

A Guide to Creative Product Design

A #ThinkBeyond Best Practice Series

PHOTON®

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Executive summary

Design has become one of the central elements to finding innovative solutions to user problems. From focusing on aesthetic style to explicitly becoming user-centric, the evolution of design over the years has given a wide range of potential solutions to complex business problems. Today's digitally empowered customers expect seamless and personalized experiences that allow them to interact with brands across touchpoints. A well-crafted design experience based on deep customer understanding and effective visuals can make the difference between a loyal customer and an unsatisfied customer.

The creative product design process is more than just creating services and products, it goes beyond generic solutions and can be effectively applied to systems, procedures, protocols, and customer experiences. In the competitive landscape, enterprises must put creative product design at the core of their business to drive customer loyalty. Brands should assess their design maturity and follow next-gen design thinking approaches to deliver superior, design-led digital experiences that drive business outcomes.

Photon's guide explains the need for a design thinking approach in the UI/UX design process. The guide reveals how Photon's approach to the creative product design process generates business value. The guide further outlines how Fortune 500 companies integrate Photon's creative services to design 5-star rating worthy mobile apps and best-in class digital experiences.

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What is **creative product design?**

Creative product design is a synergy between a human-centered focus and hands-on tools to create an iterative problem-solving UX design process that caters to changing human needs. Enterprises that embed a creative product design process in digital CX strategy achieve tangible business benefits.



70%
of companies that embed design in the digital CX strategy have a stronger or best-in class digital experience.[1]

29%
of organizations employed a VP of Design or Chief Experience Officer in 2019[2]

70%
of CEOs consider UX as a competitive differentiator[3]

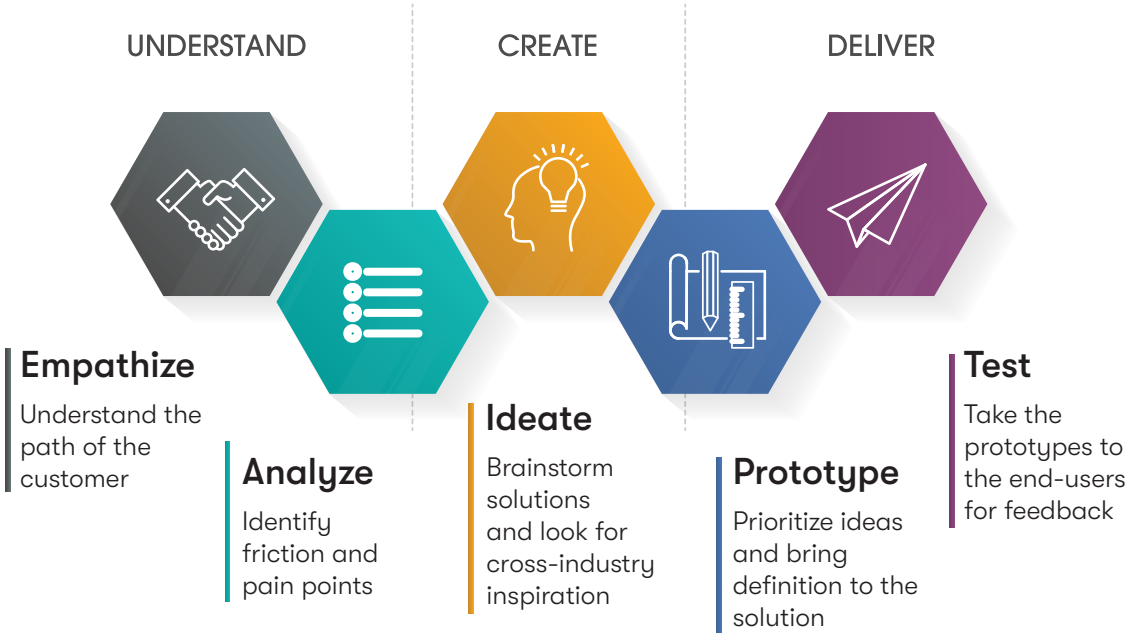
74%
of businesses believe that UX is key for improving sales and conversions[4]

