Intelligent Automation

Technology Showcase

Sensitivity: Internal

Introduction to K2

Sensitivity: Internal

Foundational pillars of Intelligent Automation

Digital Process Automation (DPA)

"turning human-centric manual or paper processes into digital apps requiring compelling and informative user interfaces and continuous availability."

Robotic Process Automation (RPA)

"the execution of repetitive, replicable tasks that humans would otherwise have to perform"

Artificial Intelligence (AI)

"broad term for technology that uses data to "think" more like humans, making sense of large streams of data"

Sensitivity: Internal

K2 Process Automation Platform

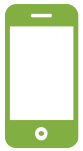
Bringing IT and business together

Workflows
Powerful workflow without code

Forms
Feature-rich forms

Integration
Integrate with anything

Analytics
Deeper insight



Mobile
Make Apps mobile

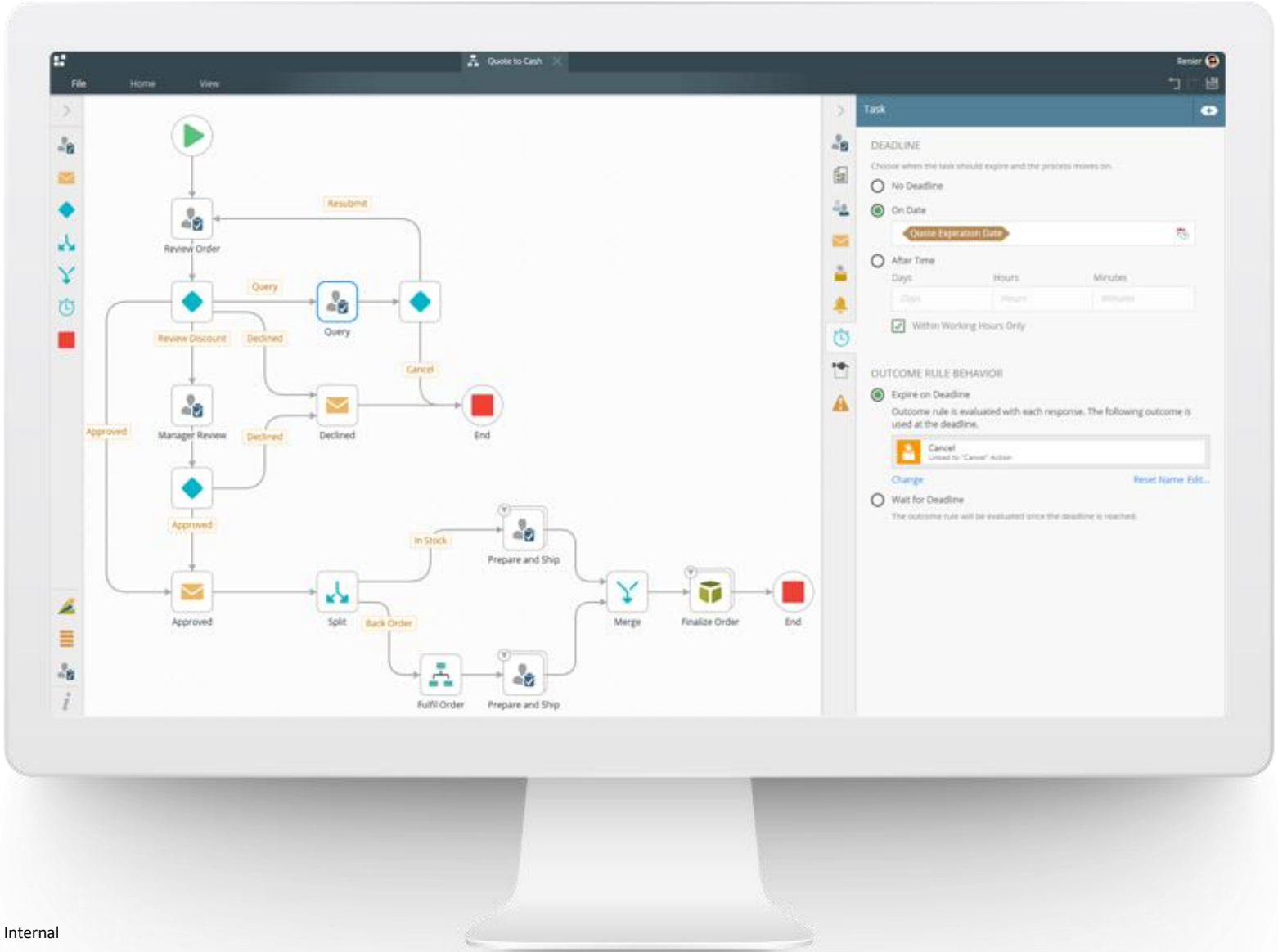
Security & Governance
Control and compliance

