

The Xbox One is one of the top contenders for the best selling video game console in the world. With over a total estimated units sold coming in at a whopping 42 million since its introduction in 2013, the Xbox has become a household name in the United States and across the world¹. The design process behind this complex product is nothing short of amazing. From the way that it looks on the exterior, to the signature controller design that you use to navigate the user-focused menus and play games, all the way down to the internals of the hardware. The Xbox One itself is an entirely unique user experience that Microsoft has created for the masses to enjoy. The amount of time, money and design failures that must have gone into this product is immeasurable when considering all the different aspects of design that make up just this one product.

Let us start by observing the external design of the Xbox One. The original release version that hit shelves in 2013 was curated with a mixture of black and gray colors, with a larger square vent on the top of the device meant to displace heat out of the system. When rationalizing this design, it was meant to seem more “entertainment oriented” and “simplified” when comparing it to the older versions of the Xbox, specifically the Xbox 360 which was the model which directly preceded it. Microsoft also removed the traditional glowing rings that display the power status of the Xbox and replaced it with an LED backlit power button in hopes of adding to the simple design aesthetic. After a few years, a major design refresh of the Xbox One was released in 2016, rebranded as the Xbox One S. This newer version of the device had a few major selling points without even considering the internal specifications. First and most obviously, the refreshed device was 40% smaller than the original Xbox One and the color scheme completely changed from darker blacks and grays to a modern-esque bright white with black undertones. The vent on the top of the device was designed and made into a circle with machine adorned holes added for aesthetic value². The new and improved device looked much sleeker compared to the older model, which undoubtedly drove sales and encouraged double dipping .

Now that we've covered the basics of the Xbox One's external design, we can move on to one of the most important pieces of the device itself, the controller. The controller is the main method for how a user of the system interacts with the console and the software within. Designers at Microsoft wanted to keep the overall layout of the controller the same as the previous iteration, but wanted to continue to improve it and make it the best console controller on the market. Extensive user experience research was performed in order to come up with the final rendition of the Xbox One controller. Microsoft “invested over \$100 million into refining the controller for the Xbox One” in order to improve it's design over the Xbox 360 controller which preceded it. Designers dabbled with many new and interesting ideas including adding speakers or screens to the controller. Designers even thought about adding the possibility for the controller to produce odors based on events that might occur during gameplay. Although many of these concepts ended up scrapped, a lot of new designs went into this product. Some examples being completely redesigned grips as well as bumpers and triggers with the purpose of being smoother and more ergonomic over previous versions. Engineers crafted a brand new type of motor to place in the triggers of the controller, aptly named “Impulse Triggers”, which allow for complete control over the physical feedback the user receives due to an ingame event. This response is multidirectional which allows for limitless possibilities when it comes to designing vibrational feedback³. A major design change that occurred from the Xbox 360 to the One controller scheme was the removal of the 8-way directional

¹ D'Angelo, William. “Switch vs. PS4 vs. Xbox One Global Lifetime Sales - March 2019”. VGChartz. <http://www.vgchartz.com/article/437098/switch-vs-ps4-vs-xbox-one-global-lifetime-sales-march-2019>, (June 1, 2019).

² “Xbox One”. Wikipedia. https://en.wikipedia.org/wiki/Xbox_One, (2019).

³ “Xbox One Controller”. Wikipedia. https://en.wikipedia.org/wiki/Xbox_One_controller, (2019).

Thor Coleman

Microsoft and Xbox's Usability Design Practices

11-19-2019

pad design in favor of a 4-way design, which many of Microsoft's competitors were already utilizing. They made this change partly due to feedback from a specific group of users. Fighting-genre gamers who thought the previous design was clunky despite the fact the 8 directional pad was originally designed with them in mind. The majority of Xbox users actually ended up happier with the 4-way design as it's easier to navigate menus, both in games and in the Xbox operating system, with 4 directions instead of 8. They listened to user feedback and the final version was that much better because of it. Microsoft also recently announced the Xbox Elite 2 controller, which includes all kinds of modulation features that many people wouldn't normally even think about needing or wanting, which is targeted at the serious Xbox gamer⁴.

