

THE USE OF ARTIFICIAL INTELLIGENCE (AI) TO SOLVE PUBLIC SECTOR PROBLEMS

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ARTIFICIAL INTELLIGENCE FUTURISM/INNOVATION TRACK



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UNDERSTANDING AI

ESTABLISHING A SHARED UNDERSTANDING

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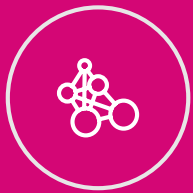


What AI is...

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Amplifying human ingenuity with intelligent technology



Reasoning

Learn and form
conclusions with imperfect
data



Understanding

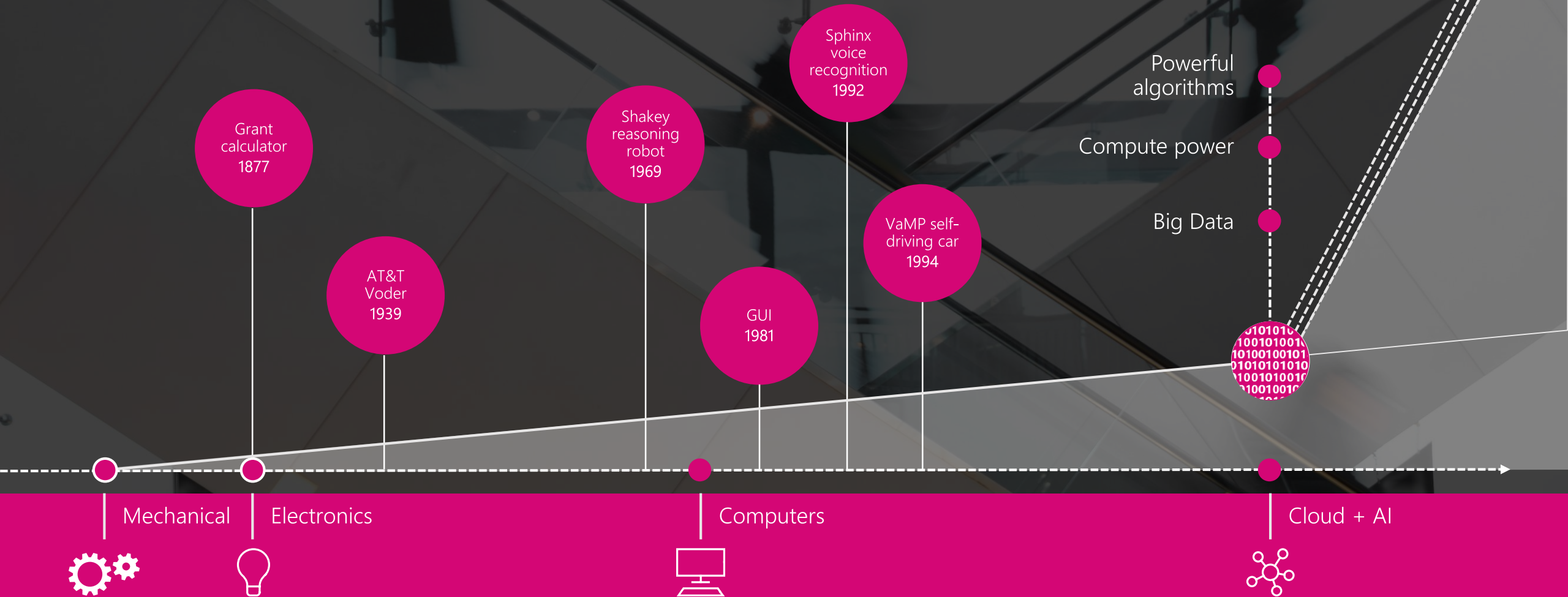
Interpret meaning of data
including text, voice, images



Interacting

Interact with people
in natural ways

Why now?





