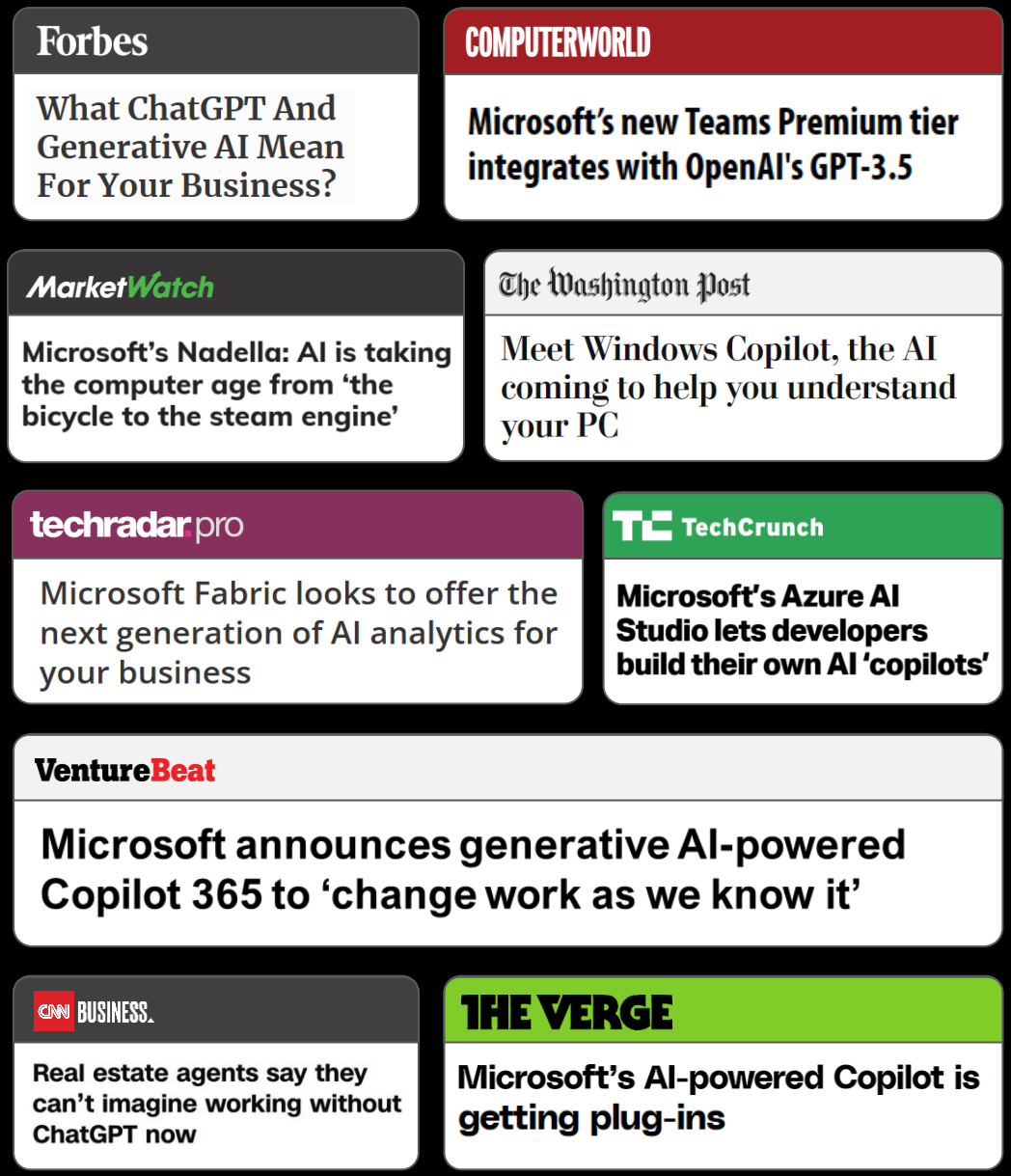
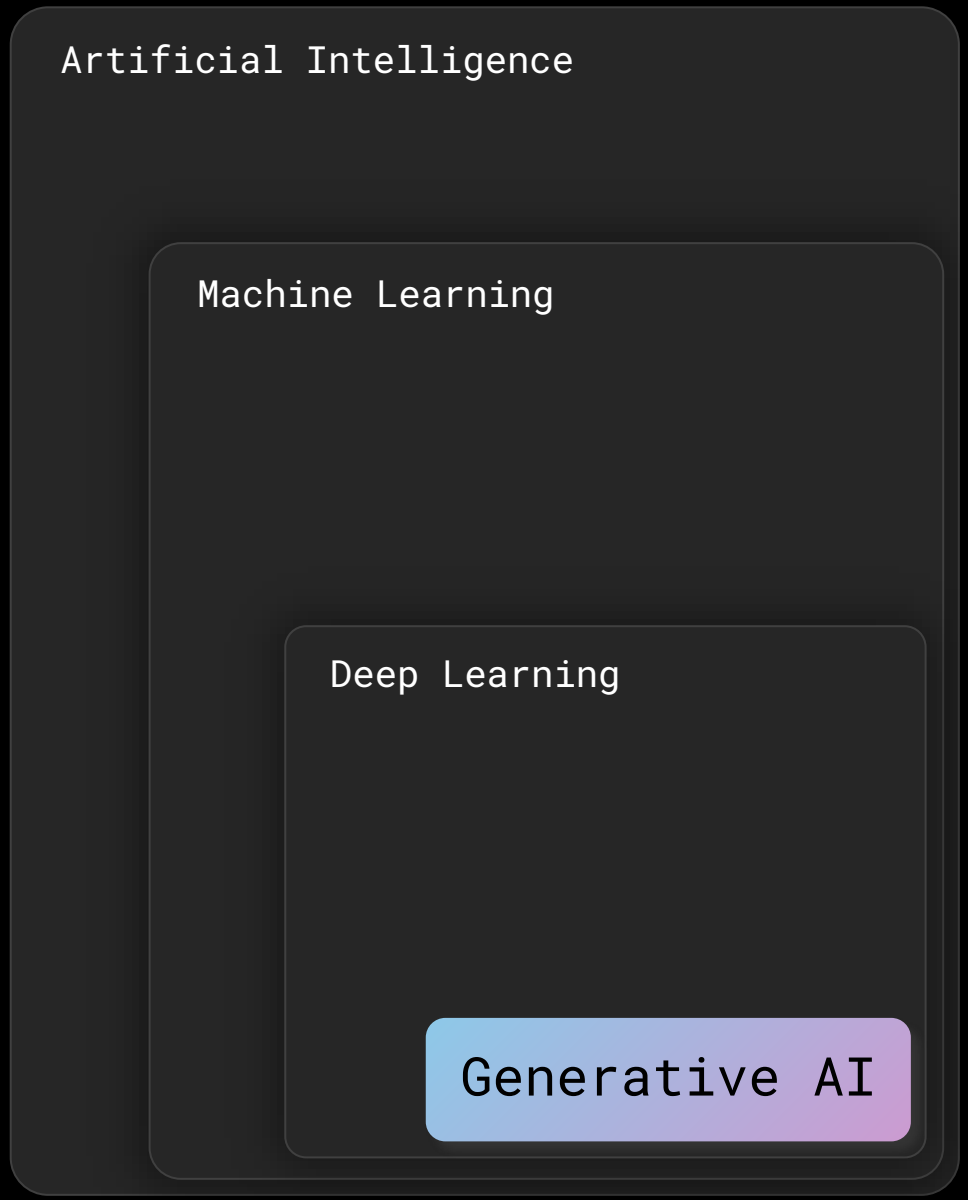
Microsoft

