Robotic Process Automation (RPA)

A Real World Use Case

GSA Background

Mission: Deliver value and savings in real estate, acquisition, technology, and other mission-support services across Government.
Vision: Effective and efficient Government for the American people.
Values: Service • Accountability • Innovation

Mission: *To provide effective, mobile, sustainable workplace solutions for federal agencies at the best value for the American Taxpayer.*

- The landlord for the civilian federal government, Public Buildings Service (PBS) acquires space on behalf of the federal government through new construction and leasing, and acts as a caretaker for federal properties across the country.
- PBS owns or leases 8,700 assets, maintains an [inventory](#) of more than 370 million square feet of workspace for 1.1 million federal employees, and preserves more than 481 historic [properties.](#)

Who we are
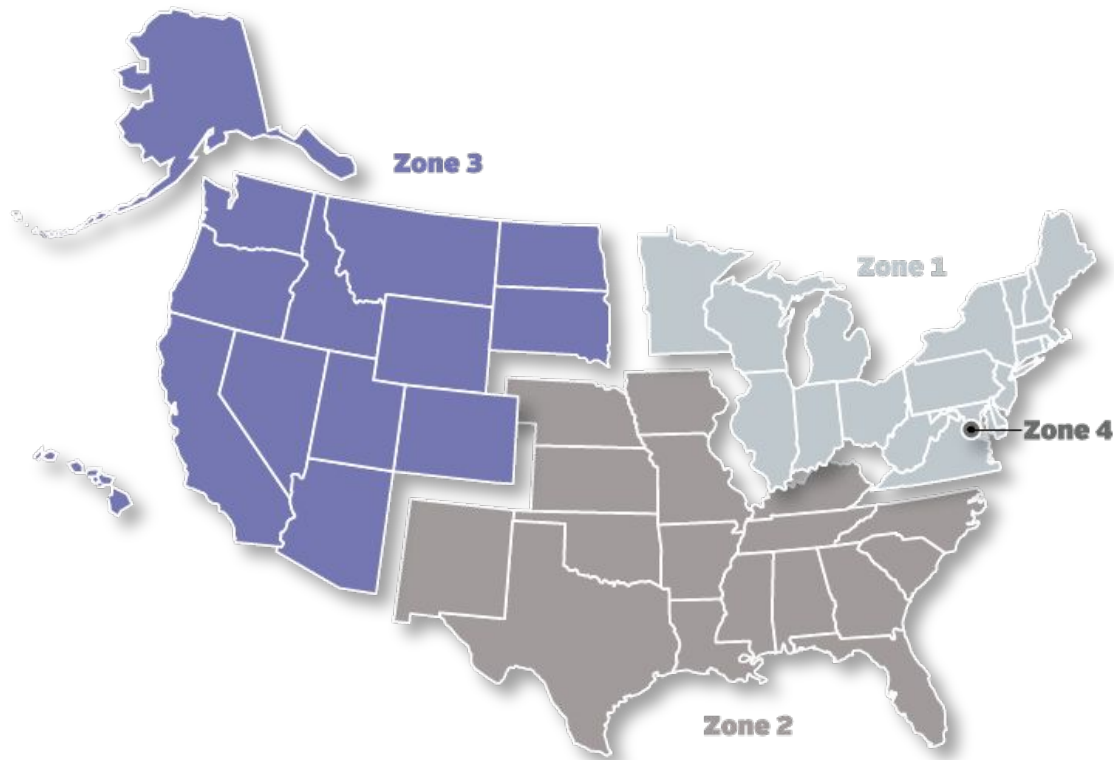
Part of GSA's Office of the Chief Financial Officer (OCFO)

Serve the Public Buildings

Zonal Structure

Zone 2 Supports PBS Regions:

    4 - Atlanta
   6 - Kansas City
    7 - Ft. Worth

Budget Analyst turned Bot Developer

Feb 2018 - GSA was seeking volunteers to get trained on Robotics Process Automation

March - April 2018 - Completed 80 hours of UiPath Academy online training (13 courses)

