



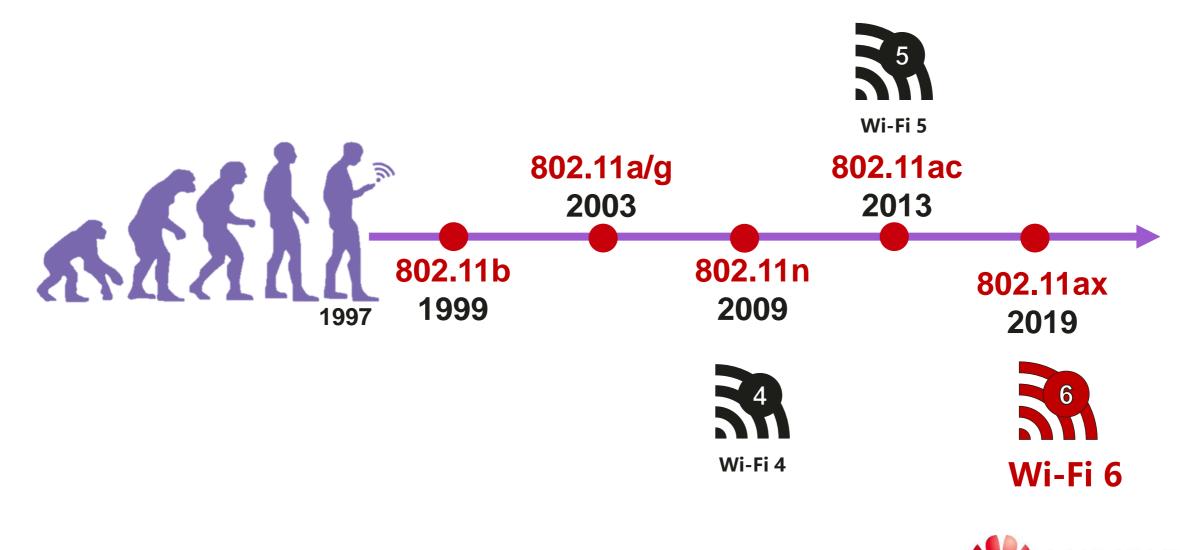
Network Product Manager Huawei Enterprise Thailand





