Secure, Compliant, Powerful AI: A Framework for Transformative Value

Andrew Cunje	Chief Information Security Officer, Appian
Dylan Williams	Senior Security Analyst, Appian
Louis Prensky	Senior Product Manager, Appian

appian

The Evolving Data Privacy Landscape

Data Proliferation

Rapid Technological Advancements

Public Awareness & Expectations

Data Breaches & Cyber Threats

Data Governance & Accountability

Regulatory Change

The Evolving Data Privacy Landscape

Data Proliferation

Rapid Technological Advancements

Public Awareness & Expectations

Data Breaches & Cyber Threats

Data Governance & Accountability

Regulatory Change

appian

Six Security Trends to Watch

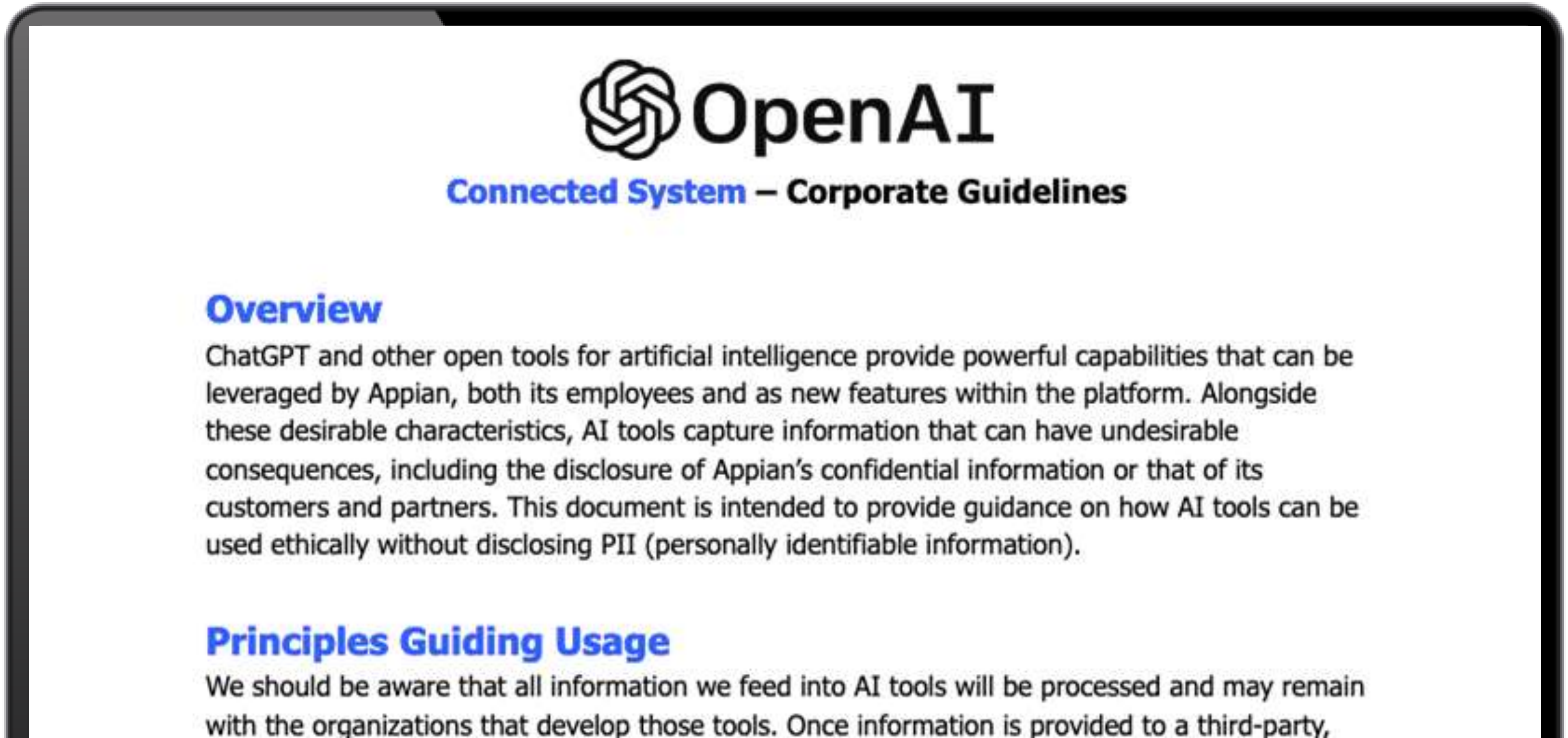
1. **Artificial Intelligence Integration**
   Agility, power, insights, and protecting your sensitive data
2. **Privacy and Regulatory Response**
   Multiplying. Focus on privacy, resilience, and emerging tech.
3. **Digital Supply Chain**
   Primary determinant of trust
4. **Consolidation**
   Simplification and attack surface reduction
5. **Resilient Platforms**
   Zero trust. Strong identity. Continuous re-authentication. Hyper least privilege. Encryption everywhere.
6. **Awareness and Distributed Decisions**
   Users remain a primary target. Security Champions.

Gartner

OWASP

NATIONAL CYBERSECURITY STRATEGY

Companies Are Weighing the Risks



OpenAI

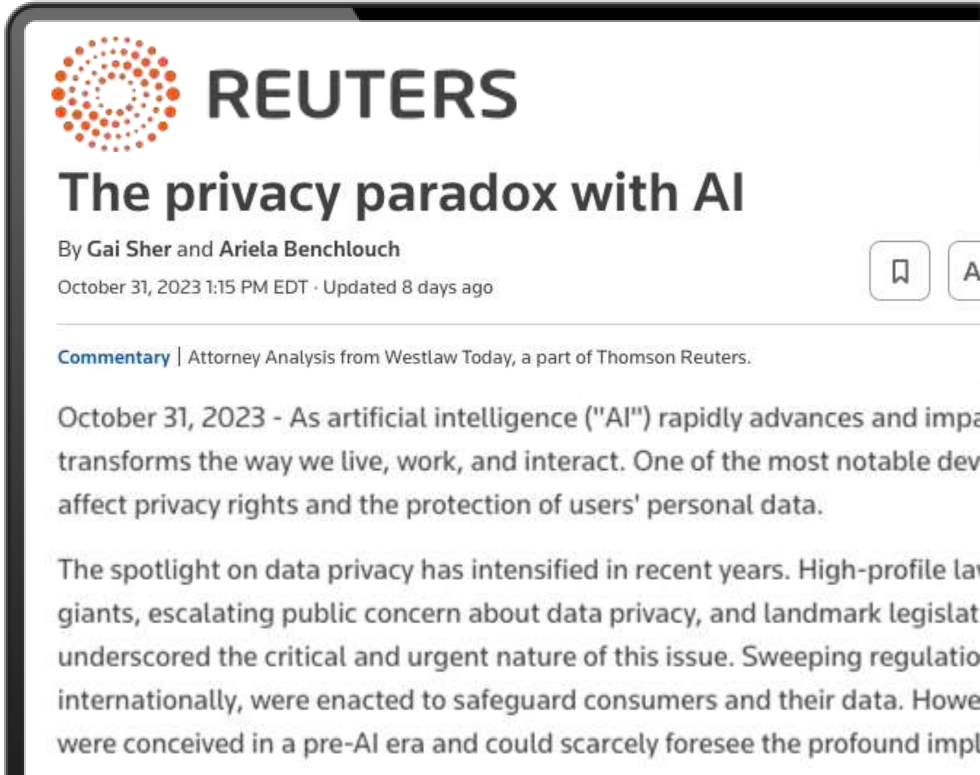
Connected System – Corporate Guidelines

Overview

ChatGPT and other open tools for artificial intelligence provide powerful capabilities that can be leveraged by Appian, both its employees and as new features within the platform. Alongside these desirable characteristics, AI tools capture information that can have undesirable consequences, including the disclosure of Appian's confidential information or that of its customers and partners. This document is intended to provide guidance on how AI tools can be used ethically without disclosing PII (personally identifiable information).

Principles Guiding Usage

We should be aware that all information we feed into AI tools will be processed and may remain with the organizations that develop those tools. Once information is provided to a third-party, [AI's] insatiable appetite for **extensive personal data** to feed its machine-learning algorithms has **raised serious concerns** about data storage, usage, and access.



REUTERS

The privacy paradox with AI

By Gai Sher and Ariela Benchlouch

October 31, 2023 1:15 PM EDT · Updated 8 days ago

Commentary | Attorney Analysis from Westlaw Today, a part of Thomson Reuters.

October 31, 2023 - As artificial intelligence ("AI") rapidly advances and impa
transforms the way we live, work, and interact. One of the most notable dev
affect privacy rights and the protection of users' personal data.