May 2018 - Completed 40 hours of UiPath instructor lead classroom style training

June 2018 - Teams formed of newly trained developers (Asimov) & assigned
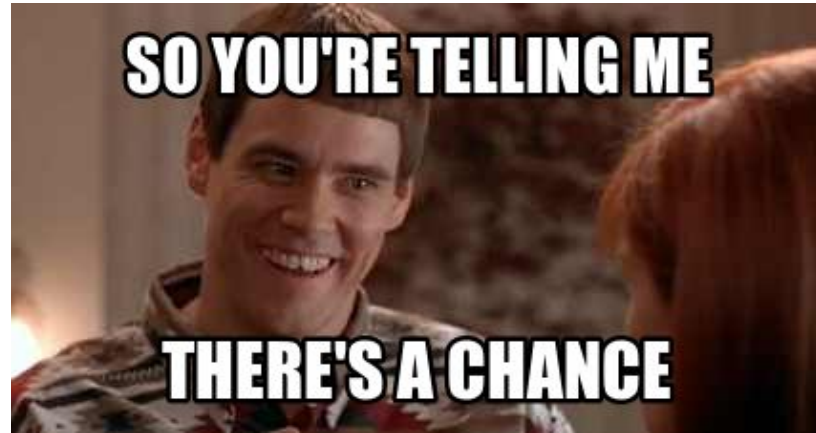
AGA Journal - Winter 2019

At a recent robotics workshop co-hosted by AGA and the CFO Council, we learned about pilot projects ongoing in many federal agencies. Although some remain skeptical, most progressive agencies are embracing RPA. **For example, 50 GSA staff members recently volunteered for robotics training to expand possibilities there**, while at Treasury, RPA is enabling the workforce to focus on more value-added components.
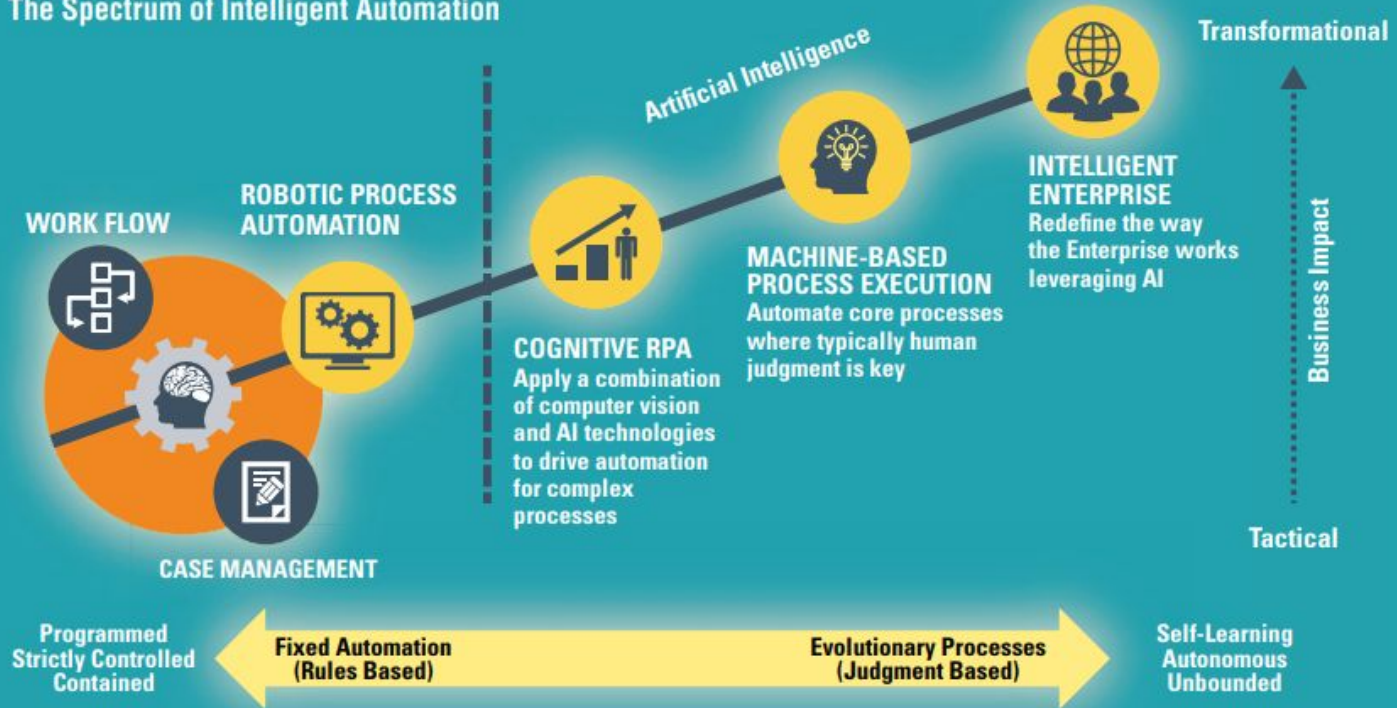
Ann Ebberts, CEO
Association of Government Accountants

