Meet Surface Studio

Microsoft Surface

Consumer Product Marketing

Using Meet Surface Studio

- This deck is the single source of product truth for those who want to tell the Surface Studio story in a compelling and consistent way

- It is partner ready – can be used both internally and externally

- The copy should not be used as consumer facing messaging for marketing or advertising execution

- Please visit Brand Central for approved copy and marketing guidelines

- FY18 Q3 Updates:
  - Formatting for marketing copy
  - Surface Studio and Surface Dial availability
  - Surface Studio 4 Reasons
  - Surface Studio demos
  - Completing the experience: Surface Ergonomic Keyboard and Surface Precision Mouse replace Surface Keyboard and Mouse
  - Surface Studio accolades removed

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Surface Studio
Turn your desk into a Studio

Microsoft Surface

A brilliant screen for your ideas.

Effortlessly transforms
from desktop to studio.

Professional-grade
power & performance.

Meticulously crafted.

Microsoft Surface

The ultimate creative studio

Microsoft Surface Studio

Surface Studio takes all of that one step further. It seems familiar but feels different. It brings your most valuable assets to life, your ideas, from concept to creation.

We built Surface Studio for creators, we built it for professionals. It is meant to transform the way you get work done by pulling you into the content, while the hardware disappears.

Surface Studio

Overview

Surface Studio is a whole new class of device, one designed for the creative process – for ideation. Surface Studio is strikingly large and incredibly thin with a 28" PixelSense™ Display. Move the screen weightlessly from an upright Desktop Mode down into Studio Mode to angle it like a drafting table for pen and touch. Immerse yourself in 4.5K resolution and 10-bit color depth; visualize ideas as you paint, edit, and design. The stunning screen is also perfect for collaborating with teammates, or pitching your creative work.

Turn your desk into a Studio

- A huge canvas; upright or like a drafting table
- Strikingly large and incredibly thin display
- Professional-grade power & performance
- Meticulously crafted with a minimal and modern design

Features

- 28" adjustable PixelSense™ Display
- Screen that adjusts weightlessly for every step of your creative process
- 13.5 million pixels of pure, true-to-life color and clarity
- 6th Gen Intel® Core™ processors and an NVIDIA® GeForce® dGPU
- Surface Pen and Surface Dial* to reinvent the way you create

Surface Dial sold separately.

Surface Studio: 4 Reasons
Turn your desk into a Studio

Most Versatile	High performance	Innovative design	Best of Microsoft
Unprecedented versatility with a screen that adjusts weightlessly to every step of your creative process. Touch it. Draw on it with Surface Pen. Visualize and develop your ideas with a natural iterative process – like you would on a sheet of paper. Reinvent the way you create with a unique set of tools like Surface Dial- use it to change color wheels, opacity, and brush size, without breaking your flow. Work together in Studio Mode as you develop your ideas as a team or work in traditional Desktop Mode.	Workstation level power with 6th Generation Intel® Core™ processors accelerated by a discrete NVIDIA® GeForce® GPU. 28" PixelSense™ Display - 13.5 million pixels of pure, true-to-life color and clarity, bringing your drawings and images to life. Runs professional-grade software like SolidWorks, Adobe Premiere Pro, and Autodesk with tools unique to Surface, like Surface Pen and Surface Dial. Make video calls feel like face-to-face meetings with a 1080p front facing camera, and Stereo 2.1 Speakers with Dolby® Audio™ Premium.	The minimal and modern design sits perfectly on your well thought out desk, with clean lines and a small footprint. A counterbalanced hinge that moves the display weightlessly from an upright angle, down into Studio Mode with one hand. Strikingly large and incredibly thin, get pulled in by the magnificence and size of the display from across the room, or get lost in the depth of detail at 10 inches away. Made to be your personal creative space for uninterrupted focus, from the first draft to final production.	Reinvent the way you create with a unique tools like Surface Pen, Surface Dial, and the latest innovations from Windows and Office. Enterprise-grade face sign-in with Windows Hello logs you in quickly and more securely. Play your favorite games with a paired Xbox Wireless controller and lose yourself in the immersive combination of stunning graphics processing and the magnificent screen.

Who we market to:

Creators

Graphic Designers

Digital Illustrators

Video and Film Editors

Photographers

Executives

CEOs

CMOs

CXOs

STEM

Architects

Engineers

Contractors

Why they love Surface Studio

- A 28" PixelSense™ Display that is the most natural and immersive screen in the world for viewing, touch, and pen, providing new ways to create

- Innovative Zero Gravity Hinge to work upright in Desktop Mode or down in Studio Mode like a drafting table, moving effortlessly with one hand

- Intel® Core™ processors and an NVIDIA® GeForce® dGPU paired with Surface Pen and Surface Dial that bring the most intensive software to life

- A device created around the designed workspace that is minimal and modern to sit perfectly on a desk, with clean lines and a small footprint

Surface Studio: 30 second pitch
Turn your desk into a Studio

Pitch

Surface Studio is a revolutionary experience that consists of a huge canvas for you to work on. Like a piece of paper, you can draw on it, with incredible precision and sensitivity to help you do your best thinking. But like a powerful computer, it can run all your professional grade software, including the most demanding creative applications so you can turn those ideas into something tangible. Most of all, it's beautiful. Surface Studio has a 28" PixelSense™ Display that provides astounding clarity and color accuracy thanks to its 13.5 million pixels and 10 bit color dept. It is only 12.5 mm thin with a crisp sleek design. Its Zero Gravity Hinge will transform your desk into an inviting personal space to be creative and productive. Your very own studio.

Product Value Prop	Studio Mode, stunning display, versatility, performance, meticulously crafted
Target Audience	Creators, executives and STEM

Surface Studio scenarios and apps

Target	Display (PixelSense™ and resolution)	Versatility (Touch, Pen and Dial)	Performance (Multitasking and dGPU)	Design (Thin display and clean AIO)
Primary: Creators	• Enhance photography with Adobe Photoshop Lightroom CC • Design amazing images with Adobe Photoshop CC • Create beautiful vector art with Adobe Illustrator CC • View and explore 3D content with Mental Canvas Player • Tour the world using aerial view with Windows Maps	• Paint a masterpiece using Color Picker with Sketchable • Write revolutionary music using Compose mode with StaffPad • Draw effortlessly using pen thickness and on-screen ruler with Sketchpad • Use 'Ink Replay' that rivals pen and paper with OneNote in Studio Mode • Draw and paint naturally on a massive canvas with Autodesk SketchBook	• Make visually stunning videos with Adobe Premiere Pro CC • Control music playing passively in the background with Spotify • Race customized cars on distinctive courses with Forza Horizon 3 • Fast boot-up time with 2TB of storage including SSD and spinning disk • Collaborate and share work in Studio Mode with Surface Pen and Dial	• Highlight its thin profile and grip release cord for easy movability • Move display from upright, down to Studio Mode with one hand • Showoff Surface Pen with precision ink, eraser and palm rejection • Bring up tools menu with Surface Dial on-screen in Studio Mode • Emphasize its no-belly display and ultra-thin screen at just 12.5 mm
Secondary: Executives, STEM	• Collect and organize data into rich visuals with Power BI • Visually organize thoughts in one place with Mural	• Edit, markup, and collaborate on PDFs with Bluebeam Revu • Write on and turn true to scale pages with Microsoft Word	• Create 2D drawings and intuitive 3D design with SolidWorks • Use and switch between email, web, spreadsheets and video with Office	• A statement piece on an executive's desk with accessories • Connect seamlessly to other devices with multiple ports

Surface Studio availability

Distribution*

Country	Announce	GA	Pre-order
US	10/26/16	3/31/17	Yes
Canada	3/29/17	4/20/17	Yes
Australia, New Zealand	3/29/17	4/27/17	Yes
Austria, China, Denmark, Finland, France, Germany, Hong Kong, Japan, Netherlands, Norway, Sweden, Switzerland, United Kingdom	5/23/17 5/26/17 (Japan)	6/15/17	Yes
Taiwan, Singapore		3/15/18	Yes

*Consumer channel only

SKUs

Memory	Processor	Storage	Graphics	Price (USD)	Model
8GB	6th Generation Intel® Core™ i5	64GB/1TB	NVIDIA® GeForce® GTX 965M 2GB	$2,999	42L-00001
16GB	6th Generation Intel® Core™ i7	128GB/1TB	NVIDIA® GeForce® GTX 965M 2GB	$3,499	42Q-00001
32GB	6th Generation Intel® Core™ i7	128GB/2TB	NVIDIA® GeForce® GTX 980M 4GB	$4,199	43Q-00001

Surface Studio tech specs

Surface Studio

Dimensions/Weight	Display: 25.1" x 17.3" x 0.5" (637.35 mm x 438.90 mm x 12.50 mm) Base: 9.8" x 8.7" x 1.3" (250.00 mm x 220.00 mm x 32.20 mm) Weight: 21 lbs. max (9.56 kg max)	Storage	Rapid Hybrid Drive options: 64GB SSD with 1TB HDD, 128GB SSD with 1TB HDD, 128GB SSD with 2TB HDD
Display	Screen: 28" PixelSense™ Display Resolution: 4500 x 3000 (192 PPI) Color settings: sRGB, DCI-P3 and Vivid Individually color calibrated display Touch: 10 point multi-touch Aspect Ratio: 3:2 Supports Pen and Zero Gravity Hinge	Graphics	i5 Intel 8GB: NVIDIA® GeForce® GTX 965M 2GB GDDR5 memory i7 Intel 16GB: NVIDIA® GeForce® GTX 965M 2GB GDDR5 memory i7 Intel 32GB: NVIDIA® GeForce® GTX 980M 4GB GDDR5 memory
Memory	8GB RAM 16GB RAM 32GB RAM	Connections and expansions	4 x USB 3.0 (one high power port) Full-size SD™ card reader (SDXC) compatible Mini DisplayPort 3.5 mm headphone jack Compatible with Surface Dial on-screen interaction* 1 Gigabit Ethernet port
Processor	6th Generation Intel® Core™ i5 6th Generation Intel® Core™ i7	Cameras, video and audio	Windows Hello* face sign-in camera 5.0 MP camera with 1080p HD video (front) Dual microphones Stereo 2.1 speakers with Dolby® Audio™ Premium 3.5 mm headphone jack
Security	TPM chip for enterprise security Enterprise-grade protection with Windows Hello* face sign-in	Wireless	Wi-Fi: 802.11ac Wi-Fi wireless networking, IEEE 802.11 a/b/g/n compatible
Software	Windows 10 Pro Office 30-day trial	Buttons/Keyboard	Volume key and power key Surface Pen Surface Keyboard Surface Mouse
In the box	Surface Studio Surface Pen Surface Keyboard Surface Mouse Power cord with grip-release cable Quick start guide Safety and warranty guide	Warranty	1-year limited hardware warranty

Surface Studio feature names and descriptions

Feature Name	Feature Description
Desktop Mode	Use Surface Studio upright at a 90-degree angle in Desktop Mode; *great for developers, executives, and viewing photos or videos*
Studio Mode	Use Surface Studio like a digital drafting table at a 20-degree angle in Studio Mode; *great for teams, Surface Pen, and standing/moving with your drawings*
PixelSense™ Display	PixelSense™: designed to be the most natural and immersive display in the world for viewing, touch, and pen, providing you with exciting new ways to create
Zero Gravity Hinge	Surface Studio is designed with a Zero Gravity Hinge that moves the display weightlessly from an upright angle, down into Studio Mode with one hand
Rapid Hybrid Drive	With Rapid Hybrid Drive, Surface Studio launches and runs applications at a high speed to get more done
Color settings: Standard, Cinema and Enhanced Mode	**Standard Mode:** See color-accurate on-screen images in the SRGB color space for professional photos, videos and imaging **Cinema Mode:** Experience color-accurate images in the DCI-P3 color space for creative professionals working on digital cinema content **Enhanced Mode:** Get a superior color experience while viewing standard media content
True Scale	Display two full-size 8.5 x 11 documents side-by-side in Microsoft Word with a 4500 x 3000 resolution screen designed to replicate actual font and document sizes
Windows Hello face sign-in camera	Log into Surface Studio in less than 2 seconds, 3x faster than a password with facial recognition
Xbox Wireless built-in	Play your favorite games on Surface Studio with up to eight paired Xbox Wireless controllers; no USB or special receivers required
NVIDIA® GeForce® GTX 965M 2GB GDDR5 NVIDIA® GeForce® GTX 980M 4GB GDDR5	GeForce® GTX 965M brings sturdy performance to Surface Studio, driving impressive and blazing-fast gameplay at ultra-settings on 1080p resolutions GeForce® GTX 980M takes advantage of next-generation NVIDIA Maxwell™ architecture to deliver unrivaled performance, advanced graphics technologies and improved battery life to take on the most visually challenging and elite games and applications
Quad-core 6th Gen Intel® Core™ i5 Quad-core 6th Gen Intel® Core™ i7	Choose an Intel® Core™ i5 processor with Intel® HD Graphics for strong processing performance. The Intel® Core™ i7 option includes Intel® Iris graphics, making photo, video, and 3D applications run faster; it also has the ability to play more PC games
High power port (1 of 4 USB 3.0 ports)	Charge phones and other devices like external hard drives with the 1.5 amp High power USB port
Grip Release Cable	AC plug custom locking design helps to avoid power loss when adjusting the display between Desktop and Studio Mode
Surface Dial on-screen interaction	Surface Studio recognizes the precise digital signature of Surface Dial with pinpoint accuracy to enhance the creative process to be more productive and enjoyable

Surface Studio competitive landscape

Advantages vs. iMac 27" with Retina

Faster than iMac
Graphics performance 3DMark

More versatile than iMac
From Desktop Mode to Studio Mode

Surface Pen and Surface Dial
Natural, immersive tools for the creative process

10 point multi-touch
Display that reacts to the lightest touch

Advantages vs. Cintiq 27QHD Pen & Touch

PixelSense™ Display
13.5M pixels of true-to-life color vs. 3.7M pixels

No additional HW needed
Comes with powerful processor and GPU

Transformative design
Machine disappears, to bring your ideas to life

Stunning looks
Minimal and modern with clean lines, small footprint

Surface Studio approved claims

	Claim	Disclaimer	Comments
1	The most creative device on the planet	*No disclaimer needed*	Potential challenges to use this claim in UK and Australia Review with LCA before using in these markets
2	The most beautiful PC ever made	*No disclaimer needed*	Potential challenges to use this claim in UK and Australia Review with LCA before using in these markets
3	The first desktop computer with pen and touch	*Includes devices running an OS and supporting true pressure sensitive pen*	
4	Highest color accuracy in its class	*Better color accuracy compared to 340 devices using public data*	
5	Thinnest LCD monitor ever built The world's thinnest desktop touch screen ever built	*Average cross section thickness across entire display*	
6	An inking experiencing that feels as natural and fluid as pen on paper	*No disclaimer needed*	