The spotlight on data privacy has intensified in recent years. High-profile la
giants, escalating public concern about data privacy, and landmark legislat
underscored the critical and urgent nature of this issue. Sweeping regulatio
internationally, were enacted to safeguard consumers and their data. Howe
were conceived in a pre-AI era and could scarcely foresee the profound impl

Source: https://www.reuters.com/legal/legalindustry/privacy-paradox-with-ai-2023-10-31/

AI Regulations Are Here (With More on the Way)

EMEA

- EU AI Act
- The UK AI regulation white paper
- Israel AI Policy
- United Arab Emirates AI regulation

AMERICAS

- US (Federal):
  - Executive Orders
  - AI Training Act
  - National AI Initiative Act
  - AI in Government Act
- Brazil AI Strategy

APAC

- Singapore Primer to the Model AI Governance Framework
- South Korea AI Act
- New Zealand Privacy Act

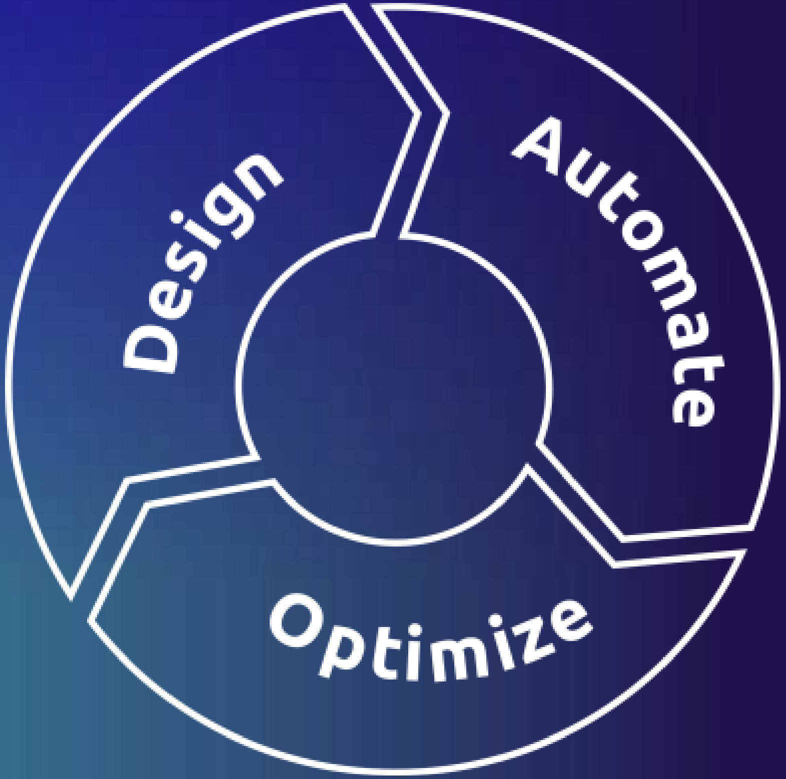
What Is Appian?

INNOVATORS IN

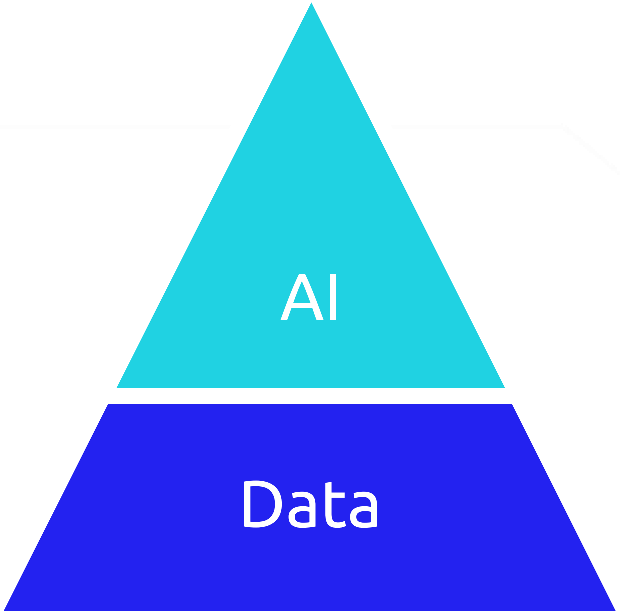
Process Automation

Data Fabric

Private AI



Data is the Foundation of AI

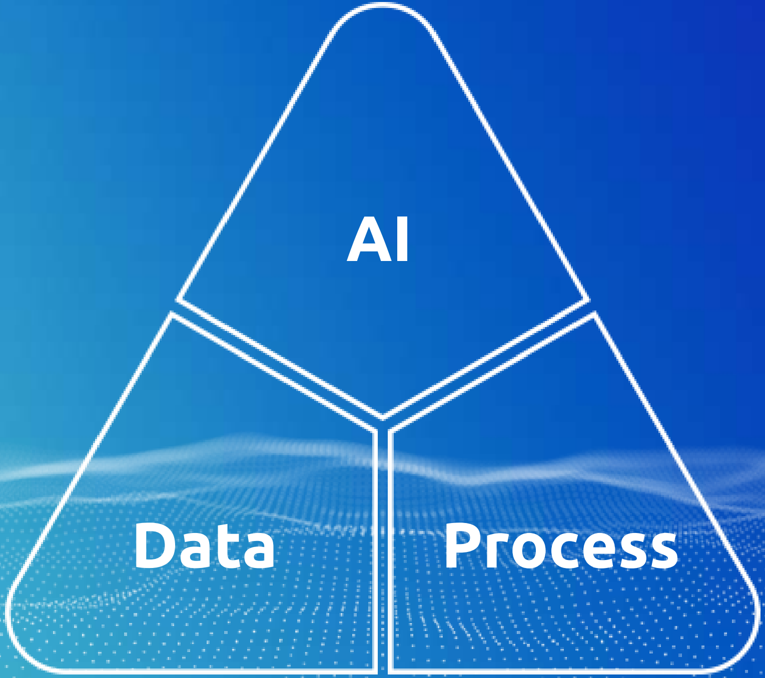


AI and machine learning use data to **learn** and **make decisions**

- Classify a few hundred documents
- Train the next large language model on billions of pages of text from the internet

Data privacy is fundamental to AI

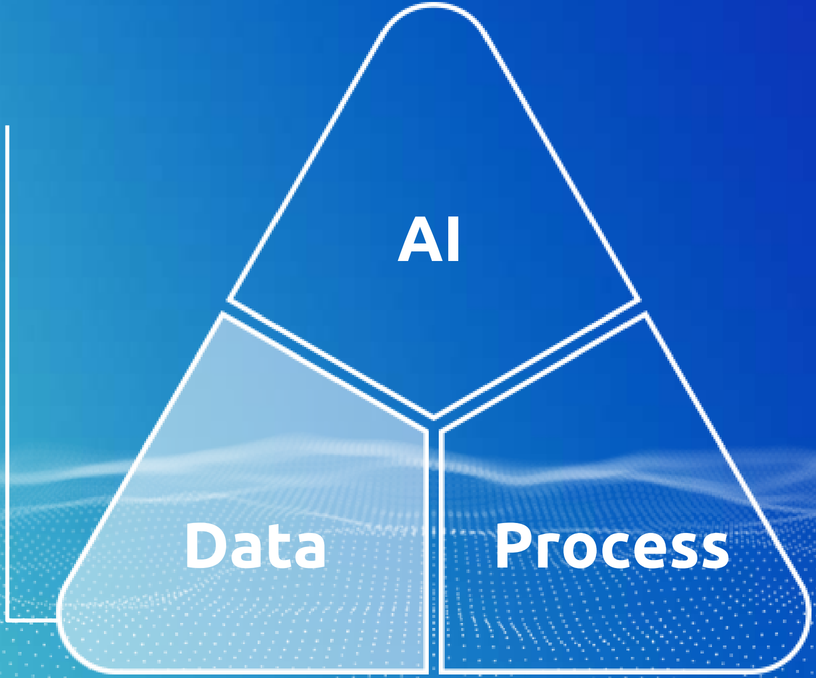
The AI Enterprise



The AI Enterprise

AI is nothing
without data.

Your data trains
and informs AI.



