Microsoft Surface

The Microsoft Surface LTE advantage

Surface Pro (5th Gen) with LTE Advanced for Business and Surface Go with LTE Advanced for Business

[Speaker name]

Table of contents

What is driving LTE demand?

Why did we build LTE-based Surface Devices in the first place?

- The world is going fully mobile – many professional responsibilities require being "always connected"

- Commercial, public sector, and consumer users need to "work-anywhere" – at the office, or remote

- Firstline workers need to provide performant, real-time services to their end-customers

- LTE support can deliver more reliable security than Wi-Fi hopping

- Time wasted returning to an office, looking for Wi-Fi, or switching connection methods is expensive

The LTE-enabled products of the Surface portfolio

Secure productivity anywhere with global LTE connectivity

Surface Go
with LTE Advanced

Surface Laptop

Surface Studio

Roaming customer service	Field servicer	Mobile sales representatives	Customer relationship managers	Information workers	Executives	Engineers, designers, researchers

Surface Pro
with LTE Advanced

Surface Book

Surface Hub

Surface Pro (5th Gen) with LTE Advanced for Business
Unmatched versatility

Enjoy LTE without sacrificing screen size, bezels, or overall premium design of Surface Pro

Connect on your terms with both removable SIM and embedded SIM (eSIM)

LTE connectivity around the world with support of 20 LTE bands[1]

Blazing fast LTE connectivity with a best-in-class Cat 9 modem and 450Mbps download speed

Windows 10 delivers the security IT teams trust

6:18
Sunday, June 18
Meeting with Kaitlin
Café
11:00 AM-12:00 PM

Surface Go with LTE Advanced for Business

Portable power

Optional **LTE Advanced** for on-the-go productivity

LTE connectivity around the world with support of 22 LTE bands[1]

Blazing fast LTE connectivity, with a best-in-class Cat 9 modem and 450Mbps download speed

Global carrier support via removable SIM card

Windows 10 delivers the security IT teams trust

Surface LTE technical advantages

Engineering excellence and innovation

Custom design

- Purpose-built LTE – not an afterthought option

- Customer experience focused design

- "Intension" design practices – sequence development and testing

True integrated LTE – connect once

- Optimized design to deliver best performance across compute, battery life and connectivity

- Thermal management innovations drive peak, fan-less processor performance

- Fan-less footprint enables more compact modem and component integration

- Smaller high-performance antenna array, no sacrifice of screen size or bezel

Single LTE SKU

- Delivering one common, universal architecture

- Surface LTE products purchased in any country will deliver the same, consistent radio coverage and performance

