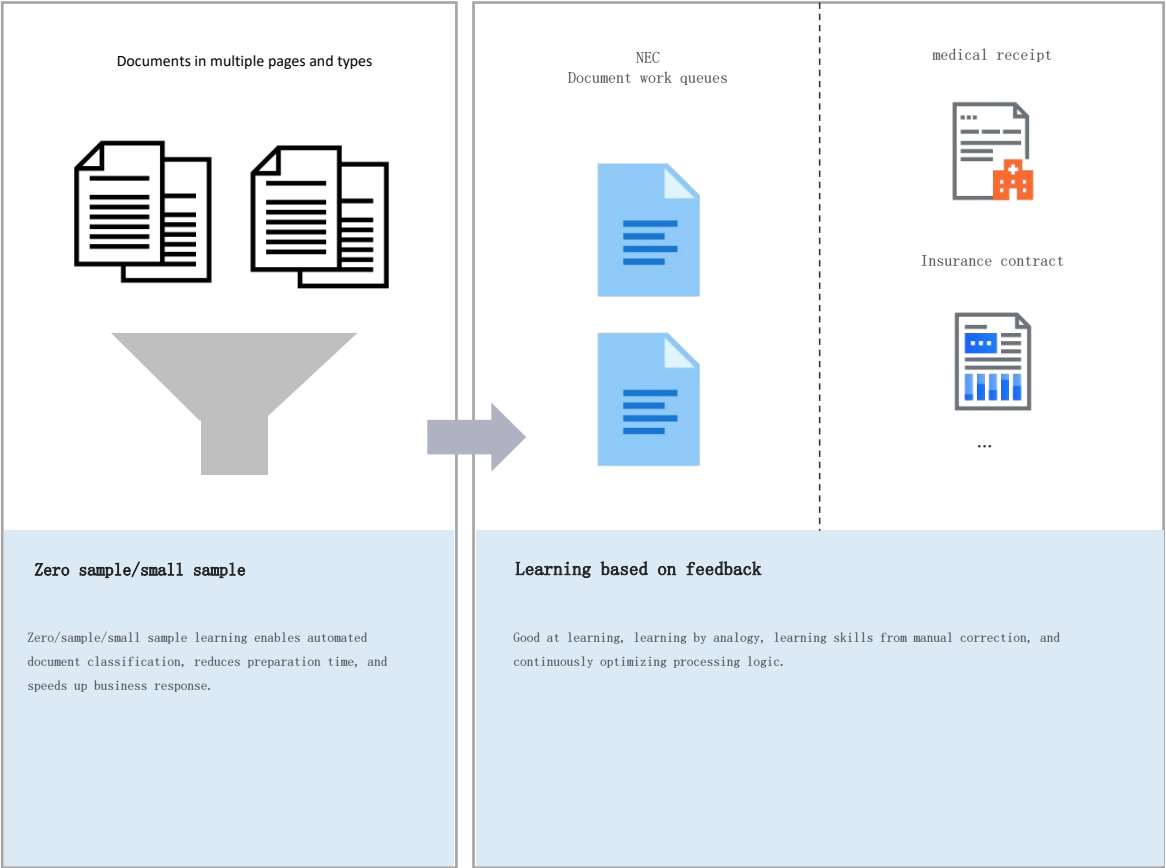


Criterion



# Innovative document automatic classificat

No.1



Back

1

2

3BB BROADBAND

บริษัท ทูโอวี จำกัด (ประเทศไทย) จำกัด

TAX ID : 0105563035874

29 อาคารอิมพีเรียลทาวเวอร์ ชั้น 3 ต.สุขุมวิท 39 อ.สุขุมวิท แขวงคลองตันเหนือ เขตวัฒนา จ.กรุงเทพมหานคร 10110

บริษัท ทูโอวี จำกัด (มหาชน)

เลขที่ทะเบียน 0107550000149

200 หมู่ 4 ถนนแจ้งวัฒนะ ตำบลปากเกร็ด อำเภอปากเกร็ด จังหวัดนนทบุรี 11120

Triple T Broadband PCL 200 Moo 4, Chaengwattana Road, Pakkret Sub-district, Pakkret, Nonthaburi 11120 Fax : 66 2 100 2121

ใบแจ้งค่าบริการ (Statement)