What is RPA

RPA essentially replicates manual keystrokes. It complements rather than competes with core application development by automating manual processes that cannot be automated in a timely and/or cost-effective manner in existing or new core applications. RPA can perform most actions that users perform on their PCs: logging into applications, downloading and uploading files to applications and network drives, creating spreadsheets and updating and manipulating data in them, sending emails with attachments, reading data from structured forms and reports, and performing calculations.

The Spectrum of Intelligent Automation

WORK FLOW

ROBOTIC PROCESS AUTOMATION

CASE MANAGEMENT

Artificial Intelligence

Transformational

Tactical

Business Impact

COGNITIVE RPA
Apply a combination of computer vision and AI technologies to drive automation for complex processes

MACHINE-BASED PROCESS EXECUTION
Automate core processes where typically human judgment is key

INTELLIGENT ENTERPRISE
Redefine the way the Enterprise works leveraging AI

Programmed Strictly Controlled Contained

Fixed Automation (Rules Based)

Evolutionary Processes (Judgment Based)

Self-Learning Autonomous Unbounded

Invoice Notice Process

- VITAP Notices
  - Fixed coding
  - Consistently failed to reach the right person

- Emails from Budget Analysts
  - Inefficient
  - Custom
  - Effective
  - Inconsistent

Approximately 600 Outstanding Invoices each Day

Can be 300 emails in a day

Google Scripts - Necessity Breeds Innovation

- Look to the past
  - I brought a background in this data
  - What did budget analysts know?

- Identify available resources
  - Contact information
  - Supervisors List
  - Excel Macros

- Discuss Plans Everywhere
  - ZD comment regarding Google
  - Friend who knew scripts

Invoice Notice from a Spreadsheet

G	J	Re	Amour	Peg Doc Num	Vendor Name	Contracting Officer	Contracting Specialis	Contracting Officer Re	COR Supervisor 1	COR Supervisor 2	CO Supervisor 1	CO Supervisor 2
92156	5	7	$455.00	EP47PH0219F0091	COUSINS INTERNATIONAL F	brandy.thomas@gsa.gov	mike.burtner@gsa.gov	donaldr.green@gsa.gov	aaron.bollinger@gsa.gov	jean.kraft@gsa.gov	liz.taylor@gsa.gov	carolyn.smith@gsa.g

Day 5 Notice - Invoice received from COUSINS INTERNATIONAL PLAZA II / $455.00 / PDN EP47PH0219F0091 / Region 7 - zone2receivingre...

https://mail.google.com/mail/b/AH1rexQxhvVHIhzue961X4ILiT-vCtAENKo35wXsddAMAeO1ve6J/u/0/?ui=2&view=btop&ver=fhp0z...

Day 5 Notice - Invoice received from COUSINS INTERNATIONAL PLAZA II / $455.00 / PDN EP47PH0219F0091 / Region 7   Other/Invoice Notices ×

Zone2ReceivingReports@gsa.gov   Wed, Apr 24, 6:14 AM (5 days ago)
to donaldr.green, brandy.thomas, mike.burtner, Zone2ReceivingReports ▾

This message is to inform you that invoice # 92156 from COUSINS INTERNATIONAL PLAZA II in the amount of $455.00 has been received by GSA for contract # GS-07P-LTX17275 and PDN EP47PH0219F0091 and is now 5 Days old

Please take action to ensure this invoice is paid timely by submitting receiving report information to either:
- your Contracting Officer for Construction / A&E invoices, or
- Zone 2 PDE Tool at: https://gsa.lightning.force.com/c/PDE.app (For Non-Recurring) or
- recurringservices@gsa.gov (for Recurring 1B, RB, EK Documents) All questions may be directed to zone2receivingreports@gsa.gov.