- Globally unifying design – no regionalization required

LTE Main Antenna   Qualcomm® Snapdragon™ X16

Surface Go for Business
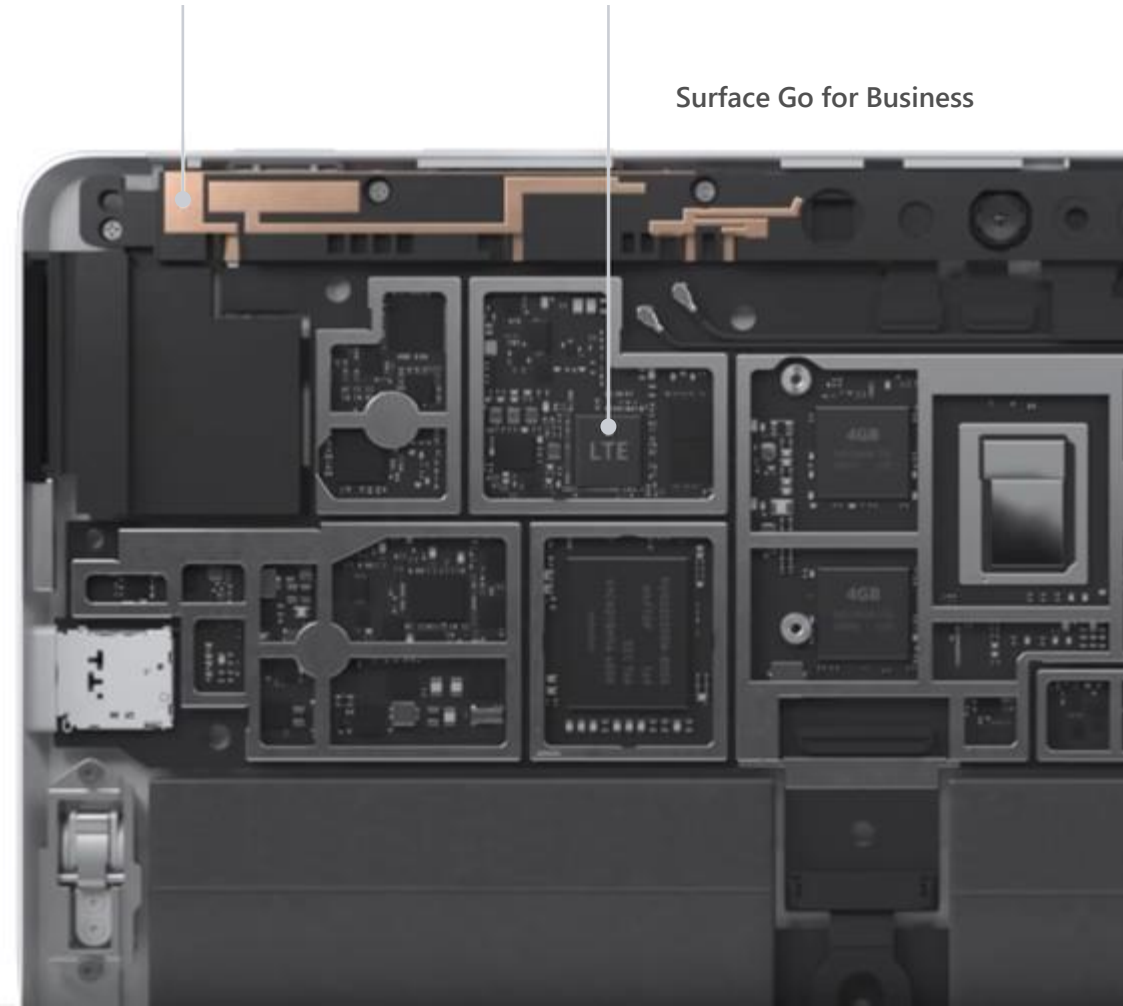
Embedded SIM technology enables versatile global support and modern device management

eSIM leveraged by Surface Pro (5th Gen) with LTE Advanced for Business

Capabilities of eSIM

- All the mobile functionality without the manual overhead of a physical subscriber identity module (SIM)

- Programmable flexibility to support a vast array of diverse carriers- change your carriers as you travel

- Eliminate the overhead of managing multiple physical card inventory

Benefits of the Surface Pro (5th Gen) implementation of eSIM

- Proven product/market delivery - early technology experience led the industry

- One device, multiple operator options

- Customers dynamically and easily choose their service providers

- Streamlines global enablement for "always connected" use models

- Centralize and unify modern management of LTE device assets, accounts and policies

Surface Pro (5th Gen) with LTE Advanced for Business

Microsoft investments ensure robust coverage

Surface LTE products built to demanding global requirements

The Microsoft Surface team executes internal testing and engages operator partners

- Certification: a formal operator-specified process which results in documented approval from the operator

- Validation: an internal exercise to prove out functionality on the operator network in real-world scenarios

	Surface Pro (5th GEN)	Surface Go
Certification	AT&T, Verizon, T-Mobile, Sprint, SoftBank, NTT DoCoMo, KDDI, Telstra, Optus, EE/UK, Orange, Vodafone, SK Telecom, LGU+	AT&T, Verizon, Sprint, SoftBank, NTT DoCoMo, KDDI, Telstra, Optus, EE/UK, Vodafone, 3/Hutchinson
Validation	71 operator networks, 30 markets worldwide	66 operator networks, 30 markets worldwide

Always an innovative eye to the future
Engaging technology partners and customers on evolving requirements

Microsoft is committed to market-relevant LTE development

- Futureproofing – aligning and designing to future technology trends

- Surface Go and Surface Pro leverage LTE innovations over time

- Always connected experience

Keying on new, emerging, and progressive customer requirements

Actively tracking and testing the evolution of cellular capabilities

Success evidence
Surface Pro (5th Gen) customer win examples

Financial Services/Insurance

Customer consolidated 700+ old tablets and laptops with a single standardized platform for the entire company.

Learn more

Automotive

Account instituted a "Work Anywhere" initiative to empower their mobile business workforce with highly secure productivity tools.

Learn more

Healthcare

Client needed a flexible, high-performing device with always-on remote connectivity to support critical home patient care.

Learn more

Banking/Financial Services

Mashreq UAE has a bank "branch of the future" initiative, mobilizing their base of 1500+ relationship managers.

