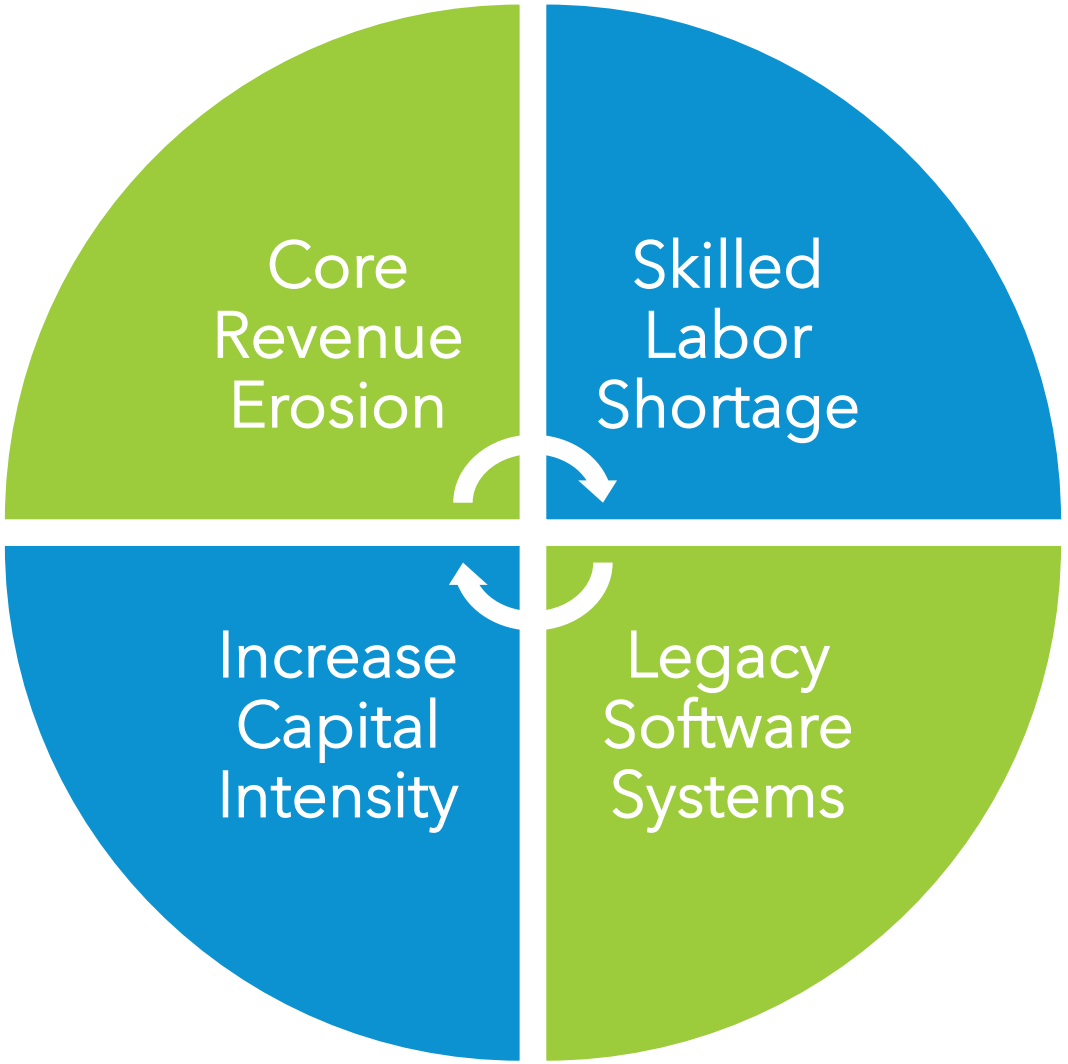
Trends in Operational Software

PRESENTED BY BRAD HINE, DIRECTOR, PARTNERS & CHANNELS
ETI SOFTWARE SOLUTIONS

Market Drivers

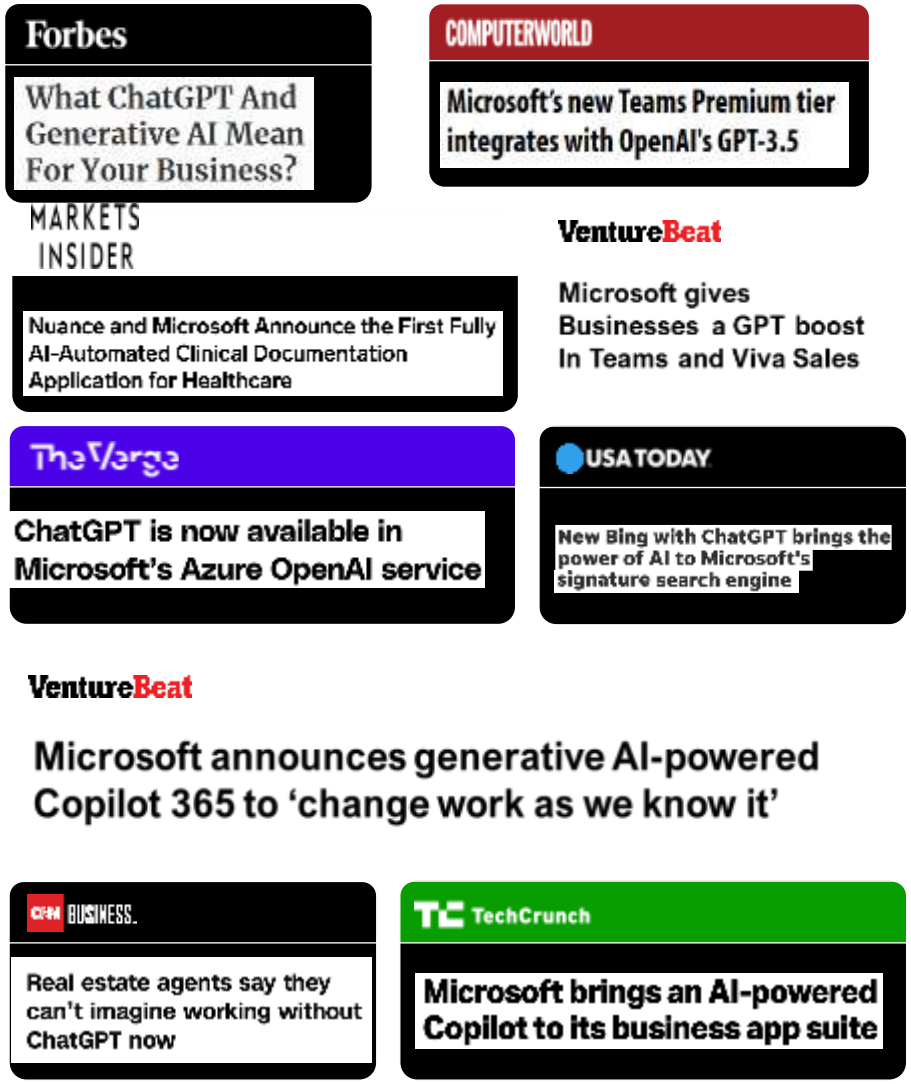
Service providers are being forced to revamp traditional monetization strategies and underlying operating models.



Market Drivers are Fueling Change

The Three As

The technology is here



The Three As

And the impact is real

CARMAX

Carmax estimates an individual would take 11 years to do what Azure OpenAI Service was able to do in days

Progressive is saving $10M annually with AI-powered chatbots

EY Building a better working world

EY is saving 250K hours of manual work per client using intelligent document automation

eti

The Three As

46% of new code is now written by AI

55% faster overall developer productivity

75% developers feel more focused on satisfying work

What is Generative AI?