010755000014900 4105287196 36702121000511 13661

เลขที่ Invoice No. : 36702121000511  
ข้อมูลถึงวันที่ (Data as of) : 12/02/24

ค่าบริการรายฉบับ (Current Charges)	ยอดค้างชำระ (Outstanding Balance)	ยอดที่ต้องชำระทั้งสิ้น (Total Outstanding Balance)	โปรดชำระเงินภายในวันที่ (Current Due Date)
685.34	684.27	1,369.61	11 มี.ค. 67 (11/03/24)

รายละเอียดค่าบริการ (Summary of Charges)  
รายการ (Detail)  
จำนวนเงิน(บาท) (Amount(Baht))  
ยอดค่าบริการรายฉบับ (Current Charges)  
ค่าบริการ 3BB VDSL PLUS (CUR) TTBB 590.00  
ค่าบริการเสริม (Value Added Services) / อื่นๆ(Others) 50.50  
ยอดรวมก่อนภาษีมูลค่าเพิ่ม (Current Charge Before VAT) 640.50  
ภาษีมูลค่าเพิ่ม 7% (VAT 7 %) 44.84  
รวมค่าบริการรายฉบับ (Total Current Charges) 685.34  
ยอดค้างชำระเดิม รวมภาษีมูลค่าเพิ่ม (Outstanding Balance : include VAT) 684.27  
ยอดค่าบริการที่ต้องชำระทั้งสิ้น (Total Outstanding Balance) 1,369.61

หากท่านประสงค์จะชำระค่าบริการนี้ กรุณาชำระค่าบริการชำระหนี้ก่อนถึงวันครบกำหนดชำระหนี้ตามที่กำหนดไว้ในใบแจ้งค่าบริการ หรือติดต่อขอชำระค่าบริการได้ที่ โทร. 1530

จำนวนเงิน.....บาท เลขที่บัญชี.....วันที่.....

“โปรดตรวจสอบใบแจ้งค่าบริการก่อนชำระเงินเพื่อยืนยันว่าข้อมูลการชำระเงินตรงกับใบแจ้งค่าบริการที่ท่านได้รับ”  
“ใบแจ้งค่าบริการนี้เป็นเอกสารที่จัดทำขึ้นโดยระบบอัตโนมัติและอาจมีข้อผิดพลาดได้ กรุณาตรวจสอบก่อนชำระเงิน”

3BB

บริษัท ทูโอวี จำกัด (มหาชน)

เลขประจำตัวประชาชน 0107550000149

แบบฟอร์มการชำระเงิน

ส่วนที่ 1 สำหรับลูกค้า

ส่วนที่ 2 สำหรับเจ้าหน้าที่

inv-th-3BB

基本信息

✓ 發票號碼

36702121000511

✓ 發票日期

2024-02-12

✓ 到期日期

2024-03-11

✓ 採購訂單

✓ 發票類型

Invoice

✓ 發票語言

TH

賣方供應商

✓ 供應商名稱

บริษัท ทูโอวี จำกัด (มหาชน)

✓ 供應商地址

200 หมู่ 4 ถนนแจ้งวัฒนะ ตำบลปากเกร็ด อำเภอปากเกร็ด...

✓ 供應商稅號

0107550000149

✓ 客戶名稱

บริษัท ทูโอวี จำกัด (ประเทศไทย) จำกัด

✓ 客戶ID

410528719

發票金額

✓ 貨幣

THB

✓ 稅前總額

640.5

✓ 總金額

1369.61

✓ 稅額總計

44.84

✓ Confirm

<

>

Reject

Postpone

More

Non-template AI model

Key value and table structure data extraction

- › Multilingual, including Chinese, English, French, Spanish, Portuguese, German, Italian, Russian, Japanese, Korean, Vietnamese, Thai, Arabic and 29 other languages
- › Handwriting recognition

Short preparation time

-No preparation required for experience testing

-configurable field extraction

-Accuracy of 500 different vendor invoice formats can be improved in just 3 to 5 business days