Azure AI, ML and OpenAI Opportunities

The AI technology is here





1956

Artificial Intelligence

The field of computer science that seeks to create intelligent machines that can replicate or exceed human intelligence

1997

Machine Learning

Subset of AI that enables machines to learn from existing data and improve upon that data to make decisions or predictions

2017

Deep Learning

A machine learning technique in which layers of neural networks are used to process data and make decisions

2021

Generative AI

Create new written, visual, and auditory content given prompts or existing data

What does Generative AI do?

+

ChatGPT	DALL·E	Codex
Conversation	Images	Code

What does Generative AI do?

GPT-3

Prompt:

```
Write a tagline for community safety

Response:

Secure your world, empower your safety - community safety starts with you.!
```

Codex

Prompt:

```
Table citizens, columns = [CitizenId, FirstName, LastName, Company, Address, City, State, Country, PostalCode]

Create a SQL query for all Citizens in Canada named Laura
query =

Response:

SELECT *
FROM Customers
WHERE Country = ‘UA' AND FirstName = 'Олена'
```

DALL·E

Prompt: Diverse riders on the bus

Response:

Note: all examples are actually written in ChatGPT or other services

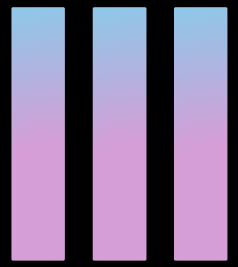
Azure OpenAI Service

Infuse OpenAI into your tech
Heavily customizable
The sky is the limit
Available now

Copilot ecosystem

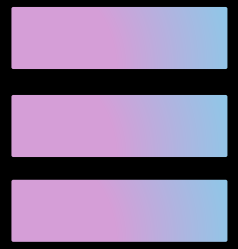
OpenAI prebuilt into Microsoft suite
SaaS experiences
In various stages of availability

OpenAI Flavours in the Microsoft ecosystem



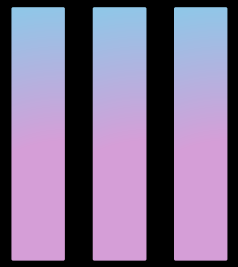
Enrich

Organizational core competencies and differentiators
Use AI to enhance the way Police Officers work on a daily basis



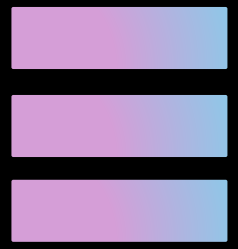
Streamline and Automate

Support tasks, repeated or manual processes
Internal communications, legal, HR, training



Enrich

Organizational core competencies and differentiators
Use AI to enhance the way Police Officers work on a daily basis



Streamline and Automate

Support tasks, repeated or manual processes
Internal communications, legal, HR, training

