



# SILICON SUMMIT

## EAST 2018

October 9, 2018 | Saratoga County, NY





# Platform Approach for a Scalable, Intelligent Edge

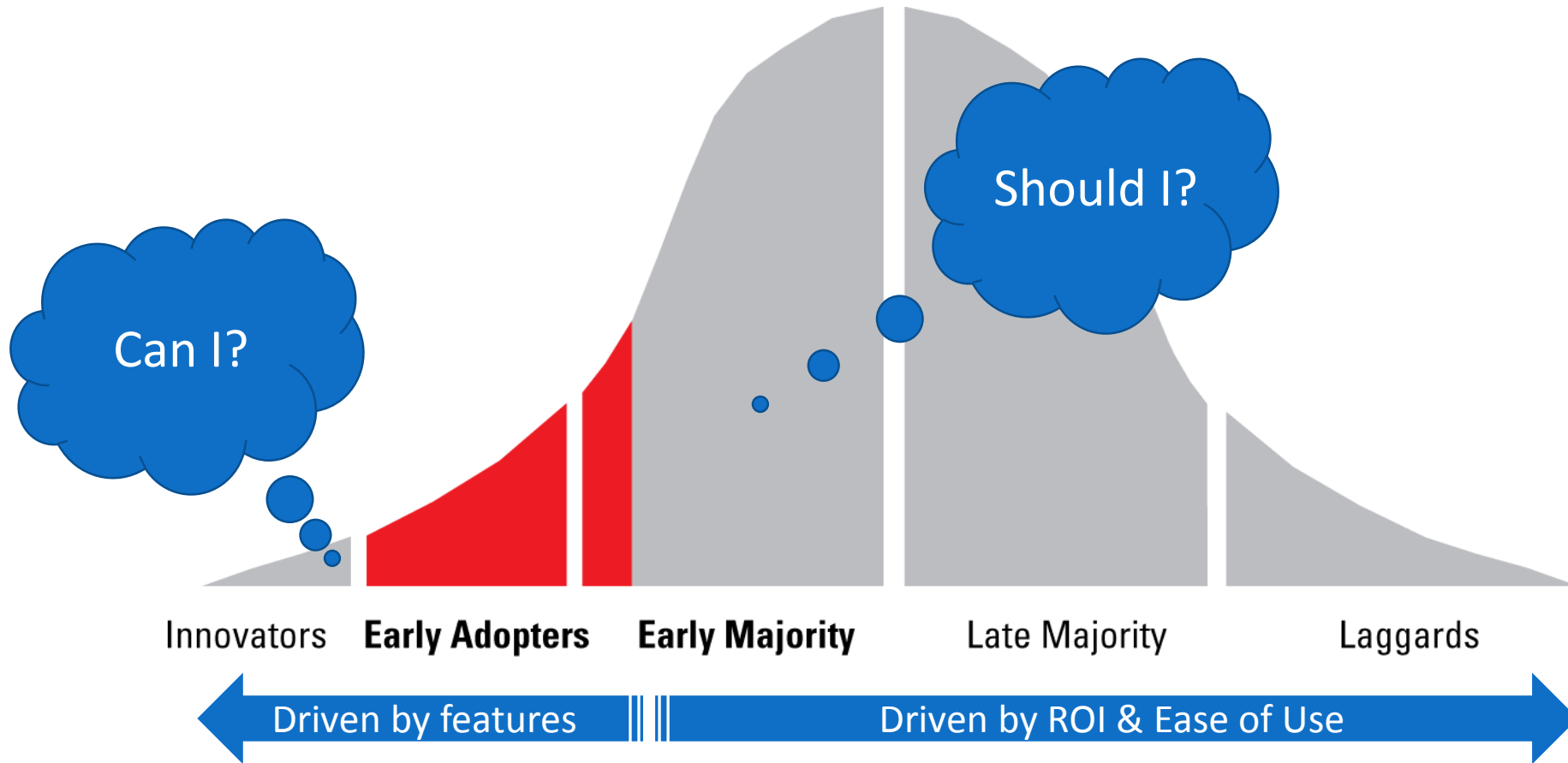
Brian Faith  
CEO, QuickLogic



# Company Overview

Addressing Critical Needs	<ul style="list-style-type: none"><li>▪ Enabling significantly longer battery life, more immersive user experience &amp; BOM integration</li><li>▪ Essential for Smartphones, Wearables, Hearables and IoT</li></ul>
Tier 1 Customers & Ecosystem Partners	
Creating Competitive Advantages	<ul style="list-style-type: none"><li>▪ 50+ patents in core IP</li><li>▪ Delivers flexibility and reduced R&amp;D costs for System on a Chip (SoC) vendors</li><li>▪ Enabling new form factors, new use cases</li><li>▪ Mobile-specific programmable logic enables hardware differentiation</li></ul>
Market Success	

