




# Automation 2019

Creating the new future of capture with

## **IBM Intelligent Content Processing**



**Mira Kim** | IBM Offering Manager - Capture  
New York City | June 6, 2019



Automation 2019



# Agenda

- Introduction: Intelligent Content Processing today brings together traditional capture, AI, Machine Learning and RPA for document extraction classification and rapid application development – Exploring the possibilities with: Datacap Insight Edition, Business Automation Content Analyzer, and RPA

*Speaker: Mira Kim, IBM*

- Customer Case Study: Bank of Montreal builds a brand new way to engage with customers on Business Automation Content Analyzer

*Speaker: Brian Chan, Bank of Montreal*

- Overview and Demo: Content Analyzer

*Speaker: Mira Kim, IBM*

- Overview and Demo: RPA and Content Analyzer

*Speaker: Stu Leibowitz, IBM*

# We are focused on extending the platform and infusing it with **Intelligence**

**Extending  
and enriching  
the  
automation  
platform**

Single,  
integrated  
platform

Low-code  
configuration

Flexible  
deployment  
options

**Infusing  
intelligence  
into  
automation**

Act on  
unstructured  
data

Collect  
operational  
data

Operationalize  
AI

# International Airline



# Maintenance Repair & Overhaul



1.700.000  
technical documents



Lots of information but hard to  
use and analyse automatically



Manual data collection is  
time consuming and expensive





900 Suppliers



150K pages per month



Up to 1000 parts per doc

# 11 ILLUSTRATED PARTS LIST

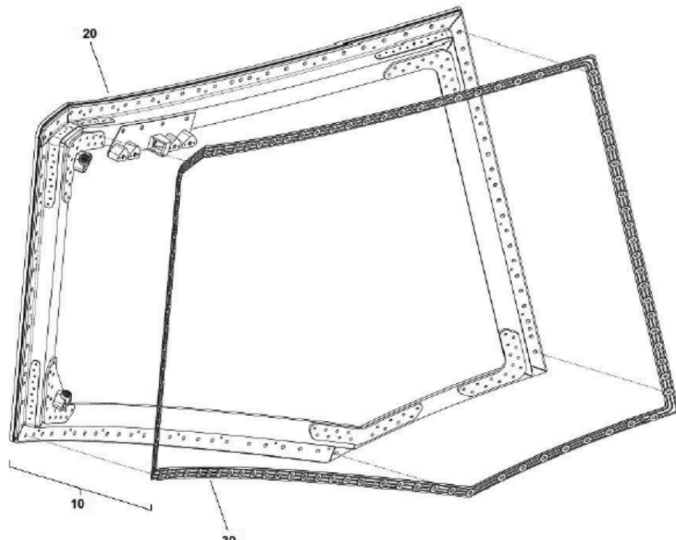


FIG / ITEM NO.	PART NUMBER	AIRLINE STOCK NUMBER	NOMENCLATURE 1234567	EFF. CODE	UNITS PER ASSY.
10-1					
1	1- J22		Window Assy. Pilot No 1 with Hydrophobic Coating	A	RF
-5	1 J23		Window Assy. Co-pilot No 1 with Hydrophobic Coating	B	RF
10	6- .10028-39		. Window Assy Pilot No 1	A	1
-15	6- .10028-40		. Window Assy Co-pilot No1	B	1
20	1- 22T262		. . Framed Window, Pilot	A	1
-25	1 J23T262		. . Framed Window Co- Pilot	B	1
30	0- J1		. . Pressure seal	A	1
-35	0 J2		. . Pressure Seal	B	1

- Item not illustrated

# Solution – Datacap Insight Edition

## Productivity

## Cost Savings

Document  
Management  
System



PDF

Datacap



XML

Datapool/  
Buffer  
(SAP)



Material  
Management  
(SAP)



International Airline

NEXT...

# MOBILE CAPTURE



Digitizes  
worldwide  
shipment  
receipt

parts  
supplies  
materials

Streamlined,  
transparent  
process

Captures and  
reads data from  
package labels

To Receiving  
cross weight  
customs status  
customer  
carrier  
etc.

