

How OCR & RPA Compliment Each Other

Intelligent OCR with RPA



DATAMATICS
TruBot

About the speaker



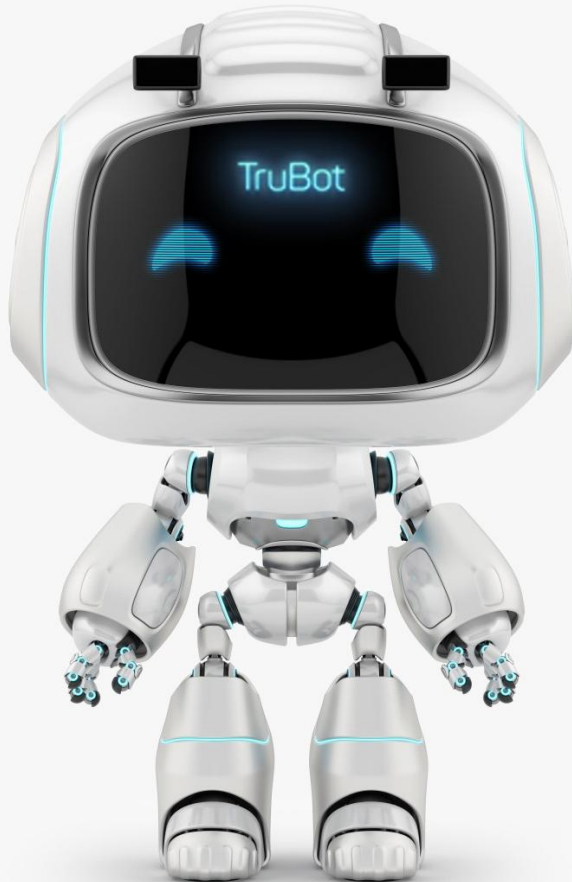
Rajesh Agarwal

Sr. VP & Head – Robotics Process Automation

Rajesh Agarwal heads the Robotic Process Automation (RPA) business at Datamatics since over a decade. He brings with him over 20 years of varied experience in the field of Information Technology and IT enabled Services and has been instrumental in developing the proprietary solution for RPA – TruBot with the objective of improving business processes for its clients. He has expertise in the areas of Technology Innovation, IP Development, Solution Architecture Project Management, Pre-Sales, Account Management, Transition Management, and Business Process Reengineering.

rajesh.agarwal@datamatics.com

Agenda



Role of OCR in RPA

Challenges in OCR

Solution using Intelligent OCR

Point where OCR ends & RPA begins

OCR in various business processes

Live Q&A session

Role of OCR in RPA

Many processes are document driven



Loan Processing



Contract Management



Shipping Process

Success of RPA depends on



Accuracy of OCR



Intelligence to read unstructured data



Integration with RPA platform

Challenges in OCR- Image Quality



skewness (Rotation)

Sample Text

Blurring and Degradation

PREVIEW TEXT

Fonts (Artistic fonts)



Scene Complexity- Camera taken images, symbols



Document with Background noise or Watermarks

Challenges in OCR- Content



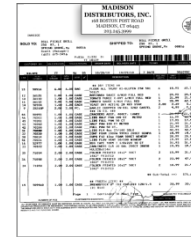
Unstructured content



Document Language

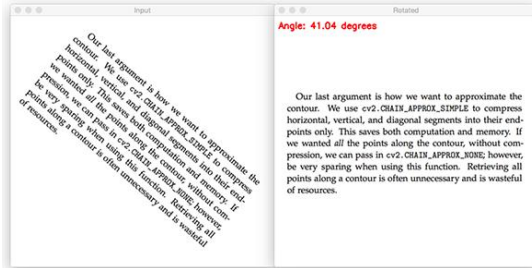


Dense document with multiple font type and size

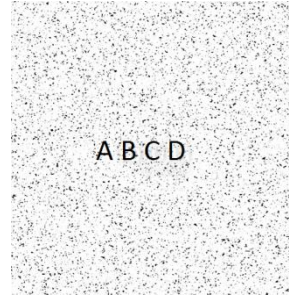


Interference of lines & logos

Solution using intelligent OCR- Image Processing



Deskew (Rotation)



