CHAPTER 4

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What's New for End Users?

So far in this book I've shown you the new headline features in Windows 10, including the Cortana personal assistant and various features coming to Windows 10 smartphones. The question remains, however: What will Windows 10 actually be like to use on your PC?

Microsoft has made quite a bit of noise about their productivity focus for this new operating system, and I've mentioned it in these pages on more than one occasion.

Whether you're using your PC at home or at work, you don't want to be hamstrung by an interface that's difficult to use or OS features that aren't discoverable or intuitive. In this chapter, I'll guide you through what's new and improved on the Windows desktop and show you how it'll make a positive impact on your PC use.

Multiple Desktops

Unless you're using a small Windows tablet or you just use Windows on a phone, you'll spend much, if not all, of your time on the desktop. When you start Windows 10, all appears much as before, with the Taskbar along the bottom of your screen, a Windows key in the bottom left, and the system tray and clock in the bottom right.

Don't be fooled though, as major and significant changes have been made to the desktop in Windows 10. Each change is either a refinement of an existing feature or something new entirely.

The ability to have multiple desktops on a PC has been a feature of GNU/Linux for years, and many plug-ins have existed for Windows to allow you to add the feature. Windows 10, however, is the first time Microsoft has natively included this much-requested feature in the OS. It's run from an icon on the Taskbar, and you can identify it by two rectangular blocks, one in front of the other (see Figure 4-1).

Figure 4-1. *You can launch multiple desktops from the Taskbar*

Clicking this icon will display all your open windows as thumbnails while also displaying a dark bar across the bottom of your screen with an *Add a desktop* button in its center (see Figure 4-2).
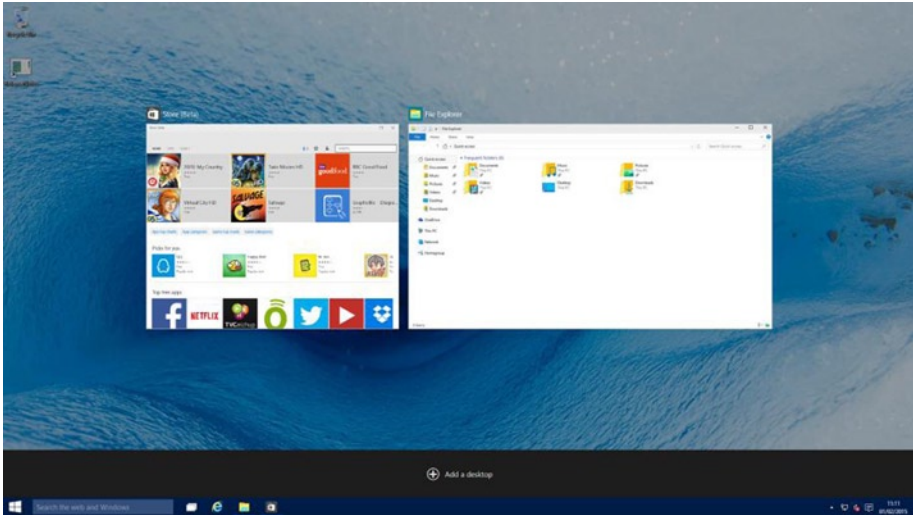