DIGITAL TRANSFORMATION & AI



Engage customers



Empower employees

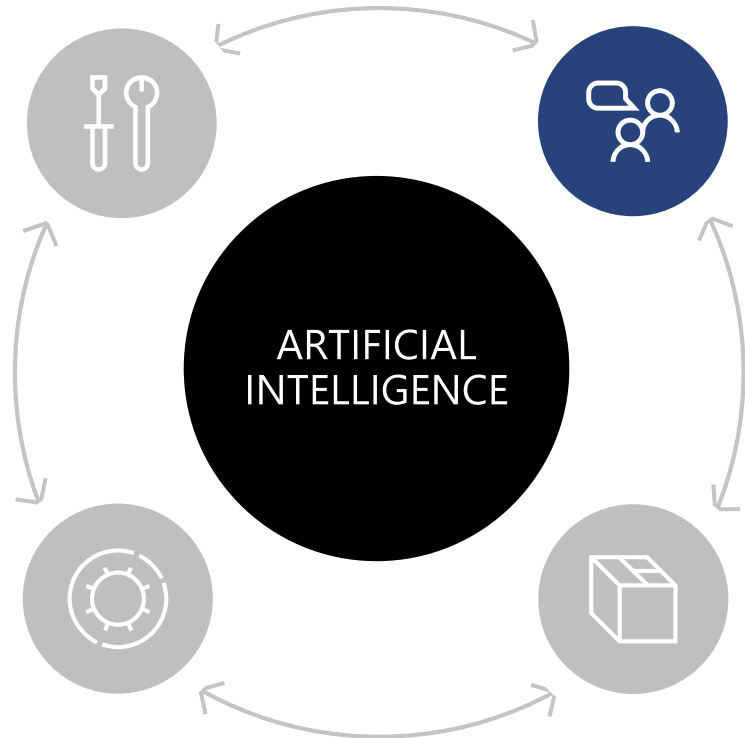


Optimize operations



Transform products

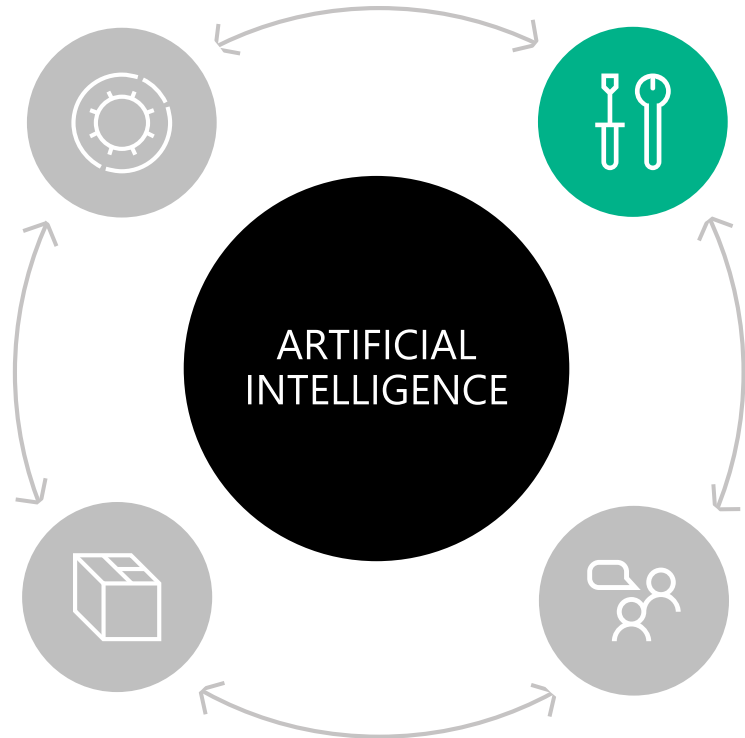
Digital transformation & AI



Engage customers

Conversational agents
Customized experiences
Customer analytics

Digital transformation & AI



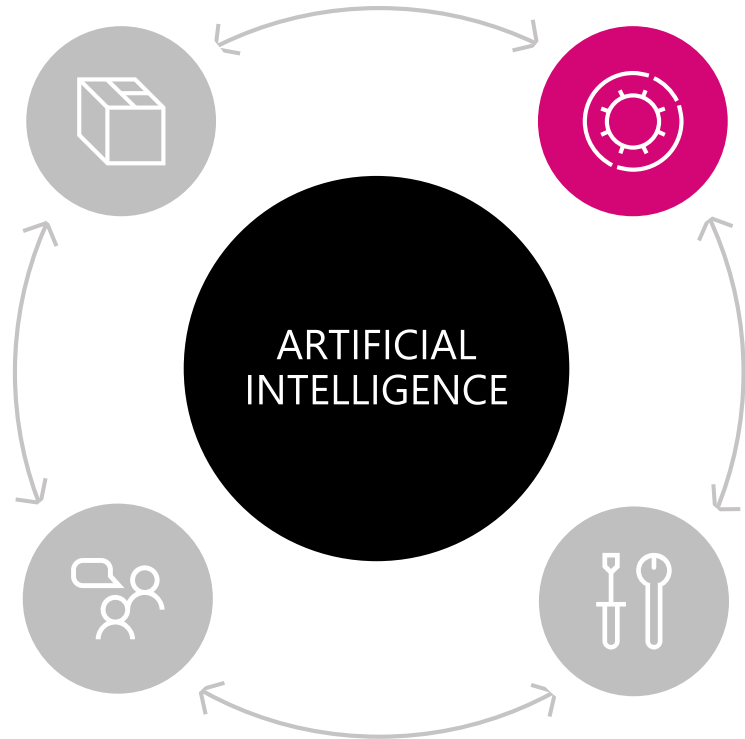
Enable your employees

Employee productivity

Business data differentiation