Deployment
Choice of Deployment

Pre-built apps
Build Apps faster

Sensitivity: Internal

K2 CAPABILITIES

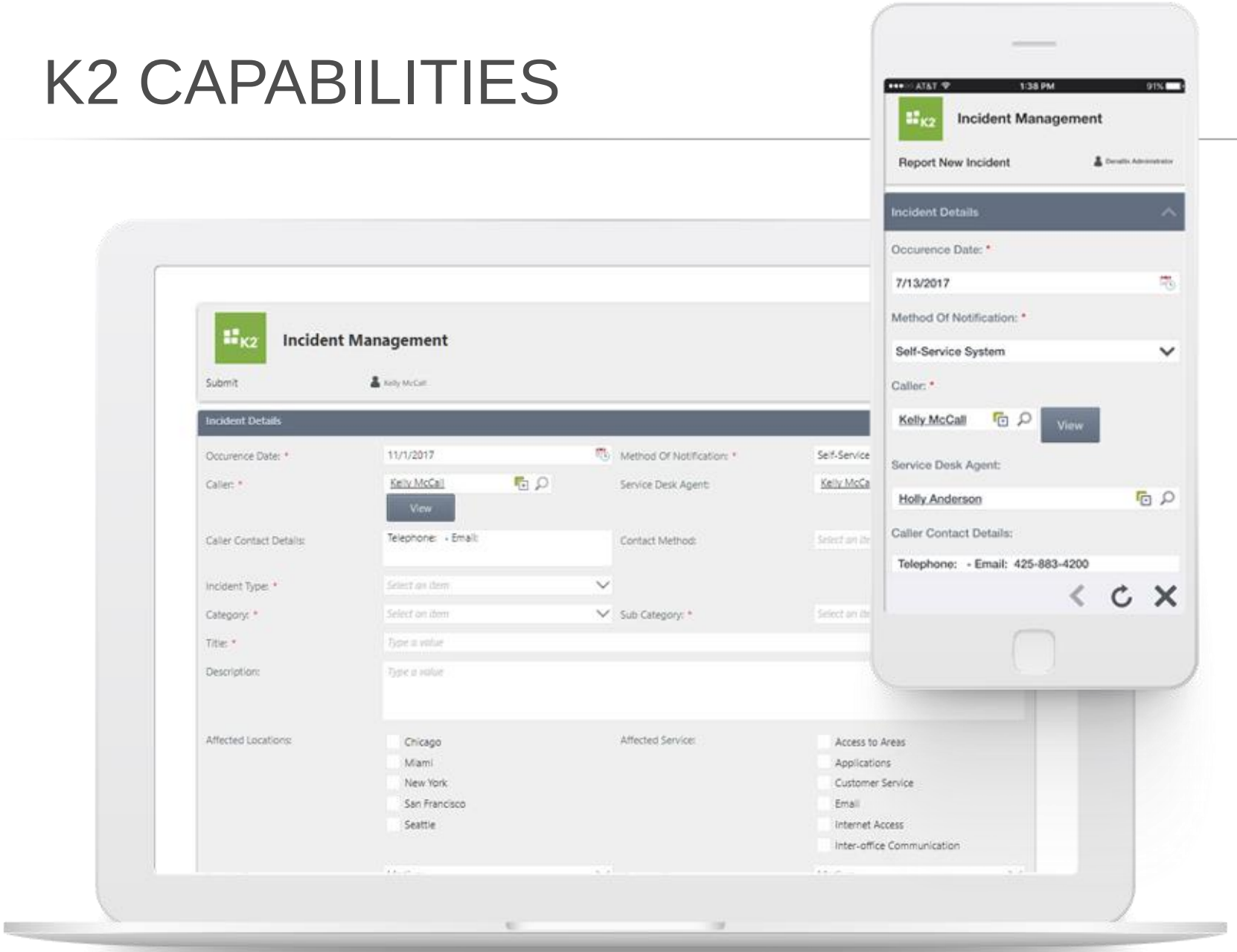


Workflow

- Visually design complex and simple workflows
- Rework, parallel approvals, sub processes and more
- Incorporate business rules
- Drive process with escalations and reminders
- Real-time workflow validation and SmartAssist that accelerates design
- Automatic version control

Sensitivity: Internal

K2 CAPABILITIES

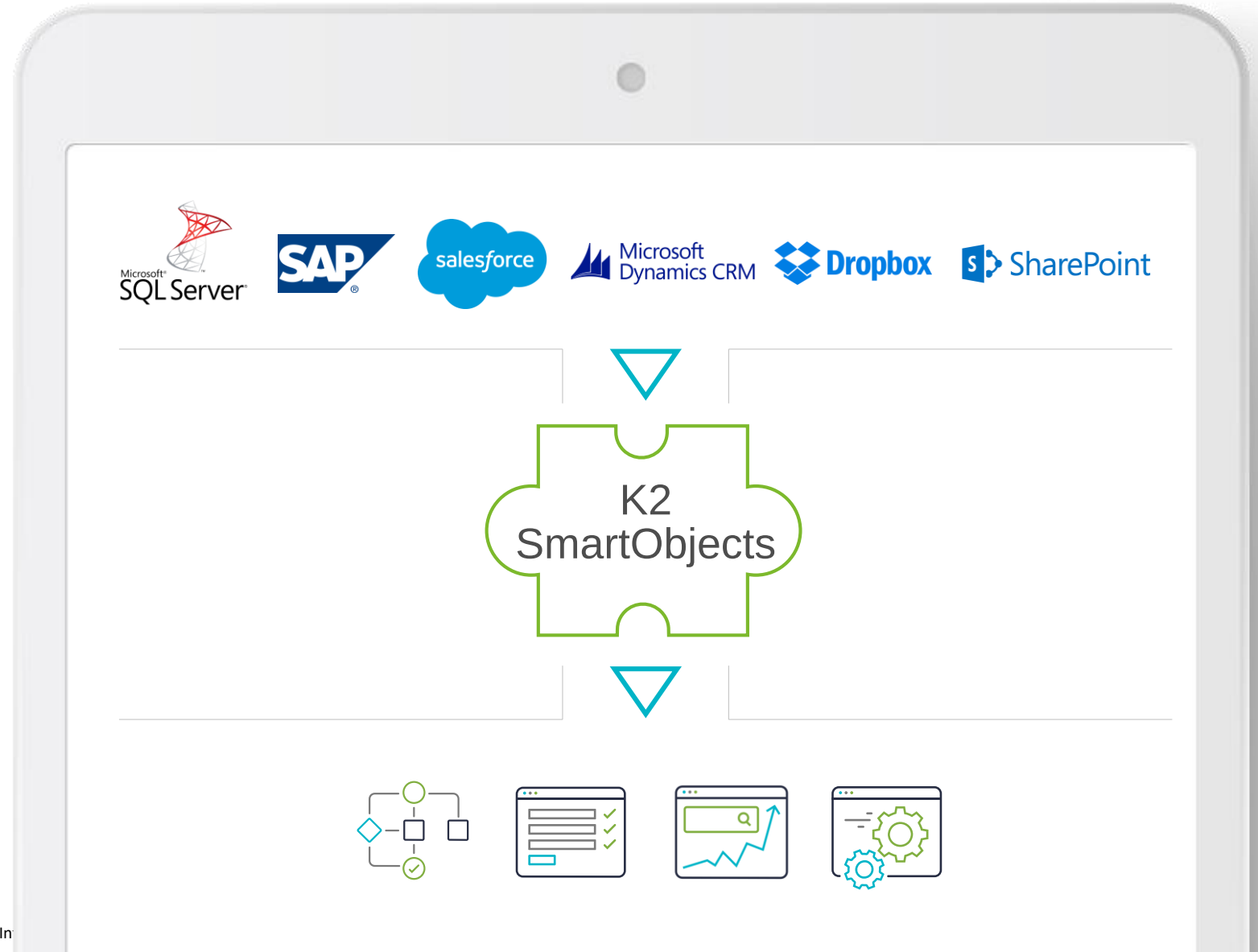


Modern User Experience

- Rich UX from multiple data sources
- Powerful business rules for data validation and dynamic display logic
- Build a form once, use on any device
- Embed within third-party solutions