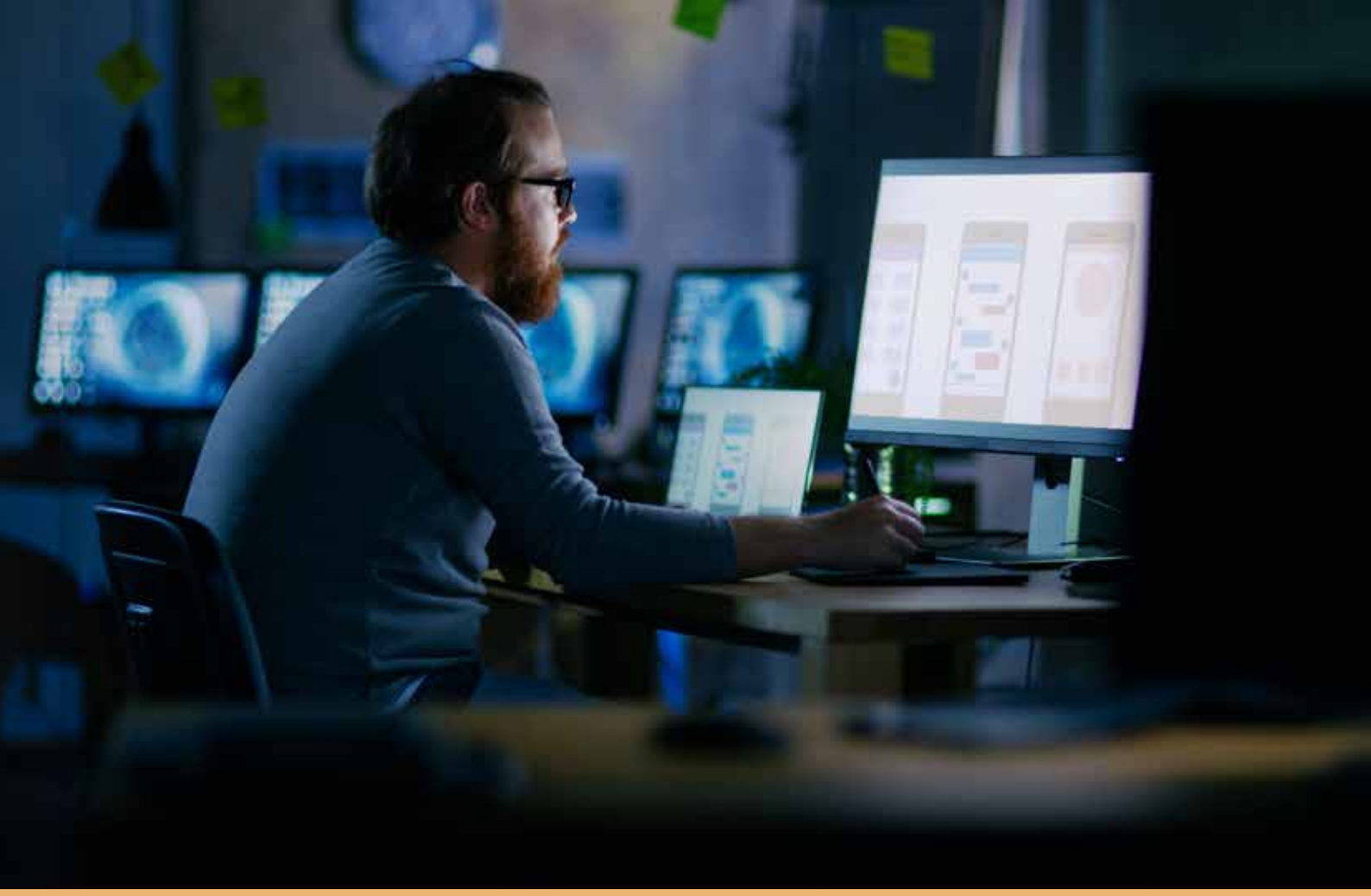
Design thinking is the foundation for the **creative UI/UX design process**

Design thinking is about removing yourself from the brand, and the business, and putting yourself in the shoes of the customer, understanding their needs and frustrations. It is an empathic, human-centered approach to digital innovation that draws from the designer's toolkit to integrate the capabilities of technology, the requirements for business success, and the needs of people.