Learn more

Avionics

Lufthansa Germany are digitizing their entire travel chain to optimize processes, improve services and provide faster communications.

Learn more

Government/Transportation

Transport Canada procured 2600+ Pro LTE units for their field inspectors and other mobile workers to use as part of their modern workplace initiative.

Learn more

Anatomy of a Surface LTE win

Consolidation

The Surface 2-in-1 platform made it easy for Daito Trust to consolidate PC and tablet inventory into one standard device. Surface creates worker efficiencies while also simplifying device deployment, security, and management.

Windows Transition

The client, faced with obsoleting software and hardware, leveraged the benefits of a transition from Windows 7 to Windows 10 in conjunction with the advantages of adopting Surface LTE.

Mobile Workforce

The Surface LTE advantage makes Daito field workers more productive by eliminating the overhead, time and performance issues of mobile phone tethering or connecting to Wi-Fi routers.

Learn more

DAITO TRUST CONSTRUCTION CO., LTD.
PURSUING EFFECTIVE USE OF LAND

Appendix

Resource links and additional support content

Resources

External deck - Surface Pro (5th Gen) with LTE Advanced for Business

[Surface Commercial Wins and Advocacy Viewer](#)

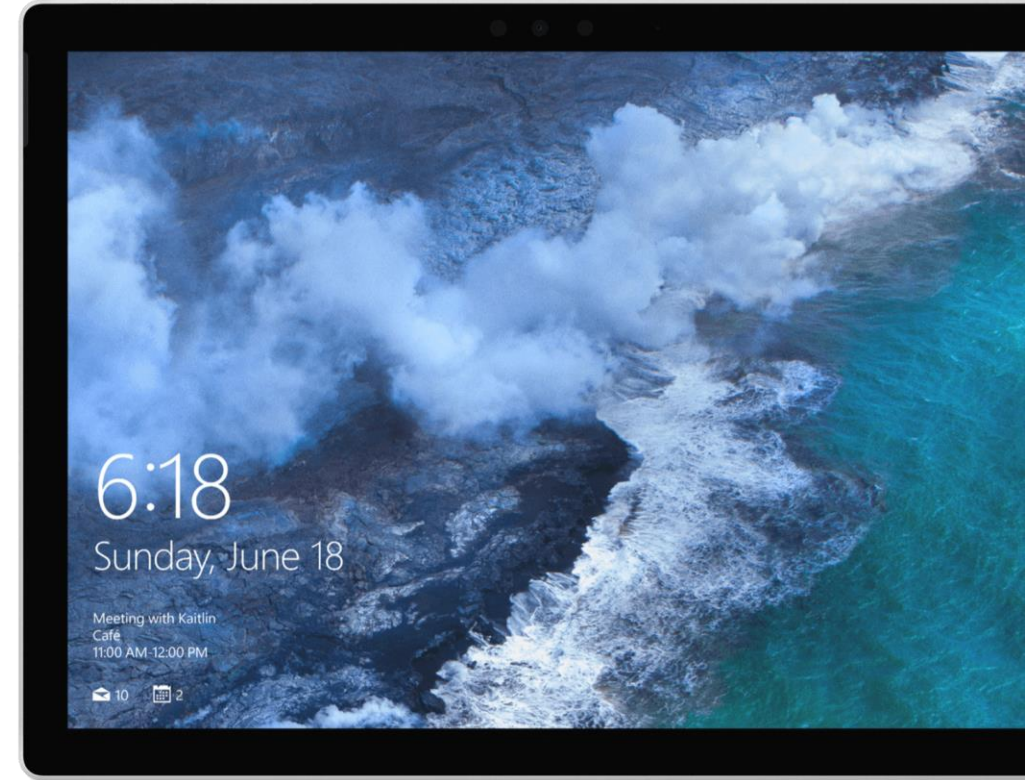[Surface Go for Firstline External Facing Pitch Deck](#)

[Surface Go Technical FAQ](#)

[Surface Go for Education External Facing Pitch Deck](#)

[Surface Go for Firstline External Facing Fact Sheet](#)

[Surface Go for Education External Facing Fact Sheet](#)

[Selling the Surface for Business Portfolio](#)

What is LTE?

Technical origin

- Long-Term Evolution (LTE) is a high-speed wireless communications standard

- It is used across a wide array of mobile devices

- LTE has obsoleted earlier standards and now provides more robust global support

- Mobile devices need to support multiple LTE "bands" to support the different country frequencies

Common LTE Use cases

Where is LTE the most impactful?

