

ACTIVITIES 3

Driving Digital Transformation in Japanese Market through Co-creation by DX Specialists Partnership between GlobalLogic and Lumada Innovation Hub Tokyo

Hidenori Akatoki

Takuya Akashi

Naotaka Kumagawa

GlobalLogic Japan was established in April 2022. The work of the company is to investigate and implement team structure and processes that will enable customers in Japan to accelerate their digital businesses and pursue DX successfully. This article describes the team structure and processes that combine the innovative knowledge and methodologies of GlobalLogic, a leader in design-led digital engineering, with the extensive business track record of Hitachi, Ltd., and the business understanding and experience that the DX specialists at Lumada Innovation Hub Tokyo have in working with customers in Japan.

Establishment of GlobalLogic Japan

GlobalLogic Japan, Ltd. (GL Japan) was established in April 2022 to play a leading role in design-led digital engineering for customers in the Japanese market⁽¹⁾.

GL Japan has office at the Lumada Innovation Hub Tokyo (LIHT). It works on digital transformation (DX) for customers in Japan and seeks to achieve a synthesis by bringing specialists from a variety of fields together at LIHT, including sales, engineer, designer, architect, and program manager from GlobalLogic and Hitachi.

GlobalLogic Japan's DX Team Structure and Processes

GL Japan is working on an organizational system that combines GlobalLogic's innovative knowledge and methodologies (GL-Way), with the business understanding and experience of the DX specialists at LIHT in working with customers in Japan. The way this works is called "two in the

box," whereby DX specialists from GlobalLogic and LIHT are paired in core roles in both the pre-sales activity and delivery phases, respectively. The division of roles between them is worked out at the same time as investigating how to undertake the project in a way that suits the Japanese market. This involves GlobalLogic's specialists delivering services leveraging GL-Way while LIHT's DX specialists provide support by utilizing their understanding and experience with customers in Japan.

(1) Team structure and process for pre-sales activities

In response to expressions of interest from customers about GlobalLogic's worldwide experience and capabilities, the pre-sales activity phase involves introducing similar DX projects undertaken by GlobalLogic overseas and then drawing on Hitachi's past co-creation work with customers in Japan to put together a specific plan of action.

In addition to inquiries from customers interested in GlobalLogic, there are also cases where LIHT's DX specialists identify opportunities within their own customer base where GlobalLogic's capabilities can be useful in addressing the challenges those customers face. In these

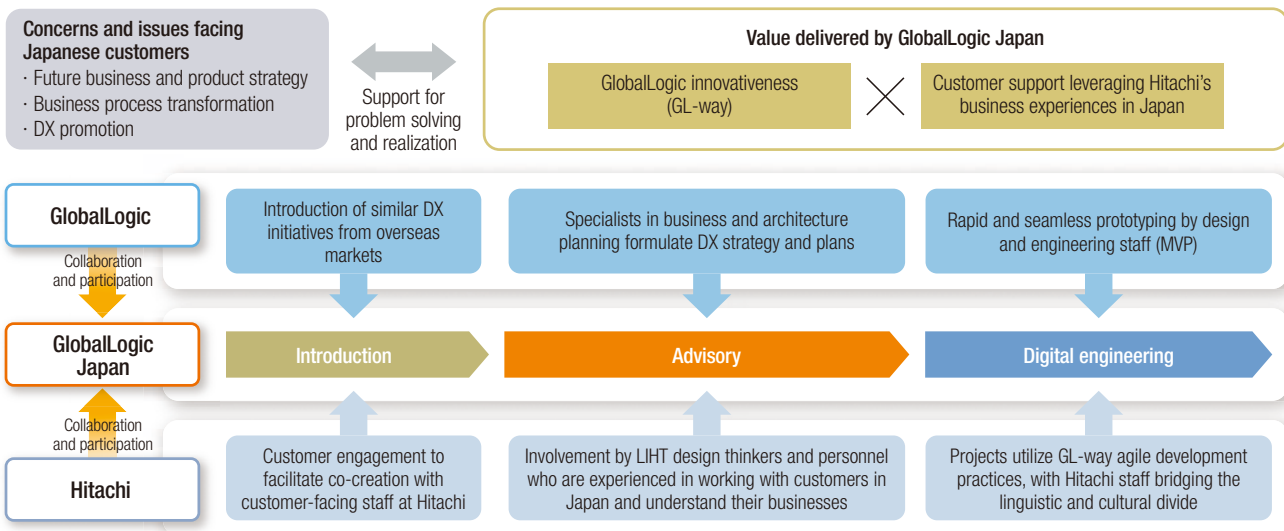
Figure 1 | Specialists from GlobalLogic and Hitachi, Ltd. Engaging in Co-creation at LIHT



Customers, partners, and a range of specialists from GlobalLogic and Hitachi combine the virtual and the real to support customer DX.