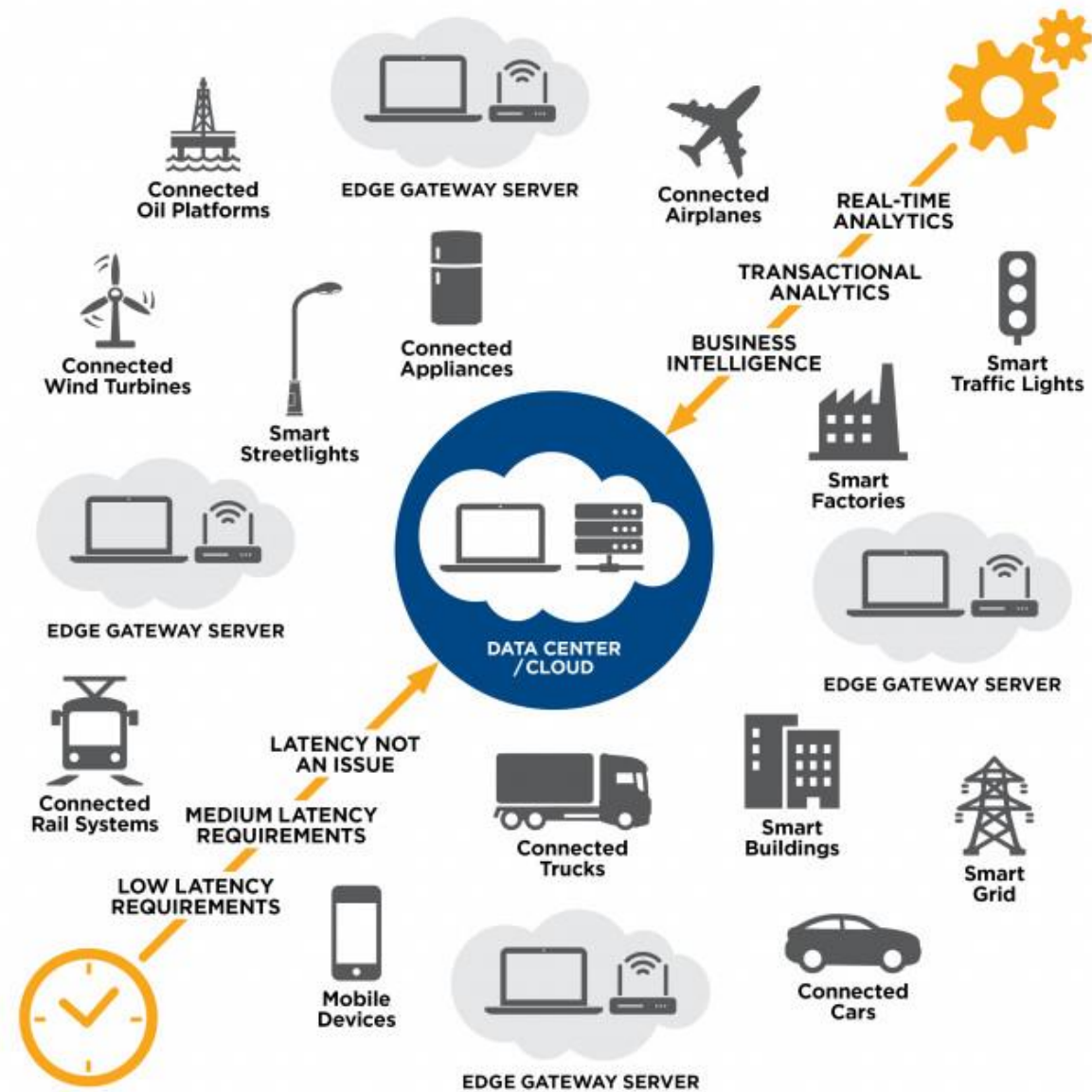
# Setting Context : Technology Adoption Lifecycle



