



DRAFT – STRICTLY  
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V25

*Finance Automation and Analytics Expansion*

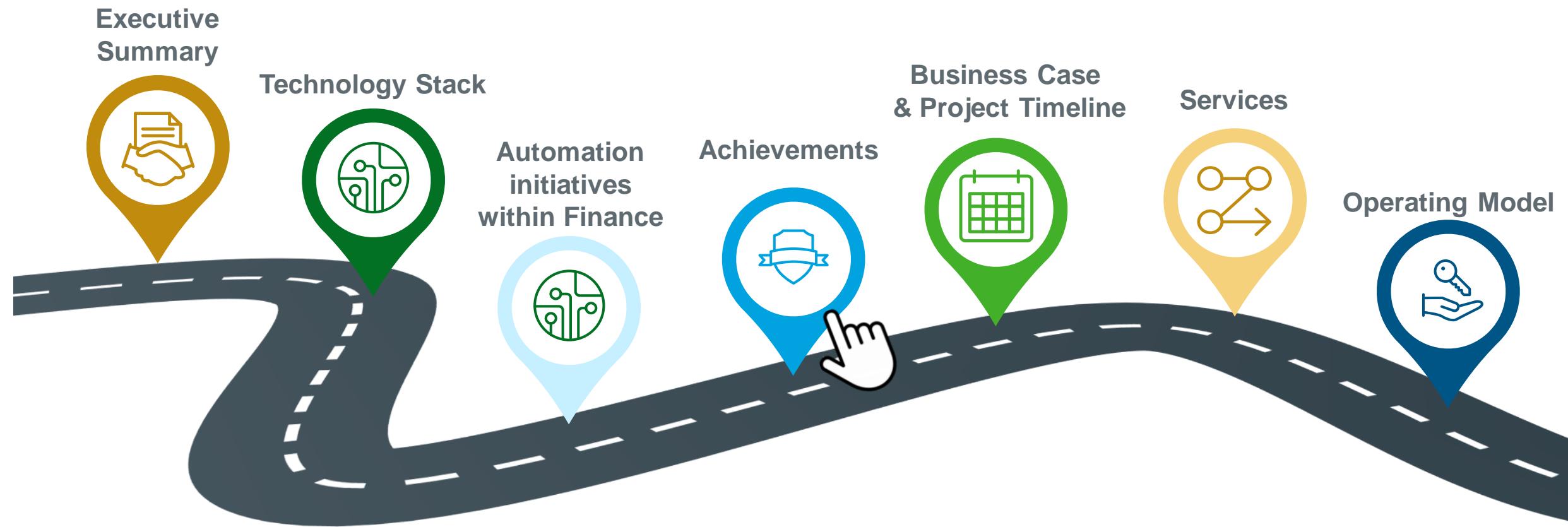
*10/19/21 Meeting*



START

# The Automation & Analytics Expansion Roadmap

- GFFS A&A was originally designed to transform the Global Finance function to a highly automated environment leveraging a wide-ranging automation stack while increasing quality of outputs and simultaneously reducing overall costs.
- We are proposing to extend this new way of working to whole Finance Function.





# Finance Automation and Analytics Expansion

- **Objective**
  - Expand the Analytics and Automation Team from being GFSS-centric to a Global Finance Organization focus to transform the Finance function to a highly automated environment leveraging a wide-ranging automation stack while increasing quality and reducing costs
- **Opportunities**
  - **\$13M net annualized savings** (Base Scenario)
  - Enhanced process efficiencies via global standardization and automation
  - Advanced analytics
  - Improved transparency, quality, and internal ownership
- **Challenges**
  - Local management buy-in in terms of standardization and change management
    - Refer to the following page for TCS insourcing feedback from RBU/GBU's
  - IT partnership
  - Management sponsorship
- **Technology Stack Currently in Use:**



Alteryx



Celonis



Python



Power Apps



Power Automate



Power Virtual Agents



Tableau



Power BI

 IQVIA

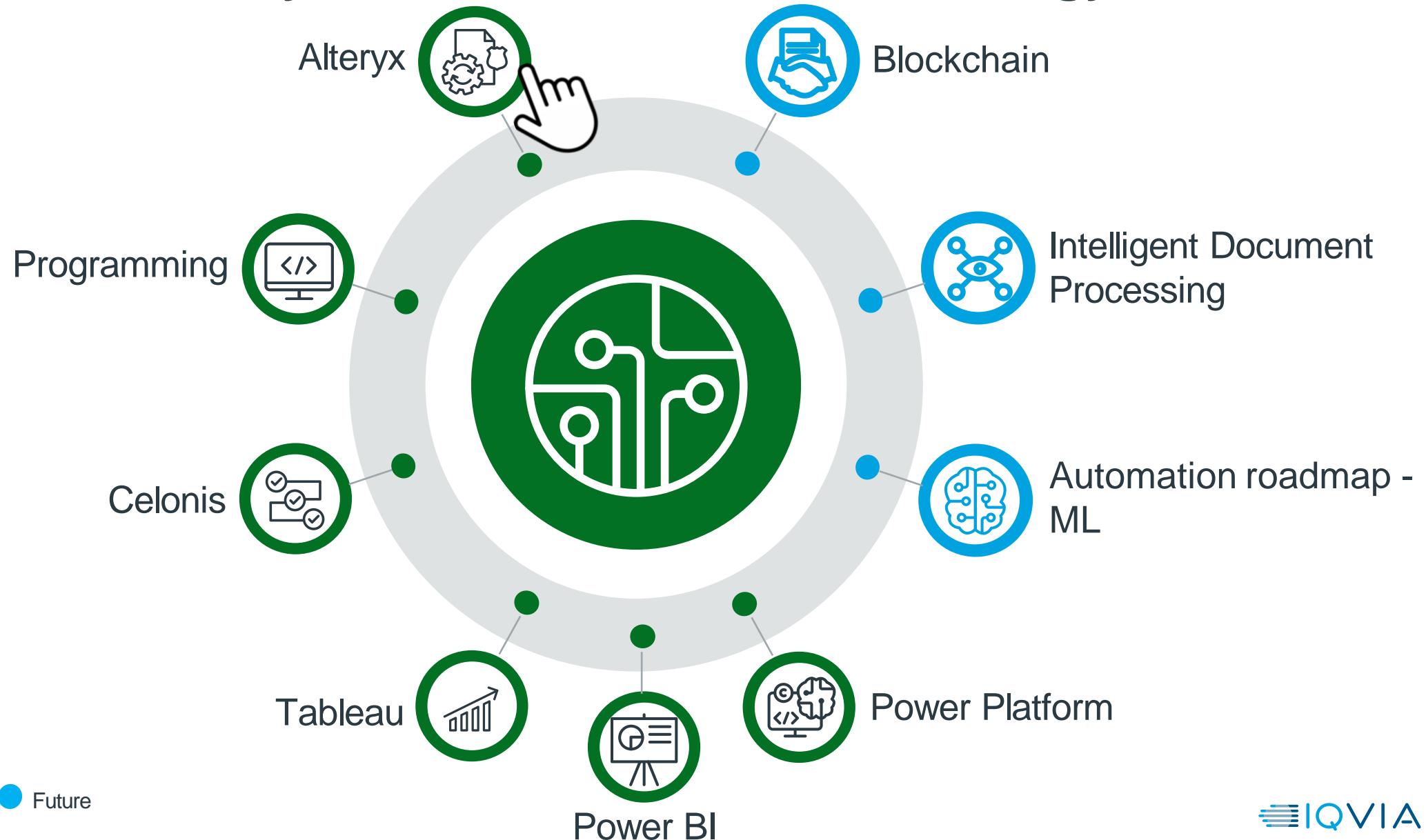


# RBU/GBU Finance Feedback About TCS Insourcing Initiative

Feedback Received	Underlying Driver of Feedback	Actions Take to Address Feedback
Previous work handled by TCS has now been absorbed within RBU/GBU Finance Teams	Change Management of historical processes with an emphasis on <b>Standardization, Simplification, and Automation</b>  Historical workload should potentially have never moved to TCS (i.e. Journal Entry Prep, BS account rec prep)	Regularly scheduled calls with RBU/GBU Finance Teams to better understand work perceived to have been moved back  As of this time, no additional headcount has been requested and feedback about work being absorbed is anecdotal.
Adherence to utilizing pre-existing templates were leading to increased workload and confusion for submitters – “Faceless Mailboxes”	Less flexibility of utilizing standardized templates required training and lead to frustration when automation rejected submissions	Enhanced pre-existing templates significantly to improve user experience and processing speed  Organized significant amount of trainings with training documentation and process overviews available on GFSS Intranet
Backlogs of AP invoice processing and MDM ticket resolution has led to additional pressure and noise for RBU/GBU Finance Teams	Processes handled by TCS were poorly documented, or not documented at all, leading to discovery of non-standard processes upon TCS exit	Transparent and real-time reporting and metrics provided to Global Finance Teams to demonstrate improved KPI's and underlying details of transactions. Refer to TCS insourcing section to see improvements across all towers



# Automation & Analytics Core and Future Technology Stack



## ● Currently used

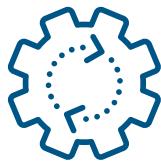
 Future

# Alteryx Automation Key Stats



Alteryx is the core Data Science and Analytics Platform utilized by the GFSS A&A Team with ~90 active users

100+



## Processes Automated

GFSS A&A Teams have covered 100+ different processes with an Alteryx automation.

400+

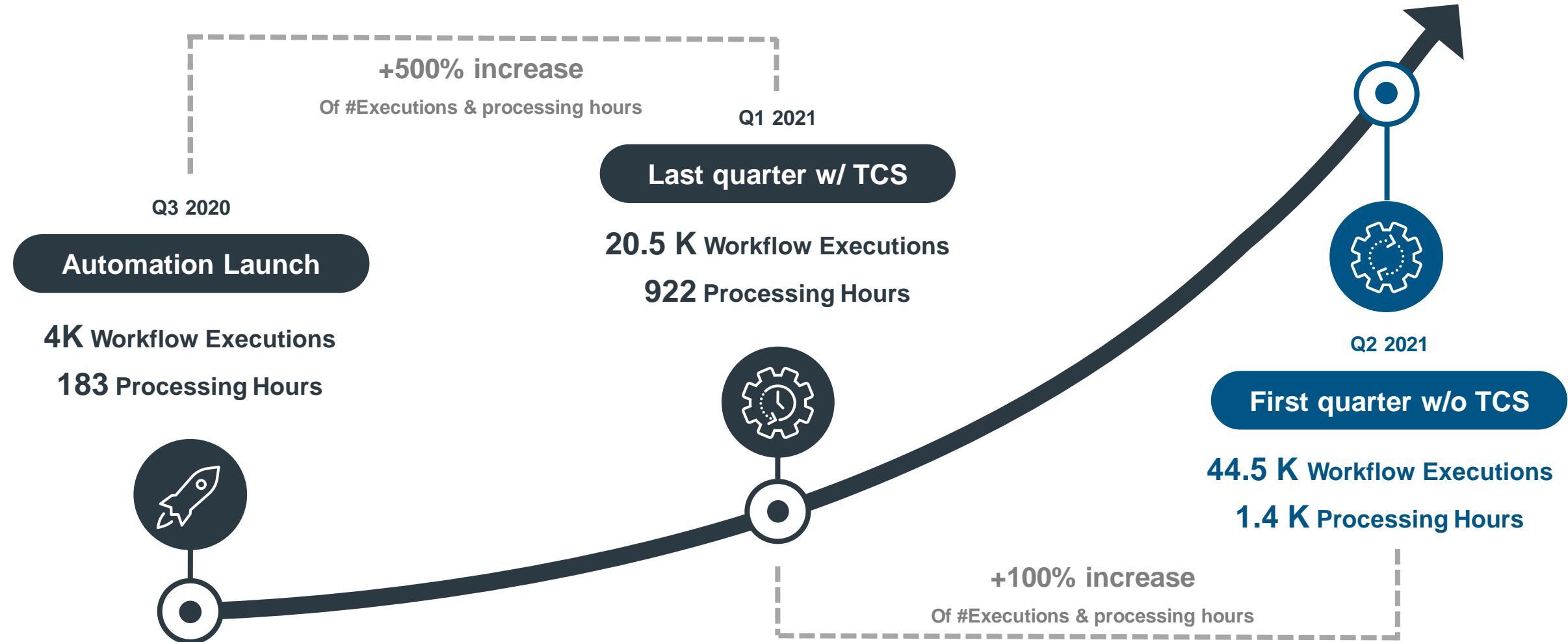


## Alteryx Workflows/Apps

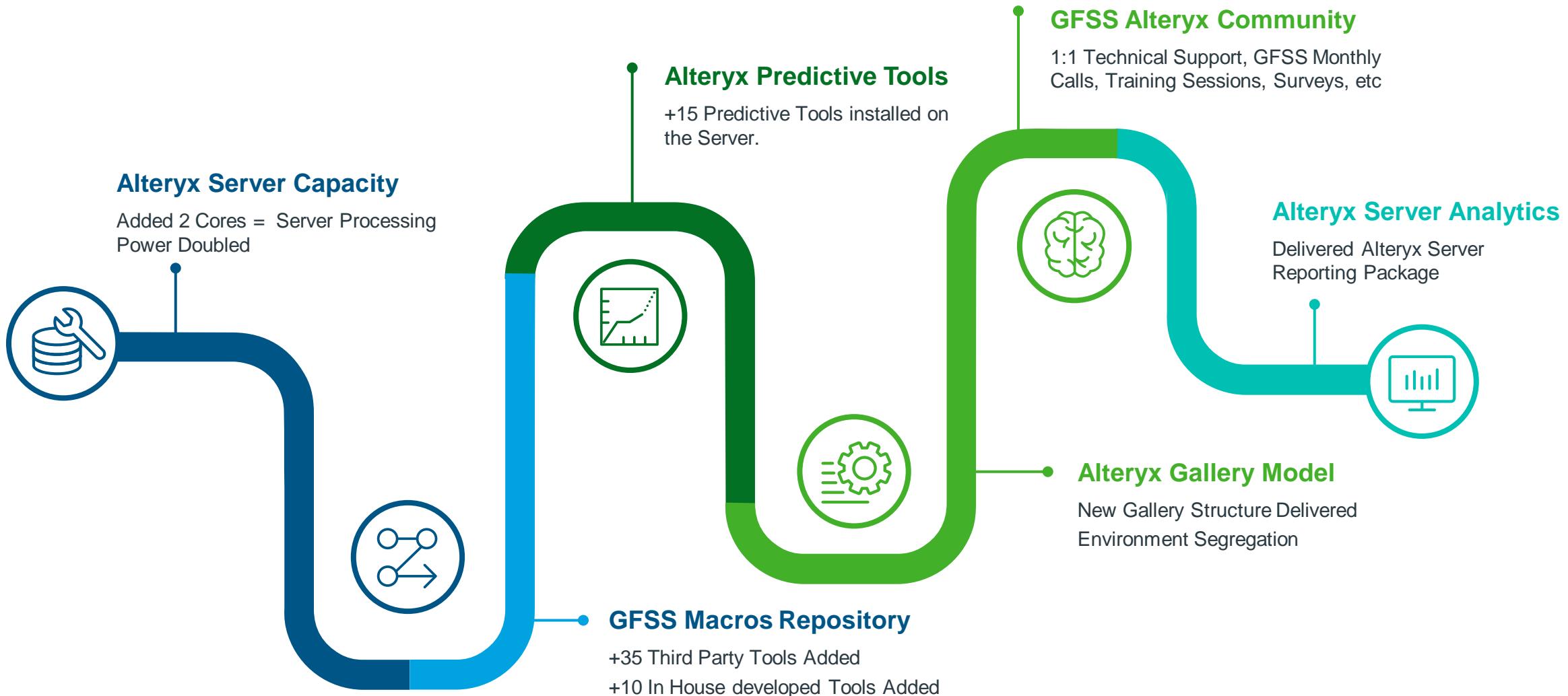
GFSS A&A Teams have created 400+ workflows in the last year.

# Alteryx Server Usage Evolution

Exponential growth of processes automated through Alteryx in last year allowed us to successfully insource TCS services. We built and deployed 400+ Alteryx workflows and our infrastructure hosts +15K monthly executions.

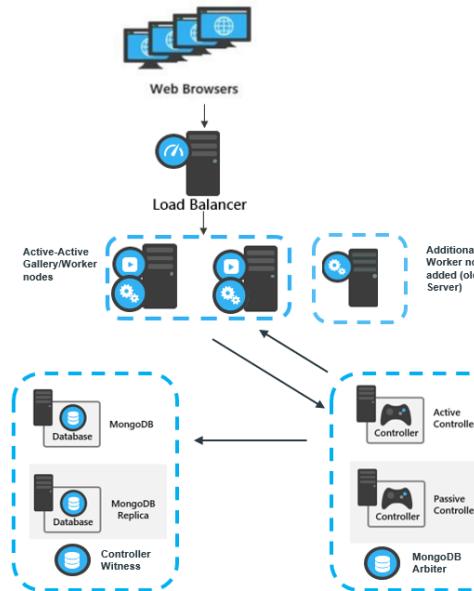


# Alteryx Platform 2020 Key Milestones



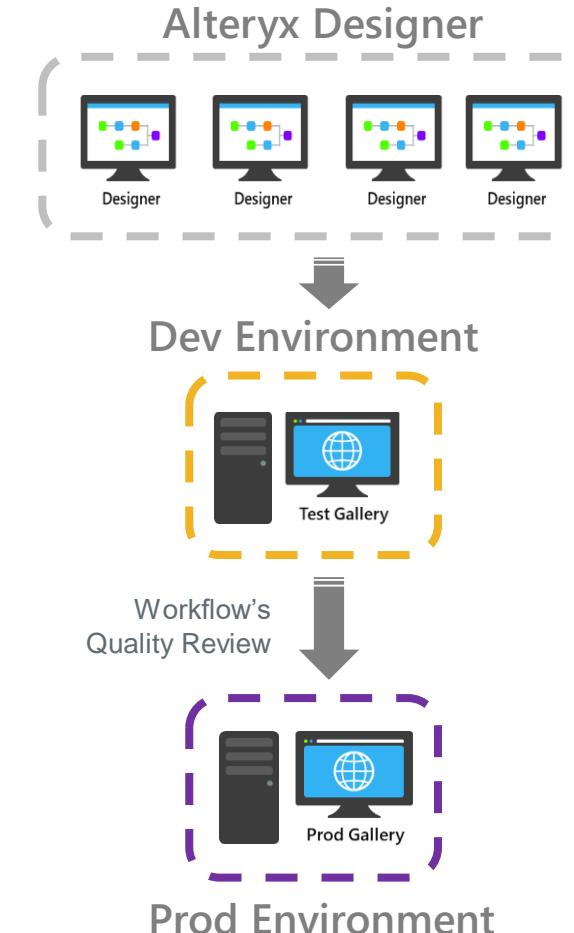
# GFSS New Alteryx Infrastructure & Improved Operational Model

The infrastructure deployed is aimed at ensuring the continuity of the GFSS operations, mitigating the risk of any unexpected incident that may occur, as well as ensuring duty/environment segregation.



## Key Benefits from Alteryx New Architecture

- ✓ **High Availability & Resilience** - Increased robustness & resilience of our infrastructure
- ✓ **Processing Capacity Increase** - Processing capacity increase to support GFSS Automation initiative growth.
- ✓ **Environment Segregation** – Disruption Risk Mitigation



Workflows are built in **Alteryx Designer** on developers' computers.

Alteryx **Sandbox** Server is used to run development workflows and conduct UAT Tests.

Implemented **workflow's quality review** before migration to Production.

Alteryx **Production** Server is used to run (scheduled or manually) production workflows.