Use cases

All industries with remote, off-site, traveling or transient workers benefit from Surface LTE

- Use cases for LTE include:
  - Customer facing roles
  - Field/mobile sales reps
  - Firstline workers
  - Field support service
  - Information workers
  - Other revenue generating field roles
  - Roaming customer service
  - Traveling business managers (road warriors)

Common user types

Who is the most likely to need and use LTE?

User types

Hands-on, end-user examples to date

- Users of LTE include:
    - Builders/Construction
    - EDU-Faculty/Staff
    - EDU-Students
    - Field Sales (product/service companies of all sizes)
    - Field Support & Service (remote diagnosticians)
    - Homecare (mobile healthcare)
    - Hospitality staff
    - Insurance claims adjusters, loan officers
    - Pilots & airline support staff
    - POS retail staff
    - Professional who wants productivity/style
    - Relations managers (FinServ/Banking & others)

User scenarios
Where does Surface LTE have natural pull demand?

**Common scenarios or opportunity triggers**

- Always-on connectivity = field productivity

- Flexible standardization and device consolidation

- Modern workplace digital transformation

- Process/workflow optimization

- Underpowered/tethered tablets

- Laptop refresh cycles

Industries

Where is LTE the most impactful?

Besides Gov, EDU, and other remote applications, we have seen early wins in industry segments/subsegments like:

- Automotive
- Construction, Mining, Utilities
- Engineering, Manufacturing
- Financial Services, Banking, Insurance
- Healthcare
- Hospitality, Travel
- Retail
- Telecommunications
- Transportation
- And many more…
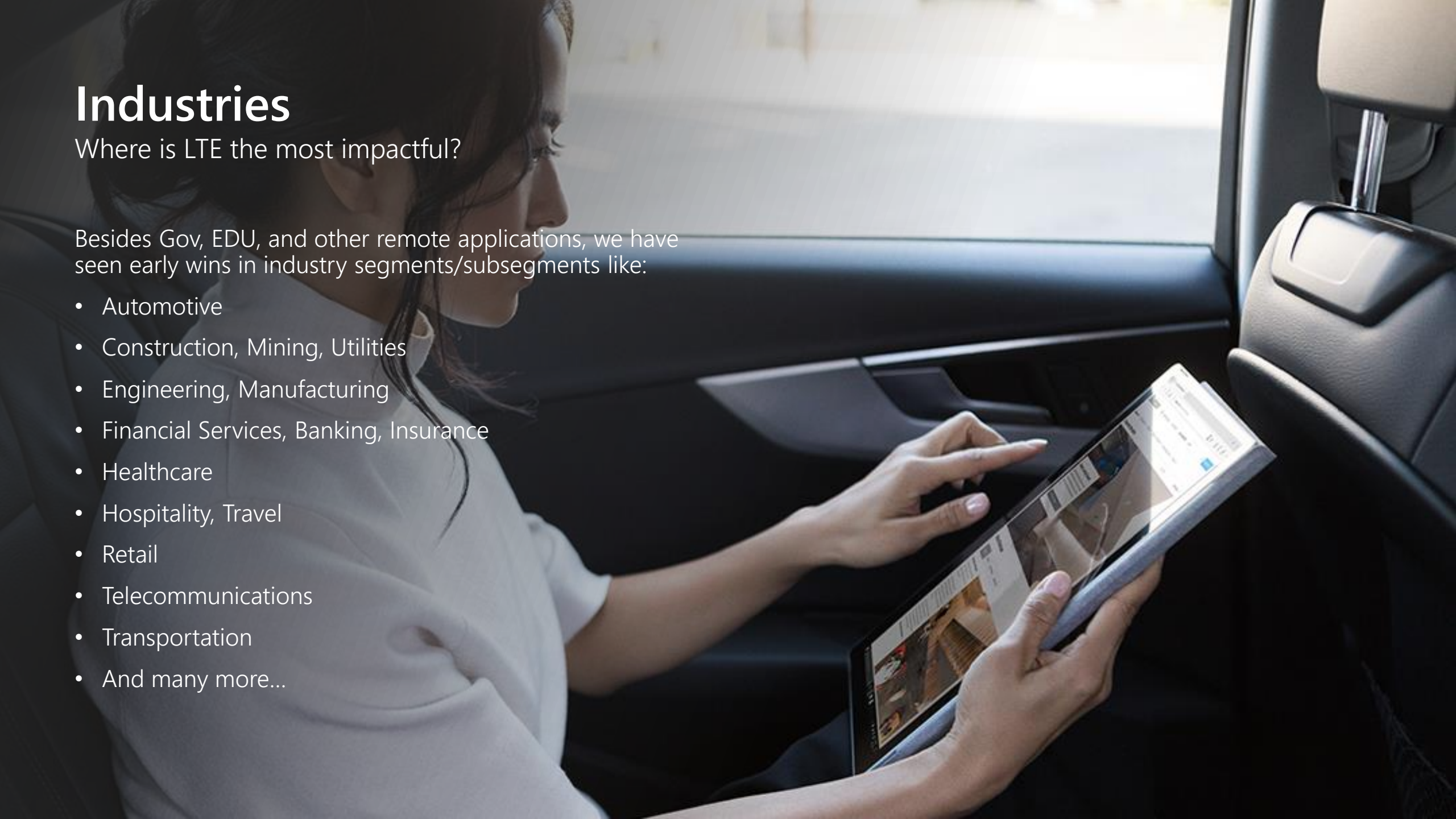
Surface Pro (5th Gen) with LTE Advanced for Business technical specifications

