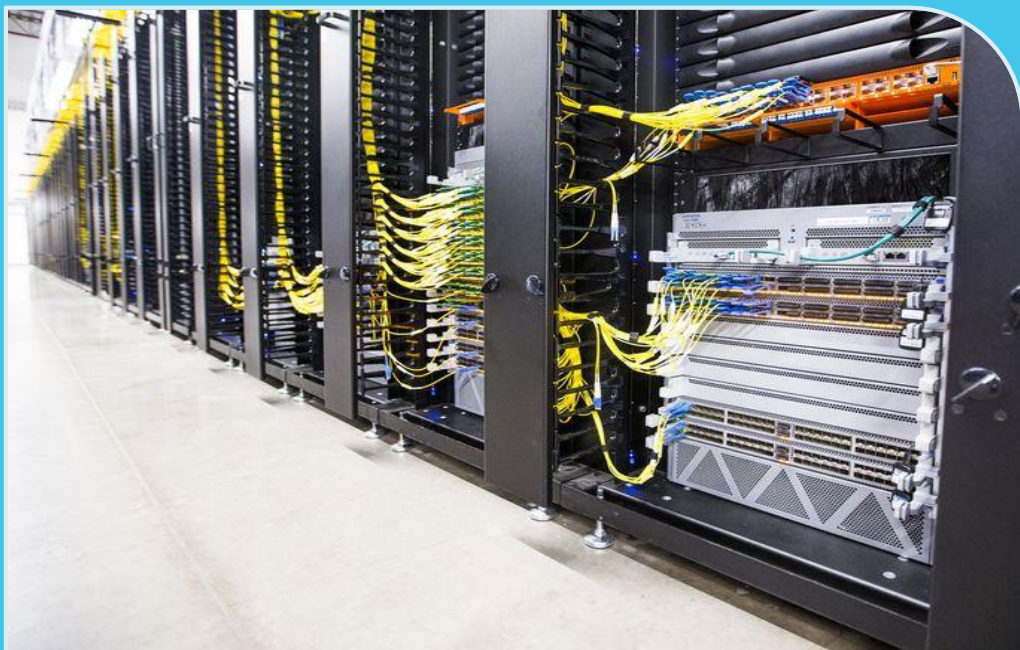# Webscale Playbook: Apple

R&D splurge to continue, as further capex falloffs on cards with virus outbreak in China

MTN Consulting
Measuring markets

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Agenda

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Operational Scale

Apple's network of six self-owned data center sites along with co-location facilities manages massive amounts of data traffic for the company's currently active ~1.5B iOS-based devices

6
Operational data center locations *(as of Jan 2020)*

16%
iCloud's percent of total upstream mobile traffic in the Americas *(per Sandvine report – Feb 2019)*

1,349 kWh mn
Total energy use at Apple's data centers & co-location facilities *(Apple's 2019 Progress Report)*

Apple's Webscale Network Infrastructure Metrics

~60 mn
Apple Music subscribers *(as of Jun 2019)*

~34 mn
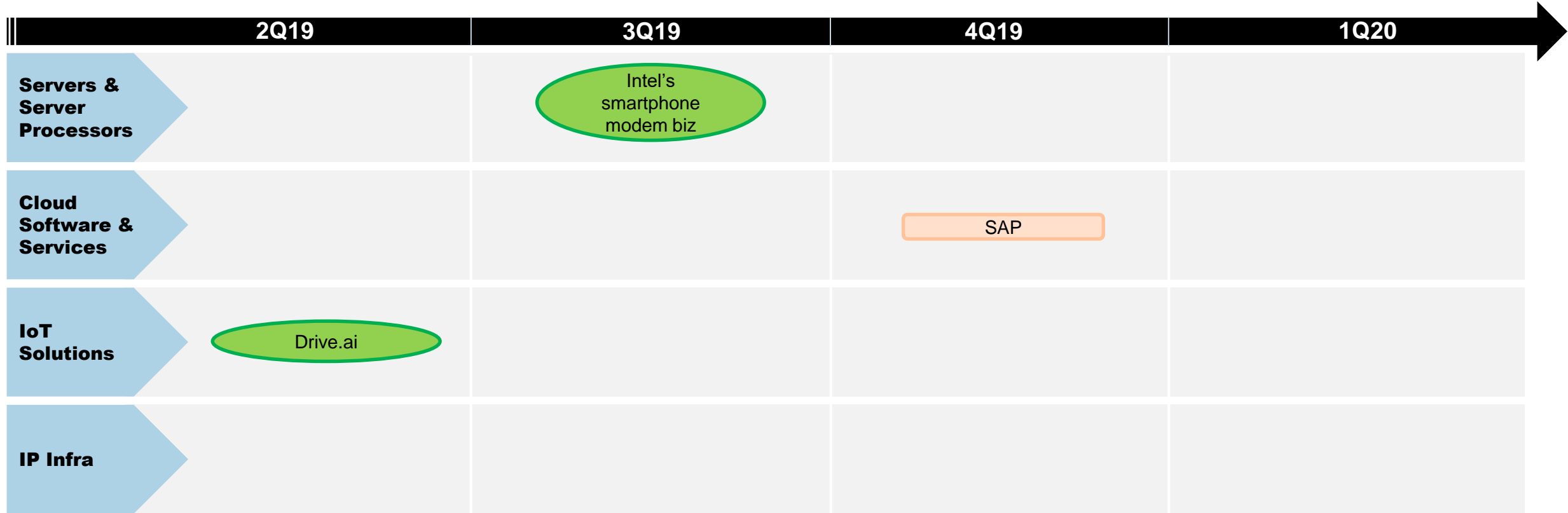Estimated Apple TV+ subscribers *(as of Dec 2019)*

~1.5 bn
Active iOS devices installed base to sell an Apple service *(as of Jan 2020)*

Source: Company website; Company annual reports

Apple's Key Technology Relationships* in Networks (1/2)

Apple's big-ticket acquisition of Intel's smartphone modem business underscored the company's strong desire for chip independence

	2Q19	3Q19	4Q19	1Q20
Servers & Server Processors		Intel's smartphone modem biz		
Cloud Software & Services			SAP	
IoT Solutions	Drive.ai			
IP Infra				

Relationship Type: Supplier   Tech. Partner   Business Cooperation   Contract Mfg.   Joint R&D   M&A

*For a detailed review of Apple's technology relationships over a longer time series, refer to the latest edition of our *Webscale Network Supply Chain Analyzer*
^ Deals with vendors marked with caret (^) symbol are "Current" or "Ongoing" in nature

Source: MTN Consulting's Webscale Network Supply Chain Analyzer; MTN Consulting analysis