Figure 4-2. *The Add a desktop button is bottom center on the screen*

When you have multiple desktops open, they will appear as small, live thumbnails on this dark bar (see Figure 4-3).
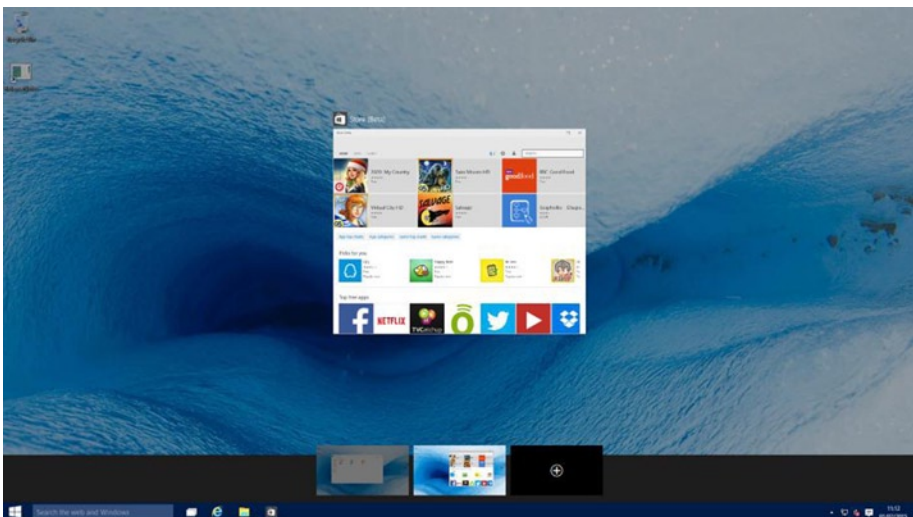

Figure 4-3. *It's simple to manage multiple desktops in Windows 10*

The methods for moving apps between desktops hadn't been finalized in Windows 10 by the time I wrote this, but right-clicking (touching and holding) an app thumbnail will display an options menu, in which a move option is available. It will be possible in the final release of Windows 10 to use a keyboard combination shortcut to move apps to different desktops, and it's also expected that you'll be able to drag and drop apps to different desktops.

You can close an entire desktop by clicking the Close icon on its thumbnail, which appears when you mouse over the icon. The touch method for closing a desktop has not yet been finalized. Closing a desktop doesn't mean any apps open on that desktop will also be closed. When you close a desktop, any open apps are automatically moved to the nearest open desktop.

Multiple desktops can be extremely useful, especially in the business space. For example, when working in my home office I will have Internet Explorer and Outlook open on one desktop, Microsoft Word for writing on a second, and perhaps a couple of virtual machines for testing as well as screenshots open on a third.

Alternatively, you could have your work apps open on one desktop, and Amazon and Minesweeper open on another (though when the time comes for a meeting with your employer about this, you didn't get the idea from me).

The Return of the Start Menu

One of the largest criticisms of Windows 8 was the removal of the Start Menu from the desktop, and its replacement with the full-screen *Start Screen* and the All Apps View.

When the Start Menu was first introduced in Windows 95 (yes it really is that old), it received instant praise, and when it was refined further in Windows Vista and Windows 7 so that huge fly-out menus didn't appear from the All Programs link, it became universally popular. Well, you'll be delighted to hear that the Start Menu is making a triumphant return in Windows 10 and has been refined yet again (see Figure 4-4).
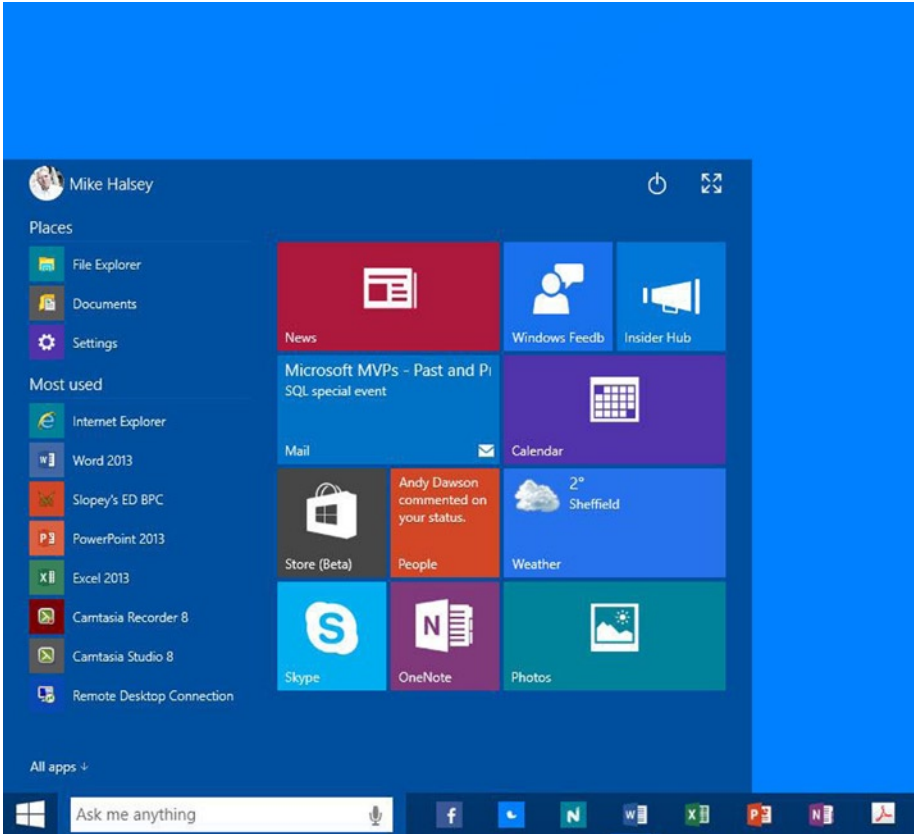
Figure 4-4. *The Start Menu in Windows 10*

