Robotics and intelligent process automation platform
What is Robotic Process Automation?

Robotic process automation (RPA) is a technology that allows software robots to emulate humans actions interacting with digital systems and software.

How does RPA Work?

Software robots can understand what’s on a screen or in the document, complete the right keystrokes, navigate systems, identify and extract data, and perform a wide range of defined actions.
RPA MAIN BENEFITS

- Digital transformation acceleration (much faster than other automation approaches)
- Costs reduction: personnel expenses, operation overhead
- 24/7 availability
- Greater speed and accuracy
- Scalability
- Improved compliance and auditability
- More value from personnel (can spend more time on creative tasks)

UNPRECEDENTED RATE OF ROI
What program robots can do?

**Robot**
- Data Transition: Data transition from one application to another according to some rules

**Matching**
- Data matching across different systems, including fuzzy logic

**Routing**
- Entity classification and routing to corresponding business process

**Text data processing**
- Data extraction from unstructured text and processing

**Technology**
- RPA AI OCR

**Manual effort reduction**
- 100%
- 80-100%
- 70-90%
- 60-90%
Enriching RPA with Generative AI

A chatbot helps an employee to quickly receive answers on internal regulatory rules and initiate automated processes with RPA.

GenAI allows extracting meaningful information from free form text (support queries, medical reports, customer enquiries), and then robot can process it.

Robot generates the text of personalized offer and sends it to customers.

Robot scans social media networks to determine the sentiment of comments in response to marketing campaigns.
IBA RPA EXPERTISE

- 7 years RPA experience
- 900+ Business Processes automated
- 100+ certified RPA + ML specialists
- Experience with leading RPA platforms: WorkFusion, Automation Anywhere, UIPath, BluePrism
- Own RPA platform

*All figures are based on the IBA Group automated processes, 2016-2023*
TRADITIONAL RPA CHALLENGES

- High licensing costs
- Limitations due to orientation on business users
- Complicated troubleshooting and support due to limited functionality for code debugging, bug fixing, and testing
- Lack of unified development standards due to orientation on citizen development
EasyRPA advantages

Zero license cost full-featured version for an unlimited period of access.

No limitations in development and modification of software robots. Full support of CI/CD, unit tests, unified development standards.

Built-in mechanisms for document processing using OCR and ML work without the limit on the number of documents.
ENTERPRISE-CLASS PLATFORM

Automatization of

- Web applications
- Windows Desktop applications
- SAP applications
- Java and Oracle Forms applications
- Citrix and Windows Remote Desktop applications
- Applications written to run in terminals or mainframes

Process and workplace management

User and access rights management

Secure password storage
ENTERPRISE-CLASS PLATFORM

- Human-in-the-loop automation
- OCR engine for document processing
- Machine learning
- Containerization and scalability
- Monitoring and auditing
CORE COMPONENTS ARCHITECTURE

CONTROL SERVER

- Automation Process Management
- Logging System
- Data Storage
- User Management
- Scheduling
- Password Storage
- Workplace Management

Workplace agent

- Automation Process

Workplace 1

- Desktop App

Workplace N

- Desktop App

* cited as an example
DELIVERY MODEL STEP BY STEP

HOW TO START

- IBA gets process description from customer or our business analyst together with customer SME creates description of the process to automate
- Depending on the level of provided details IBA Delivery Manager recommends Fix Price or T&M model
- IBA developers receive access to the client's internal systems, install EasyRPA platform and begin implementation
- After internal testing the process is deployed to customer environment and UAT is performed
- Process is launched in production

FINAL COSTS & TERMS

- Once launched in production, the process runs without any license fees.
- If incidents occur, IBA provides technical support in accordance with support agreement
AI in EasyRPA
HYBRID AUTOMATION

Human-in-the-loop Automation

- Employees and RPA robots work together passing tasks back and forth to each other with full visibility
- The resulting end-to-end RPA solution combines robot efficiency and scalability with human creativity and flexibility

Human Tasks

Automation process tasks that cannot be done by machines and require human involvement, for example, decision-making
OCR ENGINE TO DIGITIZE DOCUMENTS

Digitizing Documents — OCR
- Supports electronic conversion of printed text images into a machine-encoded text
- Includes a built-in OCR engine

Built-In OCR
- Out-of-the-box solution, no need to write or maintain any custom code
- No OCR page limits per year
- Easy PDF recognising
- Based on the leading open source OCR engines (Tesseract, PaddleOCR)
- Can recognize more than 100 languages out of the box
AI MODULE

Allows users to create automation bots empowered by Machine Learning algorithms

Cases for ML
- Document Classification
- Information Extraction
- Signature detection

EasyRPA ML Capabilities
- Provides UI for data analysts to prepare training data and train ML models
- Built in tools to evaluate ML model quality
- Able to export existing models as a file and import pre-trained models into the system
- Can be easily scaled
AI THAT GETS SMARTER

Built-in continuous learning process allows to increase ML model quality over the time automatically and adapt to the changes in document structure.