## Key Benefits achieved:

- ✓ Rigorous Platform Access Control
- ✓ Improved Platform
- ✓ Duty/Environment Segregation
- ✓ Disruption Risk Mitigation
- ✓ Business Continuity Guaranteed
- ✓ Greater Execution Capacity
- ✓ Workflows Quality Increase

# Alteryx Platform Key Usage Stats

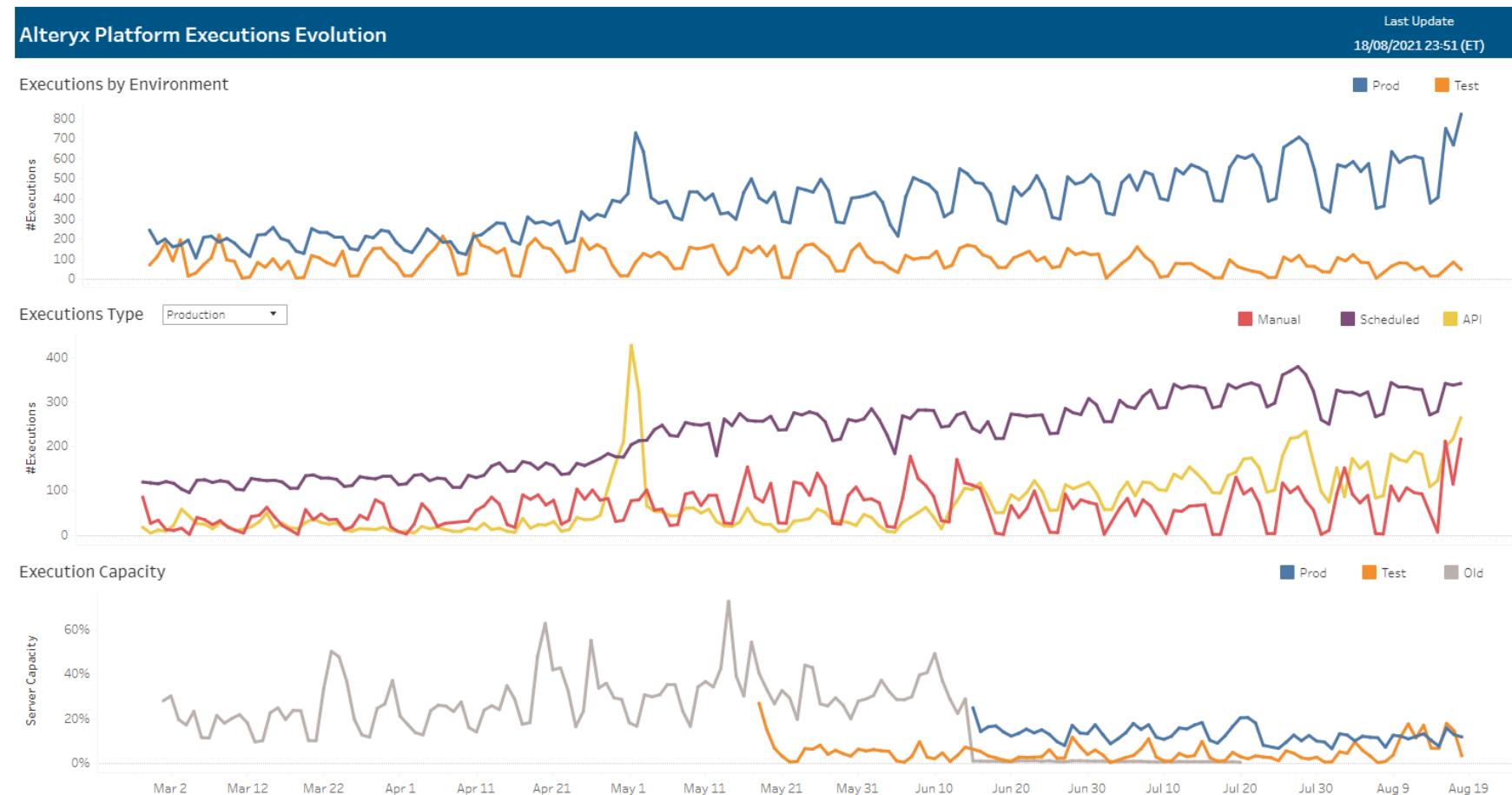
The platform is monitored daily and several dashboards (executive and operational) have been developed to monitor KPIs as part of the continuous improvement approach the A&A GFSS team applies.



# Alteryx Server Last 6 Months Evolution

Alteryx Server provides the ability to store, schedule and share workflows & analytic applications centrally and securely, leveraging the power of data analytics and ML in a self-service manner.

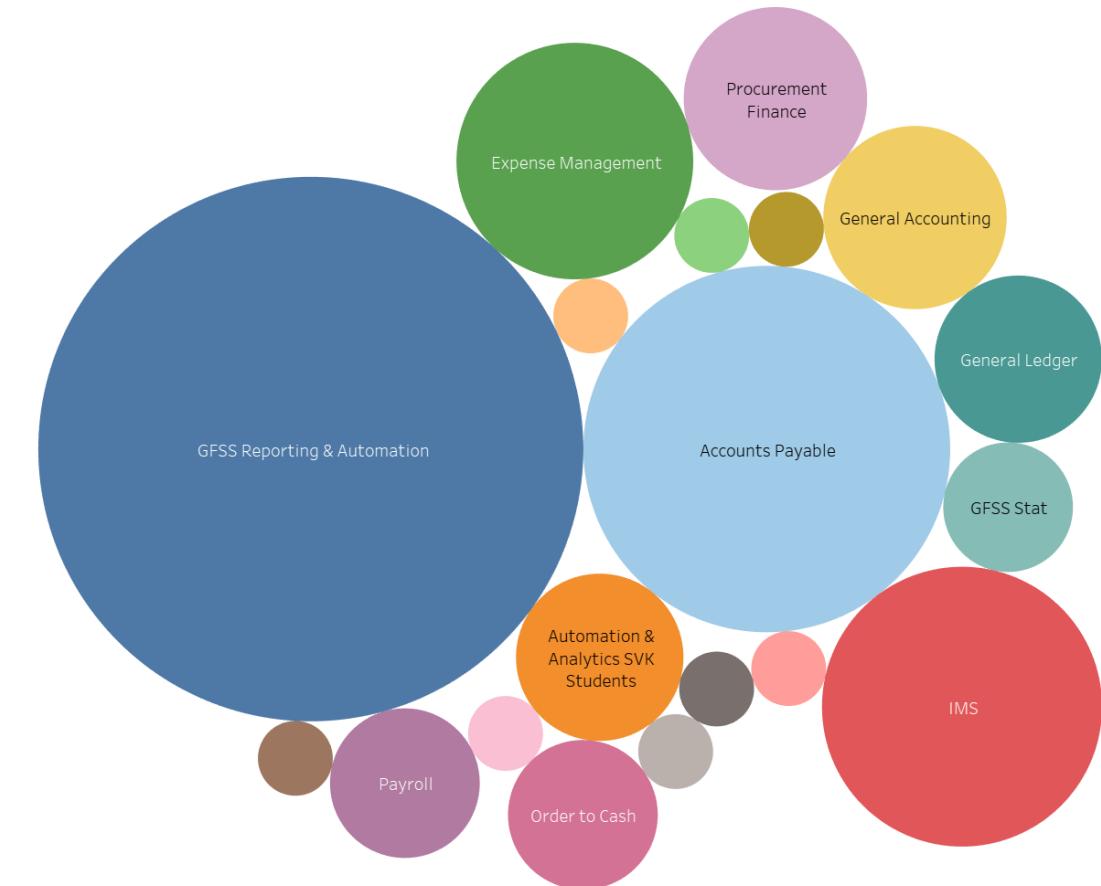
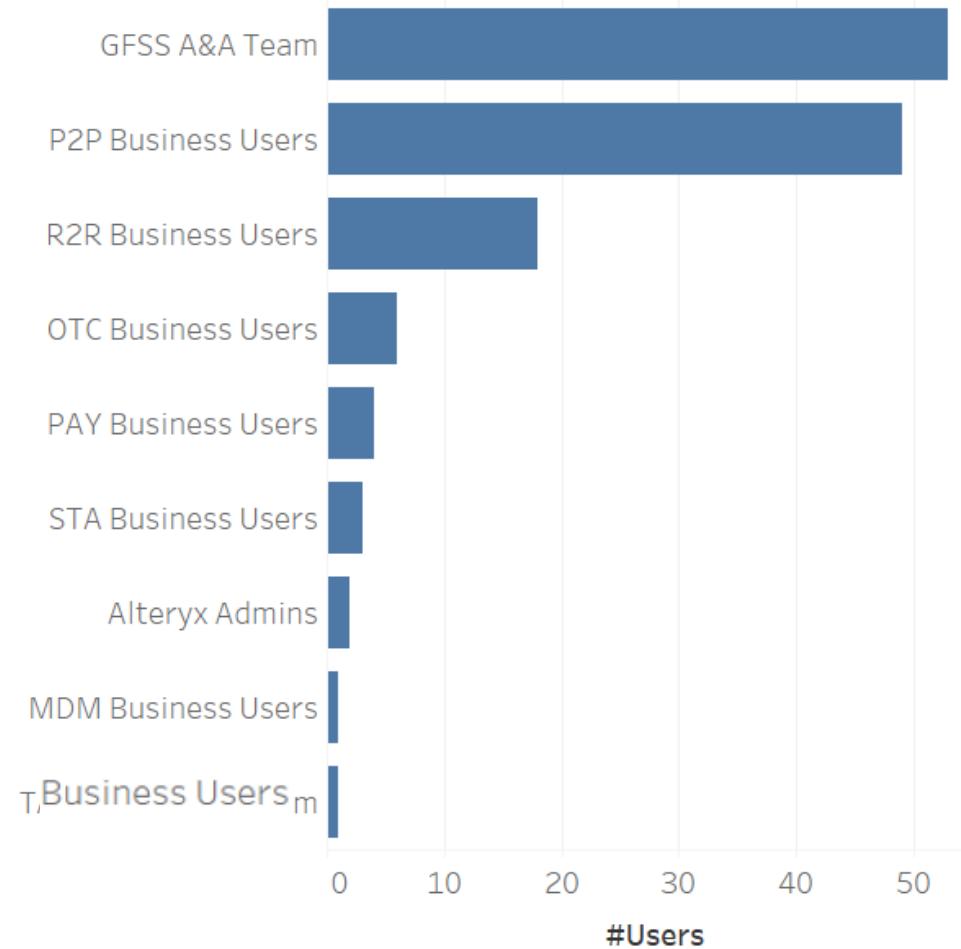
Alteryx Server is monitored 24/7 to ensure business continuity, detect & anticipate potential issues and improve automations performance and overall Alteryx platform user experience.





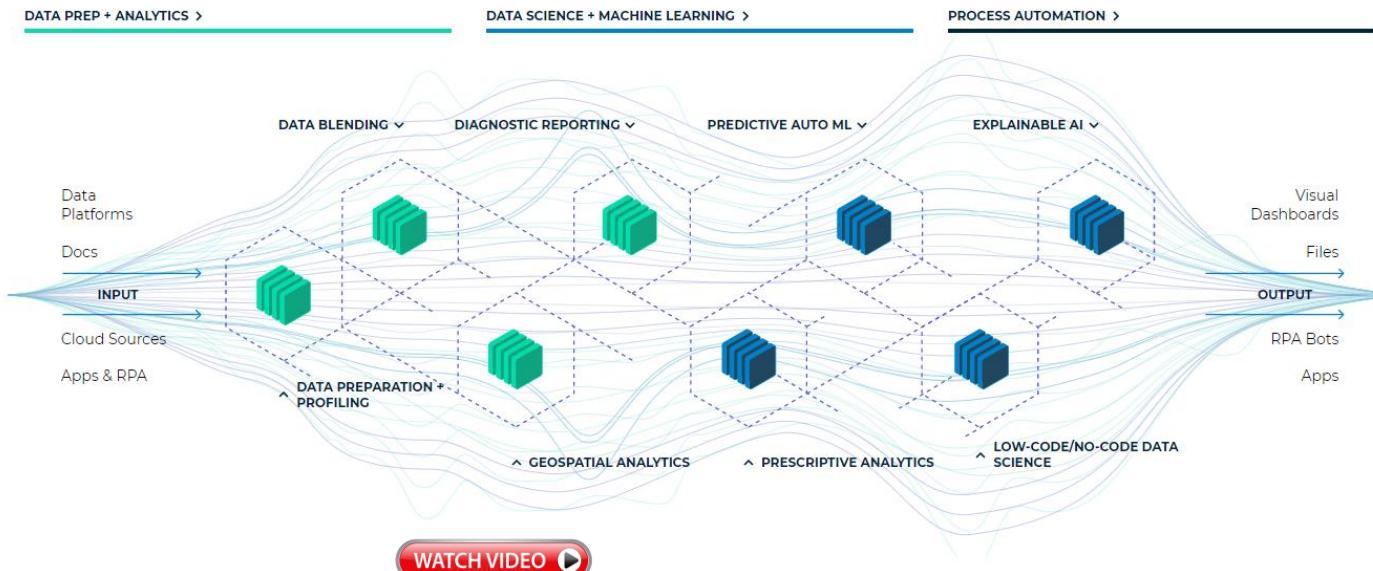
# Alteryx Prod Gallery Users by Tower & Function

Alteryx Gallery, a key feature of Alteryx Server, allows business decision-makers from multiple teams & functions to quickly and easily engage with analytic applications created by expert automation developers. It delivers a powerful consumer-based analytics experience that enables organizations to get to the value of data insights faster within a simple web interface.



# Alteryx as a Market Leader

- Alteryx is the unified self-service platform for **Data Analytics, Data Science, Machine Learning & Process Automation**
  - › “Challenger” in Gartner’s 2021 Magic Quadrant for **Data Science and Machine Learning (DSML)** platforms.
  - › “Customer’s Choice” as the highest peer rated vendor for **Data Science and Machine Learning Platforms** in Gartner’s Report.



Click on the link to see the video demo

[Introduction to Analytic Process Automation: Analytics + Data Science + Process Automation - YouTube](#)

## Analytics that automate and optimize business outcomes

- ✓ Automate data prep and analytics. With **260+ drag-and-drop building blocks**. Start driving outcomes in minutes.
- ✓ Access **80+ data sources**, including spreadsheets, docs, cloud platforms, DB's, enterprise apps, RPA bots, and more.
- ✓ Cleanse and reshape all data types, **visualizing every step of the data transformation process**.
- ✓ Automate to **70+ outputs**, including dashboards enterprise ERPs, docs, RPA systems, and more.
- ✓ Fully-guided machine learning, NLP, and visual text mining, or **access built-in R and Python tools** for additional flexibility.

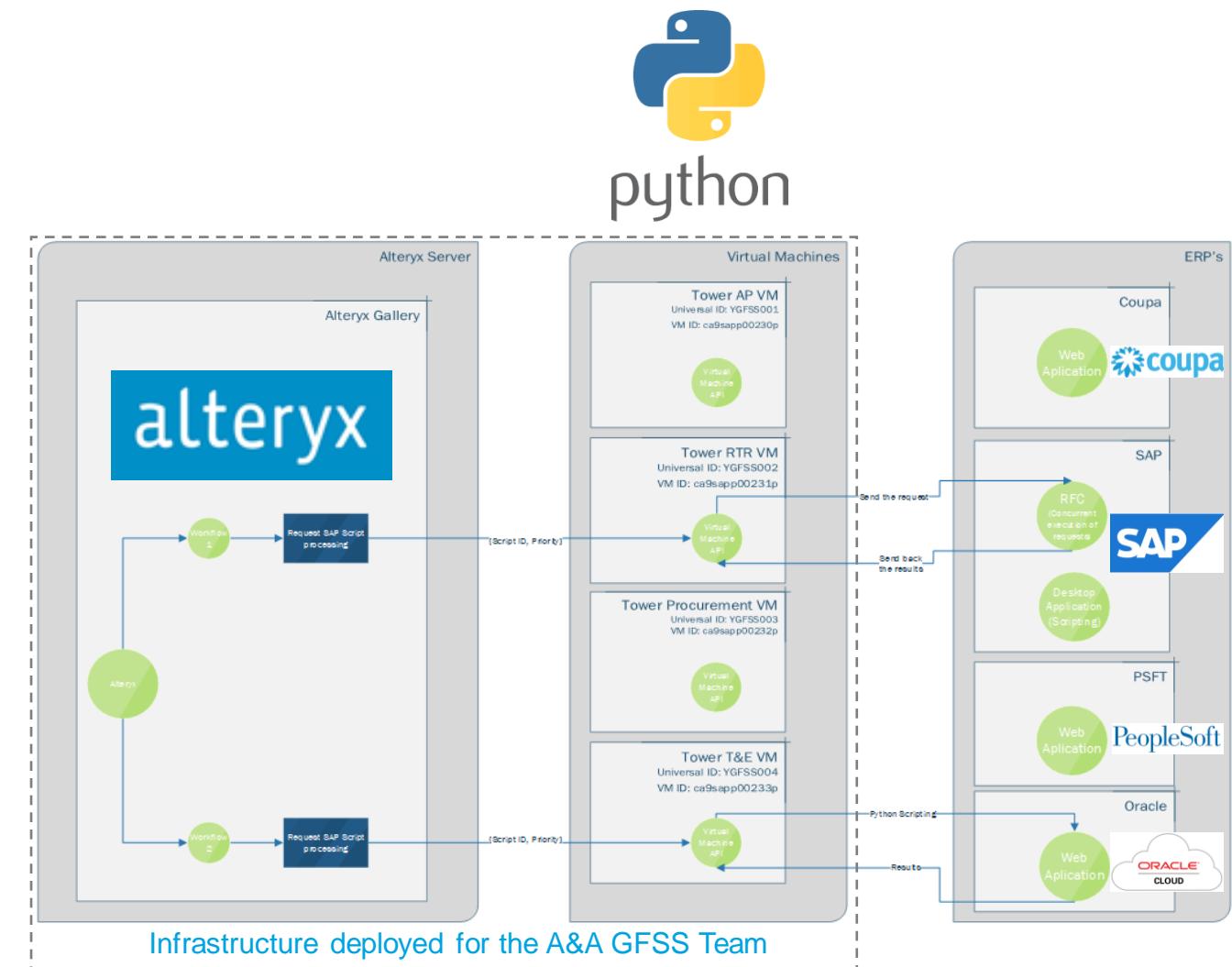
# Coding - Python

A&A team uses Alteryx as the platform that governs, triggers, schedules and manages most of the business process automated. However, in many cases some automations are designed in combination with some coding solutions using different programming languages such as Python.

The use of Python has, among others, a key purpose, which is to solve one of the main limitations the A&A team has faced; which is the non-integration of systems (SAP, PSFT, Salesforce, etc.).

A&A team develops Python scripts in order to interact with those applications (mostly through the UI of the applications) to capture and extract data and also to edit/enter data into the applications.

Python scripts run on Virtual Machines connected via API with the Alteryx platform.



# Coding – Python. Skillsets of the A&A GFSS Team

Python is a versatile programming language with many use cases in a variety of different fields which provide the A&A GFSS team with a great flexibility to develop a large range of solutions capturing efficiencies for business.

The A&A GFSS team has developed great skills using Python which allow the team to be able to develop sophisticated solutions for business interacting with the different legacy applications (SAP, PSFT,...etc.) by leveraging the Python's ecosystem that provides a rich set of frameworks, tools, and libraries.

Python applications used for GFSS:

- GUI Development
- Web scraping
- Workflow automation
- Data Science (Machine Learning)
- Data Analysis

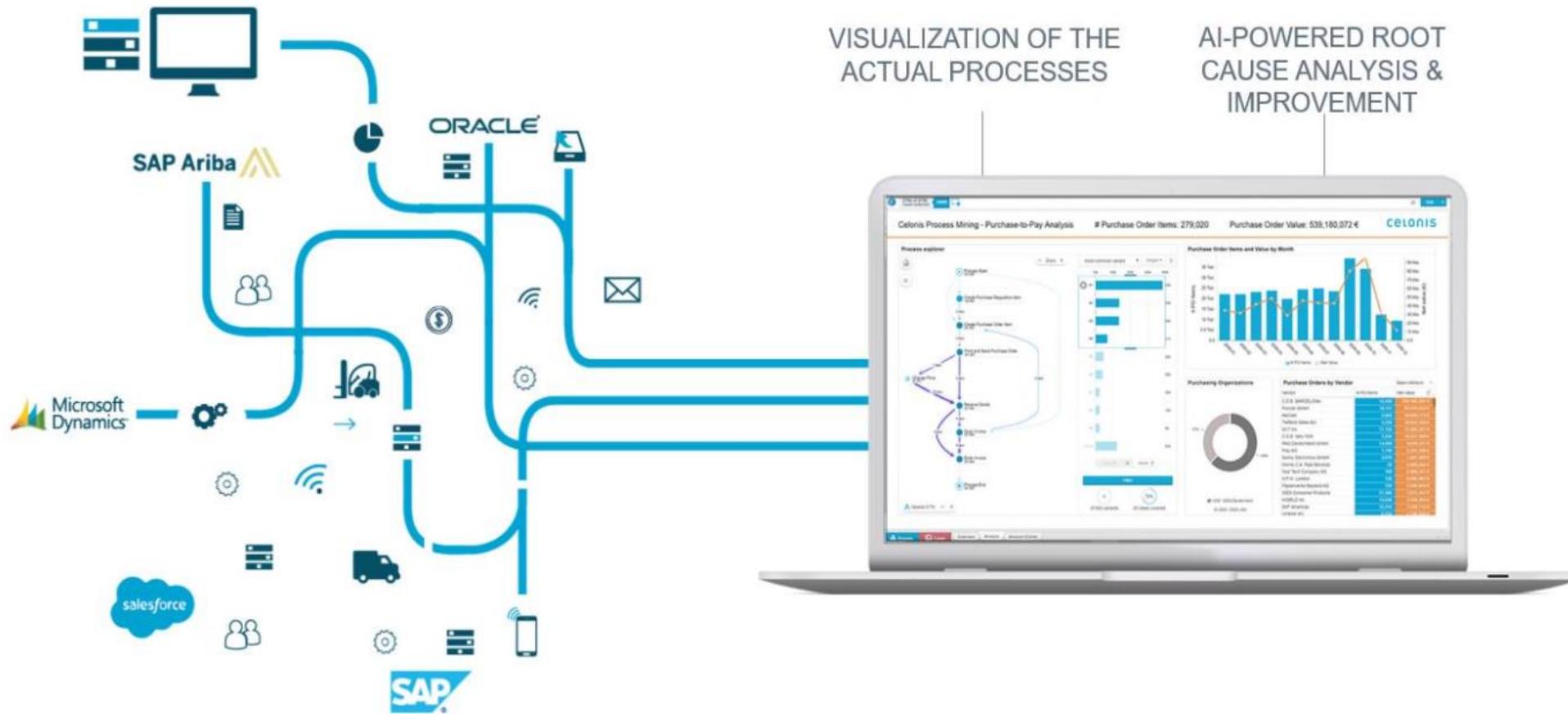


The accelerating pace of technological change is one of the most creative—and destructive—forces shaping the financial services industry.