I've got to be honest—I never personally liked the Start Menu after Windows 7 was released, as in many ways pinning app icons to the Taskbar and launching files from their jumplists is a significantly faster way to launch any app in Windows.

I've also harangued Windows program managers over the years to include the ability to create Taskbar program groups, where you can drag one app icon onto another to create a pop-up apps group. They told me they'd considered it, but they haven't implemented it yet.

So what's new with this changed Start Menu, and are the changes an improvement? The first thing you'll notice is that tiles for Universal Apps are now pinnable to its right side. These are completely optional, and if you want to use the Start Menu with just your desktop programs and no pinned Live Tiles, you can do just that.

Should you want some Live Tiles, however—and I'll detail in a minute a good reason why you might—they can be resized in the same way as on the Windows 8.1 Start Screen and dragged around to rearrange them, even into different tile groups.

Live Tiles can be generally useful because of the information they provide. In addition, being able to press the Windows key and, at a glance, see the headers for your latest received emails as well as the news headlines and weather can not only help keep you more informed, but can also boost your productivity since you might need to open those apps or news websites often.

On the Windows 7 Start Menu, options for various PC locations, such as your documents and computer File Explorer views, the Control Panel, and Devices and Printers, were found in the right panel. These have now been moved to the top left of the Start Menu in a *Places* section.

Beneath this is the list of your *Most Used* apps and then finally any *Recently Installed* apps will appear. The *All Apps* button sits in the bottom left of the Start Menu and presents a list of all the apps installed on your PC in a way that will be instantly familiar to users of Windows 7.

In the final release of Windows 10 these views will be highly configurable, just as they were in Windows 7, with apps viewable in a variety of different ways. You can also drag Universal Apps directly out of the All Apps list into the tiled area on the right of Start Menu.

■ **Note** It's expected, but has not been confirmed, that in the final release of Windows 10 you will be able to drag Universal App tiles onto the desktop, where they can be pinned and used as live information widgets.

There are three more buttons at the top of the Start Menu. In the top left is your user picture, which you can click for options to change your user account settings, log out, or lock the PC. At the top right of the Start Menu are a power button—with Sleep, Shut down, and Restart options—and a maximize button, which will toggle the Start Menu between a full-screen mode and a windows mode.

In an early build of Windows 10 the edges of the Start Menu could be grabbed with a mouse and dragged around to resize it. This is useful if you have a lot of tiles pinned to the Start Menu, but the feature was removed for the builds used to write this book. Hopefully this feature will see a return for the final release of the OS.

Improved App Switching with Task View

It might seem obvious to us now, but switching between running apps in Windows versions before Windows 10 was often hindered by the small thumbnail sizes of the apps. The Flip 3D view of Vista provided large thumbnails, but wasn't very popular with users, and so Windows 7 reverted to just the standard Alt-Tab way of switching between open apps.

Windows 10 does make this app switching easier, however, simply by making the thumbnails larger (see Figure 4-5). They're also live, so you can see exactly what's going on in the apps at that time.