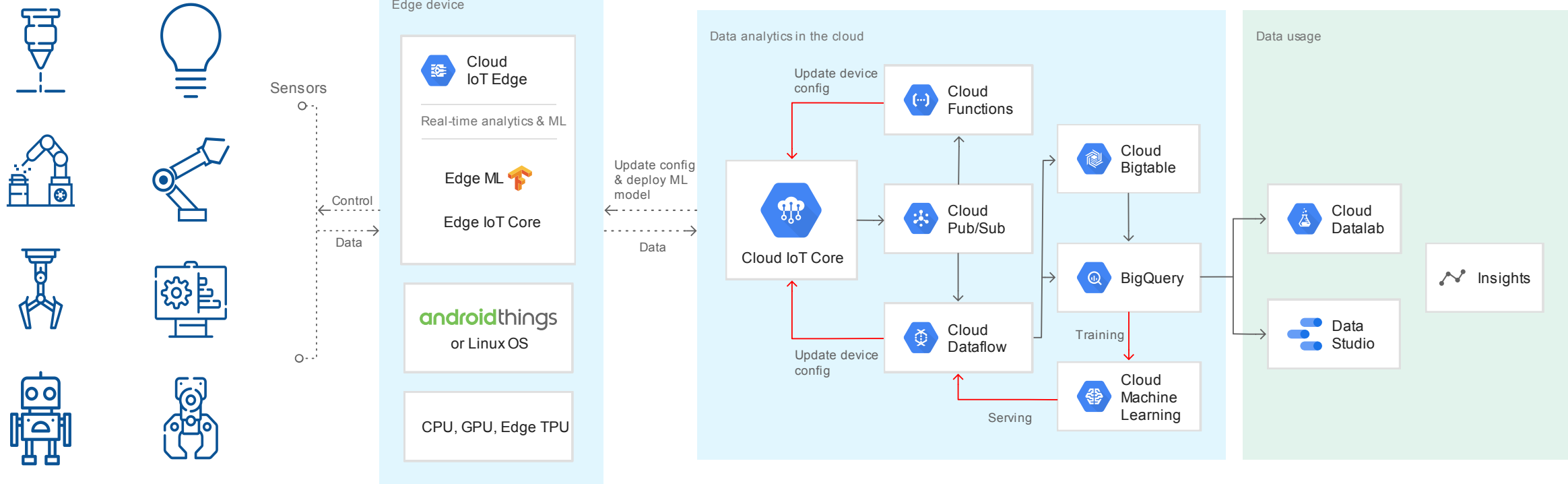
# Moving to the Edge

“The shift to the edge for AI processing will be driven by cheaper edge hardware, mission-critical applications, a lack of reliable and cost-effective connectivity options, and a desire to avoid expensive cloud implementation.”

--ABI Research, 2018



# Cloud Providers Offer Cloud to Edge



Source: Google



# IoT Technology Semiconductor Stack-up

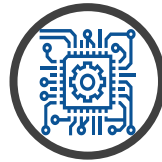
## High-Level Software

Speech Recognition,  
Image Recognition, Data  
Analytics



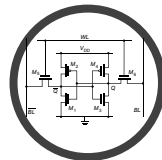
## SoC

Processor cores and  
peripherals



## Gates

Logic, Memory, etc.