Surface Dial
A new tool for the creative process
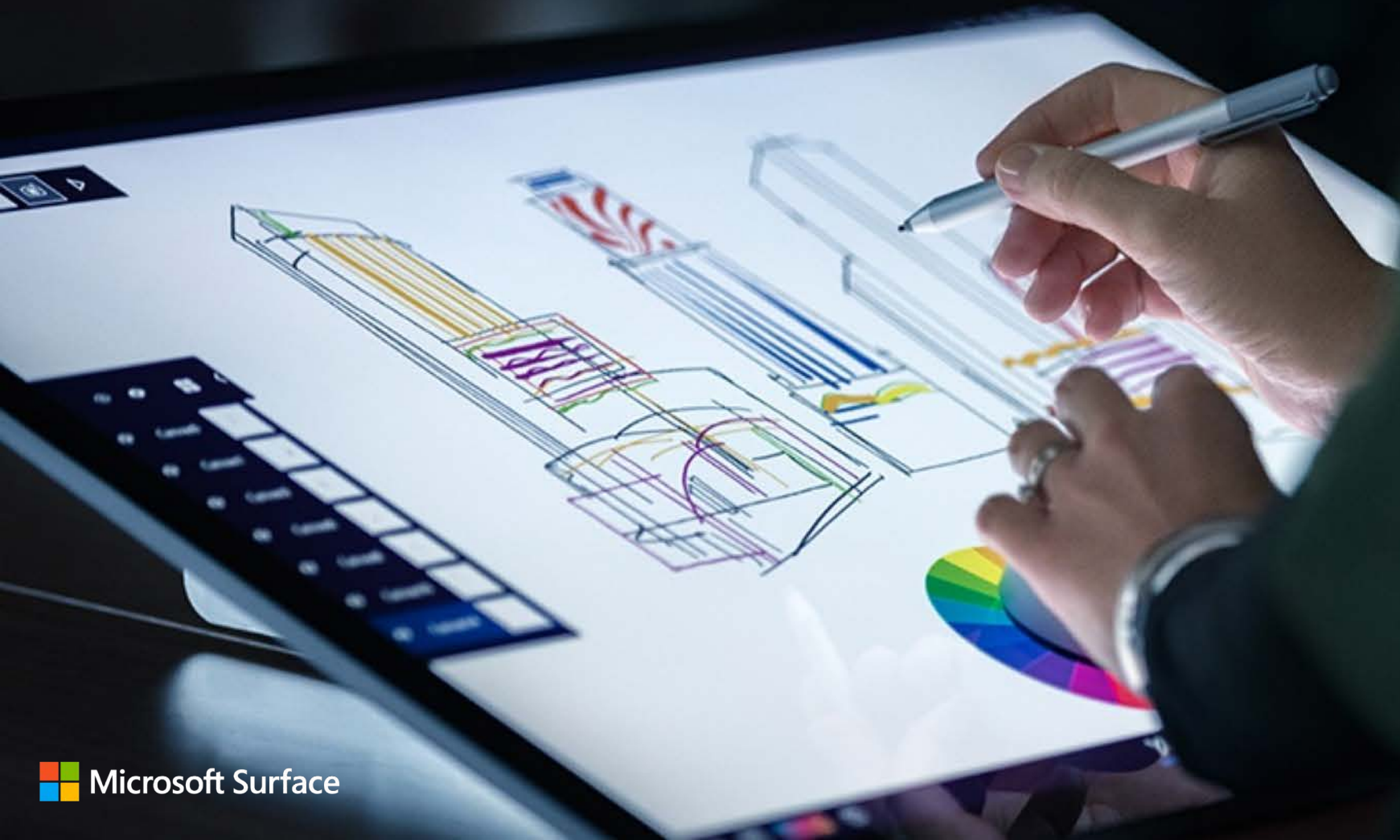
Technology has given us the tools to create digitally, but our workflow is time-consuming and unnatural

You can spend hours learning keyboard shortcuts that execute actions behind the scenes

...or take your eyes away from the screen to find the tools you need

Surface Dial

Overview

Surface Dial is a completely new way to interact with technology and create in the most natural, immersive way. Store, customize, access, navigate, and reimagine physical tools in the digital world – from concept to creation. We draw, scribble, and sketch to organize our thoughts and communicate with others. With Surface Dial in one hand and Surface Pen in the other, you can unlock your creativity with easy access to shortcuts, controls, drawing tools, and more.

Do the things you love

Click and hold Surface Dial to display a radial menu of tools, making it easier and faster to do the things you love. Imagine being able to undo each individual line of a drawing step-by-step, change pencil color or brush size, scrub through video content, rotate 3D vectors or manipulate parameters, in a single turn.

Features

- Intuitive design with three simple features; press/hold, rotate and click
- Haptic feedback provides tactile feedback in software adjustable increments
- Compatible with all Windows 10 devices running Anniversary update or later
- Bluetooth enabled up to 2 meters
- Captive on-screen detection (Surface Studio only)
- Durable aluminum body construction
- Customizable default tools in Windows settings

Surface Dial: 4 Reasons
A new tool for the creative process

Innovative Hardware	Intuitive Design	Built-In Tools	Custom App Experiences
Surface Dial is a completely new input device that brings your most-used tools directly to the screen.	Surface Dial has an intuitive design that requires only three simple gestures: press & hold, click, and rotate.	Surface Dial comes pre-loaded with global controls that work across apps. These include: media controls (volume, mute/unmute, pause/play, next/previous), scroll, zoom, undo\redo, screen brightness, and Narrator.	Users may take advantage of a growing list of apps that offer custom experiences for Surface Dial users. These experiences, created by individual software companies, offer additional value that app users would not otherwise have.
Surface Dial is meticulously crafted to look and feel premium. Its aluminum case is durable, yet elegant. The Dial pairs perfectly with your Surface device.	Simply press & hold to see a radial menu, rotate to a desired tool, and click to select that tool. Rotate to see the tool come to life. (e.g., zoom in/zoom out).	For instance, users can adjust the volume or change tracks on Spotify above the lock screen, quickly undo/redo their designs in PowerPoint, and scroll through articles online. All of these features come pre-loaded with every Surface Dial.	Example apps include: Mental Canvas Player, Bluebeam Revu, MohoTM 12, Sketchable, Spotify, StaffPad, and Windows Maps.
Surface Dial combines hardware and software to create completely new user experiences. It is designed to transform the way you work and create.	When creating, use Surface Dial in the non-dominant hand while reserving your dominant hand for drawing, creating new vectors, making edits to animations, and so forth. Surface Dial provides the tools and shortcuts, such as color picker, undo/redo, and brush size, to make the creative process more enjoyable and productive.	Additionally, users can add custom shortcuts to Surface Dial. Simply add a custom tool in Settings>Devices>Wheel.	A small subset of app features is exclusive for use on-screen with your device. As of 2/7/2017, Surface Studio is the only device that supports on-screen use with Surface Dial.
The device incorporates haptics, which give you feedback while you work. Over time, the haptic feedback builds muscle memory to help you form new habits and optimize your workflow.			

Surface Dial: 30 second pitch
A new tool for the creative process

Pitch

Surface Dial is a revolutionary new tool that was designed to transform the way you create and interact with technology. It optimizes your digital workflow by bringing your most-used tools directly onto your digital workspace, be it canvas, blueprint, or presentation. Simply press and hold to access your tools, making it easier to do the things you love in applications like Mental Canvas Player, Bluebeam Revu, Moho™ 12, Sketchable, StaffPad, and more. Over time, haptic feedback from Dial helps you form new habits to further optimize your workflow. This immersive creating experience is enhanced when Surface Dial is used on-screen with Surface Studio.

Surface Dial brings your most-used tools directly to your screen. This helps you focus on your work instead of spending time mastering keyboard shortcuts, glancing down at a separate screen for digital illustration, or, in the physical world, moving back-and-forth from canvas to palette. When creating, use Surface Dial in your non-dominant hand while reserving your dominant hand for drawing, creating new vectors, making edits to animations, and so forth. Surface Dial provides the tools and shortcuts, such as color picker, undo/redo, and brush size, to make the creative process more enjoyable and productive.

Product Value Prop	Immersive experience, seamless transitions, on-screen with Surface Studio
Target Audience	Creators

Surface Dial scenarios and apps

Adobe - Photoshop	Use Surface Dial to manipulate the opacity, size, flow, hardness, and smoothing of your brushes, so you can stay focused on your canvas and in your workflow.
Algoriddm - DJayPro	Be your best DJ, with the ability to scroll through your music catalog or Spotify and select a song, adjust volume, scratch, and scrub with Surface Dial.
Bluebeam, Inc. - Bluebeam Revu	Place Surface Dial on screen and use its location to split screen and zoom to magnify a portion of your PDF for enhanced detail and navigation. Or, press and hold for access to panels and tool chests to select annotations and review your markups list.
Drawboard - Drawboard PDF	Use Surface Dial to draw perfectly ruled lines at perfect angles, use a calibrated protractor to accurately complete line and area measurements, or freely rotate a single page to suit your writing position.
Mental Canvas - Mental Canvas Player	Rotate Surface Dial to move through an immersive 3D drawing along the artist's bookmarked views, click to play the animation, and click again to pause when you want to further explore the scene.
Microsoft Corporation - Windows Maps	Zoom in. Zoom out. Rotate your map for a different perspective. Simply click to spin the map automatically, or rotate Surface Dial to tilt in 3D with precision.
Microsoft Research - Plumbago	Quickly choose an active color palette and take advantage of the drawing tool's active color selection. Surface Dial also lets you pan the drawing canvas or change the pen's active behavior without touching the screen.
Silicon Benders LLC - Sketchable	Surface Dial gives you quick and intuitive access to the brush settings you use most. Make fast and fluid color adjustments, and rotate or scale your canvas to achieve a finer level of control.
Smith Micro Software, Inc. - Moho™	Rotate Surface Dial to move back and forth in the timeline, click to play/stop or add new frames, rotate and zoom your canvas, adjust stroke width for drawing operations, and control Smart Bones™.
Spotify AB - Spotify	Use Surface Dial and Spotify together to control music playing in the background, while using an active app in the foreground — all without interrupting your workflow. Also, lets you adjust volume and change tracks.
StaffPad Ltd - StaffPad	Compose with a mode created just for Surface Dial. Click to play/stop, or rotate left and right to rewind/fast-forward your score. Use Surface Dial as a music stamp or place on screen for quick access to symbols.

Surface Dial scenarios and apps

Adobe – Premiere Pro CC	Playback. Speed Up. Pause. Use Surface Dial for accelerated shuttling through clips and sequences with precision frame selection and immediate stop and start of playback. Rotate Surface Dial forward and backward to incrementally increase or decrease playback speed- up to 32x.
Algoriddim – Djay Pro	Take advantage of the huge screen on Surface Studio with unique location-aware Surface Dial integration. Place it on-screen to browse and select music. Place it on a turn table to scratch, scrub, loop your own soundtrack. Then use the haptic feedback in the Surface Dial to precisely adjust knobs and filters on-screen for each individual deck.
Autodesk – SketchBook	Work with more choice and control. Use Surface Dial to control the three most important aspects of Sketchbook: canvas, brush, and color. Surface Dial helps you easily rotate and resize the canvas, puts fine-tuning of brush size and opacity at your fingertips, and gives you a quick and easy way to control hue, saturation, and luminance in your color palette.
Corel – CorelDRAW	Do more with Surface Dial by bringing your most-used CorelDRAW tools straight to your fingertips. Simply drag and drop your favorite tools into the customizable on-screen Surface Dial menu, then rotate Surface Dial to adjust the settings inside your tools naturally.

Surface Dial availability

Distribution*

Country	Announce	GA	Pre-order
United States	10/26/16	10/26/16	Yes
Canada	3/29/17	4/20/17	Yes
Australia, New Zealand	3/29/17	4/27/17	Yes
Austria, China, Denmark, Finland, France, Germany, Hong Kong, Japan, Netherlands, Norway, Sweden, Switzerland, United Kingdom	5/23/17 5/26/17 (Japan)	6/15/17	Yes
Taiwan, Saudi Arabia		3/15/18	Yes

*Consumer channel only

SKUs

Compatibility	Connector	Color	Price (USD)	Model
Devices with Windows 10 Anniversary update and later	Bluetooth 4.0 LE	Magnesium	$99	2WR-00001

Surface Dial tech specs

Surface Dial

Compatibility	Devices with Windows 10 Anniversary update and later	Weight	5.11 oz. (145 g) with 2 batteries
Connector type	Bluetooth 4.0 LE Touchscreen detectable (select Surface devices)	Battery	2 AAA Alkaline batteries (included)
Color	Magnesium	In the box	Surface Dial Batteries Quick start guide Safety and warranty guide
Dimensions	Accessory diameter: 2.32" (59 mm) Accessory height: 1.18 (30 mm) Base diameter: 2.13" (54 mm) Base height: 0.16" (4 mm)	Warranty	1-year limited warranty

Surface Dial feature names and descriptions

Feature Name	Feature Description
On-screen detection	Touch digitizer reports the onscreen location of Surface Dial through a capacitive pattern on Surface Studio
Off-screen interaction	Stay focused on what matters most and experience everyday tasks in new and exciting ways with Surface Dial on your desk
Haptic Feedback	Helpful vibrations through the aluminum body into your fingertips, to help you stay in the moment and feel totally in touch with your work
Radial input	Manipulate images, volume and much more with fine-grained precision
Aluminum casing	Get durable and tactile proficiency with an aluminum body construction
Stiction	Experience precise, "sticky" use and slide-ability for motion on-screen with Stiction on Surface Studio
Wheel settings	Choose default tools such as: volume, scroll, zoom, undo, brightness and custom keyboard shortcuts
Press and hold, Rotate, Click	Press and hold Surface Dial to display a radial menu of tools, making it easier and faster to do the things you love your way Rotate Surface Dial freely/continuously in both directions and highlight a tool or use various app dependent features Click Surface Dial to activate a momentary switch and select a tool or use various app dependent features
User customization	Users can customize some aspects of their Surface Dial experience through the Windows Settings > Devices > Wheel page
Windows Ink platform controls	When the Surface Dial menu in an inking application that uses the ink toolbar, the menu now includes tools for controlling pen type and brush thickness When the ruler is enabled, a corresponding tool is added to the menu that lets the device control the position and angle of the ruler
On-screen menu	By detecting both the contact location and bounds of Surface Dial, the system displays a larger version of the menu that wraps around the outside of Surface Dial (Select surface devices)

Surface Dial approved claims

	Claim	Disclaimer	Comments
1	Surface Dial is a new tool for the creative process	*No disclaimer needed*	Remove the word "new" after 6 months in market
2	Simple and intuitive design	*No disclaimer needed*	
3	Dynamic tools that assist with flow	*No disclaimer needed*	
4	The most natural way to create, when combined with Pen and touch	*No disclaimer needed*	
5	Surface Dial enables dynamic tools that change out when you switch across integrated apps	*No disclaimer needed*	
6	Best creative tool for use on-screen with Surface Studio	*No disclaimer needed*	Include Surface Studio otherwise LCA will need to review

Surface Dial developer resources

Introducing Surface Dial
New input modes mean new experiences for your users.