Design thinking methodology is not problem-focused, it is solution and action-focused and involves both analysis and imagination. By adopting design thinking principles, companies can develop new low-cost working prototypes for various needs and test them in real-time.
A successful design thinking process puts the customer first and connects with them on an emotional level. 46% of design leaders say that creating an emotional bond with consumers is one of the defining characteristics of advanced design practice.[5]

How a human-centric design thinking process delivers value: The design thinking process is an iterative, non-linear cycle involving a deep understanding of customers' unmet needs within the context of a specific problem. The design thinking discovery process incorporates the following principles that work best when used iteratively and in combination with each other:



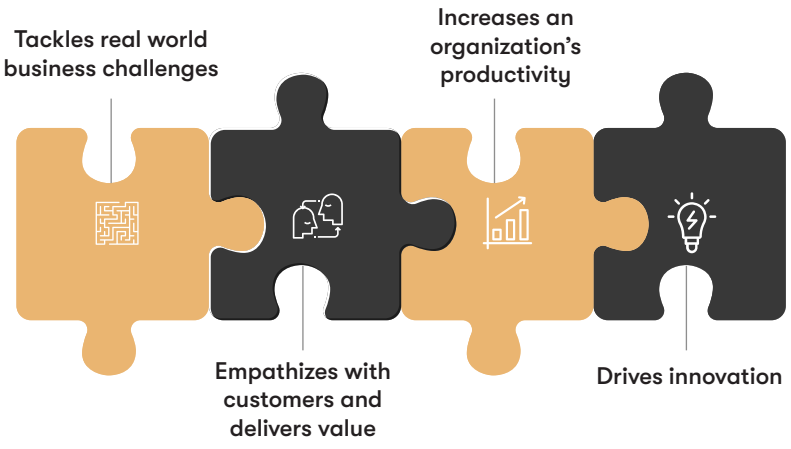


"Design thinking is a human-centered approach to digital innovation that draws from the designer's toolkit. It considers the needs and expectations of customers, the possibilities of technology, and the requirements for business success and enterprise transformation."



Jim Kim
VP, Executive Creative Director at Photon

Benefits of **Design thinking**



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UI/UX design challenges in new digital product development

UI/UX design challenges provide an opportunity for designers to flex their critical thinking and problem-solving skills. Creative design experience for new products comes with a set of unique challenges. Addressing the challenges paves the way for reliable and on-time development of digital products that exceed user expectations in terms of usability and experience. Below are the challenges and solutions that help overcome the roadblocks to building digital products that are well-suited to the users' needs.



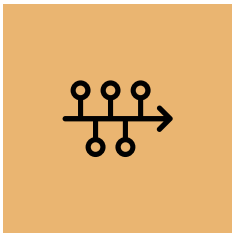
Designing new digital products for new users

In a competitive marketplace, creating products focused on UX is a key differentiator. The product development process is the top challenge faced by the UX teams. 64% of businesses have reported inclusion within the product development process as the top UX challenge.[6] Developing new digital products begins with user research. It is the foundational work of identifying and understanding the needs of the users prior to product development. User research helps businesses gain a strong understanding of their users and market trends, and develop empathy that is critical to an effective UX design. Conducting provisional or generational user research and redefining user personas enable better design process and UX problem solving.



Translating concepts into solutions

It is important to turn the observations and abstract concepts into new concrete solutions. In an organization, the design and strategy teams must be tasked with bridging the gap between abstract and concrete to create innovative digital products.



Managing timelines

As user research and testing take a long time, managing timelines is one of the challenges in an effective UI/UX design process. Once the user persona is refined, tests or interviews can be scheduled with real people. Creative design teams need to carefully manage their timelines without slowing down the development of new digital products.

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Building blocks of **creative discovery**

Human-centered creative discovery approach for software development and design has less focus on hardware and product deployment, and pays more attention to UX that customers will engage with during product usage. The three building blocks of creative discovery are:

What goes in it?