Organizational knowledge

Digital transformation & AI



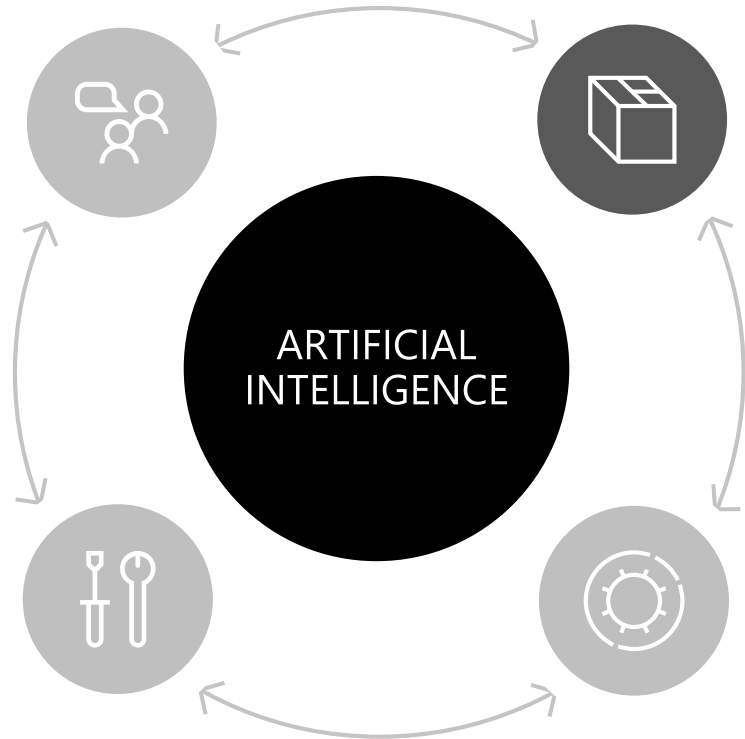
Optimize your operations

Intelligent predictions

Operational efficiency

Deep insights

Digital transformation & AI



Transform your products

Product innovation

Differentiated experiences

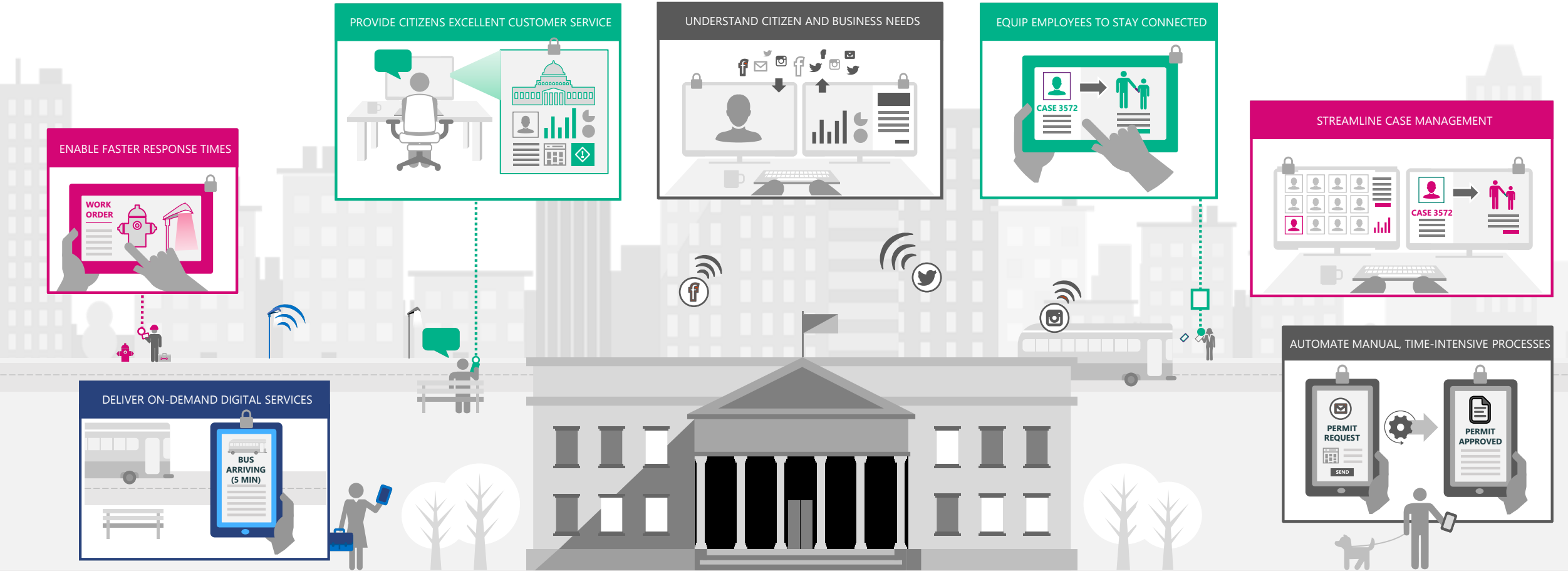
New scenarios



How Government is Using AI

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Surfacing intelligence in the public sector