Surface Dial Idea Book
Interested? Email Avi Negrin (anegrin)
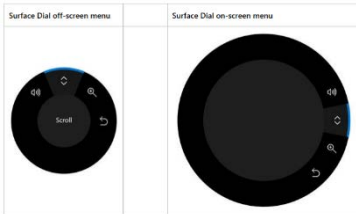
Surface Dial Interactions
Windows Wheel devices, like Surface Dial, are a new category of input that enable compelling and unique user interaction experiences for Windows and Windows apps.

RadialController Sample for UWP
This sample shows how to use the RadialController class for UWP to create custom menu items for a Surface Dial device, control the haptic feedback and configure the default system items.
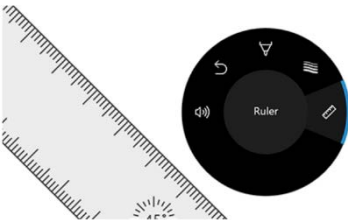
RadialController APIs
Click through here for documentation for the RadialController class.

RadialController Sample for Win32
This sample shows how to use the RadialController class for Win32 to create custom menu items for a Surface Dial device, control the haptic feedback and configure the default system items.
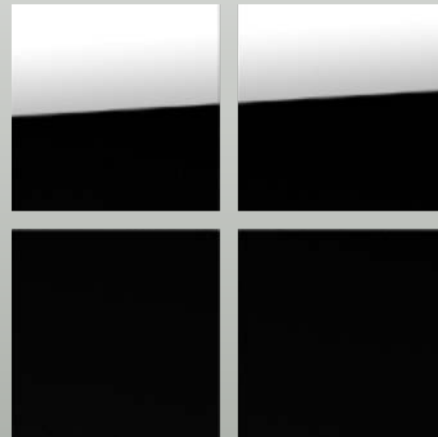
Appendix

Years of practice.

In our 34 years of creating PC accessories, we've brought many features and functions to the mainstream, from basic point and click to the scroll wheel.

A key area we've consistently led in is ergonomic design. Each ergonomic product we produce incorporates years of knowledge, and adds additional refinements based on new best practices.

Features & Refinements

Superior ergonomic design.
Carefully designed keytop geometry, split space bar, and naturally domed shape.

Double-cushioned Alcantara® palm rest.
Adds a touch of luxury while protecting your wrists.

Re-engineered experience.
Superior key travel, precision and stiffness for a more accurate and satisfying typing, plus long battery life.
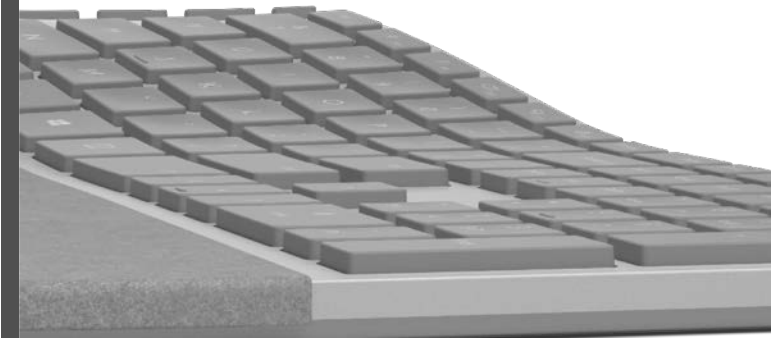
Where form and function come together

Experience productivity with advanced comfort. The unique palm rest and subtle changes to the keytop geometry, split space bar, and naturally arched shape help protect you from hand and wrist strain, while improving your typing form.
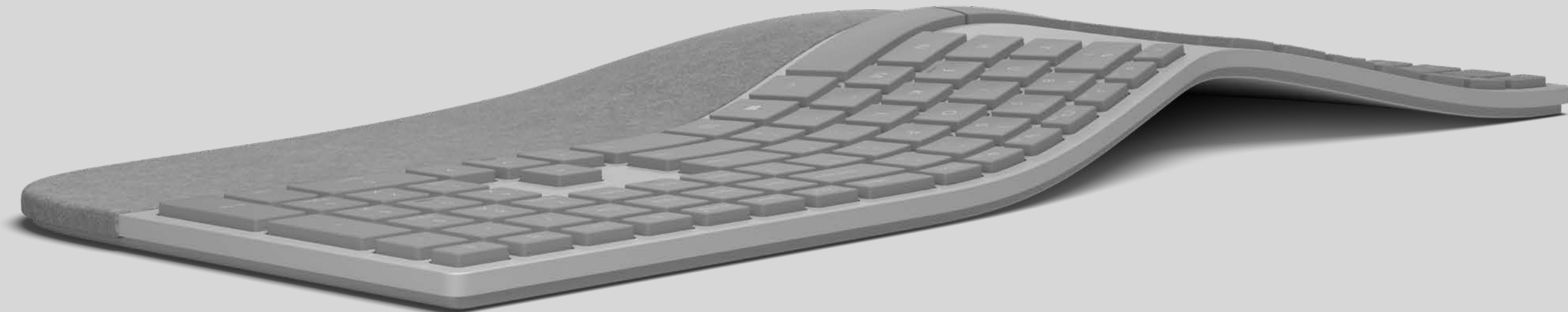
A touch of luxury

The double-cushioned palm rest uses a unique, ultra-durable version of Alcantara®, a proprietary material sourced in Italy with unique aesthetic, sensory, and technical qualities. It gives this keyboard a distinctive, elegant appearance, and the smooth softness makes it a place you want to rest your hands.

Great typing experience

We took great care in delivering the right typing experience. This keyboard uses the same precise keyswitch technology as our type covers, but with an extended 2.5mm key travel. This means that the keys sit higher, so every key press is deliberate while relaxed, without compromising on accuracy. We also make sure the experience would last, with up to 12 months of battery life.
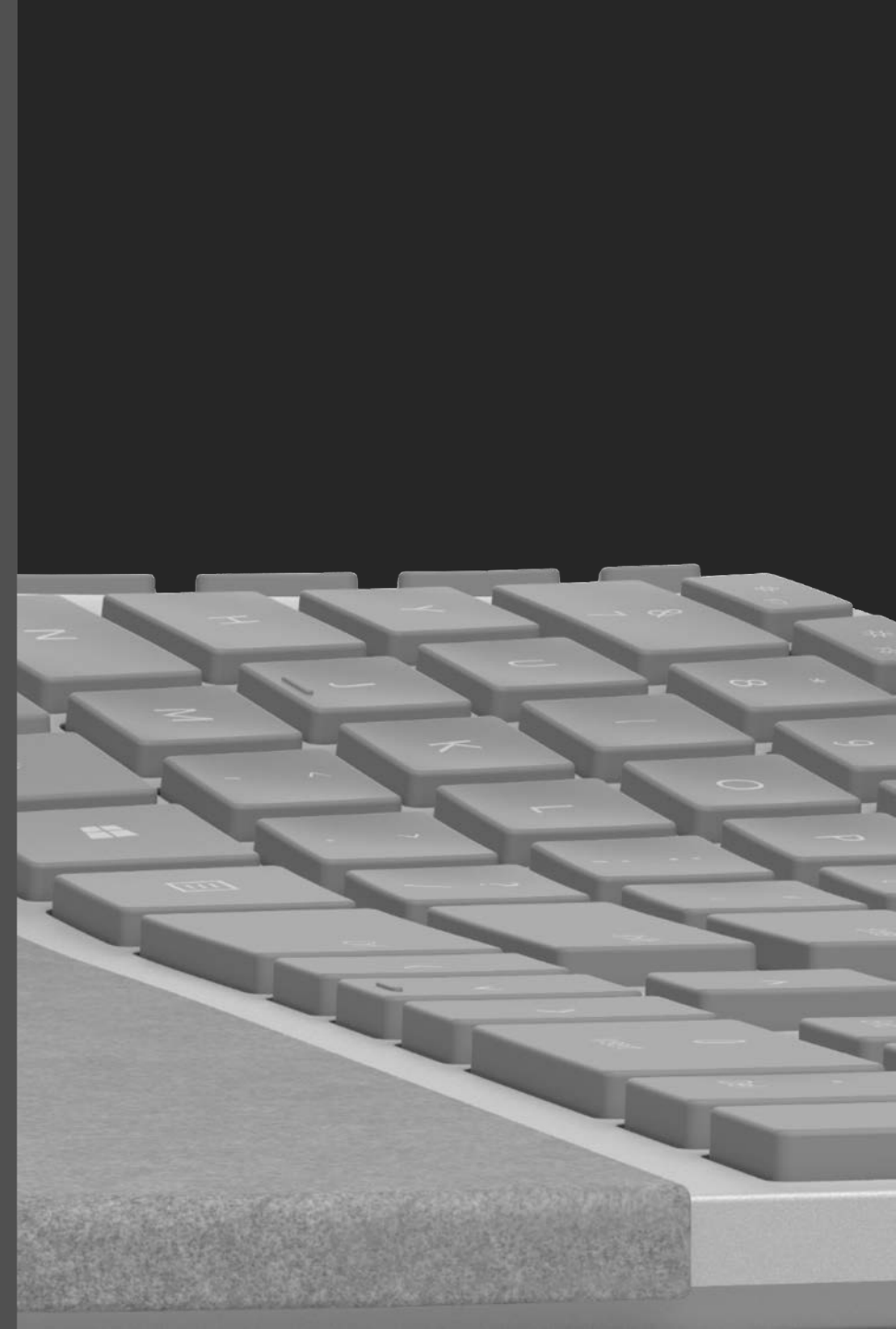
Surface Precision Mouse

Visually complementary desktop mouse for Microsoft Modern Keyboard with Fingerprint ID
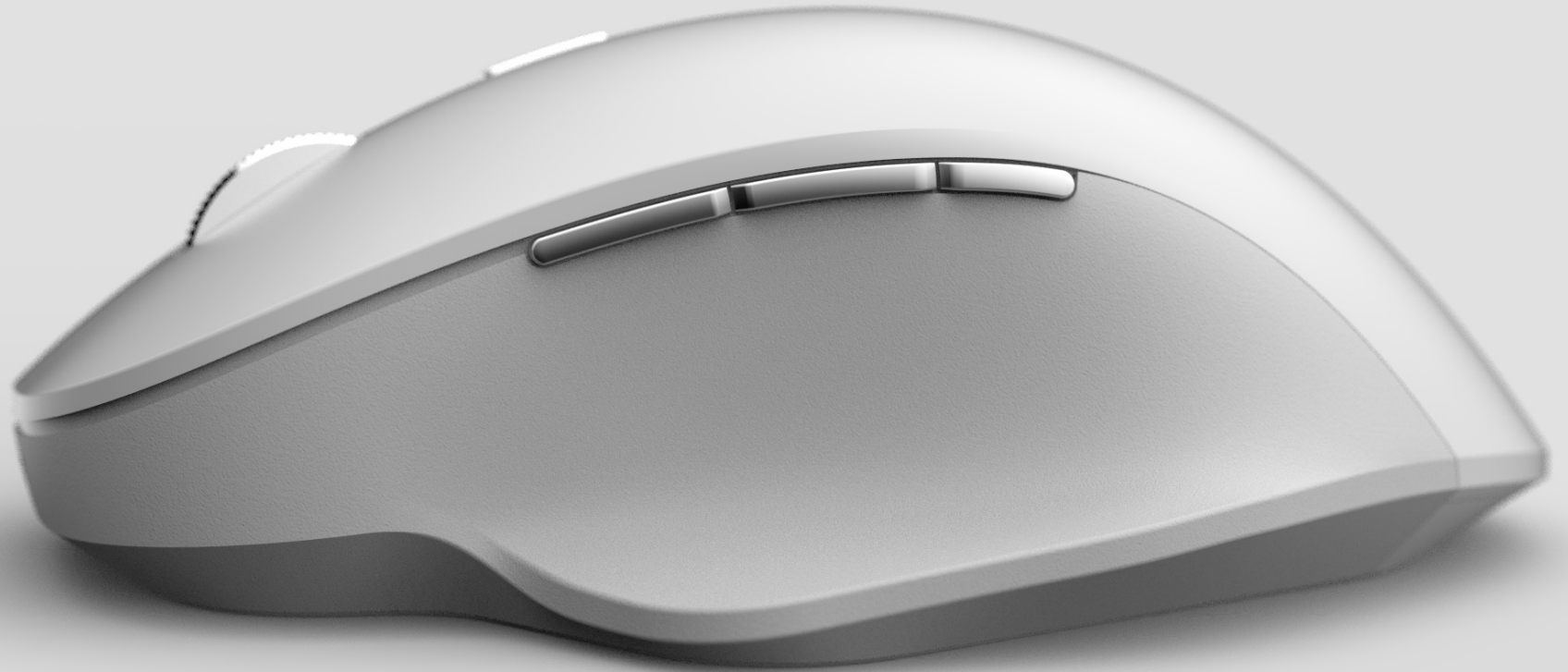
Surface Precision Mouse

Designed for exceptional accuracy, comfort, and control, the new Surface Precision Mouse helps you stay in your flow with flawless scrolling, beautiful ergonomic design, and three programmable buttons.

Stay in your flow.
- 3 customizable buttons to help you optimize your work
- Smooth or detent scrolling based on action and preference
- Works seamlessly across up to 3 different PCs
- Customized in Microsoft Mouse and Keyboard Center (downloaded software)

Experience a new level of comfort.
- Designed based on ergonomic principles for long hours of work.
- The materials were chosen with comfort in mind. It has comfortable side grips, machined aluminum buttons and scroll wheel, and durability painted top case.

Even more control
- Carefully calculated weight, stability and precision for easy manipulation.
- It can be used wirelessly with Bluetooth or through a direct wired connection, depending on how you like to work.