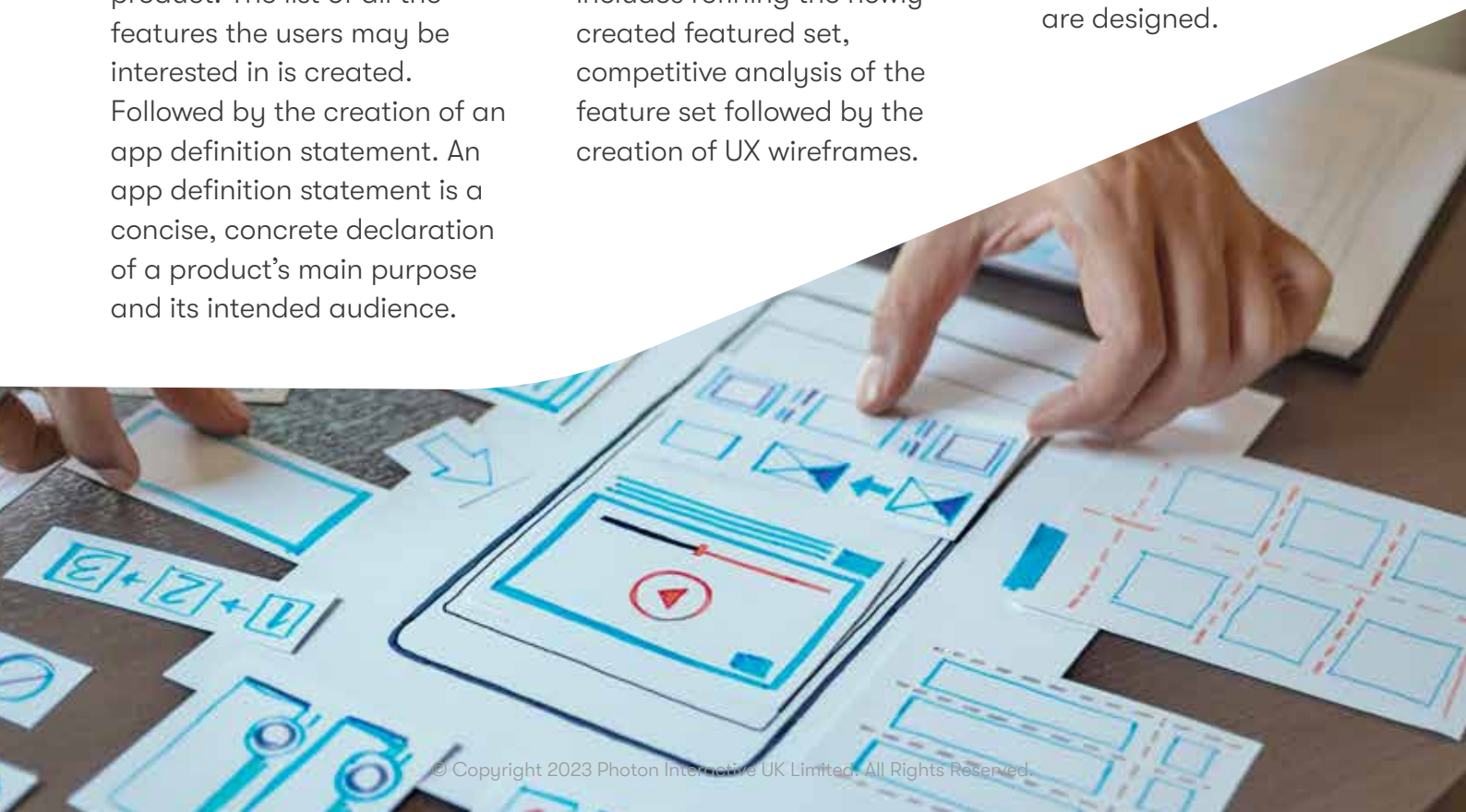
Feature set: The feature set includes simple guides to create a usable mobile product. The list of all the features the users may be interested in is created. Followed by the creation of an app definition statement. An app definition statement is a concise, concrete declaration of a product's main purpose and its intended audience.

How will it work?

UX: The process of determining how a user will go about completing a task. This includes refining the newly created featured set, competitive analysis of the feature set followed by the creation of UX wireframes.

What will it look like?

UI: The graphic design elements of the product, including transitions and micro interactions, are designed.



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Photon's approach to the Creative Product Design process

Creative product design process becomes real when it is embodied in the team. Design does not end when services or products are launched—it should be incorporated into the customer experience and continuously analyzed to refine and enhance the human experience.