Adapt and respond

Anticipate new challenges that others introduce
Dealing with all the new things bad people can do

Enrich: what is happening

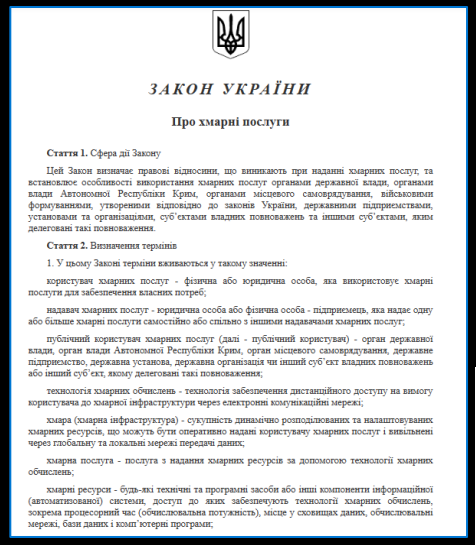
Organizational core competencies and differentiators
Use AI to enhance the way Police Officers work on a daily basis

Police agencies in the United States, UK and Australia are leveraging AI to make information more consumable for investigators – so they can apply less energy to manual tasks and more energy to human tasks

→translating and summarizing BWC footage and transcriptions
→summarizing and prioritizing case data for cold case investigations
→ingesting and categorizing disparate banking records in financial crimes investigations

Azure OpenAI Document Processing Automation

Understanding Law



ЗАКОН УКРАЇНИ

Про хмарні послуги

Стаття 1. Сфера дії Закону

Цей Закон визначає правові відносини, що виникають при наданні хмарних послуг, та встановлює особливості використання хмарних послуг органами державної влади, органами влади Автономної Республіки Крим, органами місцевого самоврядування, військовими формуваннями, утвореними відповідно до законів України, державними підприємствами, установами та організаціями, суб'єктами владних повноважень та іншими суб'єктами, яким делеговані такі повноваження.

Стаття 2. Визначення термінів

1. У цьому Законі терміни вживаються у такому значенні:

користувач хмарних послуг - фізична або юридична особа, яка використовує хмарні послуги для забезпечення власних потреб;

надавач хмарних послуг - юридична особа або фізична особа - підприємець, яка надає одну або більше хмарні послуги самостійно або спільно з іншими надавачами хмарних послуг;

публічний користувач хмарних послуг (далі - публічний користувач) - орган державної влади, орган влади Автономної Республіки Крим, орган місцевого самоврядування, державне підприємство, державна установа, державна організація чи інший суб'єкт владних повноважень або інший суб'єкт, якому делеговані такі повноваження;

технологія хмарних обчислень - технологія забезпечення дистанційного доступу на вимогу користувача до хмарної інфраструктури через електронні комунікаційні мережі;

хмара (хмарна інфраструктура) - сукупність динамічно розподілюваних та налаштовуваних хмарних ресурсів, що можуть бути оперативно надані користувачу хмарних послуг і вивільнені через глобальну та локальні мережі передачі даних;

хмарна послуга - послуга з надання хмарних ресурсів за допомогою технології хмарних обчислень;

хмарні ресурси - будь-які технічні та програмні засоби або інші компоненти інформаційної (автоматизованої) системи, доступ до яких забезпечують технології хмарних обчислень, зокрема процесорний час (обчислювальна потужність), місце у сховищах даних, обчислювальні мережі, бази даних і комп'ютерні програми;

Case Study: law on use of cloud services needs to be translated, summarized and some questions answered

LAW OF UKRAINE

About cloud services

Article 1. Scope of the Law

This Law defines the legal relations arising from the provision of cloud services and establishes the specifics of the use of cloud services by public authorities, authorities of the Autonomous Republic of Crimea, local governments, military formations formed in accordance with the laws of Ukraine, state enterprises,

Summarize text in English and answer could we use public cloud services?

This Law defines the legal relations arising from the provision of cloud services and establishes the specifics of the use of cloud services by public authorities, authorities of the Autonomous Republic of Crimea, local governments, military formations formed in accordance with the laws of Ukraine, state enterprises, institutions and organizations, subjects of power and other entities to which such powers are delegated. The Law establishes the requirements for the

Yes, we can use public cloud services, as long as they meet the requirements set out in the Law.

Use of OpenAI for direct translation, summarization and Q&A on the complex unstructured document

Automatic Translation o the original document defining corpus of the text to be used.