Data Fabric: Access Data Across the Enterprise

Pre-built Connectors

salesforce S NETSUITE servicenow …

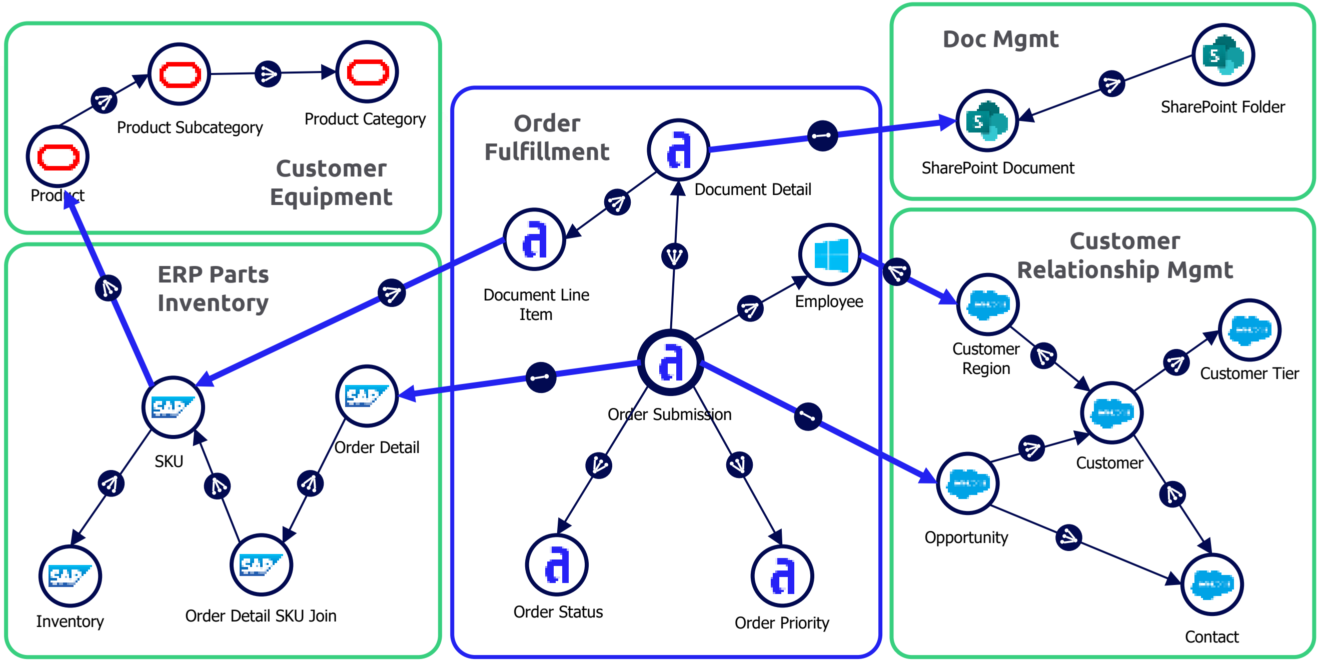
Web Services

HTTP

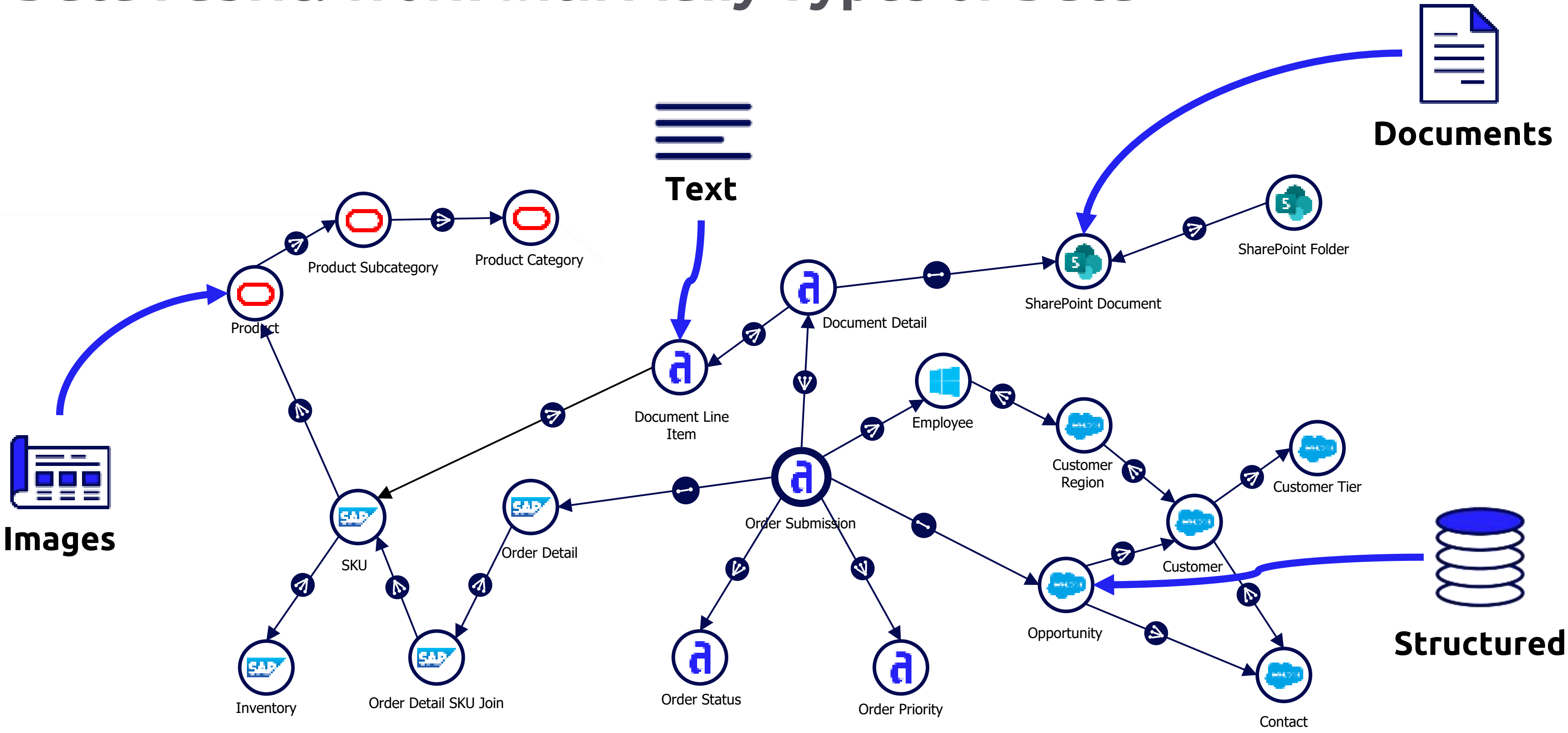
JDBC/SQL

MariaDB Powered by MySQL ORACLE Microsoft SQL Server …

Data Fabric: Create Rich Data Sets with Relationships

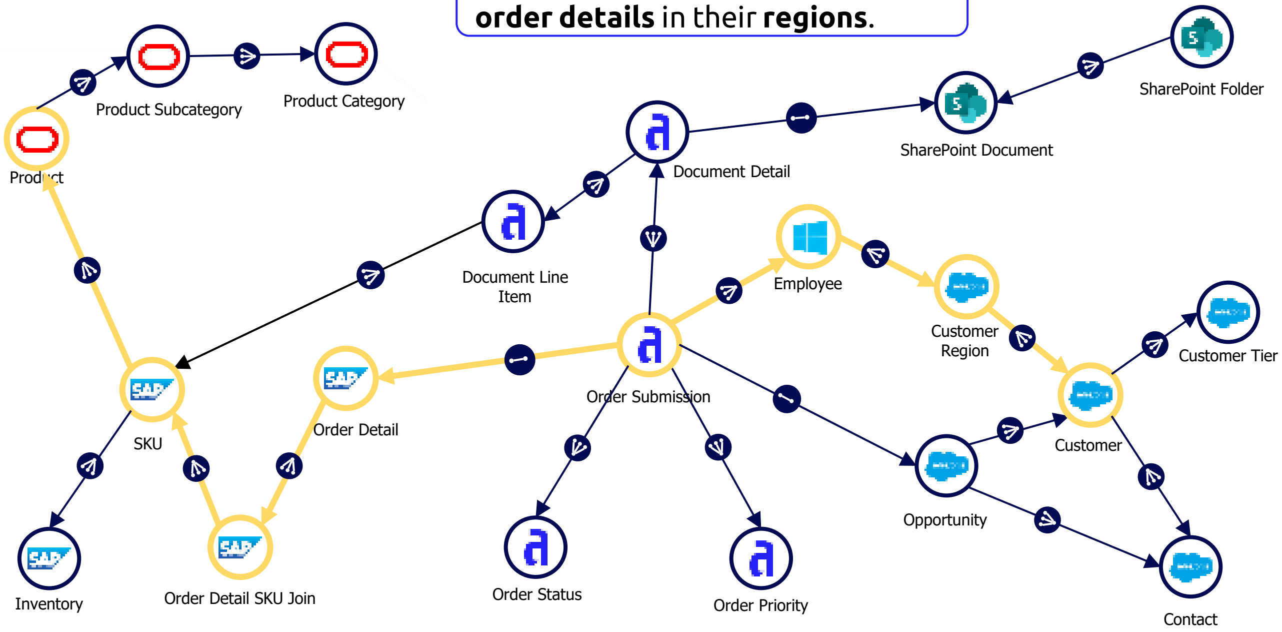


Data Fabric: Work with Many Types of Data



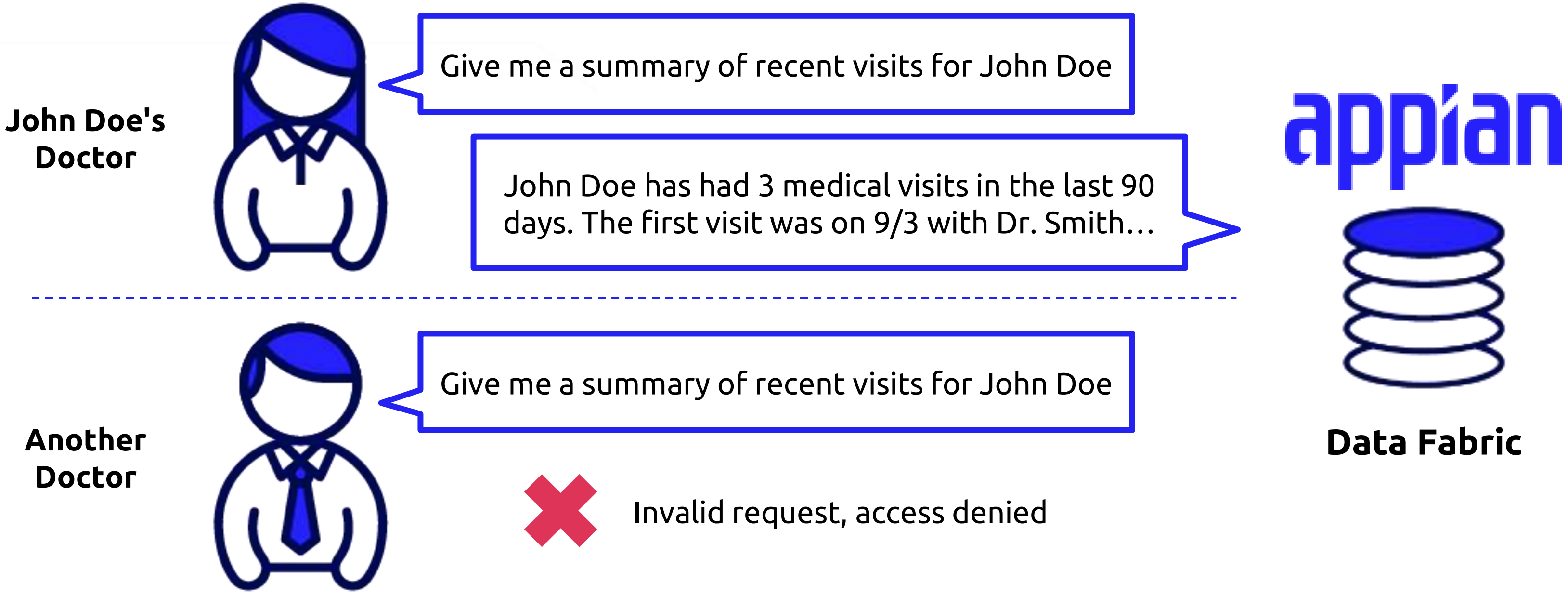
Data Fabric: Control Access with Row-Level Security

Account executives can only see **order details** in their **regions**.



appian

Example: Chat with Data Fabric



John Doe's Doctor

Give me a summary of recent visits for John Doe

John Doe has had 3 medical visits in the last 90 days. The first visit was on 9/3 with Dr. Smith…

Another Doctor

Give me a summary of recent visits for John Doe

✗ Invalid request, access denied

appian

