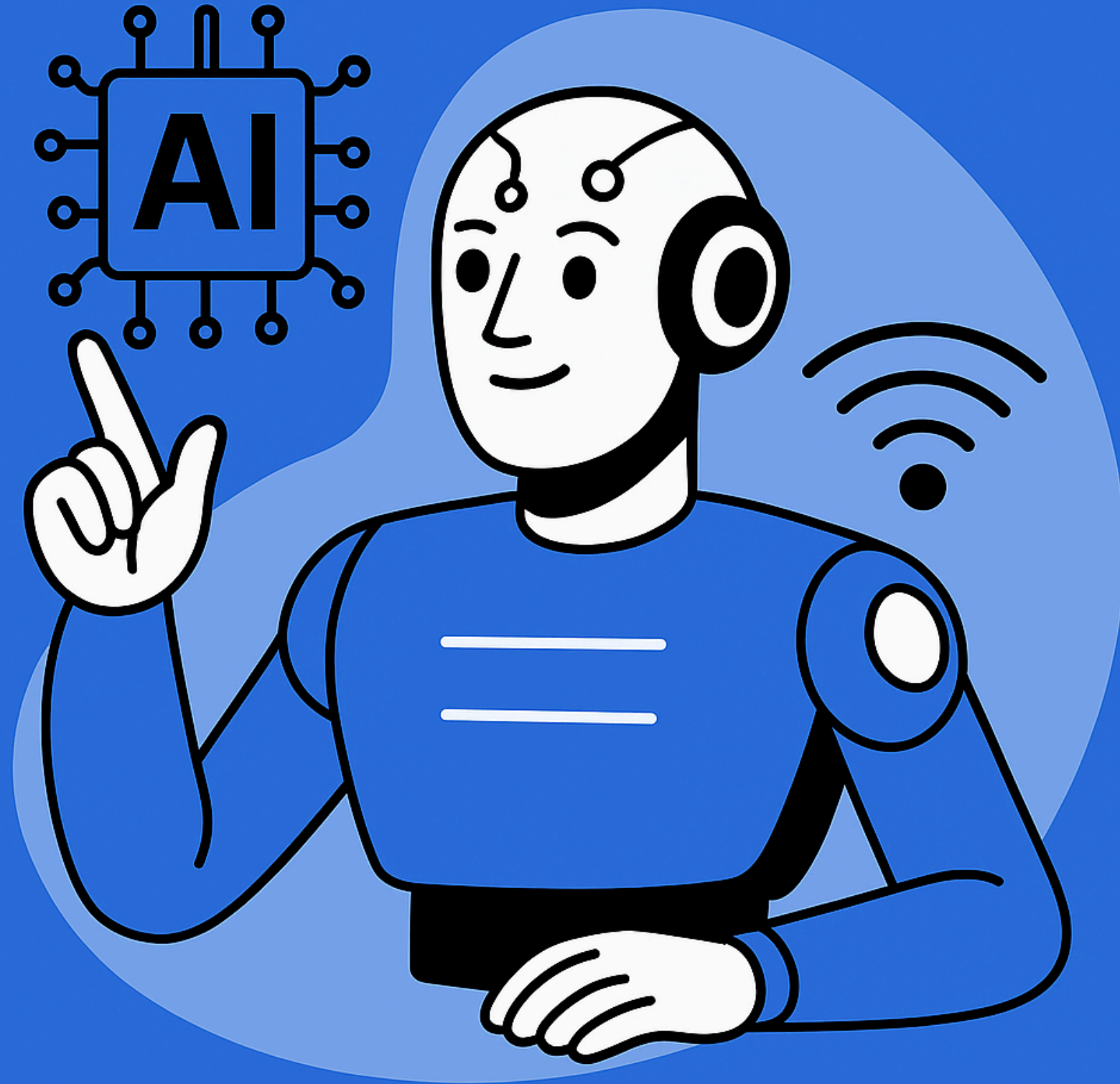


# AI in Wi-Fi



**WI-FI KS, 2025**

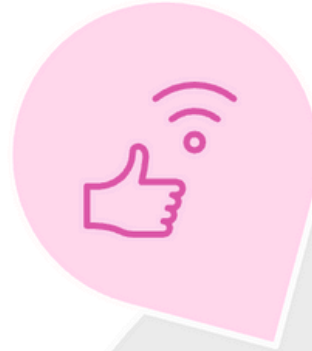
**- PRABHASH DHYANI**



# AI/ML Applications in Wi-Fi Systems

## QoE Enhancement

AI/ML for ensuring high-quality user experiences



## Radio Resource Management

AI/ML for dynamic channel selection and power optimization



## Configuration Recommendations

AI/ML for suggesting and auto-tuning network settings



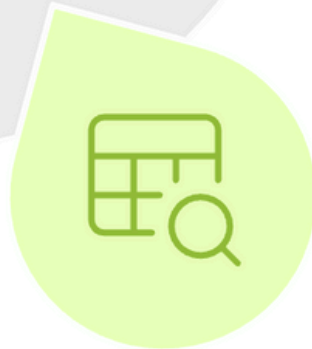
## Predictive Maintenance

AI/ML for forecasting and preventing network failures