Demo flows

Hero feature breakout: 3D model support in Office apps

Thematic value line	Show every angle of your story (3D model support in Office apps)*
Feature line	Add power to your point with 3D
Feature messaging	Use 3D content to increase the visual and creative impact of your PowerPoint, Word, and Excel docs. Easily insert a 3D object from the Remix 3D[1] catalog or your desktop, then use the 360-degree rotation handle to change its perspective. Bring your 3D objects to life in your presentations with transitions like Morph that create cinematic animations between slides. For example, from one slide to the next, you can seamlessly rotate your view of a 3D building design from the front to the side.
Scenarios	Students creating more compelling presentations Teacher creating more compelling lessons Professionals creating more compelling pitches Product design, engineering, architectural presentations showing all angles easily
References	3D in the Office apps
Video	3D in the Office apps shown at the Microsoft event on October 26, 2016
Availability	Word, Excel, PowerPoint, Outlook*[2]
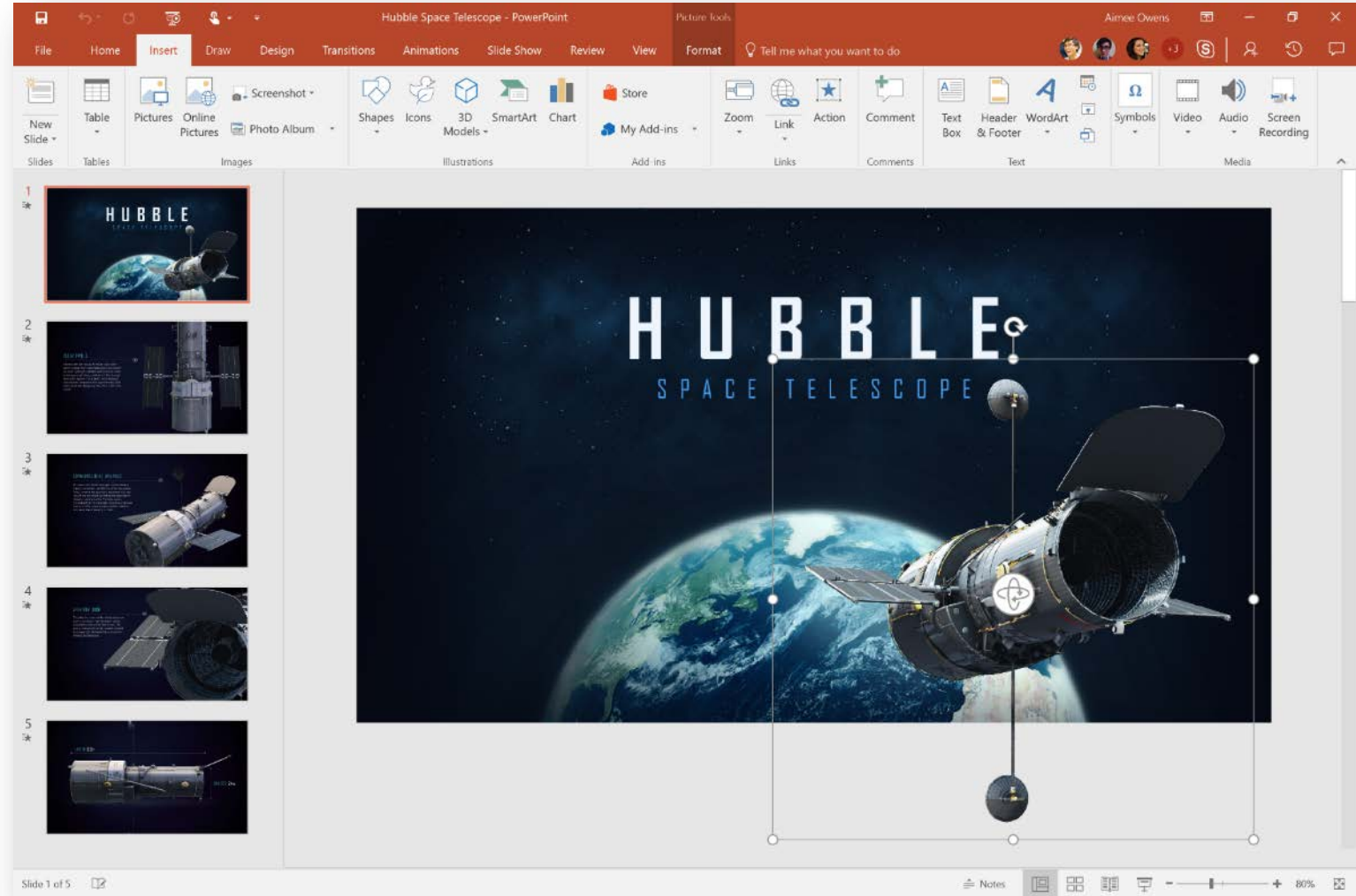
*Office 365 Subscription Required
[1]Remix 3D integration subject to Remix 3D availability
[2]3D models in Outlook are only supported in email compose; emails receive contain 2D rendering of the 3D model at the time it was sent.

Hero feature breakout: Ink Editor in Word

Thematic value line	Eco-friendly editing*²
Feature line	No printing required with Ink Editor
Feature messaging	With Office, your pen is a more powerful document editing tool than ever. Use your pen to intuitively make edits directly in Word. Strikethrough words to delete them, circle text to select it, and automatically snap highlighter ink to text.
Scenarios	[Really any document editing scenario] Making edits on the go Skipping step of converting annotated feedback to document edits Using pen as a primary interaction method
References	Ink Editor
Video:	Inking in Microsoft Office Ink Editor in Word shown at the Microsoft event on October 26, 2016
Availability	Word on Windows desktops;* Word on Android (coming Feb '17); Word Mobile (coming Feb '17)
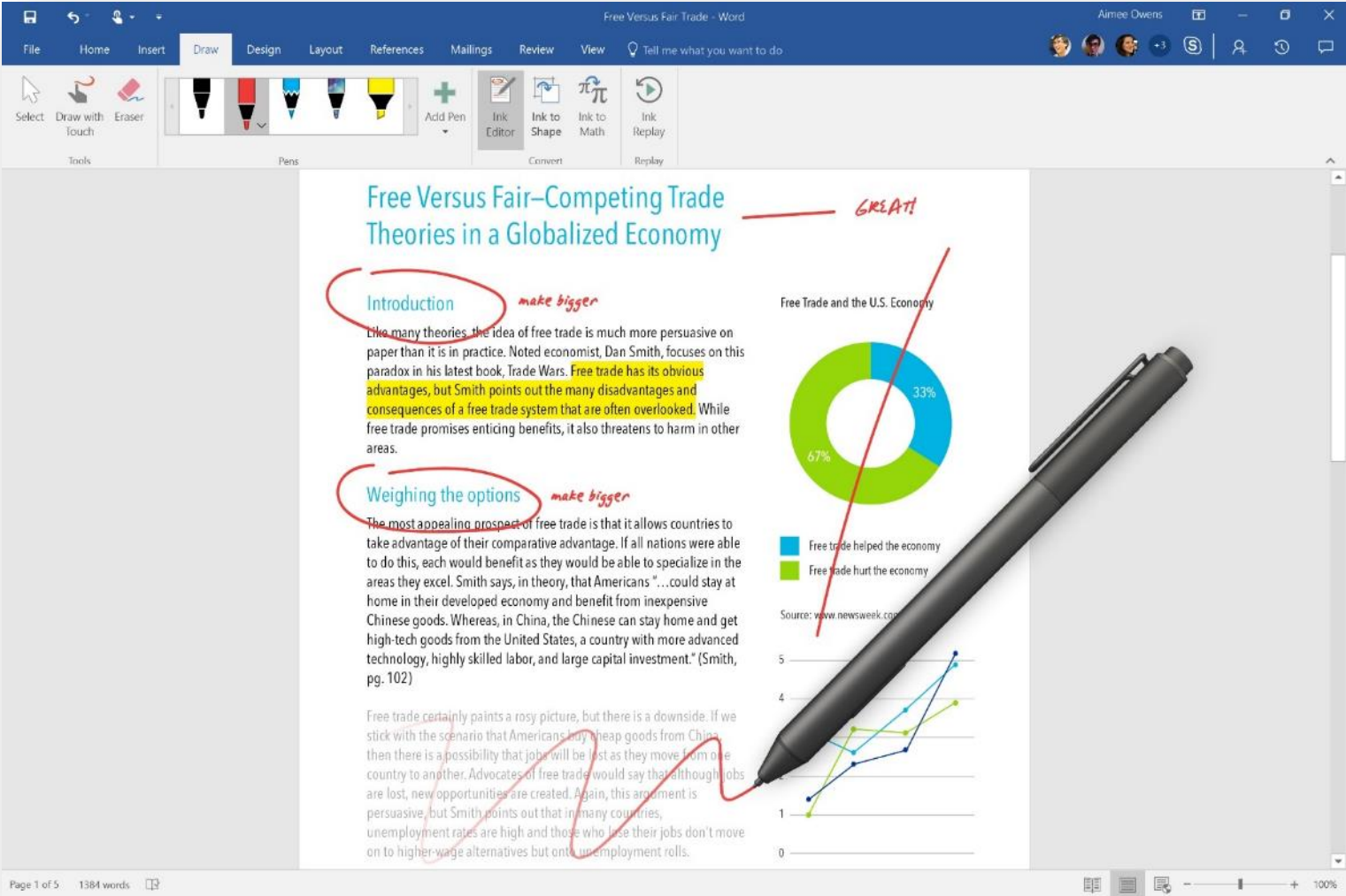
*Office 365 Subscription Required
²Touch capable tablet or PC required. Pen accessory may be sold separately.

Hero feature breakout: Editor in Word

Thematic value line	**Write better, right now (Researcher & Editor in Word)*¹**
Feature line	Bring out your best writing with Editor
Feature messaging	Editor assists you with the finishing touches by providing an advanced proofing and editing service. Leveraging machine learning and natural language processing—mixed with input from our own team of linguists—Editor makes suggestions to help you improve your writing. It helps you simplify and streamline written communications by flagging unclear phrases or complex words, such as recommending "most" in place of "the majority of." As a cloud-based service, Editor also will get better with time. It's already expanded upon Word's current spelling and grammar tools to inform you why words or phrases may not be accurate—teaching at the same time it is correcting. Editor has also overhauled Word's visual proofing cues so you can distinguish at a glance between edits for spelling (red squiggle), grammar (blue double underline) or writing style (gold dotted line).
Scenarios	Writing tighter papers Creating more polished reports Crafting a presentable resume
References	Introducing Editor—your new digital writing assistant
Video	Researcher and Editor for Word
Availability	Word on Windows desktops*

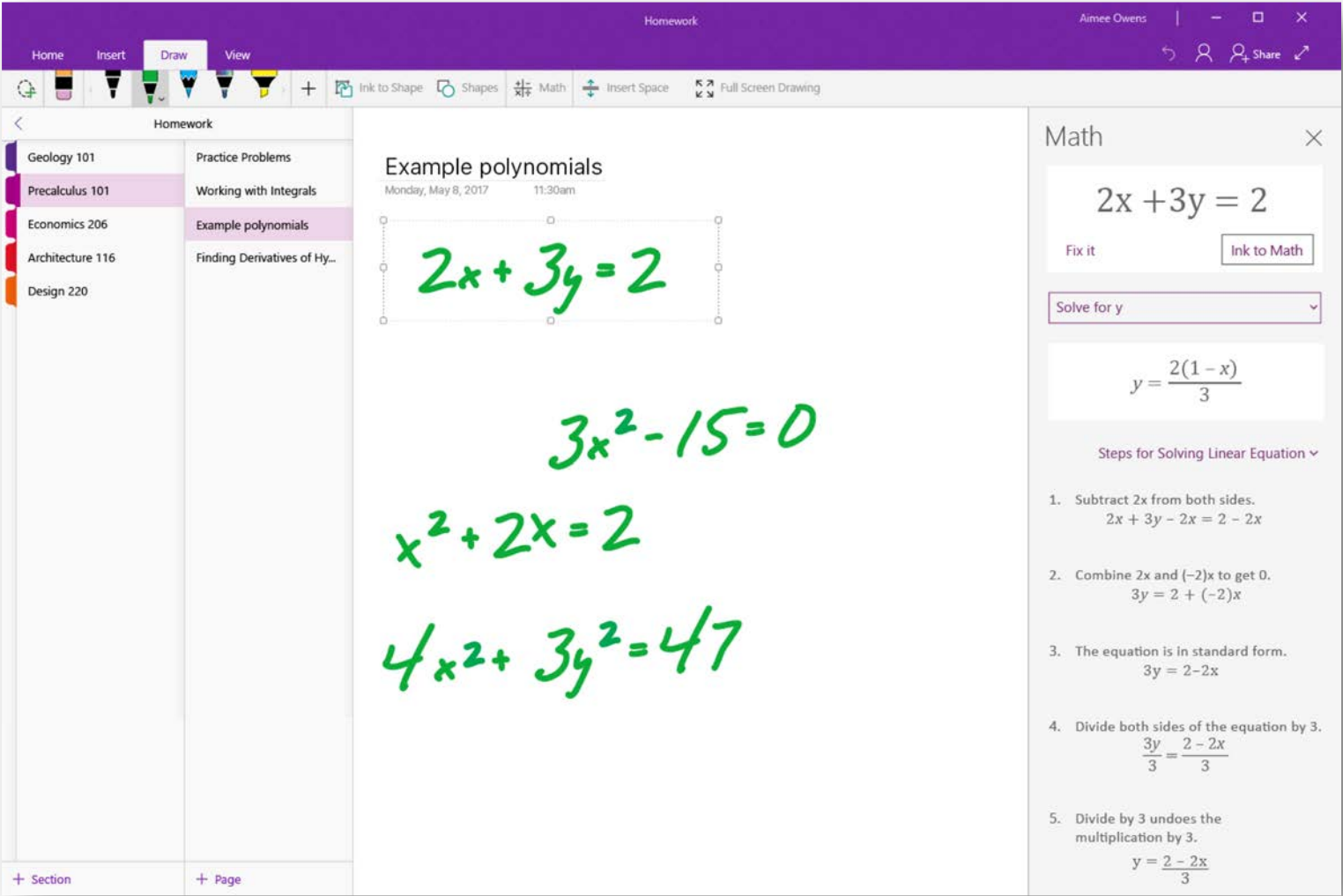# Hero feature breakout: Designer in PowerPoint