Data Fabric

US | Education | Operations/Customer Service

UNIVERSITY of SOUTH FLORIDA

AI-powered Student Advisory

Improving graduation rates with Appian AI Copilot

University of South Florida use Appian AI Copilot to enable a generative AI-powered chatbot to help student academic advisors with their cases management tasks such as:

- Understanding case history and creating action plans
- Suggesting agendas for student meetings
- Generating drafts of messages to send to students

The chatbot was quickly deployed through Appian Records Chat. Appian Data Fabric helped power the AI assistance and ensured student data integration.

From idea to deployment in
under 2 months

Student data remain
protected and secure
with Appian Private AI.

“I don’t have to look at 10 different things. This will help me quickly prepare.” (USF)

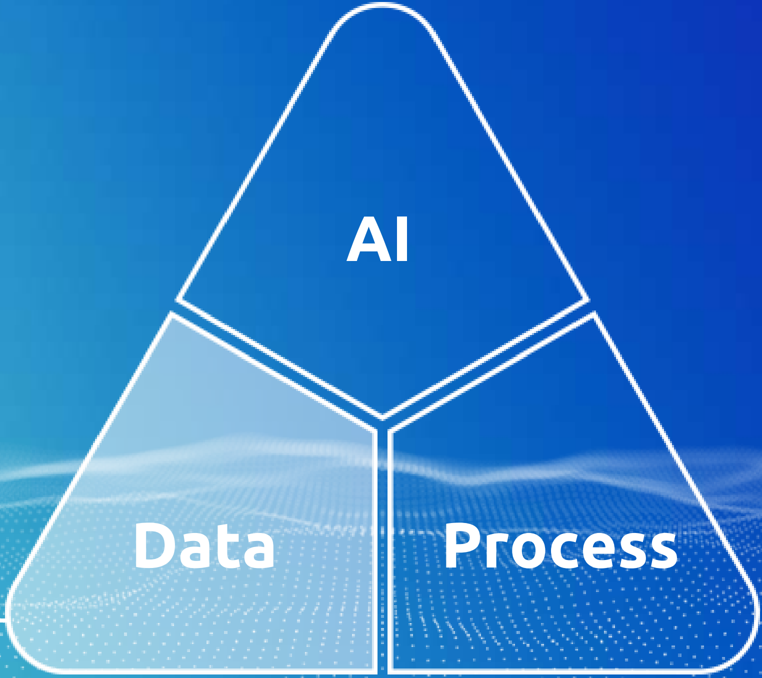
Data Fabric Fuels the AI Machine!