With the creative product design process, we help enterprises to think differently, reinvent themselves, and become truly digital. Photon's creative experiences incorporate UX design and development best practices into every step of the application development process.

Photon delivers on three primary activities to initiate a creative design engagement.

UX-UI engagement model	Definition
Standard creative discovery	This is necessary when the project definition and scope are already partly defined and require further user understanding, feature prioritization, and prototyping before agile production can begin.
User experience research	User experience research is recommended when project definition, scope, and user needs are not properly determined, and foundational data regarding personas and business needs are required.
Design thinking workshops	Design workshops assist with projects requiring foundational context and insights, strategic alignment from within a stakeholder group, or to accelerate project definition.

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"Fortune 500 companies that leverage next-gen creative product design process to align the customer journey across multiple touchpoints empathize more with customers, tell a more consistent brand story, and invest in digital capabilities that promote a culture of a shared vision for better business values and outcomes."



Mukund Balasubramanian
CTO, Co-Founder at Photon

Standard creative discovery:

This is for projects that still need direction. If the project goals, features, purpose, KPIs, strategy, and look and feel are yet to be set, then creative discovery is performed in order to define all these requirements before the rapid design process begins. Our design process is so rapid that there is no time for determining high-level direction, namely:

- What exactly is going into the app/site?
- What will the look and feel be?

All of these high-level, important decisions need to be made in advance. The creative discovery process consists of interviews and workshops that help determine the foundation of your project and refine the output.



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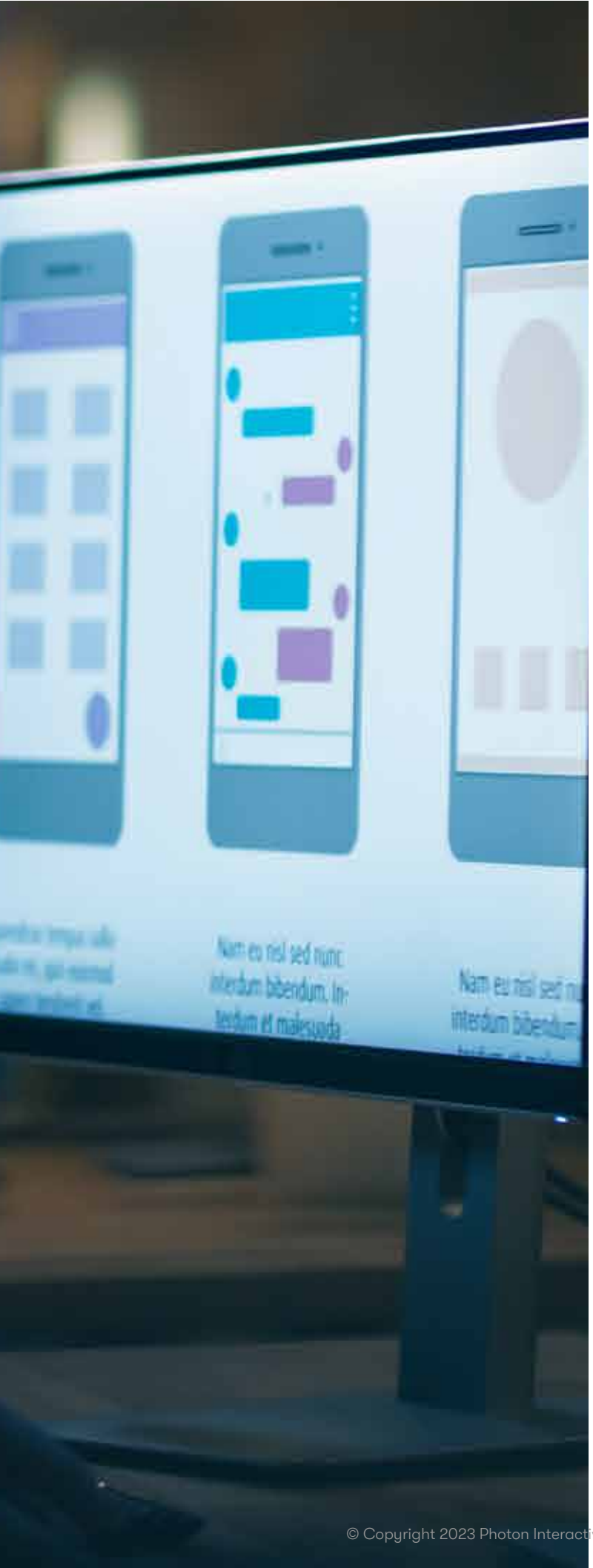

Some outputs are: KPI definition, priority features, and Information Architecture, to name a few, with the end goal to produce a usable prototype.