Figure 4-5. *Improved app switching in Windows 10*

You'll also see in the figure that the apps are appropriately and fully labeled, making it easier to identify what's what. I don't know about you, but if you've had multiple File Explorer windows open, switching between them and finding the right one in the past has been a hit and miss affair.

Task View can also be controlled with gestures from your laptop's trackpad, and I'll detail how to do so later in this chapter.

Four-Way Snap!

I don't know about you, but I loved the desktop Snap feature when it was introduced in Windows 7. Being able to quickly snap two windows to the left and right side of the screen so I could transfer files or compare two web pages or documents, and then snap them away and have them revert to their original size, was hugely useful.

I always felt it limiting, however, that this only worked with two windows. I often have to simultaneously shuffle video and other files between different drives on my PC as well as network storage locations. Well, the good news is that Snap has been improved in Windows 10 so that it now supports four-way snap (see Figure 4-6).
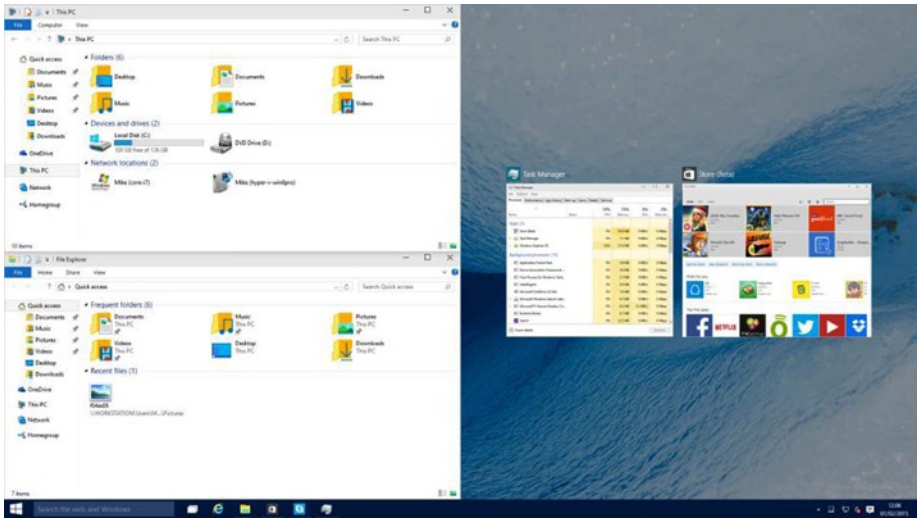
Figure 4-6. *Windows 10 supports four-way snap*

You can still drag apps to the far left and right of your screen to use snap in the two-way split-screen view as before. In addition, you can drag apps to the four corners of your screen to snap them top left, top right, bottom left, and bottom right.

When you snap a window in Windows 10, the remaining space will show thumbnail images for your remaining open apps. If you click one of these it will automatically fill the remaining space in a two-, three-, or four-way split view. Alternatively, you can click one of the apps that's already snapped, or the desktop, to return there.

Search from the Taskbar

In Chapter 2 I spoke about Cortana's inclusion in Windows 10 and of the productivity benefits it can bring. Not all countries will benefit from Cortana when Windows 10 launches, however, and some users will see a search icon instead.

Regardless of whether or not you use Cortana in Windows 10, you can change the Taskbar icon to a search box by right-clicking it and choosing the appropriate option, enabling you to search both your PC and the Internet directly from the Taskbar (see Figure 4-7).

Figure 4-7. *You can search directly from the Taskbar*

Searching from this box works in exactly the same way as I detailed in Chapter 2, and it can save valuable time since you don't have to open a web browser to navigate to Bing, Google, or another search engine.

■ **Note** For people using Windows 10 on a touch device, such as a tablet, the desktop on-screen keyboard now supports full autocorrect and predictive text. These have been features in Windows Phone for a while, and it's great to see them used throughout Windows 10.

Improved File Explorer

It should be noted that File Explorer in Windows 10 is going through something of an upheaval, and so the version seen in the Technical Preview is far from the finished product.