Text

Code

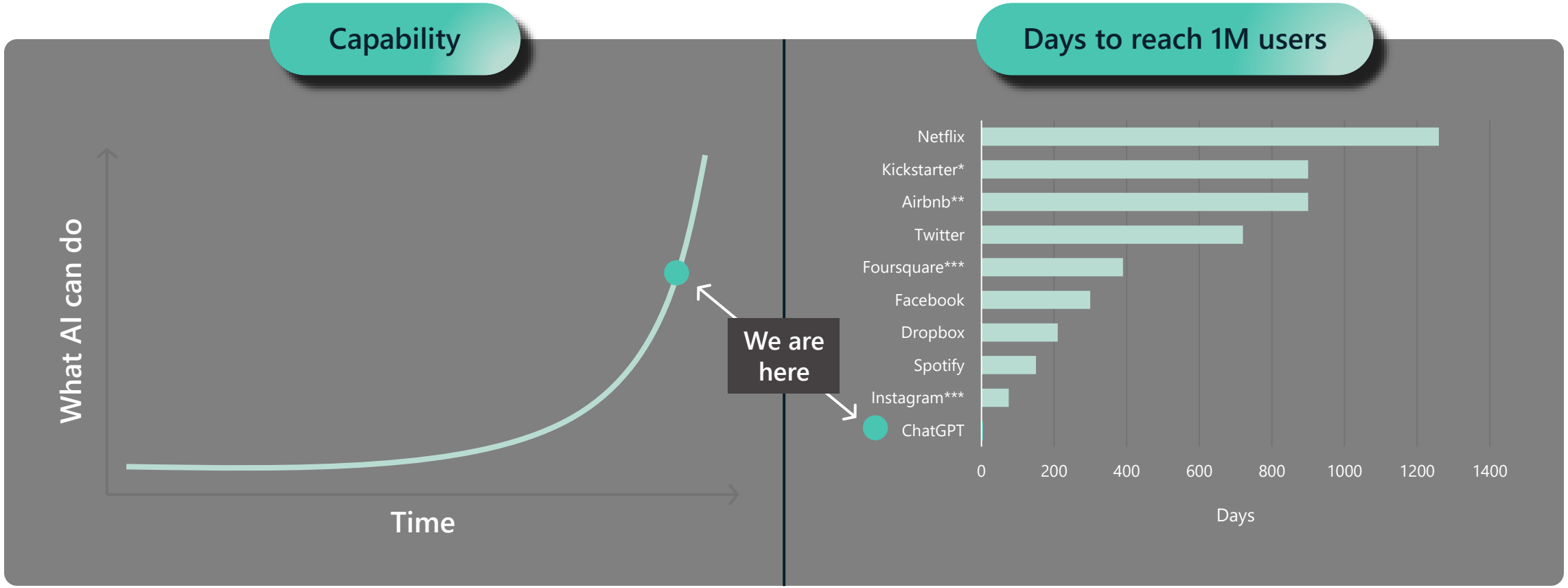
Images

Video

Data

Generative AI refers to a branch of AI that focuses on creating models capable of generating new, original content. It involves training algorithms to understand and mimic patterns in data to generate realistic outputs that resemble human creations.

AI Capability and Adoption Growth Rates



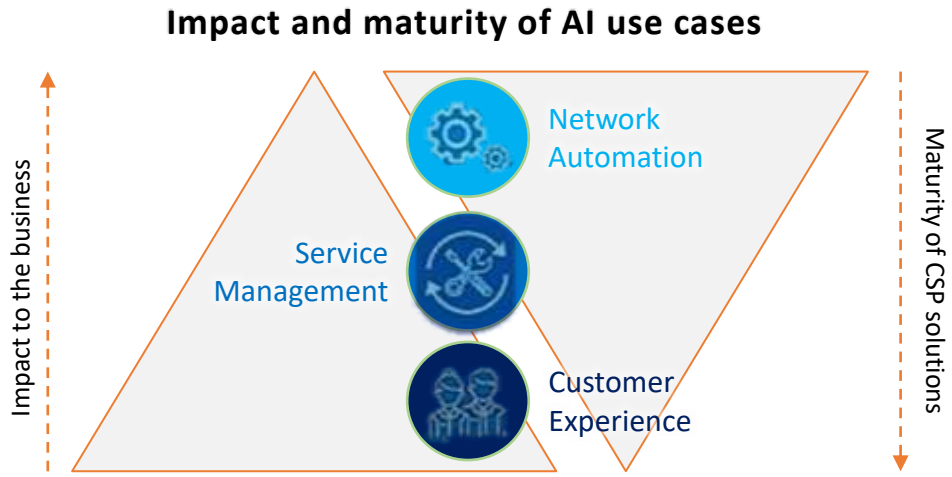
From Hype to Theory to Reality

1805
Thomas Bayes' essay that underpins AI

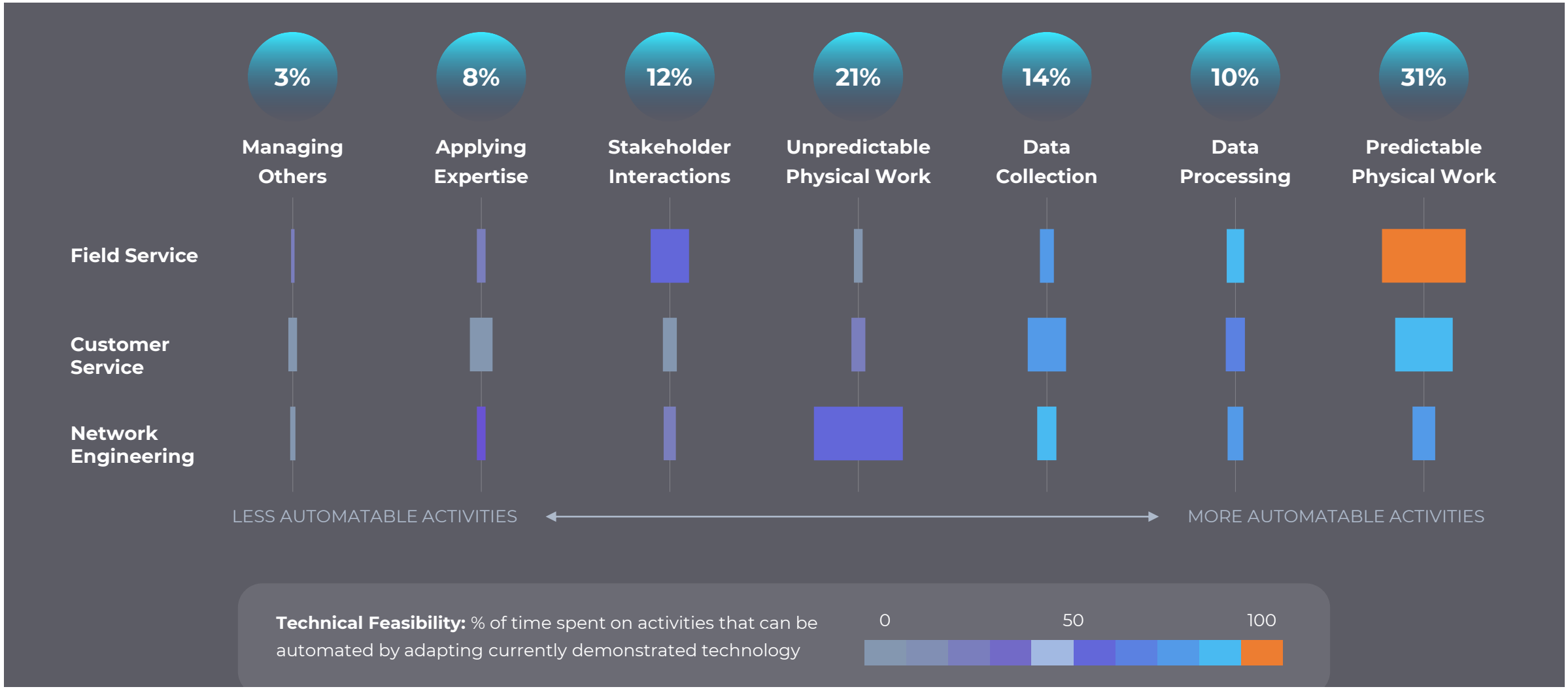
2011
IBM's Watson beats Jeopardy!

2024
Microsoft's Azure AI powers GitHub Copilot, DALL·E 2 and ChatGPT

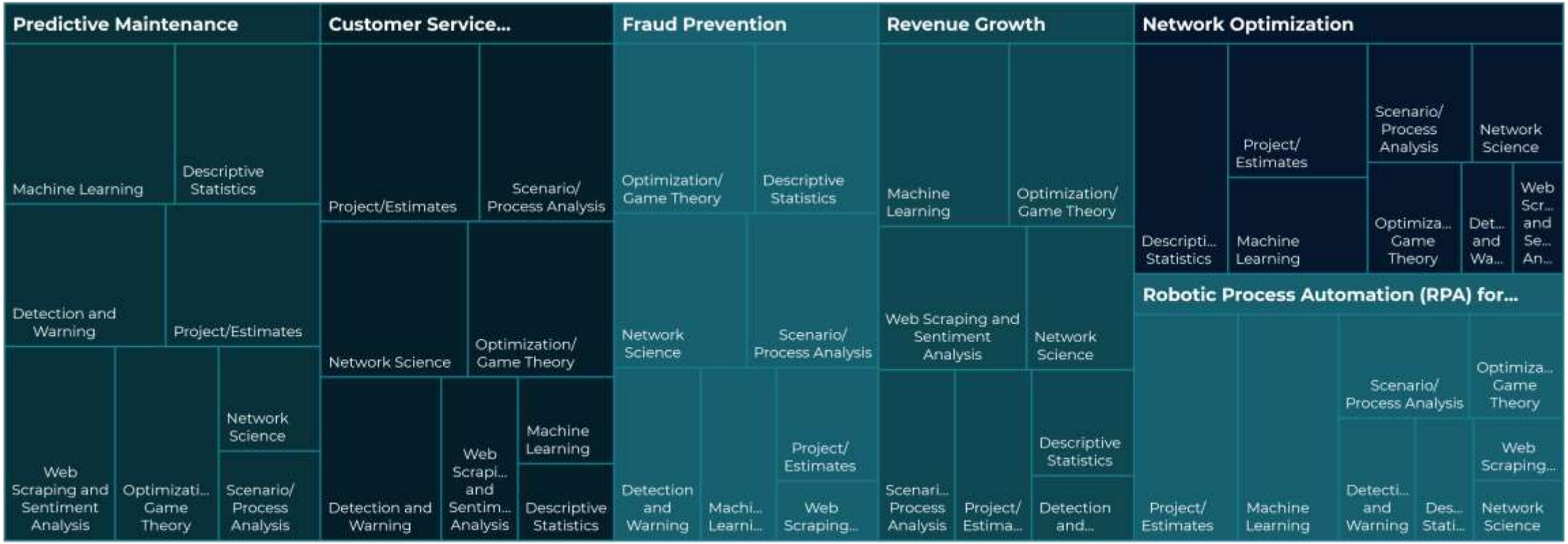
AI has great potential to address core challenges of the telecom industry:



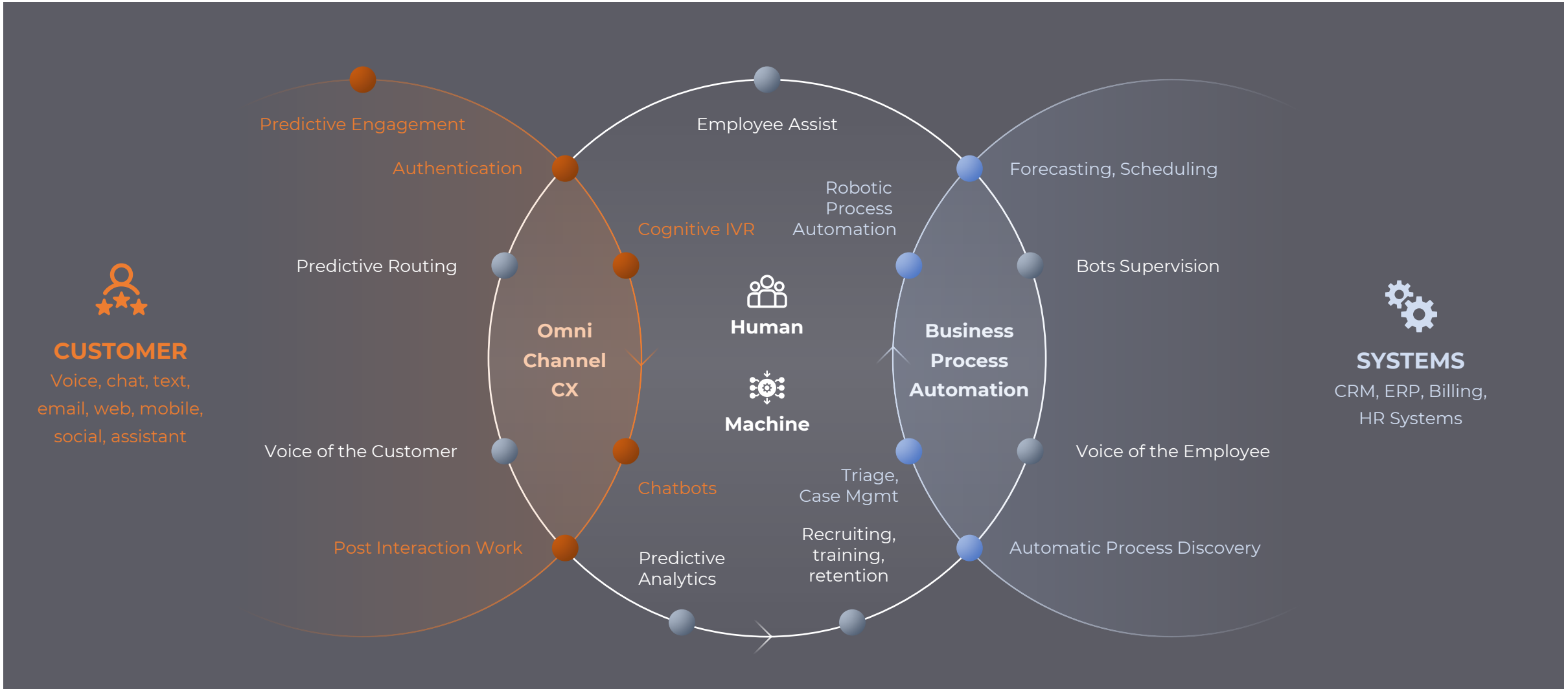
Automation Technical Potential



Machine Learning Use Cases



End to End Automation Capabilities



Case Study: Improving Frontline Worker Efficiency

80% of employees are frontline workers[1] so it is vital to enable them with digital tools

74%

of business leaders say that automating manual processes improved the efficiency of their workforce[2]

#3

Technology ranks third on the list of factors that workers say could help reduce workplace stress[1]

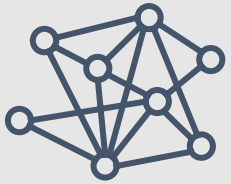
63%

Of frontline workers are excited about the job opportunities technology creates[1]

Sources: 1. Microsoft Work Trend Index, January 2022 2. Deloitte, "IT, disrupt thyself: Automating at scale", December 2021,

But challenges stand in the way of creating an agile and efficient frontline

One-third of frontline workers don't have the right technology tools to do their job effectively[1]



Dispersed systems of records complicates access and disrupts the frontline flow of work

Frontline workers lack reliable methods to pass critical information to the next shift, burdening productivity and preventing efficient task management[2]

52% of frontline workers feel supply chain issues and labor shortages make their jobs more difficult[1]

Sources: 1. Microsoft Work Trend Index, January 2022 2. Results are for a composite organization based on interviewed customers. "The Total Economic Impact™ Of Microsoft Teams For Frontline Workers, a commissioned study conducted by Forrester Consulting, July 2022" https://aka.ms/FLW_Industry_TEI

Empowering frontline workers with the right technology helps them concentrate on what matters

- Automate business processes
- Connect to line-of-business applications and industry devices
- Enhance shift and task management
- Gain operational visibility for real-time insights

Empower frontline workers across your organization to do more with less

345%

ROI by deploying Microsoft Teams for frontline workers over 3 years[1]

USD2.7 million

Increased revenue from better customer experiences over 3 years[1]

USD9.1 million

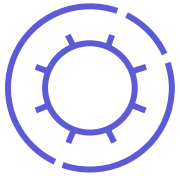
Recouped from improved frontline manager working time over 3 years[1]

USD6.1 million

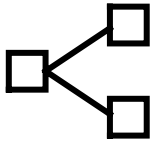
Gains from reduced errors and improved frontline outcomes over 3 years[1]

Source: 1. Results are for a composite organization based on interviewed customers. "The Total Economic Impact™ Of Microsoft Teams For Frontline Workers, a commissioned study conducted by Forrester Consulting, July 2022" https://aka.ms/FLW_Industry_TEI