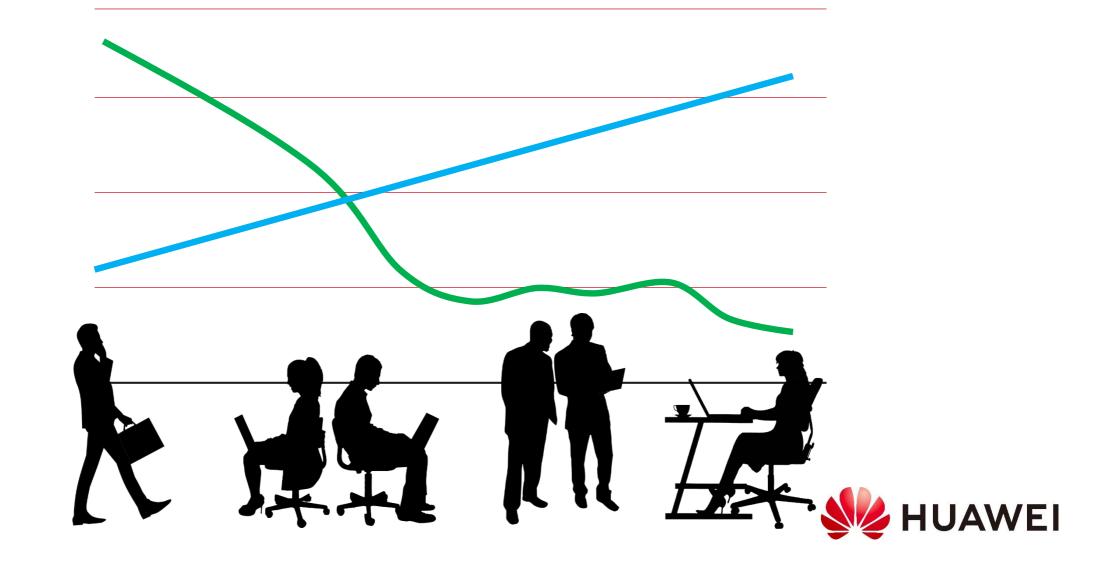
### What it really is



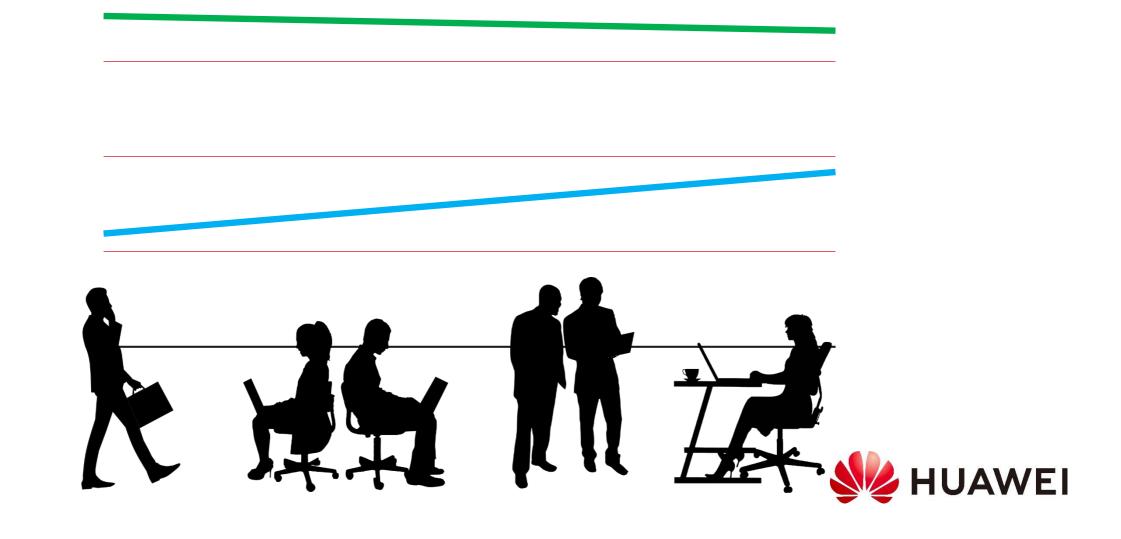




### WIFI 5 Throughput and Latency



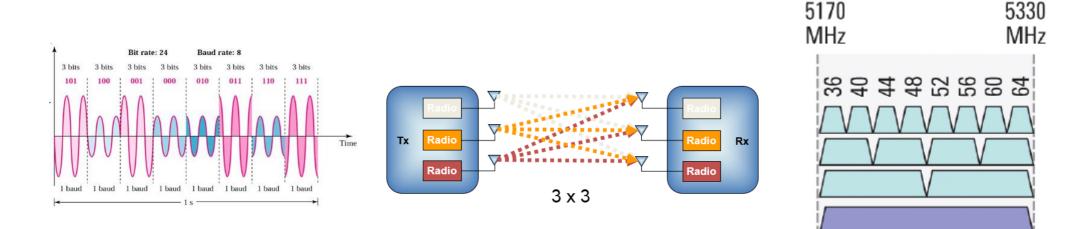
### WIFI 6 Throughput and Latency



# Something obviously makes the difference here!



### What has WIFI been improving for all these years?



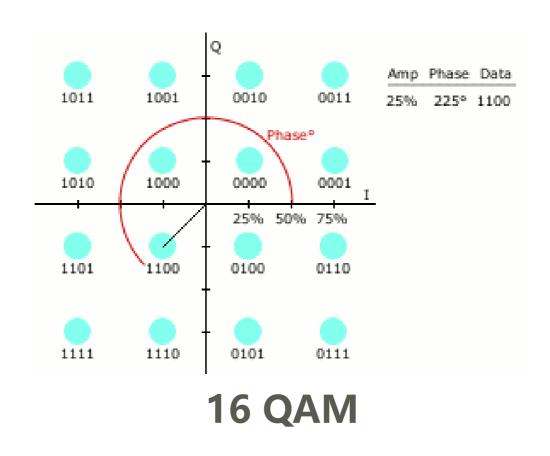
Modulation Algorithm Spatial Streams

Channel Bonding

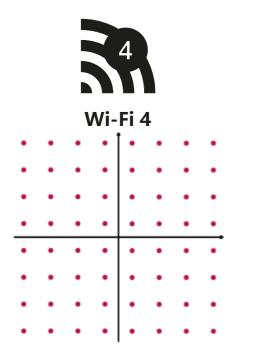


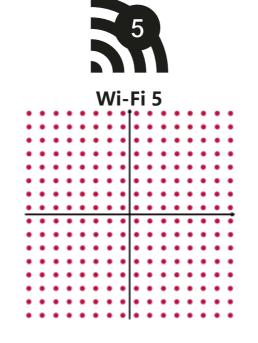
### **Modulation algorithm**

QAM







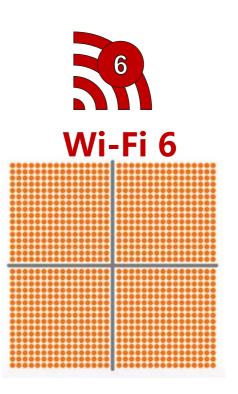