# Customer Feedback Program



# Calling all applicants

- We want to work with you to further define and refine our offerings; IBM Content Analyzer and IBM Mobile Capture.
- We want to understand your use cases and needs, and make sure you'll derive maximum benefits from our products. As we progress, we would like you to try it out and give us your feedback.
- Objectives
  - Give you access to the service to try with your use case and documents
  - Gather feedback on effectiveness, gaps and user experience

# Contacts

- For IBM Business Automation Content Analyzer, contact
  - Mira Kim, IBM Offering Manager – Content Analyzer  
[mira.kim1@ibm.com](mailto:mira.kim1@ibm.com)
- For IBM Mobile Capture, contact
  - Hanson Shen, IBM Offering Manager – Mobile  
[hansonshen@ibm.com](mailto:hansonshen@ibm.com)

# Automation 2019

## Engaging customers with Business Automation Content Analyzer

**Brian Chan** | Product Lead | Bank of Montreal  
New York City | June 6, 2019



Automation 2019

IBM

Good



Fast

Cheap



AI / Prediction

Accuracy



Speed

Price

# Bill Payments

# Problem:

## Late bill payments

87%

---

Customers paid at least 1 bill  
late last year\*

91%

---

Do not prefer automatic  
payments\*

3M+

---

Unhappy BMO customer  
moments

Unhappy customers visit branches and call centres more often

## Traditional in branch bill pay

Personal and assisted, our branch experience has worked closely with our customers for over 200 years.

### THE EXPERIENCE

1 CHANNEL

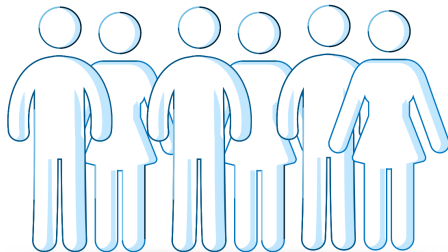
20 MINUTES

MEDIUM COGNITIVE LOAD

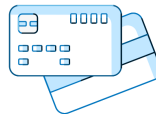
Receive a bill



Visit a branch



Confirm identity



Pay a bill



End interaction



Time-lapse

## A best in class mobile bill pay experience

Our mobile bill pay experience is a leader in North American industry standards.

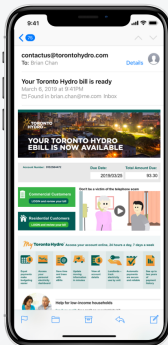
### THE EXPERIENCE

4 CHANNELS

3-5 MINUTES

MEDIUM COGNITIVE LOAD

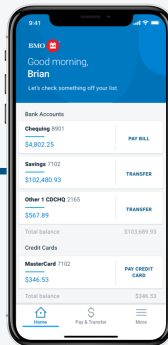
Receive a bill



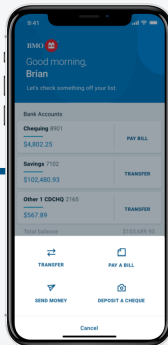
Login



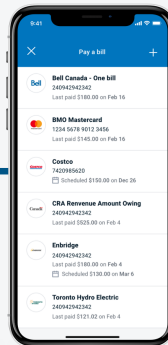
Account summary



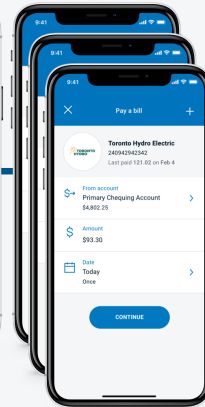
Choose bill pay



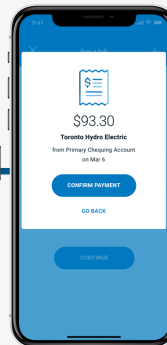
Choose a payee



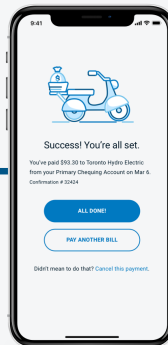
Choose account, enter amount and choose date