Increase frontline operational efficiency



Automate business processes



Connect to line-of-business applications and industry devices

Enhance shift and task management

Gain operational visibility for real-time insights

Challenges to automating business processes

Fragmented, paper-based systems hold back efficiency by creating more work

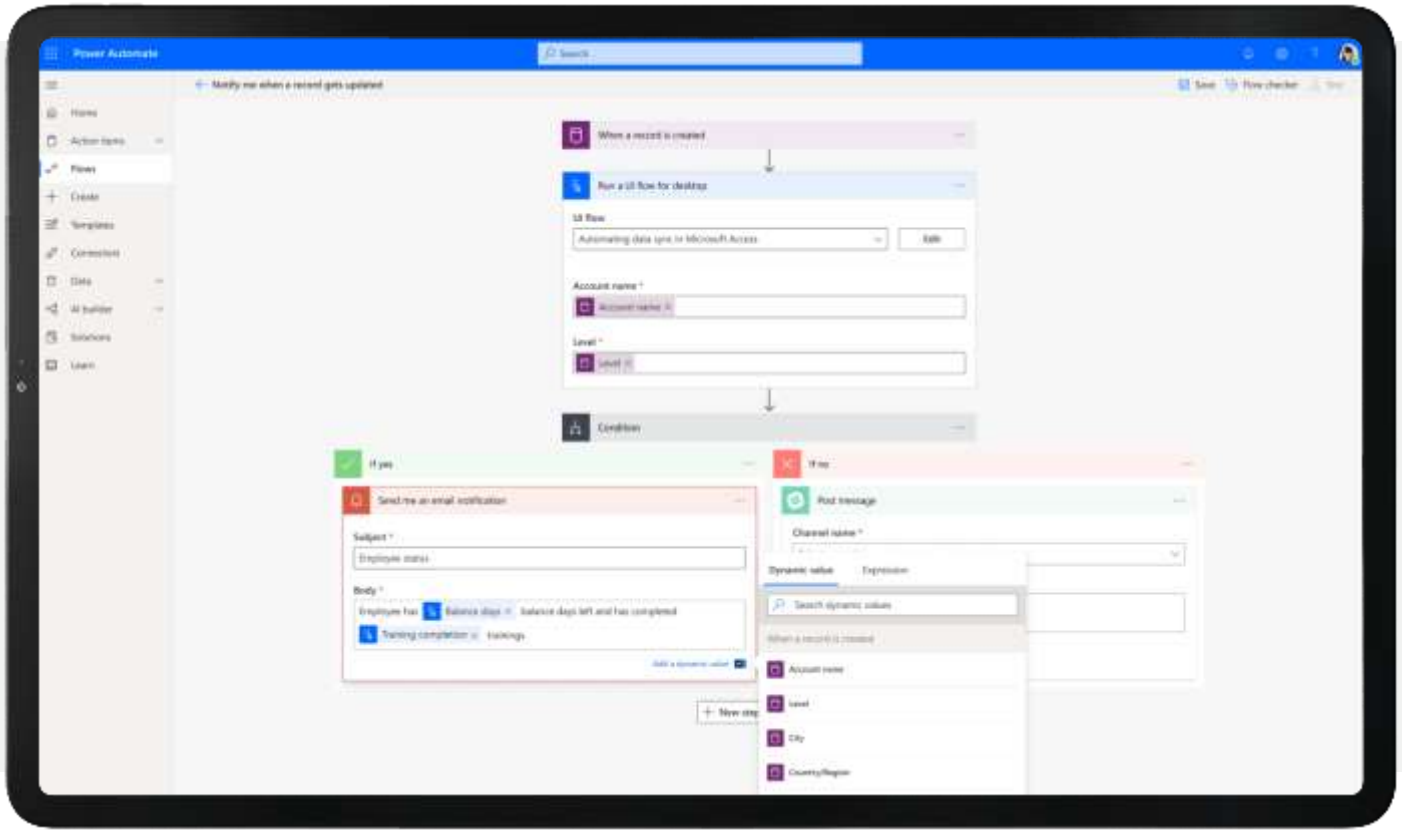
Repetitive processes inhibit the frontline from focusing on higher-value activities

Legacy systems limit real-time guidance and assistance opportunities

Aging facilitation and follow-up procedures limit the quality of customer relationships

Streamline repetitive processes*

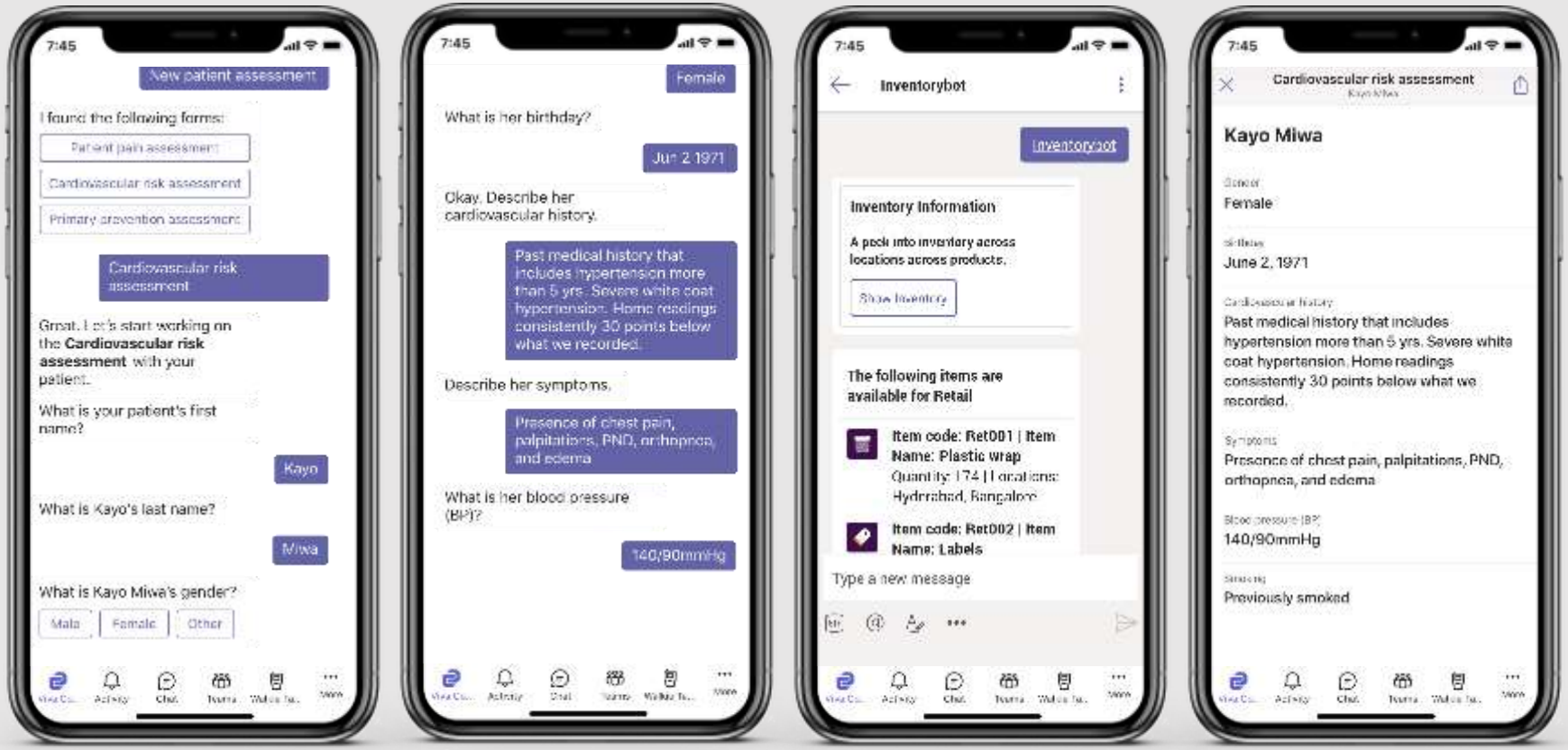
Free your frontline workers to focus on higher-value activities by streamlining repetitive processes using intelligent workflows.



Provide digital assistance*

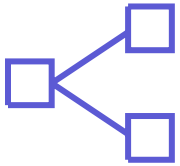
Build intelligent conversational bots

to empower your frontline with digital assistance through actionable live updates, general guidance, and easy workplace accessibility.



Increase frontline operational efficiency

Automate business processes



Connect to line-of-business applications and industry devices

Enhance shift and task management

Gain operational visibility for real-time insights

Challenges to connecting to line-of-business applications and industry devices

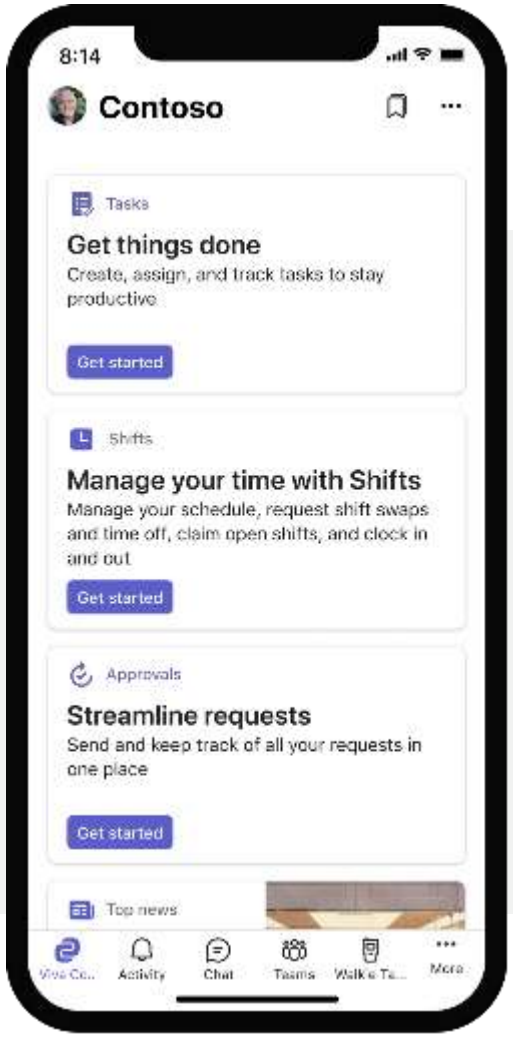
Lack of one central platform complicates deskless worker access and communications

Navigating third-party apps outside of Microsoft Teams disrupts the frontline flow of work

Carrying multiple devices makes work fragmented and cumbersome

Provide one platform for your frontline applications

Add the services your frontline workers use most into one location for easy access.