Dimensions/Weight (not including Type Cover*)	11.50" x 7.9" x 0.33" (292mm x 201mm x 8.50mm) With LTE Advanced: 1.79 lbs. (812g)
Display	Screen: 12.3" PixelSense™ Display Resolution: 2736 x 1824 (267 PPI) Aspect Ratio: 3:2 10 point multi-touch Corning® Gorilla® Glass 4
Memory	4GB/8GB RAM 1866Mhz LPDDR3
Processor	7th Generation Intel® Core™ i5-7300U
Security	TPM 2.0 chip for enterprise security Enterprise-grade protection with Windows Hello face sign-in
Software	Windows 10 Pro Microsoft Office 365 30-day trial
Sensors	Ambient light sensor Accelerometer Gyroscope
Wireless	Wi-Fi: IEEE 802.11 a/b/g/n/ac compatible Bluetooth Wireless 4.1 technology
External display support	Up to two 4K UHD (@30Hz) or single 4K UHD (@60Hz)

Connections and expansions	Full-size USB 3.1 Gen 1 MicroSDXC card reader Surface Connect™ 3.5mm Headphone jack Mini DisplayPort Surface Pro Type Cover port
Cameras, video, and audio	Windows Hello face authentication camera (front-facing) 5.0MP front-facing camera with 1080p Skype HD video 8.0MP rear-facing autofocus camera with 1080p Full HD video Dual microphones 1.6W Stereo speakers with Dolby® Audio™ Premium
Warranty	1-year limited hardware warranty
Graphics	Intel® HD Graphics 620
Network (LTE Advanced models)[1]	4G LTE Cat 9 modem up to 450Mbps GPS / GLONASS: Standalone and Assisted GNSS, accuracy up to 3 meters Nano SIM Tray and Embedded SIM (eSIM) LTE Advanced (Bands 1, 2, 3, 4, 5, 7, 8, 12, 13, 17, 19, 20, 26, 28, 29, 30, 38, 39, 40, 41)
In the box	Surface Pro (5th Gen) with LTE Advanced Power Supply Quick Start Guide Safety and Warranty documents
Battery life	With LTE Advanced: Up to 12.5 hours of video playback[2]
Storage	BGA PCIe NVMe Solid State Drive (SSD) options: 128/256GB[3]

Surface Go with LTE Advanced for Business technical specifications

Display	10" PixelSense™ Display, 1800 x 1200 (217 PPI) 10-point multi-touch, Aspect ratio 3:2 Corning® Gorilla® Glass 3 Contrast ratio: 1500:1
Dimensions	9.65" x 6.9" x 0.33" (245mm x 175mm x 8.3mm)
Weight	Wi-Fi: 1.15 lbs. (522g) LTE Advanced: 1.17lbs. (532g) Note: Weight not including Type Cover (sold separately)
Processor	Intel® Pentium® Gold Processor 4415Y
Memory (RAM)/Storage Combinations[1]	4GB RAM, 64GB embedded MultiMediaCard (eMMC) drive • Available in Wi-Fi only 8GB RAM, 128GB solid state drive (SSD) • Available in Wi-Fi and LTE 8GB RAM, 256GB solid state drive (SSD) • Available in LTE only
Graphics	Intel® HD Graphics 615
Battery	Up to 9 hours of battery life local video playback[2] With LTE Advanced: up to 8.5 hours of battery life for local video playback[3]
Security	TPM 2.0 for enterprise security Enterprise-grade protection with Windows Hello face sign-in
Software	Commercial/EDU customers: Ships with Windows 10 Pro configurable to S Mode[4] 1-month trial for new Microsoft Office 365 customers

