



Microsoft Business Application Summit

July 22–24, 2018
Seattle, WA

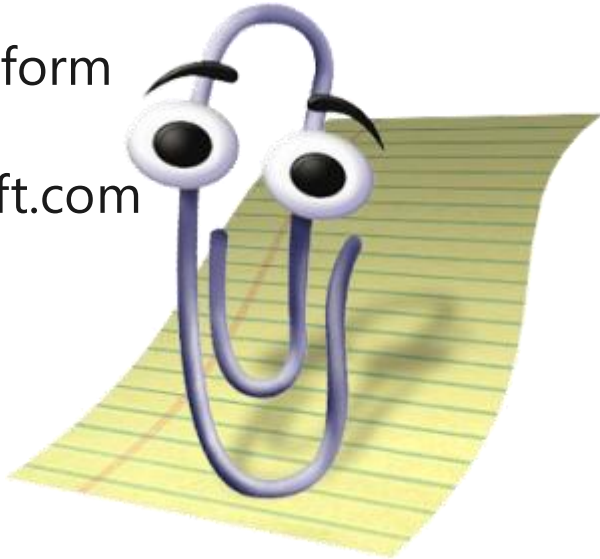




How we do AI & ML @ Microsoft

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Agenda

- Our journey and technology
- AI in Bing
- AI in Windows
- AI in Xbox
- AI everywhere @ Microsoft

The Past/Present for AI @ Microsoft

ARIA *Sagam* **Maestro** **Siphon** **Kusto** *Asimov*
Avocado **VORTEX** **Xpert**
COSMOS *xflow*
Reactor
AXON *Scape* **ScopeML**
The Learning Code **Mission Control**

The Future of AI @ Microsoft

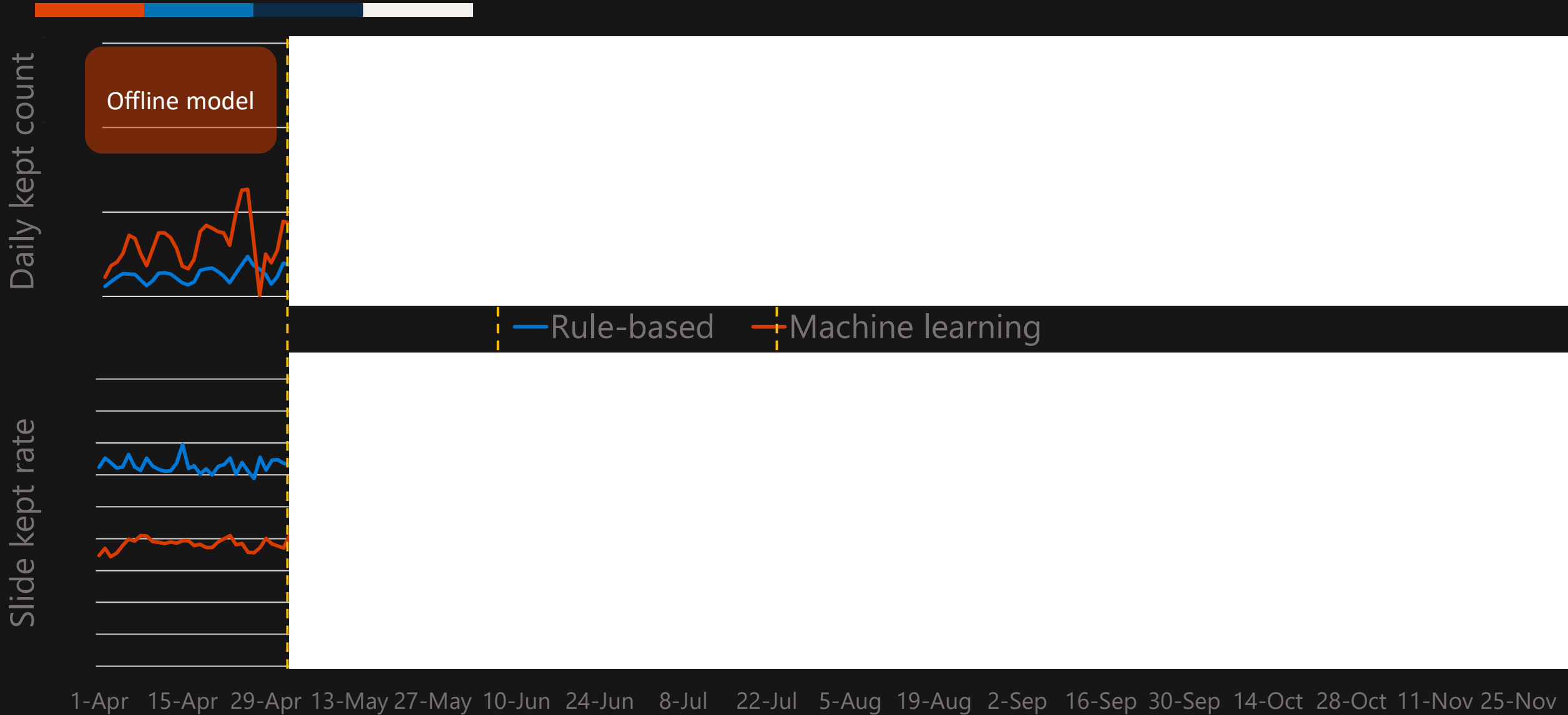


+ more!