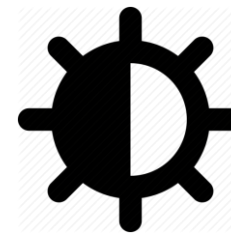
Speckled Image with text



Noise removal
(blobs & shadows)

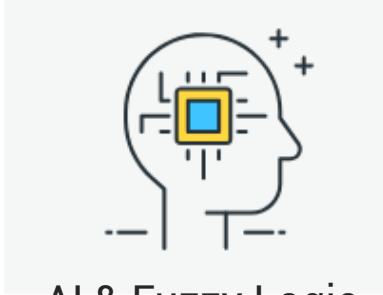


Character Repair



Smoothing & Grow

Solution using intelligent OCR- Post Processing



AI & Fuzzy Logic-
Auto location



Data Validation



Auto Correction
0 to O , 2 to Z , l L to 1



Auto Formatting &
Rule Based Conversion

Point where OCR ends & RPA begins

RPA + OCR = Total Process Automation



OCR is used to digitize the document by extracting useful information



RPA has handshaking with OCR at this junction



Output of OCR is given to Bot for further processing

- Posting in ERP
- Triggering the workflow
- Storing document in DMS
- Feeding payment data in core banking system

Point where OCR ends & RPA begins- Examples

Trade Finance Processing

- OCR extracts the information from trade documents
 - Party Name
 - Bank name
 - Account number
 - Swift code



- Extracted data is populated into trade workflow or core banking system using RPA

Loan processing

- OCR extracts the
 - Personal details
 - Property details
 - Cheque details
 - MICR code etc from loan documents

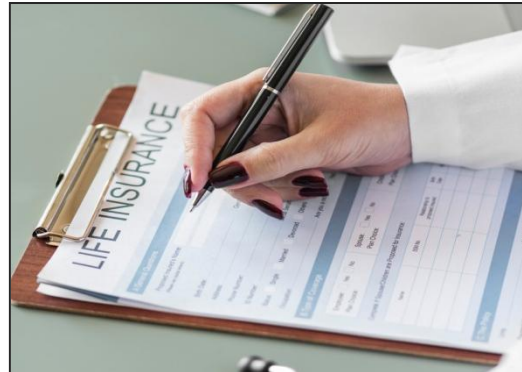


- RPA uses this information to process these loan in mortgage system.

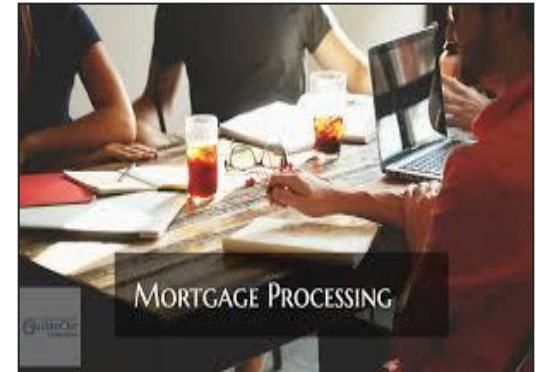
OCR in various business processes



Accounts Payable
& Receivable



Claim Processing &
Policy Issuance



Mortgage Document
Processing

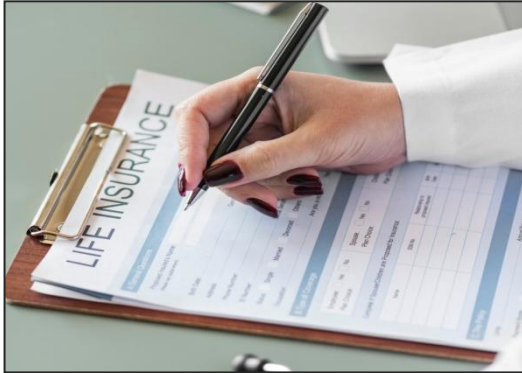
OCR in Accounts Payable & Receivable



Accounts Payable
& Receivable

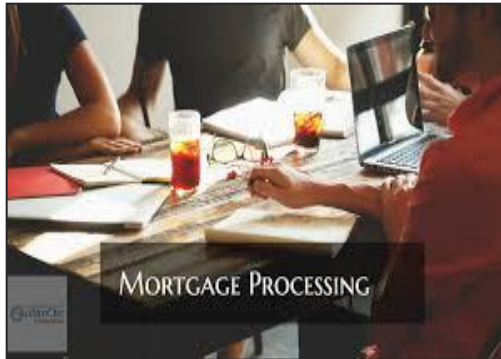
- Process involves different documents such as invoices, purchase orders etc.
- OCR helps in digitizing, indexing and reading other critical information
- Minimizing human labor
- Increase in data accuracy