Confirm payment



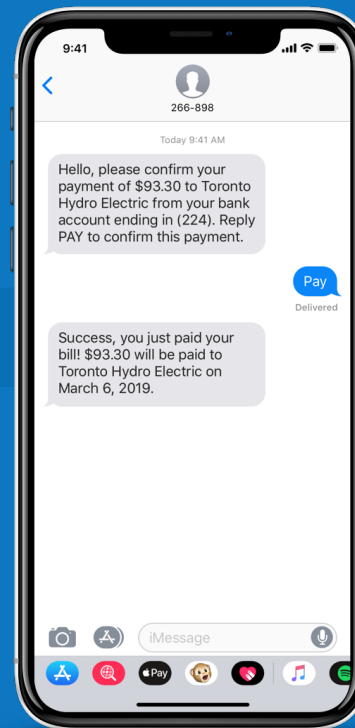
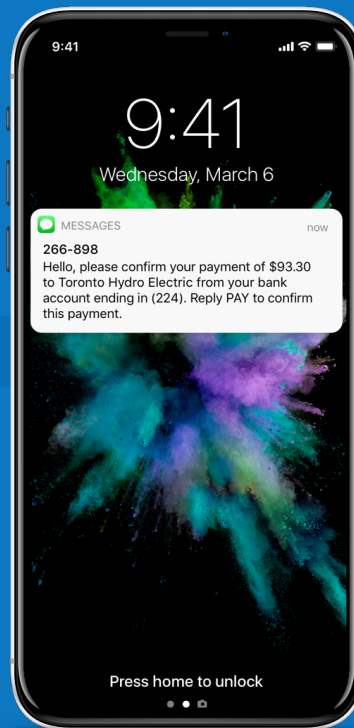
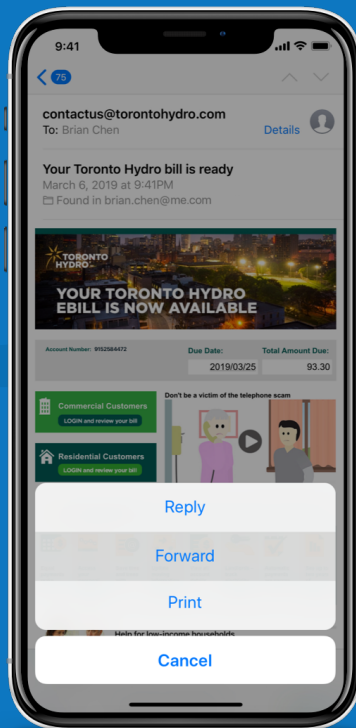
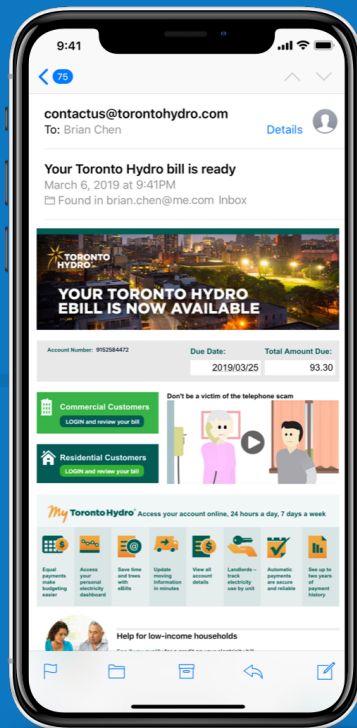
Success



