

# 5G-是什么与做什么

韦青 微软(中国)首席技术官



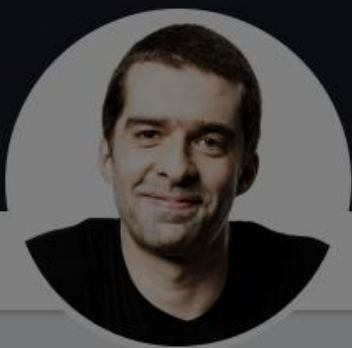
# Prelude

物理世界是有物理局限的

所有进步都是有代价的

# 拿AI做个借鉴

\* Mat是微软CEO Satya Nadella的技术助手 Technical Advisor



**Mat Velloso**

@matvelloso

Technical Advisor to the CEO at Microsoft and developer advocate at heart. Opinions here are mine only, don't take them too seriously

📍 Redmond, WA

🌐 matvelloso.com

📅 Joined April 2009

🖼️ 1,304 Photos and videos



**Mat Velloso**

@matvelloso

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Difference between machine learning and AI:

If it is written in Python, it's probably machine learning

If it is written in PowerPoint, it's probably AI

5:25 PM - 22 Nov 2018

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💬 200 ↺ 8.4K ❤️ 23K



**Mat Velloso** @matvelloso · 22 Nov 2018

Thank you, thank you, I'm here most evenings, making nonsensical jokes and swearing at keras LSTM because this input shape thing makes no sense what the hell

💬 10 ↺ 11 ❤️ 384



**Mat Velloso** @matvelloso · 23 Nov 2018

I think this joke is over fitting...

💬 6 ↺ 19 ❤️ 457



**Mat Velloso** @matvelloso · 23 Nov 2018

People complaining that I use keras lstm: I am not a data scientist, I can't probably tell k-means from a bowl of cornflakes.

My PowerPoints are great though

💬 5 ↺ 12 ❤️ 275

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\* Mat是微软CEO Satya Nadella的技术助手

来自2019亚洲消费电子展（CESA）的一则新闻（[2019-06-14 16:01](#)）

## 变革探索在5G前夜未完待续

... ..

可以看出在这次CESA上，许多企业已经将曾经停留在“PPT”上的内容逐渐落地，乍一看似乎整个展会上没有新鲜的“概念”，众多参展商让这科技展看起来更像一个“招商会”，但是，对新事物的消化、演进和实现能力，才是当下整个科技制造业最迫切需要的。

... ..

