

# Sennheiser Accelerates Mobile App Development by 40% with NativeScript

CASE STUDY



**INDUSTRY**  
Consumer Goods and Services

**PRODUCT**  
NativeScript

**SUMMARY**  
Building and maintaining mobile apps natively with two separate codebases was a time-consuming process, so Sennheiser switched to a native cross-platform development approach via NativeScript.

## Challenge

Sennheiser is a German audio company that designs and produces a wide array of high-fidelity audio devices for personal and professional use. As a producer of high-end goods, it is critical that Sennheiser's applications also match the quality of its products and deliver an engaging digital experience.

To get a consumer-grade user experience, Sennheiser originally developed its headphone companion app natively for iOS and Android. However, this process was both slow and costly—without any ability to share code, the codebase for the two apps had to be maintained separately. This also created issues when testing new features and delayed releases for both versions.

## Solution

To accelerate the delivery of new features and capabilities for its mobile applications, Sennheiser opted to explore a cross-platform development approach. At the same time, the company was unwilling to sacrifice the native performance and feel of its applications, so the cross-platform development framework needed to deliver on that end as well.

After exploring different cross-platform options, Sennheiser decided to create a proof-of-concept app using both React Native and NativeScript®, an open-source framework for building truly native mobile apps with Angular, Vue.js, TypeScript or JavaScript. Sennheiser ultimately decided to move forward with NativeScript. NativeScript was the more appealing option of the two, providing an architecture that enabled frontend development to be abstracted from backend development for greater flexibility.

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## Results

The first app created using NativeScript was Sennheiser Smart Control, a companion app that enables users to configure their Bluetooth headphones, like the Momentum True Wireless. Users can set options like voice assist, configure the equalizer or turn on noise canceling functions all from within the app. Also, the app can pull new firmware files from the cloud and applies them to the Sennheiser products over-the-air.

The ability to create truly native apps with a shared codebase has helped Sennheiser dramatically improve turnaround times for new releases. Approximately 85% of the total application codebase is shared (namely, the UI and application layer). The UI is essentially 100% cross-platform, which reduces the barrier for creating new UI elements compared to native development.

“NativeScript enables us to just scale the team to cover the three critical areas of the app,” Eismann added. “This is something I haven’t seen in other cross-platform tools, and NativeScript offers the architecture to do this very nicely.”

The benefits of having a single codebase bleed into other areas of development as well. For example, the QA team can write Appium-based UI tests once in a common language instead of having to write tests for two different platforms since the UI code is identical between the two platforms. This reduces testing time by as much as 50%.

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Dirk Eismann, Mobile Software Architect, Sennheiser

With the success of the Smart Control app, other units within Sennheiser are now exploring the use of NativeScript. This would enable Sennheiser’s various teams to share code freely between them, further accelerating the development of innovative digital experiences that help reinforce Sennheiser’s brand image as a leader in its field.

## About Sennheiser

Shaping the future of audio and creating unique sound experiences for customers – this aim unites Sennheiser employees and partners worldwide. Founded in 1945, Sennheiser is one of the world’s leading manufacturers of headphones, microphones and wireless transmission systems. With 21 sales subsidiaries and long-established trading partners, the company is active in more than 50 countries and operates its own production facilities in Germany, Ireland, Romania and the USA. Since 2013, Sennheiser has been managed by Daniel Sennheiser and Dr. Andreas Sennheiser, the third generation of the family to run the company. In 2017, the Sennheiser Group generated turnover totaling €667.7 million.



Create Truly Native Cross-Platform Apps with NativeScript

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