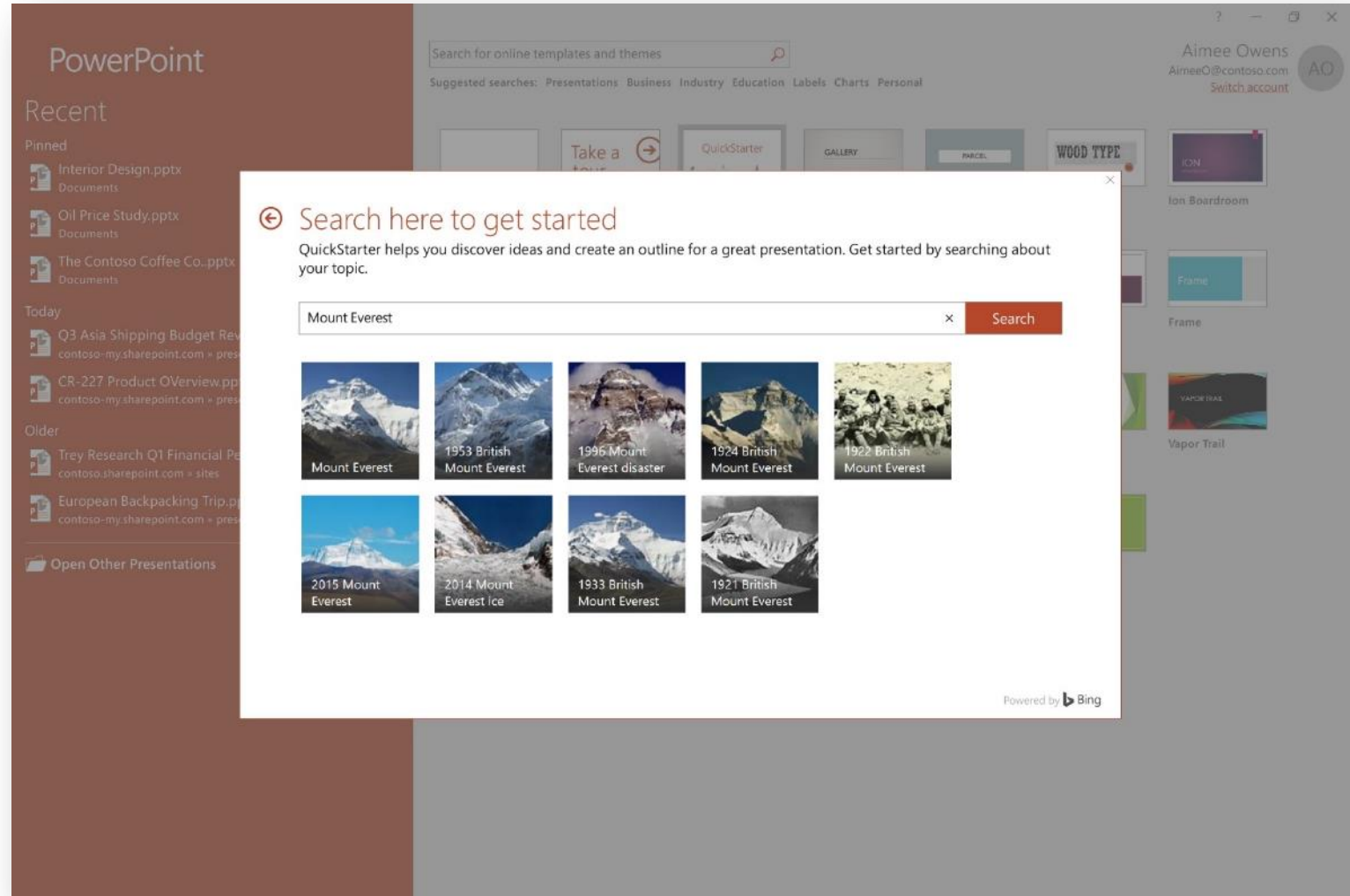| Thematic value line	Make your slides shine (PowerPoint Designer & Morph)*
Feature line	Slides that shine with Designer
Feature messaging	Designer in PowerPoint is an intelligent new design assistant to help you create beautiful slides in seconds. Designer in PowerPoint allows anyone to create high quality professional slides within seconds. Just drop an image into your presentation and Designer provides you with several design ideas. Select your favorite and you're done! This allows you to spend less time figuring out how to produce high quality designs and more time preparing for that key moment—your presentation.
Scenarios	Create school reports faster Build more compelling presentations Build presentations that stand out amongst peers Create professional content without a designer
References	Introducing PowerPoint Designer Enhancing the power of PowerPoint Designer Designer transforms text
Video	Introducing PowerPoint Designer and Morph
Availability	PowerPoint on Windows desktops;* PowerPoint Mobile on Windows tablets;* PowerPoint on Macs;* PowerPoint on iPad;* PowerPoint on Android tablets;* PowerPoint on the web* (only for presentations on SharePoint Online)
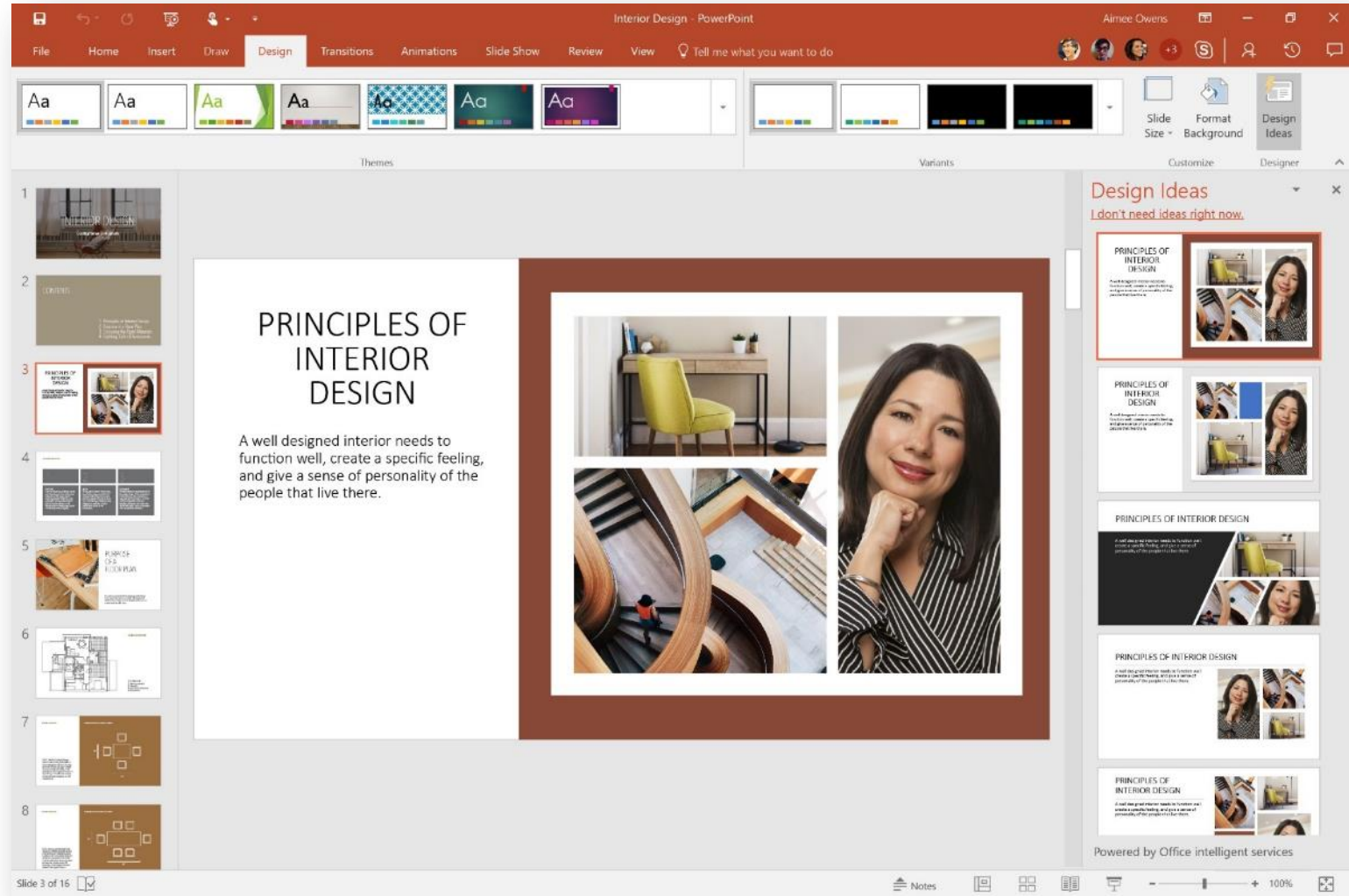
Hero feature breakout: math assistant in OneNote

Thematic value line	Eco-friendly editing*2
Feature line	Problem, solved with math assistant
Feature messaging	When you handwrite an equation, OneNote can not only convert it to text, but also now teach you the steps to solve it. This intelligent assistance makes OneNote your math coach and pairs nicely with Editor, the intelligent writing assistant in Word. Together, they make Office an even better partner to help you achieve more in your learning journey. Learn faster with a digital math tutor. From basic math to calculus, convert your handwritten equations to text you can edit. Then get step-by-step instructions to help you find the solution. It's everything you wished a calculator could do.
Scenarios	Students learning steps to solve math equations Teacher converting handwritten equations into text for lesson planning, creating homework assignments
References	The continued evolution of inking in Office: your digital pen is even more powerful www.OneNote.com/ink
Availability	OneNote for Windows 10*

*Office 365 Subscription Required
2Touch capable tablet or PC required. Pen accessory may be sold separately.

Hero feature breakout: QuickStarter in PowerPoint & Sway

Thematic value line	Go from "stuck" to "start"*[1]
Feature line	Jumpstart presentations with QuickStarter
Feature messaging	QuickStarter is re-inventing the creation process, helping you conquer the blank canvas. Powered by the Bing Knowledge Graph, QuickStarter in Sway and PowerPoint provides carefully curated outlines for any topic, including recommendations on information to include, categories to consider and associated images tagged with Creative Commons licenses. This provides a solid starting point to then continue building the rest of your presentation.
Scenarios	Getting inspiration for a student presentation Build a thorough outline for a presentation
References	QuickStarter in PowerPoint and Sway
Video:	QuickStarter for PowerPoint and Sway
Availability	Sway on the web; Sway for Windows 10; PowerPoint on Windows desktops* (coming Mar '17)

# Hero feature breakout: Morph in PowerPoint

Thematic value line	Make your slides shine (PowerPoint Designer & Morph)*
Feature line	Animate in one click with Morph
Feature messaging	Morph in PowerPoint creates cinematic motion by seamlessly animating between your slides. Morph doesn't just animate regular text or images, it can animate 3-D shapes or be applied at a word or even character level, including text wrapping. Simply duplicate slides you want morphed together, move the objects based on how you want them to animate and click the Morph button under Transitions. You'll be amazed with the quality of animations you create with just one click.
Scenarios	Build more compelling presentations Improve storytelling with smooth transitions Build presentations that stand out amongst peers Create professional content without a designer
References	Create cinematic motion with Morph
Video	Introducing PowerPoint Designer and Morph
Availability	PowerPoint on Windows desktops;* PowerPoint Mobile;* PowerPoint on Macs;* PowerPoint on iOS;* PowerPoint on Android;* PowerPoint on the web*
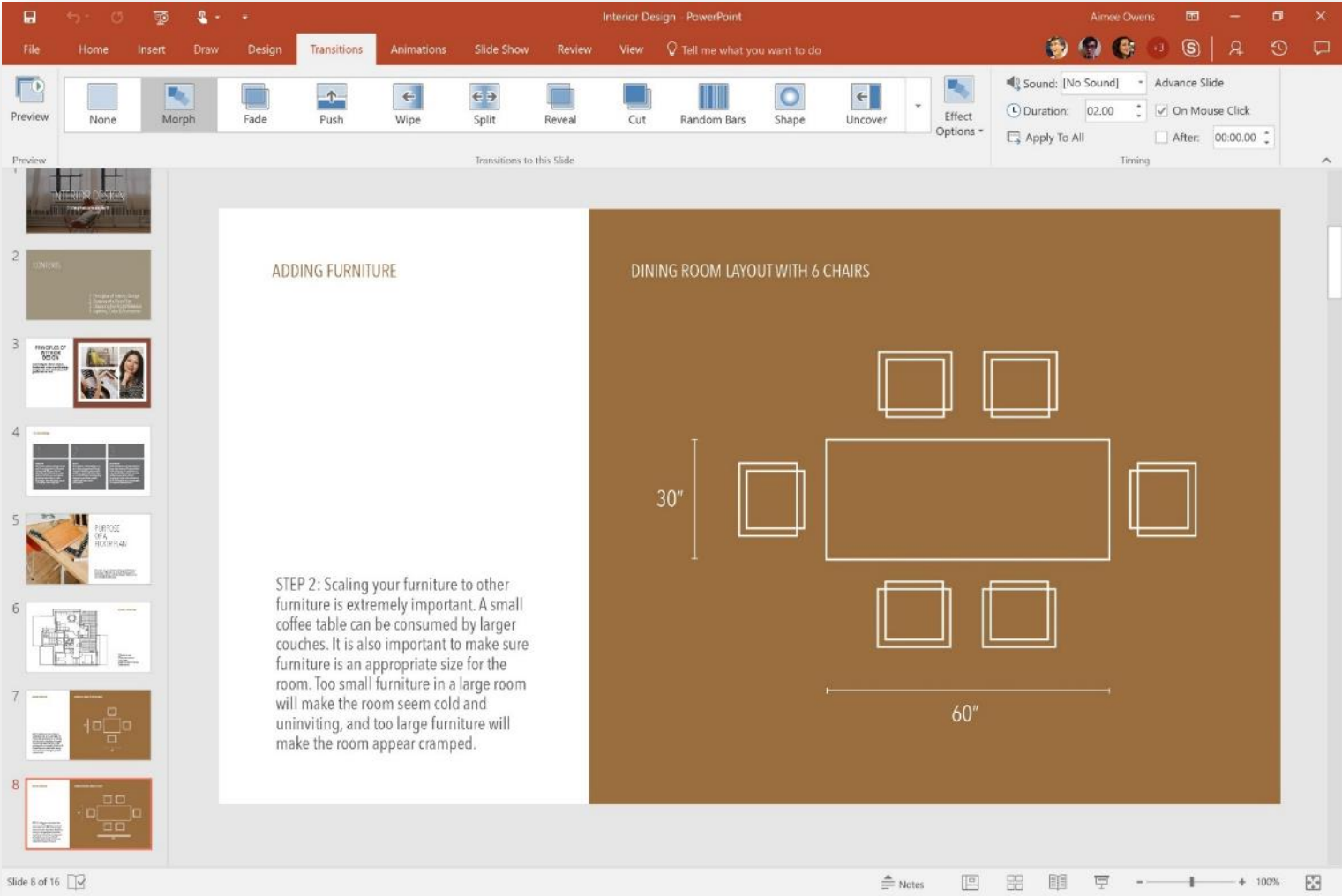
*Office 365 Subscription Required