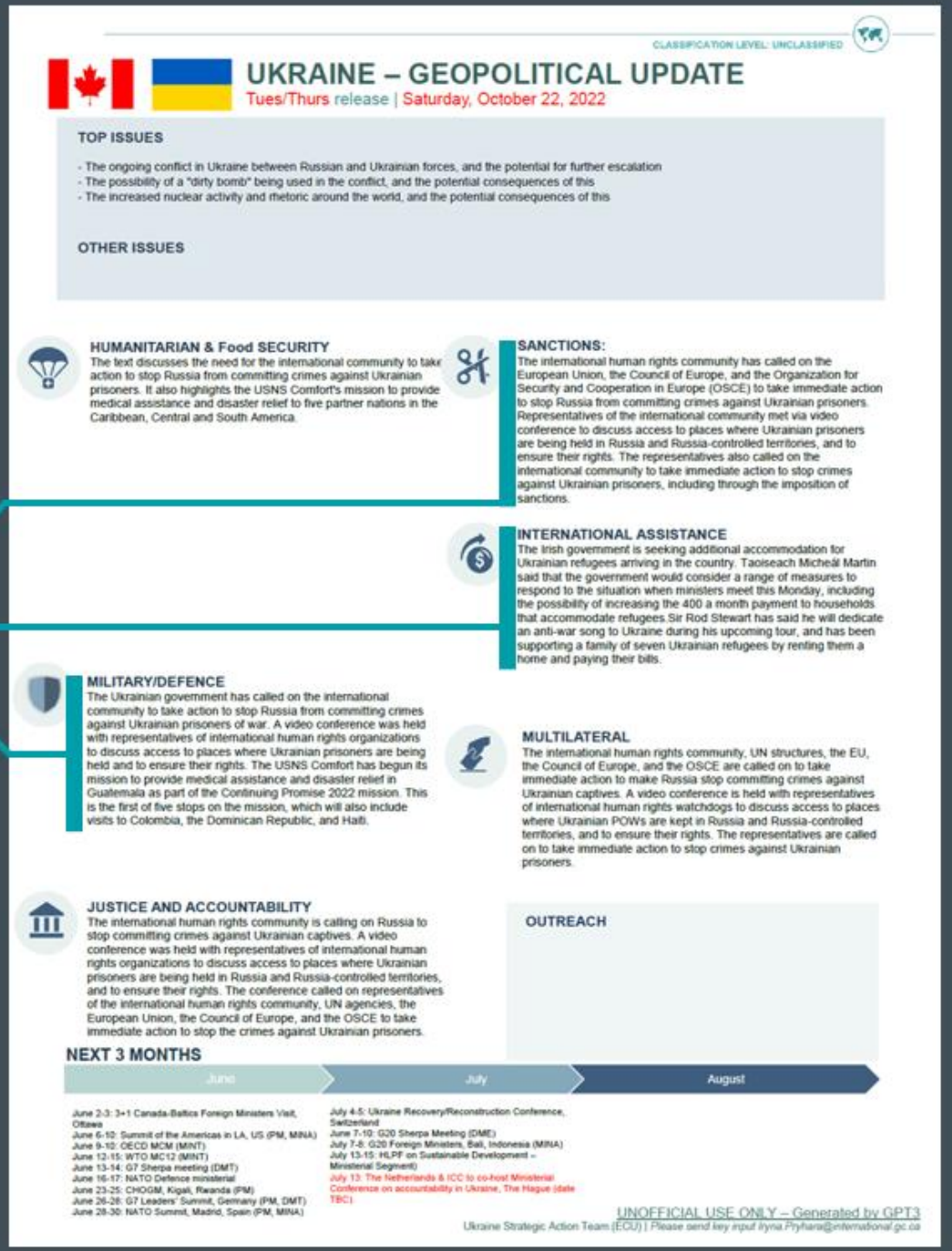
OpenAI Instructions that we added to manage the flow of execution and direct the ansewers

Output: summarizing the complex text to the required summary, but also answering the specific question.

Summarization of news articles related to the Ukraine-Russian war using Azure Open AI

Processing

Classify (topics)
Combine
Chunk (textwrap)
Tokenizer (4K tokens)
Verify length
Summarize



CLASSIFICATION LEVEL: UNCLASSIFIED

UKRAINE – GEOPOLITICAL UPDATE

Tues/Thurs release | Saturday, October 22, 2022

TOP ISSUES

- The ongoing conflict in Ukraine between Russian and Ukrainian forces, and the potential for further escalation
- The possibility of a "dirty bomb" being used in the conflict, and the potential consequences of this
- The increased nuclear activity and rhetoric around the world, and the potential consequences of this

OTHER ISSUES

HUMANITARIAN & Food SECURITY
The text discusses the need for the international community to take action to stop Russia from committing crimes against Ukrainian prisoners. It also highlights the USNS Comfort's mission to provide medical assistance and disaster relief to five partner nations in the Caribbean, Central and South America.

SANCTIONS:
The international human rights community has called on the European Union, the Council of Europe, and the Organization for Security and Cooperation in Europe (OSCE) to take immediate action to stop Russia from committing crimes against Ukrainian prisoners. Representatives of the international community met via video conference to discuss access to places where Ukrainian prisoners are being held in Russia and Russia-controlled territories, and to ensure their rights. The representatives also called on the international community to take immediate action to stop crimes against Ukrainian prisoners, including through the imposition of sanctions.

INTERNATIONAL ASSISTANCE
The Irish government is seeking additional accommodation for Ukrainian refugees arriving in the country. Taoiseach Micheál Martin said that the government would consider a range of measures to respond to the situation when ministers meet this Monday, including the possibility of increasing the 400 a month payment to households that accommodate refugees.Sir Rod Stewart has said he will dedicate an anti-war song to Ukraine during his upcoming tour, and has been supporting a family of seven Ukrainian refugees by renting them a home and paying their bills.