Remember bill details



# Introducing: BMO QuickPay™



PATENT PENDING

# BMO QuickPay: Benefits

6x

---

Faster than digital banking

90%

---

Adoption rate

5x

---

ROI projected over 3 years



**Eye On Innovation Award 2018**  
Category & Overall North America Region Winner



**Top Digital Innovation**





# Thank you



**Brian Chan**  
Product Lead


/in/BrianChanBMO  
**LinkedIn**



# Automation 2019



## Business Automation Content Analyzer Overview

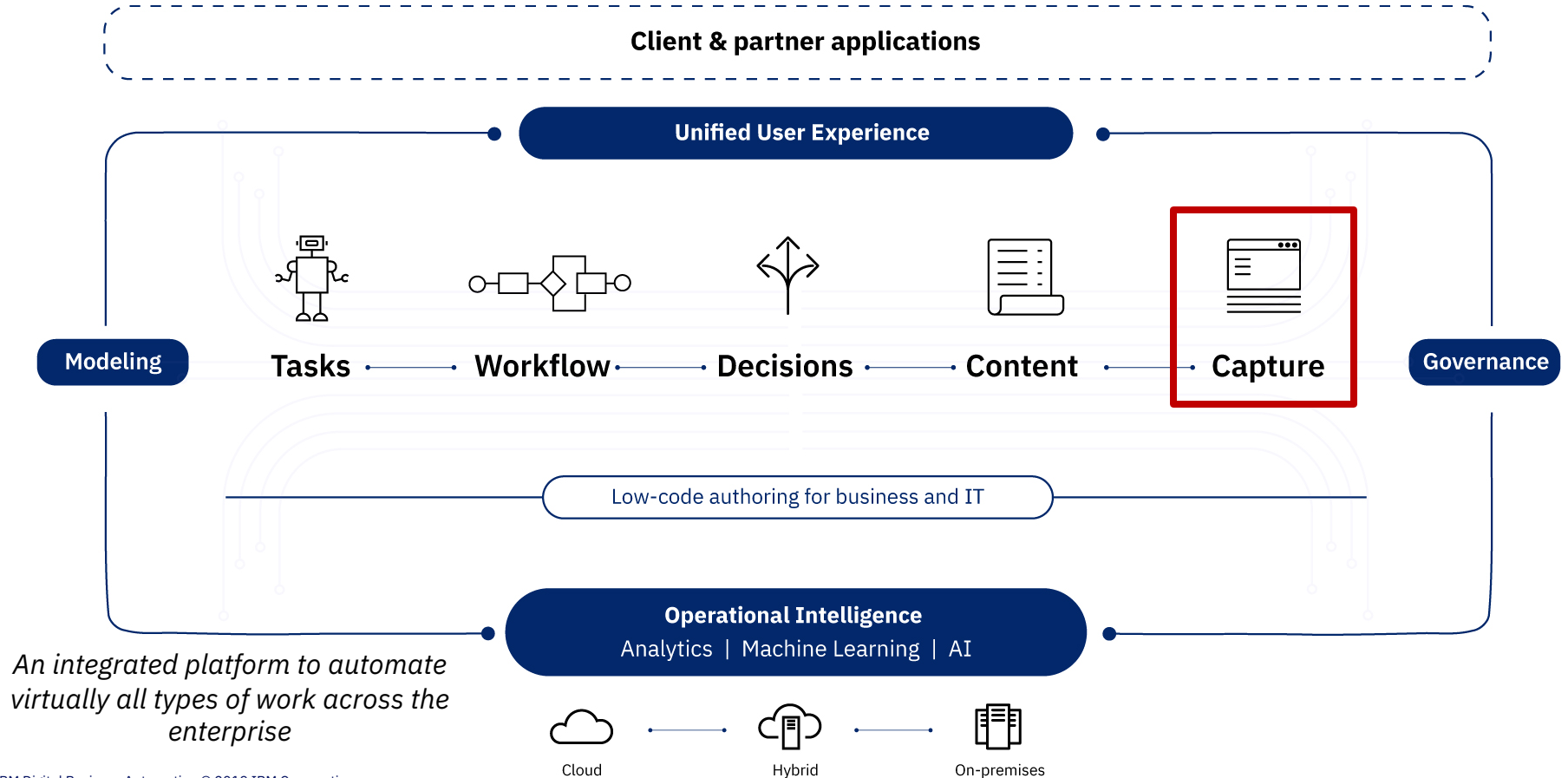


**Mira Kim** | IBM Offering Manager - Capture  
NYC | 06.05.2019



Automation 2019

# IBM Automation Platform for Digital Business

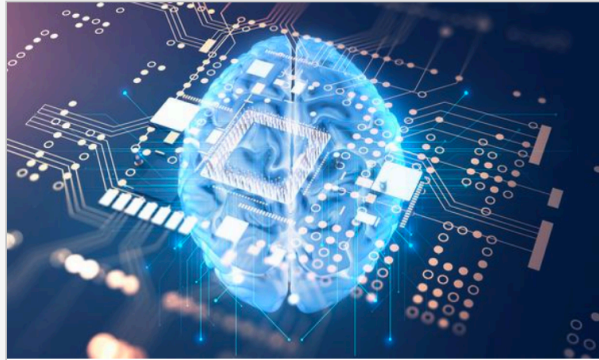


# IBM Business Automation Content Analyzer



## **Classify and extract data from documents**

Classifies, extracts fields, and bursts image, pdf, and word documents



## **AI Inside**

Machine learning removes dependency on form templates for different document layouts



## **Empower business users**

Low code setup does not require a technical expert

# Many Business Processes Rely on Documents

- **Banking**

- Account opening
- Account servicing
- Lending

- **Insurance**

- New policy
- Policy servicing
- Claim investigation

- **Telecom**

- Account opening
- Contracts analysis

- **Government**

- Criminal justice
- Public records

- **Life Sciences**

- Clinical

- **Automotive**

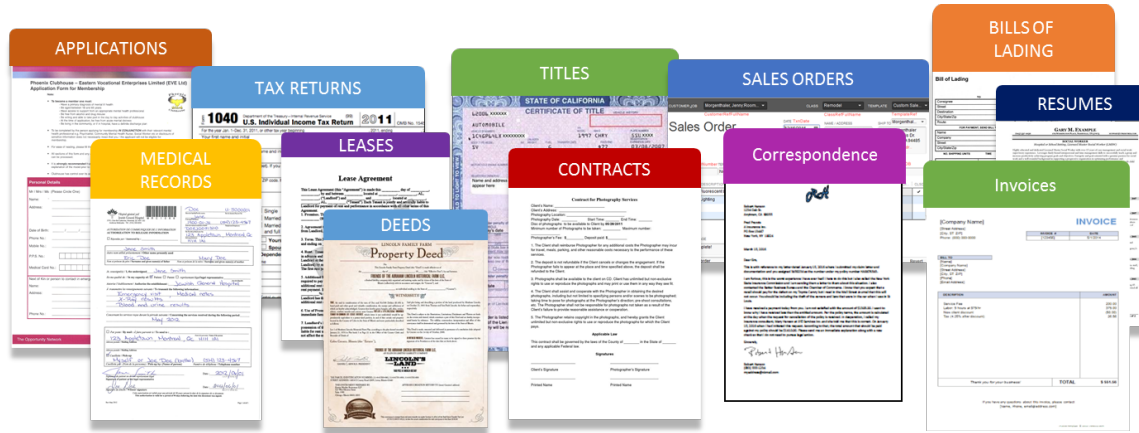
- Accelerate customer Transactions

- **Cross Industry**

- Human Resources
  - On Boarding
  - Request Processing
- Legal
  - M&A Due Diligence
- Compliance
  - Data Privacy