This causes disruption which forces the traditionally conservative sector to innovate, or risk falling behind.

# Celonis process mining

- Objective, fact-based insights, derived from actual data, to help you audit, analyze, and improve your existing processes.
- Faster, cheaper and more accurate than the lengthy and often subjective process mapping workshops it replaces.
- No rip-and-replace needed - process mining works on top of your existing systems.



# Celonis: Connection to systems and Data engineering

## Options of IT connection



### On Premise

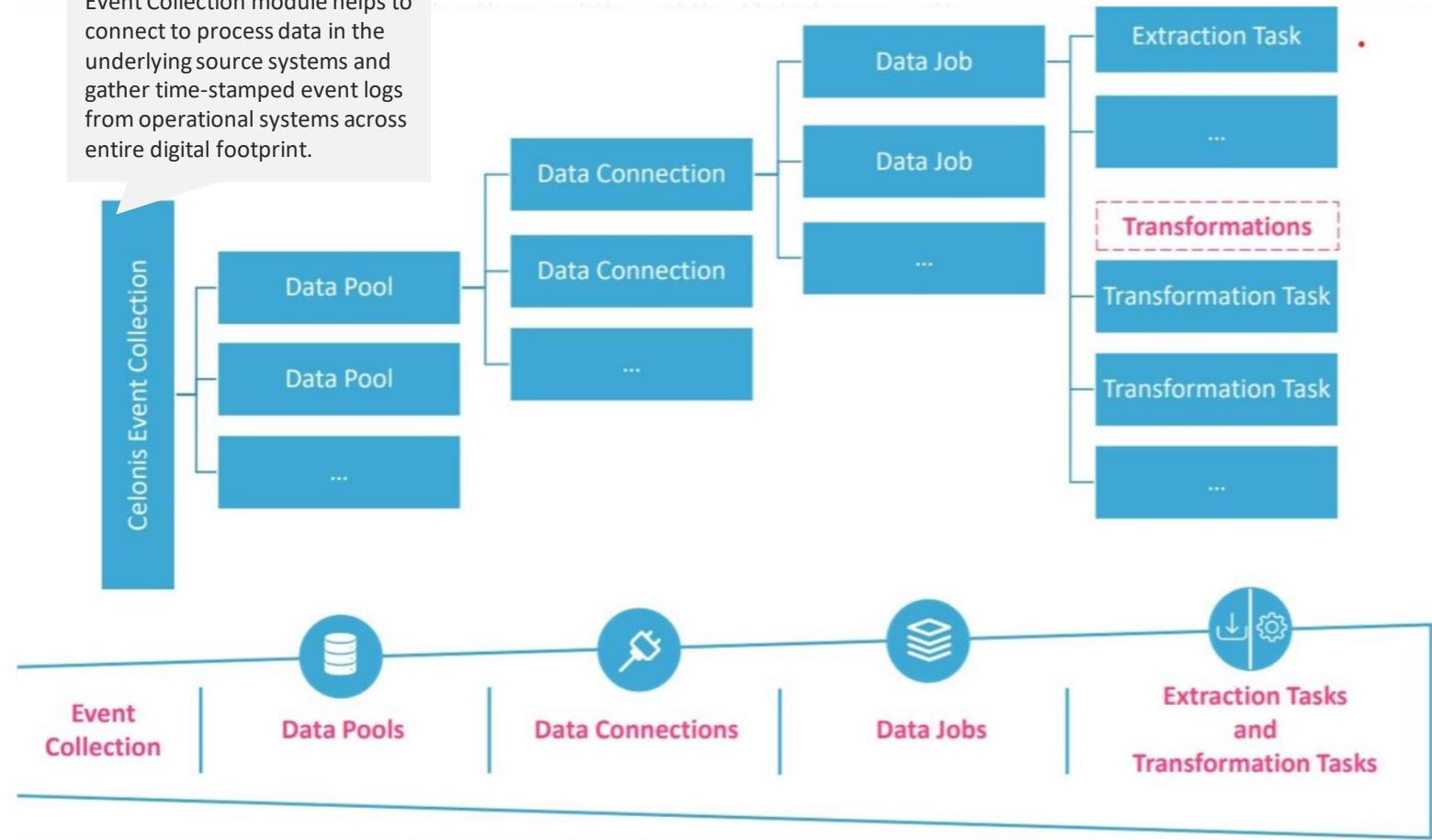
Source data exists in your own IT systems/ network and does not allow third party software. An 'On premise connector' is used to handle the communication between source systems and Event Collection (module of Celonis).



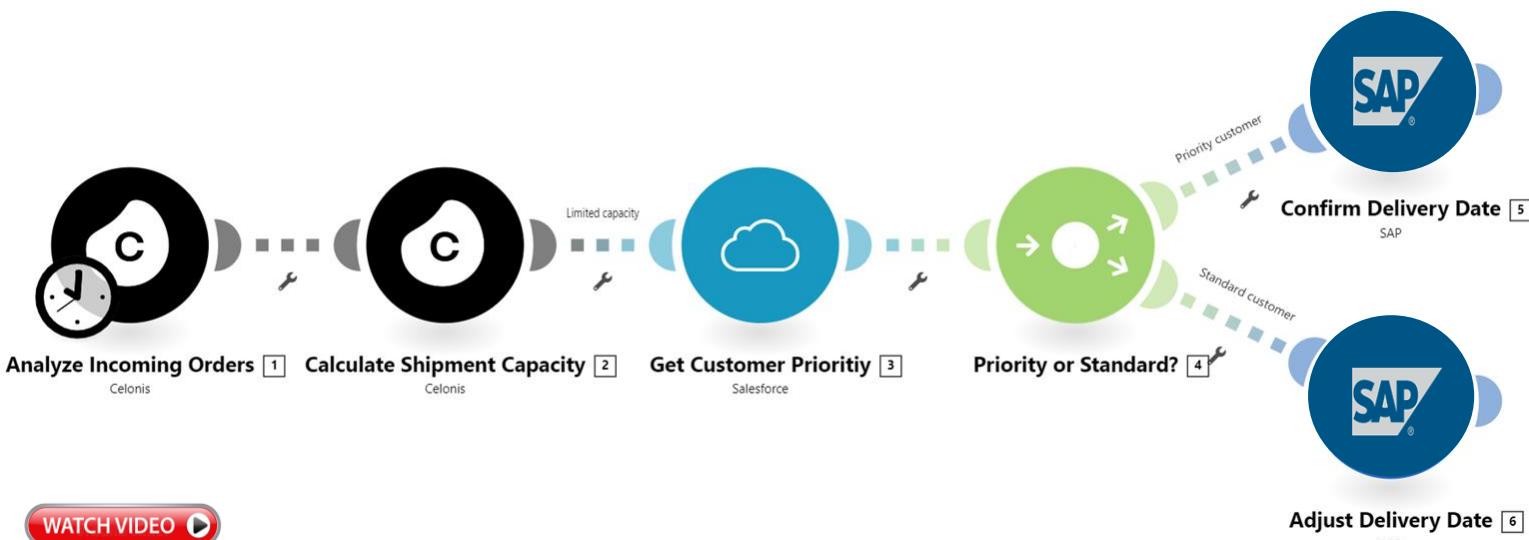
The source data exists in the cloud. The Celonis Intelligent Business Cloud (CIBC) uses cloud connectors to talk to cloud service provider via their web APIs.

How does Celonis use the raw data from multiple sources to create one master file that maps out the whole business process?

Event Collection module helps to connect to process data in the underlying source systems and gather time-stamped event logs from operational systems across entire digital footprint.



# Celonis: Action Flows features



Click on the link to see the video demo  
[Celonis Action Flows](#)

**1**

Through process mining, identify which execution gaps can be eliminated or prevented using automation.

**2**

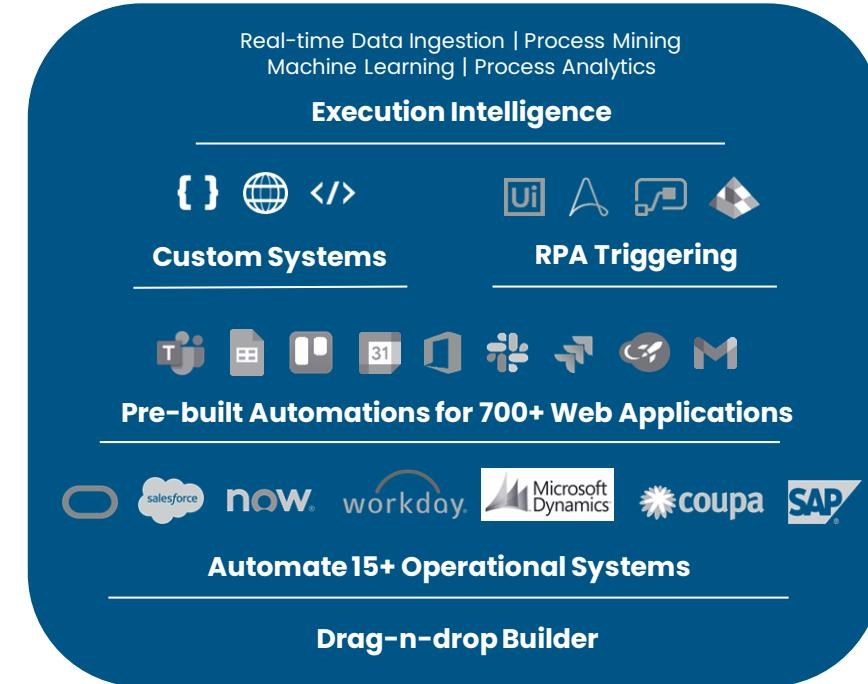
Define the business rules and logic that will trigger automation based on data-driven insights.

**3**

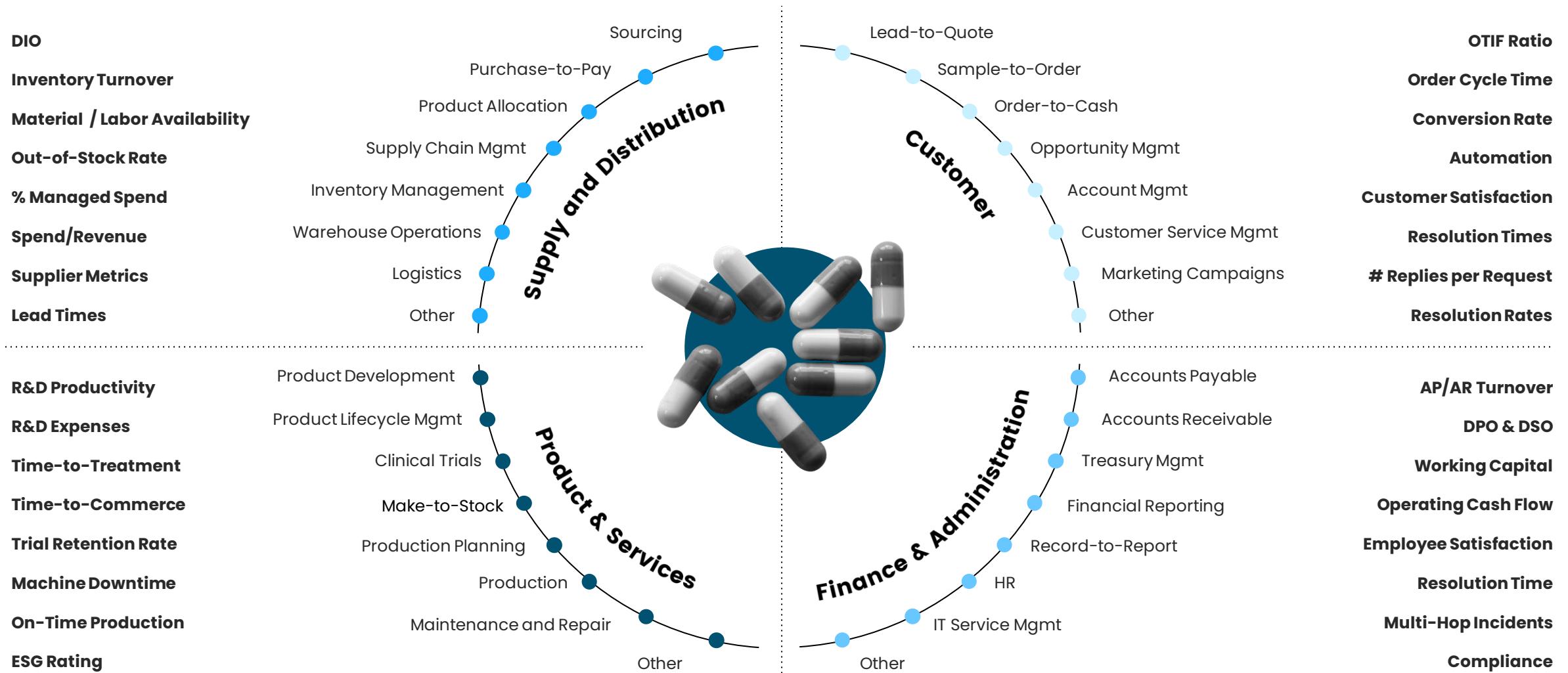
Build automations to act directly in your source systems, send alerts to the right people or even trigger RPA.

**4**

Continuously monitor the effects of automations and adjust as needed.



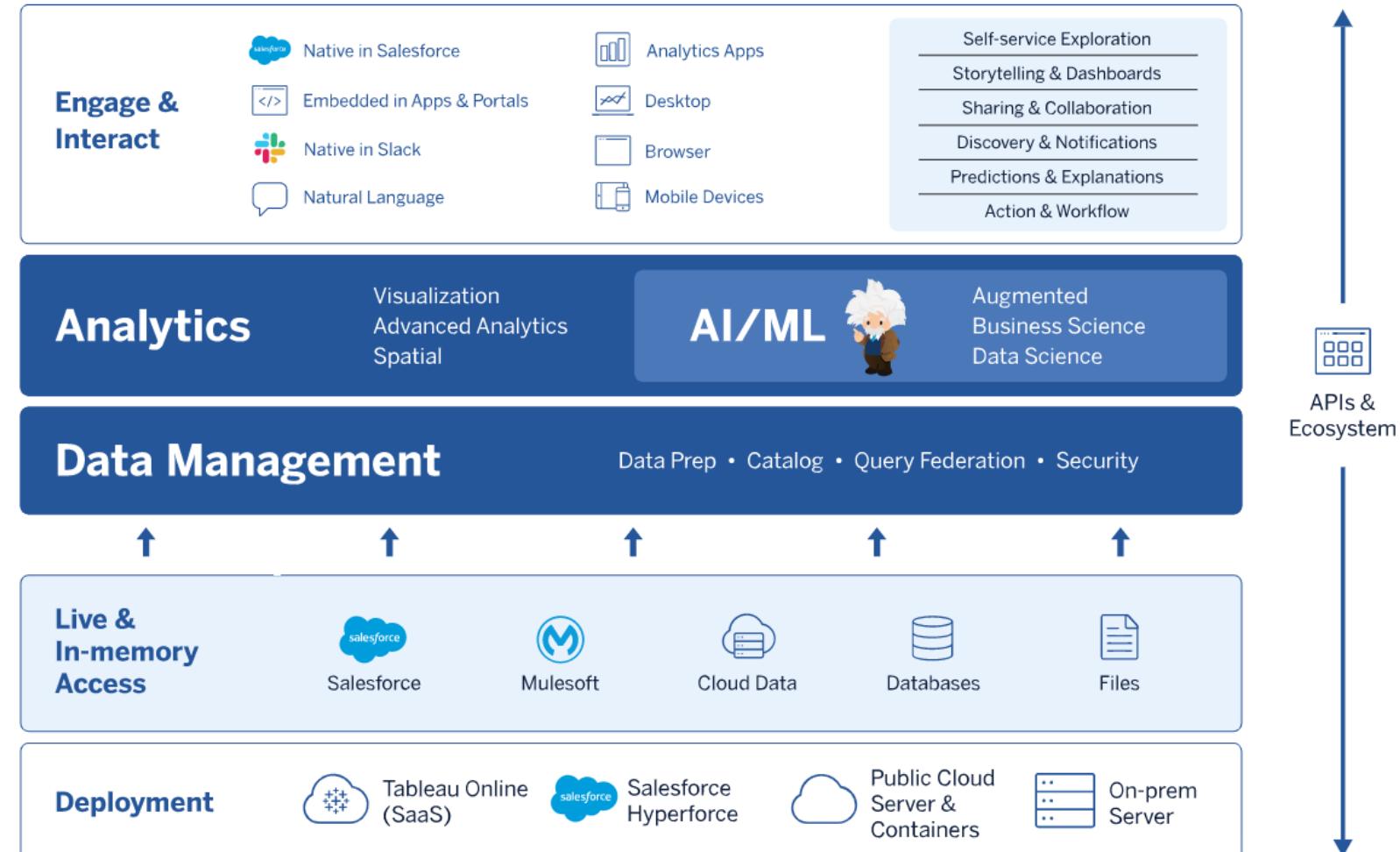
# Celonis implementation in Pharma and Life Sciences



# Tableau

The world's leading analytics platform

- Designing for a mobile-first world
- Tableau Server - Analytics for everyone, everywhere
- Sharing and collaborating securely
- Big data, live or in-memory
- Flexible deployment





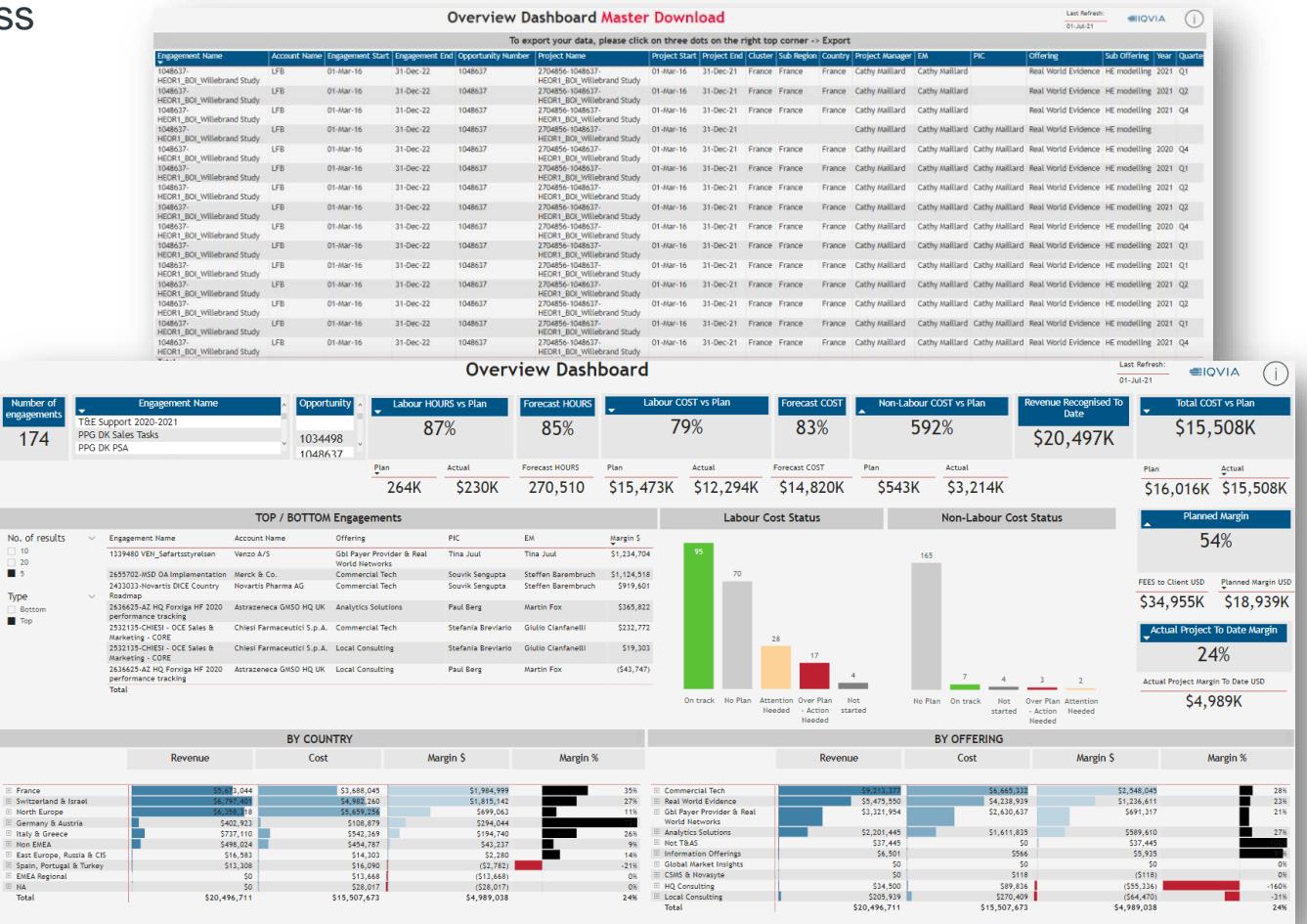
# Power BI

Create and share interactive data visualizations across global datacenters.

- Create interactive reports customized for your business
  - Author for everyone, anywhere
  - AI-driven augmented analytics
  - advanced analytics with the familiarity of Office
  - Prep and model your data with ease
  - Improve collaboration with Microsoft Teams
  - Easily share reports with SharePoint



**Click on the link to see the video demo**  
[Power BI Demo | Microsoft Power BI](#)



# Microsoft Power Platform

A&A GFSS team is using Power Automate to interact with other Microsoft products (SharePoint, MS Forms to create nice inputs)

## Power BI

Make informed, confident business decisions by putting data-driven insights into everyone's hands.