Sensitivity: Internal

K2 CAPABILITIES

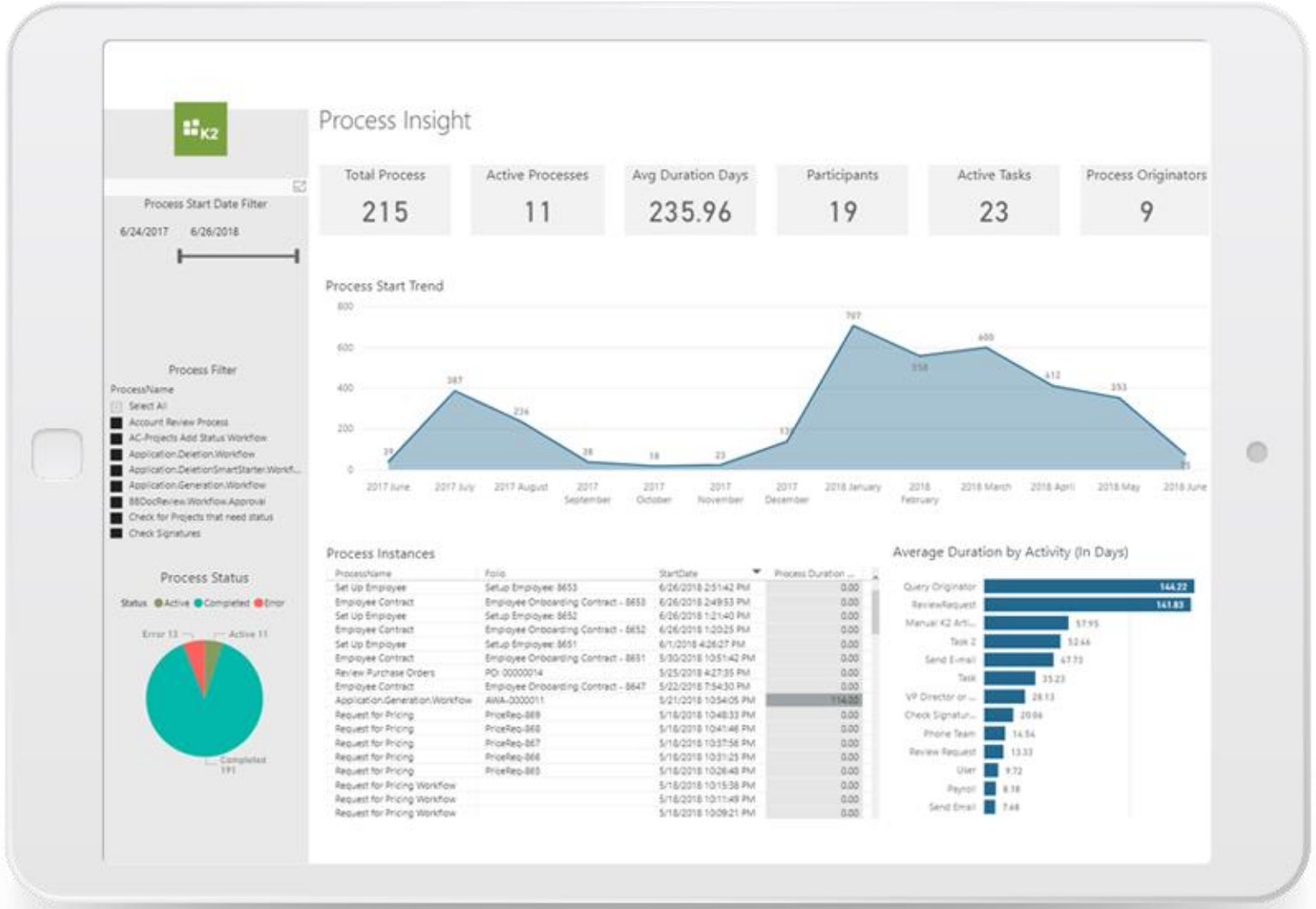


Integration

- Visually configurable connectors
- OOB integration with industry-leading solutions
- Leverage native security
- Aggregate data from multiple LOB systems
- APIs and SDKs for developers

Sensitivity: In

K2 CAPABILITIES



Reports and Analytics

- Out-of-box process reports
- Real-time graphical insights
- Create reports using third-party tools like PowerBI
- Use third-party cognitive services and machine learning

Sensitivity: Internal

Live build with K2

Sensitivity: Internal

Google

UiPath

K2

Intelligent Q+A

Sensitivity: Internal

Introduction to UiPath

Sensitivity: Internal

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Your Platform for End-to-End Automation

Let's call it *hyperautomation*

What is Robotic Process Orchestration?

Emulates the work of a human agent, using existing UIs to drive applications and execute system-based work.

It automates repetitive, rules-based tasks.

“RPA takes the robot out of the human”

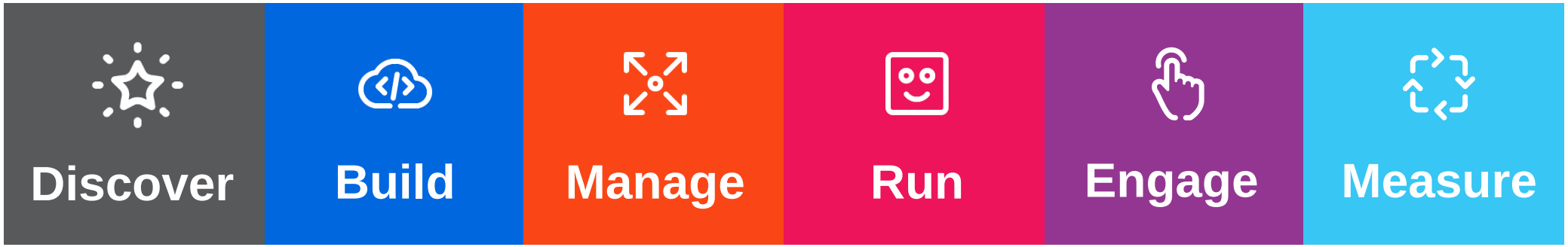
Humans vs Robots

- Creativity and Innovation
- Verbal Communication
- Subjective Thought
- Unstructured Information
- Emotions and Compassion

- Structured Work
- Repetitive Tasks
- Accuracy and Consistency
- Logical Processing
- 24/7 Operation

