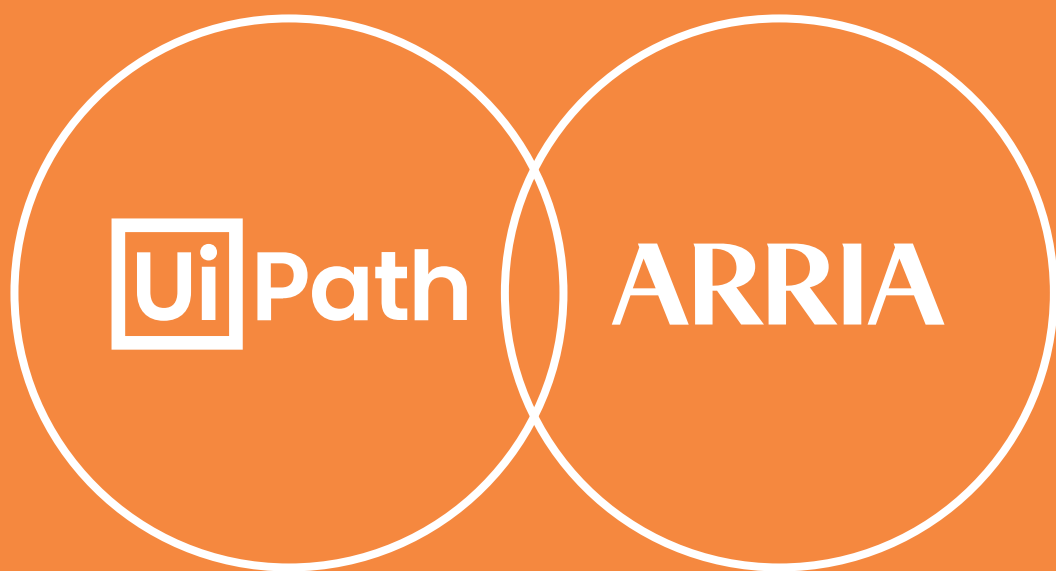


ARRIA

UiPATH RPA + ARRIA NLG

Transforming automation
workflows with today's
best-of-breed technologies

THE POWER *of* LANGUAGE



THE POWER *of* LANGUAGE

INTELLIGENT AUTOMATION RPA+NLG

Arria and UiPath have joined forces in a partnership to further advance Automation. By combining the power of RPA+NLG, enterprise clients are accelerating their digital transformation and automation initiatives.

Arria NLG is the recognized global leader in the field of Natural Language Generation (NLG), a form of artificial intelligence specializing in extracting insights from complex data sources and communicating that information in natural language (i.e. as if written or spoken by a human subject matter expert).

UiPath is one of the fastest growing and highest-valued AI enterprise software companies worldwide. It is leading the “automation first” era—championing one robot for every person, delivering free and open training and collaboration and enabling robots to learn new skills through AI and machine learning.



Quarterly Expenditure Variance Analysis

Overview

The quarter ending Dec-2018 had a total expenditure of \$160.2MM, which was less than the quarter ending Sep-2018 by \$39.9MM or 19.93%.

Key Drivers & Offsets

The above mentioned reduction was mainly due to savings in "Other Charges" of \$46.7MM, "Marketing" of \$9.8MM and "Group Head Office" of \$7.6MM. These were partially offset by "Variable Compensation", "Benefits" and "Equipment", which increased between the periods by \$9.4MM, \$650.1K and \$380.9K respectively.

By cost center, LOB7 expenditure was lower in the quarter ending Dec-2018 compared with the quarter ending Sep-2018 by \$48.0MM, LOB5 was lower by \$6.0MM and LOB6 was lower by

Commentary

Major expenditure items by line of business were the following:

- LOB1's item was from "Marketing" (Marketing Monthly Chargeout PL Acc Mgmt (US\$1.2MM)).
- LOB2's items were from "Professional Fees" (Ven028 (US\$195.0K) and Ven027 CPB Data Strategy (US\$119.8K))

\$200.1M \$160.2M (\$39.9M)
First Period Second Period Variance

Variance by Level 4



First and Second Periods By Customer Gr...



