

Why exceptional design is essential

- and yet so difficult to achieve

Intuitive, natural, effortless. When talking about how exceptional products feel to use, it's often easier to describe their sense of 'rightness' as being something spontaneous or organic, rather than the result of careful design. Yet, for Sennheiser's Peter Vestergaard Værum, Head of PCB & Mechanical Development & Audio Engineering, achieving this sense of inherent quality is the ultimate goal of industrial design:

"It's almost an irony, that when design truly succeeds, you barely notice the hard work involved. We break down the barriers for the user, so when they have a product in their hand they simply say, "this, I would like to wear". We specify everything that is put inside the products, so we can be sure the performance is great, but when introducing a new solution, we have to combine the features inside with desirable, effective design to make the user want to use a certain product. Industrial design is important, because when the user even touches a product, they already have a perception of whether it will be good to wear and will be thinking about how they will look in the mirror."

Yet this all-important first impression is only half the battle: successful design must also anticipate the user experience, so the promise of how a product looks and feels is fulfilled, day in and day out.



Designing for effortless productivity

Designed to provide total individual flexibility for office workers, Sennheiser's SDW 5000 wireless headset series, was created to offer this special blend of desirability and performance to help professionals become more effective and more productive. The SDW 5000 serves as a seamless communication hub that connects the user to their computer, desk phone and mobile phone. And this connection is more than just digital: a headset is a truly personal technology that has to offer great ergonomics and comfort. Peter Vestergaard Værum describes how the SDW 5000 series was created from the start to offer three different wearing styles: "Achieving a personalized fit was really important. Some users like to have a headband, some like to have an ear hook, and some prefer to have a neckband. We wanted to ensure that this solution could adapt to the user - and not the other way around."



Peter Vestergaard Værum explains how he and his colleagues considered ease of use from the very start of the design process for the SDW 5000 series. "When you have to put the headset on a base station, it's really important that you don't have to think about which points have to match together - you just simply put it on. That's why we implemented a magnet interface."





This elegant solution ensures that users find storing and charging their headset effortless but, for the designers at Sennheiser, offering this freedom of wearing styles provided a challenge to solve. Peter Vestergaard Værum noted that even though an ear hook is a far smaller element than a headband, the base station's magnetic interface was engineered to ensure that any option could just as effortlessly fit the base station for easy charging, elegant storage and fast access when needed.

Designing for effortless conversations

Created for a new age of ultra-mobile, global businesses, the SDW 5000 Series recognizes the importance of making communication easier. It sets new standards in audio quality through the implementation of super wideband sound in both the speaker and microphone sound-path to ensure more natural conversations. Peter Vestergaard Værum explains that here too, the physical form of the headset and its interaction with the base station has been meticulously designed to complement its function: "No matter how you configure your headset with your personal wearing style it should easily fit to and be picked up from the base station without you needing to make any adjustment to the microphone boom arm. We have to make it intuitive, in order for you to just pick it up, put it on your ear and have a natural conversation with focus on speech intelligibility. This critical aspect is at the crossroads of ergonomics and audio performance and is one of the most challenging aspects of designing the system."

Not that you would notice, when using the SDW 5000. It just feels right.