- **And many more...**

# The data is locked inside documents



**A person needs to read, understand and decide – which is expensive, time consuming and error prone.**

# IBM Business Automation **Content Analyzer**

Simple and smart software service configured by a Business Analyst

IBM Business Automation Content Analyzer

⬇

1

of 6

⬅

➕

load

City

Order No

7389

Description

ACIS GeForce GTX

Entel Core i7 3.7GHz

Price

520.00

380.00

✔ Select Document Class : Invoice

✔ OCR Confidence

✔ In good order

● \* Order (Page: 1)

● Value: 7389

Cancel

Learn

IBM Digital Business Automation © 2019 IBM Corporation

27

# What is Content Analyzer?



## **Intelligent and flexible capture and analysis**

Specialized services to classify and extract information from structured and unstructured documents



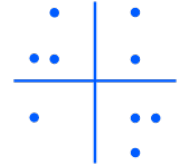
## **Embed in software applications via RESTful API**

Extend the value of your current applications quickly with a simple API call, built on microservices



## **Cloud native application**

Designed, developed and deployed in the IBM Cloud as SaaS or in your own cloud environment in virtualized containers

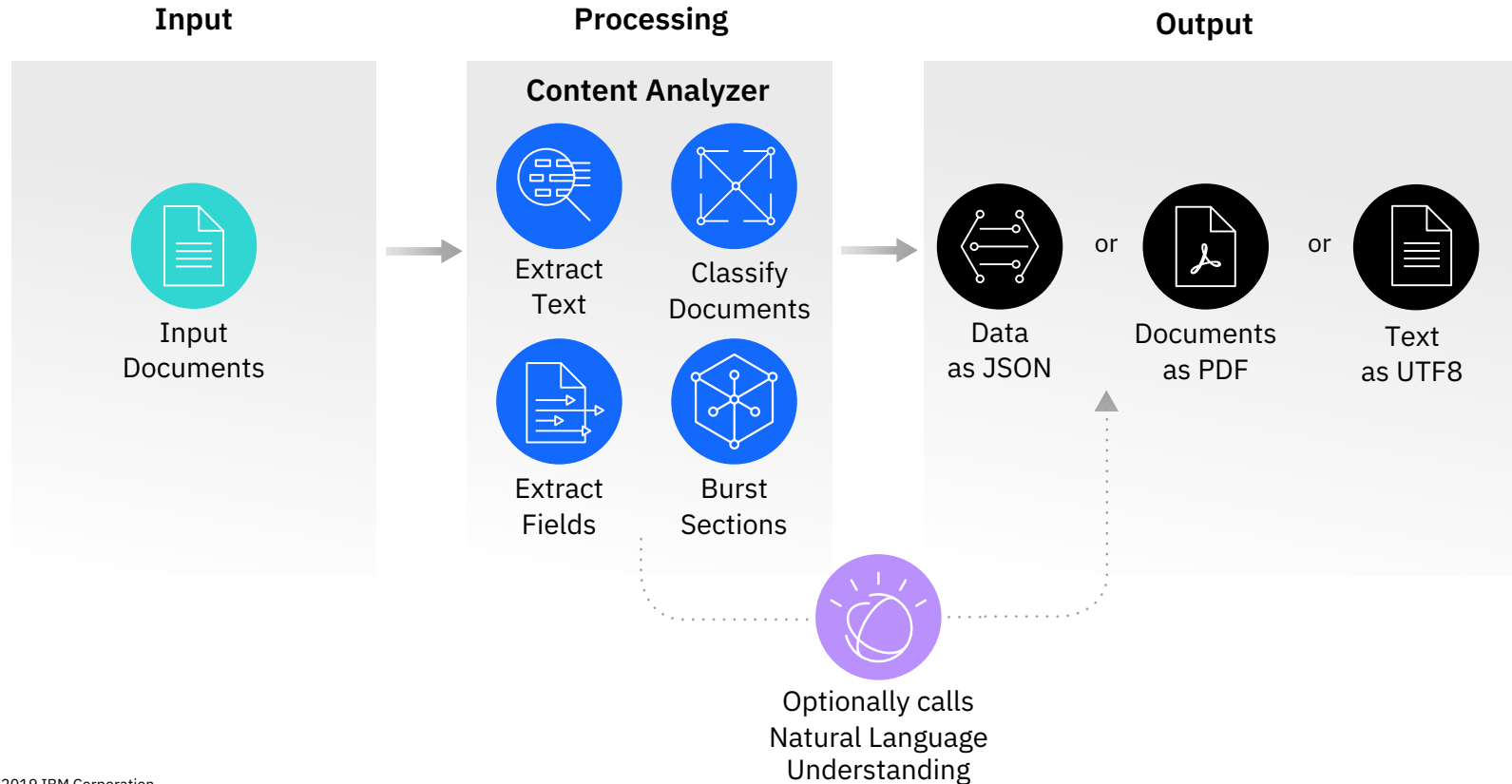


## **AI algorithms applied to your data**

Get a more complete picture of the data held in your documents and integrate into your automation journey