Line of Business

(Multiple Selections)

Variance by Country



Working Together To Transform Automation

UiPath RPA

Instantly performs the previously slow and error-prone human tasks of assembling data from disparate systems and processes.



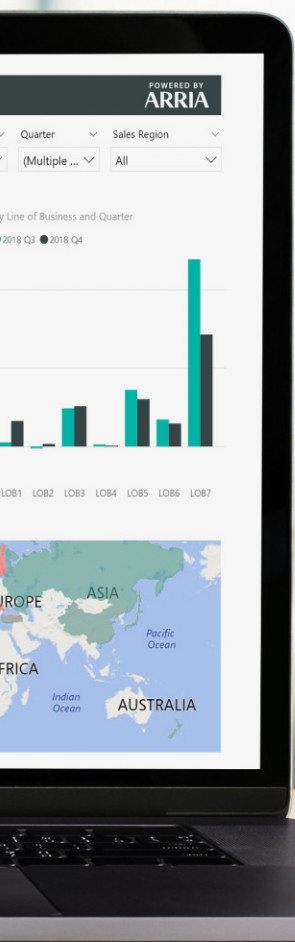
BI Dashboards

Aggregate data and provide illustrative two-dimensional visuals to extract key insights.



Arria NLG

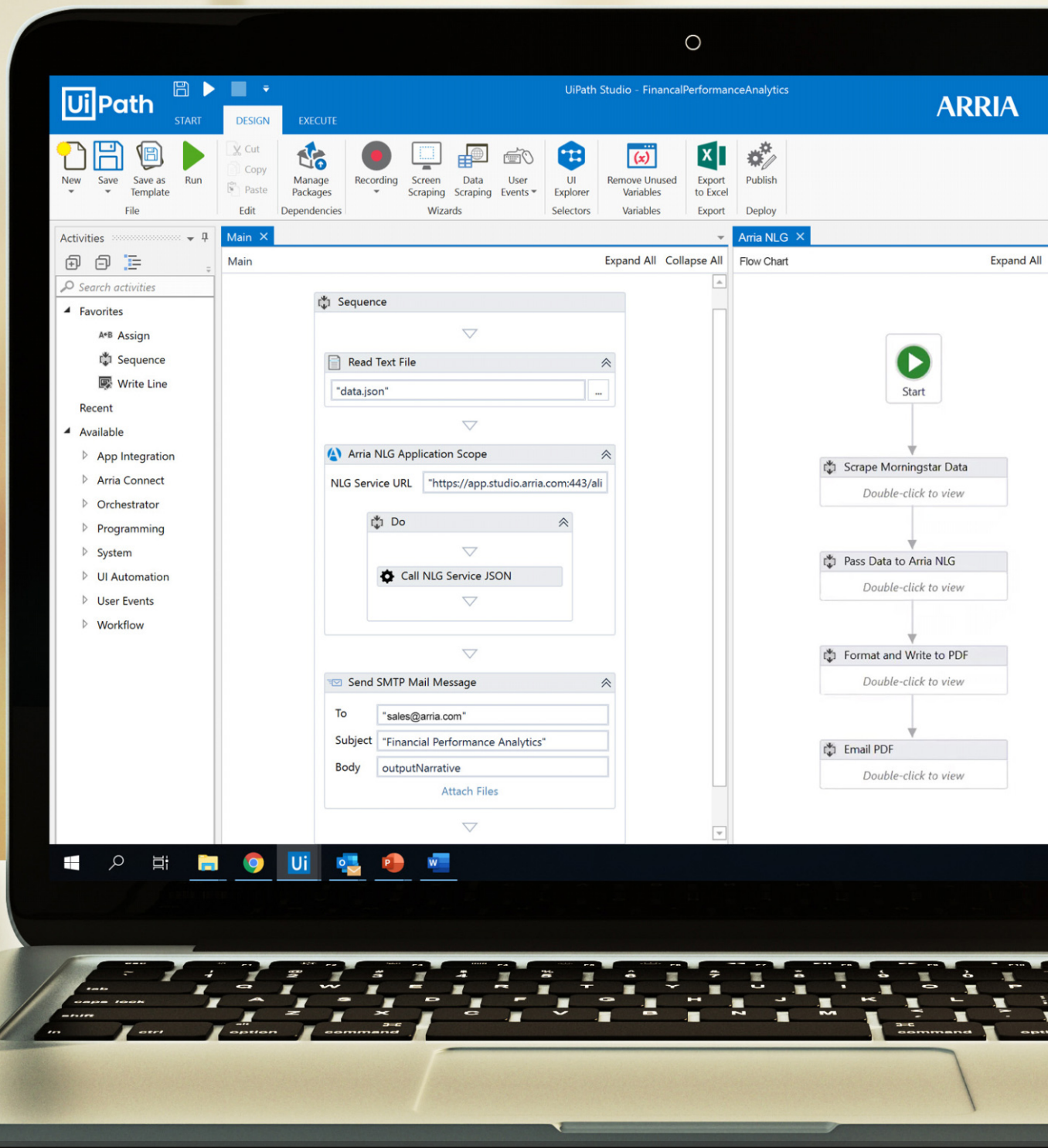
Instantly produces expert narrative that explains the insights found both within the displayed BI visuals—as well as within all of the underlying data. Revealing multi-dimensional information enables faster, better informed, decision-making.