## Anomaly Detection

AI/ML for identifying and troubleshooting network issues



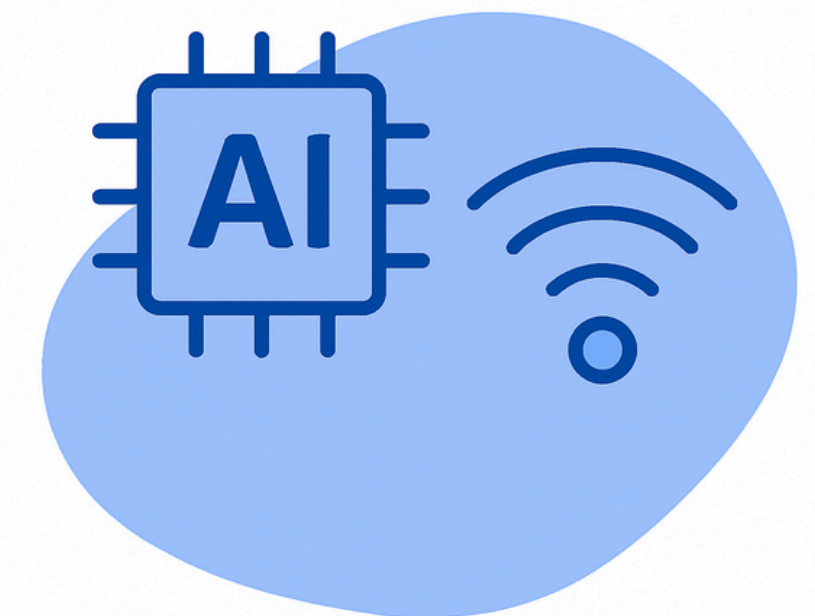
## Client Steering

AI/ML for optimizing client connections and roaming



## Top Applications





# Industry Adoption

# The Panel



**Privineth Kunhikannan**

**Senior Staff Engineer,  
Aprecomm**



**Chinmay Marathe**

**Sr. SE Specialist,  
Juniper-Mist**



**Anand N.**

**Sr. Director, Engineering  
Qualcomm**



# Practical AI



## What are the top AI use cases?

For enterprise, ISP and home users, what are the tangible outcomes?



## AI vs traditional methods?

What's better now?  
What's still hard?