## No.2

A UI interface where you see is what you get

Checkboxes can be identified in the questionnaire

Instant learning-correction is the completion of learning

No.4

DocSintel Invoice

Search Reset Upload Download

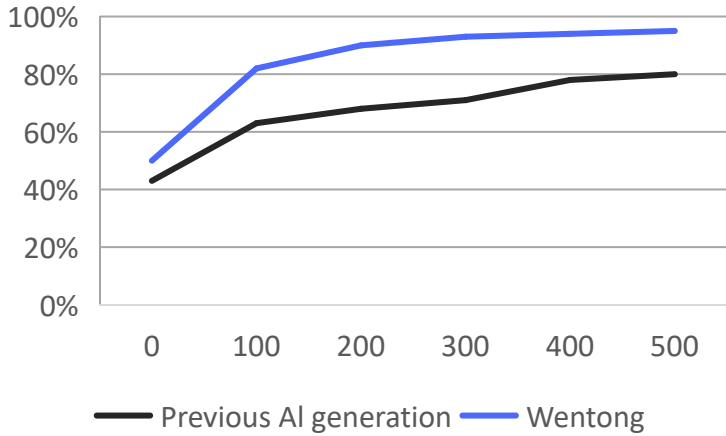
All Reviews Postpone Confirmed Exports Rejected Deleted

Row	FileName	Status	Supplier Name	Payment Term	Currency Code	Document ID	Total Amount	Sub Amount	Action
1	221531155970573602816	Identifying							More
2	inv_hk_hs_16	To Review	FAN KAM YUK LTD.		HKD	24490	21000.00	2100	More
3	Test inv_hs_00056	To Review	Goodman Propert...		AUD	202300010685	8311.36	755	More
4	FACT TRSPIT BARU-ALIJAJURA	To Review	ALEN GROUP Srl		EUR	220708/T	15.98	1	More
5	MOEN INV.800489717 R-tech	To Review	VTECH COMMUN...		USD	800499717	15850.80		More
6	MOEN INV.800489717 R-tech	To Review	VTECH COMMUN...		USD	800499717	15850.80		More
7	INVOICE 223212 01_13_23 15...	To Review	PLASTIC COMPO...	Net 75 Days	USD	223212	1209.60	120	More
8	inv_nl_nro_3	To Review	Groenendijk Bedri...		EUR	72134530	105.25	8	More
9	inv_nl_nro_3	To Review	Thule Sweden AB	Net 30	EUR	013059979	9949.80	994	More
10	inv_nl_nro_4	To Review	Groenendijk Bedri...		EUR	72134529	105.25	8	More
11	inv_nl_nro_5	To Review	Groenendijk Bedri...		EUR	72134530	105.25	8	More
12	inv_nl_nro_5	To Review	Groenendijk Bedri...		EUR	72134530	105.25	8	More
13	inv_nl_nro_5	To Review	Groenendijk Bedri...		EUR	72134530	105.25	8	More
14	inv_nl_nro_4	To Review	Groenendijk Bedri...		EUR	72134529	105.25	8	More
15	inv_nl_nro_3	To Review	Thule Sweden AB	Net 30	EUR	013059979	9949.80	994	More