**Power BI**  
Business analytics

## Power Apps

Turn ideas into organizational solutions by enabling everyone to build custom apps that solve business challenges.



**Power Apps**  
Application development

## Power Automate

Boost business productivity to get more done by giving everyone the ability to automate organizational processes.



**Power Automate**  
Workflow automation

## Power Virtual Agents

Easily build chatbots to engage conversationally with your customers and employees—no coding required.



**Power Virtual Agents**  
Intelligent virtual agents



**Common Data Service**



**Data connectors**



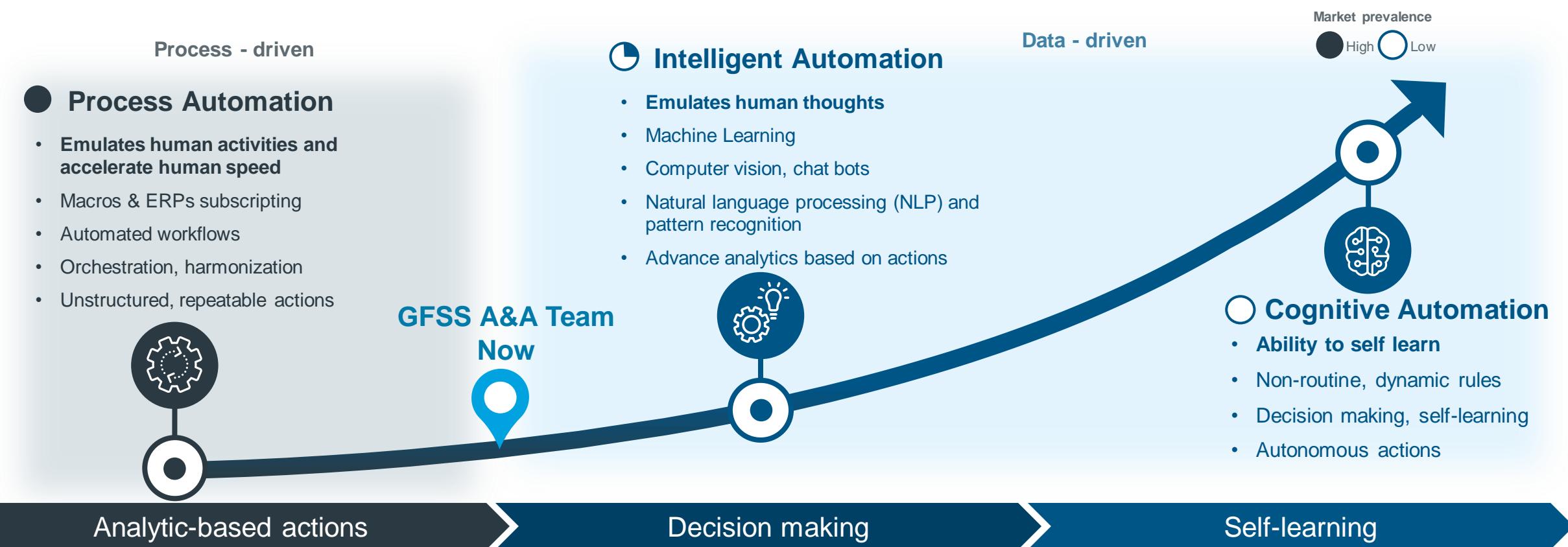
**AI Builder**

**WATCH VIDEO** 

Click on the link to see the video demo  
[Microsoft Teams + Power Platform - YouTube](#)

# Automation roadmap

Next step in the automation roadmap of the A&A GFSS team is to leverage Intelligent Automation capabilities to bring new opportunities for the automation of data-driven tasks for interpreting anomalies, learning patterns and capturing large quantities of hidden insights from processes.



WATCH VIDEO 

Click on the link to see the video demo

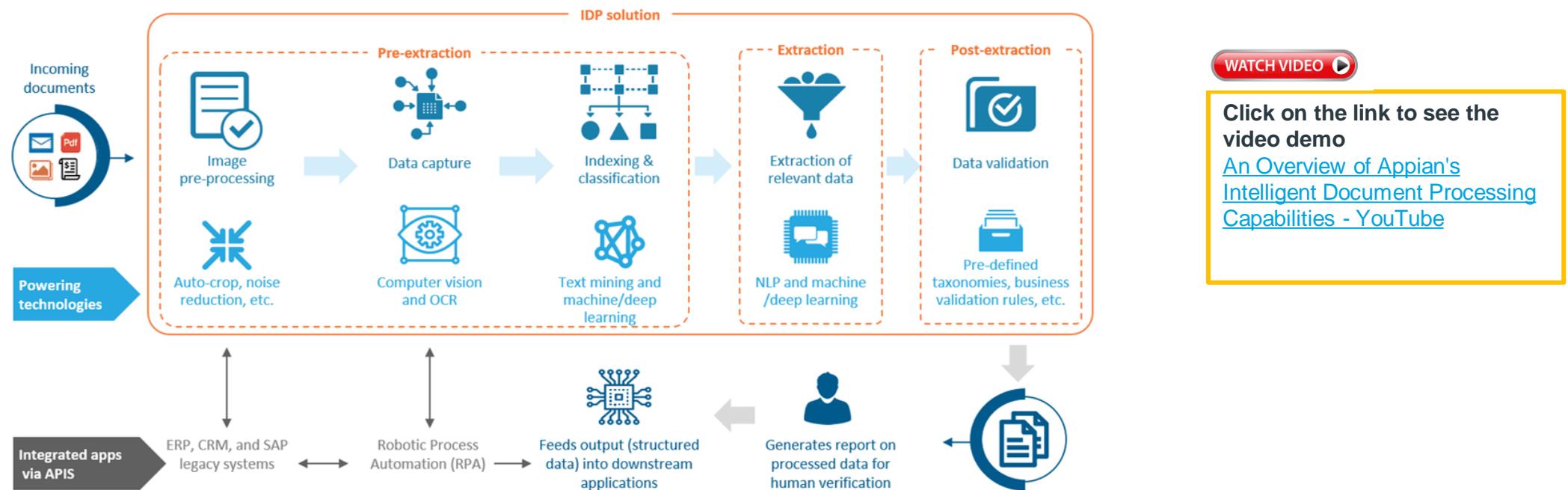
[Methods 101: What is machine learning, and how does it work? - YouTube](#)

# Intelligent Document Processing Platform (IDP)

*The next evolution of Optical Character Recognition “OCR” Technology to extract information from any business document automatically to enable end-to-end business process automation*

IDP solutions transform unstructured and semi-structured information into usable data. Business data is at the heart of digital transformation; unfortunately, most of all business data is embedded in unstructured formats like business documents, emails, images and PDF documents.

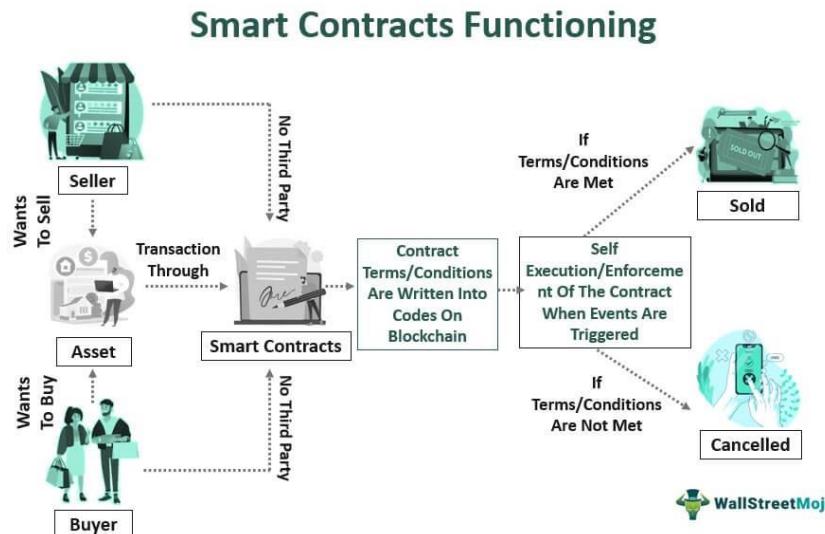
IDP is the next generation of automation, able to capture, extract, and process data from a variety of document formats. It uses AI technologies such as natural language processing (NLP), Computer Vision, deep learning and machine learning (ML) to classify, categorize, and extract relevant information, and validate the extracted data.



# Smart Contracts - Blockchain

*Blockchain is a highly advanced technology but currently in the infancy stage of maturity. Compelling use cases are being investigated currently within the Payments/Contracting process within IQVIA, however, will require substantial research and development, as well as experts with Blockchain experience in order to effectively implement.*

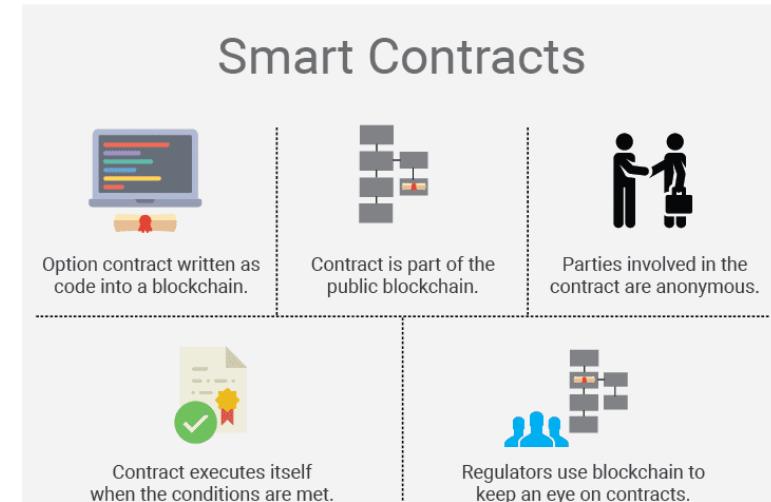
A smart contract is a self-executing contract with the terms of the agreement between buyer and seller being directly written into lines of code. The code and the agreements contained therein exist across a distributed, decentralized blockchain network. The code controls the execution, and transactions are trackable and irreversible.



**WATCH VIDEO** 

Click on the link to see the video demo

[Smart Contracts Explained: What Are Smart Contracts? - YouTube](#)



Smart contracts permit trusted transactions and agreements to be carried out among disparate, anonymous parties without the need for a central authority, legal system, or external enforcement mechanism. Digital smart contracts stored on a blockchain that are automatically executed when predetermined terms and conditions are met.



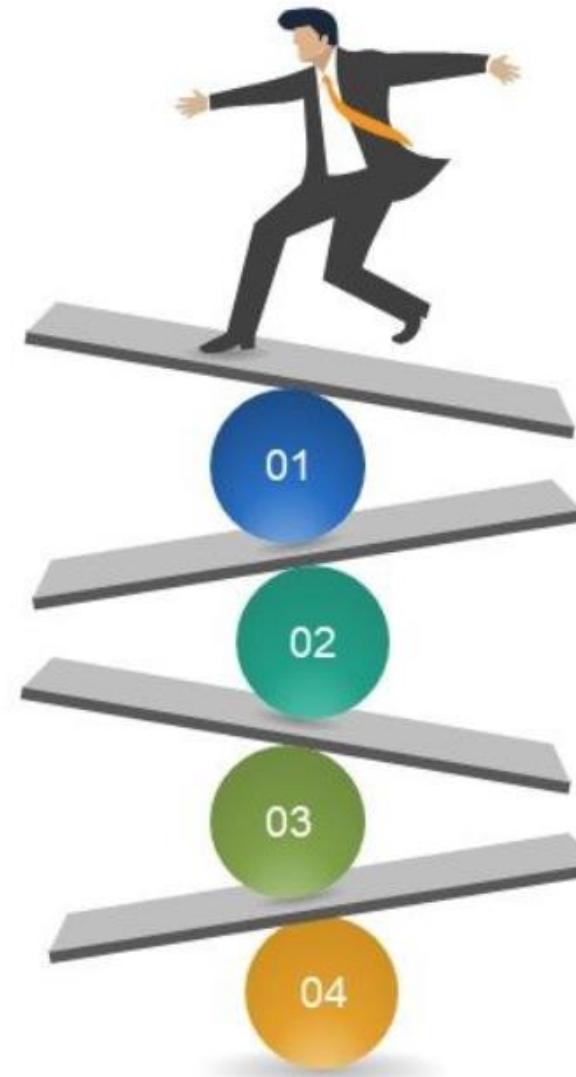
## Technology

- High amount of manual work, low automation
- Deficient skill sets
- Advanced skill sets revolve primarily around Excel
- Many different systems used for similar processes



## Process

- Processes are not standardized
- Lack of scale
- Duplicated activities
- Extensive historical and non-value-added activities
- Procedures are not documented properly or at all
- High level of bureaucracy has led to inability to make fast decisions



## People & Culture

- Siloed Organization
- Lack of centralization
- Low motivation to innovate
- No clear responsibility split
- High employee turnover
- Resistance to Change
- Status-Quo Approach
- Environment doesn't support innovations

**\$135M in Costs**

**1040 FTEs**

# Automation initiatives within Finance



**Q2 Solutions**  
In Production for:  

- Backlog Automation in Labmatrix
- BD Commission for CL automation in Labmatrix

In Build-Out:  

- Contracts & Proposals RPA Initiative

**R&DS Finance**  
Largest initiatives being automated:  

- CO calculation (at project and business unit level),
- auto upload of budgets/project setup and auto update of payment schedules.

**Japan**  
In Production for:  

- Delivery Invoices
- Expense Report Consistency
- IPA/CTMS AP Creation

**T&CS**  
In Production for:  
Deferral Posting - Alteryx / Sally Clifton

RBU/GBU	Automation of Repetitive Tasks	Advanced Data Analytics	Enhanced Customer Service / Chatbots	Automated Data Extraction	Efficient and Scalable Data Processing	Reporting from Multiple Systems	Teams involved
LatAm	•••	✗	•••	•••	✗	•••	<b>Operational Excellence</b>
Q2 Solutions	✓	✗	✗	✗	•••	•••	PRA Team, Q2 Innovation Hub, GFSS A&A Team
R&DS Finance	✓	✗	✗	✗	✗	✗	RPA Team
EMEA	✓	✗	✗	✗	✗	✓	GFFS A&A Team
Japan	✓	✗	✗	✗	✗	✗	RPA Team
T&CS	✓	✗	✗	✗	✗	✗	T&CS Team
GFFS	✓	✓	✓	✓	✓	✓	GFFS A&A Team
Internal Audit	•••	✗	✗	✗	✗	✗	Operational Excellence

••• - Opportunity investigation

✓ - ongoing automation

✗ - no automation projects started

## FUTURE PLANS

- LATAM**
- Budgeted Resources in RPA for 2022
  - Kaizen event planned for Q4 2021
  - Focus on FP&A Reporting,
  - Collections/Vendors
  - Manual processes

- Q2 Solutions**
- Continue development of Labmatrix opportunities
  - Migrate Genomics and BioFortis to PSFT ERP
  - Develop Central Lab Reporting

- Japan**
- Perceived minimal remaining opportunities to drive impact based on conversations with RPA Team so intend to take a more deliberate approach focusing not only on Finance but also Sales/Bus
  - Cognizant of RPA implementation costs as belief is ROI is minimal

# Automation & Analytics Achievements



## 40% Net Cost Reduction

\$25.1M to \$14.9M from 12/31/18 to 12/31/22 Budget v1

## \$5M TCS Cost Removal

Gross savings per year, \$2M Net, after removing TCS after a 10+ year relationship with limited documentation available and minimal disruption to business operations

## >100K Automated Notifications

Personalized notifications sent YTD to users across Global business functions

## Automated Equity Reporting

Automated reporting to IQVIA CEO and CEO direct reports with increased frequency



## \$1.9M Profit Increase

EMEA Region Project Management and reporting initiative supported

## 120+ Data Dashboards

Automated reports are available and regularly updated across towers and functions

## 2K+ Automated Billings

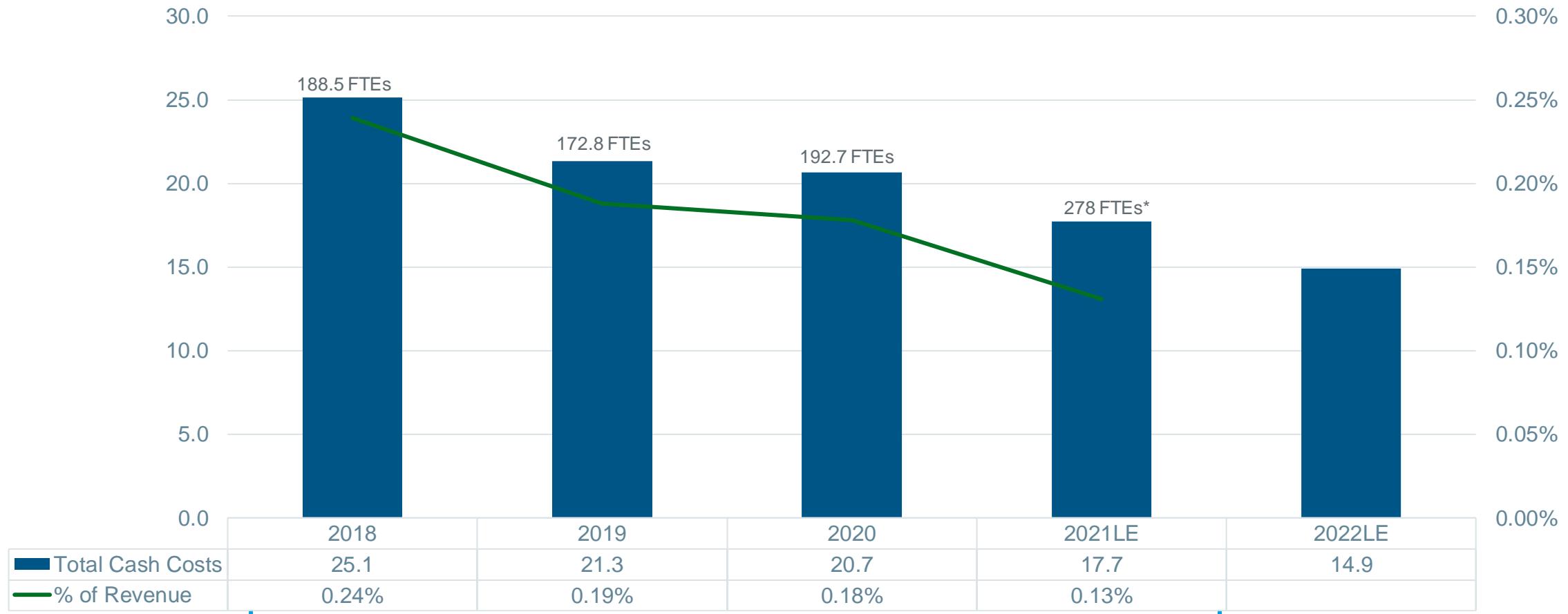
Automatically delivered fully digital invoices (not PDF) in last 12 months to customers via 3rd party portals (i.e. Ariba, Tungsten, etc.)

# GFFS Cash Costs Trend: 2018 – 2022LE



## Total Cash Costs/Percent of Revenue \$M @PFx

Costs allocated to integration CC are not included.



**46% Decrease of Costs as a % of Revenue – 11% CAGR**

\* - 2021 HC growth direct result of TCS insourcing initiative

# TCS Insourcing

- Effective April 9<sup>th</sup>, IQVIA ended their relationship with TATA Consulting Services (TCS)
- Activities of ~200 TCS employees were transferred to GFSS
- ~250 processes were selected for automation across all Towers

## 113 (29%) Net HC Reduction

Comparing 12/31/20 to 12/31/21 Forecast

### Addressed challenges:

- Manual and time-consuming processes
- Siloed roles based on region and Legacy-I/Q
- Limited quantitative metrics and reporting
- Limited documentation
- Loosely defined SLA's
- Limited analytic talent
- Poor quality outputs

## 36% Net Reduced Costs

\$5M to \$3.2M Annual Spend

### Current situation:

- 114 automated processes with average automation rate of 85%
- Harmonized roles to cover expanded Global remit
- Increased reporting utility, quality, and frequency
- Created process documents and Intranet reporting site
- Transparent reporting metrics on individualized and global levels
- Significantly increased analytical and automation expertise
- Improved metrics and performance across all towers

# Project Transformation Example: TCS vs GFSS scope



## How have we transformed TCS processes?

Automated 114 manual  
processes with average  
automation rate of 85%



Metrix established for  
each of the processes



Reports and dashboards  
are regularly delivered  
to business teams



SOPs and SDD documentation  
created for all automated processes



Proof of concept discovery  
management, including ML,  
chatbots, IDPs, blockchain, etc.