64 QAM 6 bit/symbol

~150 Mbps

256 QAM 8 bit/symbol

~200 Mbps

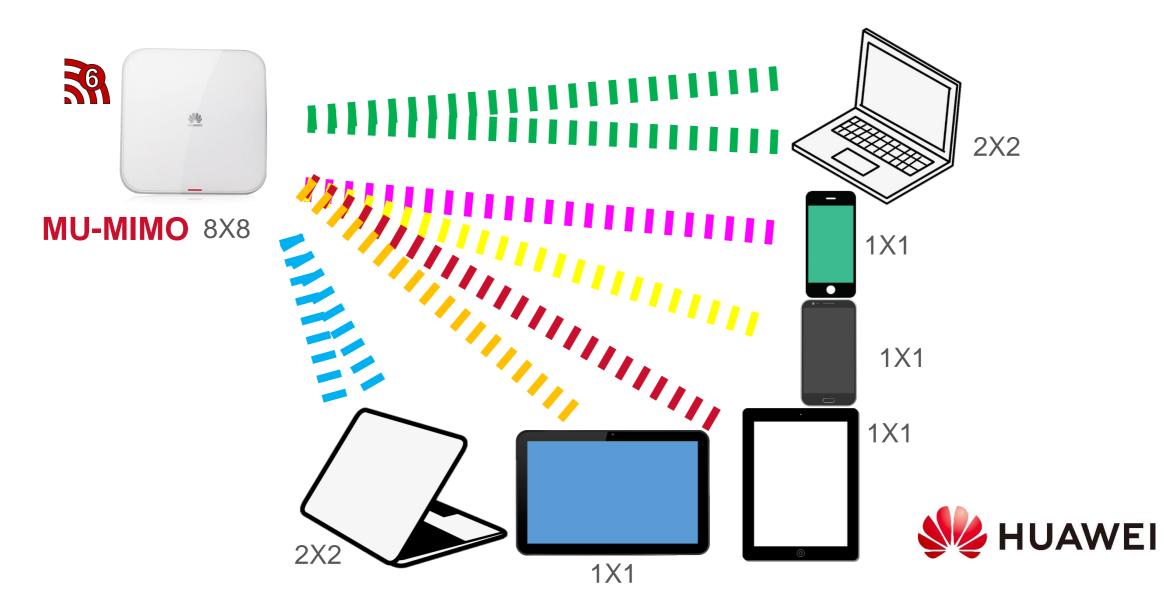


1024 QAM 10 bit/symbol

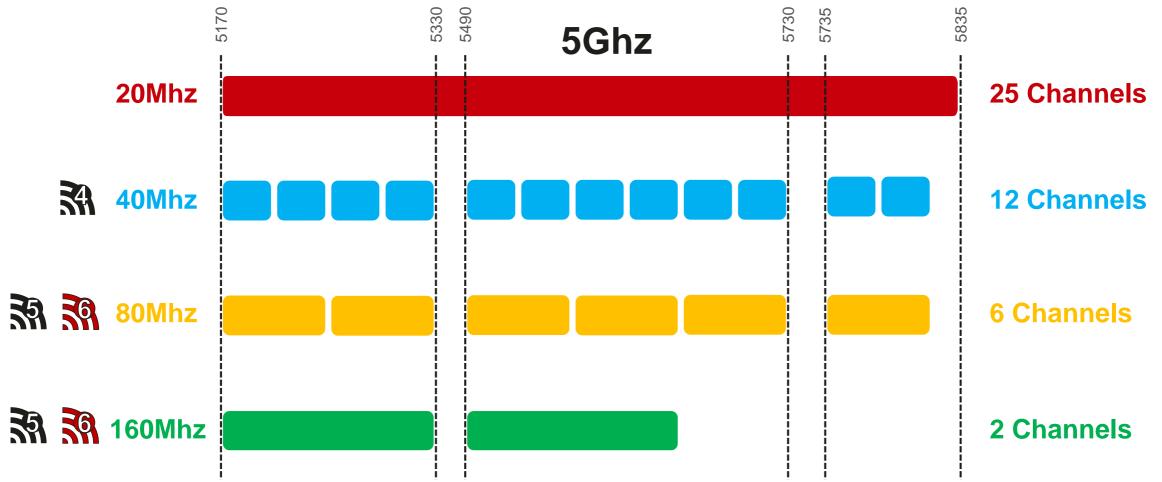
~290 Mbps



### **Spatial Stream**



### **Channel Bonding**









Orthogonal

Frequency

**Division** 

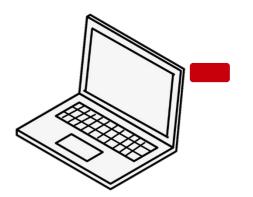
**Multiple** 

Access



## **OFDM (WIFI 4 + WIFI 5 )** 20mhz



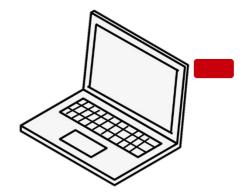




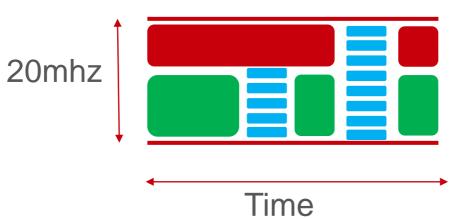




### OFDMA (WIFI 6)



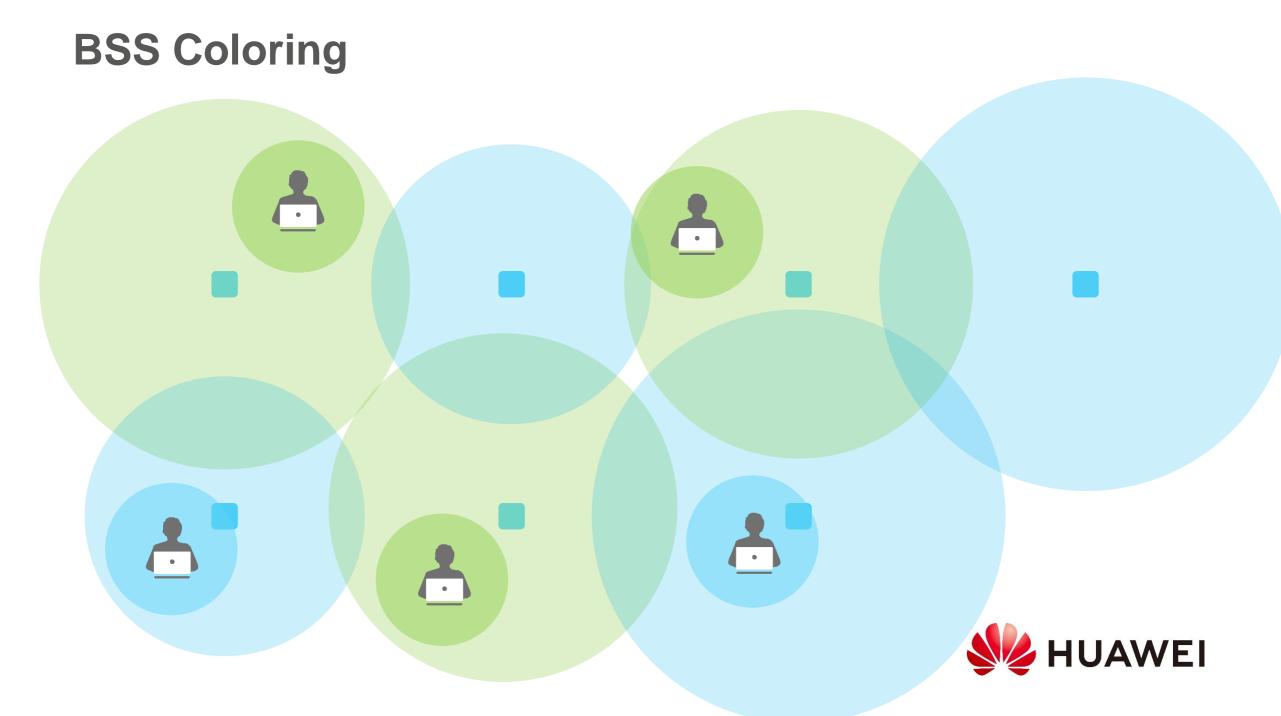












### **Recap WIFI 6 advantages**

| OFDMA                | Latency       | Capacity + +  |
|----------------------|---------------|---------------|
| BSS Coloring         | Noise         | Capacity + +  |
| Modulation algorithm | Bandwidth + + |               |
| Spatial Stream       | Capacity + +  | Bandwidth + + |
| Channel Bonding      | Bandwidth + + |               |



### Capacity





**Big Classroom** 



Supermarket



Stadium **HUAWEI** 

### **Bandwidth + Latency**

#### 9.6 Gbps/AP + <100ms/station



4K/8K Video Streaming

Augmented Reality

Virtual Reality



### Thank you.

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