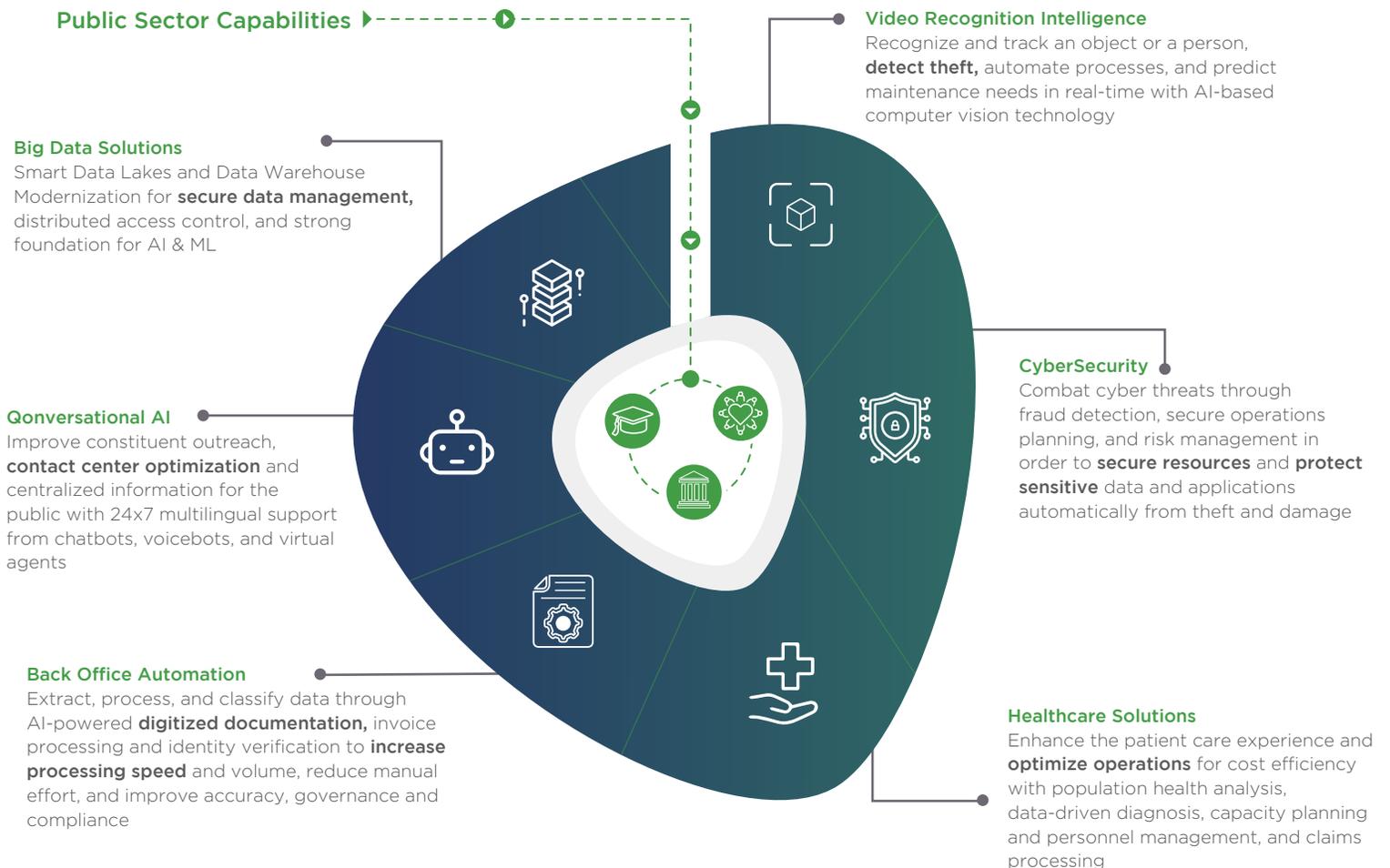**quantiphi**
Solving What Matters

# Public Sector

Enabling Connectivity and Enhancing Citizen
Experiences through Data & AI-driven Transformation

Access cloud-based computing, storage,
machine learning and analytics to modernize
legacy systems, secure critical information,
improve public service delivery, create
citizen-centric experiences, and generate
innovative data insights

## Engage citizens, connect systems, and streamline operational workflows

Quantiphi is a trusted partner in helping public sector organizations positively impact communities by delivering
better services and programs to citizens, empowering their employees to be more productive and collaborative
across the board, and driving significant cost savings and innovation.

