



Mindtree

Welcome to possible

From Metal-to-Cloud - The Rise of Wearables



Wearables are one of the fastest growing and rapidly changing segments in personal and enterprise technology. What does it take to conceptualize and launch a successful wearable? While the device is very important, it is an equalizer; software is the differentiator but it is data and analytics that provide the true competitive edge.

To create an impact in a crowded market, all these aspects need to come together in perfect harmony. An effective wearable device is a well-balanced combination of user experience, data collection, connectivity and an insights engine. Companies with products/services with expertise and experience in the entire 'metal-to-cloud' spectrum have a competitive advantage over others.

More and more products are being launched with newer features and applications; but like any other convergence space, a 'single source of truth' is often missing. Firms need to look for partners who understand the complexities and have been part of the evolution. Companies with expertise in the entire metal-to-cloud ecosystem will hold the leading edge.

Back to the beginning

Most wearable devices today are offshoots of traditional products made by companies that have diversified or expanded their navigation, sports apparel or sound product lines. They have demonstrated their prowess in miniaturization (size reduction), connectivity and user friendly designs as a platform for the software to deliver customized results.

Although consumer interest in wearables is strong, business demand for wearables is even greater. According to a recent report, 68% of global technology and business decision makers affirm that wearables are a priority for their firms, with 51% calling it a moderate, high or critical priority. Forward-looking companies in all industries are either using or planning to use wearables to empower their workforce and improve productivity and efficiency.

Creating new business and service models for wearables

Designing market leading devices is about creating a complete digital ecosystem around the product.



This includes expertise in:

- **Data and analytics:** Data is at the center of this revolution. It unlocks hidden opportunities and insights. Efficient use of information management, business intelligence and analytics solutions can turn data into actionable insights.
- **Engineering R&D:** To address market needs effectively, Original Equipment Manufacturers (OEMs), Original Design Manufacturers (ODMs) and semiconductor enterprises need to achieve cost effectiveness, faster time-to-market and first-time-right approach for their products.
- **Cloud:** Adopting Software-as-a-Service (SAAS) solutions enables rapid scaling at a lower cost. A mix of reusable components, frameworks and toolsets can reduce risks inherent in unfamiliar development areas and reduces time-to-market.
- **Agile software development:** Adopting agile design principles sounds simple but the transition is not easy. It calls for careful choice of platforms, tools and metrics to increase visibility and predictability. Agile delivery ensures high quality apps that meet customer needs.
- **User experience management:** A fine balance is needed between form, function and usability.

Context, elegance and lifestyle factors need to be carefully considered to create a seamless, connected experience.

- **Domain knowledge:** The evolution of industry-specific solutions rather than a "one solution fits all" approach will ensure greater adoption and cost-effectiveness.

Examples from leading global enterprises

Mindtree has worked with leading global companies to bring to market several futuristic products like fitness tracking bands, Bluetooth headset solutions, smartphone-based insulin controllers, smart watches, Glucose meters, and personal gaming accessories like head trackers and wearable security devices. Here are some examples of how our clients are innovating in their respective industry segments:

- **GPS navigator**
One of the world's leading GPS smart device manufacturers connected its devices to wireless accessories via Bluetooth by using Mindtree's Bluetooth stack. This solution has enabled the top-selling wearable to connect with a variety of devices.
- **Multi-sport watch**
A leading sports watch manufacturer sought our help to test and integrate services. End-to-end system testing and integration with leading smartphone devices helped the company bring user-friendly products to the market in a shorter time frame.
- **Office communication devices**
A European leader in business communication devices improved user experience with better product engineering expertise, mobile application development and configuration testing services from Mindtree.
- **Insulin measurement app**
A Switzerland-based medical device solution provider developed an Android application to remotely control an in-body insulin pump with an easy-to-use UI developed by Mindtree.
- **Cloud-enabled health monitoring**
A major US manufacturer of health and lifestyle equipment partnered with us to connect wearable devices with the cloud. This enabled the customers to access a wealth of patient data through an iOS application, server development, hosting on EC2 cloud and third-party healthcare integration.

About Mindtree

Mindtree [NSE: MINDTREE] delivers technology services and accelerates growth for Global 1000 companies by solving complex business challenges with breakthrough technical innovations. Mindtree specializes in e-commerce, mobility, cloud enablement, digital transformation, business intelligence, data analytics, testing, infrastructure, EAI and ERP solutions. We are among the fastest growing technology firms globally with more than 200 clients and offices in 14 countries.