



Thinking Digital: Creating the Pathway for an Emergent Digital Strategy

As companies of all sizes realize that all business is now digital, they understand that “thinking digital” is more than a catchphrase, it’s a non-negotiable requirement. Companies no longer have to be convinced they need to think digital, but they need to understand how.

This white paper provides a common vocabulary and a set of foundational principles that must be considered on the journey toward thinking digital. Specifically, it explains and explores the critical alignment between experience design and experience technology – and how they come together to give a competitive advantage.

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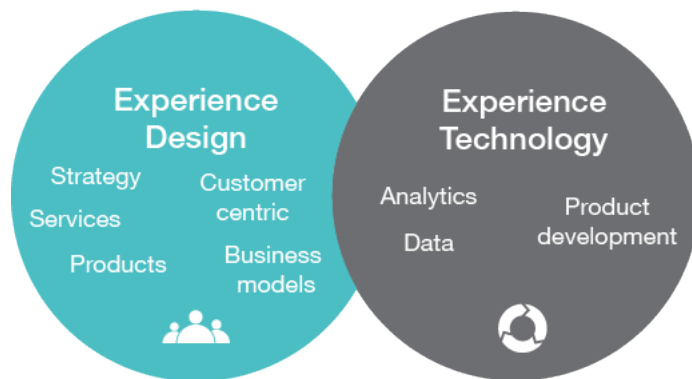
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Introduction

Until recently, the phrase “digital transformation” was used to describe an approach to working that enabled the building of digital products and services. As the term became more fluid and slippery, GlobalLogic came to believe that “thinking digital” is a better way to approach today’s changing business needs. Aligning a customer-centric approach to experience design with an insight-based experience technology platform helps businesses “think digital” and allows them to bring data-driven products, services, and experiences to market quickly, generating greater customer and corporate value.

Thinking Digital: A Visual Model

It can be helpful to visualize the thinking digital approach with two key, interrelated components: experience design and experience technology, shown below and described in greater detail in this section.



Experience Design

Profound changes in the digital age are forcing businesses to ask challenging questions:

- What are our strategy, products, services, and business models?
- How can we redefine these fundamentals when individual customers now engage us with a simple binary click? When they accept or reject us based on how relevant the experience is?
- How do we differentiate our brand in every interaction?
- How can we use customer engagement as a plank in an innovation platform that needs to respond to relentless change?

Experience design is a framework for defining the what, why, and how of integrating brand, experience, and value – along with the right processes and methodologies – for continuous insight and delivery.

Customer centricity. One of the cornerstones of thinking digital is customer centricity, that is, knowing or anticipating what customers are doing at a particular time and in a particular place, as well as how far they are in their journey. Are they becoming aware of a product for the first time? Making a purchase? Looking for support? Possibly considering ending their engagement? Customer centricity is the key to empathetically understanding customers' needs, intents, and points of friction. It also enables multidimensional brand engagement, providing highly personalized digital experiences based on customer data including usage patterns, likes, and dislikes.

Channels. The number of interfaces and touch points for customer interaction has exploded. The channels through which customers encounter experiences include everything from mobile devices and wearables to the Internet of Things. Companies looking to think digital should consider an omnichannel model for developing single, unified experiences that span all touch points – including context-aware environments – to work seamlessly, regardless of interface.

Experience Technology

When thinking digital, if experience design is the “what,” then experience technology is the “how.” As organizations grapple with an IT world where slow backend infrastructures support instantaneous customer interactions, they must consider the most appropriate technologies so that they can deliver amazing experiences at a rate of continuous change.

Data

Storing customer interactions across all channels and interfaces not only provides a rich source of insight into human behavior; it also reveals usage patterns that can better inform new products and services. This data can be stored and processed by big data technologies, which are far more powerful and cost efficient than older, proprietary databases.

Analytics

Sometimes called “business intelligence,” the analysis of massive amounts of customer data allows businesses to identify insights, for both new opportunities and enhancements of existing experiences. Beyond traditional reporting methods that analyze Key Performance Indicators (KPIs) in bar and pie charts, next-generation analytics technologies include:

- **Ad hoc reporting.** In this new type of enterprise reporting, which leverages huge in-memory capabilities, non-technical end users can ask hypothetical “what if” questions in real time, without the assistance of IT.
- **Statistical analysis.** Highly specialized software tools leverage algorithms to analyze the most complex data sets. Some tools perform predictive analytics that model human behavior, predict responses, and refine behavioral models on the fly. Armed with this knowledge, companies can fine tune customer experiences – including making suggestions and recommendations – in real time.
- **Artificial intelligence/Machine learning.** Advanced computing techniques leverage massive quantities of data and real-time systems to interpret and respond to the context of a particular environment or situation.