Enterprise access

Relationships

Many data types

Row-level security

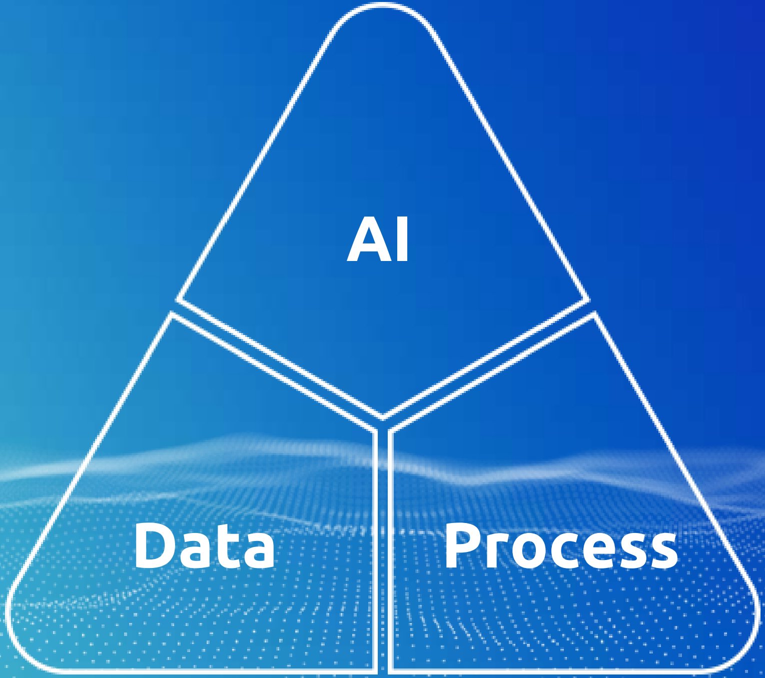


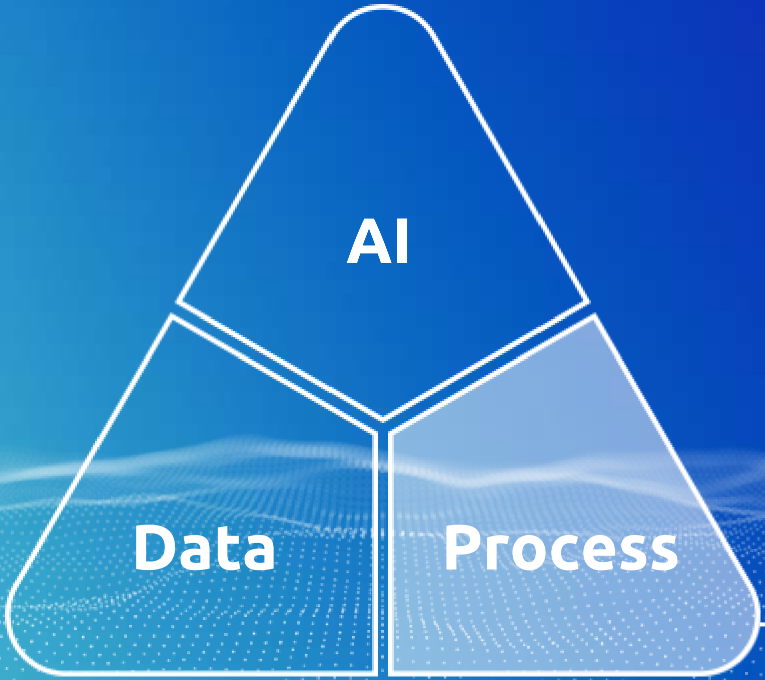
AI

Data

Process

appian

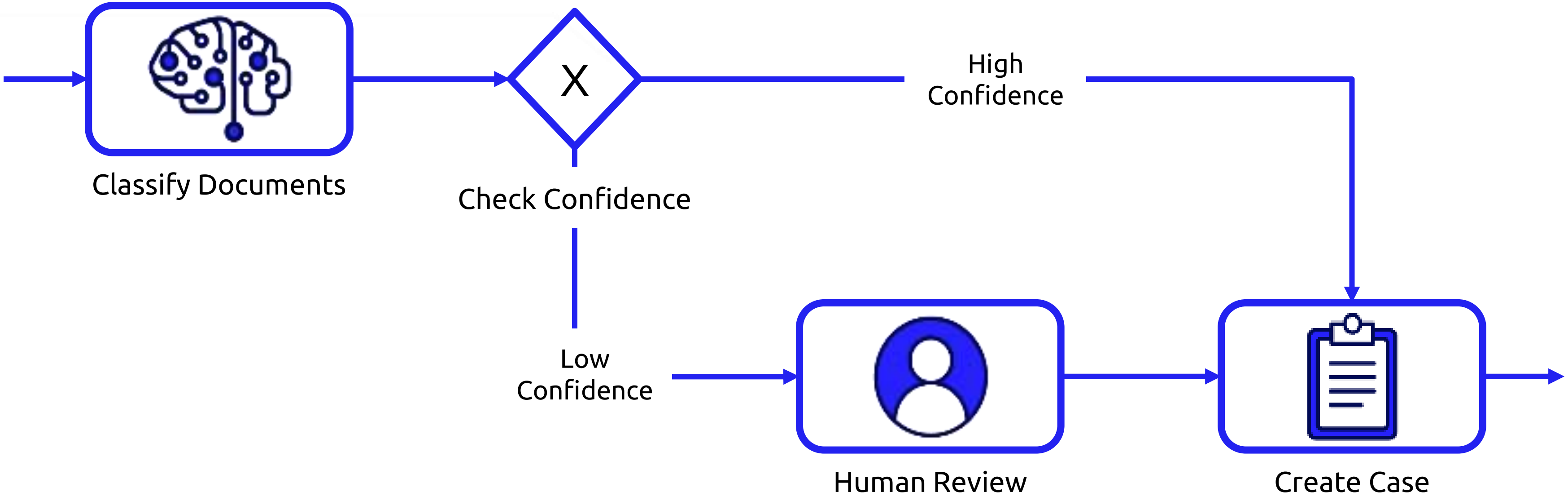

AI
Data
Process



This is the era of mixed autonomy.

Processes coordinate work between humans and AI.

Mixed Autonomy: Humans & AI Working Together



Control AI Usage Based on Risk

EU AI Act: A **Risk-Based** Regulatory Framework

Email Routing

Minimal risk

Human oversight later in the process

100% AI automated

Customer Service Response

Moderate risk if responses are poor

Split out higher risk scenarios

75% AI automated

Medical Treatment Decisions

Cost risks

Regulatory risks

Reputation risks

Keep the decision with a human

0% AI automated

Control AI Usage Based on Risk

EU AI Act: A **Risk-Based** Regulatory Framework

Email Routing

Minimal risk

Human oversight later in the process

100% AI automated

Customer Service Response

Moderate risk if responses are poor

Split out higher risk scenarios

75% AI automated

Medical Treatment Decisions

Cost risks

Regulatory risks

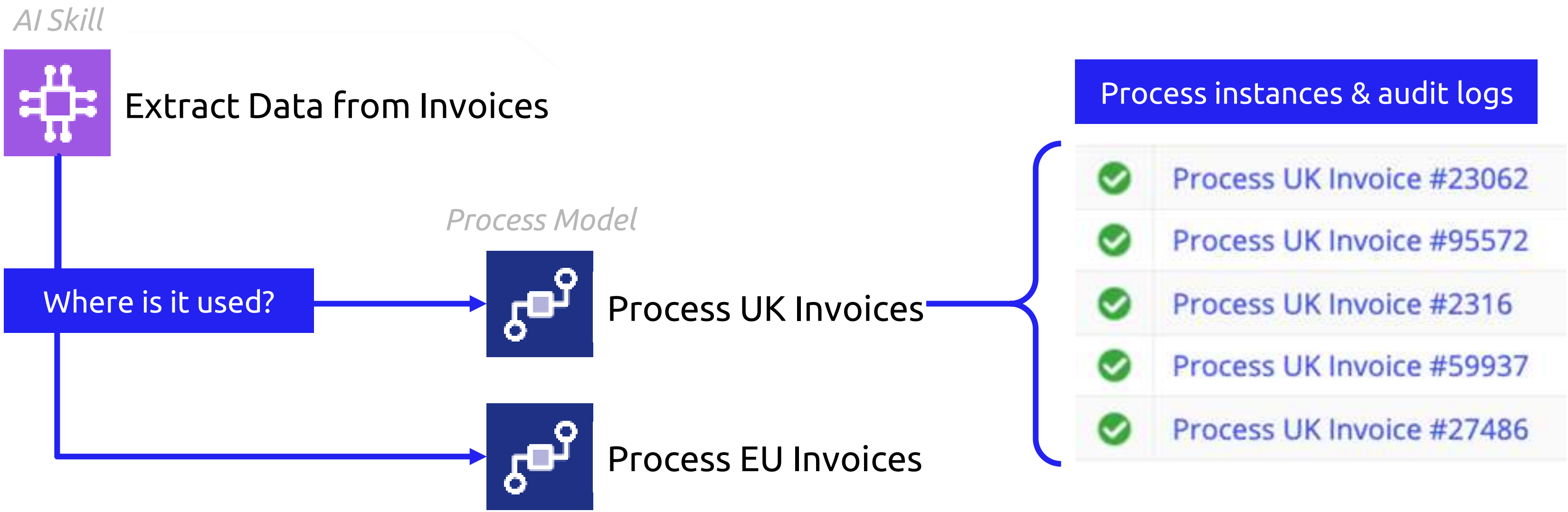
Reputation risks

Keep the decision with a human

0% AI automated

appian

Audit AI Usage



AI Skill

Extract Data from Invoices

Where is it used?

Process Model

Process UK Invoices

Process EU Invoices

Process instances & audit logs

✓ Process UK Invoice #23062

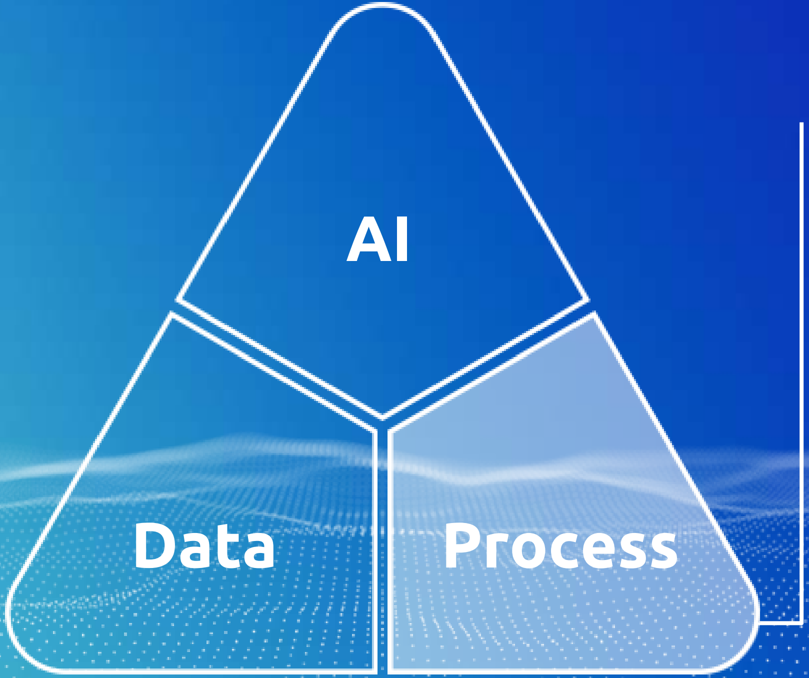
✓ Process UK Invoice #95572

✓ Process UK Invoice #2316

✓ Process UK Invoice #59937

✓ Process UK Invoice #27486

Process Enables AI Governance!



