GlobalLogic Solutions: Digital Health Platforms

Expanding Offerings, Scaling Resources & Improving Patient Experience with Digital Transformation

Introduction

GlobalLogic partners with some of the world's leading medical devices, medical technology, clinical research, and in vitro diagnostics (IVD) organizations to create world-class patient, caregiver, and clinician experiences.

From embedded systems and software as a medical device (SaMD) to clinical study platforms, internet of medical things (IoMT), and telehealth, GlobalLogic has helped the world's leading medical technology, CROs, and diagnostics organizations design, develop, and deliver world-class digital patient experiences for over 20 years.
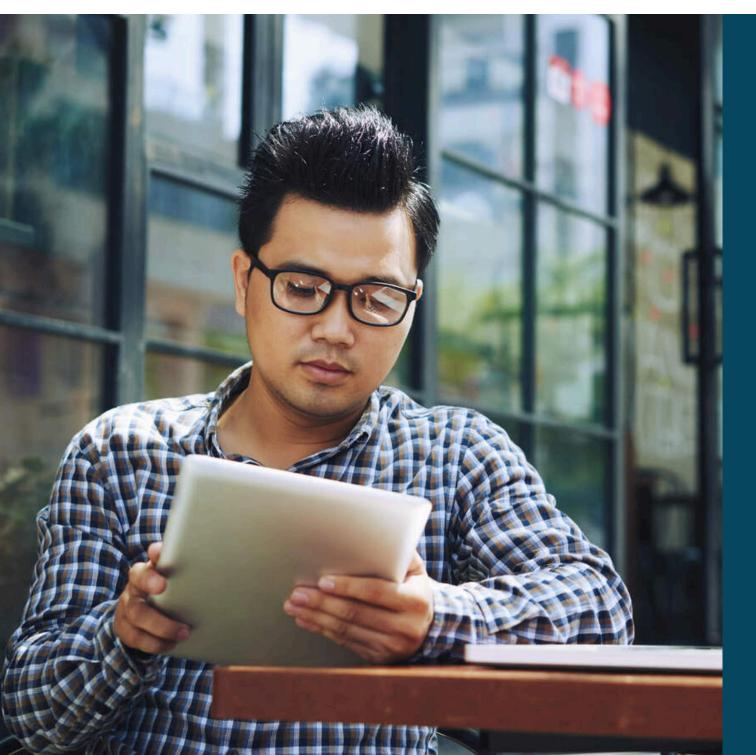
In this solution guide, we explore the key areas where GlobalLogic can help you develop medical device/IVD software, digital health platforms, healthcare information exchanges, IoMT and smart healthcare systems that facilitate telehealth, and health data intelligence and diagnostics (HDID).

GlobalLogic partners with some of the world's leading medical devices, medical technology, clinical research, and in vitro diagnostics (IVD) organizations to create world-class patient, caregiver, and clinician experiences.

Our services enable these organizations to get products to market faster and transform healthcare through technology and innovation.

In this highly regulated industry, it is essential to work with a partner whose software engineering skills come intertwined with a deep quality culture and a strong working knowledge of the governing ISO/IEC standards.

At GlobalLogic, we believe that when you create high-quality medical devices that are easy to use, it increases your business value as well as your value to your clients.

We've learned that whenever you can create patient value in the marketplace, good things will follow.

Given the technical sophistication of today's environments, the best way to achieve that end is to increase your creation potential and innovation by working with a knowledgeable, scalable, and trusted technology partner.

Digital Health Platforms

Learn how technology is enabling decentralized clinical trials and rich data management/ visualization for medical organizations.

The Role of Digital Health Platforms

For healthcare providers, digital health platforms enable a new architectural approach to rapidly deploying digital capabilities. These platforms typically exist within each of the technology blocks, and for some regulated products they may also include the complete requirements — from design to test package — for the platform.

For example, the client may develop an embedded platform that can be deployed across multiple instruments within instrument systems. Depending on the platform type, they have great benefits for GlobalLogic clients and our clients' customers once established.

A digital health information platform enables patients to communicate with their healthcare platform through an API that lets them access their personal health, fitness, and wellness data, and control which applications can access that data.

Digital health information platforms help patients to track, monitor, and maintain a "big picture" of their health history, and provide healthcare providers with an easy way to expand their offering and scale resources according to demand.