Documents → OCR & ML → MSE validates or helps with data extraction → Extracted and validated data → Data is used in business process

New better model is automatically deployed to production

Model training on historical and new data
USE CASES
KYC PROCESS AUTOMATION

Customer
Large private full-service bank with 25+ years history and operations worldwide

Technologies
RPA, OCR, ML

Goals
Reduction of processing time, 80% automation

PROCESS AS IS
• Clients request to open new accounts across number of channels
• 14 types of KYC documents (ID card, driving license, etc.), reconciled against 10+ rules per document
• Reconciliation with several systems
• 200+ FTEs, located in different offices

SOLUTION
• Employees digitize customer documents using OCR
• Robots retrieve required data, validate data against the rules, route exceptions for manual processing, enter data into the system
• 30 FTE to check results in complex cases.

RESULTS
80% PROCESS AUTOMATION
3 min vs 20 min BOT vs HUMAN
COMPLIANCE REPORTING AUTOMATION

**Customer**
Group of Telecommunications Companies

**Technologies**
RPA

**Goals**
Reduction of processing time and manual errors, automation.

**PROCESS AS IS**
- 100% manual process, around 5 hours for loading data, high rate of manual errors
- Interaction within the SAP ERP (2 modules: accounting and items' log), 3 excel spreadsheets, websites, and mail-agent
- Compliance department employees apply several filters and initiate export of data from different modules to the excel spreadsheets, merge them, scrape the current currency exchange rates into the resulting excel document, visit the website for random number generation and send resulting report.

**SOLUTION**
- Robots log-in to the system, apply several filters and initiate export of data from different modules to the excel spreadsheets, merge them, scrape the current currency exchange rates into the resulting excel document, visit the website for random number generation and send resulting report.

**RESULTS**

- 100% PROCESS AUTOMATION
- 4x FASTER MANUAL HANDLING TIME
- 0% HUMAN ERRORS
**INVOICE PROCESSING AUTOMATION**

**Customer**
Eastern European airline

**Technologies**
RPA, OCR, ML

**Goals**
Automation and reduction of processing time and manual efforts

**PROCESS AS IS**

**Human**
- Every day, the finance department receives invoices for sold airline tickets from ticket resellers. Each reseller sends their invoices as individual PDF files. The employee splits each PDF file into individual invoices.
- The employee manually enters 10-12 fields such as invoice date, flight number, aircraft registration number, price/amount/quantity, and currency while registering each invoice in the ERP system.
- At the end of the day, the employee generates a report in the system, exports it to an Excel file, and sends it via email.

**SOLUTION**

**Robot**
- Scans the folder for new PDF files and splits each PDF file into individual invoices.
- OCRs the document and validates the data, then registers each invoice in the ERP system.
- At the end of the day robot generates the report in the system, exports it to an Excel file, and sends it via email.

**RESULTS**

<table>
<thead>
<tr>
<th>Process Automation</th>
<th>Automation Accuracy</th>
<th>Faster Manual Handling Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>96%</td>
<td>98%</td>
<td>10x</td>
</tr>
</tbody>
</table>
AUTOMATION OF PRICE BOOK UPDATES

Customer
A leading UK furniture manufacturer and retailer (119 shops in UK and EU)

Technologies
RPA

Goals
Automation and reduction of processing time and manual efforts

PROCESS AS IS
Human
• Prepares a Google Spreadsheet document with a table of products. Each row contains a cost price, a sale price and a commission percentage per region / country. Near 10 price books for each region, one input file roughly consists of 1,000 price updates.
• Launches the Author web application, searches for a corresponding price book based on region and updates the prices for a certain product
• Launches the Retails application via a mainframe terminal, searches for a price book and a product, and updates the prices.

SOLUTION
Human
Prepares a Google Spreadsheet document with required products and prices
Robot
• Splits the input data into 5 batches to launch automation in parallel and minimize the time
• Launches the Author and Retails applications, and executes the automation steps to update the prices
• Generates an HTML report of activities and sends the results to Human

RESULTS
95%
PROCESS AUTOMATION
16x
FASTER MANUAL HANDLING TIME
24/7
WORKING HOURS
0%
HUMAN ERRORS
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