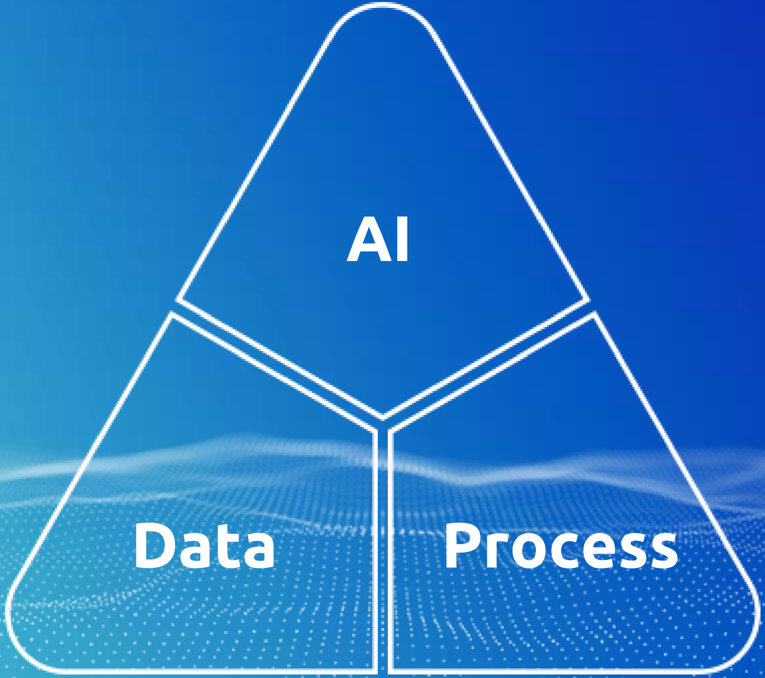
Human coordination and oversight

Manage risk exposure

Auditability

The Era of AI Due Diligence

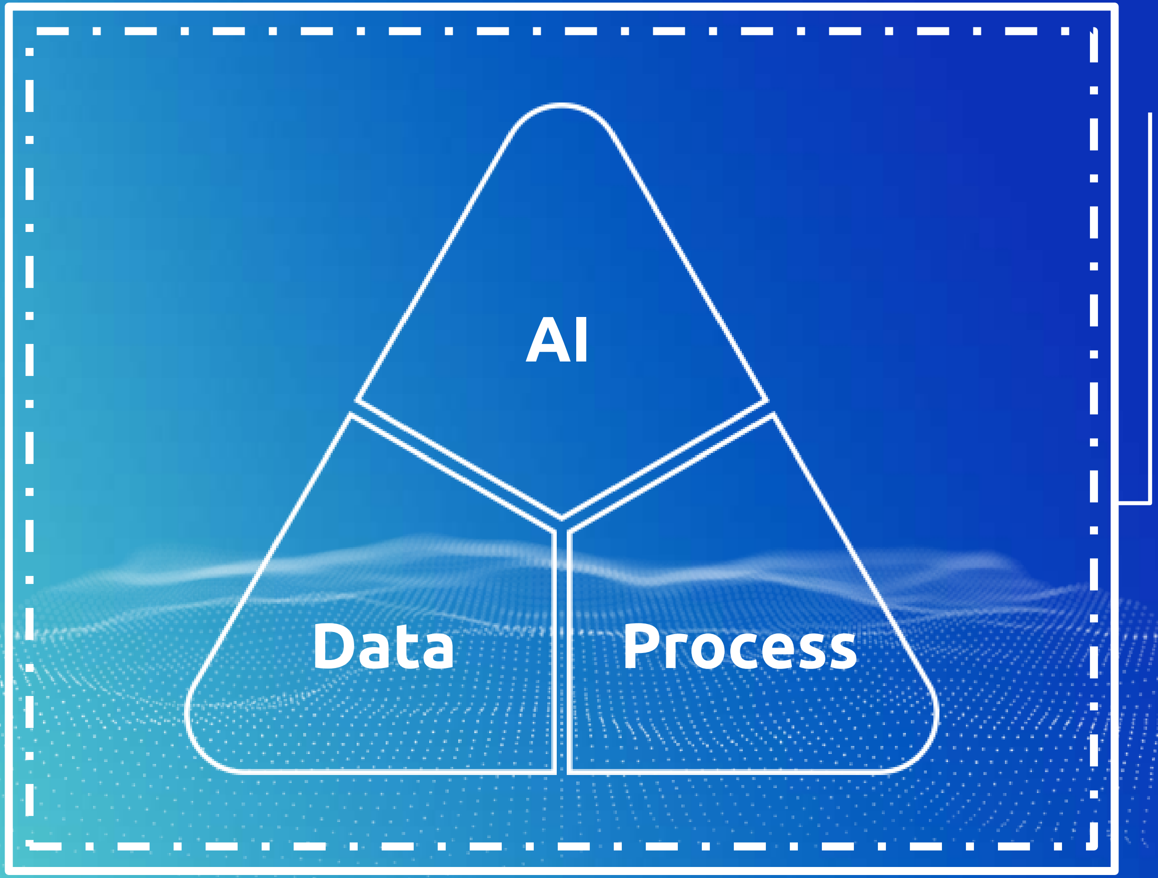
- Will my data be used to train AI models that are shared with other partners or customers?
- Are decisions made by AI performed automatically or is there human review and oversight?
- Does the product use any 3rd vendors or services that employ AI?



AI

Data

Process



One platform.

One compliance boundary.

Appian Is Enterprise-Grade

Scalable

9 Million
users

16 Billion
transactions per day

66
availability zones

Secure

GxP

508

AICPA SOC

PCI DSS

cloud security alliance CSA

HM Government G-Cloud Supplier

HITRUST CSF Certified

FISMA

FedRAMP

HIPAA

ISAE 3402

DISA IL5

Reliable

BEST-IN-CLASS

99.99%

AVAILABILITY

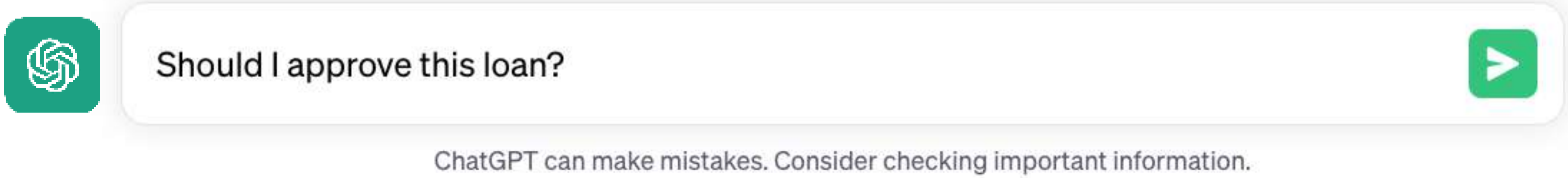
99.95% SLA

4-minute RTO

1-minute RPO

appian

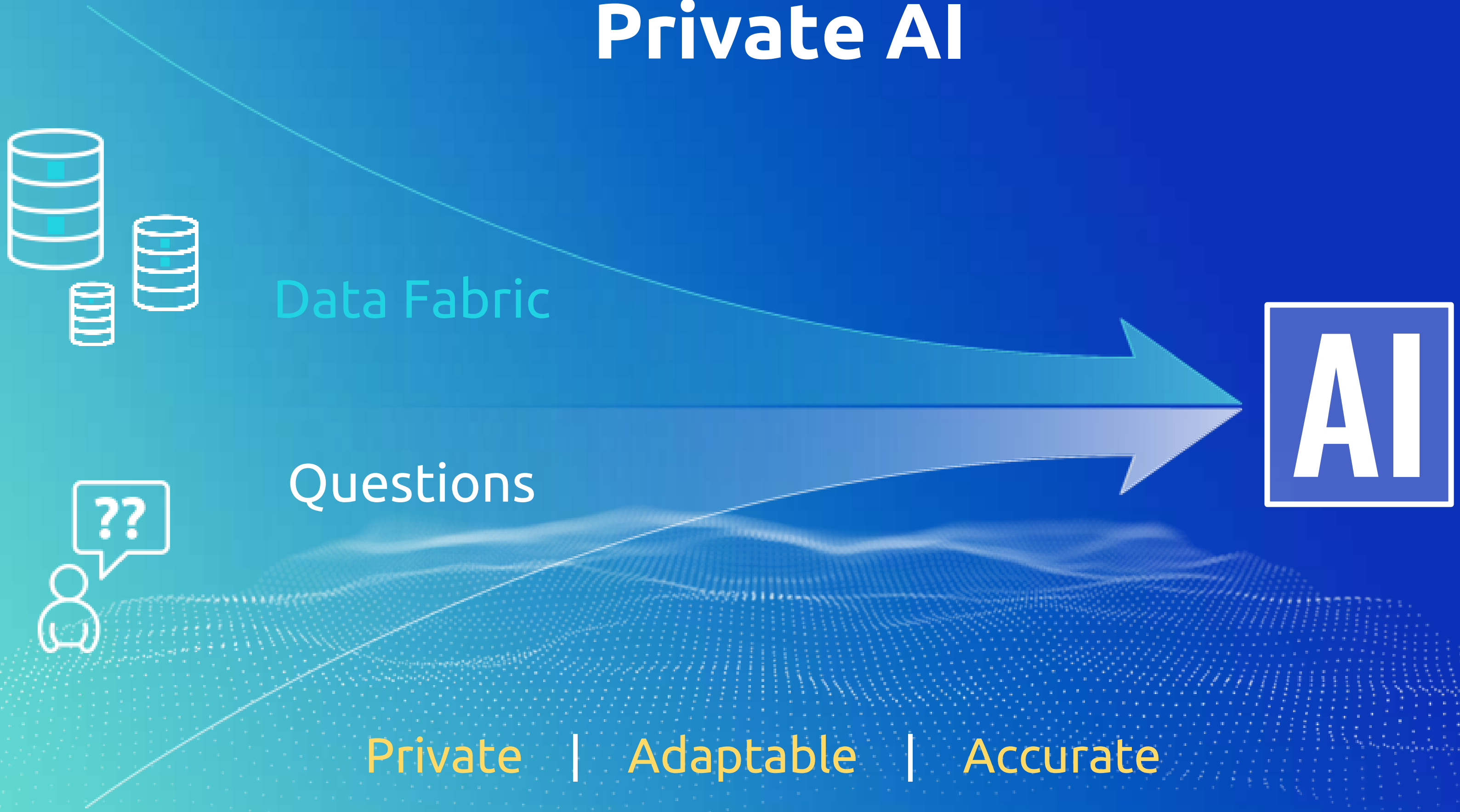
Can You TRUST Your AI?



