



Xbox Adaptive Controller OOB: Creating a Fun and Accessible Video Gaming Experience for All!

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INTRODUCTION

Gamers with disabilities may struggle with barriers in video gaming, such as the inability to distinguish important visual cues, hear critical audio, or adequately move controllers (Porter & Kientz, 2013), and roughly **30% of gamers in the US** identify as disabled (Le Ngoc, M.T., 2021). Devices designed to accommodate their impairments need to be easy to operate, and easy to set up.

- Early interactions with a new product shape buyer attitudes toward it, and may determine its marketplace performance (Gilbert et al., 2005)

This study evaluates the **Out-of-Box-Experience (OOBE)** of the Xbox Adaptive Controller for people with varying levels of disability and gaming experience

- **15 participants**, from the ERAU-Daytona Beach campus.

- Researchers conducted **semi-structured interviews**. Participants were asked:
 - About their experience with video games and adaptive technology.
 - For their **expectations** of the packaging and contents of the Xbox Adaptive Controller and Logitech Gaming Kit.
 - To **unbox** and put together the Xbox Adaptive Controller and Logitech Gaming Kit.
 - For their **impressions** of the packaging and contents of both devices.



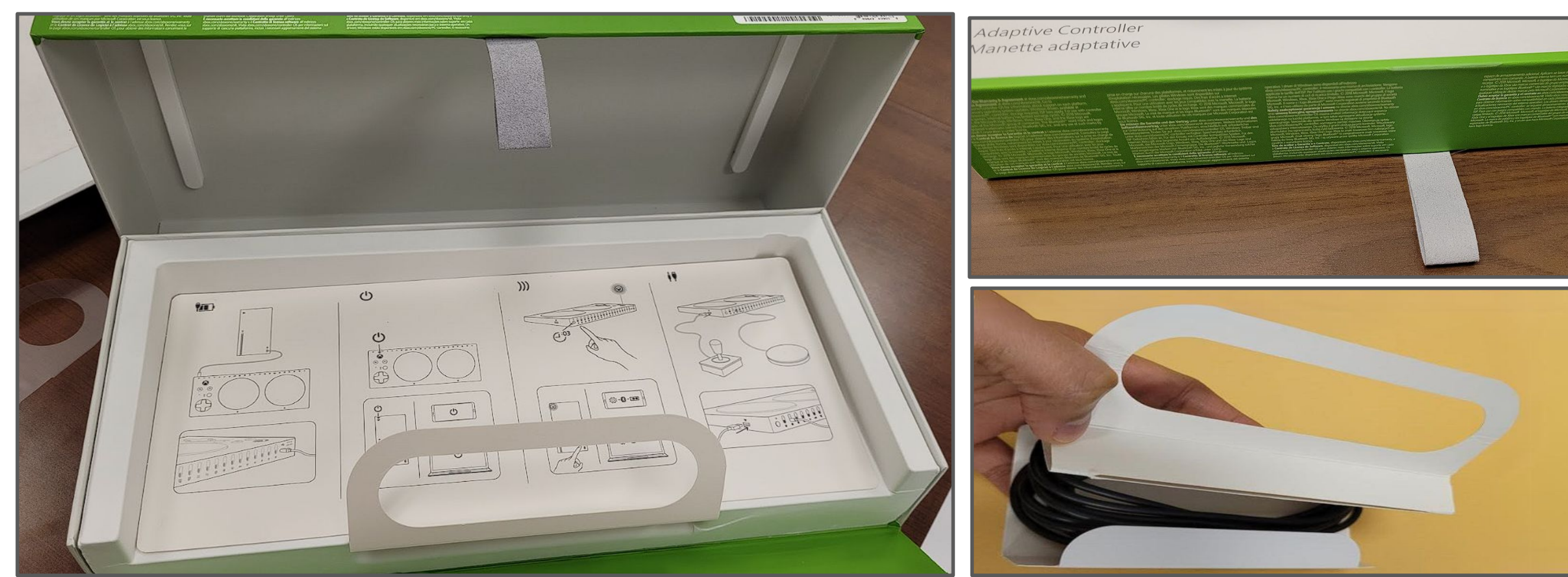
Participants were then asked to **set up** the adaptive controller as desired for a play session of Monopoly Go™ on the Xbox One console.

XBOX ADAPTIVE CONTROLLER

The Xbox Adaptive Controller is an adaptive technology designed by Microsoft. It comes with 19 different ports for accessibility switches that may accommodate a number of motor impairments.

FINDINGS

- Had heard of the term “adaptive controller” before participating, but had not used an adaptive controller before.
- Expected to be able to buy this controller in brick-and-mortar stores and online. Thought that an adaptive controller would cost more than a standard controller.
- Found the instructions and charging cable, but often overlooked paperwork on the bottom of the box.
- Appreciated that the instructions for the adaptive controller were placed towards the top of the box, as it made it easy to see and access.



Left: Pictorial Instructions with handle Right Top: Pull Tab to open the Xbox Adaptive Controller Right bottom: Wrapped Charging Cord

FINDINGS (CONT.)