Product Development

No longer the domain of engineers working on “cool technology” for its own sake, product development now starts from the perspective of human needs. Gaining insight into these human needs comes from many techniques, including the data analysis methods described above.

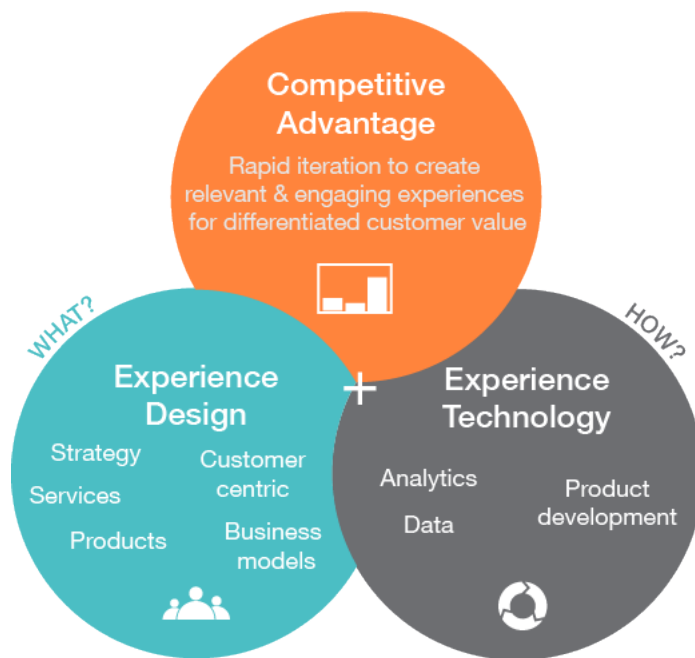
- Ethnography allows for the direct observation of human behavior.
- Long experience working in industries can develop deep subject matter expertise.
- And the open innovation movement uses input such as crowdsourcing, co-creation, competitions, innovation networks, and beta communities to gain external insights into an organization.

Testing and validation. When it comes to the testing and validation side of product development, there are many levels of complexity. From “back-of-the-napkin” low-fidelity sketches to high-fidelity visual prototypes, companies can test their hypotheses before execution. Minimum Viable Products (MVPs) go one step further, providing actual working models, using real working code, for quick, iterative testing. While this lean model entails more risk, as less consideration has taken place, it significantly speeds up execution and allows companies to correct on course.

APIs/Micro-services. Lightweight APIs and many smaller, discrete micro-devices enable the rapid composition of new products and the flexibility to add or switch out components. This new approach to creating components replaces heavy enterprise architectures, enabling companies to bring new experiences to market at unprecedented speed.

Experience Design + Experience Technology = Competitive Advantage

While deploying any of the components of the above model can be of value, competitive advantage comes from bringing them together into a powerful model of working.



Once a company has understood human needs from a customer-centric perspective, formed hypotheses, and then validated those hypotheses through testing, it can rapidly iterate to create relevant and engaging experiences for differentiated customer value. In this new way of working, competitive advantage comes from the speed at which a company understands a customer's need, creates a new or improved experience that meets the need, and eliminates friction along the way. Value is created when insights are applied immediately and when customers decide to participate (or not) in a product, service, or experience.

Conclusion: An Emergent Strategy

Until recently, the “how” of building traditional technology solutions was handled by in-house IT departments, with the “what” and “why” provided. Working together, they produced fixed, deterministic, end-state solutions, including operational change management guidelines. In today's much more fluid and dynamic environment, businesses who think digital must adopt an emergent strategy, one in which the “what” and “why” are in the system itself.

When companies understand human behavior through experience design and validate it through experience technology, they improve experience and increase value in real time. In this model, the future is open and non-deterministic. Constantly delivering customer value at greater speeds becomes the strategy from which digital thinking originates



About GlobalLogic Inc.

GlobalLogic is a full-lifecycle product development services leader that combines chip-to-cloud engineering expertise and vertical industry experience to help our customers design, build, and deliver their next generation products and digital experiences. Headquartered in Silicon Valley, GlobalLogic operates design studios and engineering centers around the world, extending the benefits of our true global presence to customers in telecom, automotive, healthcare, technology, retail, media and entertainment, manufacturing, and semiconductor industries.

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