The report containing today's invoice information is available at:https://goo.gl/LXwcpv (Please see the by invoice tab with today's date)
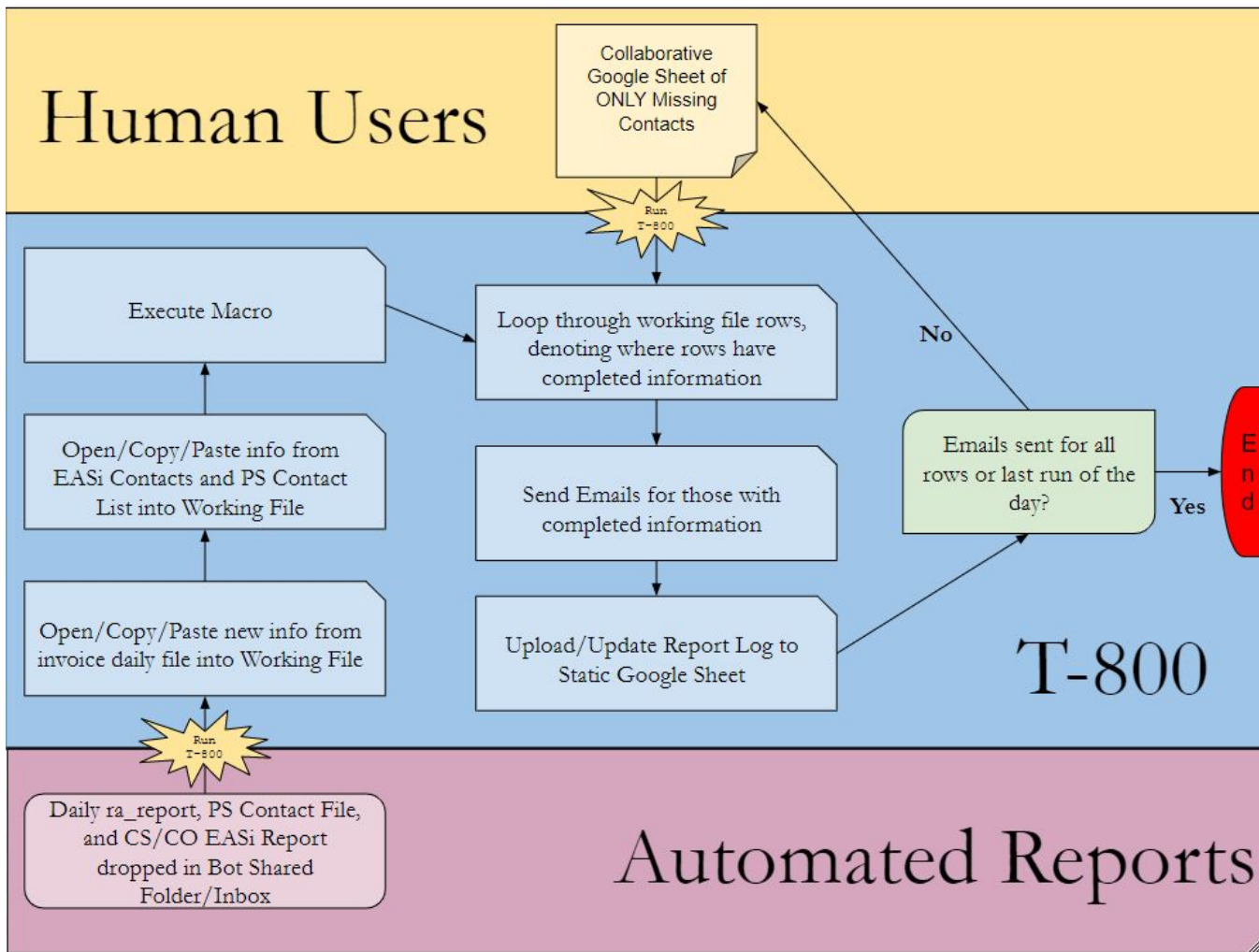
Invoice detail may be found using Invoice Search. Please see our Guide to Invoice Search at: https://goo.gl/E8Hnqp