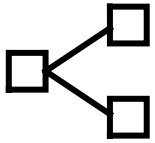


- Approvals
- Shifts
- Walkie Talkie
- Tasks*
- Updates*
- Virtual Appointments
- Time clock

*coming soon

Increase frontline operational efficiency

Automate business processes



Connect to line-of-business applications and industry devices

Enhance shift and task management

Gain operational visibility for real-time insights

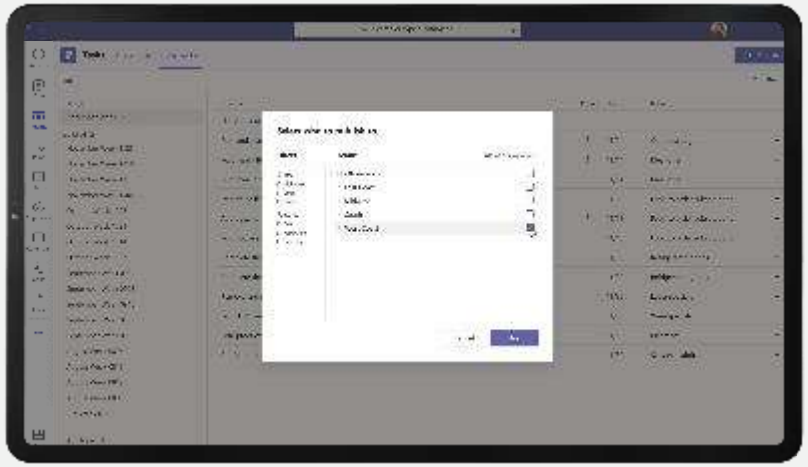
Challenges to enhancing shift and task management

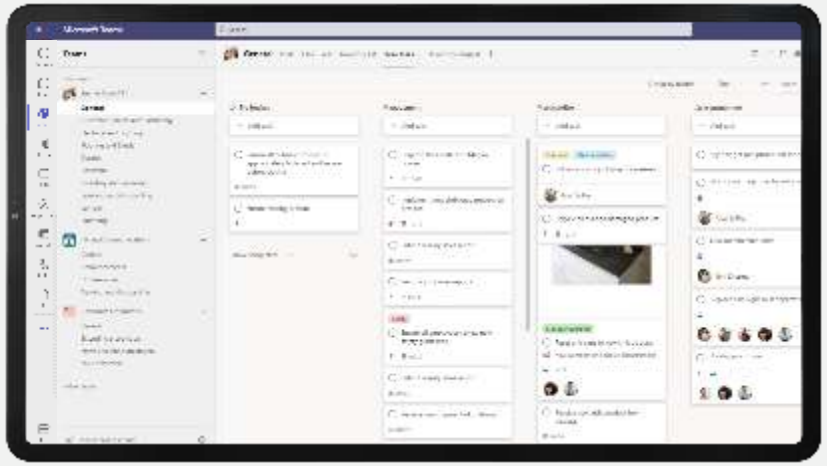
Paper-based processes make updating shift schedules time consumptive

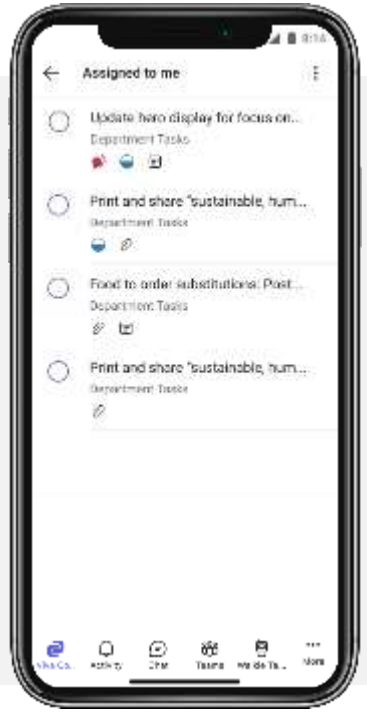
Analog time tracking systems reduces time and attendance accounting accuracy

Fragmented planning systems make it difficult for managers to track tasks

Streamline task management* CSR







Corporate

Create tasks centrally and publish to different locations with the ability to choose specific store layouts, factory capabilities, or other customizable attributes of your frontline teams

Managers

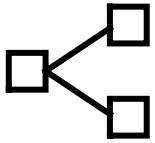
Manage tasks regionally and assign them to the right individual in the store

Frontline workers

Execute tasks locally with clear, detailed directions from HQ/Operations

Increase frontline operational efficiency

Automate business processes



Connect to line-of-business applications and industry devices

Enhance shift and task management

Gain operational visibility for real-time insights

Challenges to gaining operational visibility for real-time insights

Legacy systems limit informed decision-making and a holistic view of performance

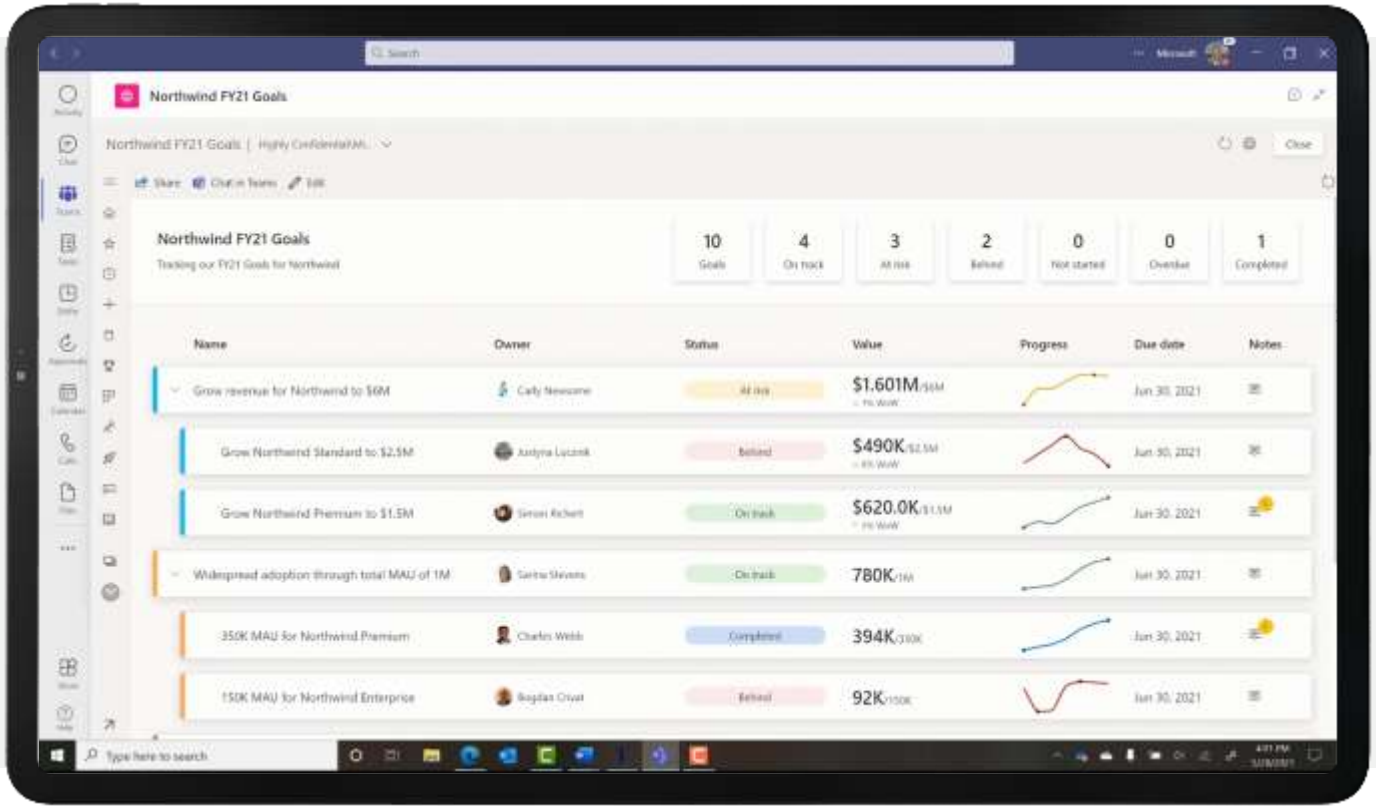
Lack of organization-wide structures prevent central operations and management from tracking task execution in real-time

Distributed workforces make it difficult for the frontline to quickly share information