How GlobalLogic Can Help

GlobalLogic's expertise in designing digital health platforms begins with knowing the right terminology and continues through designing the testing approach, the automation approach, validation, and the Q&A (in the clinical sense).

Being able to bring this knowledge into the project is critical.

Decentralized
Clinical Trials

GlobalLogic has developed digital platforms for numerous use cases within clinical trials and clinical research spaces.

This includes traditional clinical trial management systems (CTMS), labor and delivery systems, and many others. We have spent the last 20 years building a variety of sophisticated applications ranging from traditional CTMS, electronic clinical outcome assessment (eCOA), and electronic patient-reported outcome (ePRO) to modern decentralized digital trials.

We design modular architectures that take full advantage of IoMT devices, modern data approaches, and integration into personal digital spaces. This includes integrating with an individual's digital routines and familiar social media and entertainment notifications to provide a multidimensional user experience that involves timing, locations, and traditional visual components.

GlobalLogic provides engineering services at various maturity stages, from ideation and validation to execution and testing.

We bring the ideas, experiences, and architectures that we already have in order to help our clients elevate their industry expertise and take full advantage of technology capabilities.

What is your organization's greatest challenge in clinical trials and research?

◯ Patient privacy and healthcare data security

◯ Lack of in-house resources to plan and/or execute

◯ Validation and testing

◯ Associated costs

◯ Other

Post answer

Data Management and Visualization

Beyond gathering patient data, healthcare clinicians are becoming increasingly aware of the power and usefulness of data visualization to treat individual patients and show trends across a population

To make sure data is accessible when needed, GlobalLogic develops healthcare information exchanges where patient data can be shared among authorized parties associated with a patient's clinical care.

These exchanges include sophisticated software development built with AI/ML capabilities to clean up data and then make it representable using various user interface/experience (UI/UX) design capabilities.

In your opinion, is your organization fully activating the value of its data?

○ Yes, we have sophisticated AI/ML-enabled data visualization capabilities

○ Somewhat; we are making use of our data but perhaps not deriving the full insights available

○ No, I am not satisfied with the current state of our data analysis and visualization capabilities

○ I am unsure

○ Other

Post answer

Our Key Differentiators

We excel at helping healthcare organizations create world-class digital customer experiences and transform their business operations.

Deep Medical Expertise

- 20+ years of experience developing regulated FDA (I, II & III products) with FDA clearance and CE mark
- 2300+ engineers dedicated to healthcare and life sciences
- 300+ new products
- ISO 13485 certified QMS, IEC 62304 compliant SDLC

Processes for Healthcare

- Delivery processes tailored to healthcare domain
- Working within our client's QMS or using GlobalLogic's 13485 compliance QMS
- Setting up internal and external audit processes
- Building policies on security and data privacy
- Establishing healthcare and ISO/IEC standards training programs for staff assigned to these projects

Innovative Technologies

- Infrastructure-, platform-, or software-as-a-service (IaaS, PaaS, SaaS) implementations using public, private, and hybrid deployment models
- Cross-platform development
- AI/ML, big data
- Microservices architecture, DevOps, cloud operations, and management tools
- Embedded systems, Bluetooth Low Energy (BLE), Wi-Fi, near-field communication (NFC) integration

About GlobalLogic

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

GlobalLogic®
A Hitachi Group Company

20+ years industry experience

2300+ industry-dedicated engineers

300+ new products

90+ clients

GlobalLogic is a trusted partner in the fields of medical devices, medical technology, clinical research, and diagnostics.

We develop Class I, II, and III products in accordance with ISO 13485 certified QMS and IEC 62304 compliant SDLC.

Why choose GlobalLogic as your software engineering partner?

- Our deep working knowledge of ISO governing standards enables us to work with many different companies' QMS and SDLC.
- Our experience in using various tools, software languages, cloud environments, and infrastructure to integrate and collaborate with your in-house engineering team seamlessly.
- Our experience in building, designing, implementing, and testing systems per agreed-upon product definitions and specifications.

To learn more, or to speak with one of our experts, please reach out to info@globallogic.com.

We are on a two-decade-young journey and we're proud of our growth and the milestones we have achieved. A startup to a Hitachi group company, our product engineering story is unique. Thanks to our people who have been our companions and growth drivers in this amazing journey.

'We are GlobalLogic' is a spectacular showcase of what we do, what we represent, and our capabilities as a global leader in product engineering services.

Learn More: Visit Our Website

Thank you for reading

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