MILITARY/DEFENCE
The Ukrainian government has called on the international community to take action to stop Russia from committing crimes against Ukrainian prisoners of war. A video conference was held with representatives of international human rights organizations to discuss access to places where Ukrainian prisoners are being held and to ensure their rights. The USNS Comfort has begun its mission to provide medical assistance and disaster relief in Guatemala as part of the Continuing Promise 2022 mission. This is the first of five stops on the mission, which will also include visits to Colombia, the Dominican Republic, and Haiti.

MULTILATERAL
The international human rights community, UN structures, the EU, the Council of Europe, and the OSCE are called on to take immediate action to make Russia stop committing crimes against Ukrainian captives. A video conference is held with representatives of international human rights watchdogs to discuss access to places where Ukrainian POWs are kept in Russia and Russia-controlled territories, and to ensure their rights. The representatives are called on to take immediate action to stop crimes against Ukrainian prisoners.

JUSTICE AND ACCOUNTABILITY
The international human rights community is calling on Russia to stop committing crimes against Ukrainian captives. A video conference was held with representatives of international human rights organizations to discuss access to places where Ukrainian prisoners are being held in Russia and Russia-controlled territories, and to ensure their rights. The conference called on representatives of the international human rights community, UN agencies, the European Union, the Council of Europe, and the OSCE to take immediate action to stop the crimes against Ukrainian prisoners.

OUTREACH

NEXT 3 MONTHS

June | July | August

June 2-3: 3+1 Canada-Baltics Foreign Ministers Visit, Ottawa
June 6-10: Summit of the Americas in LA, US (PM, MINA)
June 9-10: OECD MCM (MINT)
June 12-15: WTO MC12 (MINT)
June 13-14: G7 Sherpa meeting (DMT)
June 16-17: NATO Defence ministerial
June 23-25: CHOGM, Kigali, Rwanda (PM)
June 26-28: G7 Leaders' Summit, Germany (PM, DMT)
June 28-30: NATO Summit, Madrid, Spain (PM, MINA)

July 4-5: Ukraine Recovery/Reconstruction Conference, Switzerland
July 7-10: G20 Sherpa Meeting (DME)
July 7-8: G20 Foreign Ministers, Bali, Indonesia (MINA)
July 13-15: HLPF on Sustainable Development – Ministerial Segment)
July 13: The Netherlands & ICC to co-host Ministerial Conference on accountability in Ukraine, The Hague (date TBC)

UNOFFICIAL USE ONLY – Generated by GPT3
Ukraine Strategic Action Team (ECU) | Please send key input iryna.Pryhara@international.gc.ca

Enrich: what is possible

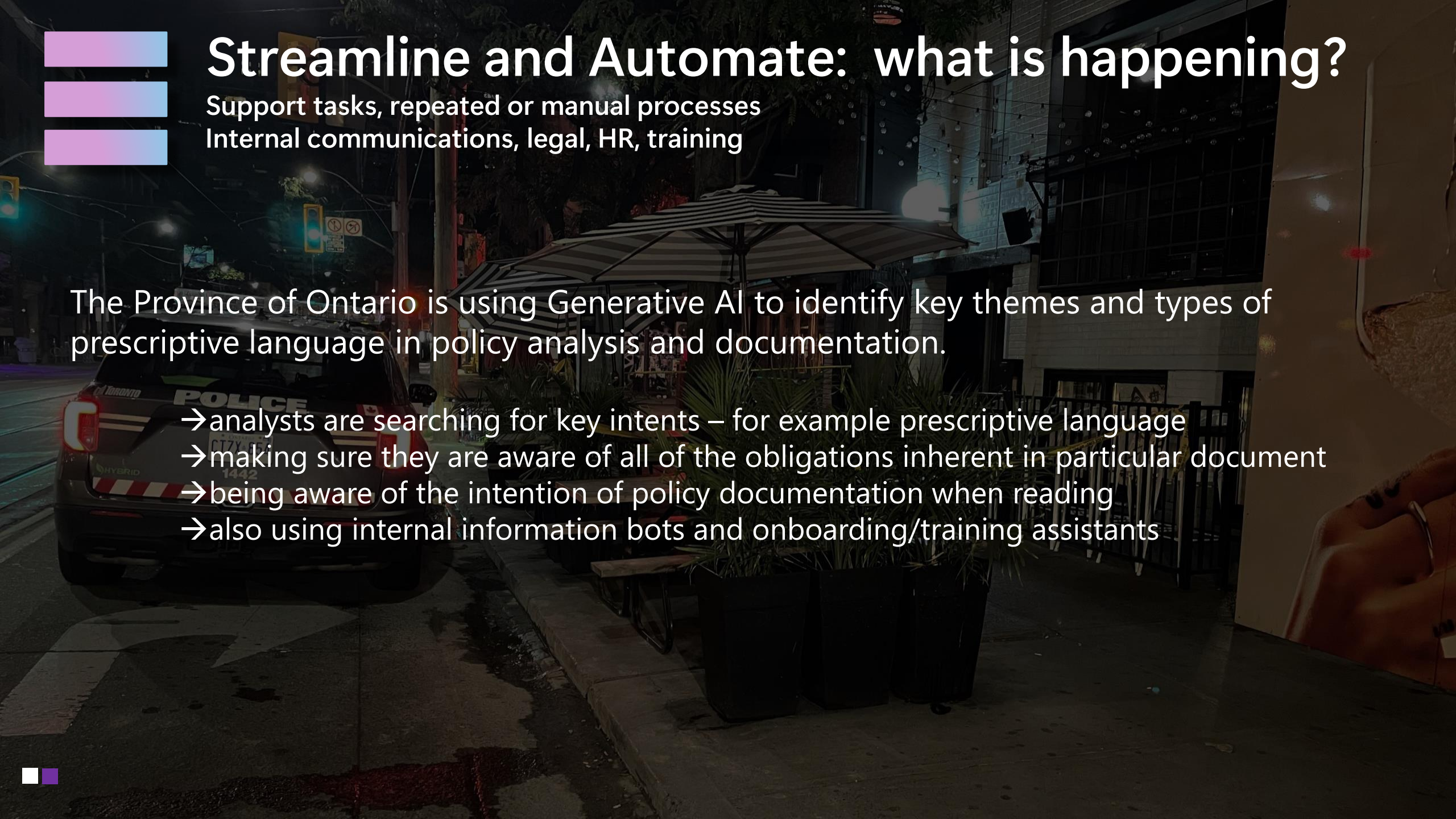
Organizational core competencies and differentiators
Use AI to enhance the way Police Officers work on a daily basis