Incorporating the two Automation Technologies is easy and seamless

ArriaConnect™ is part of UiPath's ecosystem and can be found on UiPath's UiGo! It's the plug-in you'll use to easily integrate Arria's NLG technology with your existing UiPath automations, or with your upcoming UiPath automations.

Click on this link to visit ArriaConnect on the UiGo! website.



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AUTOMATION ACCELERATED

RPA+NLG now integrated into a single platform

Two best-of-breed technologies within a single platform—making it easier for joint customers to receive the full benefits of both automation solutions

By partnering with Arria, UiPath becomes the first RPA provider to integrate NLG into its platform. After a careful selection process, UiPath chose Arria's NLG technology because of its powerful analytical and linguistic functionalities, and its ease of use. As a result, Arria is now incorporated into the UiPath platform and listed in the UiPath Go! ecosystem featuring easily downloadable, secure automations for the world's biggest RPA community.

Using these two technologies together gives enterprise-level clients the ability to dramatically accelerate their automation. RPA automates repetitive, manual, processes, elevating humans from mundane tasks, such as the gathering of accounting data from disparate, legacy systems, and the organization of that data into structured data sets. NLG instantly turns structured data sets into natural human language that equals that produced by a company's expert analysts.



Together these two leading-edge technologies deliver efficiencies that are economically impossible to achieve via headcount –giving users a huge competitive edge by significantly accelerating their automation.

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BRIDGING THE GAP

Robotic Process Automation (RPA) automates human actions

UiPath allows anyone to configure computer software, or a “robot,” to emulate and integrate the actions of a human.

The UiPath AI-powered RPA platform lets companies automate repetitive tasks and rule-based business processes resulting in operational acceleration, cost reduction, and increased employee satisfaction.

RPA is different from other enterprise automation tools. In contrast to other, traditional IT solutions, RPA allows organizations to automate at a fraction of the cost and time previously encountered. RPA leverages the existing infrastructure without causing disruption to underlying systems, which would be difficult and costly to replace. With RPA, cost efficiency and compliance are no longer an operating cost but a byproduct of the automation.

RPA robots are capable of mimicking many, if not most, human user actions. They log into applications, move files and folders, copy and paste data, fill in forms, extract structured and semi-structured data from documents, scrape web pages, and more.



“UiPath’s automation platform combined with Arria’s NLG platform helps bridge the communication gap between robots and humans. Customers can easily automate reports previously written by a human with the NLG activity for UiPath Studio.”

– **Dhruv Asher**
SVP, Head of Business Development and Tech Alliances, UiPath

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INSTANT NARRATIVES

Natural Language Generation (NLG) automates knowledge-work

Arria NLG's platform is an advanced AI system that can think and write like a person. It analyzes your structured data and instantly describes it in human language.

Arria's platform is the only NLG solution that **combines advanced analytics with advanced computational linguistics in one easy-to-use platform**—that is customizable, configurable, and controlled by the user.