One interesting addition, however, is that by default (though you can change this) the main view when you open a File Explorer window is the new *Quick Access* pane (see Figure 4-8).
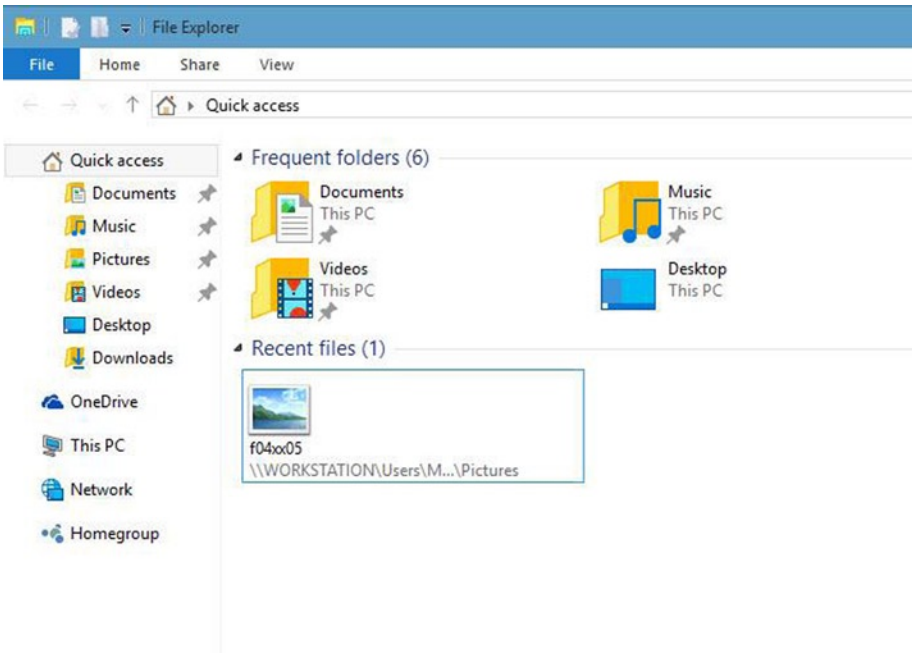

Figure 4-8. *File Explorer now opens into a Quick Access section*

This new view will show you the most recently utilized folders, disk locations, and files, enabling you to quickly gain access to the documents, files, and locations you are currently working with.

Anything can be pinned to the Quick Access view, which replaces the Favorites pane from Windows 7 and Windows 8.1. This includes folders, local and network drives, and files. Pinning an item to the Quick Access section doesn't just display it in the tree view on the left side of File Explorer windows, but also in the main view.

Otherwise, File Explorer is currently unchanged, though we can expect refinements to include better touch support, likely with Ribbon UI enhancements that space out buttons and options for when Tablet mode is activated on the PC.

Touch and Trackpad Gestures

Whether you will use Windows 10 with a touchscreen or on a laptop, you'll be using touch, and in this new OS the ways in which you can interact with the OS are benefitting from welcome improvements. Not all the gestures for Windows 10 have been finalized, but Microsoft is expected to further refine the touch gestures and controls for the OS.

Additionally new trackpad gestures will be available to laptop users. These include but are not limited to the following:

You can **Show [the] Desktop** with a three-finger swipe downwards on the trackpad. This gesture will automatically minimize all the windows on your screen (useful, perhaps, if the boss walks past while you're shopping on Amazon).

You can also reverse this (after the boss is out of view) by swiping upwards with three fingers on your trackpad to **Restore [all] Windows** on the desktop to their previous locations.

To open **Task View** in Windows 10 and see large thumbnail windows of all your running apps, swipe upwards with three fingers on the trackpad, the same gesture used to restore all your minimized windows.

Once in the Task View you can swipe left and right on the trackpad to move through the available apps, keeping your fingers on the trackpad while you do this. To select an app, lift your finger off the trackpad.

Overall, gestures such as multi-touch pinch-zoom controls are being improved upon for both touch and trackpad use, and we can expect to see additional gestures announced by Microsoft nearer the final release of Windows 10.

Single Sign-On

One of the improvements Microsoft made to Windows 8.1 and Windows Phone 8.1 was the ability to automatically sync your website usernames and passwords between various PCs using a Microsoft Account.