- Appreciated the availability of a pull tab to open the box, and that the charging cable didn't have a twist tie on it, as the packaging method made it easier for participants to access the materials.
- Reported that the packaging of the adaptive controller was of good quality, easy to open, well-organized, sturdy-looking, and minimalistic. They also thought the look of the controller fit with other Xbox products.
- Wished that there were more written instructions, symbols, and available languages, as they thought it was difficult to understand the diagram. Users also wished that there was a link to a video that could aid with the set-up process.
- Wished it was clear that you had to purchase additional switches to use the controller for all games.

LOGITECH GAMING KIT

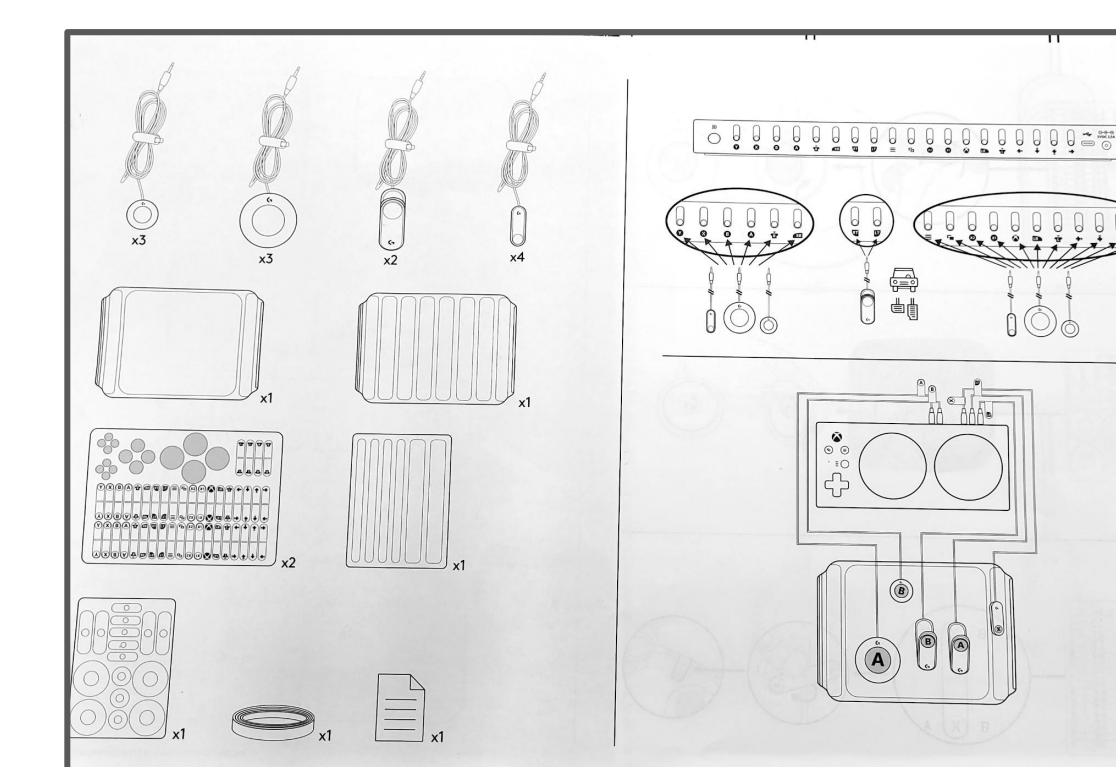
The Logitech Gaming Kit comes as an add-on accessory, offering a wide variety of additional switches for the user to customize their controller.

FINDINGS

- Enjoyed the addition of stickers to keep track of the function of the switches.
- Unboxing was easy and users were satisfied with the contents of the box.
- Confusion on how the switches would interact with the adaptive controller.
- Felt overwhelmed by the amount of switches included.
- Did not like the inclusion of graphic-based instructions; users could not clarify any questions.



Contents of Logitech Gaming Kit



Graphic-based Instructions for the Logitech Switches

SET UP AND GAME PLAY

FINDINGS

- Found the game play using the switches and the controller very easy.
- Liked that the buttons were easy to use and enjoyable to press.
- Largely preferred to use the small, rectangular switches for the movement arrow inputs. Users often consulted the controller instruction card to determine which switches to use, rather than immediately customizing to their preference.
- Had a hard time realizing that they could use the big A and B buttons on the adaptive controller rather than plugging in switches for those operations.
- Frustrated with set up and use of the X key. Users either could not find where to plug it into or they could not decipher which switch to use.
- Were confused about connecting via Bluetooth and often gave up attempts to connect to the console wirelessly.
- Cord management proved to be an issue for many.



Gameplay from Monopoly Go™



Controller and switch set up by a participant

TAKEAWAYS

Strengths

- Easy to open, well organized, packaging designed for people with disabilities to open more easily
- Looked stylish and fit in with the aesthetic of other Xbox products
- Stickers were helpful for labeling and allowed participants to customize to their preferences

Areas of Improvement

- Provide text or videos along with the graphics in the instructions
- Include more information about what switches to use, how to use them, and where to purchase
- Include examples of set ups to show different customization options
- Provide clear labeling that users likely need to purchase more inputs than are built in to the Xbox Adaptive Controller
- Improve labeling on the Xbox Adaptive Controller, so users more readily understand how to use built in buttons
- Address cable clutter