Figure 2 | How Collaboration Works in Pre-sales Activity and Delivery Phases

GlobalLogic is a leading company in the global DX business. To accelerate the digital business activities of customers in Japan, it applies its innovative knowledge and methodologies (GL-Way) to the Japanese market in tandem with customer support that draws on Hitachi's extensive business experience.



DX: digital transformation MVP: minimum viable product LIHT: Lumada Innovation Hub Tokyo

cases, the DX specialists proactively introduce and propose GlobalLogic's services.

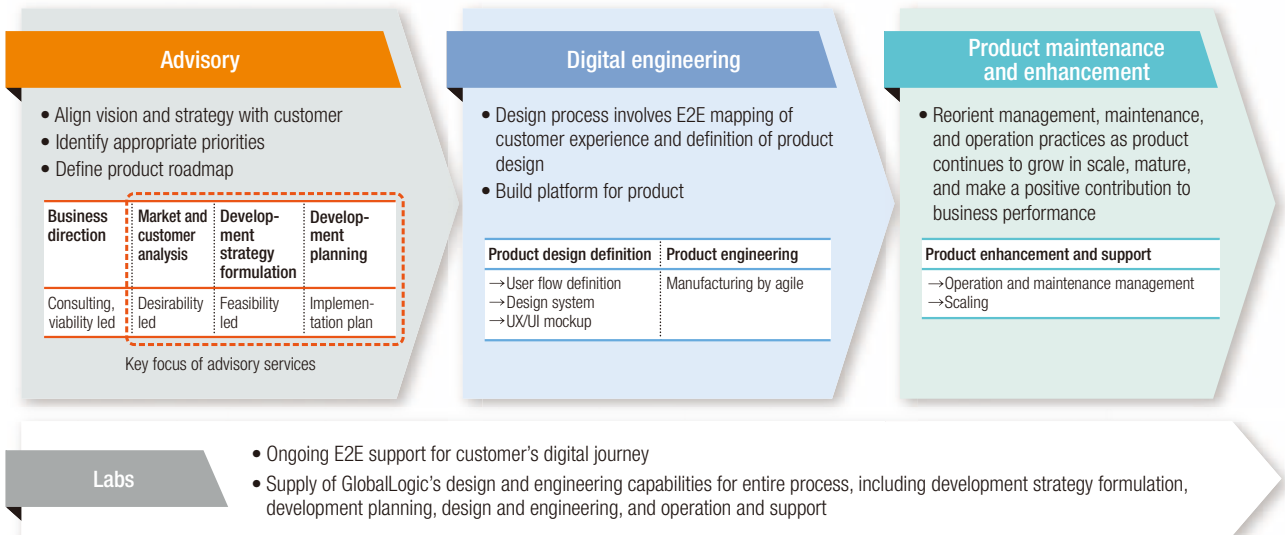
In this way, the two organizations are able to market themselves to customers in Japan in a way that draws on their respective strengths, combining GlobalLogic's extensive experience and success at undertaking DX around the world together with the DX specialists at LIHT who are conversant with the Japanese market and their customers' business context.

(2) Team structure and process for deliveries

For the delivery phase, the personnel required for the project are assembled from GlobalLogic's 39 engineering centers and nine design studios (as of November 2022) located around the world, taking note of the issues raised when consulting with customers during the pre-sales activity phase. The delivery phase itself involves combining GlobalLogic's distinctive agile processes for both design and digital engineering with DX specialists from LIHT who have experience in co-creation and other project work with customers in Japan.

Figure 3 | Service Offerings to Help Customers Accomplish their DX and Digital Journey

By partnering with customers engaged in DX, GL Japan provides service offerings that extend from the use of design thinking for market analysis and strategy formulation to development planning and the ultimate creation of a working product.