Engage and serve citizens more effectively to increase trust and engagement

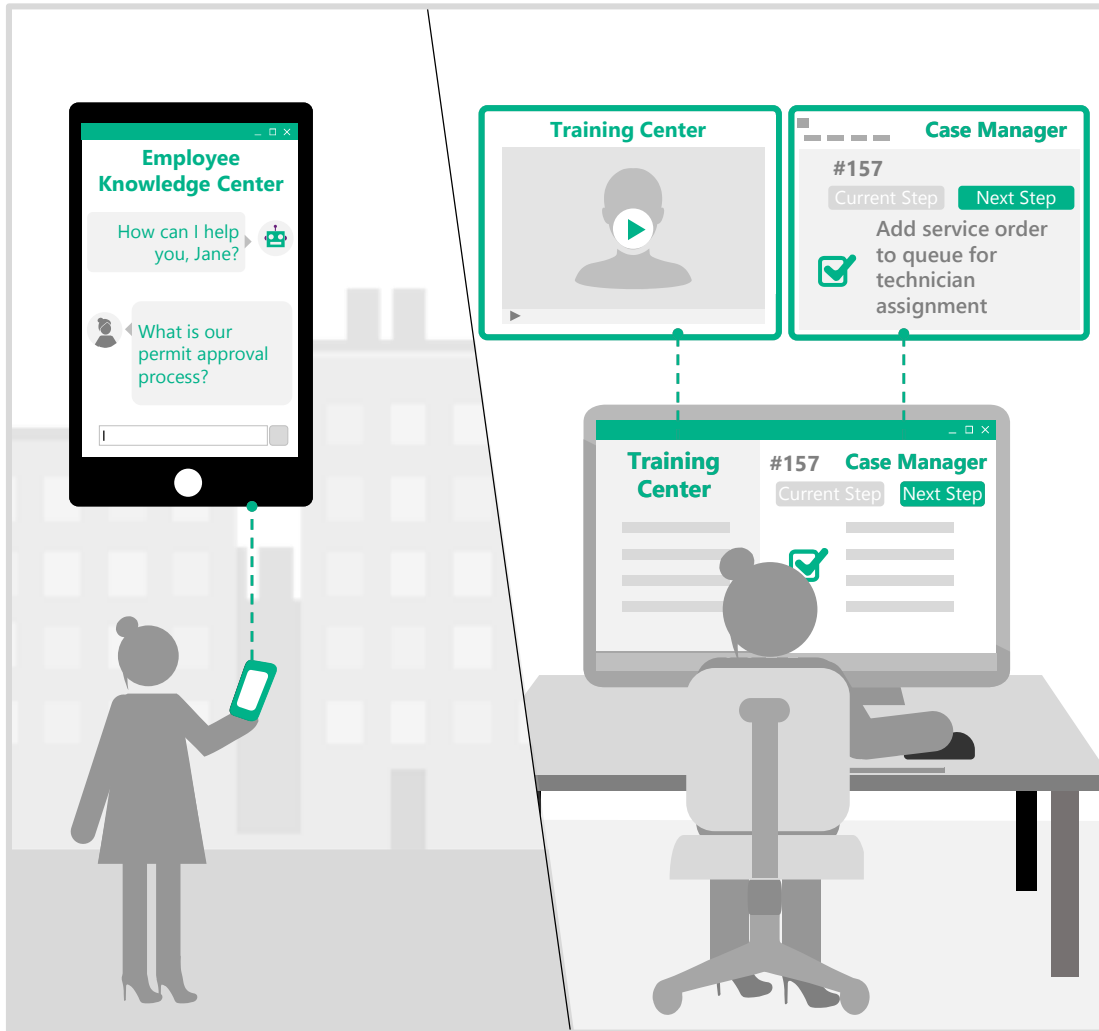


Enable personal assistants to guide citizens through a service request

Employ intelligent search agents to deliver personalized on-demand digital services

Keep citizens informed with automated tools that route and monitor service requests

Empower employees to deliver more efficient service



Create self-service bots to give employees instant access to knowledge base

Provide digital assistants to create personalized employee learning management experiences

Leverage advanced analytics to expedite the workflow process and identify the next best action