Wireless	Wi-Fi: IEEE 802.11 a/b/g/n/ac compatible Bluetooth Wireless 4.1 technology
Network (LTE Advanced models)[5]	Nano SIM Tray 4G LTE Advanced (Bands 1, 2, 3, 4, 5, 7, 8, 12, 13, 17, 19, 20, 25, 26, 28, 29, 30, 38, 39, 40, 41, 66) GPS / GLONASS: Standalone and assisted GNSS, accuracy up to 3 meters
Sensors	Ambient light sensor Accelerometer Gyroscope Magnetometer
Connections and expansions	1 x USB-CTM 1 x Surface Connect port 3.5 mm headphone jack 1 x microSDXC card reader Surface Type Cover port
Cameras, video, and audio	Windows Hello face authentication camera (front-facing) 5.0MP front-facing camera with 1080p Skype HD video 8.0MP rear-facing autofocus camera with 1080p HD video Single microphone 2W stereo speakers with Dolby® Audio™ Premium
Exterior	Casing: Magnesium Color: Silver Physical buttons: Volume, Power
What's in the box	Surface Go for Business (Wi-Fi or with LTE Advanced) 24W Power Supply Quick Start Guide Safety and Warranty documents
Warranty	1-year limited hardware warranty

How do Mobile Operators go to market?

There are two ways Mobile Operators sell data plans to the enterprise. Each has its own implications to the sales flow

Plan Type	Customer	Mobile Operator	Microsoft
Corporate Liable	• Device standardization decreases support and management burden • Increased control and negotiated lower data plan rates	• Prefer corporate liable plans due lower risk and management overhead • Operator sellers will push plans with highest compensation and lowest price • Devices 'subsidized' with bounties paid for by data plan. Surface does not participate	• We are competing against subsidized devices with an artificially low device cost • Winner take all model in the face of subsidy disadvantage • Carrier team motivated to sell against us
Individual Liable (BYOD)	• Device selection made by employee and plan expensed • Often selections are limited to approved catalog items • Offers employee flexibility and satisfaction • Rates generally higher but controlled through expense caps	• Rate plans vary by customer • Lesser ability to influence device selection (unless customer large enough for special rate and device plans)	• Lower opportunity to influence device selection at the employee level at operator retail location so need to focus on company sourced devices • Success depends on consumer and not commercial org • No sales credit for Microsoft Surface Commercial team

There are two paths to market. Open channels or a direct stocking item. Open channels is how we operate today. Direct will require significant investment by both sides

	Open / Channels (Today) Device sold through ADD, sometimes a reseller, subject to standard MS channel terms and incentives	**Direct through Operator** Device sold directly into operator owned inventory with custom terms then sold directly to end customer
Pros	• Does not require creation and management of special terms • Usually able to get end user reporting via ADD sales records to pay MSFT Sales • Requires less incremental investment from Microsoft for certifications, marketing, sales engagement • Channel able to sell mobile data plan and activate so Surface adds value to existing managed partners mobility businesses	• Front and center product placement in systems, tools and marketing campaigns for operator's large sales teams to drive • Full operator sales team compensation and therefore proactive sales focus • Participation in bounty/subsidy model enabling lower device prices subsidized by future plan revenues • True SSP field partnership with operator sales team unlocked to drive most competitive deal • > 80% of activation volume done through operator direct
Cons	• Operator sales teams rarely compensated on Surface sold through channel reducing mind-share • More difficult to participate in bounty/subsidy model putting us at a price disadvantage against OEM competition • SSP's lose deal control by having little influence over rate plans and bounties • Channel sell all manufacturers and it's possible for them to replace Surface with a more lucrative OEM • **<20% of activations conducted by resellers of operator data plans**	• Overhead to create and manage special terms, line of credit, supply chain relationship, partner management • Most operators unwilling and unable to provide end user sales reporting preventing sales compensation • Operators unable to manage deal by deal pricing so a special pricing model is required • Incremental investment into additional certifications (up to $2M per carrier) and marketing/sales • Cuts our valued ADDs and (in some cases) DMPs out of LTE business