GL Japan: GlobalLogic Japan E2E: end-to-end UX: user experience UI: user interface

Pre-sales Activities and Service Offerings of GlobalLogic Japan

Taking note of the nature of the issues raised in pre-sales activities with customers, GL Japan brings together its experience and past work on design, engineering, and data science to provide end-to-end (E2E) support for the customer's digital journey, extending from experience-centric design and engineering that draws on the latest technologies to maintenance and enhancement.

In practice, this equates to two service offerings in particular: an advisory phase on identifying the DX services that end users are really looking for, and a digital engineering phase for implementing the cutting-edge technologies required for the proposed DX service. GL Japan can also provide engineering labs, enabling a flexible and agile response to market conditions and changes in customer strategies and tactics by providing comprehensive support across all steps in the digital journey, not just at specific phases such as the advisory and digital engineering phases. For example, support can be provided as an ongoing accompanied service whereby GlobalLogic staff with the required design and engineering skills work with the corporate customer on an in-house basis, serving as their DX research and development (R&D) team.

(1) Advisory

In the advisory phase, the “innovation sweet spot” is sought out in terms of desirability (user needs), business viability, and technical feasibility. This phase is undertaken by a team made up of four different roles (strategist, designer, architect, and program manager) that are filled by DX specialists from GlobalLogic and from the various divisions of Hitachi. The strategists seek to achieve an overall balance between the user needs, business viability, and technical feasibility of the customer's product or service, while the designers partner with the customer in investigations that seek to identify existing problems and DX opportunities from an experience viewpoint. The architects collate the technical issues and their impact on the business to determine an appropriate future architecture. Program managers manage the project to ensure that it proceeds in a way that is satisfactory for the customer, resolving project problems so that other team members are free to focus on their own respective roles.

Through interviews with end users and workshops with the customer, the people filling these four roles work together to determine what is needed and put together a roadmap for the product. They formulate a development plan on the basis of the agreed scope, which is determined in terms of the minimum viable product (MVP) that can deliver value at minimum cost.

(2) Digital engineering

The design-led digital engineering provided by GlobalLogic can be broadly divided into system-centric software and user-centric software. System-centric software specializes in chip-to-cloud system development involving the use of data that has been collected by edge devices and forwarded to the cloud. User-centric software, on the other hand, is about the touchpoint with users and includes end user applications and other products. GlobalLogic is also working to brush up its methodologies for fast and reliable service delivery utilizing global resourcing based on the Scaled Agile Framework*, and pursuing not only basic research into advanced technologies such as artificial intelligence and machine learning (AI/ML), Web 3.0, the metaverse, and non-fungible tokens (NFTs), but also work aimed at their practical application.

The digital engineering phase in turn involves bringing together the capabilities needed to resolve the challenges of DX and assembling cross-functional teams for the design and implementation of cloud-native software. The strategist and architect, meanwhile, having participated from the advisory phase, review the digital engineering to verify that the service being delivered satisfies the needs identified earlier in the project.

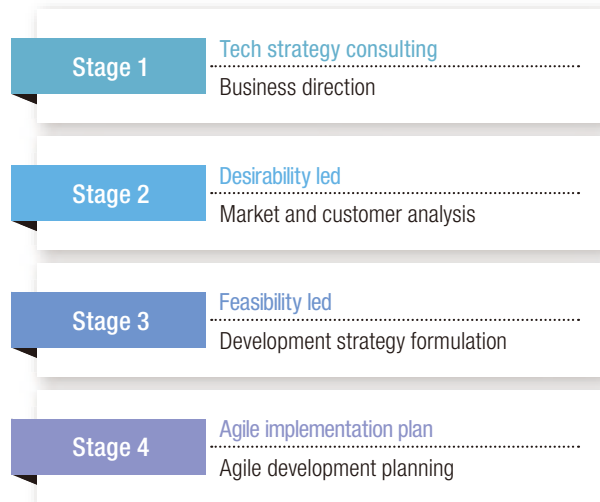
Case Study of GlobalLogic
Japan's Approach to DX

One example in which GlobalLogic and Hitachi are bringing their different strengths to the provision of services to a customer in the Japanese market is a co-creation project with Nojima Corporation⁽²⁾. With the aim of improving the in-store user experience and having retail staff focus on consulting with individual customers about which products best fit their needs, Nojima is working with GL Japan to investigate how digital technology can be used in the retail environment. This includes a proof-of-concept (PoC) trial to test and verify these measures in an actual store.

* SAFe and Scaled Agile Framework are registered trademarks of Scaled Agile, Inc.