# What does Content Analyzer do?

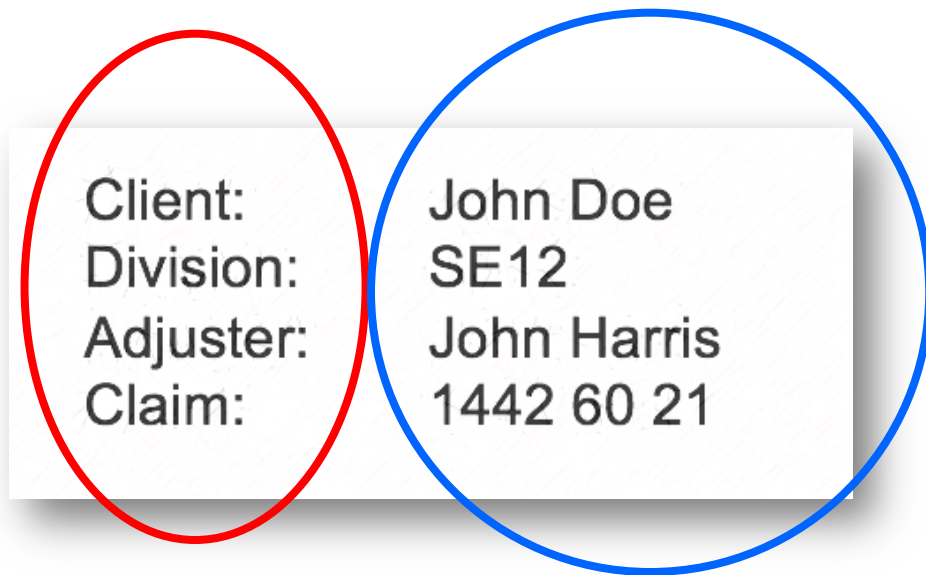


# What does Content Analyzer do?

Understands key/value pairs in documents

*The human brain does this intuitively -- you just see them!*

**KEYS**



**VALUES**

# Quiz: What is the Customer Name, Payment & Payment Due Date?

Remittance

**Client:** John Doe                      **Sold by:** Mary Jones  
1234 5<sup>th</sup> St, Anytown, CA. 90026

Credit	Statement Date
<b>Pay Amt:</b> \$500.00	11/15/2019

**Remit By:**                      12/15/2019

Payment Slip

**Statement Date:**  
11/15/2019

**Customer:**  
John Doe  
1234 5<sup>th</sup> St, Anytown, CA. 90026

**Sold By:** Mary Jones

**Amount:** \$500

**Due By:** 12/15/2019

**Credit: \$200**

Your brain and Content Analyzer can **see** and **reason**:

- Customer Name is John Doe                      (*Client means Client -- just misspelled*) (*Customer means Client*)
- Payment is \$500.00                                      (*not \$200.00 to the right*)
- Payment Due Date is 12/15/2019                      (*“Remit By” and “Due By” both mean “Payment Due Date”*)

# FileNet Integration

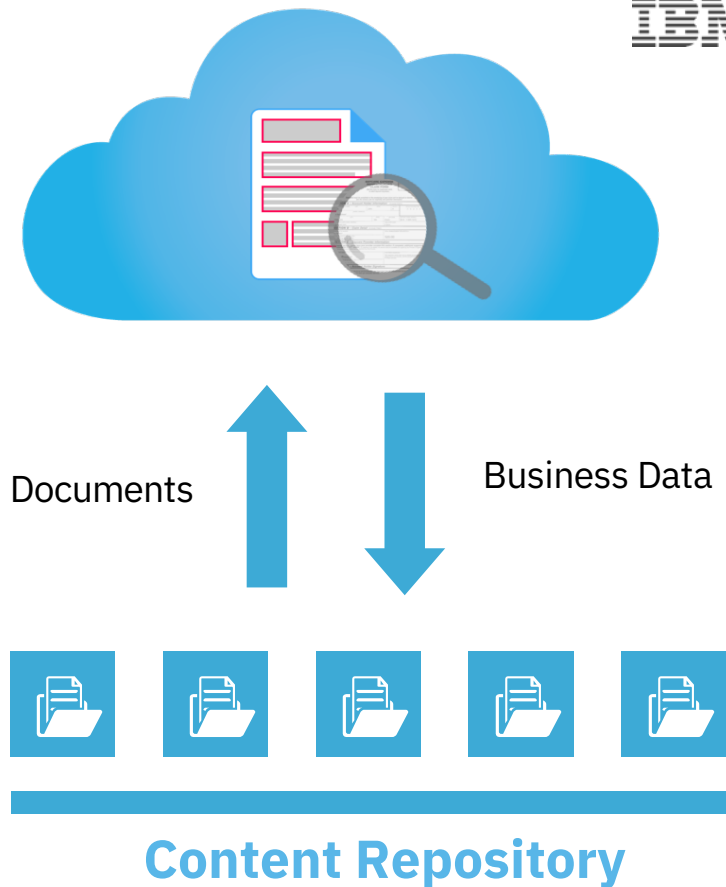
*Classify, extract and act directly from FileNet*