Analytics and custom-  
made reporting for  
various GFSS and  
non-GFSS groups

TCS  
200 FTEs

GFSS  
60 FTEs

6 FTEs

17  
FTEs

6 FTEs

3 FTEs

5 FTEs

12  
FTEs

2 FTEs

2 FTEs

1 FTE

Project Management

Internal audit,  
governance and  
compliance

## What else we do?

Support model for existing automations  
including governance and Maintenance  
of 400+ Alteryx workflows / 115 E2E  
processes automated

90+ process automations in  
progress or being analyzed  
currently for GFSS

External Projects execution (6 FTEs):  

- Project Profitability (EMEA)
- Equity reporting (Ari's Direct Reports)

Implementation of third-  
party portals

Establishment and further development  
of Alteryx, Python and Celonis Centers  
of Excellence

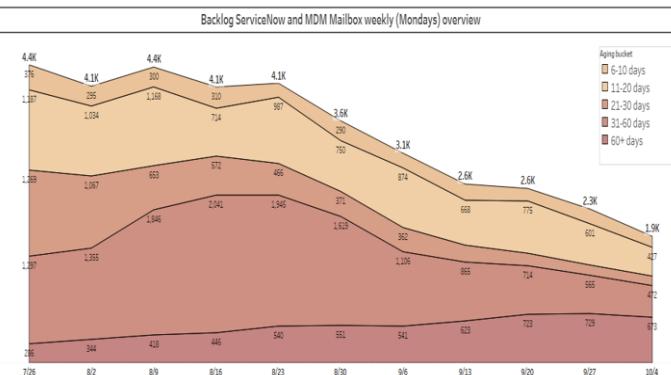
Intranet build-up and  
maintenance

# TCS Insourcing – automation examples



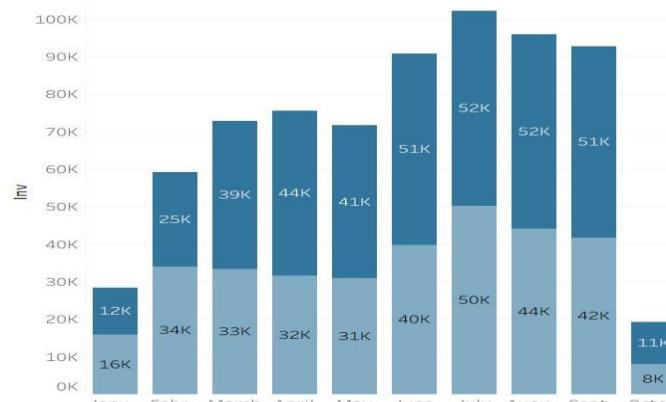
After the TCS exit, reporting and KPI visibility increased while volumes increased as well, with improvements to pre-TCS activities across all Global Towers

MDM backlog decreased ~57% since end of July (no data exists pre-TCS)

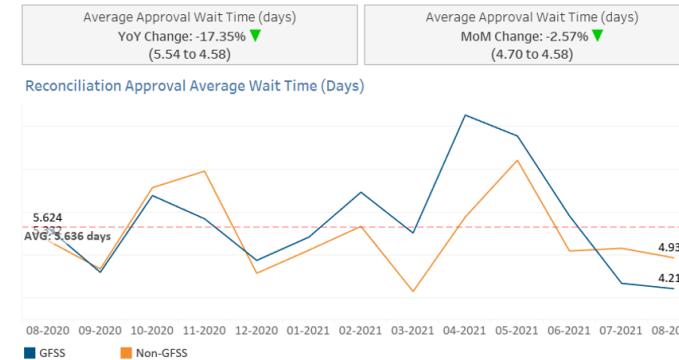


AP invoices vol increased while backlog is at a low-time low

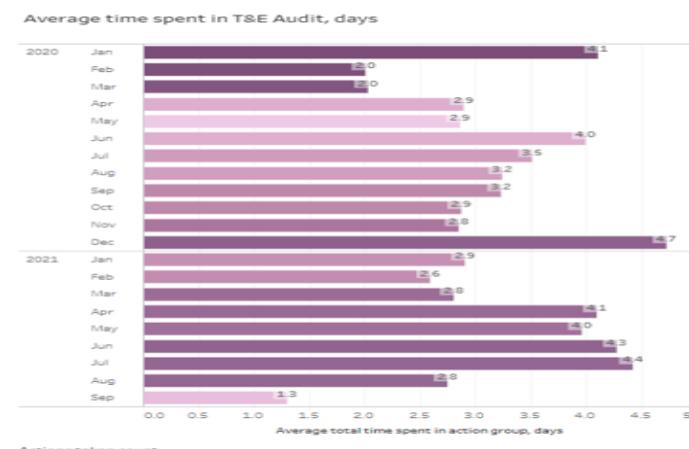
PSFT and SAP monthly volumes



Reconciliation approval avg. wait time is below pre-TCS level, due to faster prep



Avg. T&E processing time reduced 11% from 6.4 to 5.7 days on avg.



Journal Entry Staging



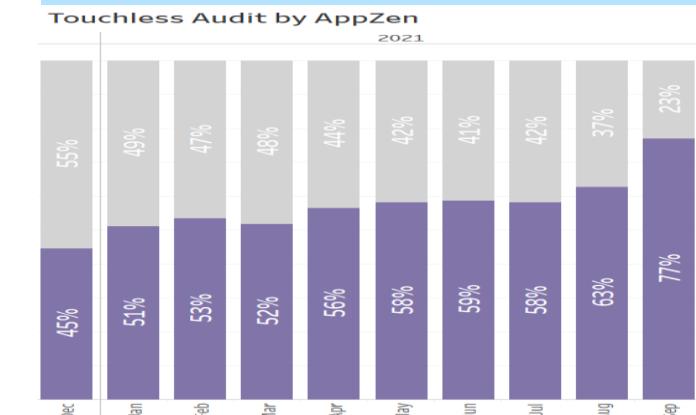
Click for more

Bank Reconciliations



Click for more

Touchless audit by AppZen is at all-time high of 77%





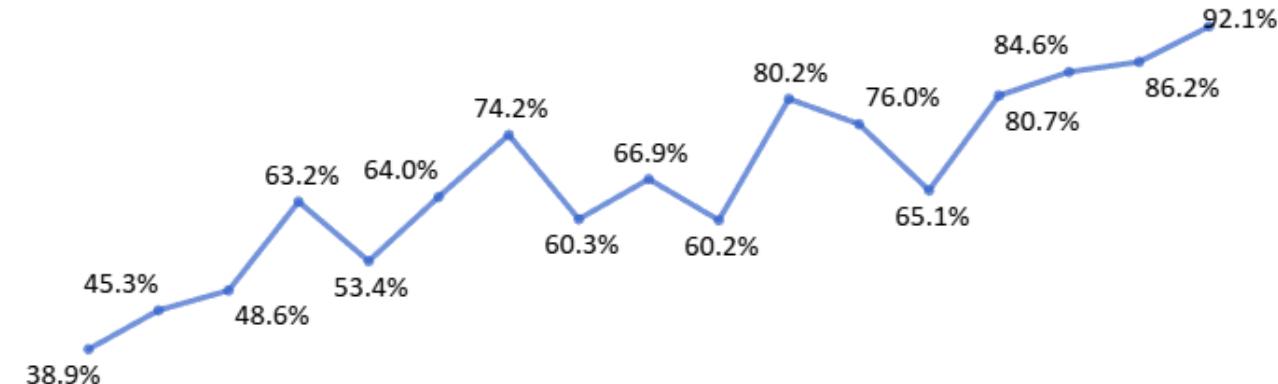
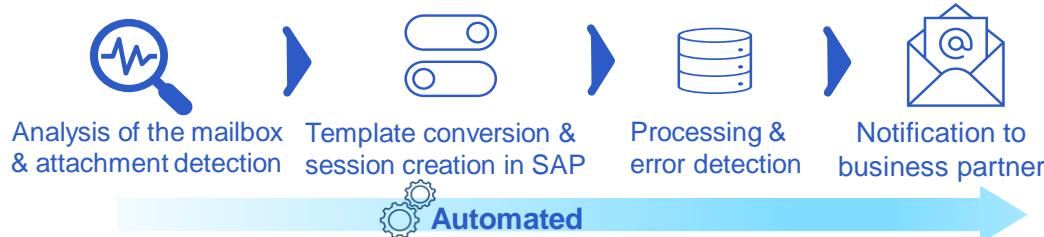
# Example - SAP Journal Entry Staging



*Click to see the  
video demo*

## What we did

- ✓ Automatic posting in SAP of Journals submitted by business partners
  - ✓ Daily Management Dashboard



# Benefits

- ✓ Processing time of less than 2 hours, irrespective of time zone
  - ✓ Clear and consistent feedback to submitter
  - ✓ Greater SOX control compliance through centralized documentation storage
  - ✓ Personalized reporting to submitters
  - ✓ Continuous improvements allow for timely and agile updates to enhance user experience

# 89%

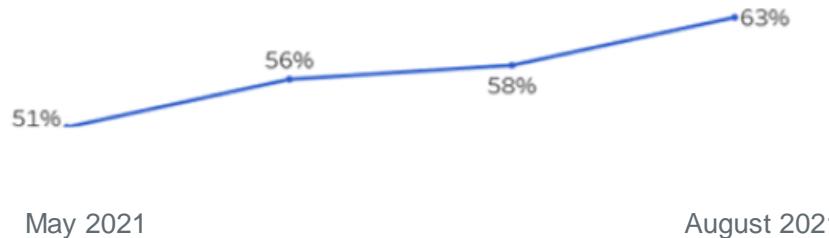
## Auto-posting Success Rate

**318**  
Users

**>25K  
Auto-posted  
Journals**

# Example - Bank Reconciliations

## Automation Matching Rate – monthly rate



## Matching rate Improvement

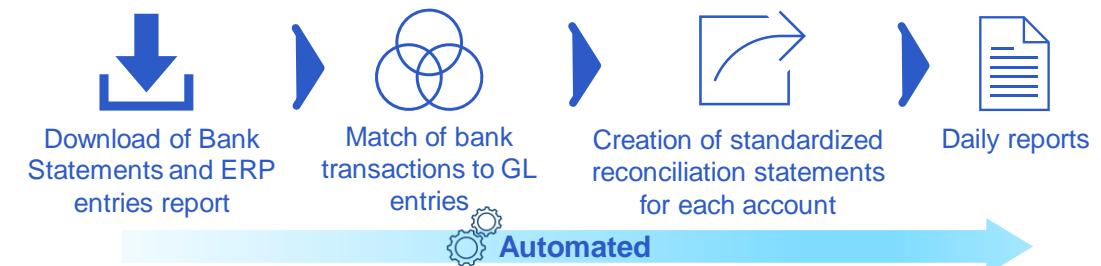
- ✓ Bank Posting automation for automatically posting bank fees and sweeps was created. The journal created happens automatically and all of the data is transferred correctly to the GL, which improved the Matching rate

## Benefits

- ✓ Daily reconciliation
- ✓ Reduced number of late reconciliations
- ✓ Information related to reconciliations: matched items, unmatched items and values, match rate available sooner to the end user

## What we did

- ✓ Automatic reconciliation of GL book to bank items
- ✓ Standardized reconciliation output for all banks and accounts
- ✓ Continuous matching of bank to book throughout the month
- ✓ Daily Management Dashboard



**340**  
accounts

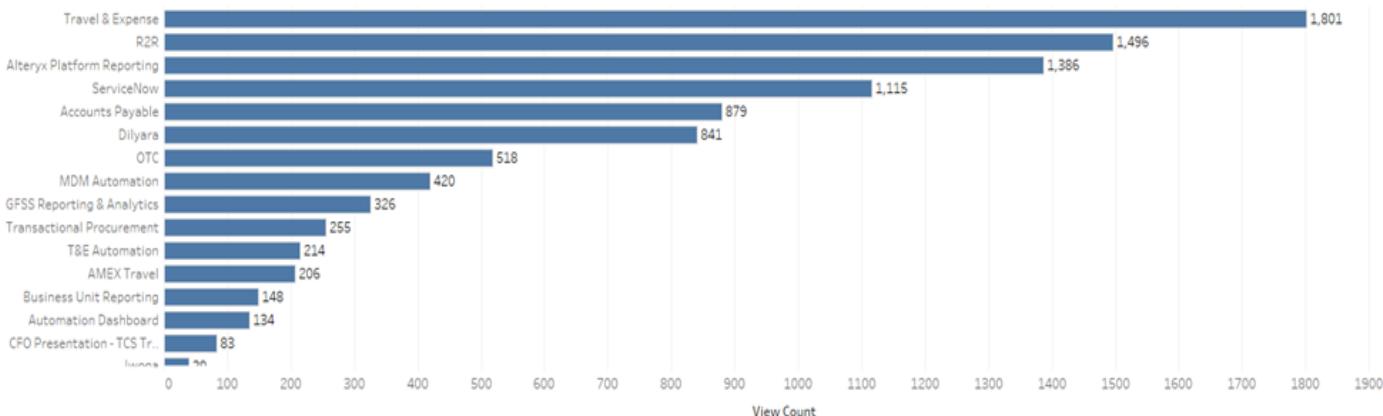
**+50K**  
Lines/monthly

**11**  
Banks

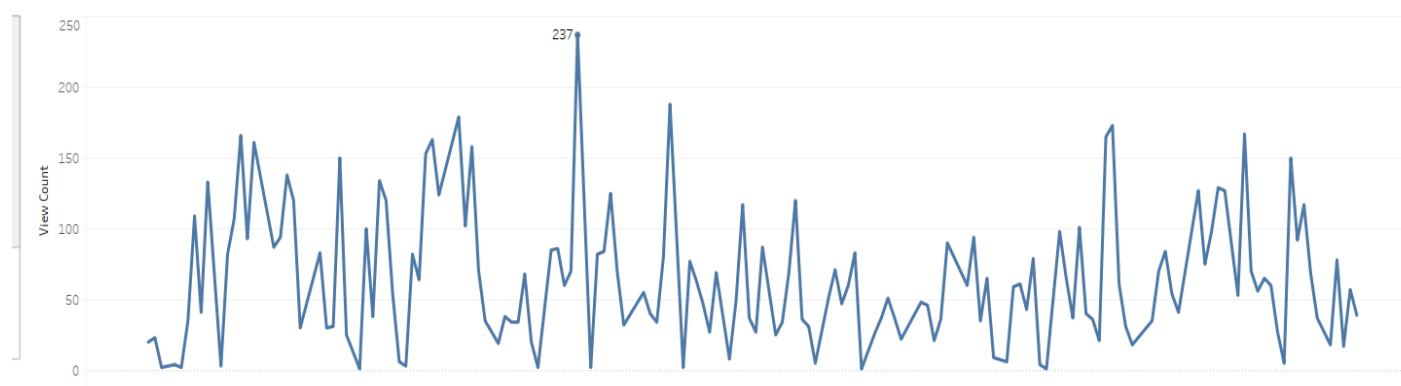


# Achievements – Reporting

*Count View by project in Tableau since Jan-2021*



*Count of Views by Day in Tableau Server*



**>120**  
Reports



**>200**  
Visits/month in  
Tableau



[Workbook: GFSS Reporting Portfolio \(iqvia.com\)](http://iqvia.com)

# Project Profitability Dashboard



Custom-made solution designed for EMEA Commercial Operations / RWE aimed at developing a standardized approach to the management of project financials in order to provide **real-time profitability calculations, with goal to increase project profitability by 1% (\$1.9M)**



Strengthen culture of client delivery excellence



Deliver **outstanding business results** for our customers



Improve project margins and adopt value-based pricing

## Data Model

Live projects data



Data processing



alteryx

The Thrill of Solving



Excel output



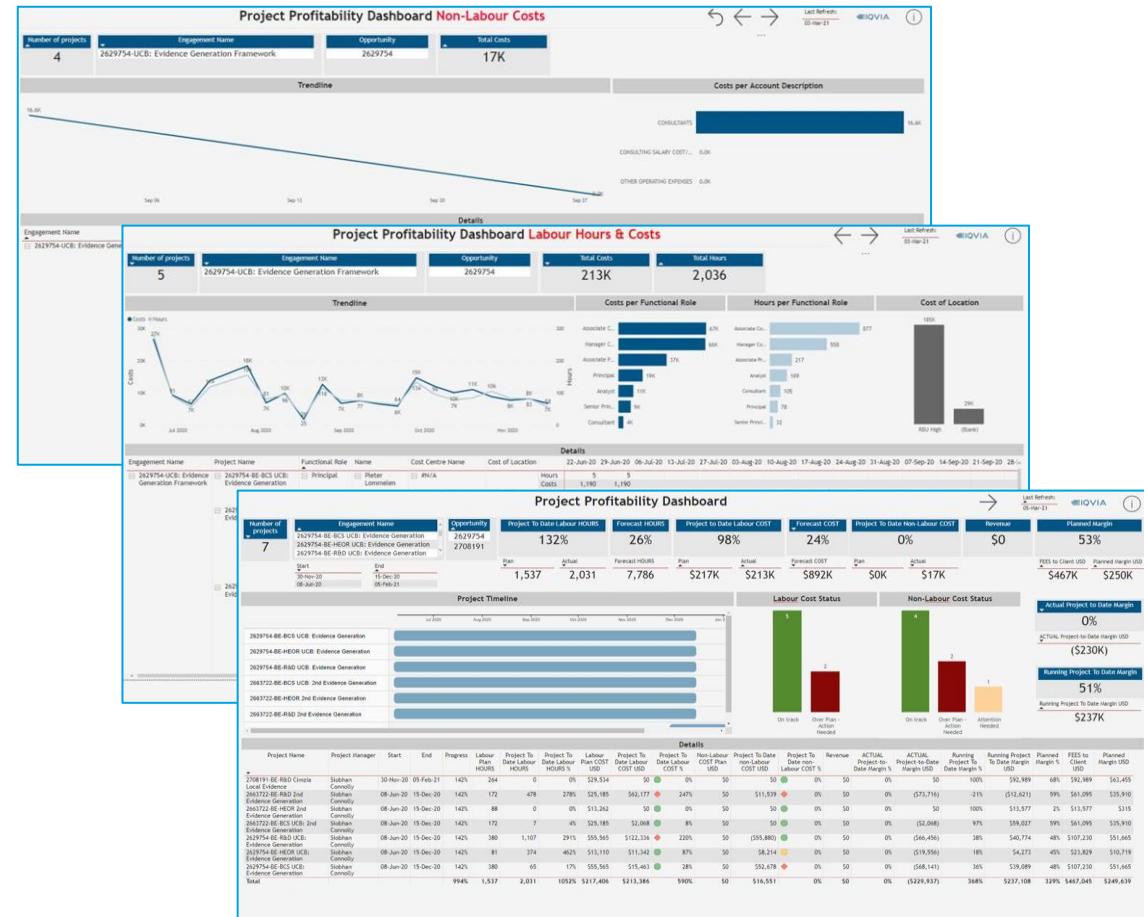
Power BI dashboard



Actuals

Personalized emails sent to PMs, EMs, PICs

## Reporting Outputs

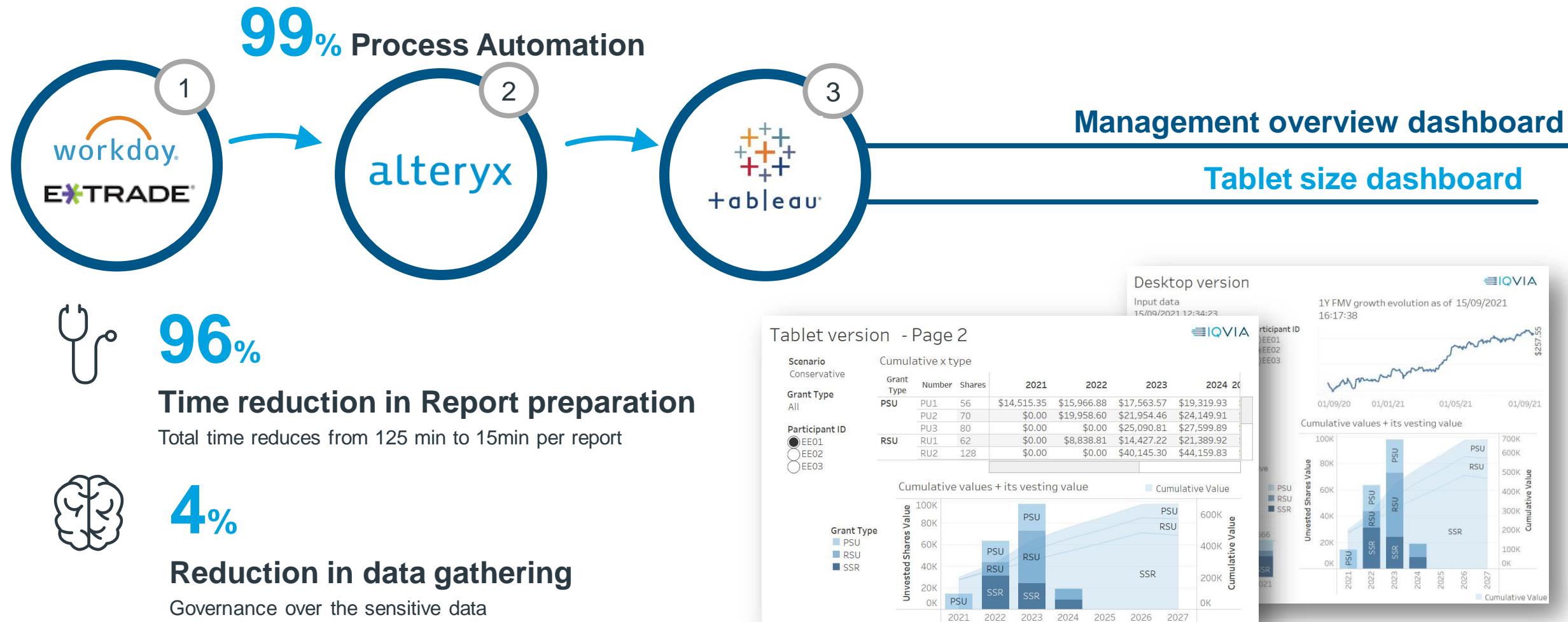


# Equity Reporting



This initiative is a joint-effort between GFSS A&A and the Equity Compensation Team aimed at monitoring the stock compensation scheme for Ari Bousbib and his direct reports

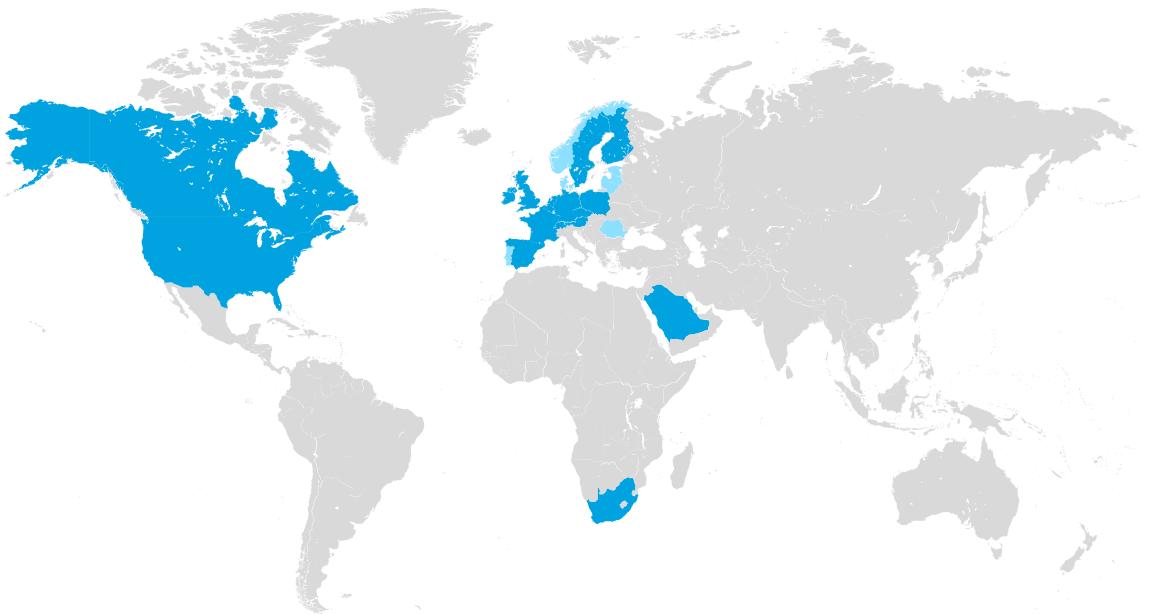
**Benefits include increased scalability, frequency, quality assurance, and interactive reporting**



## What is e-invoicing?

An electronic invoice (e-invoice) is an invoice that is **issued, transmitted, received, processed and stored electronically** using specific document formats.