总结下来，两句先贤的智慧

知其雄，守其雌

与其坐而论道，不如起而行之



信息纷杂世界的入门诀窍：  
找源头

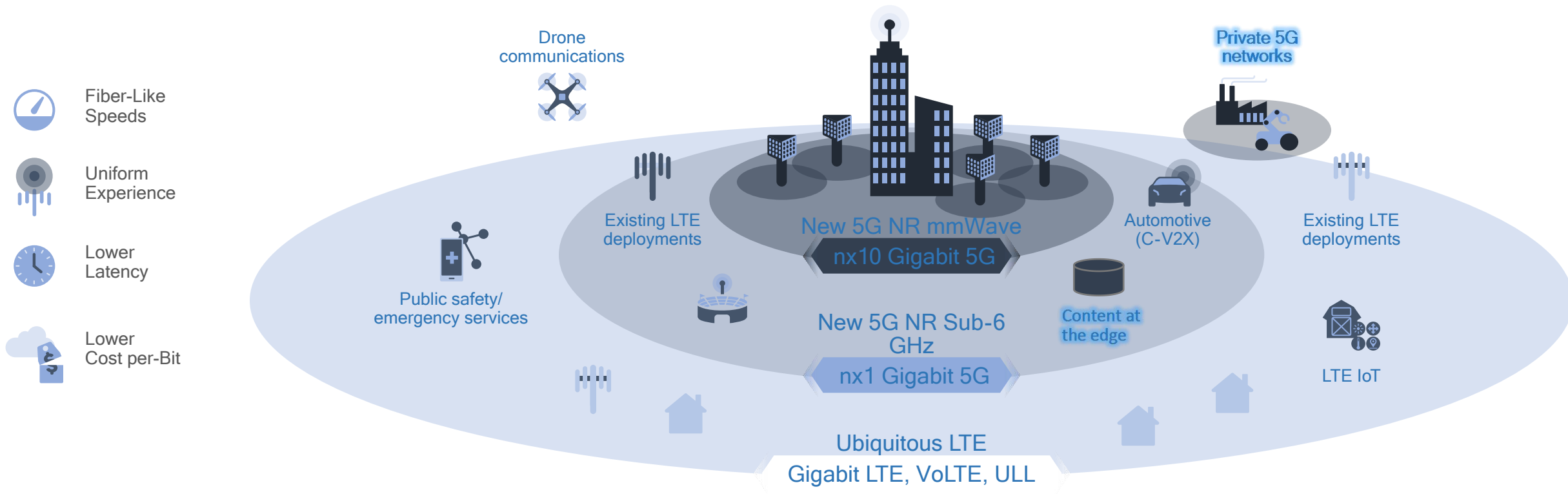
3GPP和IMT

5G到底是能给大家带来什么？

5G NR  
5G NSA/SA  
Sub-6G/mmWave  
Slicing  
Virtualization  
ONAP

# What is **5G**?

1. **Ubiquitous 4G Gigabit LTE / IMS** as the fallback (43 MOs deployed since 2018) – 100s of Mb/s
2. **5G New Radio (NR) “Sub 6”** – Below 6GHz spectrum capabilities provides single digit Gbp/s bandwidth with more consistent coverage and lower cost per sub; upgrade existing telecom equip
3. **5G NR “mmWave”** – millimeter wave high frequency capabilities that 10s of Gb/s bandwidth and precise indoor location; new equip needed