Our NLG platform ingests vast quantities of data from multiple data streams, analyzes it, draws conclusions—and instantly turns it into written (or spoken) words as if written by a human subject matter expert.

The final written output is indistinguishable from the work of trained analysts—except for the incredible volume and speed with which it is produced. The insights contained within the data are discovered and communicated in real-time for immediate action.

And, the written reports, explanations and summaries it creates are automatically custom tailored to the specific readers of the narratives.

ARRIA

"Arria and UiPath have a close synergy as we both serve the same enterprise-level businesses focusing on similar use cases. Where there is RPA, there is typically a need for NLG, and vice versa. This is the natural extension of automating both the workflow and language-based analytics."

– **Lyndsee Manna**
SVP, Business Development & Partnerships, Arria

THE POWER *of* LANGUAGE

ADVANCED INTEGRATIONS

Key integrations allow you to narrate your entire dataset (beyond your displayed visuals)

Arria easily integrates with all major BI dashboards, RPA systems, virtual assistants and chatbots

Arria's **Business Intelligence (BI)** integrations aggregate and narrate *all the underlying data* available within your dashboards going well beyond two-dimensional visuals which are open to interpretation and do not typically tell the whole story. This gives you unlimited drill down capabilities with an unlimited number of dimensions from any number of external data feeds.

Expand your existing **Robotic Process Automation (RPA)** system (which automates repetitive tasks) with instant NLG-generated narrative summaries and reports.

Bringing the power of language to **Conversational AI** is where the convergence of technologies really comes to life. Arria's advanced NLG enhances virtual assistants and chatbots—shifting them from “command/respond” to dynamically generated data-driven conversations.

Arria's key integration partners include:



RPA+NLG USE CASE #1

Global financial institution seeking to transform BI dashboard and automate FP&A reports—dramatically improving decision-making



Industry

- Banking

Desired Outcome

- FP&A BI Dashboards
- FP&A Real-Time Reports

RPA Automation

- Assembling multiple complex data streams in preparation for analysis

NLG Automation

- Instantly producing expert natural language narratives explaining the entire BI dataset

The Challenge

This international bank began its digital transformation with the Finance Department. Through mergers and acquisitions over many years, Finance was burdened with disparate legacy systems that did not communicate with one another and, therefore, could not be represented at once within the same BI dashboard. As a result, FP&A reporting was a tedious, manual process, prone to human error and rarely completed in a timely manner.

The Solution

As a starting point, **UiPath RPA** was used to aggregate data from the various legacy systems in preparation for streamlining it into one centralized Business Intelligence (BI) dashboard. **Tableau** was then used to provide