E-invoices are digital throughout the entire document life cycle, from issuance to archiving.



Invoices delivered in last 12 months



Average number of days of earlier payment per invoice in Q1-Q3 2021



FCF Generated as a reduction of DSO



Supported countries



# Automated email notification and reporting

100K+ 

Automated personalized notifications sent to users Globally

## Time & Expenses

- Monthly Spend Reporting
- Payment Hold Reporting
- Credit Card Reconciliation Report

## Record to Report

- Intercompany Out of Balance Report
- Fixed Asset Disposal Approval Request
- Blackline Reconciliation Reminder

## Procure to Pay

- Purchase Order Status Report (Coupa) Reminder
- Requisition and Invoice Review Requirement Report (Coupa)
- SAP Auto-Payment Report
- Coupa Supplier Invitation Follow-Up

# A&A Expansion Business Case

	\$ million	2021	2022	2023	2024	2025	
Finance Payroll costs /excl GFSS	105	105	101	96	86		→ 18% NET Reduction
Finance Other costs /excl GFSS	30	30	30	30	30		→ \$0 Change Assumed
Fully-Loaded Proposed A&A Costs <sup>1</sup>		3	6	6	6		
Total finance costs	135	138	137	132	122		→ 10% NET Reduction
YoY Net (Cost)/Savings		(3)	1	5	10		
Cumulative NET Savings <sup>2</sup>		<b>\$13M</b>					→ \$0.6 profit on \$1 investment

Total HC count change <sup>3</sup>	1,040	29 NET decrease, 3%	1,011
Fully Loaded FTE cost change for HC in project scope	\$130k	37% saving per FTE	\$82k



<sup>1</sup> Fully-loaded proposed A&A costs in 2025 are \$4.5 mil (72%) compensation costs and \$1.7mil (28%) technology costs. Further breakdown in Appendix.

<sup>2</sup> This is the annualized savings amount for 2026 and beyond assuming all else equal

<sup>3</sup> Net decrease is calculated on A&A Team hiring 75 FTEs and 104 FTE reduction in finance

# Appendix – Business case details / savings



- V25 assumes 1 FTE in GBU/RBU Finance will be replaced by 0.7 FTE from A&A team (**104 FTEs** assumed in scope for automation)
- Homecoming was largely transactional and repetitive tasks that had high automation %'s (80%+) resulting in a ratio of 0.4 IQVIA FTE's for every 1 TCS employee

\$ million	Costs in Scope Automation Rate				\$30M other costs include professional and consultancy services, among others, which can bring additional scope for automation. These costs were not considered in these scenarios.		
		Base Case		Upside			
		25%	40%	25%	50%	25%	30%
FTE Costs	\$ 105	\$ 86		\$ 81	\$ 91		
Other Costs	\$ 30	\$ 30		\$ 30	\$ 30		
A&A Expansion Fully Loaded Costs	\$ -	\$ 6		\$ 6	\$ 6		
Total Cost (excl GFSS)	\$ 135	\$ 122		\$ 118	\$ 127		
Headcount	1,040	936		867	961		
A&A Expansion Team HC	-	75		75	75		
Total HC	1,040	1,011		942	1,036		
Cumulative Savings							
Fully Loaded FTE Costs	\$ 129,808	\$ 12,822,372		\$ 17,447,372	\$ 7,997,372		
Fully Loaded A&A Costs		\$ 123,932		\$ 128,432	\$ 125,756		
Net Fully Loaded Cost Savings Per/FTE		\$ 82,368		\$ 82,368	\$ 82,368		
Net FTE Reduction		-34%		-36%	-35%		
Net FTE Reduction %		29		98	4		
		3%		9%	0%		

Breakdown of A&A Expansion fully loaded costs is on next slide

Finance FTE reduction based on costs in scope and automation rate

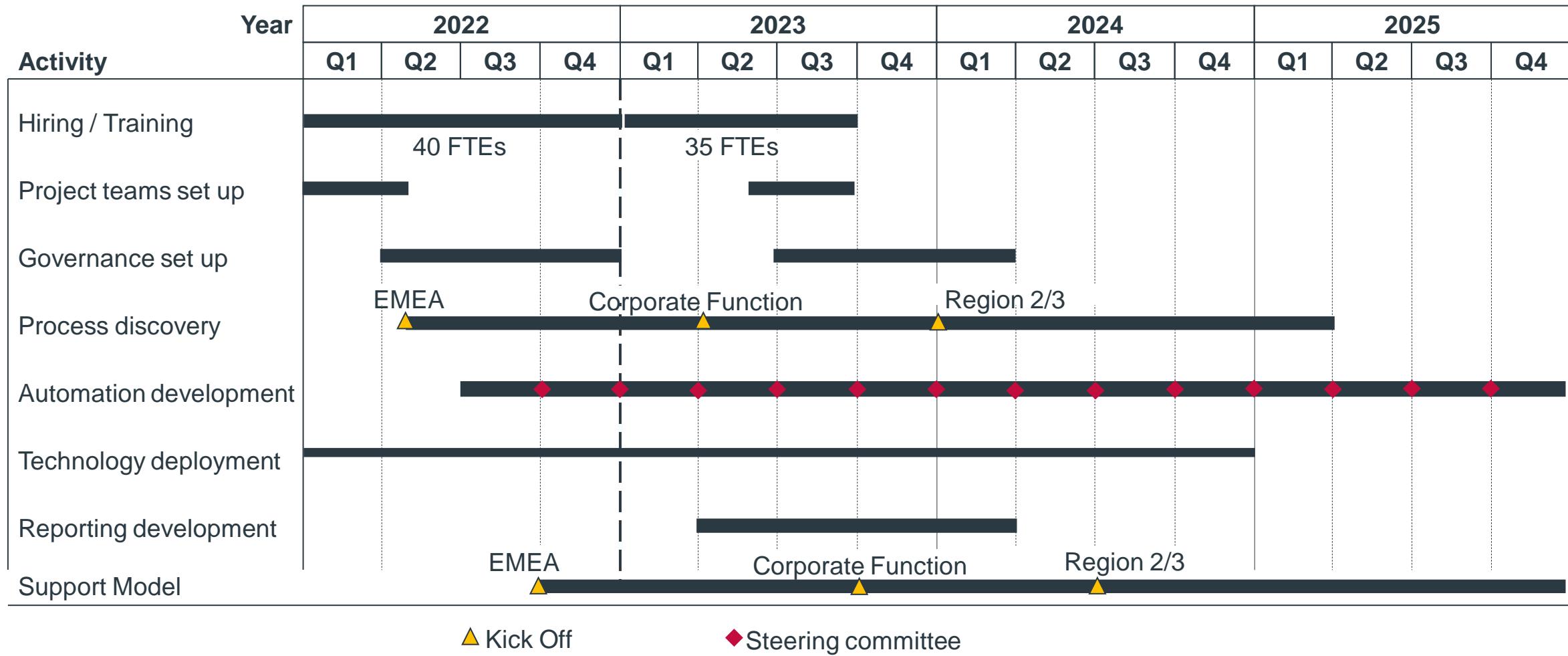


# Appendix – A&A Expansion Fully Loaded Costs breakdown

	\$ million	2022 Year 1	2023 Year 2	2024 Year 3	2025 Year 4
Personnel	75 FTEs	2.25	4.50	4.50	4.50
Reporting and Analytics	20 FTEs	0.60	1.20	1.20	1.20
Automation	50 FTEs	1.50	3.00	3.00	3.00
Project Managers	5 FTEs	0.15	0.30	0.30	0.30
Technology		1.17	1.49	1.50	1.68
Tableau - A&A Creator licenses		0.02	0.03	0.03	0.03
Tableau - Viewer end users licenses		0.01	0.03	0.06	0.06
Celonis		-	0.12	0.12	0.12
Alteryx		0.12	0.25	0.25	0.25
Trainings		0.04	0.07	0.07	0.07
Power Platform (Power apps): A&A team		0.01	0.03	0.03	0.03
Power Platform (Power apps): GFSS Users		0.03	0.05	0.08	0.10
Power Platform (Power automate): A&A team		0.01	0.03	0.03	0.03
Power Platform (Virtual agent)		0.05	0.10	0.15	0.20
IDP (Invoices) - Software + Vendor fees		0.23	0.15	0.21	0.24
IDP (Invoices) - IT fees		0.38	0.24	-	-
IDP (non Inv. docs.)		0.14	0.16	0.18	0.21
Alteryx servers		0.08	0.16	0.16	0.16
Infrastructure		0.04	0.08	0.13	0.17
Elasticstack		0.00	0.00	0.01	0.01
<b>TOTAL</b>		<b>3.42</b>	<b>5.99</b>	<b>6.00</b>	<b>6.18</b>

\$60k average annual cost per FTE

# Project timeline





# Critical Success Factors

## Management Sponsorship

- Identify this project as key to organization's strategy and portfolio direction
- Recommends opportunities to optimize cost/benefits
- Supportive of organizational shifts to drive further harmonization and adoption of the Automation & Analytics processes and procedures
- Ensures continuity of sponsorship
- Provides assurance
- Provides feedback and lessons learned

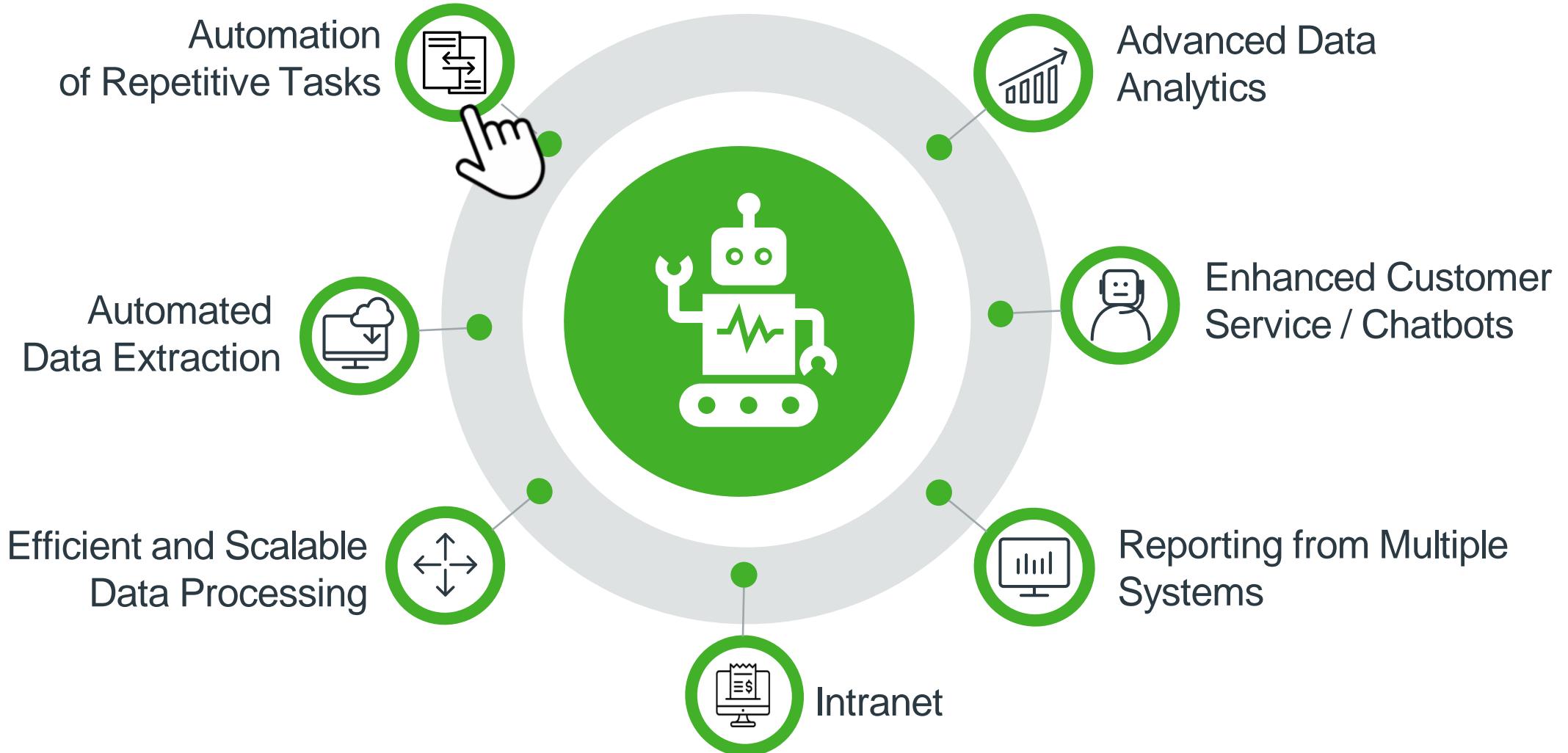
## Local Management Buy-In

- Identify change champion to overcome resistance to change, play an active role in project teams, and to have a collaborative approach with A&A team
  - Commits to cost reduction opportunities, role synergies, proactively identifies potential areas for automation and reporting opportunities connected to savings
- Points to be addressed:
- Perceived loss of tribal knowledge
    - Mitigated through improved processes, clear and robust documentation
  - Departure of long-tenured employees could pose morale risk for remaining employees
    - Mitigated through recognition of high performers and assurance to remaining employees of opportunities to succeed

## IT Partnership

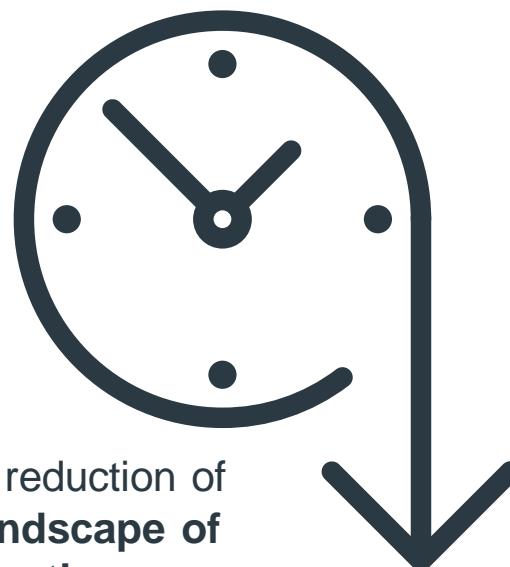
- Take a collaborative role that allows for GFSS to operate in a self-reliant, innovative, and flexible fashion, while still maintaining proper controls and governance
- Commits to sourcing initiatives in an agile fashion to allow for more targeted projects that require smaller investments, shorter POC's, and higher ROI requirements
- Points to be addressed:
  - Data/System Ownership
  - Mitigated through changes to the historical ownership of Systems and Data residing solely with CIO

# Automation and Analytics Offering



# Automation of repetitive tasks

- With an 8-hour workday being the global norm, the **average employee loses 60 hours per month** to easily automatable tasks
- By deploying a digital workforce and automating these repetitive tasks, employees could be given back a quarter of their annual work time (4.5 months) to **focus on more meaningful work**, boosting productivity and overall business value
- The GFSS A&A team is supporting the reduction of repetitive tasks by **utilizing a broad landscape of technologies and advanced skill expertise**, allowing for further expansion and scale to support the global IQVIA Finance Organization



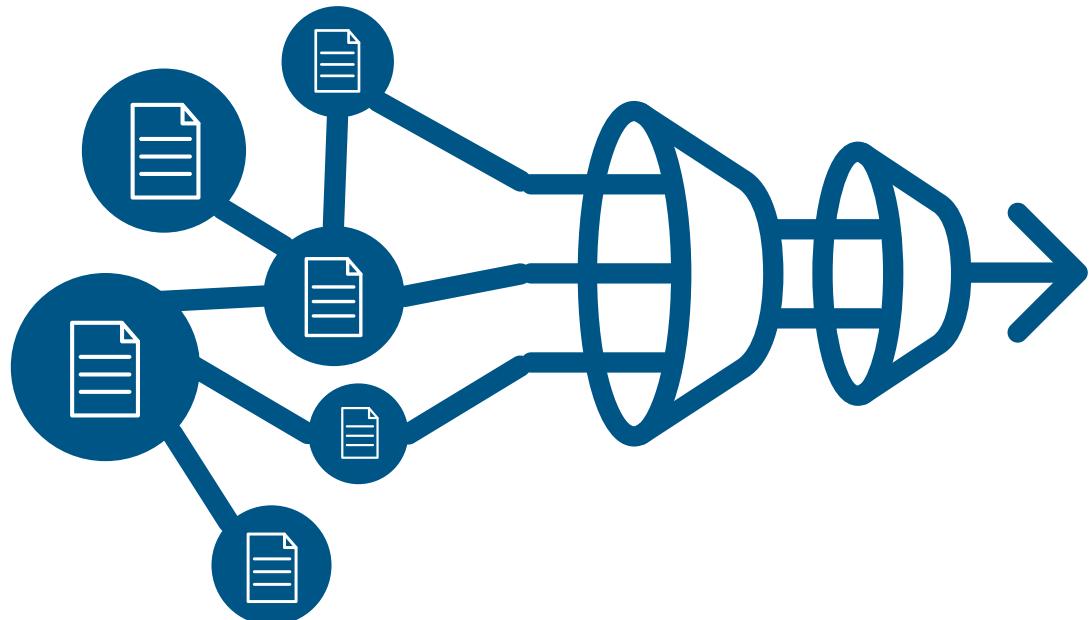
Office workers waste more than **3 hours** every day on **mundane, repetitive computer tasks**

Research by OnePoll, 2020

Technology which we use:



# Automated data extraction



Technology which we use:



Alteryx



Celonis



Python



Power  
Automate



Intelligent  
Document  
Processing



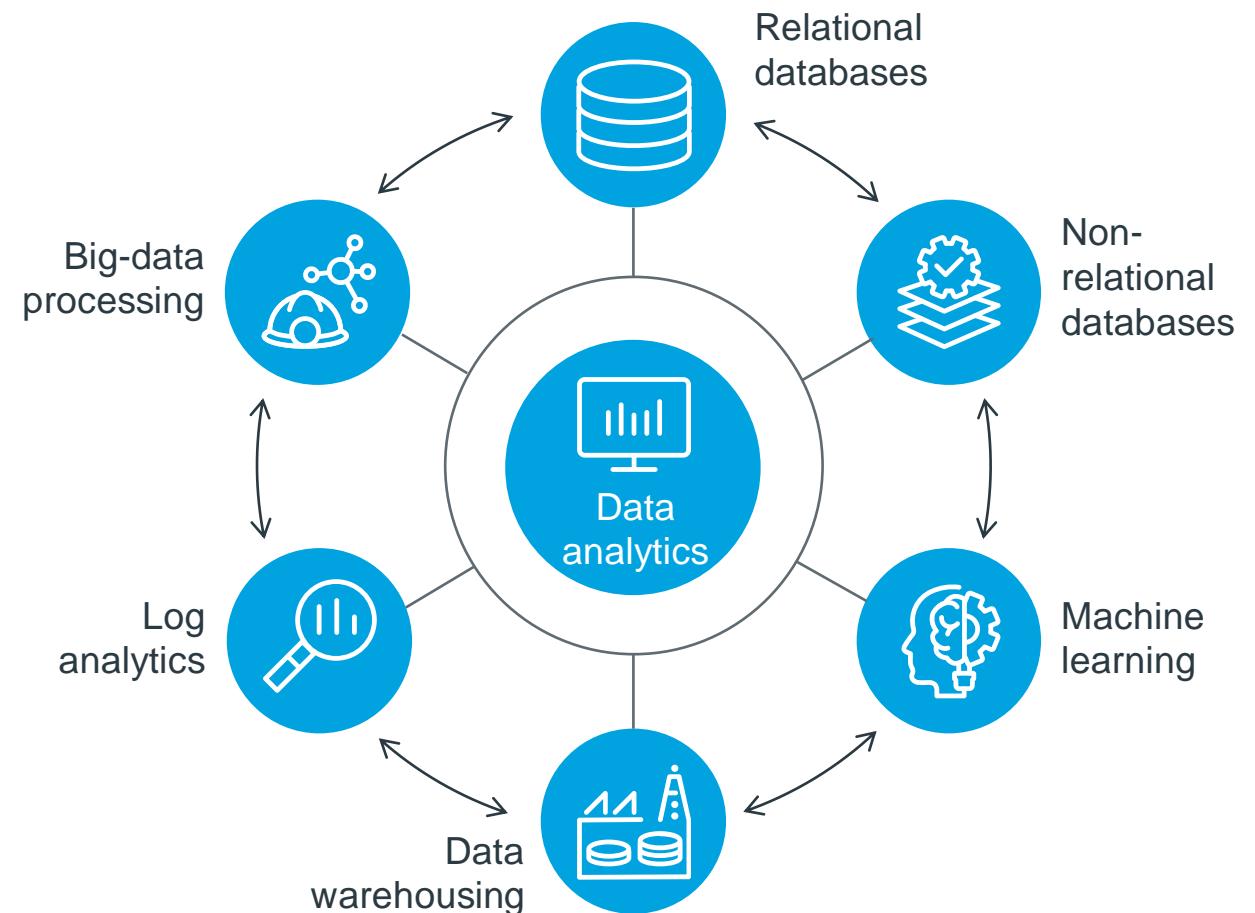
Intelligent  
Automation

- The GFSS A&A team helps IQVIA GFSS access the data they need, regardless of source system, often **reducing hours to manually pull daily**
- Gleaning data utilizing traditional methods often requires custom integration, technical scripts, or new tools introduced for each system involved in the Finance ecosystem – **requiring heavy resourcing needs and long times to achieve**
- The GFSS A&A team has a **comprehensive automation toolset capable of handling a high volume and complex set of data**, allowing for expansion of services across the global Finance Organization, while bridging the gap between IQVIA financial systems

# Efficient and scalable data processing



- IQVIA can gain deeper and richer insights by bringing together and analyzing relevant data of different structures, types, and sources. **IQVIA Finance currently operates over 40+ boundary systems** (i.e. Coupa, Concur, WorkDay, HFM) **with no central processing and analysis** on a transactional level.
- A historical solution for this type of scenario would be to build/buy a data aggregation tool or platform (Data Warehouse) to do analytics and ML on top of the data which is **typically a costly and time intensive investment**
- To perform efficient and scalable data processing, the A&A team is storing data in purpose-built data stores to get **quick results for complex queries** on structured data and analyze log data to monitor the health of production systems. **The result is the ability to analyze a vast array of data in a flexible, and real-time fashion.**



Technology which we use:



Alteryx



Celonis



Python



Power Apps



Power Automate



Power Virtual Agents



Intelligent Document Processing



Intelligent Automation



Blockchain



Tableau



Power BI

# Reporting Hub

## The Future Reporting Hub would allow for:

- ✓ **Reporting from multiple systems**
- ✓ **A centralized repository** for all reports and supporting raw details, accessible to end-consumers and the governance group
- ✓ **Customer centric interface**, with clear structure, accessible from mobile, subscriptions to allow for push updates, and easy-to-use forms for update requests
- ✓ **Business continuity** with the creation of backups to allow for a clear audit trail of all reports
- ✓ **Accessibility** of all business partners anywhere in the world on a 24/7 basis

Technology which we use:



# Enhanced Customer Service - Chatbots

- As part of the technology landscape the A&A team is exploring chatbot technology. A chatbot is software that simulates human-like conversations with users via text messages on chat. ***The key task is to help users by providing answers to their questions quickly and accurately***, utilizing pre-programmed responses, artificial intelligence, or both.
- GFSS A&A has developed a Proof of Concept for an Accounts Receivable Virtual Assistant to achieve the following:**
  - Check open receivable balances for a specific customer utilizing a customer name or number
  - Query SAP to check the AR balance and return it to the user together with a cleanly formatted support file report

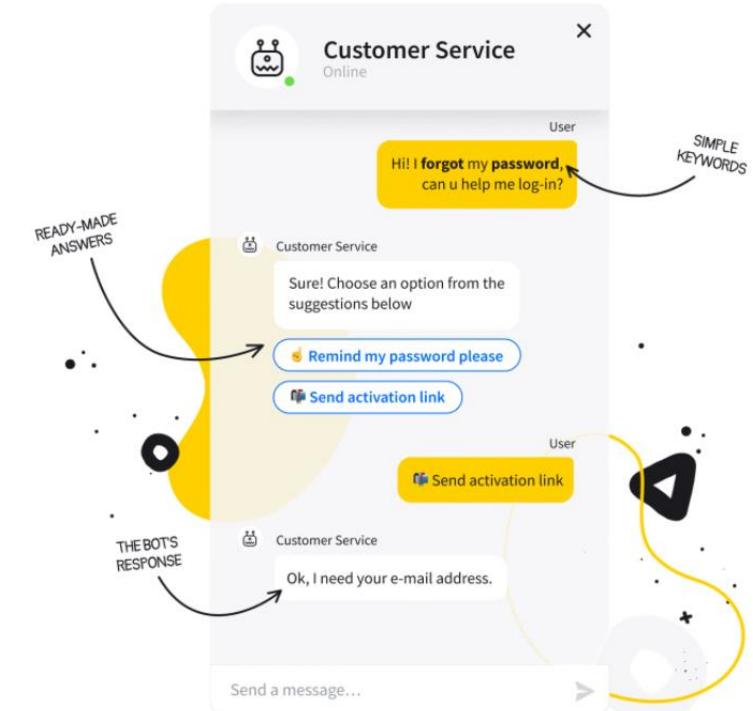
Technology which we use:



Power  
Virtual  
Agents



Intelligent  
Automation



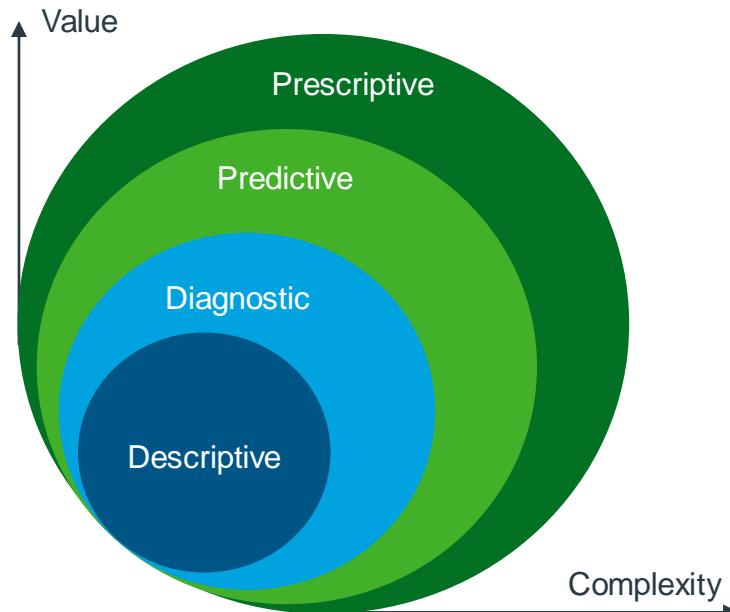
**WATCH VIDEO** 

Click on the link to see the video demo  
<https://web.microsoftstream.com/video/1ea1c89b-c8bf-4669-863f-6e9b437ef872>

# Advanced Data Analytics



- IQVIA finance is primarily focused on the early-stage data analytics, utilizing Excel, PowerPoint, and visualization tools like Spotfire
- Currently, there is **not a consistent, nor centralized function** with the ability to help support the various analytics types on both a Transactional and Consolidated view



Technology which we use:



Alteryx



Celonis



Python



Tableau



Power BI

## Descriptive:

- Comprehensive, accurate and live data
- Effective visualization

## Diagnostic:

- Ability to drill down to the root-cause
- Ability to Isolate all confounding information

## Predictive:

- Business strategies have remained consistent over time
- Historical patterns being used to predict specific outcomes using algorithms
- Decisions are automated using algorithms and technology

## Prescriptive:

- Recommended actions and strategies based on champion / challenger testing strategy outcomes
- Applying advanced analytical techniques to make specific recommendation

# Intranet design

*Re-design intranet pages for a smoother and client-centric design*

SharePoint

GLOBAL FINANCIAL SHARED SERVICES >  
IQVIA GLOBAL PROCUREMENT  
MYVENDOR >

Legacy Quintiles Utilization Support

Find summarized monthly utilization results for Legacy Quintiles and Novella Operations staff using the Spotfire utilization solution which has replaced the OBIA utilization tool and the interim excel utilization report effective 8 August 2018.

Please note:

- Dashboard results are updated weekly and available for review each Monday
- Final monthly reports are available working day 6 of each month

Access Spotfire Utilization Dashboards, training slides, and navigation video:

[Line Manager Dashboard](#) – LMs can review their direct reports weekly and monthly utilization results

[Line Manager Dashboard Training Slides](#) – Learn how to use the Spotfire dashboard and export employee level data

[Management Dashboard](#) – Management can review summarized utilization results for their functional area

[Management Dashboard Training Slides](#) – Learn how to use the Spotfire dashboard and export employee level data

[Utilization Navigation](#) – Training video providing overview of Spotfire utilization dashboard navigation

Report #

Departments | Finance

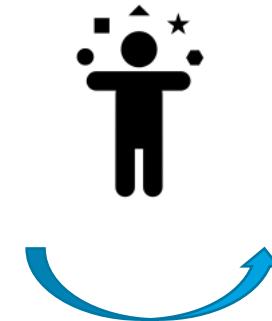
Finance

GLOBAL FINANCIAL SHARED SERVICES >  
IQVIA GLOBAL PROCUREMENT  
MYVENDOR >

Global Financial Shared Services Utilization Support Global Treasury Operations

Global Procurement Finance Support Services Financial Policies

Accounts Payable



World Clock Holiday Calendar Corporate Policies VIA Yammer Compliance

IQ IQVIA HR TRAVEL REGIONS DEPARTMENTS OUR COMPANY MY IQ Search Report

Departments | Finance | Global Financial Shared Services | Test2

AUTOMATION AND ANALYTICS

RECORD-TO-REPORT

ORDER-TO-CASH

MASTER DATA MANAGEMENT

PROCURE-TO-PAY

PAYROLL

VAT REPORTING

STAT REPORTING

TAX AND VENDOR

Automation & Analytics

Our mission is to standardize, simplify, and automate to increase agility and productivity to bring value to IQVIA internal customers

REQUESTS

Do you have a process to be automated?

Fill in the [Automation Request Template](#) and send it to [GFSS A&A Team](#)

Key Figures

+100 +400 +200

Processes Alteryx Reports

Work in progress

Leadership

Marianna Sadlonova Sr Director, Accounting Global Automation and Analytics +421 220 515 580

Anellya Ivanova Assoc Dir, Business Systems Reporting & Analytics

Enrique Lloret Assoc Dir, Business Systems Automation

IQVIA

# Governance and Target operating model



# GFSS A&A CoE – Scale up operations



America Delivery Hub

Automation CoE &  
EMEA Delivery Hub

ASIA Delivery Hub

Currently GFSS A&A is supporting EMEA business hours, however we propose to build 24/5 support around all regions

## Features:

- 24/7 Operations
- Full geographical dispersion
- Smooth and gradual deployment
- 24/5 Support Model



• Automation CoE

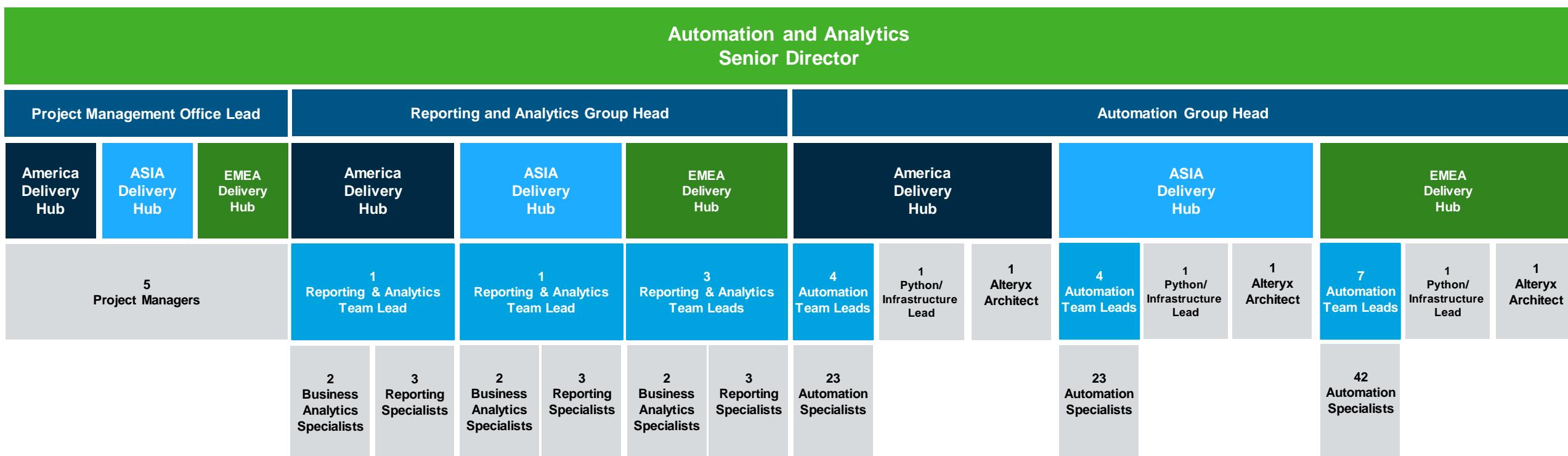


3 A&A Delivery Hubs

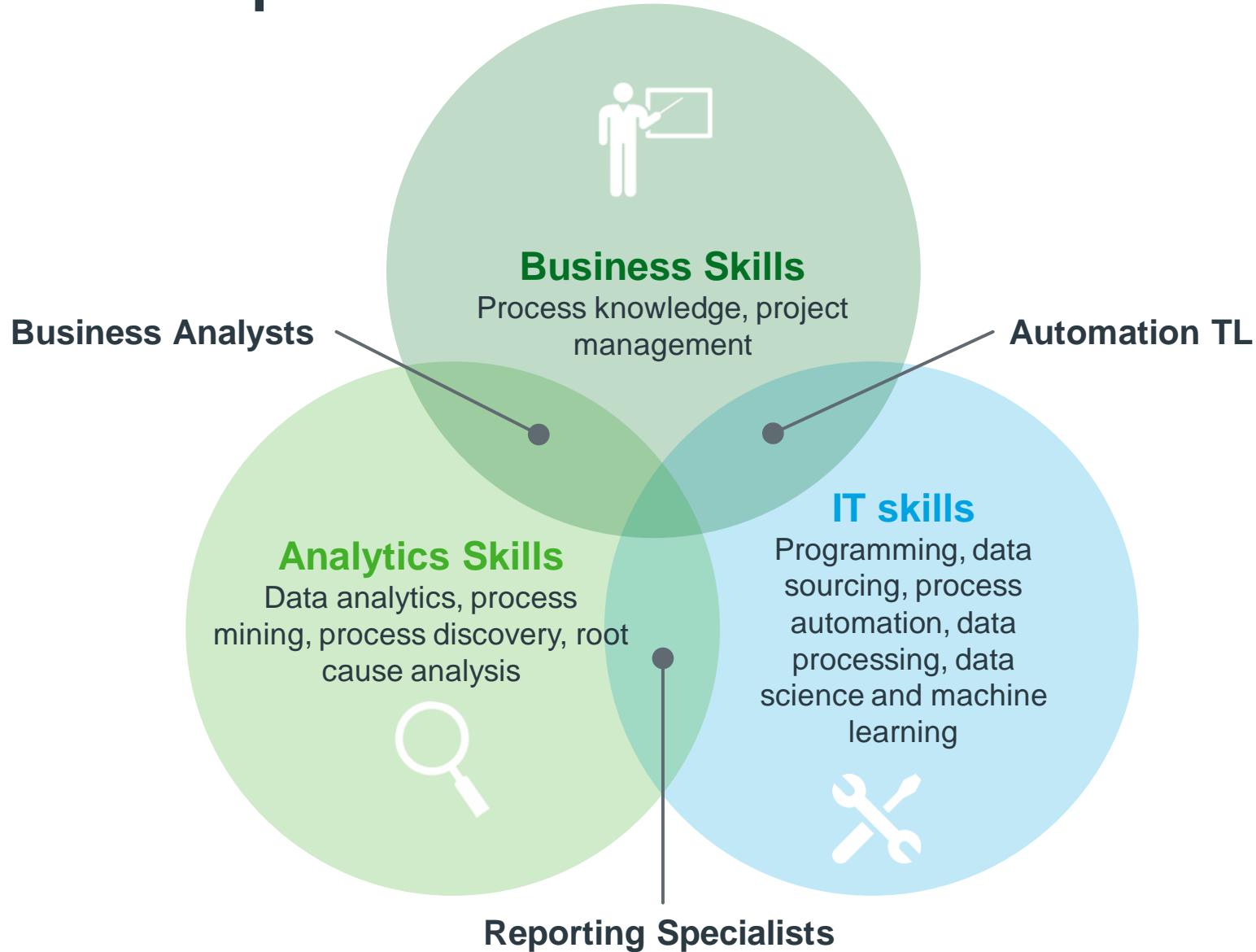
- EMEA
- America
- ASIA



# A&A Organizational Structure proposal



# A&A People Profiles



## Bolder.

Applying our capabilities more creatively in new directions, developing unique platforms, creating new solutions to old problems.

## Smarter.

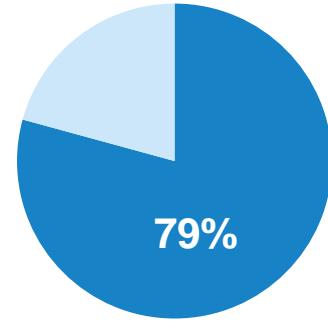
Prioritizing our actions and investments, focusing on customers, tapping into the best knowledge and experience, using data to drive decisions and actions, and harmonizing our legacy systems and processes.

## Leaner.

Leveraging automation and technology to achieve efficiencies, streamlining operations, redesigning processes to increase productivity.

# Skills Matrix

## 1 Finance Processes



Prior experience with GFSS processes

## 2 Analytics and BI

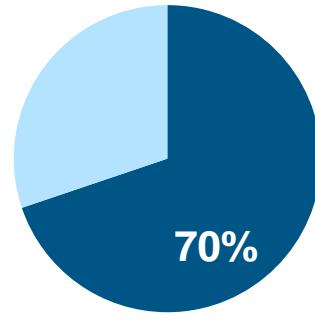
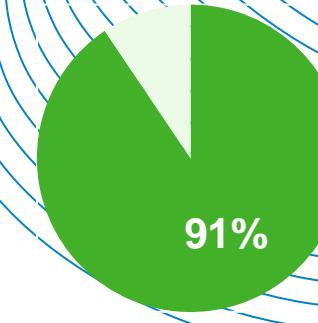


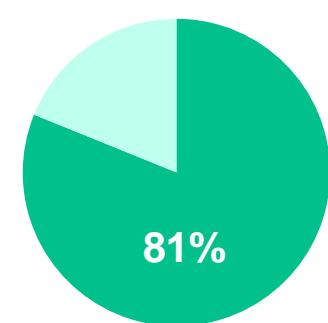
Tableau and Power BI are primary tools utilized

## 3 Programming



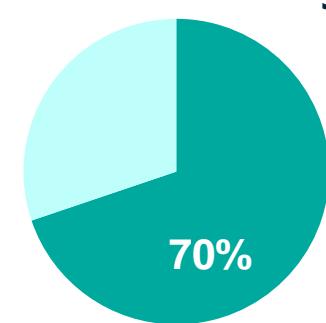
VBA, SQL, and Python most common languages

## 4 ERP



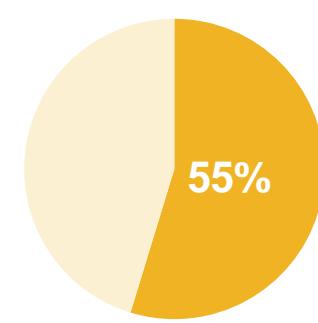
Prior experience working with ERP's

## 5 Data Science and Machine Learning



Prior experience with Alteryx, Data Science, and ML platforms

## 6 Process Automation



Practical experience in Process Automation

# Tech Academies

## Python lectures overview

**When**  
Biweekly  
Non-demo Thursdays  
Afternoon hours



**What**  
Basics  
Hands-on examples



**How**  
Presentation  
Live coding

**Who**  
7 Trainers  
More than 35 Trainees

## Topics



Setting up Python environment



Using basic data structures



Managing data flow



Working with data files



Working with Python modules



Basics of algorithms with Python



... and way more

# Training policy

## Objective

Provide employees with professional development opportunities to increase their skills and enhance their contributions to the GFSS A&A organization.