## System Software

Embedded SW, HAL,  
Drivers



## Programmable H/W IP

Optimized for Machine  
Learning, Neurons,  
eFPGA

# Where is the VC \$ Flowing?

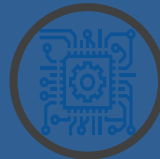
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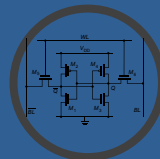
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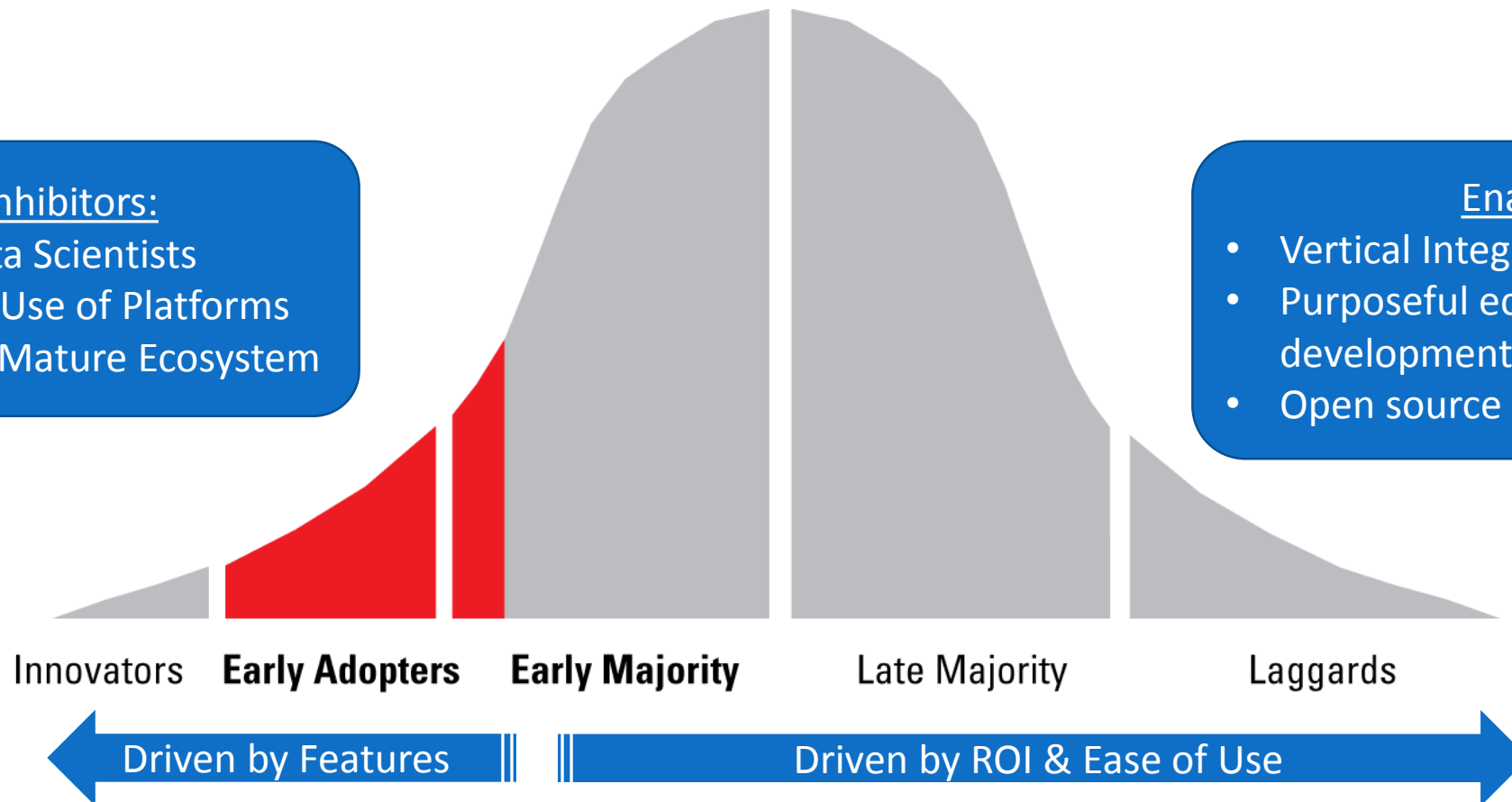
# Scaling = Crossing the Chasm from Early Adopters to Early Majority

## Inhibitors:

- # of Data Scientists
- Ease of Use of Platforms
- Lack of Mature Ecosystem

## Enablers:

- Vertical Integration of Solutions
- Purposeful ecosystem development
- Open source initiatives



# Simple to Understand, Complicated to Achieve

- Scaling intelligence at the Edge for the “majority” requires us to look at both the numerator and denominator:

$$\text{ROI} = \frac{\text{Increase the value through vertical integration and services}}{\text{Drive incremental support costs to zero}}$$

# A Final Thought

- The cloud platform companies of the world are already positioning AI as a Service
- How might we?