Obtain critical insights from the frontline

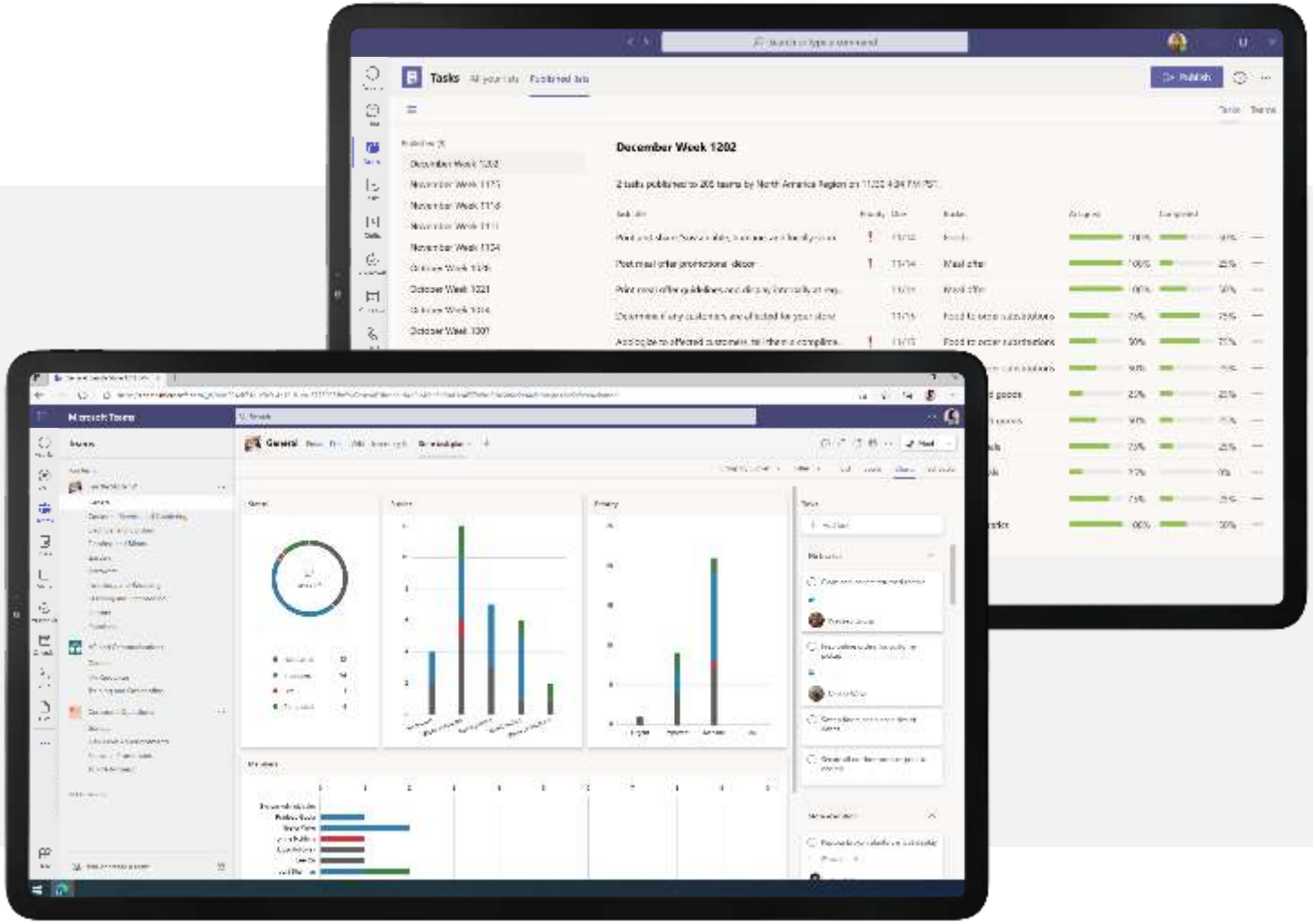
Enable the frontline to use self-service analytics with built-in AI to make informed decisions.

Provide a holistic view of frontline performance to decisions makers.



Monitor task progression

Central operations view

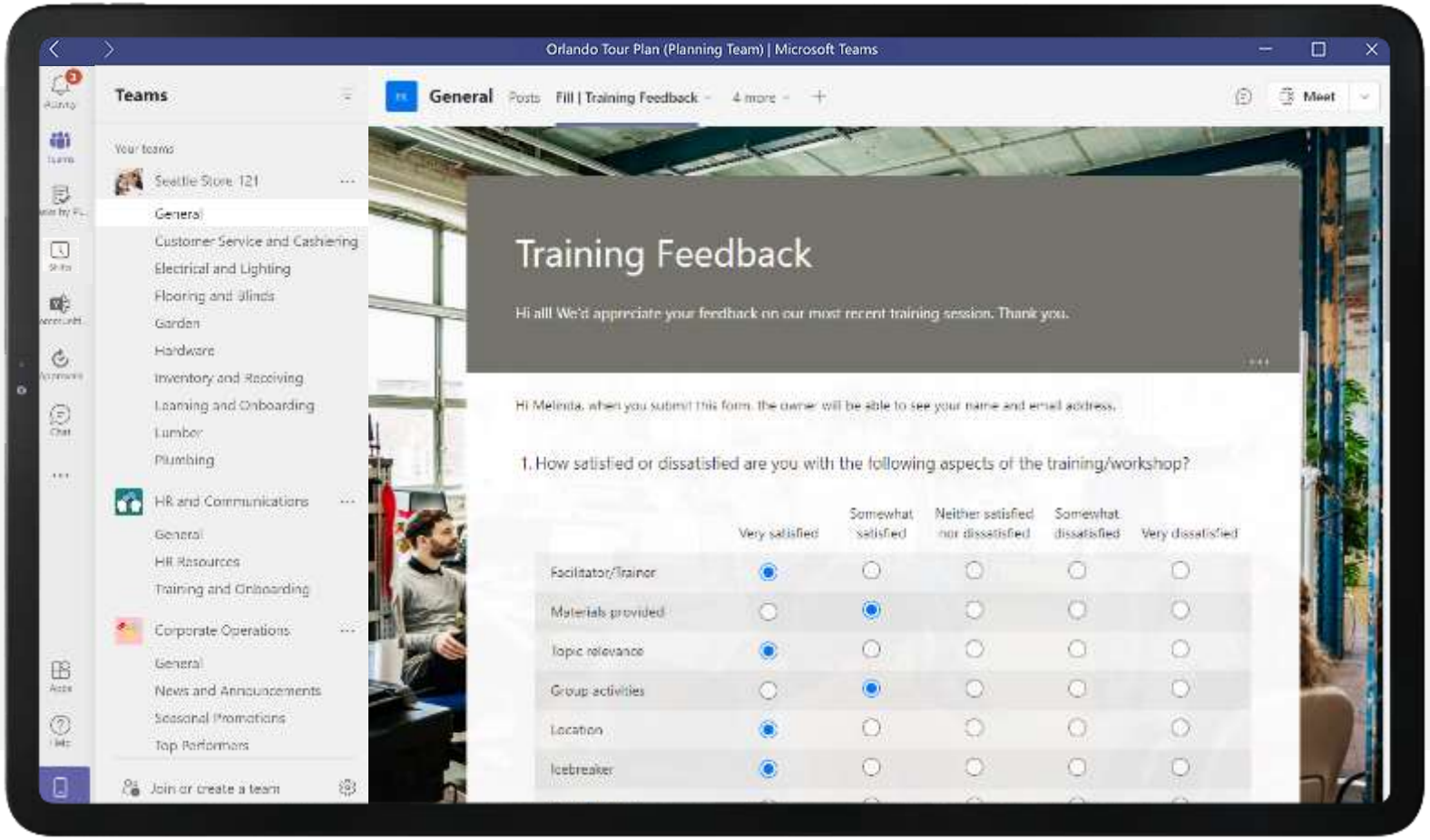


Track task execution in real-time at a specific frontline location for managers or across locations for corporate.

Manager view

Tap into frontline worker insights*

Quickly gather information and feedback from your frontline workforce



Benefits of the Three A's

Grow revenues from network expansion, new services, partnerships

Ensure ubiquitous and reliable connectivity

Decrease operational expenses

Outpace competition by offering new services faster

Rest easy with enhanced security to fend off data breaches

Make informed decisions with data-driven insights

Thank you!

etisoftware.com

Operations

Increase frontline operational efficiency

Automate processes with connected digital workflows, creating a unified platform for your workforce

Common COO challenges

Unsanctioned shadow IT fills current communication gaps while cultural barriers limit new technology rollout and adoption

Fragmentated systems, tools and business processes that are often manual and redundant

Constant need to have visibility into on the ground operations

Microsoft Teams can help you

Workforce efficiency

- Improve workforce flexibility and respond quickly with Walkie Talkie
- Improve coordination between business functions and frontline teams with Tasks and task publishing

Resource optimization

- Provide integrated solutions that improves profit margins and operational efficiency with Microsoft Teams as a platform

Inventory shrinkage

- Optimize business processes thru data-driven insights and automation of routine tasks and processes with Power BI and Power Apps like Inventory Management

Through Teams and task publishing, we ensure that our 300 stores are well stocked, our service is outstanding, and that displays, seating, and selection is consistent.

Ernesto Davila: Area Manager, Chedraui

Security

Safeguard your business

Secure your business with built-in security and compliance across endpoints and devices.