UiPath
Reboot Work.™

You're hyperautomation-ready with the UiPath Platform



Discover what to automate with process mining powered by AI

Professional developers, citizen developers, and employees create automations

Securely deploy and manage automations from anywhere, at scale

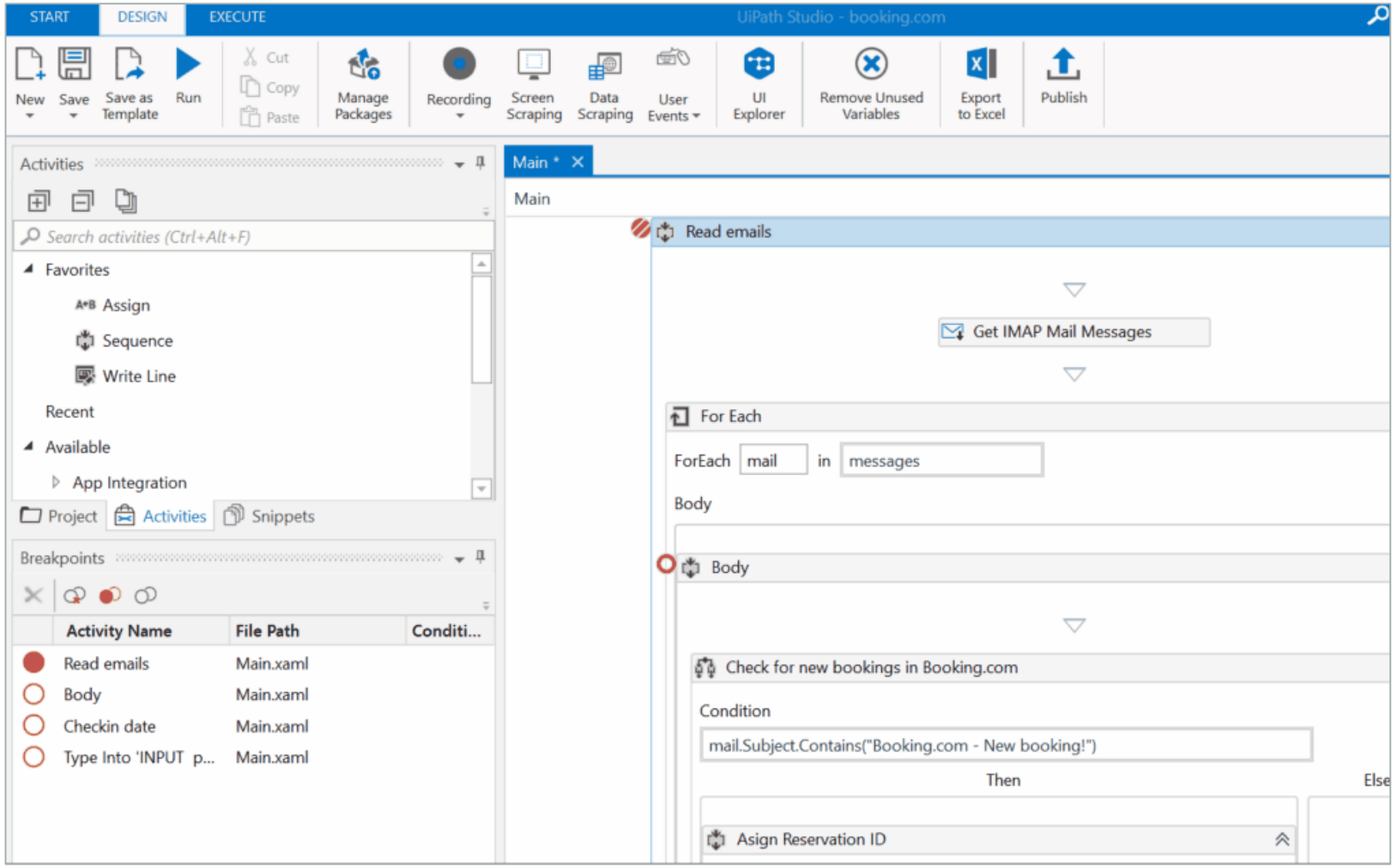
Robots work with your applications and your people to carry out automations

People and robots work together to automate complete processes

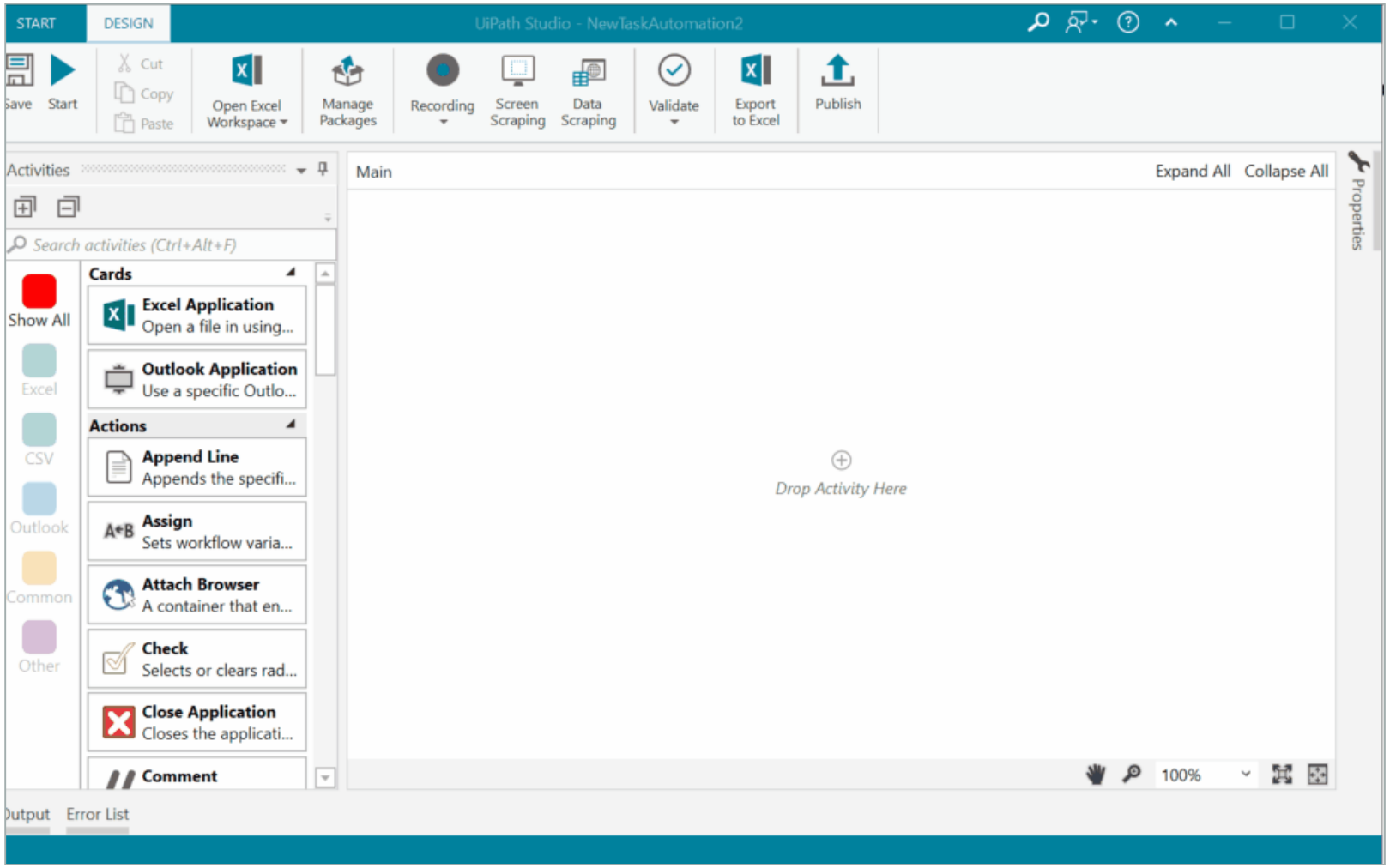
Embedded analytics give you deep insights into business metrics, not just robot metrics