Optimize government operations and make the most of limited resources

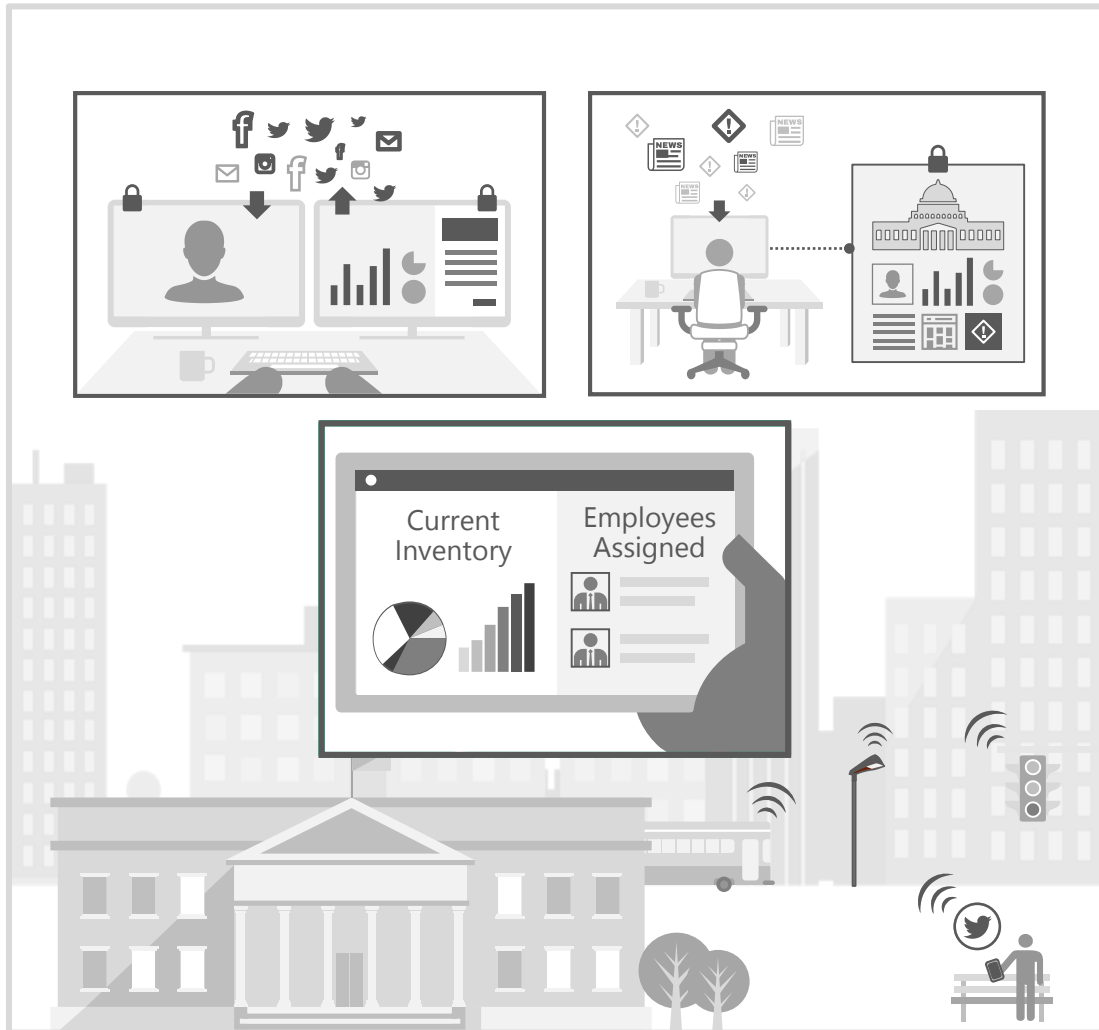


Employ advanced analytics and predictive models to identify and prevent regulatory and compliance risks

Capture, prioritize, and route service requests to the correct employee and improve response times

Enhance connected devices to monitor critical facility systems and adapt to shifting energy demands

Transform your services to provide enhanced value to citizens



Leverage internal and public data to measure and augment the impact of government initiatives

Track trends that inform future planning to achieve desired outcomes

Ensure optimal service using predictive models to recommend ideal inventory levels and workforce allocation

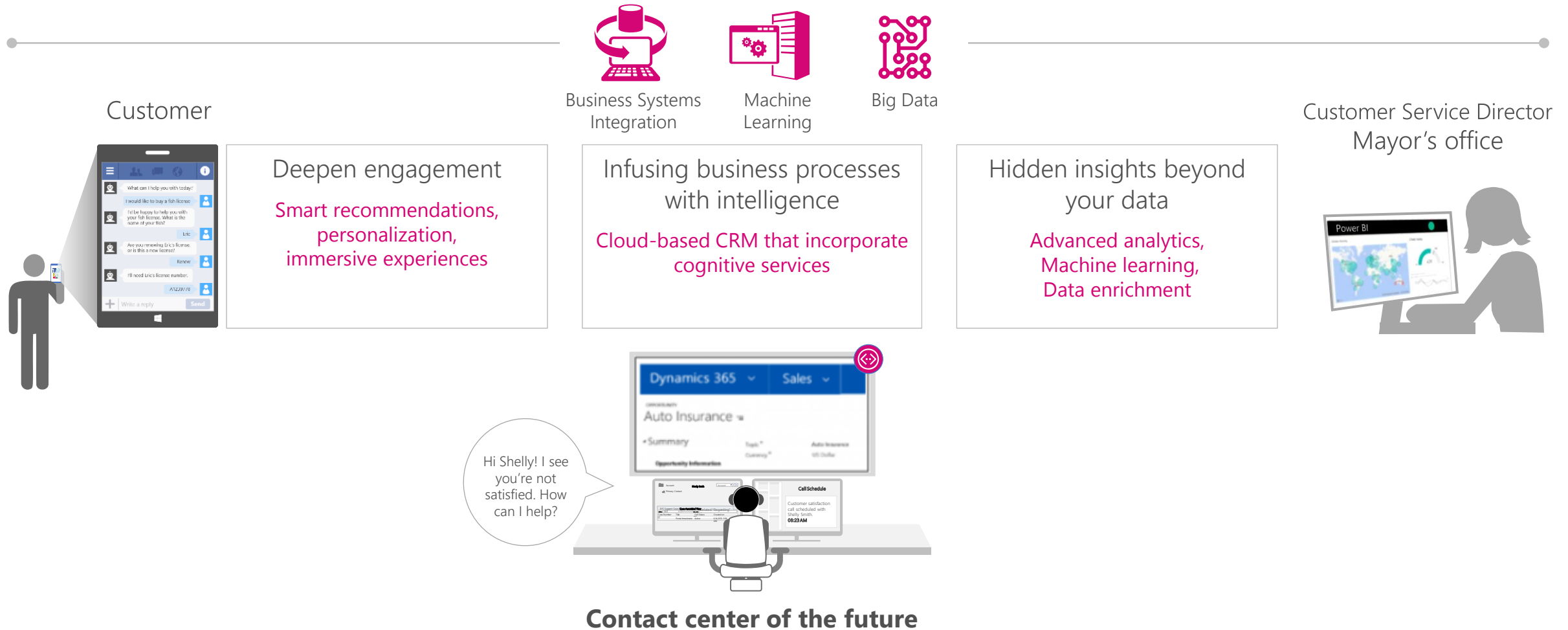


Evolution of Public Expectations

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Reinventing smart support centers to citizens