Generative AI could have multiple other use-cases in policing operations since it is inherently good at rationally consuming a large amount of data and presenting it back in the way its human partner needs

→speech based AI responding to non emergency lines
→predictive law enforcement
→using video to analyze crowd movement
→linkage analysis in intelligence
→thinking of alternate ways to summarize the same set of information
→reviewing and redacting high volumes of video information

Streamline and Automate: what is happening?

Support tasks, repeated or manual processes
Internal communications, legal, HR, training

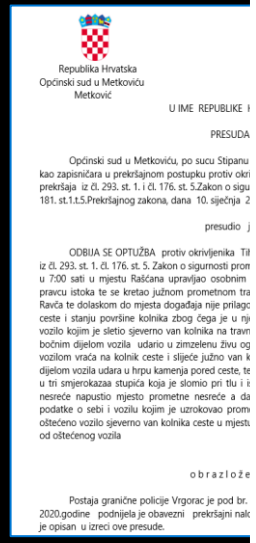


The Province of Ontario is using Generative AI to identify key themes and types of prescriptive language in policy analysis and documentation.

→analysts are searching for key intents – for example prescriptive language
→making sure they are aware of all of the obligations inherent in particular document
→being aware of the intention of policy documentation when reading
→also using internal information bots and onboarding/training assistants

Azure OpenAI Document Processing Automation w/ Annot

Understandin


Republika Hrvatska
Općinski sud u Metkoviću
Metković

U IME REPUBLIKE

PRESUDA

Općinski sud u Metkoviću, po sucu Stipanu
kao zapisničara u prekršajnom postupku protiv okr
prekršaja iz čl. 293. st. 1. i čl. 176. st. 5.Zakon o sigu
181. st.1.t.5.Prekršajnog zakona, dana 10. siječnja 2

presudio

ODBIJA SE OPTUŽBA protiv okrivljenika Til
iz čl. 293. st. 1. čl. 176. st. 5. Zakon o sigurnosti pron
u 7:00 sati u mjestu Rašćana upravljao osobnim
pravcu istoka te se kretao južnom prometnom tra
Ravča te dolaskom do mjesta događaja nije prilago
ceste i stanju površine kolnika zbog čega je u nj
vozilo kojim je sletio sjeverno van kolnika na travn
bočnim dijelom vozila udario u zimzelenu živu og
vozilom vraća na kolnik ceste i sljiječe južno van k
dijelom vozila udara u hrpu kamenja pored ceste, te
u tri smjerokazaa stupića koja je slomio pri tlu i s
nesreće napustio mjesto prometne nesreće a da
podatke o sebi i vozilu kojim je uzrokovao prom
oštećeno vozilo sjeverno van kolnika ceste u mjestu
od oštećenog vozila

obrazlože

Postaja granične policije Vrgorac je pod br.
2020.godine podnijela je obavezni prekršajni nal
je opisan u izreci ove presude.

Case Study: und
judgement on fo
and processing
understanding t
exctracting the c
information.

What was missing from the answer?

what did police do?

According to the given text, the Border Police Station Vrgorac submitted a mandatory misdemeanor order against the accused for the offense described in the verdict of this judgment.

under which number order was submitted?

The order was submitted under number "511-12-35/05-4-30-1/2020" as mentioned in the text.