Now, many people these days might believe that the Xbox One is just for playing video games, but since the devices beginning it has evolved into a all-in-one entertainment system for anyone to enjoy. The most popular streaming apps like Netflix, Hulu and HBO are all available on the Xbox operating system. You can even use it to browse the internet or find videos on YouTube. This software that Microsoft has created was crafted with usability for the masses and connectivity within their ecosystem at its core. The Xbox user interface is grid-based on a 4-directional plane with the whole menu being very geometrical⁵. Microsoft has a specific design philosophy when it comes to the products they release which they call their Fluent Design program. All of their devices and products are designed with each other in mind⁶. For example, if you have a Windows personal computer and play video games on it, you can connect to the Xbox ecosystem through the computer and message friends, play games across platforms etc. They have support as well as documentation for designing all kinds of user interfaces for products that cross business borders like iOS and Android based on their design principles.

Microsoft is all about usability, power and simplicity when it comes to their design process. It's evident throughout their massive collection of both software and hardware based intellectual property. Software that Western students and faculty use on a day to day basis like Office 365 is constantly being put under the microscope by designers and psychologists and users alike in order to make improvements so everyone is able to have access to this technology⁷. About one year ago, Microsoft released the Xbox Adaptive controller. This controller allows for people who might be suffering from a physical disability or has limited mobility to play video games just like anyone else would. They designed this controller to accept all different kinds of devices, either they themselves produce or third-party inputs, that translate to button inputs on the controller. Inputs are completely customizable and made to be as user friendly as possible⁸. None of Microsoft's competitor companies have any kind of controller like this that would make it possible for people with disabilities to use their systems easier and more effectively. When it comes to releasing a controller designed for a smaller demographic like this that's never been done before, Microsoft is taking a risk as a company in a sense. Risky design can be admirable and this is definitely a case where that holds true while also putting the company at an advantage over their competition.

⁴ "Xbox Elite Wireless Controller Series 2". Microsoft.

<https://www.xbox.com/en-US/xbox-one/accessories/controllers/elite-wireless-controller-series-2>, (2019).

⁵ "Xbox One System Software". Wikipedia. https://en.wikipedia.org/wiki/Xbox_One_system_software, (2019).

⁶ "Fluent Design System". Microsoft. <https://www.microsoft.com/design/fluent/>, (2019).

⁷ Friedman, John. "Designing for Power and Simplicity". Medium Corporation.

<https://medium.com/microsoft-design/designing-for-power-simplicity-9cddec615567>, (2019)

⁸ "Xbox Adaptive Controller". Microsoft.

<https://www.xbox.com/en-US/xbox-one/accessories/controllers/xbox-adaptive-controller>, (2019).

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Microsoft and Xbox's Usability Design Practices

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Xbox, like every other Microsoft product, is meant to appeal, be useful and most importantly, be usable by everyone. Microsoft didn't just create the Xbox One's user experience, they curated it and they are continuing that process now with all of their products and services. As a company, they have these values at the forefront of their process. Microsoft's design principals are admirable and other companies should follow in their footsteps in the sense of expanding usability to the largest possible audience, even smaller more niche demographics. Accessible design should be there for everyone to utilize, especially as technology continues to expand at an exponential rate. It's the job of designers to make these tools available for everyone to use intuitively. Just the fact that Microsoft created a controller specifically designed for those with motor impairments makes me as both a designer and consumer appreciate their process and Microsoft as a whole even more. As a user myself, I love the Xbox controller and the entirety of the Xbox user experience. I use the Windows operating system, OneDrive, Outlook, Excel, PowerPoint and other Microsoft software everyday. The power of simple and sleek design as well as powerful and captivating user experiences are openly evident when taking a closer look at the Microsoft design process. They do a wonderful job of evoking a sense of partnership and unity with their user base. And with everything that goes into all of these systems we utilize everyday, so many people will never realize what goes into creating these experiences that they're having.