Common challenges

Lack of visibility and manageability across entire device landscape for dispersed workforce

Difficult to ensure the right policies are applied to all apps

Enabling user productivity without sacrificing security

Microsoft Teams can help you

Easily manage your devices

- Centrally secure, manage, and troubleshoot your organization's endpoints with Microsoft Endpoint Management (MEM)
- Delegate user identities with My Staff in Azure Active Directory

Ensure the right apps and policies are applied

- Restrict worker's access to apps while off-shift with off-shift access controls
- Easily apply the right policies for your frontline workforce at scale with policy packages built for them

Protect against reputational & compliance risks

- Fortify compliance in the event of a compromised device loss with Data Loss Protection
- Full visibility into threats with an integrated solution with Microsoft Defender for Office 365

Security played an essential role in our decision to deploy Teams. The fact that we can authenticate every user within the organization and ensure the data remains encrypted in transit and at rest gives us peace of mind that our information is secure.

Pilar Rojas Suárez: CIO and Director of Systems, Chedraui

TRIAD6

eti

Dashboard

Analyze and visualize infrastructure data in real-time. You can easily create custom dashboards, charts, and graphs that help you gain valuable insights into your data.

- Real-time visualization of your data. This means that you can see changes to your data as they happen, allowing you to make more informed decisions based on the latest information.
- Identify patterns and trends in your data. With its powerful analytics features, you can quickly identify correlations and outliers, and gain a deeper understanding of your data.
- Integrates seamlessly with a wide range of data sources, including Elasticsearch, Logstash, and Beats, so you can easily connect to your existing data infrastructure.

TRIAD6

Observability

Triad provides a service mesh capability that adds visibility, security and reliability to your Triad environment. Collect metrics and logs about every request and response to identify bottlenecks, troubleshoot problems, and optimize your system.

- Identify bottlenecks - Shows you which services are spending the most time processing requests, which can help you identify where to focus your optimization efforts.
- Troubleshoot - Shows you which services are failing and why, which can help you identify the root cause of the problem.
- Optimize systems - Shows you how your systems are using resources, which can help you identify opportunities to reduce costs or improve performance.

TRIAD6

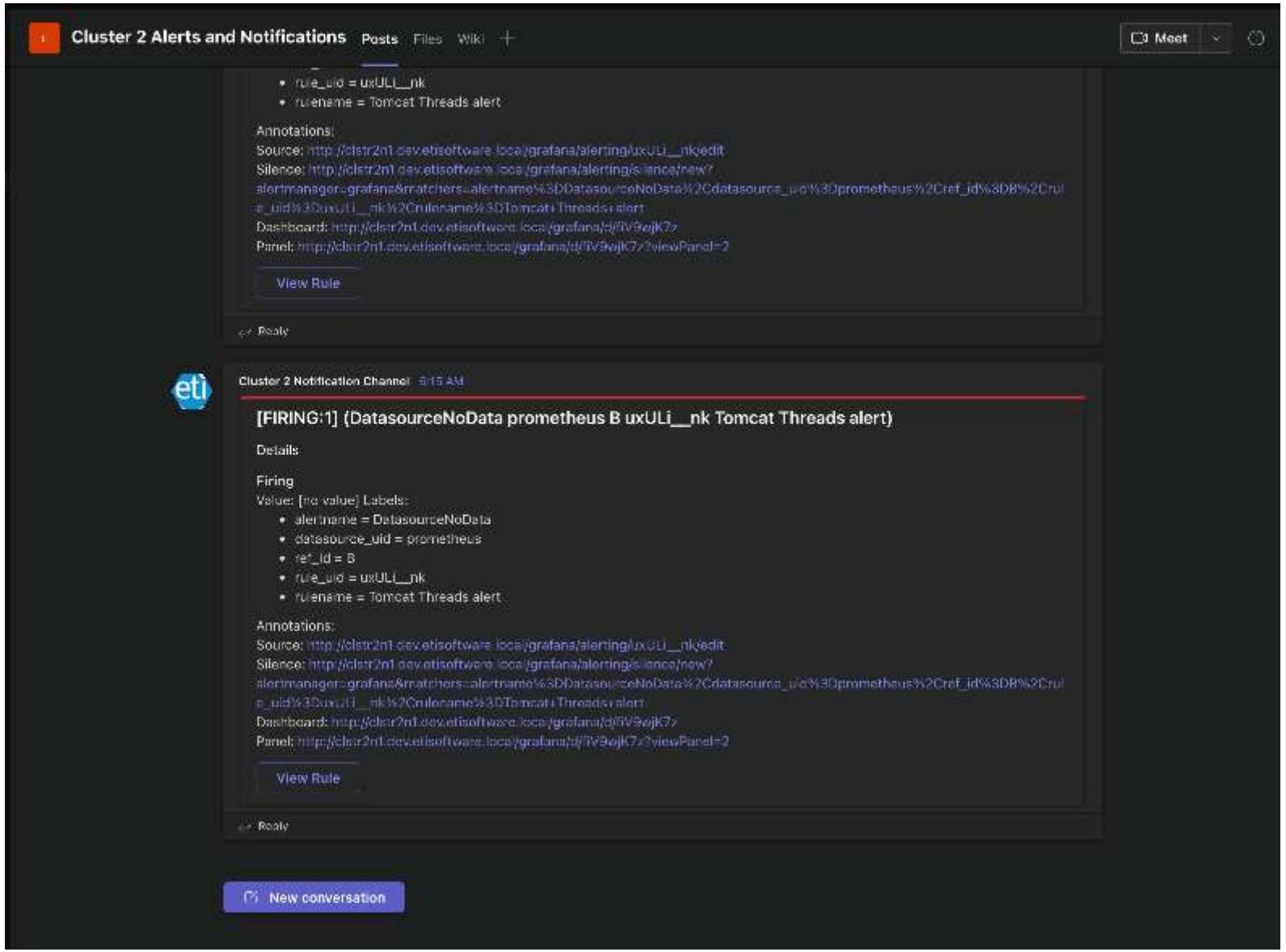
eti

Monitoring

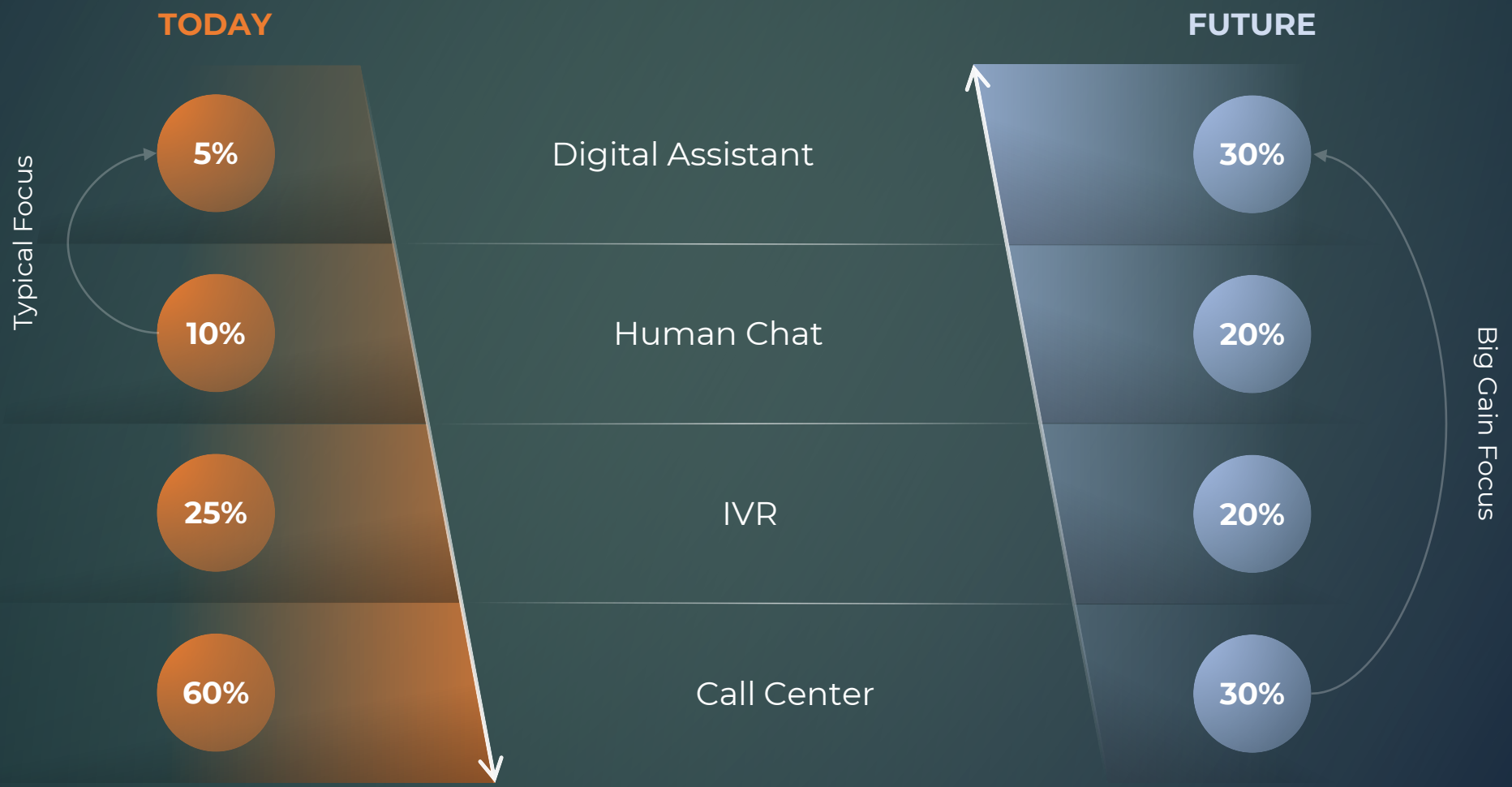
Improved monitoring including:

- Metrics: Collects a wide variety of metrics from your applications and infrastructure, including CPU usage, memory usage, and network traffic.
- Alerting: Can send alerts when certain metrics exceed a threshold. This can be used to notify you of problems with your applications and infrastructure.
- Grafana: Works with Grafana to create dashboards and visualizations of your metrics. This can help you to better understand your applications and infrastructure.