Bots are communication interfaces with natural language processing capabilities

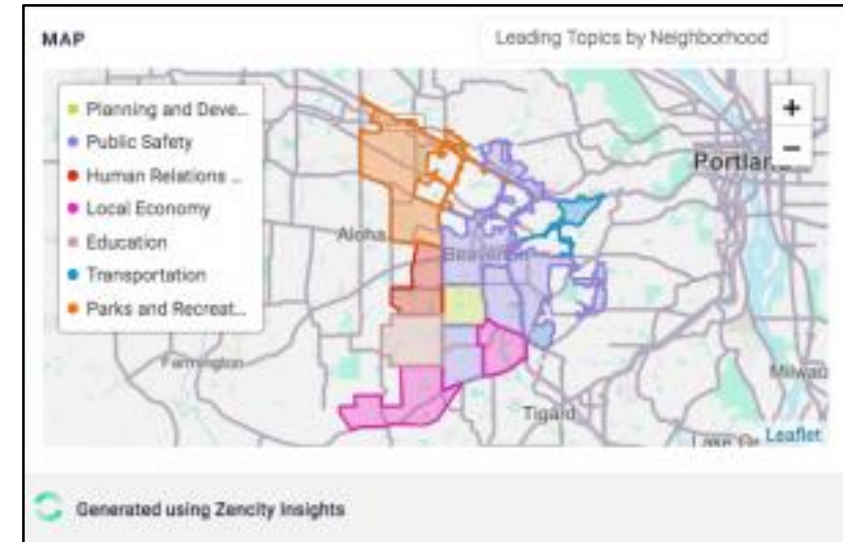


Using AI to Tackle Homelessness

Challenge: Beaverton, OR wanted to implement a Safe Parking program with cooperation host neighborhoods

Approach: Using Zencity, a tool that uses AI and ML to understand real-time community feedback:

-  Continuously tracked the program's community impact
-  Understood neighborhood-specific concerns
-  Differentiated how the majority of residents felt about the program, and having a more nuanced understanding of resident discourse.
-  Better showcased to residents the way in which the City listened and integrated their feedback and ideas



LEVERAGING AI

GEORGIA SMART COMMUNITIES CHALLENGE

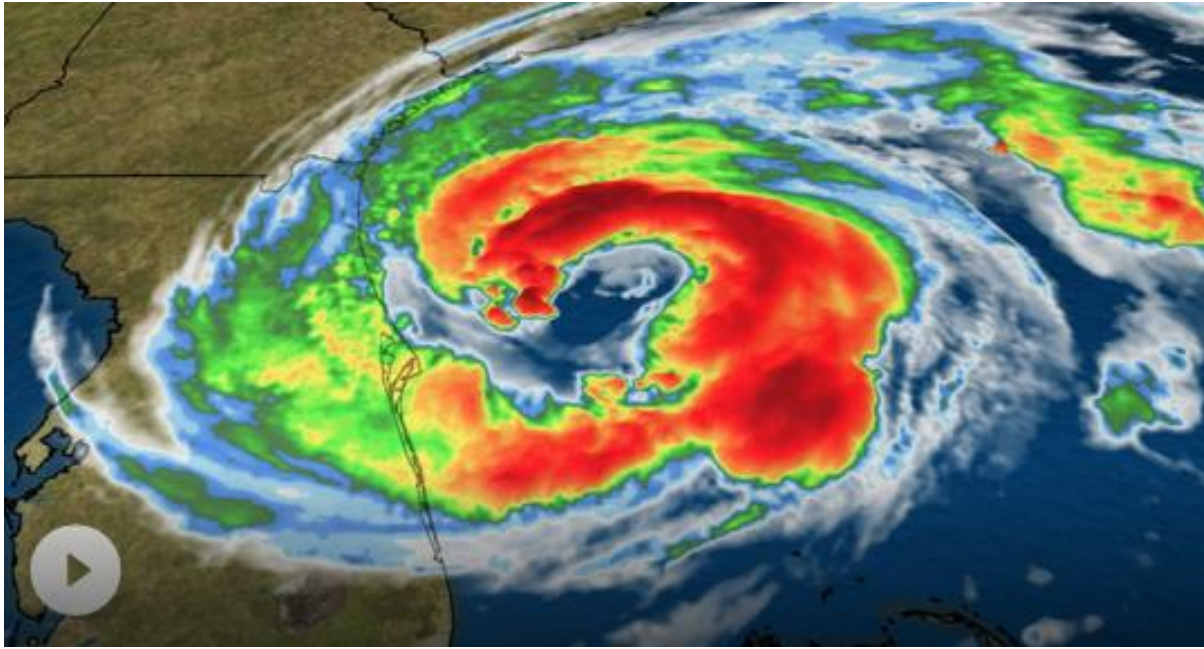
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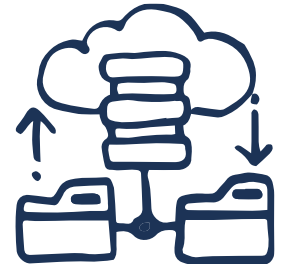
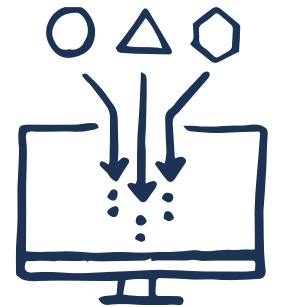
Workforce Development

Smart Community Corps Civic Data Science

5 student interns embedded in communities
10 student researchers supporting projects

Strategic Energy Institute- EPI Center | Center for Serve-Learn-Sustain | Center for
Career Discovery & Development | Student Government Association

6,000 hours of project support



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Columbus

Using Data Sharing to Improve Infrastructure

Columbus will develop smart technologies for its Uptown district to promote safety, security, and an intelligent transportation system through a coalition for data sharing and infrastructure improvement. Columbus is planning suitable locations for Internet of Things (IoT) devices and analysis of the data captured to provide better service and reduce overall Police, Fire, and EMT response time.