Hero feature breakout: Researcher in Word

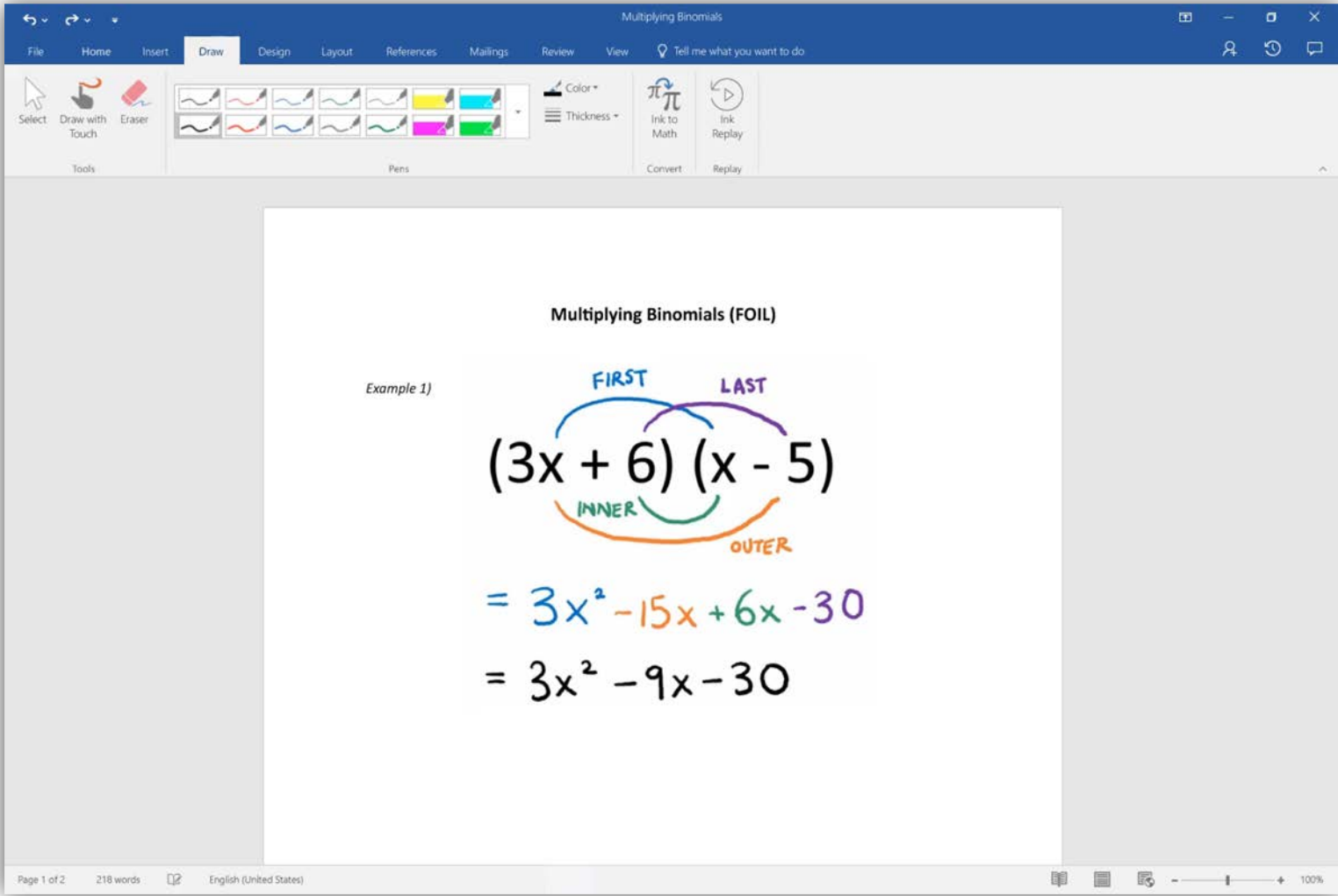| Thematic value line	Write better, right now (Researcher & Editor in Word)*[1]
Feature line	Take the search out of research
Feature messaging	Researcher is a new service in Word that helps you find and incorporate reliable sources and content for your paper in fewer steps. Right within your Word document you can explore material related to your topic and add it—and its properly-formatted citation—in one click.
Scenarios	Student research paper Build a thorough outline for a paper Creating robust bibliography Developing attention to citations Stay focused/avoid distraction while researching
References	Introducing Researcher: accessing credible sources and cited content just got easier
Video	Researcher and Editor for Word
Availability	Word on Windows desktops;* Office Researcher companion app available on iOS (Office 365 Subscription required to access saved information from the iOS app on Windows desktops)
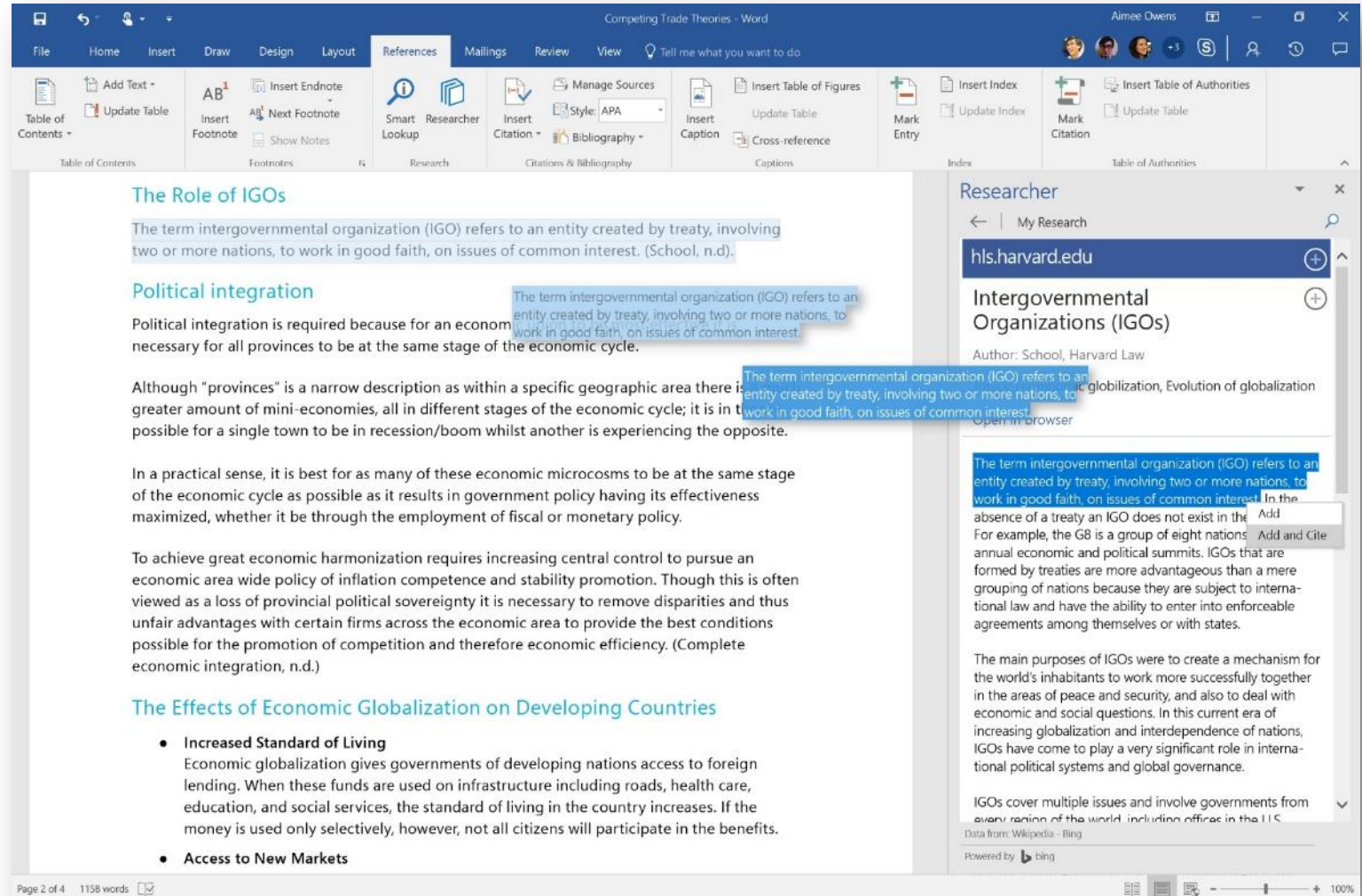
*Office 365 Subscription Required
[1]Feature availability and experience may vary by market, language and device.

Feature breakout: Ink Replay

Reason to believe	Rewind and replay the sequence of mark-ups made by others to better understand their thought process*[2]
Headline	Watch an idea unfold with Ink Replay
Feature messaging	To understand what's behind the ink you see on a page, use new ink rewind and replay capabilities. Follow a sequence of handwritten notes and drawings, review step-by-step instructions, or see the order in which somebody else marked up the document. With Ink Replay and Surface Dial, ink playback is as natural to control as a spin of the device. This helps you effortlessly set the pace at which you review step-by-step instructions, reveal lesson ideas and more.
Scenarios	Understand the flow of others' feedback Understand a student's thought process Unpack a lesson, step-by-step Follow along with instructions Play a sequence of ink for entertainment
References	The continued evolution of inking in Office: your digital pen is even more powerful (8/30/16) Ink Replay control with Surface Dial (10/26/16)
Video:	Inking in Microsoft Office Ink Replay control with Surface Dial shown at the Microsoft event on October 26, 2016 Office Inking on Surface Studio

*Office 365 Subscription Required
[2]Touch capable tablet or PC required. Pen accessory may be sold separately.

(Play video)

Microsoft Office roaming pens demo flow

Demo Summary

App	Microsoft Word, Excel, PowerPoint
Audience	• Professionals • Creators
Product	• Surface Pro • Surface Pen
Length	~1-2 minutes
Message	Pens are personal. Just as you carried your favorite pens and pencils with you in your pencil case in your backpack when you were a kid , now you can now save your favorite pens in Office and use them across the suite and on any device.
Files	

Remember carrying around a pencil case in your backpack as a kid . Remember your favorite pen – how it became an extension of yourself – an expression of creativity. Remember how if you'd loose it you'd look everywhere for it, because writing with a pen that wasn't your own – just wasn't the same.

Office is bringing that notion – your pens, your personal pens, to the digital age.
You can quickly customize a gallery of your favorite pens. Chose the type – pen, highlighter, or the new pencil texture – choose a color or effect, and a thickness .
Now once, I've added this pen, it will always stay with me.
I can access my custom set of pens, pencils and highlighters, from any Office app.
I can even access these pens from any Office app on any of my devices.

DEMO FLOW
1. Open an Office application
2. Navigate to Draw Tab
3. Add a couple pens and a pencil
4. Close the App
5. Open another app (on same device, or any other device with same MSA)

FEATURES
Customizable/roaming Pens gallery (New – Releasing Mid-June)
Pencil Texture (New – Releasing Mid-June)
Metallic ink effects (rainbow, galaxy, gold, silver, etc., – Releasing Mid-June)
Can also include
Ink Editor
Ink Replay
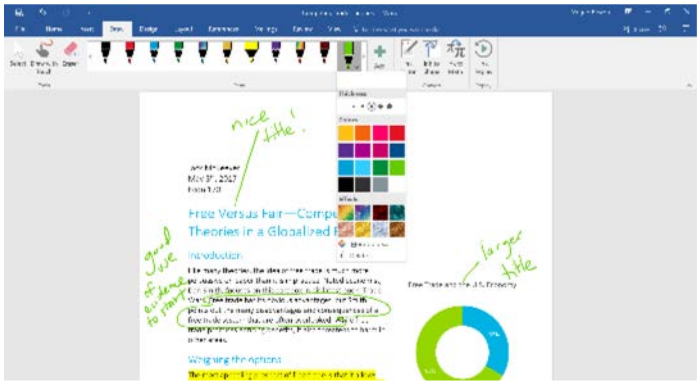
Adobe Premiere Pro CC demo flow

Demo Summary	
App	Adobe Premiere Pro CC (Win32)
Audience	Video editors
Product	• Surface Studio • Surface Dial
Length	~1-2 minutes
Message	Playback. Speed Up. Pause. Use Surface Dial for accelerated shuttling through clips and sequences with precision frame selection and immediate stop and start of playback. Rotate Surface Dial forward and backward to incrementally increase or decrease playback speed – up to 32x.

The editorial market is always looking for ways to scrub through countless footage. Video playback in the past was imprecise with keyboard hotkeys or expensive (with specialized equipment).

1. Click Surface Dial once to start playing video at normal speed
2. Place Surface Dial on-screen on Timeline
3. Rotate forward once so you feel one haptic feedback to trigger 2x forward speed
4. As you step through the various playback screens, it will speed up to 4x, 8x, etc. intuitively
5. As I scrub through the timeline in Premiere Pro, you can get a good sense of how fast you are moving through the footage from the haptic feedback and from the timeline movement itself
6. Then, pause the playback by simply clicking Surface Dial again and it will stop precisely where you left off
7. Scrub through the footage by rotating Surface Dial – mark an "in" or an "out" so that you can come back to it later through the new touch UI in Premiere Pro
8. Drag/drop clips of footage into the on-screen controls, like "insert" and "overlay" by dragging to the same location
9. Scrub back through footage by turning Surface Dial backwards on Timeline till it stops at the beginning

Surface Studio and Surface Dial make video editing so much easier and more fun with the new integrated touch UI on Premiere Pro and the new Dial integration – it's an editor's dream to work with. Surface Studio and Surface Dial provide the precision and accuracy of much more expensive professional-grade tools but at great value and beautiful design, you can't beat it.

Adobe Photoshop demo flow (2)

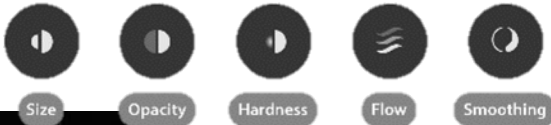| Demo Summary	
App	• Adobe Photoshop (Win 32)
Audience	• Digital artists • Designers
Product	• Surface Studio • Surface Dial and Pen
Length	~1-2 minutes
Message	Adobe Photoshop and Surface are bringing the best of Pen and touch to creatives
Files	 MSSurface_SurfaceBook_PS_Mountain_River.png

Create anything you can imagine - anywhere you are. Embrace the full power and functionality of Adobe Photoshop CC with the mobility of the new Surface Pro. Do more with Surface Pen, Surface Dial, and Touch to unlock the full potential of what's possible.

Streamline and speed up your workflow with Surface Dial

Use your Surface Dial to easily manipulate your brushes in Photoshop so you can stay focused on your canvas and in your flow.

To use Surface Dial to adjust your brush settings:
1) Choose a Photoshop tool with a brush tip (Brush, Dodge, Burn, Blur, etc.)
2) Press and hold Surface Dial to activate the radial menu and rotate to select Brush
3) Select the setting you want to adjust (Size, Opacity, Hardness, Flow, or Smoothing)
4) To select another tool, click the Surface Dial to activate the brush adjustment menu or move the Surface Dial to another part of your canvas

Adobe Photoshop demo flow (2)

Demo Summary	
App	• Adobe Photoshop (Win 32)
Audience	• Digital artists • Designers
Product	• Surface Studio • Surface Dial and Pen
Length	~1-2 minutes
Message	Adobe Photoshop and Surface are bringing the best of Pen and touch to creatives
Files	 MSSurface_SurfaceBook_PS_Mountain_River.png

Create anything you can imagine - anywhere you are. Embrace the full power and functionality of Adobe Photoshop CC with the mobility of the new Surface Pro. Do more with Pen and Touch to unlock the full potential of what's possible.