7908-HA from west to east on the southern traffic lane of the state road Sestanovac -

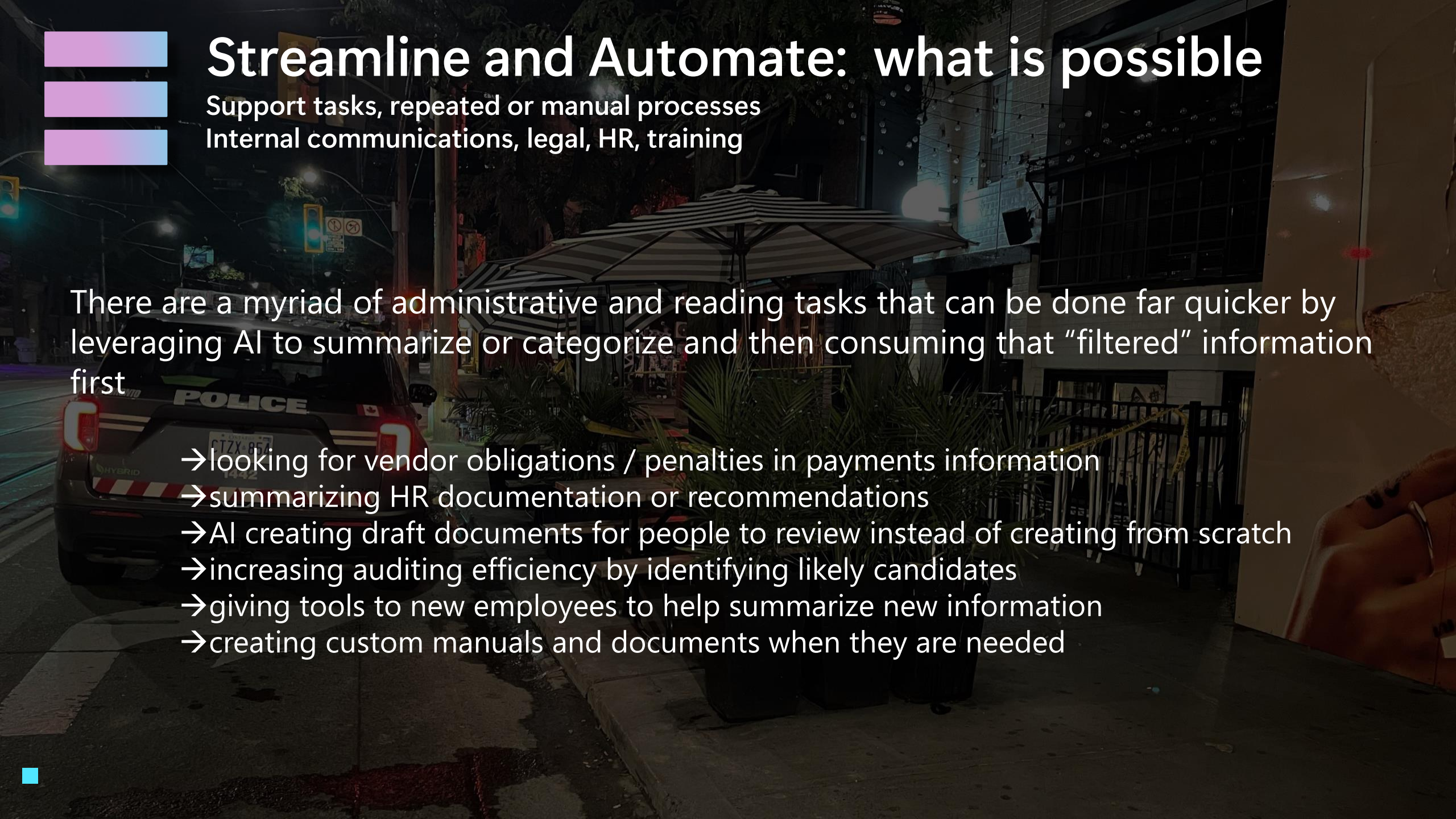
Automatic Summarizing without the evidence of translation

OpenAI Instructions that we added to manage the flow of execution and direct the ansewers (with error in Q)

Output: summarizing the complex text to the required summary

Streamline and Automate: what is possible

Support tasks, repeated or manual processes
Internal communications, legal, HR, training



There are a myriad of administrative and reading tasks that can be done far quicker by leveraging AI to summarize or categorize and then consuming that “filtered” information first