**Public Sector Capabilities**

**Video Recognition Intelligence**
Recognize and track an object or a person,
**detect theft,** automate processes, and predict
maintenance needs in real-time with AI-based
computer vision technology

**Big Data Solutions**
Smart Data Lakes and Data Warehouse
Modernization for **secure data management,**
distributed access control, and strong
foundation for AI & ML

**CyberSecurity**
Combat cyber threats through
fraud detection, secure operations
planning, and risk management in
order to **secure resources** and **protect
sensitive** data and applications
automatically from theft and damage

**Qonversational AI**
Improve constituent outreach,
**contact center optimization** and
centralized information for the
public with 24x7 multilingual support
from chatbots, voicebots, and virtual
agents

**Back Office Automation**
Extract, process, and classify data through
AI-powered **digitized documentation,** invoice
processing and identity verification to **increase
processing speed** and volume, reduce manual
effort, and improve accuracy, governance and
compliance

**Healthcare Solutions**
Enhance the patient care experience and
**optimize operations** for cost efficiency
with population health analysis,
data-driven diagnosis, capacity planning
and personnel management, and claims
processing

# REAL WORLD RESULTS: CASE STUDIES

## Document Classification & Entity Extraction

A leading federal national mortgage association receives over 1 million paper documents a year, including invoices, tax statements, and checks from their customers and vendors that must be manually sorted and organized; posing a risk for fraud that could go undetected

### Solution

Quantiphi developed an ML- based custom document classification model to organize their service reimbursement process by automating the digitization of documents and efficiently detecting fraudulent requests, while also extracting information into a structured dataset at scale

### Business Impact

- Cost optimization
- Time savings - Capable of processing **700+** documents in 2 mins
- **97.8%** classification accuracy

## Speech-to-Text Conversion & Threat Detection

A federal agency responsible for the care, custody, and control of incarcerated individuals has a large collection of inmates' telephonic conversations and invests in human translation services to obtain transcripts of the audio files. In an effort to better supervise and monitor inmates phone calls, they wanted to streamline the process of identifying threat levels from the transcripts

### Solution

Quantiphi built a custom automated machine translation solution for converting prison calls recorded in Spanish into a corresponding textual format, as well as a highly interactive User Interface to show the translated transcriptions with threat and sentiment analysis

### Business Impact

- Reduced manual effort
- Cost savings - **$12 M / year**
- Greater safety

## Multilingual Virtual Agent for Application Queries

One of the largest public housing agencies in the U.S. wanted to better address the 150,000 housing application queries it received in both English and Spanish each year and reduce the workload of its representatives

### Solution

Quantiphi transformed the existing telephony IVR system by developing a 24x7 multilingual virtual agent solution with smart agent routing and conversational history API; assisting representatives in handling high call volumes and enabling process optimization and cost effectiveness

### Business Impact

- **78%** deflection of the total call volume
- Reduction of the Average Handling Time (AHT) from 5 minutes to **3** minutes
- **85%** accuracy in user authentication

## AI-Enabled Monitoring System

A leading North American transportation & logistics company relies on 17,000 trained crew members to manually identify flags and signals, interpret them and take appropriate actions. However, the possibility of accidents as a result of poor human judgment poses a real concern for employees and civilians

### Solution

Quantiphi developed a custom deep learning solution to perform intelligent video analytics and provide real-time assistance to crew members by autonomously detecting objects and people near and around its 20,000-mile network of railway tracks, while also storing the data real-time on a web dashboard

### Business Impact

- **> 90%** accuracy
- Better detection of trespasser hotspots - reducing theft
- Increased monitoring & safety for employees, consumer goods, and communities

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Quantiphi is an award-winning applied AI and big data software and services company driven by the desire to solve transformational problems at the heart of business. Our unique approach combines deep industry experience, disciplined cloud and data-engineering practices and cutting-edge machine-learning research to achieve quantifiable business impact.

Boston | Princeton | San Jose | Toronto | Mumbai | Bangalore | London

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www.quantiphi.com | appliedai@quantiphi.com