Now with fully-integrated touch controls like 3-finger undo/redo that allows you to go back and forth in your stack..

Action: Make a few strokes with Surface Pen to edit file. Tap and drag 3 fingers back and forth across Surface Pro screen to undo/redo control and point out history toolbar at top

--and 5-finger full-screen mode to fully immerse yourself in your work

Action: Tap 5 fingers on screen to make Photoshop UI disappear and show full screen mode. Tap 5 fingers again to bring UI and tools back

Now with tilt and shading support to let you create as naturally and effortlessly as possible...

Action: Open "Unstructured" demo file, select "Pencil brush" and start to create lines on a blank canvas, tilting Surface Pen as you go to show the shading effect
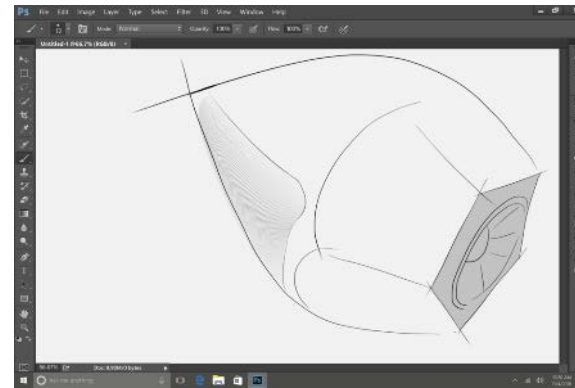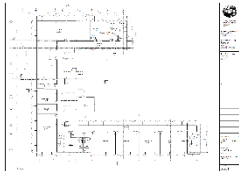

 UnStructured.png

Autodesk SketchBook demo flow

Demo Summary	
App	• [Autodesk SketchBook](#) (UWP) • Must use Pro version
Audience	• Product and automotive designers • Architecture professionals • Concept and storyboard artists, illustrators
Product	• Surface Studio • Surface Dial and Pen
Length	~1-2 minutes
Message	Autodesk SketchBook and Surface provide the most natural feeling drawing tools to capture and quickly iterate your ideas.
Files	Autodesk SketchBook Demo Files.zip

Autodesk is focused on the future of making things. But every new thing that is made begins with an idea. Autodesk SketchBook captures that idea the moment inspiration strikes, lets you iterate quickly, and move it to the next part of your workflow. The most natural thing in the world to do with an idea is to draw it out. Autodesk SketchBook and Surface Studio with Surface Dial bring that natural feel to a digital workspace.

1. Open SketchBook with a partially completed radially symmetric drawing.
2. Select the [fine art pencil], and complete line drawing
3. "Here I am going to complete a drawing I started earlier today. As you can see, SketchBook has a minimalistic UI with almost all the screen space dedicated to my canvas, which makes it very easy to get started. When we're making SketchBook, we are thinking about the way people first learned to draw with a pencil and piece of paper. We make sure that SketchBook is easy to use, feels completely natural, and uses the power of the device to add efficiency to the drawing process. I'm going to finish the line work with my favorite pencil, then I'll be ready to start to add some finishing touches to the drawing"
4. "Since I'm using a digital drawing tool, I can work faster without sacrificing any quality. Let me show you a few things that make getting this drawing finished a lot easier"
5. Open radial symmetry menu
6. "Today, we're introducing the Radial Symmetry tool for SketchBook in the Windows Store. Radial symmetry enables me to create perfectly symmetric drawings with up to 16 sectors. Let me show you what I mean. First I'll select the number of sectors I want, then I can just start drawing, and each stroke is perfectly mirrored in each sector on the canvas. When I'm drawing [things like this], or wheels, clocks, mandalas, it saves me an incredible amount of time"
7. "I also have this other hand that isn't doing anything, so I can use the Surface Dial with my non drawing hand to help me correct any strokes I lay down that aren't what I was looking for. I didn't like the last couple lines I draw, so I can just dial them back and lay down what I want."
8. Use dial in undo function to remove lines.
9. "That's better."
10. Toggle through Surface Dial functions while speaking:
11. I can also use the dial to change my color, brush size and opacity, and rotate and zoom the canvas"
12. Using Surface Dial for these functions instead of keyboard shortcuts or menus really keeps me in a distraction-free drawing environment, and staying in the zone is so important when you're doing creative work.

So when I have an idea and I want to get it out of my mind and into the world, the fastest, most natural, and most powerful way to do that is with SketchBook and the new Surface Studio with Surface Dial. I finished a drawing in minutes that would have taken me well over an hour without these tools.

Bluebeam Revu demo flow

Demo Summary

App	Bluebeam Revu (Win32)
Audience	AEC industry
Product	• Surface Studio • Surface Dial
Length	~2 minutes
Message	Place Surface Dial on screen and use its location to split screen and zoom to magnify a portion of your PDF for enhanced detail and navigation. Or, press and hold for access to panels and tool chests to select annotations and review your markups list.
Files	Bluebeam Revu Demo Files.zip

PDF drawing takeoff and markup is used throughout the construction management lifecycle. This requires users to determine measurements via construction documents to define material quantities and cost while tracking issues. Performing these measurement markups accurately and efficiently is critical. It requires a workflow that includes navigating large format PDF drawings and can be hindered by screen size, precision, and access to markup tools.

DO: Open "Bluebeam Revu Demo File"
SAY: Many people have been using the integration between Surface Studio and Bluebeam Revu for highly interactive design review and Takeoff workflows.

DO: Press and hold Surface Dial

DO: Select Split Zoom from the Radial Menu (Note that Bluebeam Revu has now split the screen into 2 views of the same PDF)
SAY: This creates a great working UI and environment to analyze large format drawings. There is often a great deal of information contained within the drawings and navigating them effectively is important for productivity and accuracy.

DO: Place Surface Dial on the Left portion of the screen

DO: Place and move (do not slide) Surface Dial to different positions on the left to see that the opposite screen update on the right with the magnified portion of the PDF covered by center of Surface Dial
SAY: Providing the ability to analyze the details of a drawings while at the same time keeping your orientation and location on the drawing. A lot better than constantly zooming in and out with mouse scrolling.

DO: Select the Area Measurement tool from the top by clicking "Measure" then "Area"

DO: Place the measurement with Surface Pen on zoomed-in side of the split screen using click à drag to create a rectangle
SAY: Providing for a much or organic way to do your work for both Design Review and Takeoff. It removes the software and the hardware from the process and reorients you back to the information on the drawings and the work at hand.

NOTE: An area measurement should now be visible.

DO: Pullup the bottom tab to show that all the markups are being tracked
SAY: This is a great way to manage your design review comments and Takeoffs
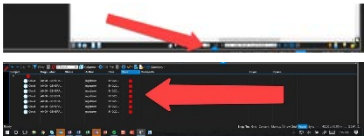
With Surface Studio and Surface Dial leveraging the split-zoom integration within Bluebeam Revu, users are naturally exposed to a working UI environment that facilitates a more fluid/precise takeoff and markup experience. This enhanced workflow increases markup production and accuracy.

CorelDRAW demo flow

Demo Summary

App	• CorelDRAW Graphics Suite 2017 (Win32) • Dial integration releases in mid-June (confidential until then)
Audience	Graphic designers
Product	• Surface Studio • Surface Dial and Pen
Length	~5-6 minutes
Message	CorelDRAW is pen-first and enables designers to draw naturally while leveraging their non-dominant hand
Files	CorelDRAW Demo Files.zip
Prep	• Launch app with F8 key pressed until dialog box is displayed • Reset the settings to factory default • Close the Getting Started window • Create new document • Tools > Options > Workspace > Display > Check "Antialias bitmap in Enhanced View' • Tools > Options > Global > Pen Settings > Interface: Real-Time Stylus • Tools > Options > Workspace > Save > Disable "Backup every X minutes" • Press S, set to 5 sec, select all buttons (include Curves, Create Single Curve, Preview Mode) • Close CorelDRAW • Double click the file "CorelDRAW Graphics Suite and Surface Dial.cdr"

Showcase the power of CorelDRAW on Surface Studio, demonstrating how the latest generation of hardware enables graphic designers to draw naturally, while also leveraging their non-dominant hand. This new technology provides an experience as natural as pen and paper.

Dial on-screen: Toolbox at your fingertips
Do: Put Dial on screen (left side of screen, about middle of height)
Say: "When I put the Surface Dial on the screen in CorelDRAW, a contextual toolbox appears within immediate reach of the pen, making this the perfect enhancement of your non-dominant hand"
Change settings easily
Say: "Within this new Dial menu, I can change the settings inside any tool dynamically and naturally"
Do: Select rectangle tool, tap on scale to scroll through values with Dial still on -screen

Fully-customizable Dial menu
Say: "One of the most powerful parts of CorelDRAW is the ability to fully customize the UI in order to match your specific needs and workflow. Using the Surface Dial on-screen continues this personalized experience."
Do: Drag & drop the Smart Fill tool from the default toolbox
Do: Draw & drop the Live Sketch tool from the default toolbox into Dial menu
Say: "By combining the power of Microsoft Surface hardware with the intuitive CorelDRAW software, the creative experience on Windows is for the first time as tactile and fun as scribbling a doodle"

Draw naturally
Say: "Until now, vector graphics creation has lacked the organic and intuitive creative experience - the simple joy of pen & paper, seeing your sketches transform."
Do: Start shaping the welded object created earlier
Do: Tap on the Dial to commit

Switch tools intuitively and instantly
Say: "The Surface Dial also enables us to quickly and intuitively change properties such as the line width of this new shape"
Do: Select the pen size field with the pen and rotate the dial

Create beautiful art
Say: "Here is an example of what you can create when the technology truly disappears"
Do: Page with LiveSketch artwork

Djay Pro demo flow

Demo Summary

App	Djay Pro (UWP)
Audience	• DJ's • Music enthusiasts
Product	• Surface Studio • Surface Dial
Length	~1-2 minutes
Message	Take advantage of the huge screen on Surface Studio with unique location-aware Surface Dial integration. Place it on-screen to browse and select music. Place it on a turn table to scratch, scrub, loop your own soundtrack. Then use the haptic feedback to precisely adjust knobs and filters on-screen for individual decks.
Files	• Spotify playlist (preferred experience) • Locally saved music

Being a DJ and mixing good music has always been seen as an unachievable skill or talent – one that only a few elites who had dedicated years of practice could achieve. But with music playing a larger part in people's everyday lives, why shouldn't we be able to mix our own soundtracks and make our own music?

1. Open Djay Pro and put Surface Dial on screen to bottom half of UI (Spotify UI)
2. Rotate Surface Dial to scroll through songs and randomly select a song you might like, or search in the toolbar like you would in Spotify
3. Press Surface Dial to lock in song selection, notice how the song will automatically start loading in the top left hand part (turntable) of the screen where the app is syncing the music
4. Touch "Play" button to play song
5. Place Surface Dial on top left-hand turntable where song is playing to show how it can be used for analog scratching
6. Place Surface Dial on table
7. Call attention to bottom right UI where suggested songs that would mix well with the current songs are queued
8. Select and drag song artwork into top right turntable, wait for it to sync
9. Use Surface Dial off-screen as a fader by rotating dial and changing into second song

Djay Pro takes full advantage of the huge screen on Surface Studio and uses Surface Dial to maximize the screen real estate in a new and unique way- by having it perform a unique function on different parts of the screen. Using Djay Pro is now even more fun and accessible, without having to compromise at all for sound quality or functionality.

Drawboard PDF demo flow

Demo Summary

App	[Drawboard PDF](#) (UWP)
Audience	• Architects • Engineers • Contractors
Product	Surface Studio
Length	~2-3 minutes
Message	Use Surface Dial to draw perfectly ruled lines at perfect angles, use a calibrated protractor to accurately complete line and area measurements, or freely rotate a single page to suit your writing position.
Files	Drawboard PDF Demo File.pdf

Engineering and construction professionals need to sketch at specific angles to achieve their drafting goals.

Easily Markup PDFs
Say: "Drawboard PDF is the best application to read, markup and annotate PDFs. Designed to replace pen and paper, Drawboard PDF improves your productivity. Today, we'll update a building plan for my new house - I want to add a back patio"

Annotate PDFs
Say: "With Surface Pen and Drawboard PDF, you can make precise annotations on any PDF. To add my patio, first I need to move the door to the backyard over"
Do: Add new doors to the left of the backyard doors. Cross out existing doors with two x's

Pressure Sensitive Inking
Say: "And with pressure sensitive inking, my pen behaves just like pen and paper. I can make lines as light or as heavy as I like"
Do: Write "Move", underline twice - once thin and once thick

Protractor: Straight Lines
Say: "Drawboard has also integrated Surface Dial to make revisions even easier. With the protractor tool, you can draw straight lines anywhere on the screen, at any angle. Say I want to add in a patio outside where my new door will lead to"
Do: Press and hold Surface Dial and select the protractor tool, then place Surface Dial on-screen to invoke the protractor
Do: Draw a line above the top of the house, near the door. Purposefully move the pen to show the calibrated straight line

Protractor: Precise Angle
Say: I can also adjust the precision of the angle by clicking once. Now, each rotation moves the protractor only a tiny amount.
Do: Draw another line at a different angle to fill in the patio, using protractor

Markup Tools
Say: "There's a wide array of markup tools that make editing documents easier too. Rather than hand-drawing the revision cloud, I can use one of the built-in markups"
Do: Add revision cloud using built-in tool over the door change
Say: "Now, I can just save this PDF and send to my architect. He will see the changes and there is no printing or scanning required"

This could only have been achieved using the tools provided by Surface Dial and grid paper. Combined with ink and canvas that Windows 10 uses, it is the closest comparison to real pen, paper, protractor, and ruler.

Microsoft Photos demo flow

Demo Summary

App	[Microsoft Photos](#) (UWP)
Audience	Any user with photos and videos
Product	• Surface Studio • Surface Dial and Pen
Length	~1-2 minutes
Message	• Animated Ink on Photos enables customers to be creative and share their memories in a more personal way • Edit lets anyone improve their photos like a pro • Albums lets you organize and share, easily

Photos and videos capture the most important moments in our life. But sometimes, there is more to the story than what our pictures and videos can convey. Animated Ink invites anyone to add a personal touch to their memories.