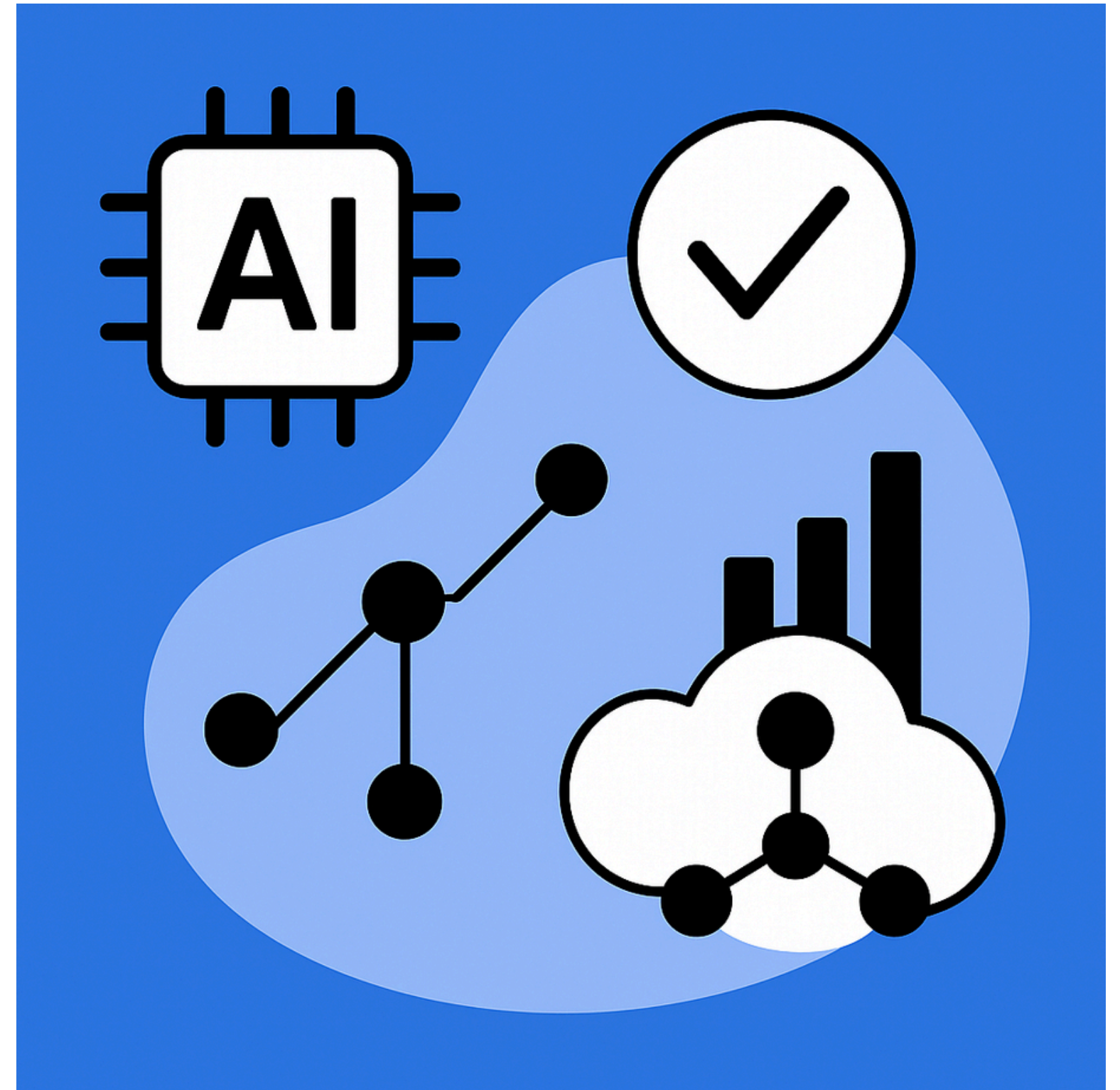
## AI as premium feature or bundled-in?

How do customers measure value?  
How do you justify ROI in enterprise, ISP and home users?



## Audience Questions:

Do IT admins trust these decisions or override them?  
Do IT teams feel more in control or less?



# Where does the intelligence live?



## Where should AI actually run?

Cloud, Edge or Hybrid?  
What are the pros and cons?



## Is Edge AI useful for enterprises too?

Why or why not?  
What will it take for inferencing? Compute, Memory, Power?



## Cloud AI vs Edge AI

How does Edge AI change strategy or cost structure?



## Audience Questions:

"If you're from an ISP—or a customer of one—do you notice if your experience improves because of AI?"





# The Future: GenAI and New Frontiers



## GenAI in Wi-Fi Stack?

What are the top use cases?



## Change in the UI usage?

AI is the new UI?

Are you seeing that adoption?