FP&A REPORTING

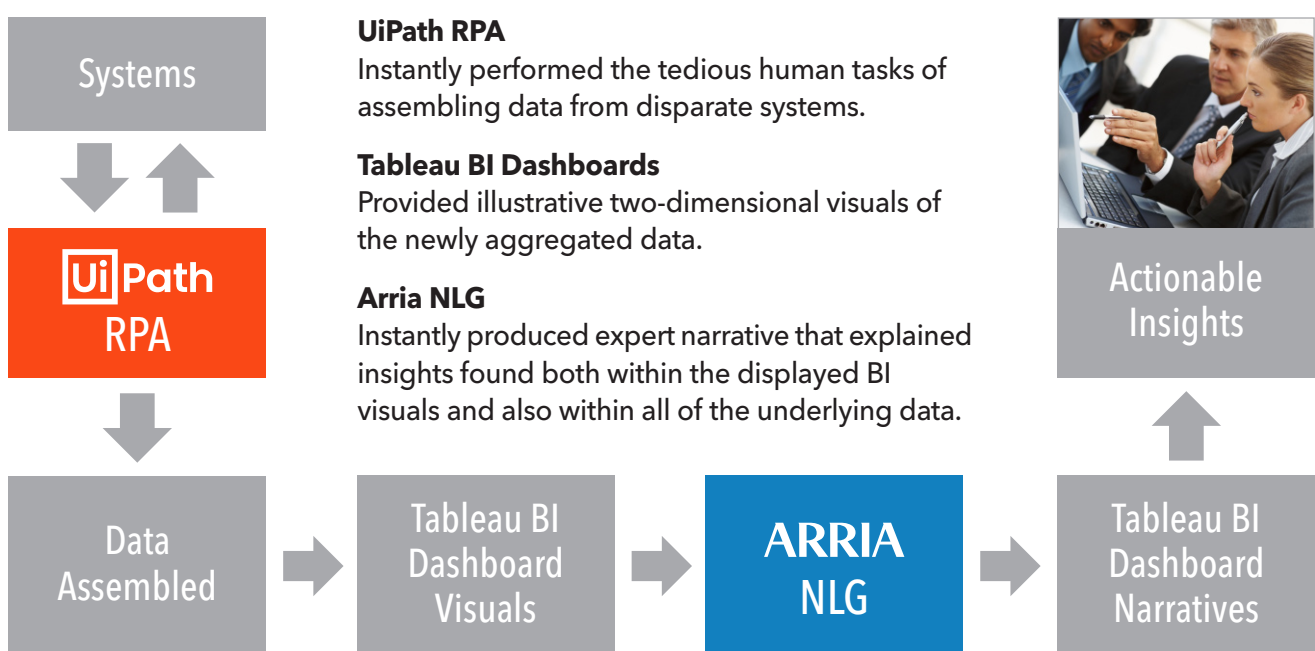
powerful analytics and visual insights. This was a huge step in the right direction. However, not every dashboard viewer was skilled at identifying and interpreting the most important visuals. Even the most insightful dashboard visuals provided only partial, two-dimensional representations of the underlying data. To get the most out of its investment in digital transformation, the company needed to add dynamic NLG to its BI dashboards. **Arria NLG** was selected because it was the only NLG provider that met the bank's criteria of being an open API-based system, deployable entirely on premises,

controllable by the bank's analysts, with advanced linguistics and math capabilities.

The Result

The company's BI charts and graphs are now explained in natural human language, meaning that all of an organization's employees—not just data scientists—can understand the BI dashboard on their own. In addition, FP&A and operational reporting, which was once manual, tedious, and often late, is now created automatically and in real time, saving thousands of analyst hours per year—and resulting in better decision-making across the bank's many divisions.

RPA+NLG **Systems-to-People** workflow for real-time actionable insights



RPA+NLG USE CASE #2

Big Four consulting firm producing a myriad of detailed, expert client reports on a rigorous schedule



Industry

- Global Consulting

Desired Outcome

- Automation of Client Reports

RPA Automation

- Assembling multiple complex data streams in preparation for analysis

NLG Automation

- Instantly producing expertly written, customizable reports for the firm's clients

The Challenge

In providing a range of services to its global clients, this firm's typical deliverables included written reports produced at regular intervals. Depending on the subject matter, the reports might include data from the firm's own cloud or offices in hundreds of locations around the world; from client data sources in multiple locations; or from various external sources, such as publicly available government data. For their analysts, compiling the data was a manual, repetitive process—tedious, slow, and prone to error. Similarly, writing the reports was time-consuming and produced a significant QA burden.