## Use Cases

- *Classify documents*
- *Populate document properties using extracted data*
- *Collect data for analytics*
- *Use data for workflow processes*

## Feature Highlights

- FileNet pushes content to Content Analyzer
- Content Analyzer returns classification and extracted data
- Process existing documents via FileNet repository sweep
- Processes new documents via FileNet check-in event action



# Datacap Integration

*Expand Datacap's intelligent document processing*

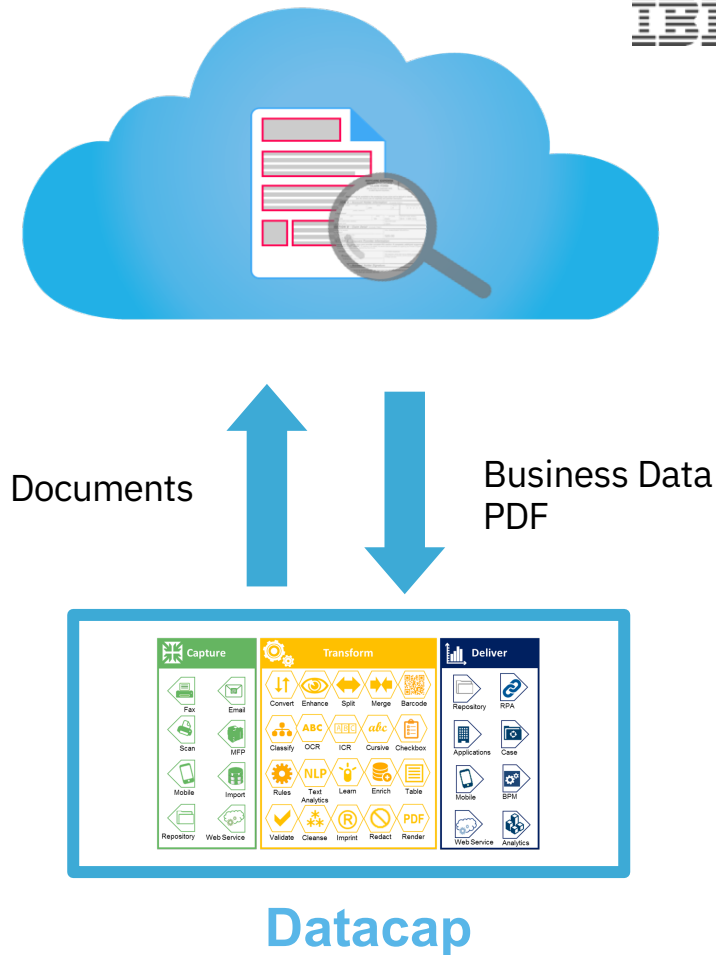


## Use Cases

- *Get data from highly variable docs without fingerprints*
- *Offload classification and extraction to the cloud*
- *Datacap provides verification UI & workflow of Content Analyzer results*
- *Datacap auto-redacts with role-based redactions*

## Feature Highlights

- Content Analyzer connector for IBM Datacap Insight Edition
- Datacap captures from scanners, fax, mobile, etc. Datacap sends documents to Content Analyzer for classification and data extraction
- Datacap workflow & UI for verifying results
- Datacap checks in document to repositories and sends data to other applications





# Documents


[Refresh](#)[Upload New](#)

There are no documents waiting for review.