UiPath
Reboot Work.™

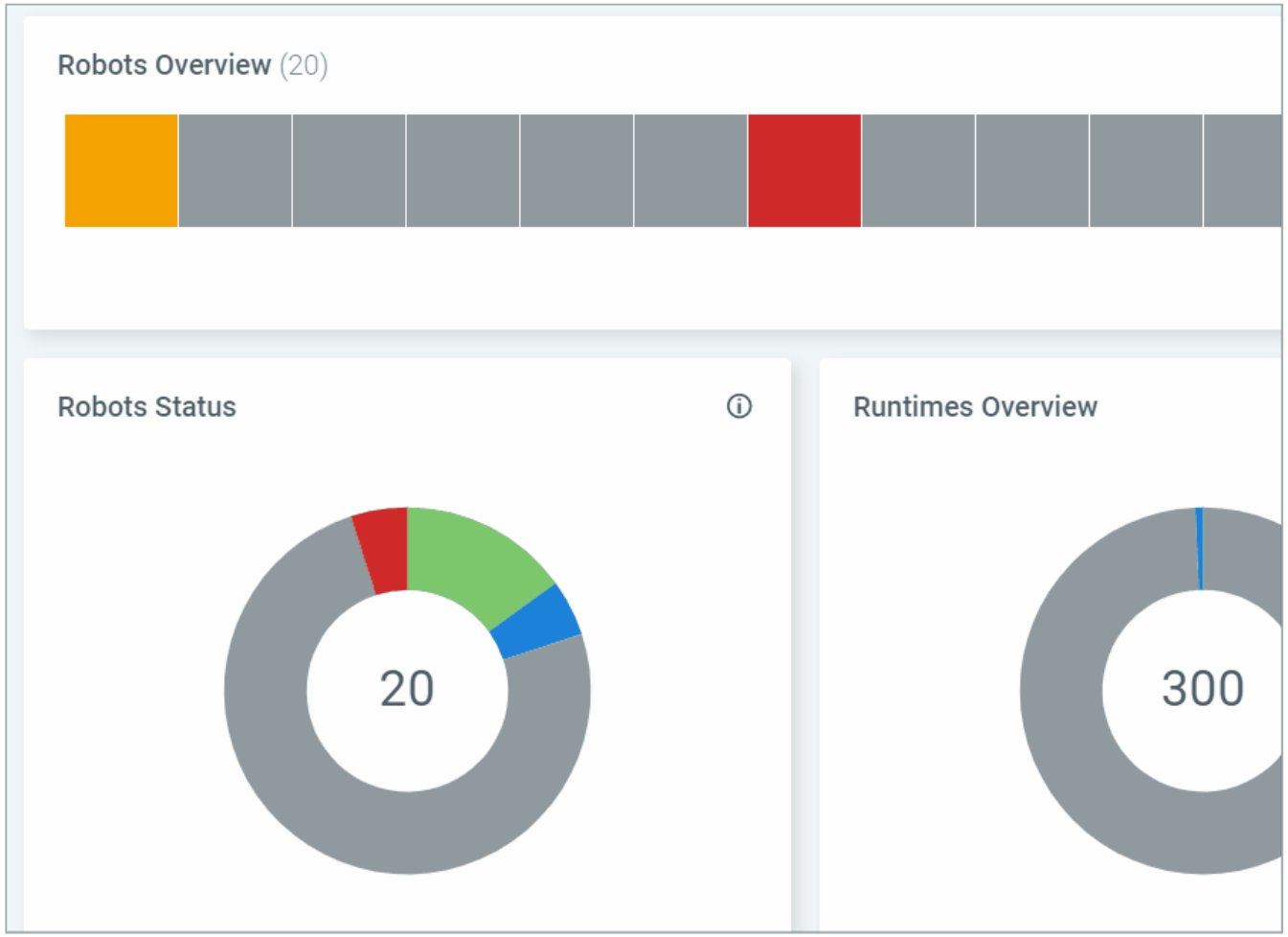
RPA Developers design automations visually in UiPath Studio



Employees chip in as Citizen Developers by automating their own Excel and Outlook tasks in UiPath StudioX