The Solution

With prior experience helping their clients implement

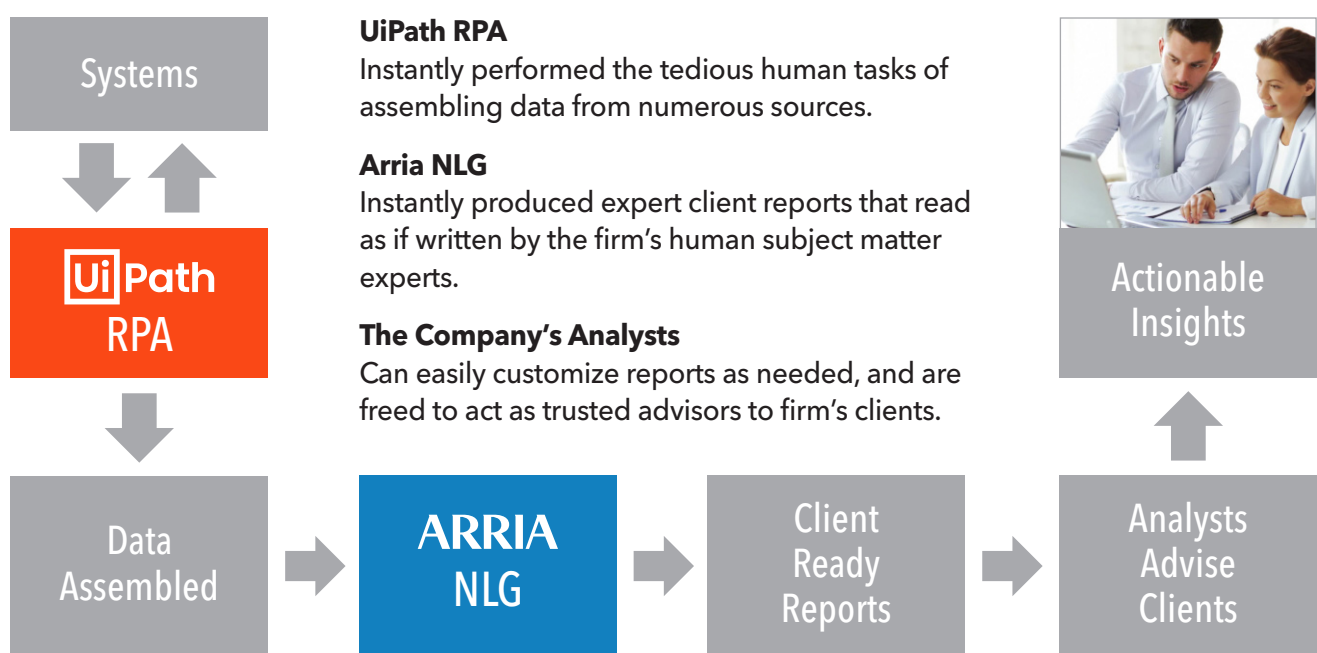
GLOBAL CLIENT REPORTING

time-saving RPA systems, the company knew that it could use RPA to automatically gather data used in client-facing reports, so it engaged **UiPath RPA** technology. In order to automate the next step—the writing of the client-facing reports that were the ultimate expression of the company’s consulting engagements—the firm turned to **Arria NLG**. Based on Arria’s success automating the reporting of other global enterprise-level companies, the firm knew Arria’s NLG technology could meet their stringent quality-of-output requirements and also integrate seamlessly with their UiPath automation.

The Result

By automating the collection of data, and incorporating the best practices of its top analysts into Arria’s NLG platform, the firm was able to deliver reports to clients *immediately* at the outset of each reporting cycle, and even upon demand in real-time. The successful combination of RPA and NLG to produce client-facing reports freed the company’s top analysts to perform higher-level tasks, such as interacting with clients in an advisory role. The result was increased satisfaction among clients, who appreciated the concierge attention, and greater efficiency and competitive advantages.

RPA+NLG **Systems-to-People** workflow for expert client reporting



RPA+NLG USE CASE #3

Major investment management company wanting to completely automate the creation and delivery of their Fund Commentaries



Industry

- Investment Management

Desired Outcome

- Full Automation of Fund Commentaries

RPA Automation

- Assembling Morningstar data, formatting and email delivering of reports

NLG Automation

- Instantly producing expertly written fund commentary reports

The Challenge

Historically, this global investment management company with nearly one trillion dollars under management, has devoted significant human capital to the creation of fund commentary and performance attribution reports. A standard comprehensive report typically takes up to 70 individuals at least 30 days to produce. In most cases, by the time the report is delivered, it's outdated.