# Automation 2019

## Integrating Content Analyzer and RPA



**Stu Leibowitz** | IBM Product Marketing Manager  
New York City | June 6, 2019



Automation 2019

IBM

# Content Analyzer Use Case Patterns



## Understand

Recognize data stored  
in repositories

Get insight

Update indices

Convert old files



## Act

Identify actionable  
information

Make decisions

Combine with RPA to  
eliminate manual data  
entry



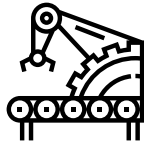
## Comply

Identify protected or  
sensitive data

Secure in content  
repositories or redact



# Software robots are similar to physical robots

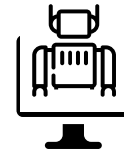


## Physical robots

Perform repetitive **physical** tasks

Example:

- Pick eight chocolates from assembly line
- Assemble a finished box of chocolates



## Software robots

Perform repetitive **software** tasks

Example:

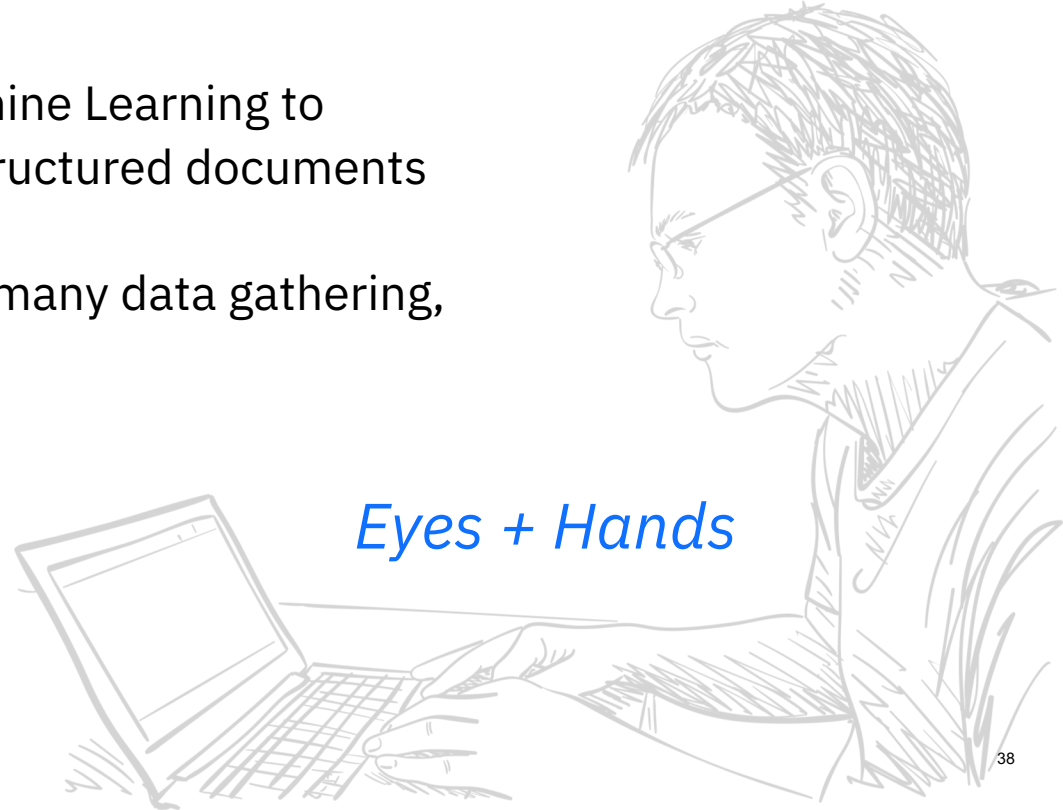
- Log in to four different systems
- Navigate legacy screens to retrieve data
- Use data to update insured info in claim system

# Content Analyzer + RPA



*Automate the classification and extraction of data so software robots can automate the entire interaction*

- Content Analyzer uses AI and Machine Learning to classify and extract data from unstructured documents and images
- Content Analyzer + RPA facilitates many data gathering, data entry and validation scenarios



# IBM RPA Content Analyzer MetaBot

Home > IBM Business Automation Content Analyzer on Cloud > API documentation >

## IBM RPA Content Analyzer MetaBot

☰ Table of Contents

🔗 Change product

You can install the Content Analyzer MetaBot to IBM Robotic Process Automation (IBM RPA) with Automation Anywhere client to extract content from electronic or image documents and return structured data that can be used downstream in the IBM RPA logic.

The Content Analyzer MetaBot connects and authenticates in to a Content Analyzer instance via the APIs to upload files, do classification and extraction and return the key value pairs in a JSON stream.



# Automation 2019 NYC



## Demo showcasing

*Content Analyzer, FileNet, Mobile and RPA*



*May 2019*

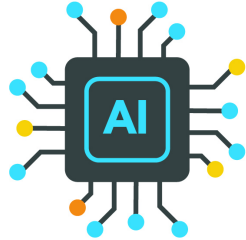


Automation 2019

IBM

# Bill Payment Demonstration

1. AI training with IBM Business Automation Content Analyzer



3. FileNet calls Content Analyzer for classification and extraction of bill data



2. Bill captured using IBM Mobile and uploaded to FileNet



4. RPA copies data from FileNet into Bill Pay app