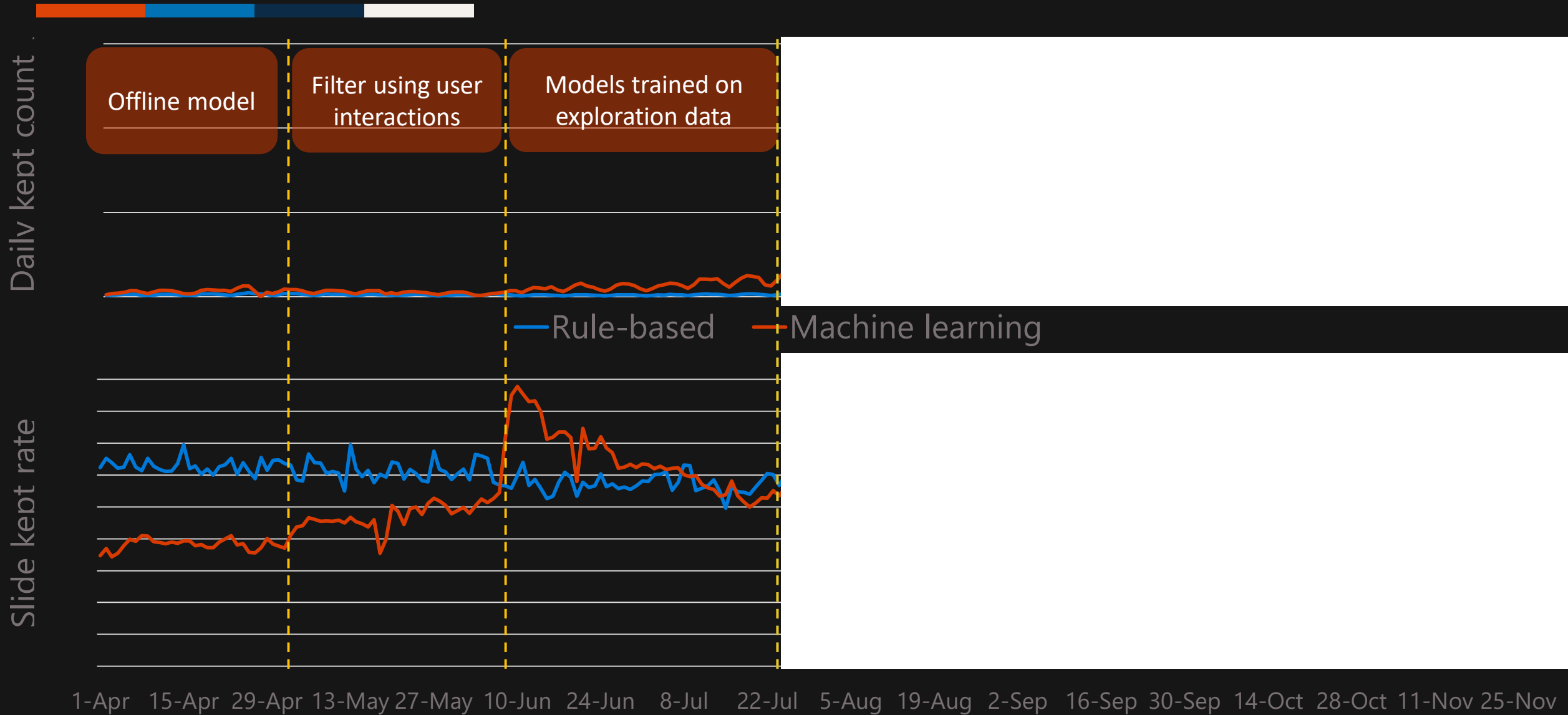
- 1000s of Data Scientists & AI Developers
- Classical ML & Deep Learning
- Compliant & non-compliant data
- Internal & OSS frameworks
- Internal & OSS tools & languages
- Deployments to Azure, Windows, Mobile, Edge and more