The Solution

The company engaged the firms that Gartner considers the world leaders in RPA and NLG, **UiPath** and **Arria NLG**. Arria Connect—a custom activities module developed specifically for UiPath—was already available on UiPath's site, which made it easy to pair NLG with

FUND COMMENTARIES

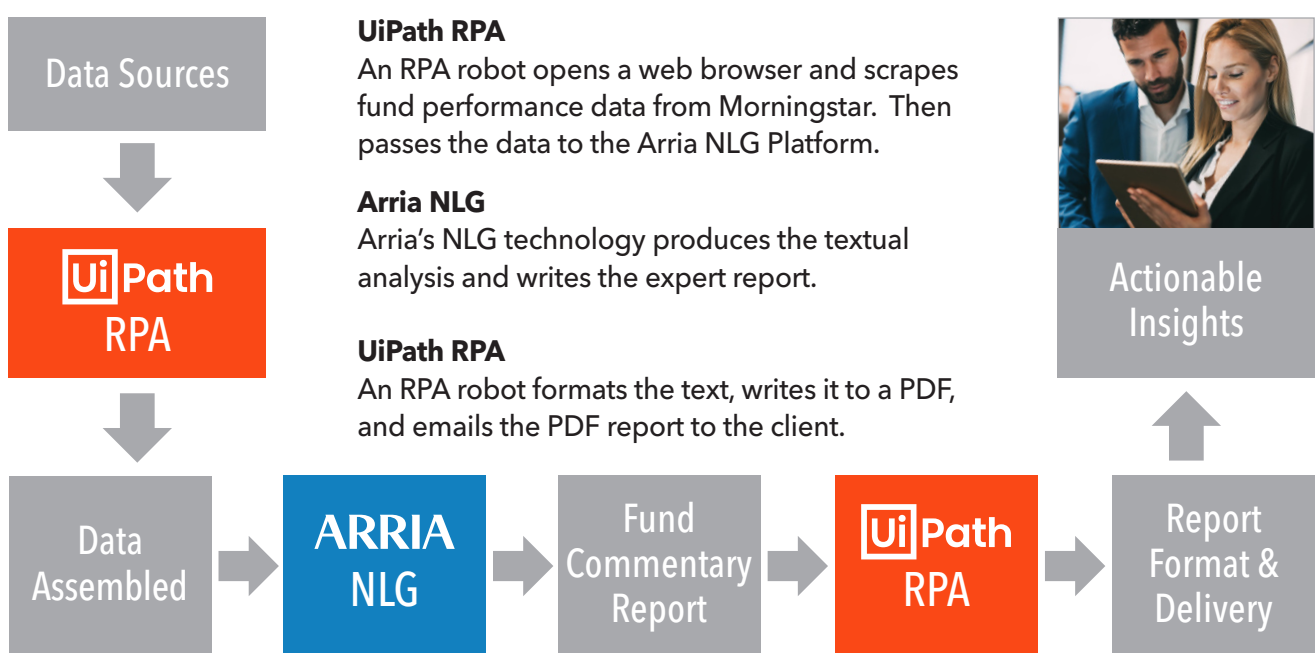
the company's RPA automation projects in order to generate written text, summaries and reports needed for their fund commentary.

The Result

The UiPath robot opens a web browser and scrapes Morningstar web pages for data pertaining to the iShares Core MSCI Emerging Markets ETF. The robot captures the fund summary, including asset allocation, top holdings, top sectors, and selected risk and return metrics. The data is then parsed into a spreadsheet and sent to Arria's platform, which instantly creates two pages of

narrative analysis, beginning with a summary of overall fund value and risk profile. For each of the top holdings, the narrative supplies the percentage of total fund value, the most recent stock price, stock price change since the prior month, and the 52-week trading range. The report concludes with the fund's asset allocations presented in several categorizations. With the narrative complete, the robot implements a few simple formatting improvements, saves the resulting file as a PDF, and emails it to the recipients. The company now enjoys exceptional operational efficiencies.

RPA+NLG **Systems-to-People** workflow for expert fund commentaries





ARRIA

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YOU EMPOWERED

THE ARRIA DIFFERENCE

1. Arria NLG Studio—#1 Platform

Simple to use, yet sophisticated in power—the Arria platform gives you the ability to take advantage of pre-built out-of-the-box projects or you can create and customize your own projects.

2. Combined Technology Power

Arria is the only solution to combine advanced analytics and advanced linguistics within one tool. This gives you the ability to generate true data-driven narratives.

3. Deployment Options

Keeping data in one place and under your control is key to supporting best-practice data security. Therefore, Arria offers three deployment options: on premises, private cloud or public cloud.