Should I approve this loan?

ChatGPT can make mistakes. Consider checking important information.

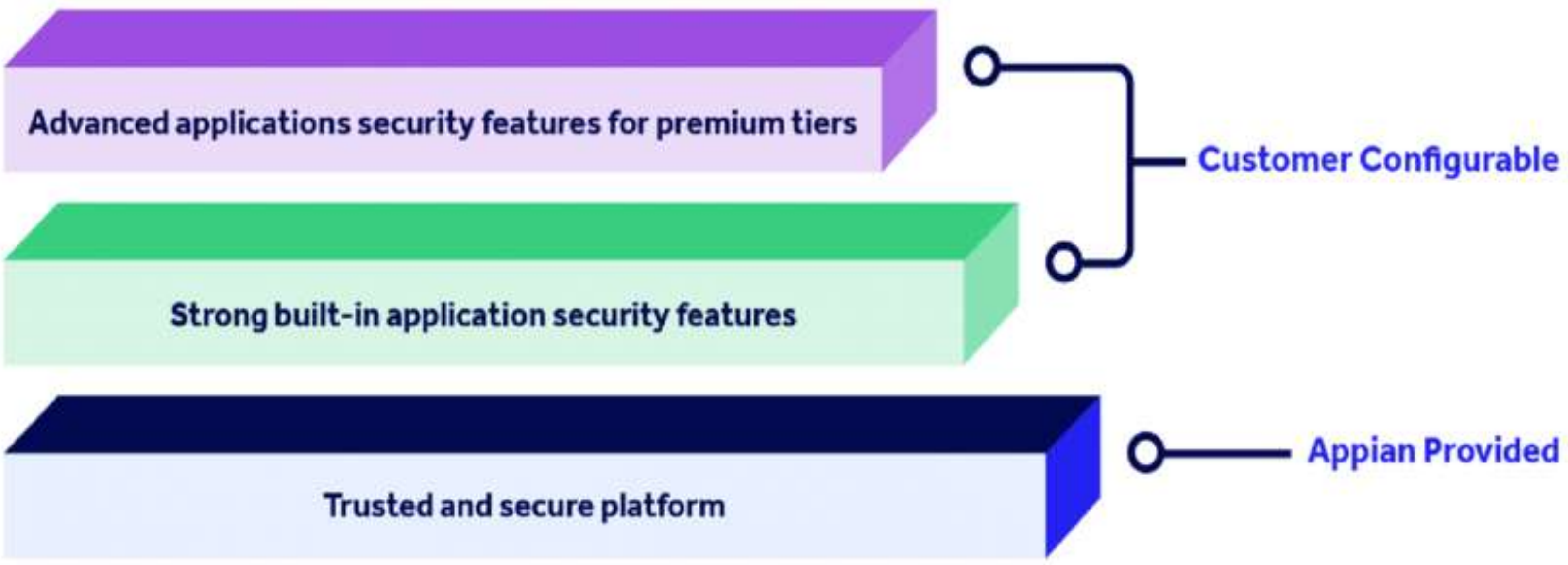
Private AI



Private | Adaptable | Accurate

appian

Appian Protect Overview



Advanced applications security features for premium tiers

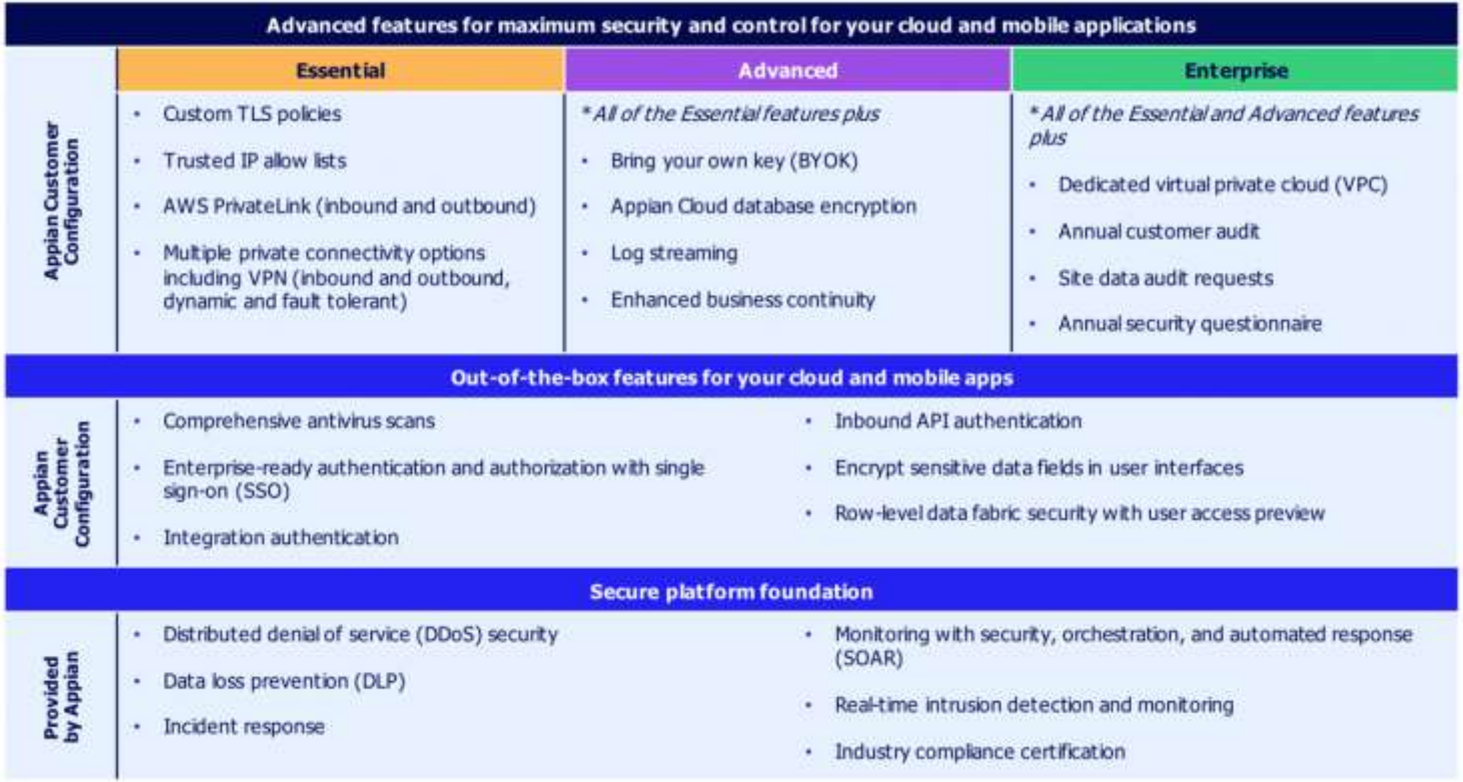
Strong built-in application security features

Trusted and secure platform

Customer Configurable

Appian Provided

Appian Protect Security Benefits



Advanced features for maximum security and control for your cloud and mobile applications

	Essential	Advanced	Enterprise
Appian Customer Configuration	• Custom TLS policies • Trusted IP allow lists • AWS PrivateLink (inbound and outbound) • Multiple private connectivity options including VPN (inbound and outbound, dynamic and fault tolerant)	**All of the Essential features plus* • Bring your own key (BYOK) • Appian Cloud database encryption • Log streaming • Enhanced business continuity	**All of the Essential and Advanced features plus* • Dedicated virtual private cloud (VPC) • Annual customer audit • Site data audit requests • Annual security questionnaire