Showing 17 Rows 1 50 / page

No label training, correction is learning

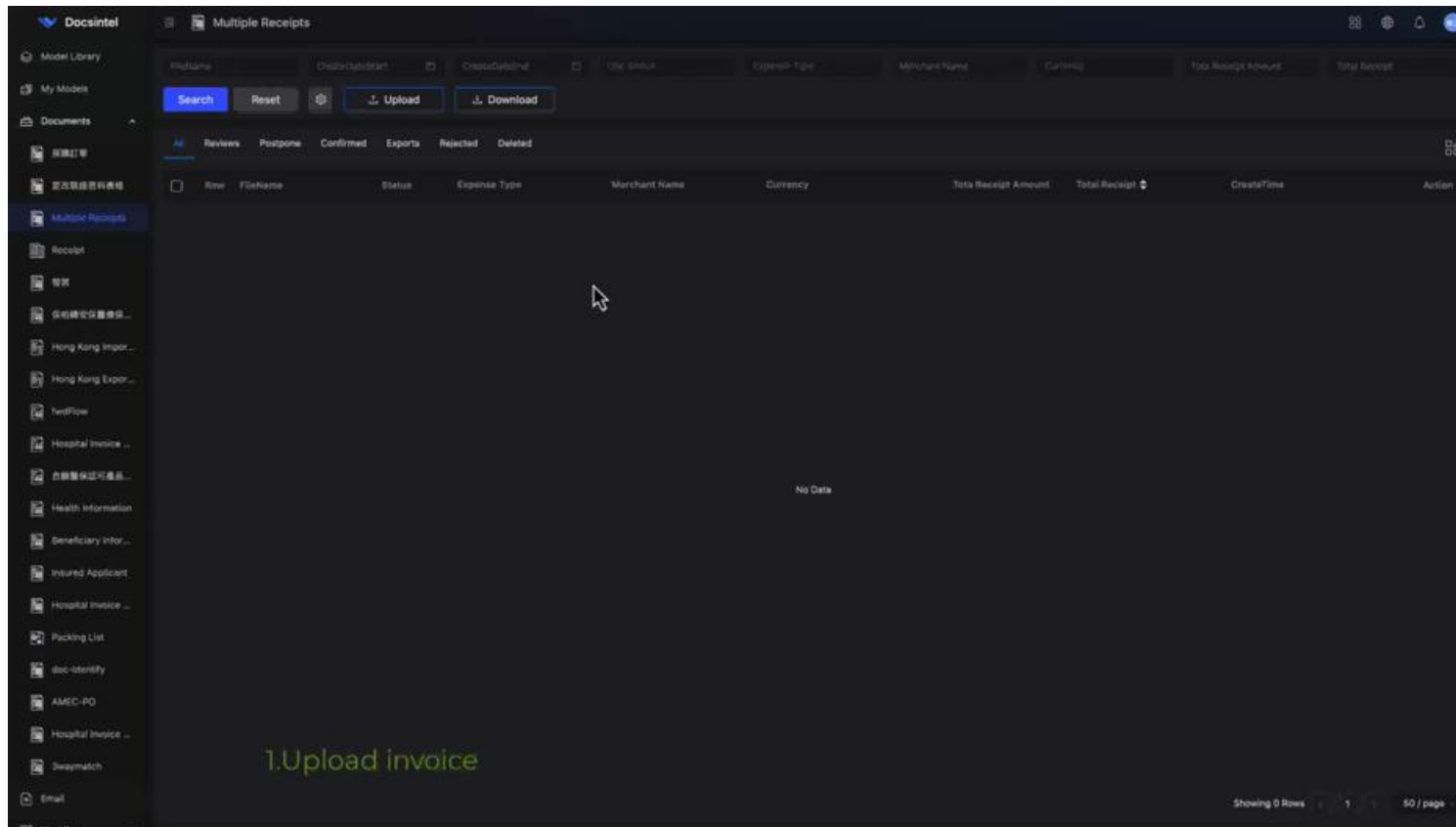
- For documents containing errors or defects, the system engine can learn the features of the document with only one or two checks and corrections from the user, and accurately extract the required information in subsequent identification processes.
- Significantly shorten the preparation time and improve the implementation efficiency.
- As it continues to be used, the system is constantly optimized and flexible to new business changes.





## Multiple payment receipts

No.5



Not only can it understand a single object, but it can also detect and accurately identify multiple objects