Figure 4 | GL Japan Advisory Stages

The advisory process can be broadly divided into four stages, starting with an exploration of business directions, followed by analyses of the market and target customers, the formulation of strategies for developing the best products or services, and detailed development planning. The process starts from the stage that best suits the customer's current circumstances.



The project follows the “two in the box” approach, with the strategists being design strategists from LIHT and METHOD, the strategic design arm of GlobalLogic. The designers are experience designers, also from LIHT and METHOD.

As the user experience when purchasing home appliances in Japan is very different than that in North America, the way that Nojima deals with customers was likewise unfamiliar to METHOD. Accordingly, they embarked on the joint work by having the Japanese team members use story-telling to demonstrate to their colleagues from METHOD the practices that Nojima values so highly for dealing with customers, drawing examples from their own user experiences of being served at a Nojima store.

Before starting on a DX project with a customer, GL Japan conducts workshops where they listen carefully to the customer's concerns and determine what it is that DX needs to achieve. In consultations with Nojima, they talked about three considerations in particular that they wanted DX to address. In the course of these discussions, GL Japan determined at what stage their advisory services should begin, deciding to start with a “Stage 2 Desirability Led” approach involving research and analysis, including in-store observations and interviews.

Figure 5 | In-store Survey and Idea Review Workshop

For the in-store survey, staff from METHOD and specialists from LIHT explore potential ideas for DX innovation by gaining a deeper understanding of the stores. Similarly, idea review workshops utilize rough drafts of the ideas being considered by GL Japan to discuss and prioritize them.



These in-store observations and interviews also used the “two in the box” approach. The project conducted observations at four Nojima stores and held interviews with 10 Nojima staff. In addition to providing language assistance to the METHOD designers, such as explaining the advertising stickers on products, the Japanese team members also helped speed up their learning by contributing knowledge about home appliance use in Japan and the features of the stores and their neighborhoods. The METHOD staff in turn drew on their unfamiliarity with Japanese practices to identify things that looked out of place and to provide essential insights.

Based on an analysis of these observations and interviews, they came up with 20 ideas for how the in-store user experience could be enhanced. A workshop was held a week after the completion of the study to present the results of analysis and discuss the improvement ideas. Two weeks after that, the ideas identified during the discussion as representing the highest priority concepts were presented to Hiroshi Nojima, Representative Executive Officer and President of Nojima Corporation. During this time, the architects worked with the strategists and designers to provide feedback on how feasible their ideas were from a technical standpoint.

This filtering of ideas through the consideration of user needs, business viability, and technical feasibility is a key feature of how GL Japan is able to focus in quickly on proposals that the customer will be able to implement. The result was a positive decision from Nojima management to

proceed with a PoC trial. As of December 2022, this project is still running and trials of in-store digital initiatives are already underway.

The respective strengths of GlobalLogic and Hitachi encompass personnel, experience, and business footprint. What GL Japan has to offer is the ability to undertake projects by combining these in ways that fit with what is needed to resolve the challenges that customers face in the Japanese market. Such projects aimed at achieving DX are already underway for customers from a variety of industries in the Japanese market, including the finance area.

Future Plans

As the different parts of Hitachi come together to accelerate DX in the Japanese market and resolve societal challenges, the DX specialists from GlobalLogic and LIHT have been using project work to combine their resources under Lumada.

In the future, the intention is to use case studies and other means to spread knowledge across Hitachi, engaging in co-creation in ways that best suit customers and promoting DX in the Japanese market.

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Hidenori Akatoki

Project Support Department, GL Japan Business Operation, Applications Services Division, Digital Engineering Business Unit, Hitachi, Ltd. *Current work and research:* Provides services for achieving DX for customers in Japan as a strategist and customer engagement manager supporting the business promotion of GlobalLogic Japan.



Takuya Akashi

Design Studio, Data & Design, Digital Engineering Business Unit, Hitachi, Ltd. *Current work and research:* Promoting DX projects as Japan business promotion strategist while strategically utilizing design at Lumada Innovation Hub Tokyo as Chief Design Strategist to generate new Social Innovation Business.



Naotaka Kumagawa

Lumada Collaboration, Strategy&Planning, Digital Engineering Business Unit, Hitachi, Ltd. *Current work and research:* Connecting Hitachi’s capabilities as DX coordinator to provide a variety of support in promoting customers’ DX.