# Intelligent Cloud & Intelligent Edge



# Gaming



# Modern Life



# Modern Workplace



## Business applications

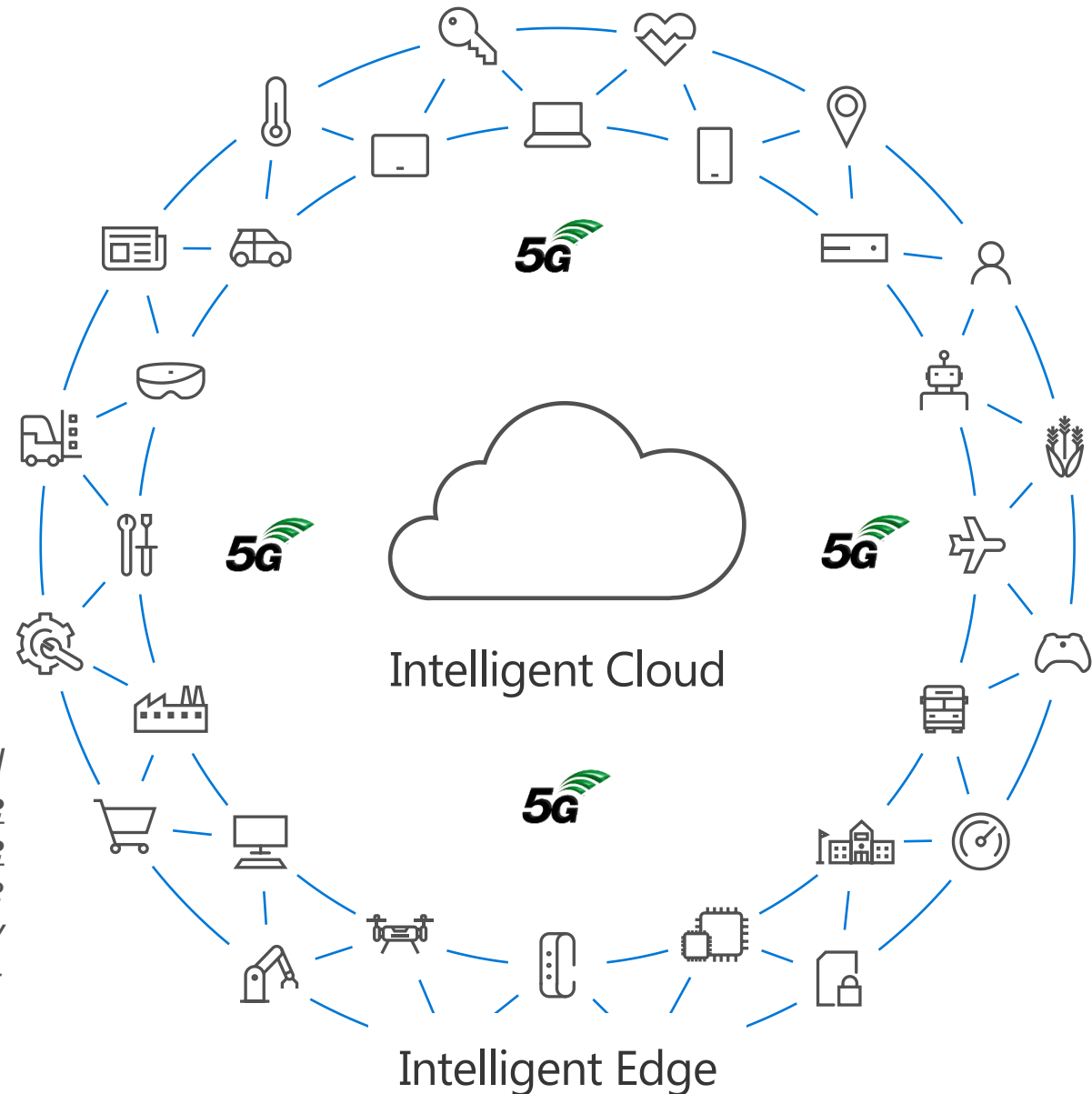


## Applications & infrastructure



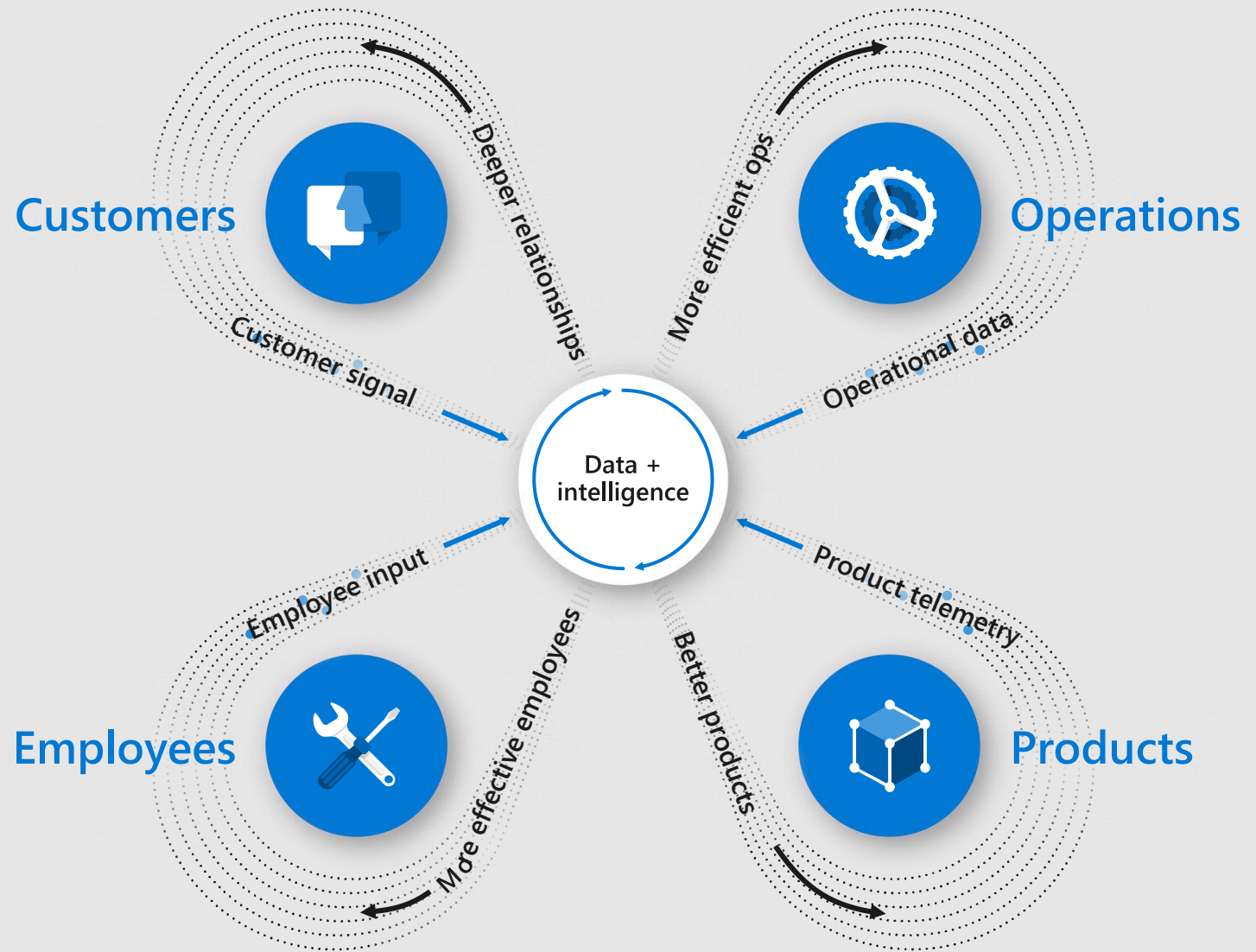
## Data & AI

5G is going to help marry the intelligent cloud and the intelligent edge in a way that **brings the power of computing and machine intelligence right to the source** - every device will not only be connected, but intelligent and able to seamlessly operate with the rest of your digital life in real-time

