

Client Overview

A 40-year industry stalwart, our client has evolved into a versatile industry leader with 16 brands and 2,000+ retail stores. With an 8,000-strong workforce and an expansive ecosystem of 38,000, they excel in Jewellery, Watches and EyeCare.

Globally impactful, their product portfolio encompasses activity tracker smart bands, smartwatches, eyewear and hearables, catering to users across the globe.

At a glance

Industry

Wearable Technology

Location

Global

Challenge

The wearable technology giant faced hurdles such as a lack of streamlined testing for diverse products, poor user experience, difficulties in validating feature reliability, and challenges in evaluating health metrics against calibrated equipment.

Success Highlights

- 98% improved issue resolution rate
- 25% surge in positive user reviews
- 13% increase in brand value and position



Challenges

The client collaborated with Impiger, to ensure hassle-free product use and formidable global brand positioning. Here are the key challenges the client wanted to address with the help of Impiger's QA team.

Lack of Testing Strategy

The client's ambitious venture included over 20 diverse wearable products, each boasting unique features. But lacked a streamlined & parallel testing approach to ensure the quality and functionality of every product.





▶ Bad UX

Understanding the significance of an intuitive user experience, the team focused on refining both the firmware and mobile application interfaces. A user-centric approach was adopted, involving iterative testing, user feedback analysis and continuous refinement to create a seamless and user-friendly interaction journey.

Unreliable Feature Validation

The expansive array of features, from call management to an extensive collection of sports modes, watch faces, and even in-built games, posed the challenge of thoroughly validating each feature's accuracy and reliability.





Improper Metrics Evaluation

A key selling point was the accuracy of health-related metrics such as SPO2, heart rate monitoring and blood pressure estimation. The challenge was to validate these metrics against calibrated medical equipment to ensure user confidence in the data.

Low Battery Life

Ensuring that the wearable products offered optimal battery life required continuous monitoring and analysis of battery consumption patterns on an hourly basis.



Solution

After carefully listening to the challenges of the client, we recommended a comprehensive testing approach to evaluate functionalities, usability and performance metrics of the products and their respective mobile applications.

To address the diverse challenges presented by Client's ambitious wearable technology line, Impiger's QA experts recommended a comprehensive and customized approach encompassing various facets of testing and validation.



Quality Engineering Techniques Adopted

To address the diverse challenges presented by Client's ambitious wearable technology line, the Impiger Testing team devised a comprehensive and meticulous approach that encompassed various facets of testing and validation.

► Parallel Testing Strategy

Realizing the strenuous management of multiple wearables products at the same time, the team adopted a parallel testing strategy. This involved dedicated resources to test each product simultaneously and ensured the testing process was efficient without compromising on the evaluation standards.

► Intuitive User Experience

Realizing the significance of an intuitive user experience, the team focused on fine-tuning both the firmware and mobile application interfaces, via an user-centric approach, involving: iterative testing, user feedback analysis, and continuous refinement to create a seamless and user-friendly interaction journey.

▶ Feature-Specific Validation

Rigorous validation of the extensive feature set was pivotal. The team carried out scenario-based testing to simulate real-world usage scenarios for each feature. This included comprehensive call management validation, extensive sports mode testing, watch face functionality evaluation, and in-built games thorough examination.

Key Health Parameter Accuracy & Validation

To ensure the accuracy of health-related metrics required a meticulous approach. The testing team validated heart rate monitoring, SPO2 tracking, and blood pressure estimation against calibrated medical equipment and bridged the gap between wearable technology and medical accuracy.

▶ Battery Life Analysis

To optimize battery consumption, the team continuously monitored its use on an hourly basis. The data-driven approach provided insights into usage behaviors and enabled the identification of areas for battery life optimization without compromising the product's performance.

Comparative Analysis

A comparative analysis was conducted to benchmark Client's wearable technology line against competitors. This involved accuracy checks of step counts, distance covered, calories burned, and health parameters using calibrated medical equipment for validation.

Technology used



Test Automation Frameworks



Simulation Tools



Benchmark Comparison with Standard Medical Devices

Results

The well-planned and implemented testing strategy enabled the client to relish exceptional outcomes and better positioning in the market.

▶ 98% Improved Issue Resolves

Through the rigorous testing approach, the QA team achieved a remarkable 98% rate of identifying and resolving issues. Swift identification and timely resolution of even the smallest glitches ensured a seamless and hassle-free user experience.

► 100% Improved Accuracy

Comparative analysis against similar products in the market revealed a 20% improvement in data accuracy. This boosted users' confidence and provided valuable insights for improvements.

▶ Unparalleled User Experience

The focus on refining user experience resulted in an impressive 20% reduction in user-reported issues related to interface navigation and glitches. The intuitive design and seamless interactions elevated user satisfaction.

▶ 25% Increased Positive Reviews

The user-friendly experience and accurate functionality translated into a substantial 25% increase in positive user reviews across app stores. Users lauded the products for their reliability and ease of use.

Key Outcomes



13% Improved Brand Value & Positioning

The rigorous testing approach solidified Client's brand value, contributing to a **13% increase** in the brand's perceived reliability and innovation.



Market Competitiveness

Validating the health & fitness metrics accuracy and performance ensured a competitive edge and increased the sales within the wearable technology sector.



12% Decreased Churn Rate

The seamless user experience and enhanced accuracy cultivated a loyal user base, reflected in a **12% decrease in customer churn rates**.



35% Improved Operational Efficiency

The parallel testing strategy enabled efficient testing of the entire product line and reduced testing time by 35% to ensure on-time quality deliverables always.

To conclude, the robust testing approach resulted in tangible quantitative results and translated into substantial qualitative benefit, bolstering the leading manufacturer's market positioning and growth.

Ready to revolutionize your wearable technology offerings and delight your customers with unparalleled quality and innovation? Let Impiger's proven QA expertise guide you towards achieving remarkable results just like our client, the Wearable Tech Giant. Say goodbye to unresolved issues and hello to a surge in positive reviews, improved accuracy, and enhanced user satisfaction.

Contact us today to embark on a journey towards elevating your brand value, boosting market competitiveness, and driving operational efficiency.

Don't let testing challenges hold you back - partner with Impiger and unleash the full potential of your wearable tech products!



For more information, contact: sales@impigertechnologies.com visit: www.impigertechnologies.com

About Impiger Technologies

Impiger Technologies is an 18 year old technology organization with expertise in the field of Mobile, Cloud, Web, IoT, AR, RPA and AI Technologies, catering to industries like Manufacturing, Logistics, Retail, Healthcare, Finance, and Services. With over 300+ professionals spread across the globe, Impiger has assisted businesses ranging from Startups to F500. We have built 500+ mobile apps, 350+ web portals, and 100+ automation and engagement solutions.