Alerting – Enterprise Communications



INTELLIGENT CUSTOMER ENGAGEMENT (ICE)



RESULTS USING RECOMMENDATIONS AI

More Relevant Recommendations Displayed on Page

Increase in Click Through Rate

Surge in Average Order Value

So why not do this yourself?

Cost **Sustainability** **Hallucinations** **Regulation** **Trust in AI** **Ethical Backlash**

Forbes
https://www.forbes.com › tiriasresearch › 2023/05/12

Generative AI Breaks The Data Center

May 12, 2023 — Tirias Research forecasts that on the current course, generative AI data center server infrastructure plus operating costs will **exceed $76** ...

Training GPT-3, which is a single general-purpose AI program that can generate language and has many different uses, took 1.287 gigawatt hours, according to a research paper published in 2021, or about as much electricity as 120 US homes would consume in a year. Mar 9, 2023

Bloomberg
https://www.bloomberg.com › news › articles › how-mu...

Artificial Intelligence Is Booming—So Is Its Carbon Footprint

Fortune

'Prone to hallucinations and bias': A Texas judge puts A.I. in its place

Judge Brantley Starr strikes back against generative A.I. hype.

Bloomberg.com

Biden Administration Split Over Policy on OpenAI as EU Pushes New Rules

Biden administration officials are divided over how aggressively new artificial intelligence tools should be regulated — and their...

Gartner

Why Trust and Security are Essential for the Future of Generative AI

As generative AI innovation continues at a breakneck pace, concerns around security and risk have become increasingly prominent.

NBC News

Lensa reignites discussion among artists over the ethics of AI art

Lensa, the AI portrait app, has reignited discussion among artists over the ethics of creating images with models that have been trained...

Industry trends

The future holds in balance: Telco at the tipping point to Renaissance

Business Model Re-Invention

Customer Re-Imagination

Telco to Tech-co Revolution

Complexity and excitement: Media's Next Wave of Change

Modernization and Technological Differentiation

Audience Monetization & Engagement

Accelerate Platforms and Business Models

TRIAD6

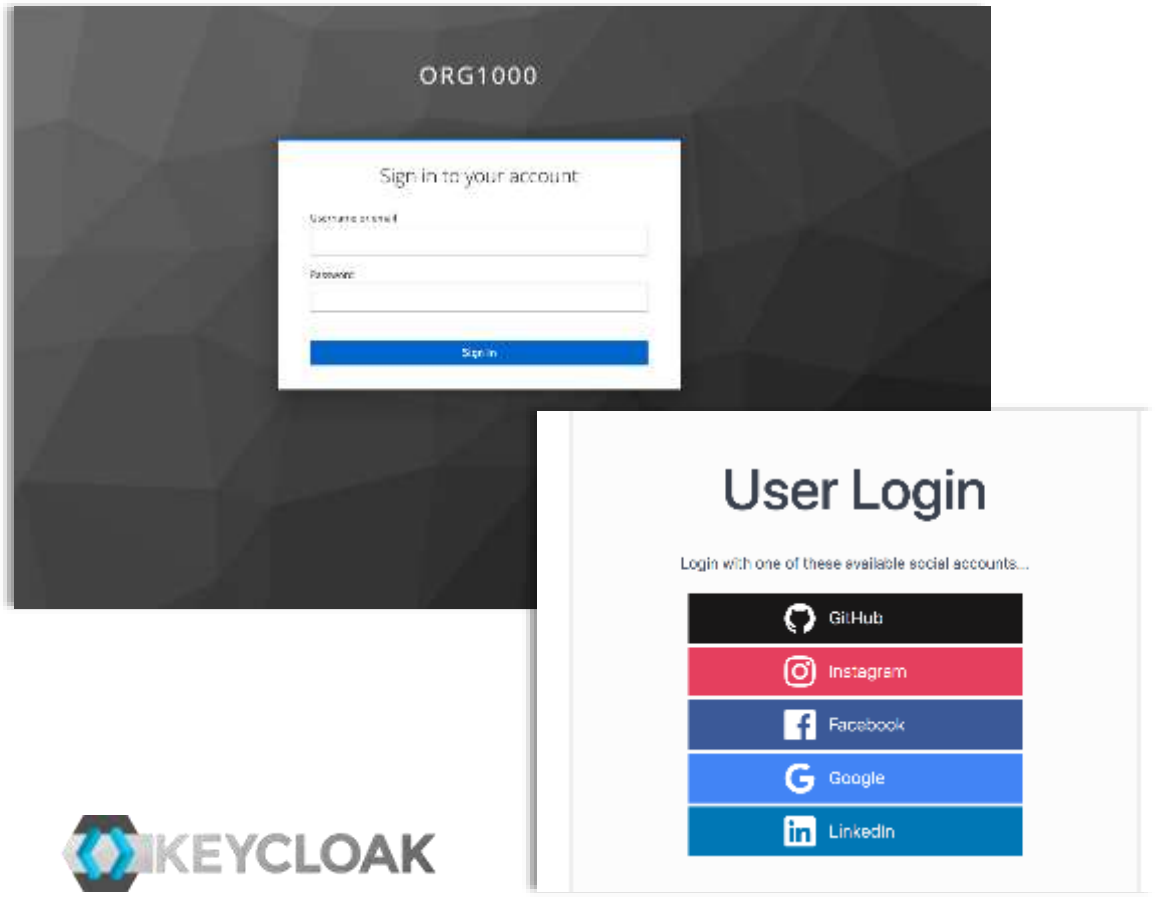
eti

Enhanced Security

- Constant scanning your cluster for new vulnerabilities and then automatically updating your security reports. This allows you to stay up to date on the latest vulnerabilities and to fix them as soon as they are discovered.
- Generate security reports that show you the vulnerabilities that have been found in your cluster. This will help you prioritize your security updates and to fix the most critical vulnerabilities first.
  - Vulnerability and Config audit reports show where the issues have been found.
  - RBAC reports that show the access rights that have been granted to users and groups in your Kubernetes cluster.
- Track the progress of your security updates. For example, it can generate reports that show the number of vulnerabilities that have been fixed over time. This data can help you identify areas where you need to improve your security posture.

Identity and Access Management

- Single-Sign On
- Identity Brokering and Social Login
- User Federation
- OpenID Connect, Oauth 2.0, SAML, Kerberos protocol standards
- Role-based and fine-grained Authorization Services
- LDAP, Active Directory, or RDBMS
- Password Policies
- Admin Console
- Account Management Console
- Extensible

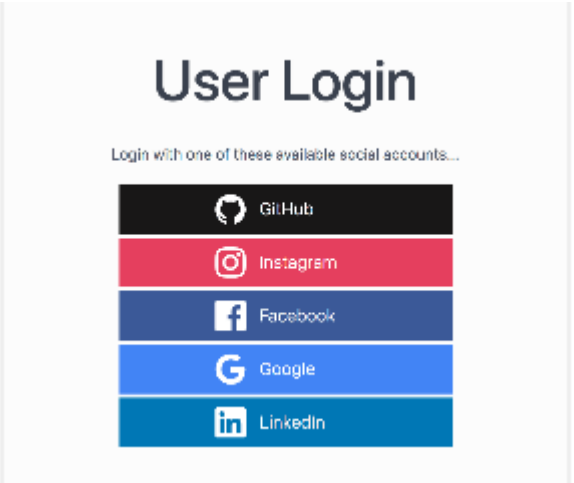


Zero Trust Security

- Role-Based Access Control (RBAC)
- Secrets are encrypted at rest and purposely kept separate from applications
- (ITU) X.509 standard based digital certification
- Transport Layer Security TLS 1.2
- Monitor Network Traffic
- Audit Logging
- Third-Party Authentication

KEYCLOAK

CERTIFY



Based on findings and recommendations Microsoft, Open AI, the TM Forum, Deloitte, McKinsey, PwC, BCG, and Bain, this session will facilitate automation strategies for workforces and explore AI-driven innovations for core business offerings. AI can address the broadband worker shortage by offering intelligent business applications that empower everyone to deliver operational excellence and create more engaging customer experiences.