OCR in Claim Processing & Policy Issuance



Claim Processing &
Policy Issuance

- Process involves different documents such as Health claims, Insurance claims, Medical reports, Policy documents etc.
- Increases internal efficiency in both the new policy & claims processing workflows.
- Minimizing human labor
- Improves customer service & attracts more clients.



Mortgage Document
Processing

- **Data extraction from loan applications, forms, legal letters, etc**
- **Automated metadata extraction enables straight-through processing of documents.**
- **Validating and cross checking data using various validations.**
- **Reduces TAT for information extraction, review & validation.**

About Datamatics TruBot

Datamatics TruBot™ is a multi-skilled bot that manages different kinds of processes in a day such as invoice processing & collections, customer onboarding, account reconciliation, reporting processes and many more that ensures optimum utilization of each bot.

Intelligent OCR

Its in-built advanced Optical Character Recognition (OCR) capability is integrated with AI and fuzzy logic.

Smart

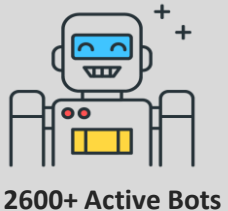
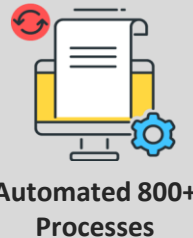
Automates complex processes, such as Murex-based treasury processes, Citrix-based accounting processes, ATM reconciliation and dispute resolution, and cash, credit and overdraft limit extension.

Multi Skilled Bot

One bot sequentially performs multiple processes on one machine using a single license.

Scalability

Provides a consistent and scalable performance and is compatible with advanced enterprise technologies and business operations.



About Datamatics TruOCR

Datamatics TruOCR is an Optical Character Recognition (OCR) solution powered by Artificial Intelligence (AI) and fuzzy logic. It helps in intelligent data capture from various unstructured documents with over 99% accuracy.

Unstructured Data Extraction

Helps in intelligent data capture from unstructured scanned images. Template free automation.

Auto-learning

Over the period of time it auto learns.

Auto-Correction

Inbuilt fuzzy logic helps to autocorrect typical mistakes of OCR

Data Validation

Offers to automatically verify and validate data using business rules and AI/ML algorithms leading to continual improvement.

High Visibility Of Data

Extracts metadata, indexes, and converts them in to easily searchable portable formats.



Multiple Language
Supported



Over 99% OCR Accuracy



Auto Learning

About Datamatics TruOCR



Over 99% OCR Accuracy

Over 99% accuracy of output with strong capabilities for pre-processing and image enhancement to improve OCR accuracy.



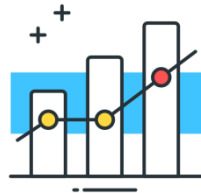
23 Million+ Documents processed

23 Million+ documents processed with TruOCR.



Enhanced Human-OCR Synergy

Configured to capture data as per pre-defined threshold confidence level. Allows manual intervention for below threshold limits.



Up To 400% Productivity Improvement

TruOCR improves data capture productivity by up to 400% as against manual data capture.



Seamless Integration With All RPA Platforms

TruOCR is not only compatible with TruBot RPA, but can also be seamlessly integrated with other 3rd party RPA platforms.

About Datamatics



We build intelligent solutions for data-driven businesses to enhance their productivity and customer experience

450+

Customers Worldwide

10,000+

Employees

Offices in

6 Countries

Global Delivery centers in

4 Regions

\$145+ M

Annual Revenue

Publicly listed

Q & A session



THANK YOU

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