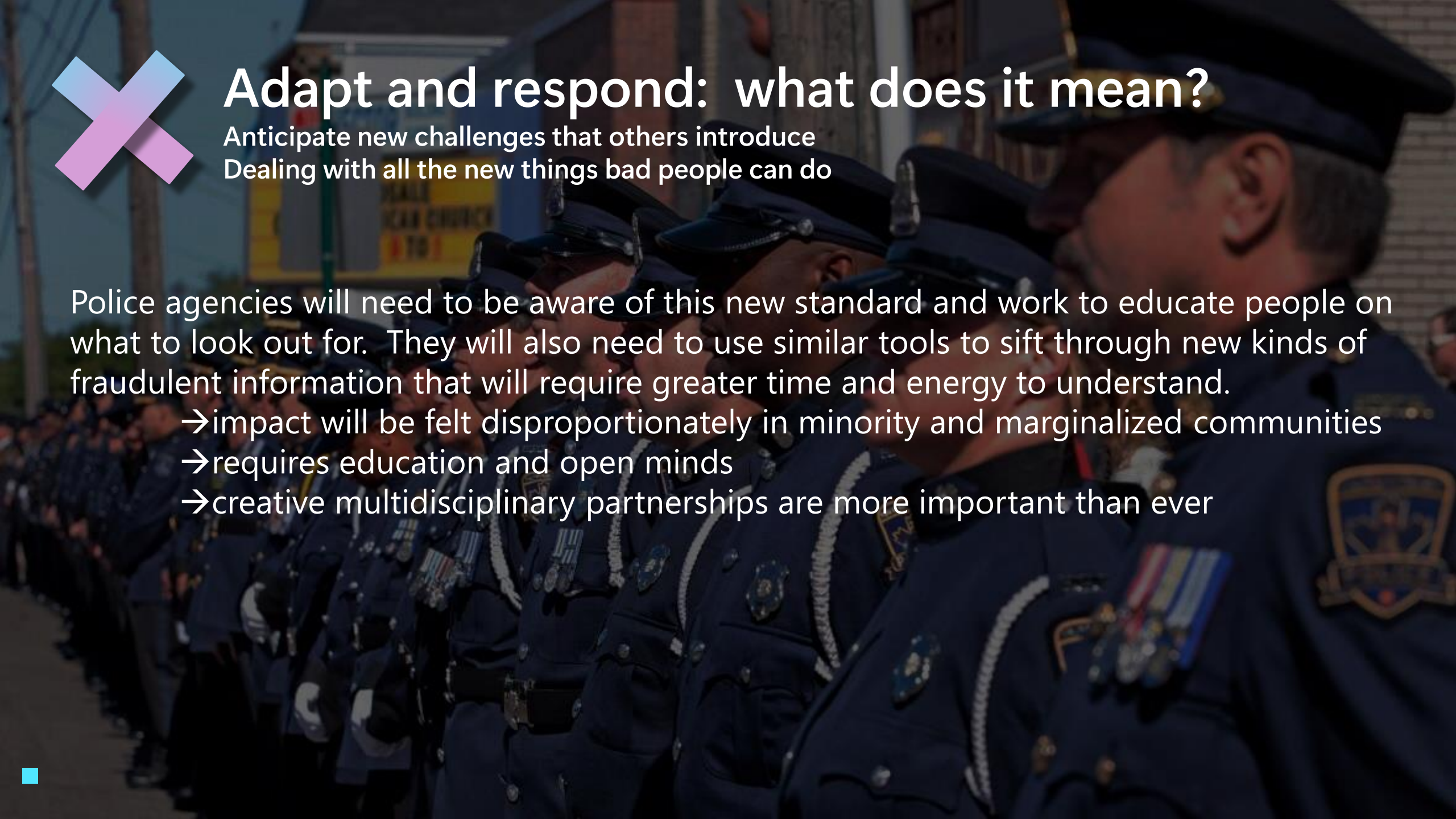
→looking for vendor obligations / penalties in payments information
→summarizing HR documentation or recommendations
→AI creating draft documents for people to review instead of creating from scratch
→increasing auditing efficiency by identifying likely candidates
→giving tools to new employees to help summarize new information
→creating custom manuals and documents when they are needed

Adapt and respond: what is happening?

Anticipate new challenges that others introduce
Dealing with all the new things bad people can do

Bad actors are creating more sophisticated, more believable versions of reality that are harder to identify even for tech savvy individuals.

→impersonating loved ones in simulated ransom situations
→generating fake images and videos that look like real news
→drafting more believable phishing and scam emails
→being more targeted by generating more insights about the intended victim
→lowers the bar on “who can be a hacker”
→cyber stalking and new ways to exert control (ie human trafficking scenarios)
→generation of new illicit content



Adapt and respond: what does it mean?

Anticipate new challenges that others introduce
Dealing with all the new things bad people can do

Police agencies will need to be aware of this new standard and work to educate people on what to look out for. They will also need to use similar tools to sift through new kinds of fraudulent information that will require greater time and energy to understand.

→impact will be felt disproportionately in minority and marginalized communities
→requires education and open minds
→creative multidisciplinary partnerships are more important than ever

Other Sample Generative AI Use Cases by Business Area

Building Operations

- Intelligent remediation/ troubleshooting assistance
- Training guide creation
- SOP checklist creation
- Maintenance schedule creation
- Equipment guide summarization

Supply Chain

- Invoice/PO Processing – Augment AFR for Targeted Data Extraction
- Vendor contract analysis
- Vendor communication summary

IT

- Tier 1 service agent (enterprise IT bot)
- Incident report analysis
- Process document creation
- Knowledgebase article drafting
- Ticket classification/routing

Legal

- Contract analysis (summarization, compliance violations, clause extraction)
- Summarization (litigation, regulatory filings, etc.)
- Draft document generation (corporate policies, privacy docs, etc.)

EHS

- Safety document creation/summarization
- Checklist creation for EHS procedures
- Semantic search for safety docs
- Internal safety bot – always on response to safety issues

Marketing

- Copy creation (website, social media, email, etc.)
- Competitor summarization
- Sales collateral creation (presentations, brochures [text and image])
- Customer pulse – social media/user review summarization

HR

- Employee materials summarization (internal enterprise chat bot)
- Employee pulse – summarization of surveys, exit interviews
- Job posting creation/curation

Customer Service

- Call center analytics
- Customer response creation (email/chat)
- Service request summarization
- Customer-facing support bot
- FAQ/troubleshooting guide creation