4. Flexible Architecture

Arria's flexible RESTful API architecture allows seamless integration with a variety of systems that use various data formats. Call Arria services from any system without installing additional software, with any data format (via conversion to JSON).

5. Advanced Integrations

Arria easily integrates with all major business intelligence (BI) dashboards, Robotic Process Automation (RPA) systems, virtual assistants and chatbots—it's the only BI integration that has the ability to narrate your dashboard's entire underlying dataset.

6. Unparalleled NLG Expertise

Arria has a high concentration of NLG expertise (and 25 NLG patents) supported by founding NLG scientists who are globally recognized as industry leaders.

7. Raving Fan Client Support

Your success is our success! Arria has put great effort into developing its best-practice methodologies along with a library of online training to help bring you and your team up to speed quickly. And, of course, we're always here to help!

8. Flexible Pricing

Why pay for more than you need? Arria's consumption-based pricing gives you the ability to scale as needed to align with your budget and usage.



ARRIA REVIEWS

Gartner

"Arria is a world leader in NLG"

"Arria is a world leader in NLG, with 23 core NLG patents. Its Arria NLG Studio product is an enterprise-level, self-service NLG design tool with advanced analytics and linguistic functions that enables users to easily create, edit and publish NLG narratives. Arria solutions are deployed globally."

– **Gartner**, *"Market Guide for Natural Language Generation Platforms"*



"Dramatically improve the speed and efficiency of reporting"

"Arria NLG Studio's BI analytical and linguistic capabilities...dramatically improve the speed and efficiency of our reporting. A key benefit for us is that we can use this powerful platform to create our own NLG applications within our department."

– **Brian O'Connor**, *Lead Director, Advanced Analytics Global Business Services, AstraZeneca*



"Fundamentally changing the services we offer to our clients"

"Arria helped take the fear out of AI by giving us the control and flexibility to replicate in software what we normally do, only in a much simpler, more productive manner and with accuracy and consistency of the language."

– **Rob Moody**, *Chief Innovation Officer, EY UK&I (Ernest Young)*



ARRIA REVIEWS

FORRESTER

"Arria is a Leader with robust writing automation and analytics"

"Arria is a Leader with robust writing automation and analytics capabilities. We found Arria's writing automation capabilities to be the most comprehensive among all participants. Its founders have written definitive books on NLG and hold more than a dozen patents on the technology... Arria is best for companies that need a "space shuttle" for writing automation. If your writing automation and NLG for analytics call for the top-of-the-line capabilities with a comprehensive IDE, and a myriad of rules and templates, Arria is a perfect fit for you.

– **Forrester** *"New Wave Report" on Natural Language Generation*



BNY MELLON

EAGLE
INVESTMENT SYSTEMS

"Arria's industry leading NLG capabilities"

"We're excited to offer our clients access to Arria's industry leading NLG capabilities to help our clients utilize and analyze their data stored within the Eagle platform. We're working with Arria to build a set of capabilities in portfolio management, portfolio analysis and performance measurement that will help our clients significantly reduce the amount of time they spend writing personalized client summaries and reports and allow them to spend more time interacting with their clients."

– **Joel Kornblum**, *Global Head of Strategic Alliances, Eagle Investment Services*

For more reviews, visit arria.com



Take The Next Step

ArriaConnect™ activities give you seamless integration between UiPath and Arria NLG Studio—letting you automatically generate written (or spoken) text, summaries or reports from the data in your workflow.

Arria's integration with UiPath makes it easy for UiPath Studio developers to bridge the communication gap between robots and humans by adding automated natural language to any workflow. Arria's NLG technology ingests vast quantities of data, analyzes it, draws conclusions—and instantly turns it into written reports, explanations and summaries that can be custom-tailored to the specific readers of the narratives. This dramatically improves the speed and efficiency of your analytics and reporting.

Custom Activity

Arria Connect

Arria Connect custom activities allow you to leverage Natural Language Generation (NLG) in your a...

ARRIA **FREE**

[Click on this link to visit ArriaConnect on the UiGo! website](#)

For more information, including a demo tailored to your specific use-case, please contact sales@arria.com