Out-of-the-box features for your cloud and mobile apps

Appian Customer Configuration

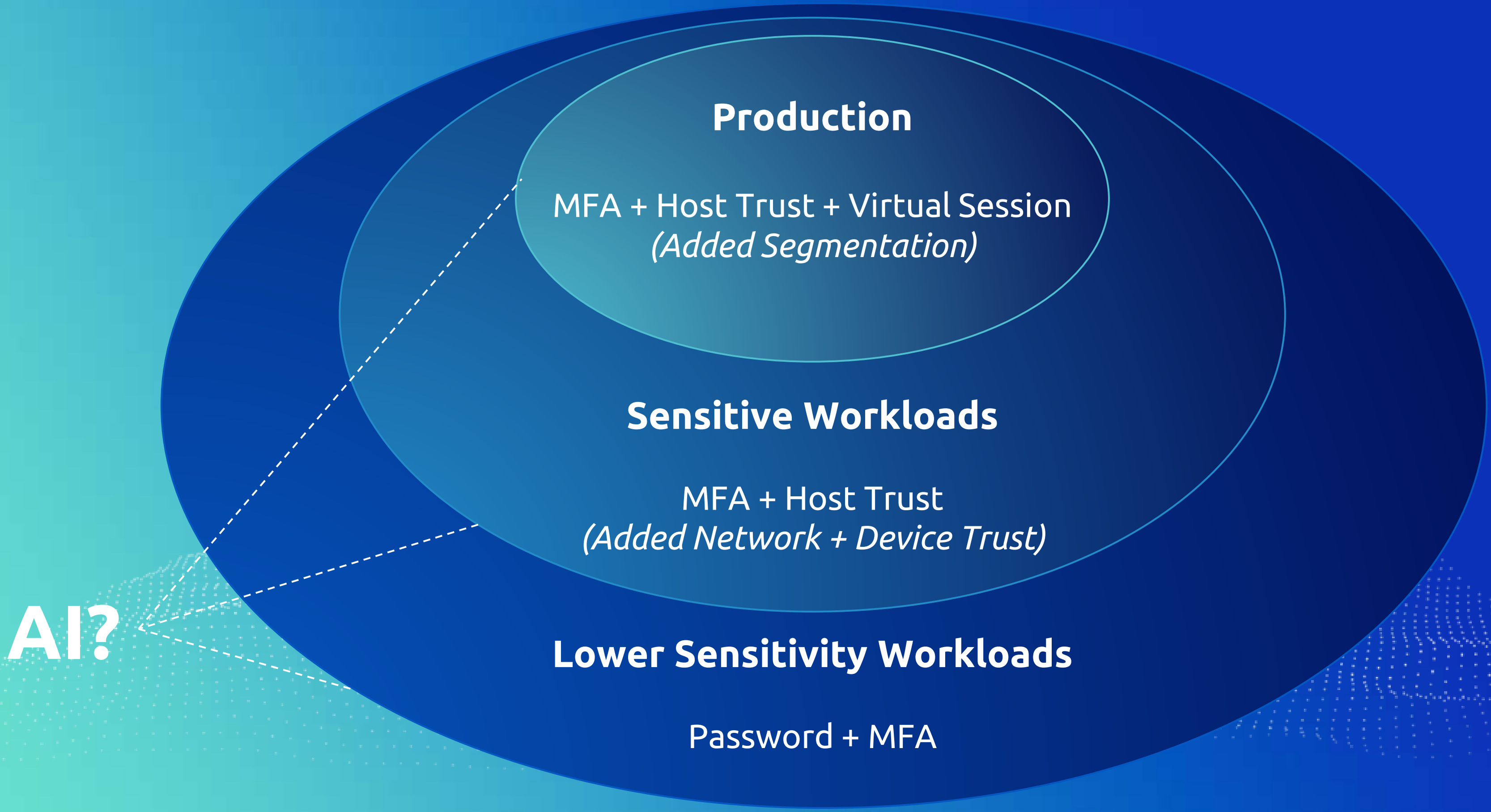
- Comprehensive antivirus scans
- Enterprise-ready authentication and authorization with single sign-on (SSO)
- Integration authentication
- Inbound API authentication
- Encrypt sensitive data fields in user interfaces
- Row-level data fabric security with user access preview

Secure platform foundation

Provided by Appian

- Distributed denial of service (DDoS) security
- Data loss prevention (DLP)
- Incident response
- Monitoring with security, orchestration, and automated response (SOAR)
- Real-time intrusion detection and monitoring
- Industry compliance certification

Zero Trust with AI



Production

MFA + Host Trust + Virtual Session
(Added Segmentation)

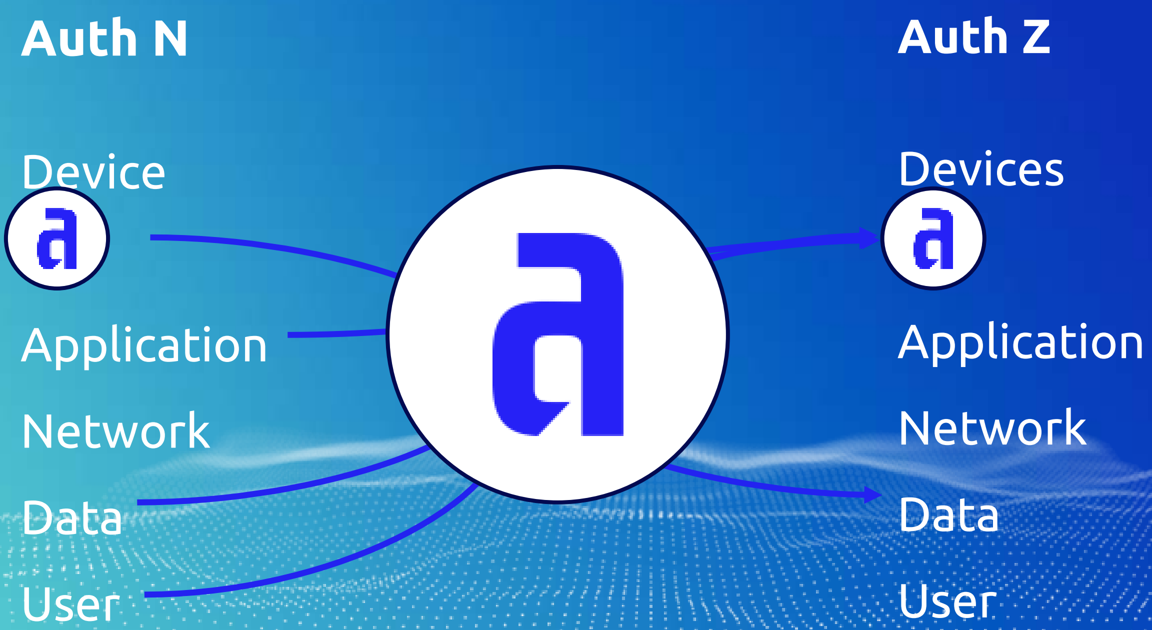
Sensitive Workloads

MFA + Host Trust
(Added Network + Device Trust)

Lower Sensitivity Workloads

Password + MFA

Zero Trust AI Overlay - The Cyber Defence Matrix...



Art of the Possible: Your Security Journey

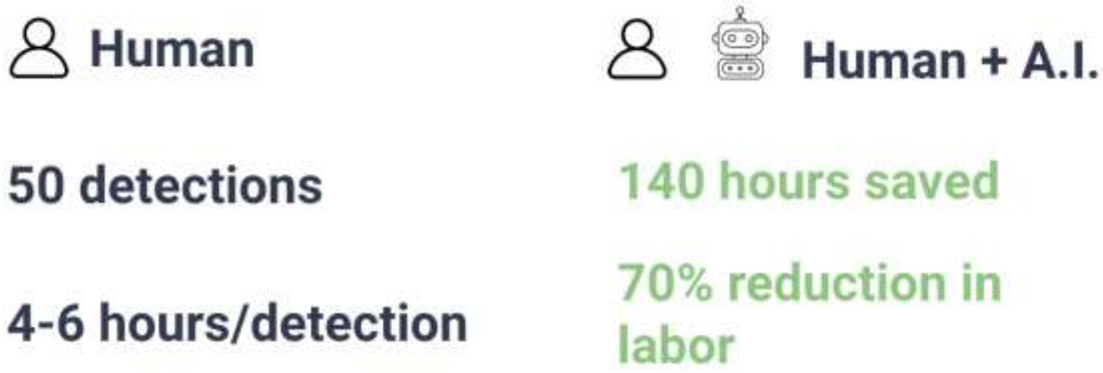
- **How Appian built our own SOAR on our platform**
  - Tackling Security Alert Fatigue with Appian
  - Orchestrating the Security Toolbox
  - Automating Threat Analysis
- **Appian for Privacy Compliance**
  - Safeguard your customer data to ensure compliance
  - KPMG and Appian: Using Appian to build Privacy App

Using AI for Security Use Cases

- Identify toil in daily work
- Augment your workforce
- Use AI to increase access to expertise

Using AI for Security Use Cases

- Go from threat intelligence to detections in seconds instead of hours



Human	Human + A.I.
50 detections	140 hours saved
4-6 hours/detection	70% reduction in labor

Thank You

Appian is the leading platform for
process orchestration, automation, and intelligence.