1

Intelligent differentiation of printed OR handwritten

2

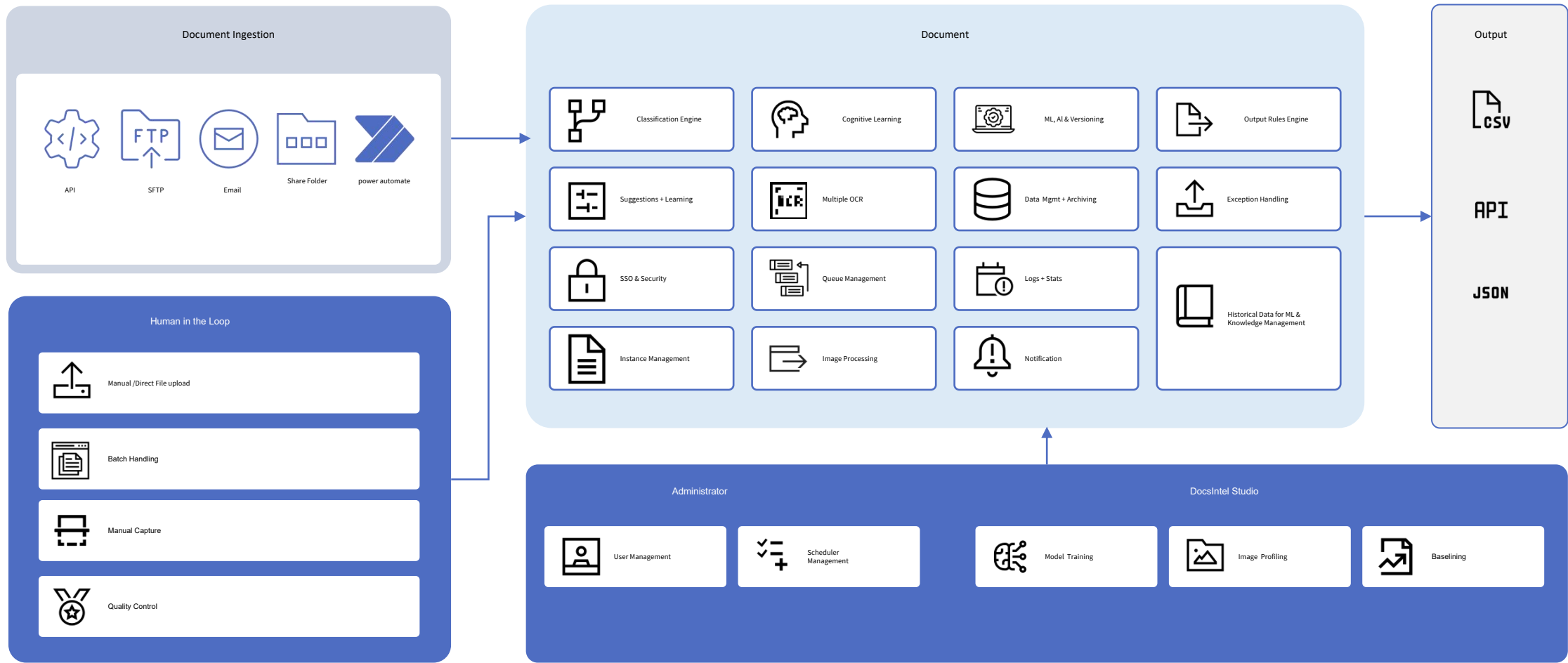
Supports handwriting confidence detection

3

Supports determining cost types based on content

[illegible]

# Intelligent Document Processing



Data security and compliance assurance

---



Key security practices

- Data encryption (transmission and static state)
- Role-based access control and audit logs
- Continuous monitoring through the Azure Monitoring and Security Center
- Comply with international standards and reduce regulatory risks for insurance companies in Hong Kong, Macao and Taiwan



Signed channels

( order not specified )

# IDP Features

Module	Capability	Description
Document Ingestion	API, SFTP, Email, Shared Folder, Power Automate	Support flexible input of files from various systems and sources-automatic or manual
Human-in-the-Loop	Manual Upload, Batch Handling, Manual Data Entry, Quality Control	Allow manual review and intervention in complex or exceptional cases to ensure accuracy
Core Modules and Engines	Document Classification	Automatically identify file types (e.g., invoices, contracts, reports)
	Cognitive Learning	Learn from user feedback and historical patterns to gradually improve
	OCR Engines	Supports 192 languages and handles complex layouts, reading order, and multi-column structures
	Image Preprocessing	Improve image quality for better OCR results
	Data Archiving & Management	The security storage is structured and allows easy retrieval or auditing
	Exception Handling	Automatically tag and route problem files for human review
	Output Rules Engine	Application business logic generates structured data output, such as JSON or CSV
	Logs & Analytics	Track processing history and system performance to gain operational insights
	Queue & Instance Management	Manage the processing queue to ensure scalability and system stability
	SSO & Security	Provides secure access with single sign-on and role-based permissions
	Suggestions & Learning	Provide field suggestions and learn from the fixes to facilitate future processing
	Historical Data Store	Collect tag data for future model training and knowledge reuse
Notification System	Alerts & Updates	Send updates about the status, error, or required operation in real time
Admin Console	User Management	Control access and roles on the platform
	Scheduler Management	Automate document processing tasks according to defined schedules
DocsIntel Studio	Model Training	Train the AI model according to your specific file type and format
	Image Profiling	Set the best image processing rules according to the file type
	Baselining	Define a baseline of accuracy and track the models improvement over time
Output	API, JSON, CSV	Provides structured output for seamless integration with downstream systems