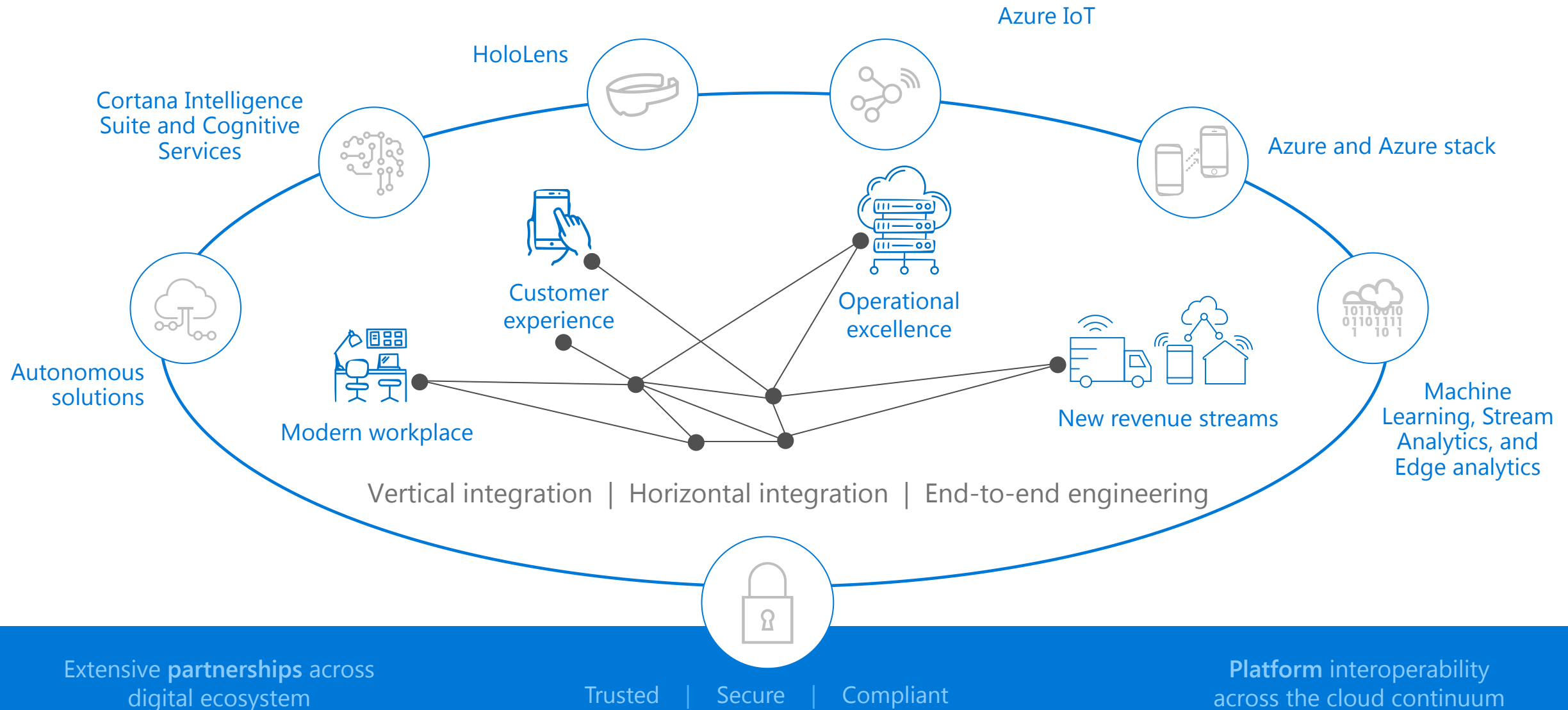


# How does 5G enhance the digital feedback loop?

- 1 Data: Capture digital signal across business
- 2 Insight: Connect and synthesize data
- 3 Action: Improve business outcomes



# Telco Digital Transformation







谢谢大家！