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GlobalLogic Partnerships That Transform Patient Care Services

Partnerships That Create World-Class Digital Patient Experiences

The world's leading Medical Technology, Healthcare, and Life Sciences organizations are continuously seeking new ways to improve the quality and increase the value of the care they bring to their patients. Digital transformation is key to helping organizations cut down costs, increase access to care delivery, and improve medical care. These transformations are happening today in a variety of areas.

Digitizing and automating legacy manual processes can provide organizations with unprecedented scalability to fuel growth. Embedding data management software and enabling connectivity for medical devices can make data more readily and rapidly available to be analyzed, creating opportunities for product innovation. And creating a user-friendly mobile app that communicates with a patient's medical therapy device can increase patient engagement, enabling much better patient performance, improving patient satisfaction, and helping the patient complete their therapy faster.

If your organization is pursuing digital transformation and is looking to adopt cutting-edge modern technologies in a strictly regulated environment, GlobalLogic can help.

GlobalLogic has helped MedTech and Life Sciences customers develop solutions ranging from embedded medical device software to Software as Medical Devices (SaMD) and other patient therapy devices, as well as connected health systems and digital healthcare platforms. GlobalLogic can assist and augment a customer's existing resources or deliver turnkey solutions that are ready to go to market.

In these pages, we will share the stories of organizations who partnered with GlobalLogic to create enhanced patient value that drives business outcomes. These organizations have strengthened their ability to create world-class digital patient experiences, get products to market faster, uncover and capture new revenue streams, and transform healthcare through technology and innovation.

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MEDICAL DEVICE SOFTWARE
DEVELOPMENT — EMBEDDED

Next-Generation Insulin Infusion Pump Design and Development

Client Scenario

This client, a global leader in Healthcare technology, provides solutions to treat some of the most complex and challenging medical conditions. As part of its continuous innovation, the client envisioned bringing the next generation of regulated products to market concurrently to drive revenue growth.

They needed to scale massively and quickly to drive next-generation product development while continuing to maintain high quality standards for their existing product lines. This was particularly challenging because their sophisticated diabetes management solution included both hardware and software elements.

Our Approach

On behalf of the client, GlobalLogic assumed 90% ownership of the design and development of the insulin infusion pump, which was a key part of the overall solution. GlobalLogic implemented all device features including UI, software requirements, 2.4 GHz radio frequency interface and the Bluetooth Low Energy (BLE) interface. GlobalLogic also performs ongoing product risk analysis.

GlobalLogic developed a unique automated testing framework that significantly reduced the time required to test the product. The product was approved as a Class III medical device by the U.S. FDA and Canada Health, and it has the CE mark as well. Based on this success, the client further tasked GlobalLogic with creating a reliable and extendable platform for future system evolution.

Benefits

The client successfully brought the next-generation product to market. In addition to the closed-loop insulin therapy, patients also benefited from an intuitive and inviting user interface that was translated into 28 languages. The impressive functionality of the new device was designed to run for two weeks or longer on a single AA battery, minimizing the need for patients to change batteries.

Because GlobalLogic had taken over most of the development, the client realized 45% cost savings versus performing the work in-house. Moreover, following the product release, the client increased their revenue in the diabetes segment by 11%, driven primarily by successful adoption of the product on the market.

With the release of this product, the client was able to grow their revenue by 11% for a period.

11%

growth in revenue

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IoMT

Medical Device Asset Management System Development

Client Scenario

A leading medical technology company had achieved remarkable success developing innovative products and services in Medical and Surgical, and Neurotechnology but faced a significant challenge. Simply shipping a successful product is not enough, because such technologies require ongoing support. Changes in regulatory requirements, as well as the range of necessary field services, will drive software updates, which will be delivered via software upgrades. Additionally, it is important to track which devices have received which upgrades, a process mostly performed manually using spreadsheets. The client needed a scalable means of providing this support.
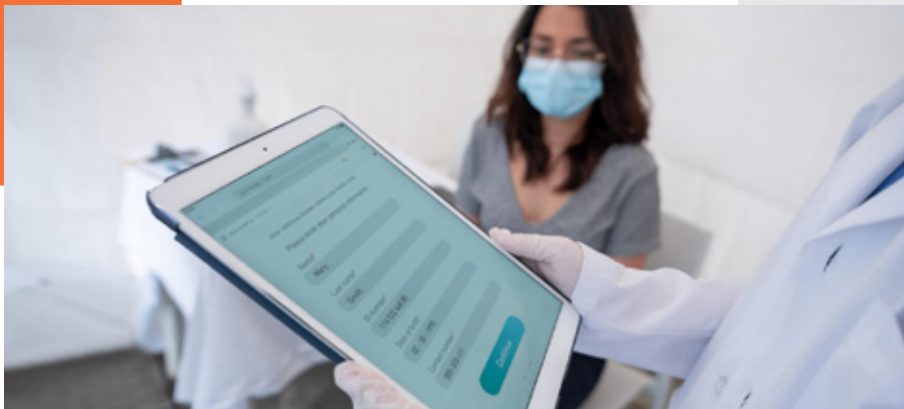
Our Approach

GlobalLogic used their expertise in embedded systems, secure communications, and cloud computing to design and develop a solution that allowed the client and their customers to track the performance and operational readiness of their devices remotely. This enabled the client to provide support at the necessary scale in a cost-effective manner.

The solution monitored assets such as devices, batteries, electrodes, and other material resources owned by an organization. It also collected, transmitted, and managed asset data, sending notifications to involved personnel and providing a web interface for the data, all operating around the clock.

Benefits

The client gained an asset management system, enabling them to better understand the quality and performance of their medical devices installed in the field. The system also provides end customers confidence that the medical devices they have installed in clinical or commercial settings are fully ready for use when needed.

The system provides multiple benefits. It helps promote operational readiness of devices in the field. It allows the client to manage a larger volume of devices and customers. It increases ease of management while lowering costs by enabling the client to execute field software upgrades remotely — without the physical presence of field personnel or the need to return products to the factory for the upgrade — at a fraction of the previous cost. This capability, originally launched in 2008, has been maintained by GlobalLogic as new devices and capabilities have been added to the system.

Our client's customers have the peace of mind that the medical devices used in their facility or span of control are ready when they are needed. This product currently supports over 350K medical devices and 55K customers including hospitals, EMS providers, police departments, and commercial locations such as airports, train stations, and hotels in over 80 different countries.

About GlobalLogic

With more than 20 years of experience in regulated software product development and engineering, GlobalLogic helps leading Medical Technology, Medical Devices, Pharma, and Life Sciences organizations create world-class digital experiences, accelerate product development, and capture new revenue streams.

Our 2,300+ industry-dedicated engineers use their deep knowledge of ISO/IEC standards to build fruitful partnerships with developers of regulated medical products. We have extensive clinical-trials experience and have developed highly valued consumer apps (across multiple industries).

We've also developed numerous data interfaces — some proprietary, some using HL7 standards — to meet complex data analysis, security, and integrity challenges. In all, GlobalLogic has helped more than 90 clients create more than 300 new products in the Healthcare and Life Sciences sector.

Conclusion

GlobalLogic provides our customers across the Healthcare, Medical Technology, and Life Sciences landscape around the world with the expertise, experience, and best practices to design and build innovative products, platforms, and digital experiences. Through our partnership approach, GlobalLogic serves as a trusted advisor in helping our customers improve both patient and clinician outcomes.

20+ years industry experience

2,300+ industry-dedicated engineers

300+ new products

90+ clients

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