With Windows 10 they want to extend this functionality further by providing new single-sign-on (SSO) extensions. Full details of this are sketchy, but the aim is to make it simpler to log into multiple services that require the same username and password.

This will certainly work with a Microsoft Account and Windows Domain services, such as Azure and Active Directory. It remains to be seen if the functionality will also include other companies that provide multiple services, such as Google and Apple.

The final aim of SSO is that you will only be prompted for your username and/or password when security is crucial, for example when changing your account and billing settings with Microsoft.

OneDrive and OneDrive for Business

Microsoft is fully behind its cloud services strategy, and products including OneDrive and Office 365 are crucial to the company's prosperity going forward.

In recent years the company has made great improvements to its OneDrive cloud sync and backup service. These have included expanding the storage available to consumers and businesses, improving maximum file size limits, and so on.

One of the best, and most envied, OneDrive features in Windows 8.1 was its use of file placeholders. You could have tens or even hundreds of gigabytes of files stored in your OneDrive account. On a desktop PC with a large hard disk it wouldn't be a problem to also keep a local copy of these files, but on a tablet or Ultrabook, which typically come with very small amounts of storage, you could also keep all your files and access them whenever you needed. Windows 8.1 did this by using placeholders instead of the actual file. These placeholders would look like the file, report the correct size of the file, and so on, but instead they'd just be shortcut links to the actual file that was stored in your OneDrive account.

When you opened a placeholder, assuming you had a live Internet connection, the actual file would be downloaded and then stored and synced locally from the PC until such time as you right-clicked on it and told Windows to only make it available offline again. This was a tremendously clever idea, and it's being further refined in Windows 10 with the addition of support for Microsoft's OneDrive for Business service.

Previously, to use OneDrive for Business you needed to download a separate sync engine, which has remained separate until now. Windows 10 will unify them into a single sync engine so both can be managed quickly and simply from within Windows 10 itself.

The full ramifications of this aren't yet clear, though it's unlikely you'll be able to combine the two services into one large storage pool. OneDrive for Business is not without its flaws, however, a major flaw being that after a reinstall or reimage of the PC you have to resync the entire file library to your PC again, which is not something that the consumer version of OneDrive suffers from.

Hopefully OneDrive will take on new functionality, and the current limits of the OneDrive for Business sync engine will be eradicated in the final release of Windows 10.

Gaming and Xbox Streaming

Gaming has always been extremely important to the PC, and recent research has showed that game-development companies still place the PC at the top of their priority list, ahead of consoles such as the Xbox One and Playstation 4. This is despite the apparent focus placed on smartphone gaming.

With Windows 8, Microsoft introduced new Xbox features, though these were limited to a couple of apps and some games that could synchronize achievements with your Xbox Live account.

Windows 10 will take gaming to the next level with a new graphics rendering engine, DirectX 12, partnering with a truly cross-device operation (see Figure 4-9).

Figure 4-9. *Cross-device gaming is improved in Windows 10*

New features include the ability to play the same game with a friend simultaneously on desktop, tablet, and/or the Xbox One console. By far the standout feature for gaming in Windows 10, however, is the ability to livestream gameplay from your Xbox console to a tablet or PC running Windows 10. This will allow you to play your Xbox One games on almost any Windows 10 device, and because the graphics are streamed, the device you're playing the game on doesn't need a lot of graphics power of its own. This streaming is achieved over your home Wi-Fi network and will enable you to use a new generation of Xbox One controllers with multiple PC devices.

New Apps Coming to Windows 10

As you might expect, the launch of a new operating system will also include a refresh for the Universal Apps bundled with and available for your PC. Generally, updates will be available for all the main apps, including Mail (which will become Outlook), People, Calendar, Photos, Videos, Music, and more.

Microsoft hasn't said much about what new functionality these new apps will bring or how they may tie into the new store that Microsoft has said will include "other types of digital content" alongside apps and games.

One app they have spoken about, however, is the new Photos app, which includes two very interesting new features. The first of these is auto-enhance mode, which will apply simple and non-destructive enhancements to your photos to improve skin tone, color balance, contrast, or brightness.