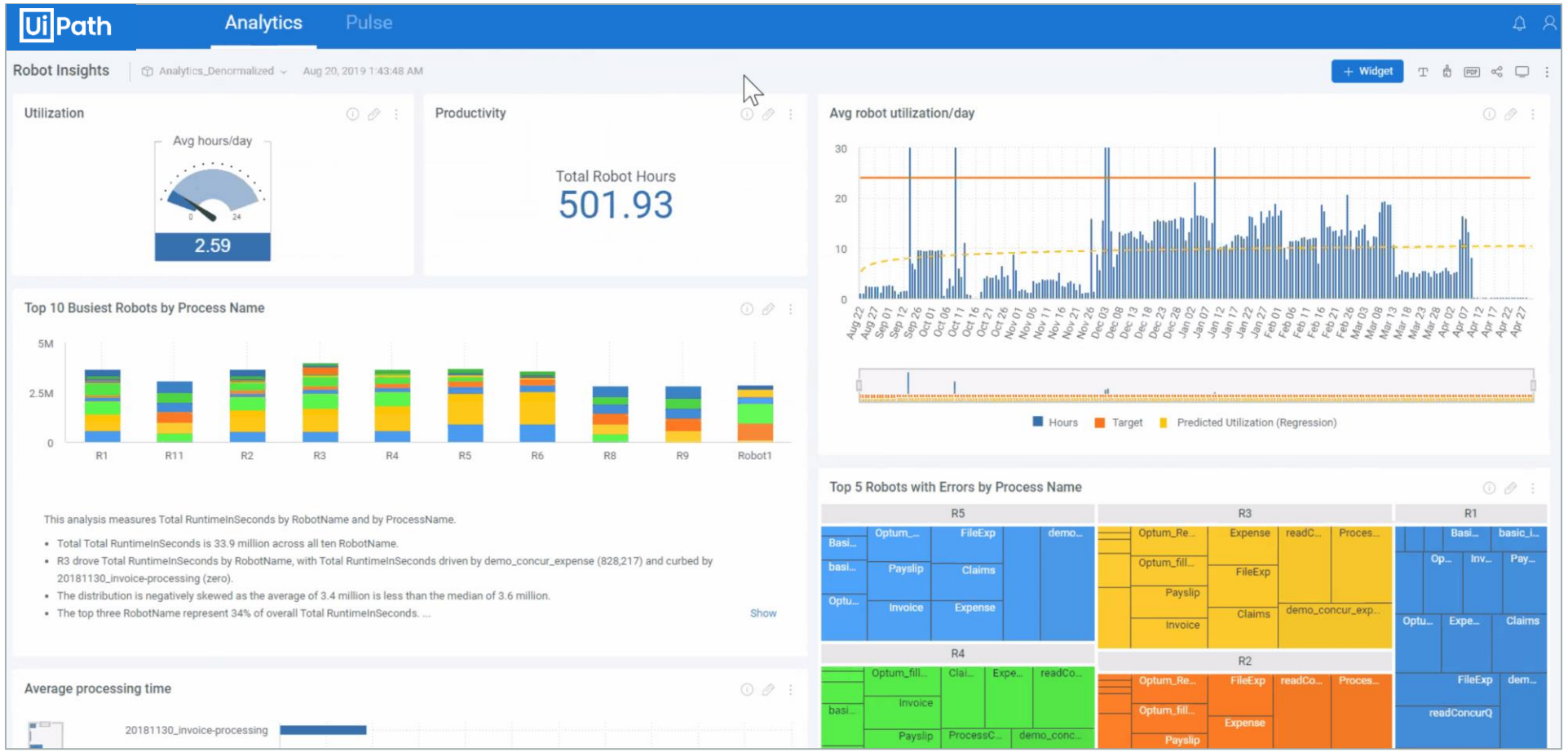


Manage and optimize your robot workforce with UiPath Orchestrator

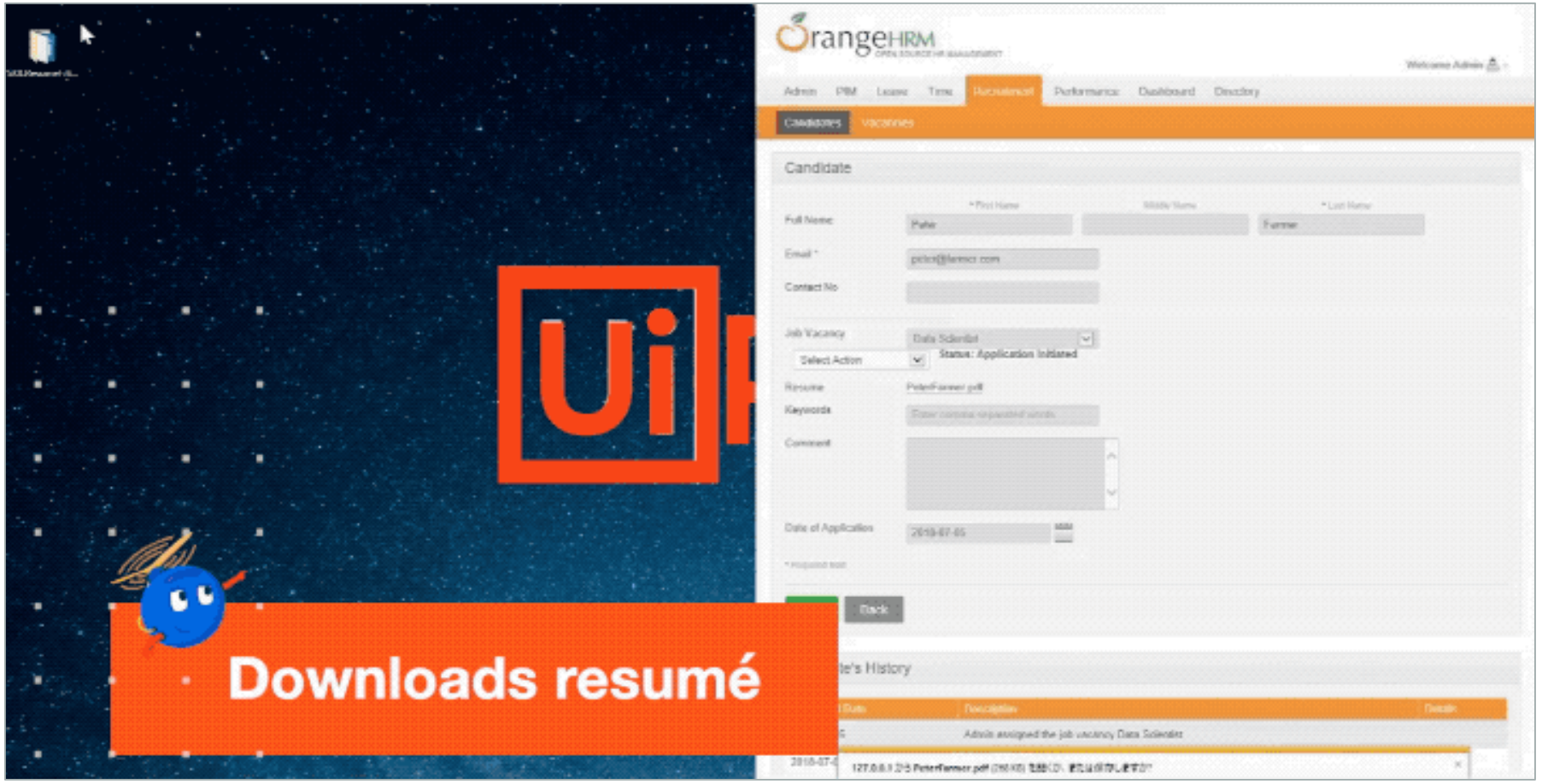


- On-Premises
- Private Cloud
- Public Cloud
- UiPath Cloud

Measure and analyze automation performance with UiPath Insights



UiPath Robots run the automations you designed



You decide how your robots work for you

Robots can work independently. They'll check in with you if there's a question or exception. We call this **unattended** automation.