## Eligibility

Define the criteria that eligible people should meet to get a reimbursement for education costs organization (at least partly)

## Courses

Define the type courses that could be included in this policy to be approved



## Procedure

Define how to articulate the course/reimbursement for each country (request, approval, HR involvement, specific training contract, etc.)

## Reimbursement

Define how the reimbursement needs to be handled (documentation required, amount approved, etc.)

## Payback Requirements

Define if there should be any payback requirements and how to do so

# Alteryx Designer Certification Survey Results

23%



## Alteryx License Holders Certified

Requested to all Alteryx License holders (91 IQVIA employees) to inform if they currently hold an Alteryx Certificate

21



## Alteryx Designer Certificates

21 Employees proved their expertise and knowledge in Alteryx by passing any of their Designer certifications. (+5 vs Jan '21)

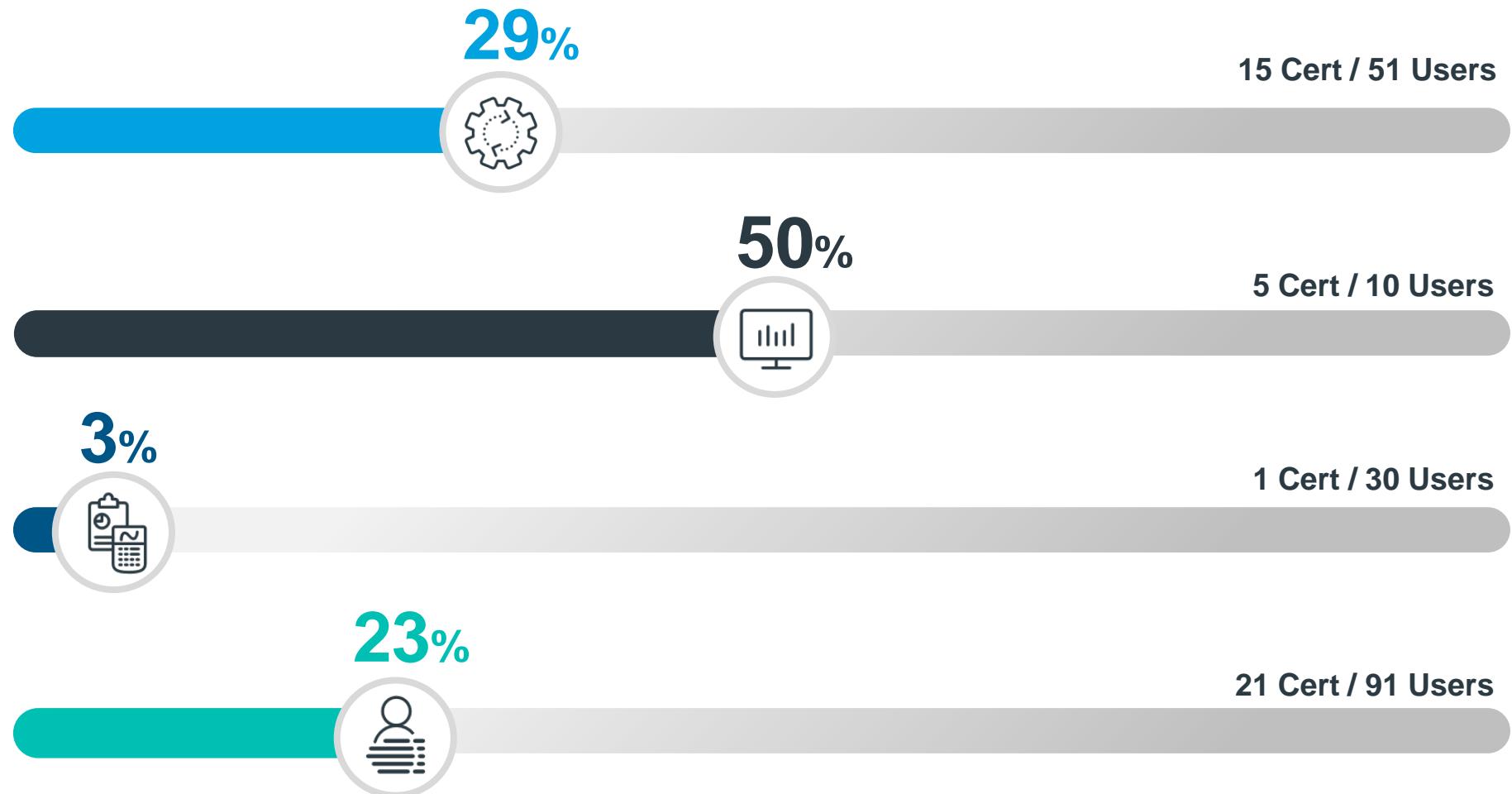
# Alteryx Designer License Holders Certification Share

**GFSS Automation Team**  
All Automation Team members hold an Alteryx Designer License

**GFSS Analytics Team**  
All Analytics Team members hold an Alteryx Designer License

**GFSS Others**  
Other Alteryx Designer License Holders within GFSS

**Overall GFSS Alteryx Users**  
Alteryx Certified of all Alteryx License Holders

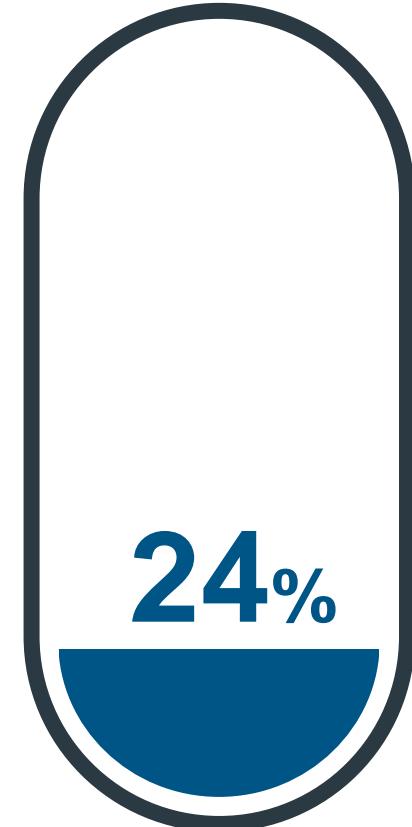
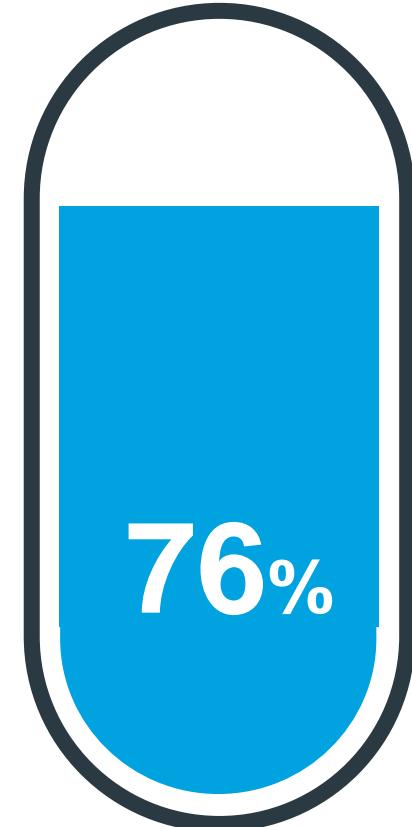


# Type of Alteryx Designer Certificate



## Alteryx Designer Core

16 Employees hold Alteryx Core Certificate (+3 vs Jan '21)



## Alteryx Designer Advance

5 Employees hold Alteryx Advance Certificate (+2 vs Jan '21)



1 Employee holds Alteryx Certified Professional and Alteryx Server Technical Certificate

# JIRA Software development Tool

## Portfolio management and Development cycle tracking

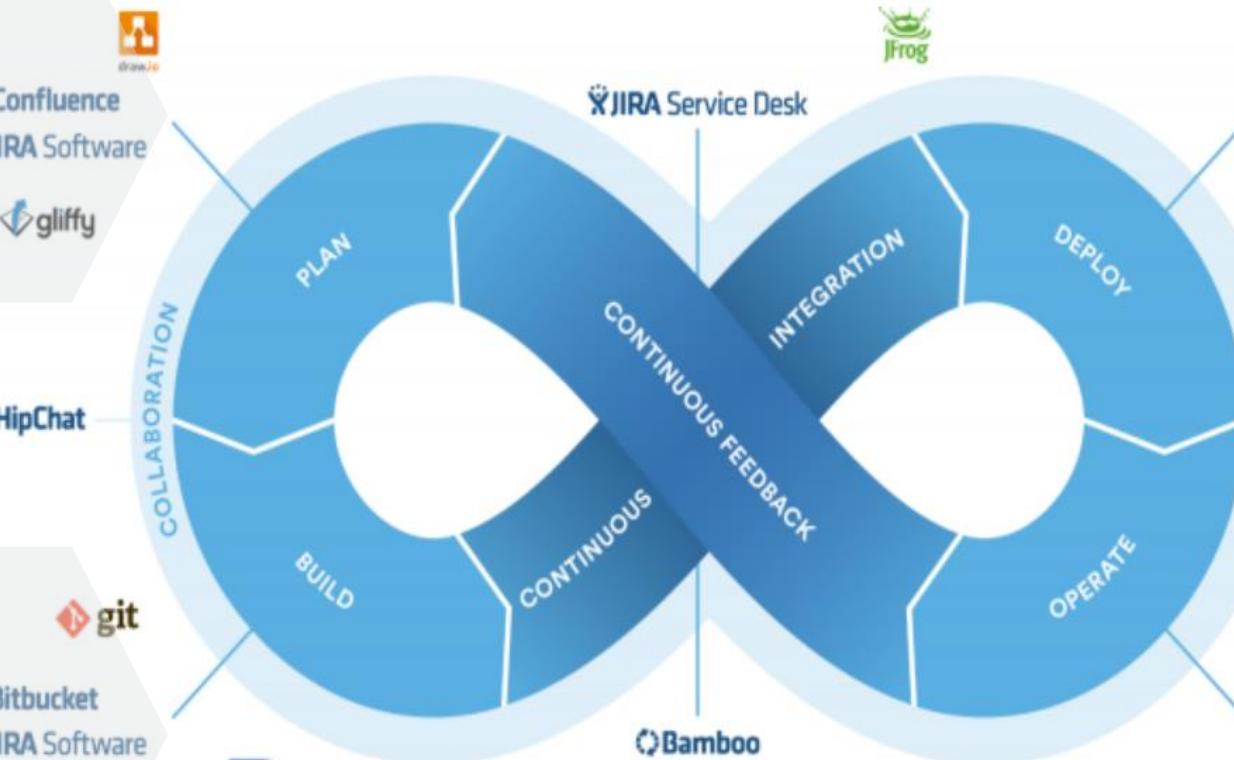
### Plan

Create user stories and issues, plan sprints, and distribute tasks across your software team.



### Build and Track

Prioritize and discuss your team's work in full context with complete visibility.



### Release

Ship with confidence and sanity knowing the information you have is always up-to-date.



### Report

Improve team performance based on real-time, visual data that your team can put to use.

# Project Management Office and Portfolio Management





# Delivery Methodology - Process

Regardless of whether a waterfall or agile approach is preferred, understanding the touchpoints between the stages of delivery is vital. The Delivery Methodology is not about blankly writing documents, but preferably it is about supporting and governing the delivery progression.

With Deliver Methodology in place we can ensure projects quality and compliance. Defined Process with RACI matrix is outlining responsibilities between all involved actors. Documentation Package allow us to harden the knowledge about the solution expectations and its implementation.

Standard SDLC tools are used to support Delivery Methodology execution in its' process and supporting documentation.

## Delivery Methodology – Process & RACI

Process Stage	Action	Product	SME	AS	PM	PA
Define	Process Analysis	PDD	C	R	A	C
	Application Assessment		C	R	A	C
	Functional Analysis		C	R	A	C
Design	PDD Business Sign-off	SDD	R	C	A	
	Solution Design		I	R/C	A	C
	Solution Review (Design Review Checklist)			R/C	A	
Develop	Solution Development	Solution		R/C	A	C
	Quality Review		QRC		R/C	A
	UAT Plan drafting		UATP	R	C	A
Debug	Internal Testing (Internal Testing Checklist)	UATP		R/C	A	C
	UAT		R	C	A	
	UAT Sign-off		R	C	A	
Deploy	Deployment to production env.	DC	I	R	A	
	Hypercare		I	R	A	
	Handover to BAU		C	R	A	

**Actors:**  
SME – Subject Matter Expert  
AS – Automation/Analytics Specialist  
PM – Project Manager  
PA – Platform Architect

**Documents:**  
PDD – Process Definition Document  
SDD – Solution Design Document  
QRC – Quality Review Checklist  
UATP – User Acceptance Tests Plan  
DC – Deployment Checklist  
OH – Operational Handbook

**Responsibility Matrix:**  
R – Responsible  
A – Accountable  
C – Consulted  
I – Informed

# Delivery Methodology – Process & RACI

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# Delivery Methodology - Documentation

Define

Design

Develop

Debug

Deploy

**Process Definition Document (PDD)** will contain a detailed process map and description. This will define the entire scope of the process but the granularity will need to be sufficient to provide enough detail for the specialist to be followed during solution design and development.

**Solution Design Document (SDD)** will complement the PDD and describe how the solution will be designed to successfully automate the process described in the PDD.

**Design Review Checklist (DRC)** will support design process with set of good practice to follow and incorporate in the solution design

**Quality Review Checklist (QRC)** will document the review meeting and show the fitness of the solution and how it adhere to the guidelines of platform specific good practice

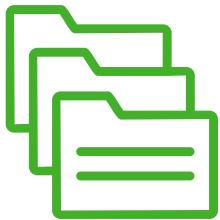
**Internal Testing Checklist (ITC)** will support testing phase with set of good practice to follow and incorporate in this stage  
**User Acceptance Test Plan (UATP)** will describe the number of cases to be processed during each phase of testing and what acceptance criteria have to be satisfied before the process can be progressed to the next phase.

**Deployment Checklist (DC)** will support solution deployment by documenting all of the necessary steps and products to be performed during the implementation project

**Operational Handbook (OH)** will consist of business relevant information how to interact with the solution and what steps needs to be follow for successful usage of the solution.

# Delivery Methodology - tools

## Confluence



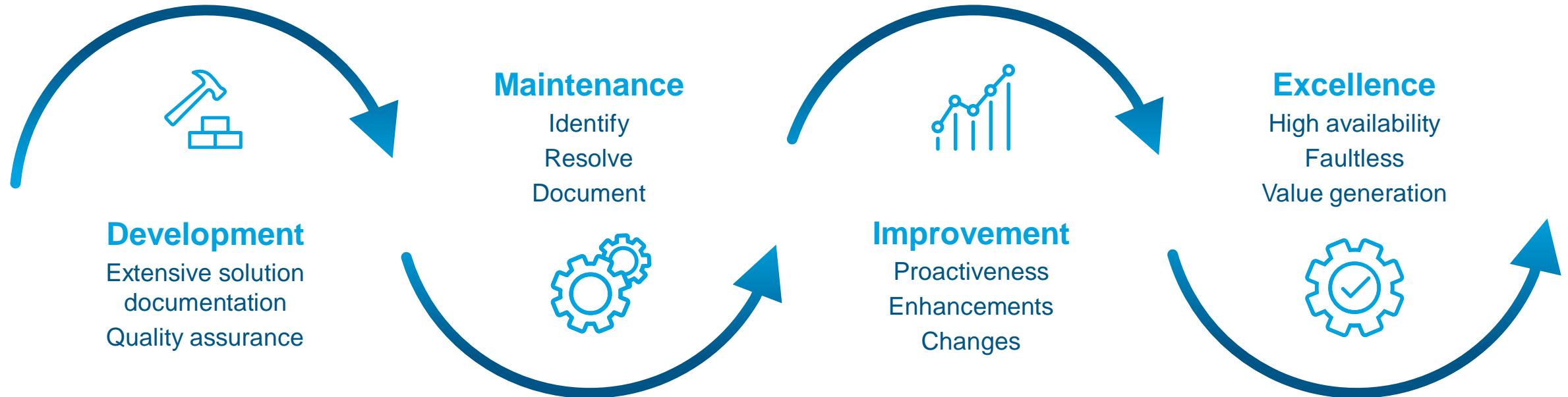
Confluence acts as a place to store full project documentation for ongoing and completed projects. Using this tool in project work reduces the amount of additional communication during the team's work and facilitates cooperation with the recipient of the solution.

## JIRA



JIRA is an issue tracking and project management software managed by the CIO organization in IQVIA. GFSS Automation and Analytics team will be using this tool to support our day-to-day project activities and equip us for successful and hustle-free Project Management.

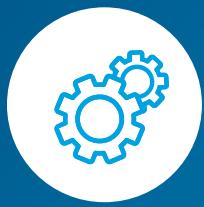
# Support Model - Overview



# Support Model - Overview



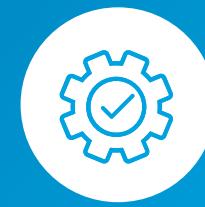
**Development**  
Our solutions are documented, reviewed and checked with our internal quality assurance checklist on each stage of development cycle.



**Maintenance**  
Our solutions cover many different processes within IQVIA. Because of vast landscape of data sources, ERPs and other factors something can go wrong. Support Model is focused on quick response to your problems and bringing back availability of our solutions.



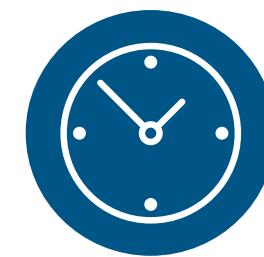
**Improvement**  
Our team is dedicated to create the highest quality products. To achieve that our solutions are constantly monitored, analyzed and improved in terms of execution speed, correctness of results and improved with enhancements and technologies.



**Excellence**  
To achieve excellence in automation and analytics we need feedback, improvement ideas and close cooperation with our customers. Support Model and Service Now are here to facilitate that journey.

# Support Model – Operating Model

## Operating Model



### Working hours

- 8AM – 5PM Central European Time
- Monday – Friday
- SLAs are in working hours



### Support Tiers

- Tier 1 – Support Team
- Tier 2 – Development Team
- Tier 3 – IT & Vendor Team (Not in A&A responsibility)



### Severity Analysis

- During the ticket creation (Requestor)
- During the ticket processing (Support Team)
- Focus on restoring availability of the solution

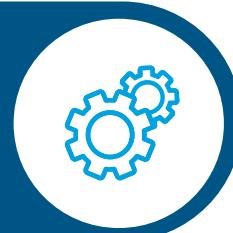
# Support Model - 3 Support Tiers

## Tier 1 Support Team



First line of support, responsible for issue evaluation, understanding and resolution. People selected from our team able to cover all technologies used in our solutions.

## Tier 2 Development Team



Second line of support, tickets can be escalated to our internal development team in case of extreme complexity of the issue. These people were developing the solution, they know it in-and-out and can solve most complex issues.

## Tier 3 IT & Vendor Team



Third line of support, for issues unrelated to our solution itself but those coming from IQVIA IT Infrastructure, ERP technical issues. Tickets escalated to this level are out of scope of A&A responsibilities.

# Support Model - Service Level Agreement

Severity	Description	Response Time (Working hours)	Resolution Time (Working hours)
High	The solution is not working and there is not known workaround. Outage impacts the health of Customer SLA for the supported process with risk of not meeting the SLA metrics.	2h	8h
Medium	The solution is not working and there is known workaround. Outage impacts the health of Customer SLA for the support process.	4h	24h
Low	The solution is not working and there is known workaround. Outage does not impact the health of Customer SLA for the supported process.	8h	40h

**Severity can be changed by support team after the ticket is created. Our team will focus on bringing back availability as a first step. Once we are sure solution is working, we will be looking for the root cause of the problem.**



# Support Model - ServiceNow VIA Forms

Forms are divided into 2 categories: Requests and Incidents. Incidents are related to any problems with solutions. Requests are related to general questions, change requests, improvements.

## Incidents

- ✓ Incorrect results or calculations
  - ✓ Missing results or reports
  - ✓ Unable to access the solution
- ✓ Solution caused disruption in the process

## Requests

(Evaluated by A&A Team, If more than 3 man days, new idea should be submitted)

- ✓ Change in solution behavior
- ✓ Request access to the solution
- ✓ Change in results
- ✓ Change in reports and calculations
- ✓ New ideas & Improvements for existing solutions
- ✓ Adding new data sources
- ✓ General questions