Benchmark® Case Studies

Sana Health Case Study

Challenge

- Richard Hanbury developed the first device using EEG to save his life after a terrible car accident
- EEG electrodes not viable in a wearable device outside the lab
- Find a proxy for EEG that could work in a scalable device

Solution

- Valencell Benchmark® Sensor System embedded in Sana Health mask for HRV biofeedback
- Now evaluating a combination of HRV metrics for measuring pain, stress, and relaxation

Result

- Product launched in 2020 as general wellness product targeted at stress management
- Great product and customer reviews
- Currently in FDA approval process for several indications, including fibromyalgia

sana | health
Relief made possible.

Sana Health Mask

Sana is a non addictive simple mask and headphones you wear on your head. The device uses audio visual stimulation to increase balance between the left and right side of your brain leading to greater relaxation and pain relief.

What the Valencell sensor allowed us to do was to replace the EEG with the Valencell sensor system on the forehead, which allowed us to look at HRV. We can now use the HRV sensor to work out whether the device (and therapy) is being effective."

- Richard Hanbury, CEO & Founder, Sana Health

valencell™

Jabra Case Study

Challenge

- Follow up the success of one of the first biometric hearables to come to market
- Deliver something never done before – adding biometrics in true wireless earbuds

Solution

- Valencell biometric sensor technology for earbuds for heart rate and fitness assessments
- Close collaboration with Valencell engineering and Biometrics lab for product testing and performance verification

Result

- First TWS biometric earbuds in the world
- Sales continue to exceed expectations 4 years after product launch

Jabra Elite Sport

Jabra Sport Pulse

Jabra is a leader in engineering communications and sound solutions – innovating to empower both consumers and businesses. Proudly part of the GN Group, we are committed to letting people hear more, do more, and be more than they ever thought possible. Through sound and video, we help transform lives.

"We've found working with Valencell to be a great decision for multiple reasons. Valencell's biometric sensor technology is extremely accurate and works very well for the form factors we want to build. It's a comprehensive solution that is helping Jabra bring successful biometric wearables to market."

– Lars Bohn, Application & Partnership Director, GN Audio (Jabra)

Scosche Industries Case Study

SCOSCHE®

Challenge

- First armband HR monitor was not well received by the market due to accuracy issues during high intensity activities

- However, market feedback on the product gave Scosche an indication that there was potential for success

Solution

- Scosche partnered with Valencell to integrate its highly accurate biometric sensor technology into the device
- Extensive testing in Valencell Biometrics Lab showed superior performance in many activities

Result

- Still one of the best optical heart rate monitoring products available today
- Fantastic product reviews - >4 out of 5 stars on Amazon with more than 1100 reviews
- Sales doubling YOY

Scosche Rhythm+ **Scosche Rhythm24**

Founded in 1980, Scosche Industries is an award-winning innovator of consumer technology, power sports and car audio products - committed to delivering superior quality, exceptional value and unmatched customer service.

"Valencell quite simply has the best heart rate sensor technology available today. But it's much more than just the technology itself. It's the complete solution that integrates technology, robust testing and validation, and manufacturing expertise that sets Valencell apart."

- *Steven Sawyer, Head of Product Development, Scosche*

valencell™

GOGO Band Case Study

Challenge

- Develop wearable solution that can identify physiological signals that predict bedwetting is about to occur (not after)

- Device must be comfortable enough for kids to wear during sleep

Solution

- Tested numerous solutions on the market and "only Valencell was able to maintain 90%+ heart rate metrics efficiency"
- Accurate biometric signals from Valencell sensor combined with GOGO Band machine learning algorithms

Result

- GOGO Band's Intelligent Predictive Alarm System (IPAS) achieving 75%+ predictive dry rate – better than any other solution on the market

GOGO Band

Meet GOGO Band, the world's most advanced solution designed to help keep your child dry and stop bedwetting for good.

Working with Valencell's evaluation kit was plug-and-play. We were up and running with a true working prototype and customized software within hours. The biometric data from the Benchmark sensor was dramatically better than any of the other dozen sensors we had tested. Our ability to accelerate the development of the first biometric wearable to stop bedwetting in children was magnified three to five times."

– Jon Coble, CEO & Founder, GOGO Band

Kenzen Case Study

Challenge

- Develop wearable solution that can predict and prevent heat stress in field workers
- Device must be accurate for real-time monitoring and alerting, while being rugged enough to survive field work environments
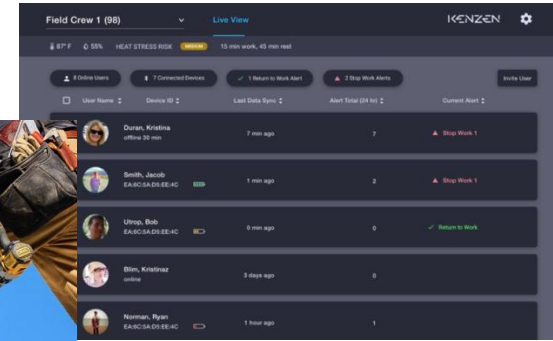
Solution

- Sensor fusion – incorporated real-time skin temp, environment temp, activity tracking, and heart rate
- Valencell Benchmark® BW4.0 sensor system for accurate, real-time biometric monitoring

Result

- Commercializing world's first body heat sensor system
- Kenzen is now deploying their system in worksites around the world today

Kenzen Patch

Heat stress tracking system for predictive, preventative worker safety

"These conditions really cry out for a very personalized and contextual view of the individual…and at its core is a real-time biometric sensor that can look at vital signs and activity. The Valencell PPG sensor is key to our ability to get accurate heart rate and activity."

– Jim McDonnell, CEO, Kenzen