AI in Office

Machine Learning for SmartArt Suggestions



Machine Learning for SmartArt Suggestions



Demo: PowerPoint Designer

AI in Bing

- Aether
 - System for managing ML pipelines
 - Optimized for rapid prototyping, data reuse, and collaboration
 - >20M Pipelines
 - >1.75M active Datasources (>2.7M total)
- COSMOS
 - GDPR compliant cloud data processing system for near real-time ingestion & processing
 - 8 Exabytes
 - 10+PB per day ingested
 - 30M events/sec
 - From 1B+ devices
 - Data Tables/Streams > 3 mill
- 2 million metrics
- 1k experiments per month

AI in Windows

Paint3D Welcome Screen

Hypothesis

Removing new/open and paste buttons from Welcome screen will increase engagement with remaining call-to-action buttons

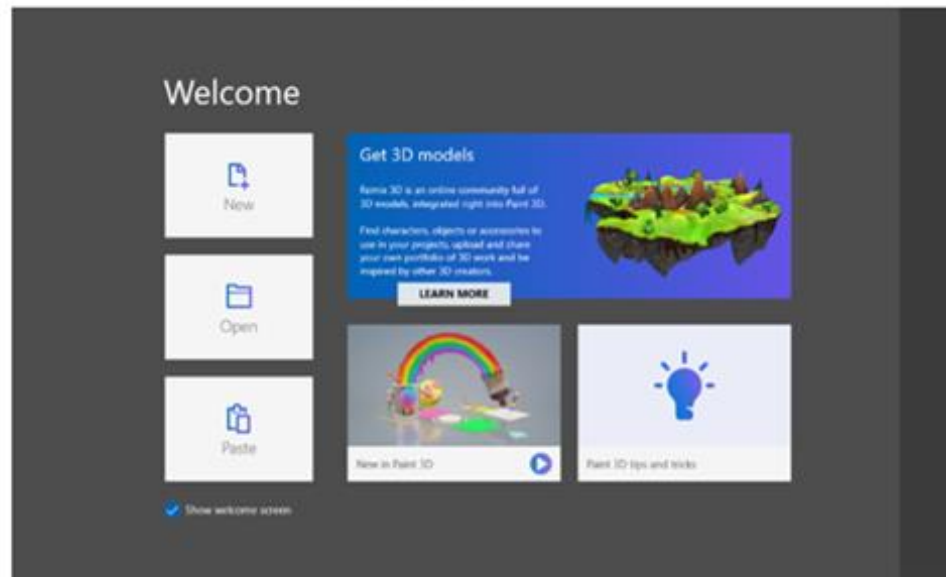
Impact

Increased engagement on several call-to-action buttons from redacted to redacted

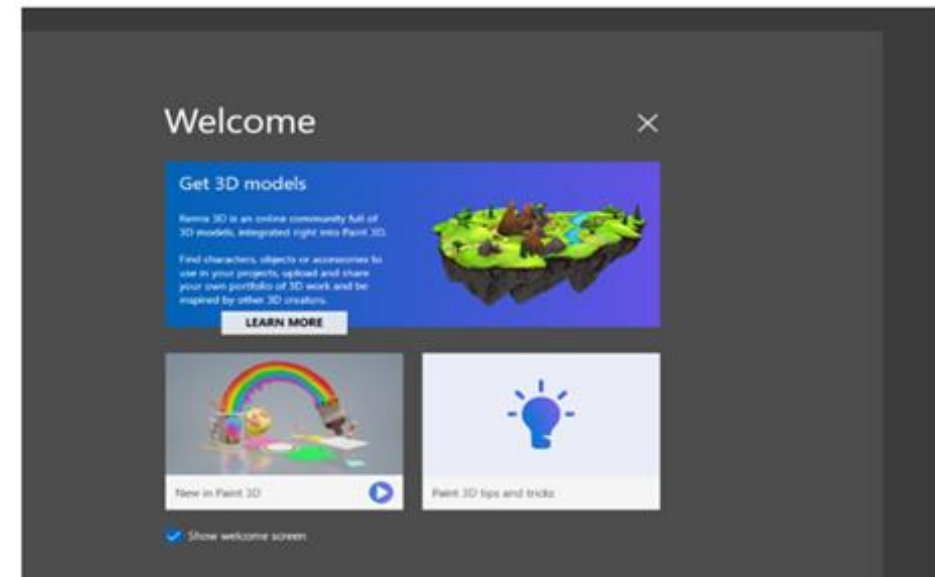
No changes in core app engagement metrics

Increased Welcome screen opt-out <<redacted>>

Control



Treatment



AI in Xbox

AI everywhere @ Microsoft

- Financial forecasting
- Space planning
- DC capacity planning
- Networking, Caching etc
- Cybercrime
- Hiring
- Cool stuff...



Thank You

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