Inking is a great way to have fun and share memories
DO: Pick a photo from the gallery (the nighttime skyline is good), annotate with ink (draw a star), use Surface Dial to select pen color and change pens
SAY: "In photos, you can add ink to photos or video when you put the pen to the screen"
SAY: "Many of the same drawing tools that you're used to are here. Plus we've got a custom calligraphy pen. Of course, Surface Dial works great with the built-in ink controls."
DO: Save the image, play it back
SAY: "Even better, once your ink dries, it animates"
DO: Iterate to other ink examples, tap share icon, highlight FB or other options
SAY: "Now that you've got your ink, share it with your friends, in motion"
DO: Pause video, ink, save, playback the video
SAY: "This same inking works on your videos too"

Edit lets anyone improve their photos like a pro
DO: Pic a photo, Apply the Zeke filter, adjust the strength. Flip to Adjust and show the options
SAY: "With new filters and a refreshed user experience, anyone can make quick fixes to their photos"

Collection view & albums lets you organize and share, easy
SAY: "Collection view shows your all your photos, without having to worry about where they are stored on your PC or OneDrive. With Albums, you can easily collect your favorite photos, upload them to OneDrive and share a link with friends and family."
DO: Collection view, select a few photos and pick Add to Album. Create a new album on the fly, and click on share. Show the option to upload and get a link.

Photos makes it easier than ever to manage your photos. Animated Ink lets you connect and tell your story.

Moho demo flow

Demo Summary	
App	• [Moho Pro](#) (UWP) • [Moho Debut](#) (UWP)
Audience	Animators
Product	• Surface Studio • Surface Dial
Length	~3-4 minutes (each)
Message	Simplifying and speeding up the tedious and complex task of traditional animation. Rotate Surface Dial to move back and forth in the timeline, click to play/stop or add new frames, rotate and zoom your canvas, adjust stroke width for drawing operations, and control Smart Bones™.
Files	Bessie Coleman (in app)

Traditional animation is a tedious and complex task. Moho's goals as an animation software with the help of Surface Dial are to simplify and speed up the process, whether for professionals, amateurs or hobbyists.

Working with rigged characters

1. Open Moho. The character, Bessie Coleman, will appear on the screen, along with the software windows, such as timeline, Layers, Style and Tools
2. Press and hold Surface Dial and select Timeline
3. Select the "Bessie Coleman" bone layer
   • Be sure "Auto-freeze keys" is checked in the Timeline
4. Go to the Tools window and select the Manipulate Bone tool (the shortcut is Z)
5. Rotate Surface Dial. The Cursor in the timeline will move. Move it until frame 24 (second 1)
6. With Surface Pen, drag the bones of the character to pose it the way you want
   • Keyframes will automatically generate. These keyframes save the new pose of the character and allow animation
7. Rotate Surface Dial to the left and right, to check the animation created
8. Continue rotating Surface Dial to the other frames and moving the bones of the character to add more animation to it
   • Be sure to use the Smart Bones, these are special bones used to easily control complex animation, like head and body turns
9. To see the animation real time, click Surface Dial to press Play/Pause

Creating frame-by-frame animation

1. Open Moho and create a new file
2. Go to the Layers window and go to the "New Layer" button (a paper with a +) and select "Frame By Frame"
3. A new Frame By Frame layer will be created and selected
4. Go to the Tools window and select the Freehand tool
5. Double-click Surface Dial to add a new frame. A new Frame by Frame keyframe will be created in the timeline
6. Draw over the canvas
7. Double-click Surface Dial again to create a new frame
8. Draw over the canvas
9. Repeat the frame creating and drawing process as many times as possible
10. To check how the animation is running, rotate the accessory to left or right
11. To create a new drawing in a frame, rotate Surface Dial until getting that time and then double-click it to add a new frame

Rotating the Canvas

1. Open Moho and create a new file
2. By default, a vector layer will be selected
3. Press and hold Surface Dial and select the Rotation Mode
4. In the Tools window, select the Freehand tool and start drawing in the Canvas
5. Place Surface Dial on the canvas and rotate it. The canvas will rotate using the position of Surface Dial as pivot
6. Continue drawing and rotating the canvas when needed.

Moho optimized with Surface Studio and Surface Dial, offers a quicker and more intuitive way to control time, characters and canvas. Rotating Surface Dial allows you to quickly navigate in time, zoom and rotate the canvas using the physical position as pivot. It can also be used to quickly create frame-by-frame animation or manipulate Smart Bones to create complex animation, such as head turns, in seconds.

Sketchable demo flow

Demo Summary	
App	Sketchable (UWP)
Audience	• Semi-pro and pro artists • Enthusiasts that love to draw
Product	• Surface Studio • Surface Dial and Pen
Length	~2-3 minutes
Message	Surface Dial gives you quick and intuitive access to the brush settings you use most. Make fast and fluid color adjustments, and rotate or scale your canvas to achieve a finer level of control.
Files	Concept Car image (in app)

Sketchable has integrated Surface Dial for two specific scenarios, exposing buried settings and deconstructing ambiguous touch gestures. This provides precision and ease of access, while maintaining modern intuitive interaction that touch and pen users expect.

Navigating the UI
System Menu
1. Long press brings up system menu
2. Rotate changes mode selection
3. Clicking commits to that selection and launches Sketchable UI

Sketchable UI
1. Pressing the icons that are located on the overlay around the dial rings, changes mode (brush settings, rgb, etc..)
2. Clicking the dial cycles trough the selected variables
3. Rotating the dial adjusts that variable

Changing Settings in Real time
1. Start in editing mode on the preloaded car image
2. Select a color that is not white, black or gray
3. Navigate to the HSB mode on the dial
   • Color picking has traditionally been done with pickers and sliders
4. If it is not the current ring, click the dial until Hue ring is selected (bright multi colored solid ring)
   • By bringing it to the canvas and wrapping it around Surface Dial, color selection becomes part of the creative process
5. Paint while rotating the dial
   • With Sketchable and Surface Dial, live painting adjustments are possible

Deconstructing Touch Gestures
1. Navigate to Surface Dial's canvas manipulation mode
2. Use two fingers to reposition the canvas
   • Touch gestures are powerful and intuitive, but also ambiguous. I just manipulated the canvas' rotation, zoom and position simultaneously. It is difficult to adjust one without adjusting the others.
3. Change between rotation and scale while intermittently rotating the dial
   • Sketchable has utilized Surface Dial to isolate the variables from that gesture – providing both precision and the modern input users are seeking.
4. Hover with the pen so that the cursor is visible
   • When a hover is detected, it takes the center of rotation and scale
5. Use dial to rotate or scale while maintaining pen hover
   • By setting the center of rotation or scale dynamically, you can achieve the desired position of the canvas in one motion

Creatives have always been most productive while using both hands. This is true for physical mediums and traditional keyboard and mouse. While pen provides tremendous advantages, it does leave the nondominant hand wanting more. Surface Dial fits this need perfectly and its incorporation into Sketchable is designed to get the most out of two handed modern interaction.

StaffPad demo flow

Demo Summary	
App	StaffPad (UWP)
Audience	Music creators
Product	• Surface Studio • Surface Dial and Pen
Length	~1-2 minutes
Message	Technology that helps an artist stay in the moment rather than serve as a distraction. Compose with a mode created just for Surface Dial. Click to play/stop, or rotate left and right to rewind/fast-forward your score. Use Surface Dial as a music stamp or place on screen for quick access to symbols.
Files	Clair De Lune *Claude Debussy* (in app)

When doing anything creative, it's important that the tools work seamlessly and as quickly as your train of thought. Whenever you have to break the flow by reaching for a toolbar, you're taken out of the moment. Additionally, doing 'editing tasks', like copy/paste, undo/redo or auditioning your work can cost precious seconds, which add up to minutes that matter when working to a tight deadline, or when inspiration is taking hold.

1. Click Surface Dial to play from the beginning
2. Click Surface Dial to pause just after bar 4 begins
3. Use Surface Dial on-screen and stamp lower bar 3, stamp again to paste in empty lower bar 4
4. Double finger tap lower bar 4 (note that was just added); rotate Surface Dial one notch to the left to transpose down; click Surface Dial to submit
5. Rotate Surface Dial to scroll to the end of the score (bar 9)
6. Place Surface Dial on-screen (new UI will pop out around Surface Dial); select the Arpeggio icon (3 vertical squiggly lines) by rotating to symbol and clicking Surface Dial to confirm selection
7. Use Pen to add (just touch with Pen in each bar around the notes) an arpeggio to upper and lower bars 9
8. Use Surface Dial to rotate to the left to scroll back to the beginning of the score
9. Click Surface Dial to play score all the way through

So, without using single dialog box or toolbar, we've seen playback controls, copy/paste, undo/redo and insertion of musical symbols. Surface Dial knew what we wanted to do at the time we wanted to do it, and gave us a simple, quick and tactile way of achieving it without breaking the flow or killing the moment.

Windows Maps demo flow

Demo Summary

App	[Windows Maps](#) (UWP)
Audience	• Maps users • Trip planners • Artists
Product	• Surface Studio • Surface Dial and Pen
Length	~1-2 minutes
Message	Pen is a natural and timeless interaction. Ink on Maps enables customers to personalize their maps with annotations and create routes with ease. Unlock your creativity to make the world your own with Maps and Surfaces devices.
Preparation	• Have map zoomed out over the Tribeca area of NY • Set ink size to 7 • Aerial view • Create a favorite for the Sheraton Tribeca

Annotating on a map is a timeless activity which has not translated well from the analog to the digital world. When personalizing a map, users will likely draw on a map printout or will save a screenshot of the map and then use another program to add and share their annotations. Digital maps are complex and don't encourage creativity. People want to personalize the world they live in.

VIEWING MAPS IN 3D IS EVEN BETTER WITH SURFACE DIAL

1. Start with **zoomed out view of New York in the Aerial view**
   • Any time you travel, it's natural to use a map to most out of the time you have there,
2. Use Surface Dial and your finger to **zoom and pan in on Washington Square Park**
   • "Washington Square Park is world famous for playing chess outdoors. Let's get a better view of the park."
3. Press & hold Surface Dial and **select the tilt tool,** then turn Surface Dial to the right to get a good **3D angle**
   • "Surface Dial naturally helps change my perspective, which can't be done with the map I got from the hotel concierge
4. Press & hold Surface Dial and **select the rotate tool. Click Surface Dial** and the map will start **rotating continuously**.
   • With a click, I can make the map rotate continuously (click to stop rotating)

PERSONALIZE AND SHARE YOUR MAP

1. Switch to Road view using the layers control to enable Ink on Maps
   • With Surface Pen, Ink on Maps is on by default, making it natural and easy to personalize my map
2. **Use Pen** to **circle the park** and **write "challenge a grandmaster"** near the circle
   • The ink is now as much a part of the Map as the roads and landmarks are
3. **Tap the ink toolbar** with the Pen or finger to **invoke ink toolbar options in the Surface Dial menu**
   • In Maps, Surface Dial also supports the Windows Ink Toolbar
4. Use Surface Dial to **change the color of the "pen" ink**
5. **Write "Hotel"** near the Sheraton Tribeca (favorite)

HOW FAR AWAY IS THE PARK FROM THE HOTEL?

1. Use Surface Dial to **select the "Directions"** tool
   • Using the Pen and Ink as the input for getting directions feels natural and fast
2. **Draw a curved line between the "hotel" and Washington Square Park**
3. Maps calculates route options between the two places. **Change the driving directions to walking directions** (optional)
4. Use Surface Dial to **zoom out then use tilt to show all the ink and the route**
   • The map is now personalized and ready to share
5. Click overflow (…) and select **share via Mail**
   • No need to show the Mail app screen

Ink on Maps brings the natural and timeless interaction of annotating on a map to the digital world. And now with Surface Dial's support of custom interactions, the Windows Maps app not only supports interacting with the Windows Ink Toolbar via Surface Dial, but also enabled multi-modal interaction with the Map canvas controls (zoom, rotate, & tilt).

Objection handling

Surface Studio: Microsoft CSS Q&A

Q: Which accessories can I use with Surface Studio?
A: Surface Studio comes with Surface Pen, Surface Mouse and Surface Keyboard, but it also works with other accessories like Surface Ergonomic Keyboard, Arc Touch Mouse and Surface Dial. For more accessories that work with Surface Studio, check out https://www.microsoft.com/en-us/surface/accessories/browse or the accessories page for your country.

Q: Where can I set it to adjust screen brightness automatically to suit ambient light?
A: Because Surface Studio is not designed to be a mobile device, it doesn't have the ambient light sensor necessary for an auto-brightness option. You can adjust the screen brightness manually in Settings > Display menu.

Q: Surface Dial slides down the screen even in Studio Mode, doesn't stay put.
A: You can clean your Surface Dial with tape or a sticky lint roller to remove any dust or dirt. This will help it stay put.

Q: Does Surface Studio support Solidworks Realview GPU acceleration?
A: You can run Solidworks on Surface Studio. Your question about the specifics of how their software works with our graphics cards is actually best addressed by Solidworks since their software changes over time and with different versions. You should be able to find their contact information here.

Q: I record video with Dolby 5.1 surround. If I edit on a Surface Studio that uses Dolby 2.1 Stereo, will it still output the 5.1 sound on a finished DVD?
A: The Dolby 2.1 Stereo spec you saw is merely a reference to how many speakers are in the device (2 speakers and one subwoofer, hence 2.1). The output of your work depends on what program you use to edit and render the video, as different programs have different settings for audio rendering. Programs like Adobe Premiere Elements or Windows Movie Maker can enable 5.1 audio.

Q: Why does 'X' program appear very small?
A: Programs like Sketchbook Pro may appear small. One resolution is to set the scaling to 100%, but this may adversely affect other programs. The best solution is to contact the support for the app or program.

Q: Why didn't you make a model that offers only SSD Drives? Slow spinning hard drives slow the machine down; I'd buy Studio if I could get it with an SSD. [OR] Why doesn't it have more powerful graphics?
A: Thank you for your love of Surface and for taking the time to share this feedback with us. Input from Surface fans like you is core to making our products better and better. If you have other feedback, I'd encourage you to share it on our Feedback Hub (www.microsoft.com/en-us/store/p/feedback-hub/9nblggh4r32n) so it can go directly to our engineers.

Q: Why doesn't Surface Studio have more powerful graphics?
A: Thank you for your love of Surface and for taking the time to share this feedback with us. Input from Surface fans like you is core to making our products better and better. If you have other feedback, I'd encourage you to share it on our Feedback Hub (www.microsoft.com/en-us/store/p/feedback-hub/9nblggh4r32n) so it can go directly to our engineers.

Q: Will there be a 'version 2' of Surface Studio?
A: We're so glad you're excited about Surface Studio! We don't have any news to share right now about future products, but we encourage you to stay abreast of our news via the Surface Twitter, Surface Blog, and Surface Store.

Q: Why is there not a student discount for Surface Studio?
A: We love students who love Surface! You can find all our discounts and special offers for students here (or at the comparable page in your country). Our offers are constantly changing so please check back often.

Q: Can I get Microsoft Complete for my Surface Studio after I've bought it?
A: Yes, if you live near a Microsoft Store, you can purchase Complete for up to 45 days after purchasing your Surface Studio. To do so, please visit a Microsoft Store location with your Surface Studio (even if you purchased Surface Studio elsewhere or online). If you're not near a store, please buy Complete in conjunction with your purchase. (It's not purchasable afterwards outside of our physical stores.)