How OCR & RPA Compliment Each Other

Intelligent OCR with RPA
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.

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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)**
- **Blurring and Degradation**
- **Scene Complexity - Camera taken images, symbols**
- **Document with Background noise or Watermarks**
- **Fonts (Artistic fonts)**
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, I 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
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

- 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

- 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.
OCR in 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.
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.

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<tr>
<th>450+ Customers Worldwide</th>
<th>10,000+ Employees</th>
<th>Offices in 6 Countries</th>
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<tr>
<td>Global Delivery centers in 4 Regions</td>
<td>$145+ M Annual Revenue</td>
<td>Publicly listed</td>
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Q & A session
THANK YOU