- **Design process (sprints):** During the creative design process, the project is broken down into manageable chunks called “sprints” that allow for the developers to take completed work from the creative teams and begin developing simultaneously to the design process continuing on for other sprints.

- **User experience design (UX):** During the UX phase of each sprint, the UX designers will deliver wireframes and flowcharts representing how the user will move through the app and the user experience. Wireframes are typically grayscale and show only how the user will interact with each screen. Flowcharts show how a user will complete tasks from the beginning to the end.

- **User interface design (UI):** During the UI phase of each sprint, the UI designers will take the wireframes and add the brand’s look and feel—the color, font, images, and style—to each page. These pages are referred to as “mocks” by designers. The dev team starts on the functionality of this sprint, by designing to the UX wireframes, and then they can integrate the UI elements for incremental release.

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User experience research:

It is the nature of design to solve specific problems. UX research activities allow designers to gain a thorough understanding of the product design context and establish foundational, strategic insights and direction.

According to the "State of UX in the Enterprise 2019 Report," UX research is rated as the most performed method for enterprise teams.[7] UX research plays two primary roles in the product design lifecycle:

- **Generative research:** Learning-based activities conducted before the design process generate insights and inform design decision-making. The activities include:

  Ethnographic studies: For foundational user insights and strategic design direction, site visits and field studies provide first-hand observations of users or business processes in a natural environment. UX researchers can both passively observe subjects and actively engage with questions to gather data efficiently and comprehensively.

  Interviews & focus groups: When site visits are impractical, knowledge transfer becomes more crucial. Qualitative activities like interviews and small group discussions are preferred, but when time and access is limited, we can develop and disseminate surveys in an expedient, quantitative approach.

  Card sorting: This method is used to help determine the information architecture of a digital experience. Card sorting activities





are designed to allow small, medium, or even large groups to quickly process a scripted program of issues, articulate and discuss preferences, and then deliberate on priorities.

Competitive landscape analysis: While understanding user needs provides key insights for design, a thorough examination of relevant competitor experiences is foundational to contextualizing the opportunity. At Photon, we examine both direct industry competitors and look for relevant cross-industry disruptors to help set strategic direction.

- **Evaluative research:** Analytical activities are conducted to measure the success or effectiveness of a concept or design assets in progress. The activities include:

  Usability testing: The most effective way to measure product usability is through qualitative observation of real users engaging with it. Whether testing a final product, prototype, or simple POC, Photon will recruit relevant subjects and conduct usability surveys on-premises, at neutral facilities, or remotely via online tools.

  Heuristic evaluation: When time and resources are constrained, a UX researcher or Senior UX Lead can perform a thorough analysis of a product, prototype, or POC, specifically focused through the lens of the user persona needs. Looking at industry baselines, competitive set analysis, as well as cross-industry best practices, Photon will outline practical and strategic areas of recommendation.

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Design thinking workshops:

The workshops are designed to help companies develop their own creative product design process and achieve desired business outcomes. The interactive design thinking workshops ideate on current business use case problem sets and bring R&D to life for the clients. In some cases, design thinking workshops can also replace a standard discovery, serving as an accelerated data gathering and planned activity.

"Through an iterative process of ideation, rapid prototyping, and testing, creative product design helps enterprises craft meaningful experiences that mesh the physical and digital interactions of people, process, and technology."



Annah Lansdown
Group Creative Director
at Photon



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How Photon helps Fortune 500 brands **create best-in-class user experiences**

Below are some instances wherein Photon helped Fortune 500 brands create best-in-class customer experiences by building innovative and data-driven UX/UI designs.