Robots can work under your supervision. You decide when they stop, start, and wait for you. We call this **attended** automation.

Or use both, in a **hybrid** model.

Live build with UiPath

Sensitivity: Internal

What about Artificial Intelligence?

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MY FIRST AI PROJECT

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Artificial intelligence (AI), the ability of a digital computer or **computer-controlled robot** to perform tasks commonly associated with **intelligent** beings

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HOW DO HUMANS MAKE DECISIONS?

We Observe

We Interpret

We Evaluate

Then we Decide

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INTENT AND CONTEXT

Sensitivity: Internal

FREE
Hugs

CATEGORIES OF AI

Computer vision
Machine learning
Natural language processing
Robotics

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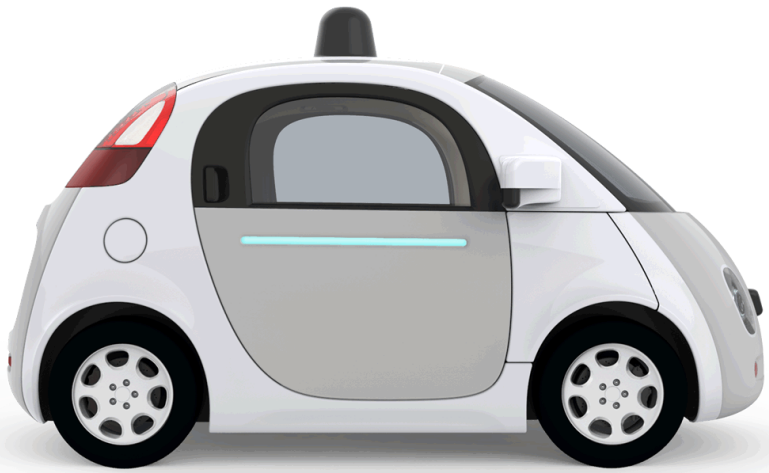
COMPUTER VISION

"Machine processing raw visual input, such as an image of video file, and using it's intelligence to understand what it is seeing"

facebook

ebay

amazon go



Uber

KINECT

MIRADA

The Imaging Software People

K2

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NATURAL LANGUAGE PROCESSING

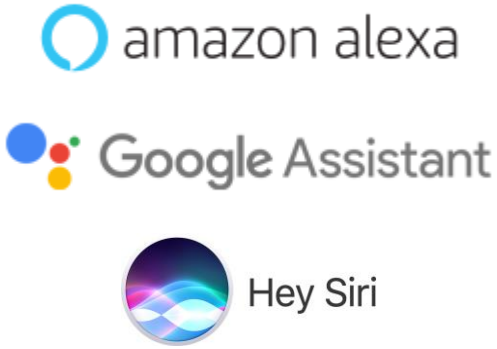
"Natural language processing (NLP) the application of computational techniques to the analysis and synthesis of natural language and speech."

Optical Character Recognition
Converting written or printed text into data.

Speech Recognition
Converting spoken words into data.

Machine Translation
Translating text from one language to another.

Natural Language Generation
Formatting information as a natural language.



Sentiment Analysis
Interpreting basic information from language e.g. topic or intent is positive or negative.

Semantic Search
Understanding and answering questions posed in a natural language.

Machine Learning
Using natural language to train artificial intelligence.

Natural Language Programming
Tools that allow end users to create or customize computer programs with natural language.

https://simplicable.com/new/natural-language-processing
https://www.expertsystem.com/machine-learning-definition/

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ARTIFICIALLY INTELLIGENT ROBOTS

"Artificially intelligent robots are the bridge between robotics and AI. These are robots which are controlled by AI programs."

MACHINE LEARNING

"Machine learning is an application of artificial intelligence that provides systems the ability to automatically learn and improve from experience without being explicitly programmed"

Supervised learning We tell it what to think.		**Unsupervised learning** It thinks for itself.
Classification	**Regression (prediction)**	**Clustering**
Is email spam or not?	What is the price of house in a specific city?	Purchasing habits among demographics
Does patient require ICU admittance?	What is the value of the stock?	Grouping of documents
Credit rating, good, bad or grey?	Predicting the age of a person	Image recognition and object grouping
Astrology – object attribution		Association between products and / or services
Is this picture a cat or a dog or a tiger?		Grouping similar tweets

https://medium.com/deep-math-machine-learning-ai/different-types-of-machine-learning-and-their-types-34760b9128a2