CO: brandy.thomas@gsa.gov
COR: donaldr.green@gsa.gov
CS: mike.burtner@gsa.gov
COS1: liz.taylor@gsa.gov
COS2: carolyn.smith@gsa.gov
CORS1: aaron.bollinger@gsa.gov
CORS2: jean.kraft@gsa.gov

Email produced by RPA AP Email Notification BOT
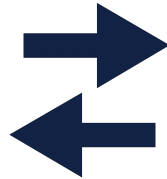
↩ Reply   ↩ Reply all   ➡ Forward

Adding RPA to the Process

Partnership between Process Owner and Developer

Process Owner

- SOP vs. Practice
- Getting buy-in/adoption of a single process (supervisors/cadence)
- Message design

Developer

- Process Definition Document (PDD)
- BOT Coding
- Authority To Operate
- Operations Plan
- User Acceptance testing

Results - For OCFO Process

- Long Term Bot Management
  - Data Changes can impact bot
  - Business changes necessitate bot changes
  - Process Owner constantly wants new things

- Can segment who does what based on skill/position
  - Looking up contacts vs. running bot.
  - Spread effort nationwide

Nationwide Daily Estimate:

Before - 42 hrs
2 emails (20 Min) a day x 125 analysts
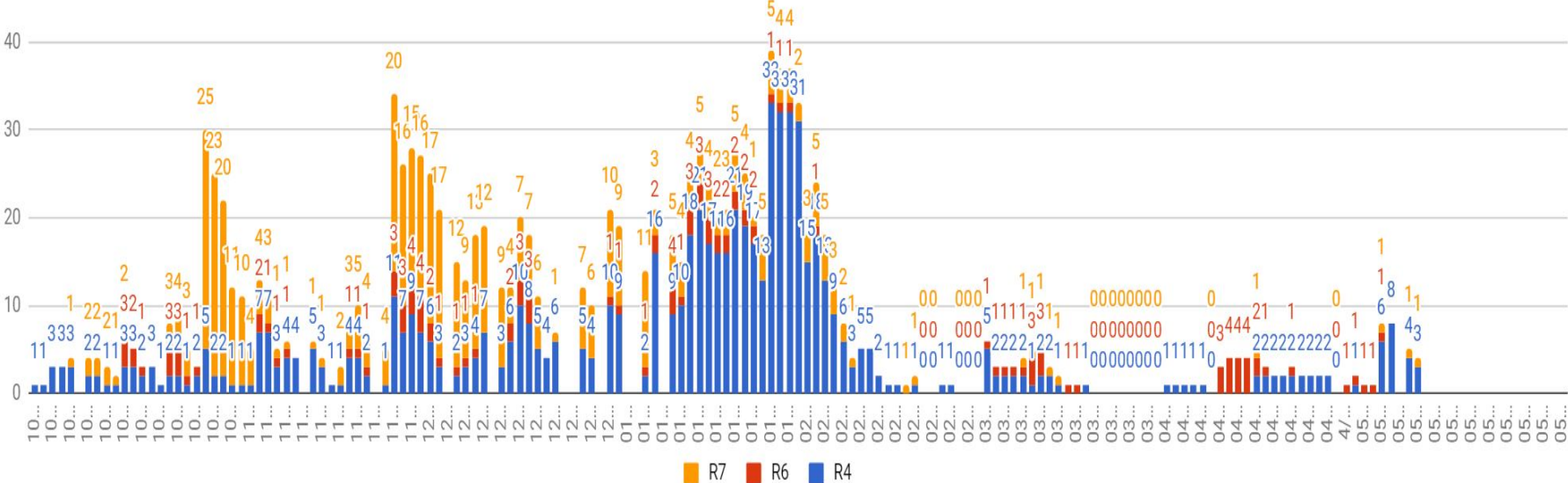
Google - 16 hrs
(4 analysts x 4 hrs a day)

RPA - 7 hrs
3 hours a day Running Bot (mainly letting it run in the background) plus looking up contacts at 1 hour a day per zone.

Results - for PBS / Agency

FY19 Invoices Over 25 Days By Region

Questions

Contacts

Michael Griese, Lead Budget Analyst
Michael.Griese@gsa.gov
817-978-3854

John Rich, Zone 2 Financial Management Director
John.Rich@gsa.gov
202-501-2029