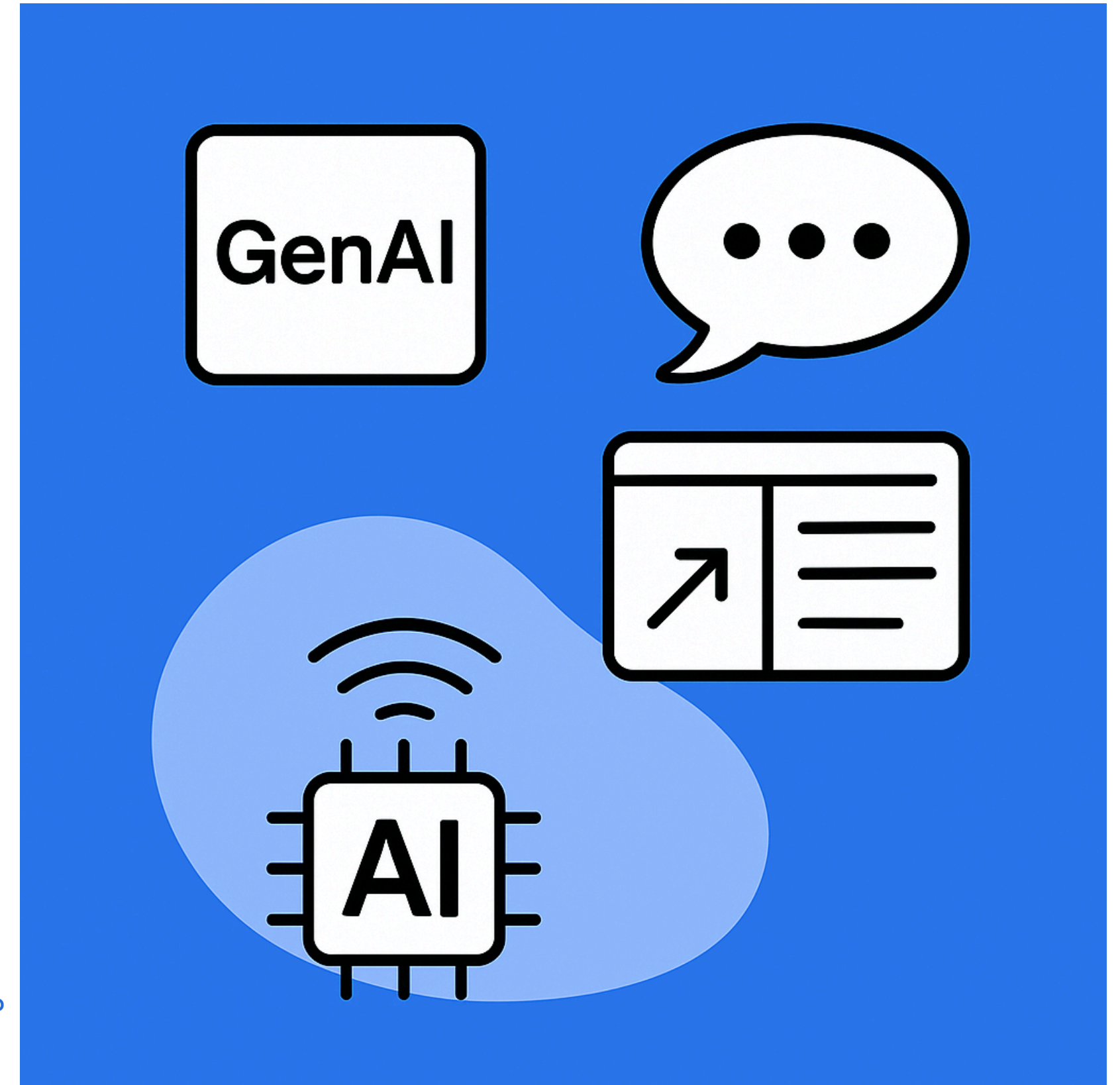
## What will Edge AI offer?

Optimizations or user-features?



## Audience Questions:

Is GenAI in Wi-Fi industry a hype or a real thing?



# Wrap-up!



## Is data history a moat?

- Can a new player match your AI performance without years of logs?"



## What's next?

- Where do you see the next AI + WiFi convergence point?
- What's one thing you're excited about?"