https://www.expertsystem.com/machine-learning-definition/

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Let’s bring it all together

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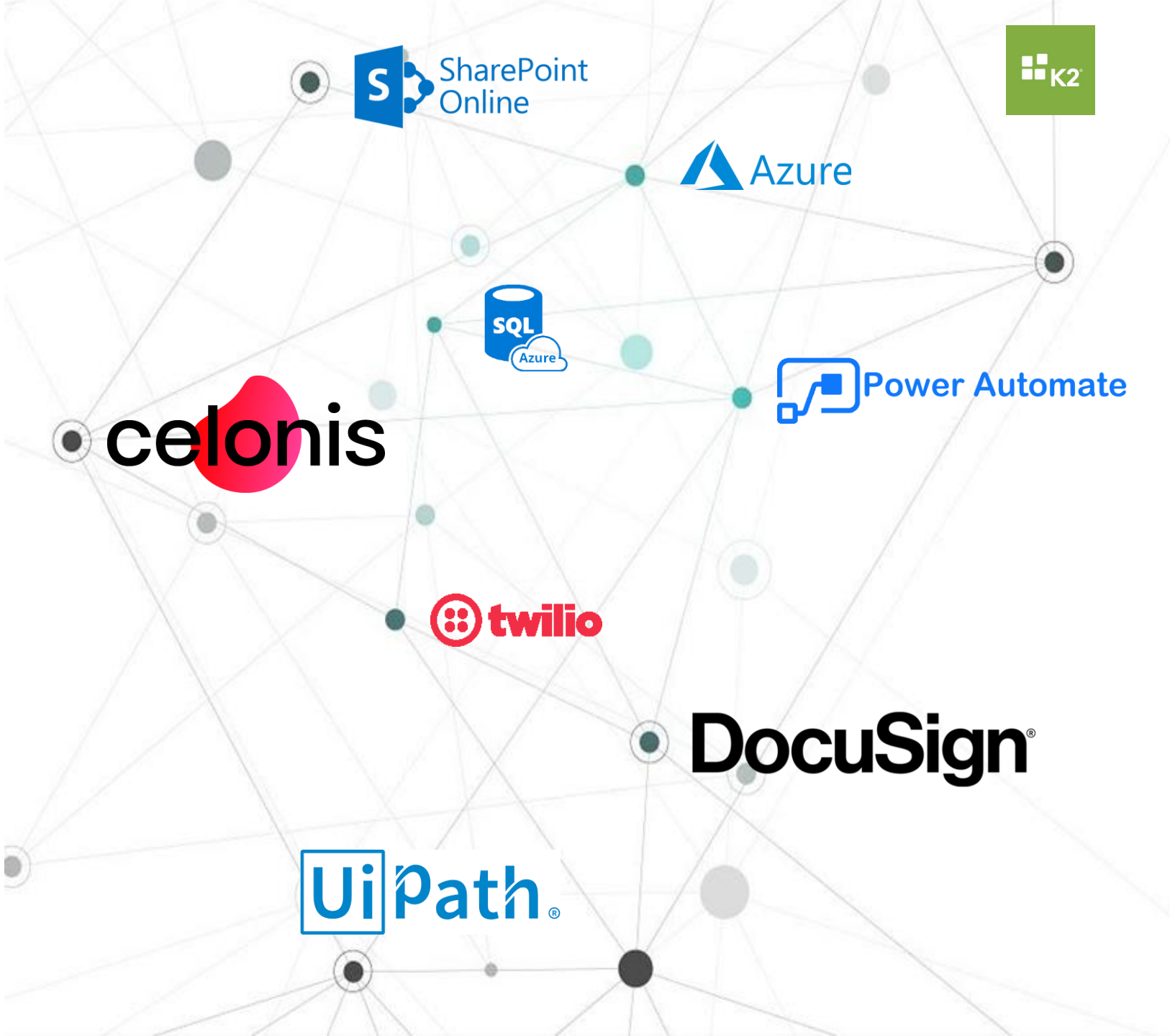
EXAMPLE: CUSTOMER ONBOARDING



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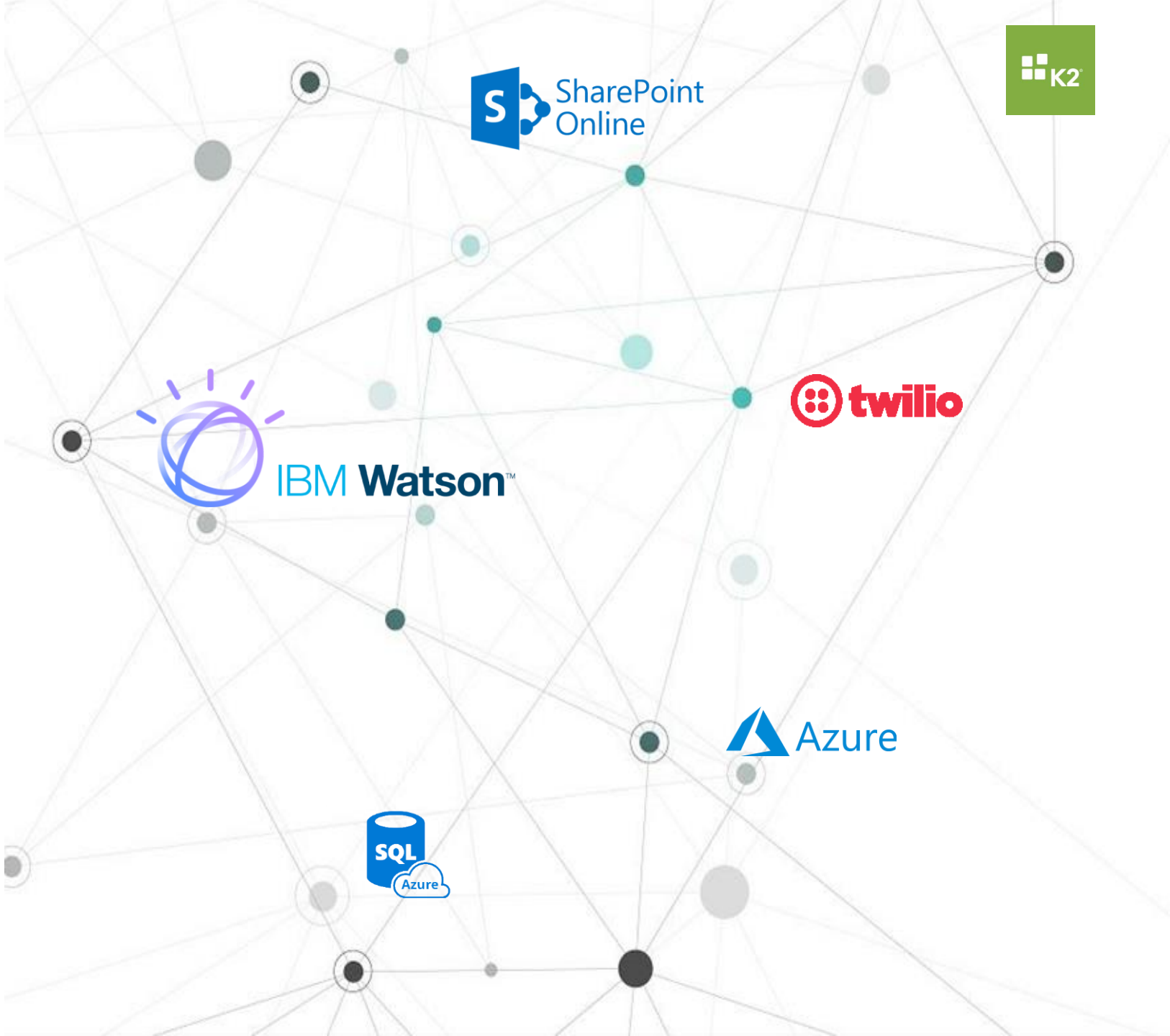
EXAMPLE: CLAIM MANAGEMENT



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