A new albums feature will automatically aggregate the photos you have stored on your PC(s), phone, and OneDrive account into a single hub where they will be automatically sorted and categorized depending on the people in them, the location they were taken at, and so on.

This is a feature have I used extensively myself over the years by manually tagging photos in a custom pictures library in File Explorer. Windows 10 doing this on its own and letting me search automatically for photos taken in Germany or featuring my friend Larry will make organizing and searching our ever-expanding photo libraries much simpler.

Microsoft HoloLens

Microsoft's major Windows 10 announcements in January 2015 were completely overshadowed by the unveiling of the HoloLens headset at the end of the event.

The HoloLens, a prototype of which can be seen in Figure 4-10, is a natural and logical extension to the Kinect sensor and several other Microsoft prototype technologies that would have allowed us to interact with the world around us in different ways.

Figure 4-10. The HoloLens headset

The aim of HoloLens is two-fold. First, as seen in Figure 4-11, the headset will enable the overlaying of virtual objects in the real world, such as playing a large video on the wall of your living room, or placing a social media readout on your refrigerator door.
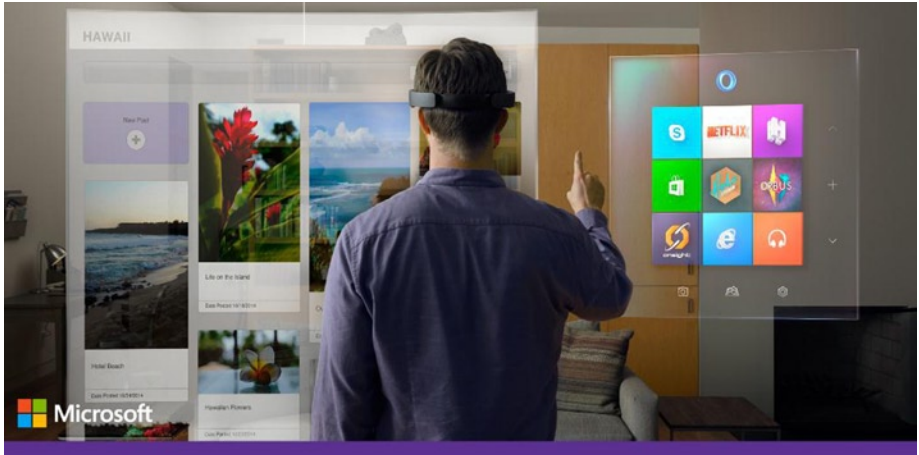
Figure 4-11. *Interacting with the world around you with HoloLens*

Second, the headset will allow you to interact with your physical environment and other people in new ways, such as chasing monsters around your own living room, creating a virtual Minecraft castle on a table, or building a 3D model for printing in thin air.

Additionally, the demos for HoloLens showed people working on Windows 10 tablets while being able to see what the wearer of the headset was seeing, and then annotating objects in that view with instructions, such as which pipe to unscrew or where in the engine they could find the manifold.

As you move your head in this virtual world the overlaid objects remain static, giving them a sense of real substance, and each can be interacted with using hand and finger gestures (though not actually touched or grabbed... yet!).

Reviewers who've had a chance to use HoloLens have described it as extremely realistic and even "magical," with the virtual objects not appearing as though they're on a screen, less than one inch from your eyes, but instead projected directly onto a real object across the room.

HoloLens will be out in the "Windows 10 timeframe," according to Microsoft, which puts it sometime in the next couple of years. Pricing has not been announced, and the success of the product will sit entirely with the quality and available of apps.

As a media or educational device, however, the HoloLens shows great potential, and I personally can't wait to try one for myself.

Summary

It's clear that the new and updated features in Windows 10 just keep coming, and the focus Microsoft has placed on helping us all to achieve more, faster and more effectively than we have before, be that at home, college, or at work, is obvious.

The workplace is a hugely important part of Microsoft's business, and all the user interface improvements in the world won't be enough to convince companies to upgrade. With this in mind, I'll detail in the next chapter what Microsoft is doing for business, with productivity, deployment, security, and apps, to help them get more from their PCs while creating the stability, scalability, and robustness that they demand.