Macon-Bibb

Giving the People Better Access to Local Government

Macon-Bibb County has several existing mobile applications and browser-based smart solutions, but these services are currently out of reach of economically disadvantaged neighbors who lack access to high-speed internet or smartphone devices. SmartNeighborhoodsMBC promotes equity in economically stressed neighborhoods by placing Smart Kiosks in strategic locations such as community centers, libraries, recreation centers, pedestrian areas, and public buildings to help underprivileged citizens better access and engage local government departments.

Albany

Employing Data Analytics for a Better Housing System

The proposed project will establish an efficient inventory of key community housing and associated infrastructure conditions. The initiative relies upon GA Tech's contribution of a streamlined data gathering and processing system, with special help from Public Policy researchers and the Environmental System Research Institute (ESRI). The system will encourage a safe and sustainable housing inventory for the city.

Chatham

Piloting Tools to Help Stakeholders During Natural Disasters

Chatham County will design, develop, and test a pilot sensor network for measuring sea level flood risk in order to inform government officials and other key stakeholders in real time during natural disasters and storms. This project depends on the partnership between different people: community groups, local and county government officials, and those helping with K-12 education initiatives. The team is conducting research with help from Georgia Tech's Earth and Atmospheric Sciences department as well as the Computing department. The pilot network will help to improve flood warnings, emergency response action plans, and flood predictions for future flood events, as well as serve as the basis for additional sea management tool development, environmental monitoring platform development, and data sharing.

GEORGIA SMART COMMUNITIES CHALLENGE

Enabling Resiliency and
Sustainability through Academic Research and
Public Sector Collaboration

FIELD GUIDE

Partnerships

When working with partners there is a process to figure out where and when to make decisions. As a project matures and transfers to different partners to sustain in the long term, the engagement needs to shift in a graceful transition.

Informing

Provide partners with reliable information so they may understand the problem and alternative solutions.

Consulting

Enable opportunities for partners to provide feedback on analysis and decisions.

Involving

Work directly with partners throughout the project to ensure everyone understands concerns and aspirations.

Collaborating

Partner with and actively seek advice from partners at each step of the project.

Empowering

Place final decision-making in the hands of partners. Each partner will bring their own strengths to the project. A smart and connected community works toward developing and connecting those strengths.

Making it Happen

To develop a smart process together, we look at a set of steps that focuses on a present problem while looking for a sustainable process that grows and adapts over time.

Understand Your People.

Building a smart and connected community starts with the people and understanding their goals for their community.

Identify the Data.

Data are central to the smart and connected community. A smart process relies on knowing what data you have, what data you need, and how to connect the right people to the right data.

Create Partnerships.

Partnerships are built on a united vision and strong understanding of the roles and responsibilities of the respective parties. They are cemented on trust and knowing the parties are committed to the long run.

Focus on Performance.

Creating a smart process relies on understanding what success means, allowing for failure, and learning from those mistakes to keep improving.

Through each of these stages, partnering with researchers will enable you to make the most of your strengths and gain the most from the technologies you deploy.

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MAXIMIZING AI

AUTOMATION IN LOCAL GOVERNMENT

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“ Deliver change in the user experience that;

- improves customer satisfaction,
- reduces time to take action, and
- improves trust in council.”

“ Improve employee satisfaction, provide them with more time to satisfy the customer and develop future skills capability.”

To RPA or Not.....

- Understand the **challenges** that the organization, employees and clients/customers face
- **Quantify** the challenges with the people who know
- Work through **solutions** to address a challenge
- How do we **build** the solution and capability that delivers the desired outcome
- Build and put into **production** the identified solution
- **Realize** the improved operating environment that is delivering the **outcome** identified

“ Don't say NO, identify ways to support and assist! ”

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BOT's Delivering Results

Animal Management

- Lack of integration
- Transparency/visibility issues between teams
- Delay in job dispatch
- Dissatisfaction

SAP & GEOP

6,200 hrs / 40,000 requests



TOA

Rates Clarification

- Payment detail issues
- Legacy systems
- Multiple checks
- Debt collection
- Contingent workforce

SAP

3,500 hrs / 24,000 rates



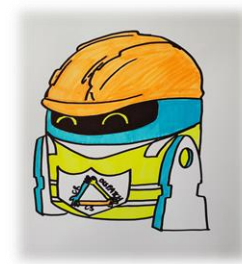
ARK

Compliance & By-Laws

- Lack of integration
- External data sources
- Delay in job resolution
- 'Neighbors in dispute'

SAP, GEOP & API's

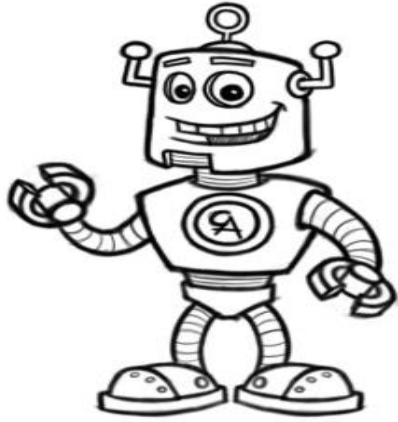
2,200 hrs / 13,000 requests



R2D2

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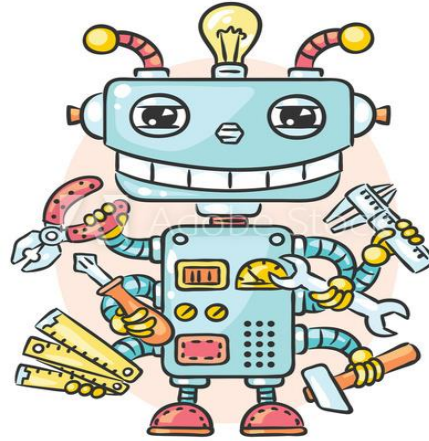
Snapshot of Other BOT Activities



Russel

Public consultation activities to support the Long-range Plan and Regional Land Transport Plan.

