

SMART WEARABLE SOLUTION FOR

SLEEP MONITORING

The solution comprises a multi-sensor wearable device and mobile application. Integration of advanced analytics and visualization features resulted in a user retention rate of 76%.

PROJECT **OVERVIEW**

We developed a mobile solution for sleep monitoring and assessment. The solution utilizes wearable sensors to track sleep patterns of individuals with sleep disorders and validates improvements in sleep quality over time.

CLIENT PROFILE

The US-based medical device company offers wearable devices, software applications, data analysis, and testing services to consumers and clinicians. These services help users to analyze sleep behavior based on data collected.

BUSINESS REQUIREMENT

The proposed digital solution would help users get sleep health guidance with coaching and behavior modifications.

- Track and analyze sleep data accurately
- Provide intuitive visualizations on sleep patterns
- Provide clinically relevant feedback and recommendations

QBURST SOLUTION

The solution captures physiological information, specifically sleep-related signals obtained through the measurement of biometric data. The solution tracks stages of sleep by monitoring heart rate patterns, making it a better alternative to trackers that rely on movement alone.

The solution discerns the user's sleep patterns and provides personalized feedback on steps to improve sleep using clinical methods such as cognitive behavior therapy for insomnia. The analytics engine displays weekly/monthly reports pertaining to sleep and lifestyle changes. These reports enable users to easily analyze sleep volume and patterns.

The mobile application provides diaries to log sleep habits, satisfaction, and performance. Recording and analyzing this information enables users to track and understand how daily activities and exercises impact sleep.

KEY FEATURES

- Sleep and satisfaction scores based on sleep phases
- Alerts based on sleep satisfaction scores
- Trend graphs display daily and weekly sleep performance
- Intelligent algorithms correlate sleep scores to user behavior
- Filter diary entries based on diet and physical activity
- Export diaries in CSV, XML, and JSON formats
- Displays a detailed report on sleep patterns
- Interactive game to monitor user reaction time
- Set reminders for activities and goals
- Sleep coaching to improve sleep quality

TECHNOLOGIES



BUSINESS BENEFITS

- 76% user retention as a result of enhanced analytics and visualization capabilities
- Ranked among the top 50 apps in the App Store (Health and Fitness category)
- Achieved 28% more installs than the expected user acquisition goal, six months from launch
- 25% increase in user engagement driven by features such as sleep performance score tracker



