



Tec-Ed

*Connecting People
and Technology!*

Tec-Ed's user research services deliver vital insights about the world of your customers. Together with your team, we observe and analyze people's actual experiences and behavior with your products. Based on user data, we create innovative designs at successful companies around the world.

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Case Study: Nextivity Smart Repeaters UI Design

Background

- **Our Client:** Nextivity, Inc. is a leading developer of in-building cellular technology for optimizing the transmission and reception of wireless signals
- **Product:** Smart repeaters optimize the indoor transmission and reception of wireless signals, eliminating in-home dead zones while protecting the integrity of the carrier's network
- **Challenge:** Create intuitive user interfaces for the Window Unit (WU) and Coverage Unit (CU) so consumers can install them without calling customer support

Objectives

- Wordless UIs for international use of product units
- Ability to alert if units are too close to or far from the WU, in a viable location, or other factors that impacts performance
- Provide quick and easy product installation with minimal instructions for all target users
- Increase subscriber retention and satisfaction for wireless carriers

Methodology

- Discovery and background research into the technology and discarded UI design ideas
- Creation of personas and installation scenarios
- Iterative design and testing of UIs with surrogate users
- In-home usability testing of out-of-box experience and product installation with non-technical wireless consumers

Design Solutions

- Employ wireless tower and signal bars, familiar from cell phones, used on WU—more bars, better carrier signal
- Light indicators specify successful positioning of CU—red CU with a directional arrow: move it; green CU: good coverage
- Add a coverage digital indicator close to the CU's house indicator to determine coverage level

Results

- Simple, elegant interface
- Intuitive, "plug-and-play" product installation
- Addition of a 1-page quick-start, with tips on placing units, boosted installation success



"The combination of Tec-Ed's exceptional design and usability testing services enabled us to have confidence the user interface will minimize the product's home installation barriers—critical to our business model."

—George Lamb, VP, Operations and Support, Nextivity, Inc.