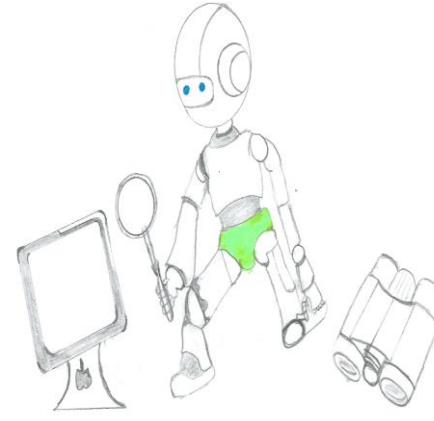
35,000 submissions /
8,000 hrs



Wanda

Project Management platform (Sentient) to SAP Integration.

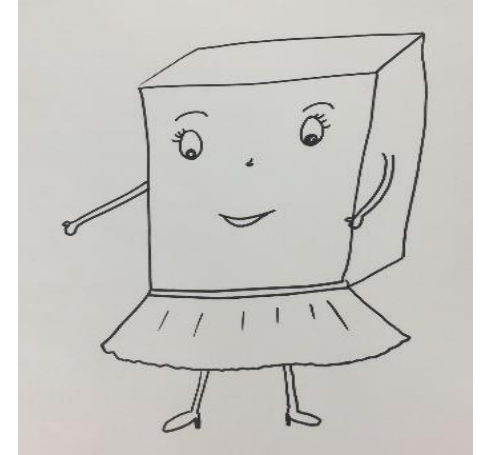
1,500 hrs



Zac

Unallocated credit matching in SAP for customer payments

11,800 payments /
1,500 hrs



Sam

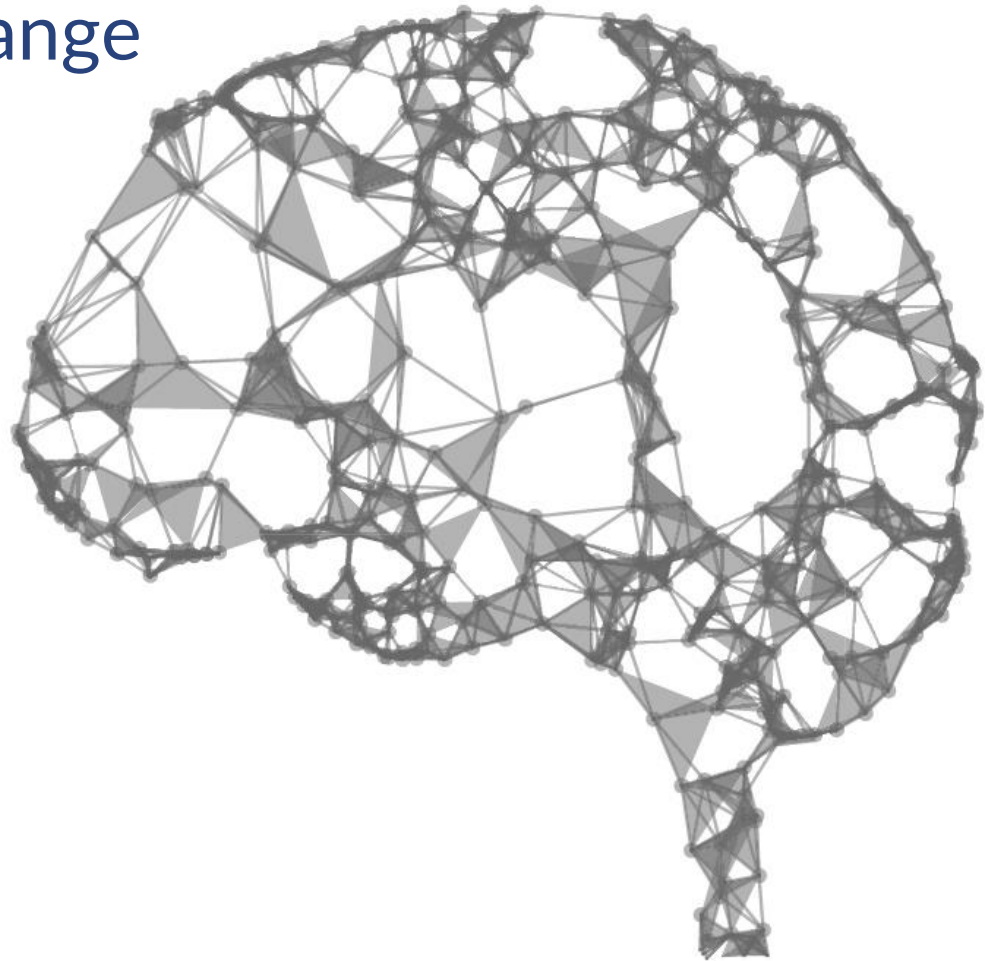
Goods receipting in SAP for Accounts Payable

14,000 invoices /
3,600 hrs

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Delivering Sustained Cultural Change

- ICT engagement
- Executive support
- Manage the dialogue
- Inclusive and collaborative
- Change management
- Employee capability development
- Community engagement
- Don't become complacent



THANK YOU

Questions?

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