Client:

A Fortune 100 drug retailing chain

Requirement:

The company was on a journey to rethink the architecture and platform for the future of digital starting with adaptive responsive front-end redesign (based on ReactJS) and microservices-based commerce backend.

Photon's involvement:

Photon was instrumental in suggesting the choice of technology and blueprinting the architecture for this engagement. Photon has been a digital innovation partner for the second-largest pharmacy store chain in the US for over 9 years—a journey that started with a pill reminder mobile application. This was the start of Photon's series of initiatives to follow that transcended all of their omnichannel

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touchpoints like responsive websites, associate applications, API platforms, big data analytics, and next-gen frontend experiences. Some major features built:

- **Refill by Scan:** Camera feature to scan the prescription barcode to refill and make the shopping experience cooler. The application would query the central database for the info on the prescription
- **Quick Print:** Allows the user to select pictures from phone albums to print and pick up at local pharmacy stores
- User can easily share pictures to the website and Facebook; this feature is built using HTML5 pages
- Location-based notification for collecting their prescription refill
- Alerts the users when their stock of medicines is about to get empty



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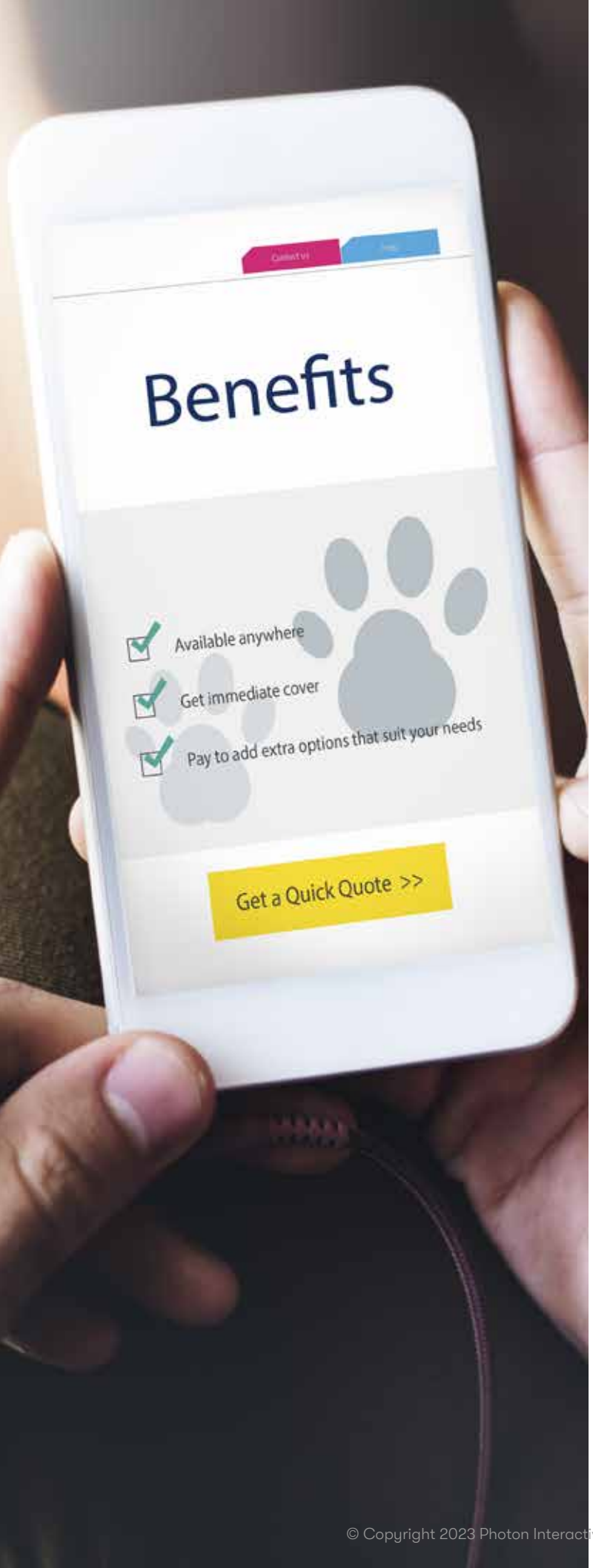

Client:

A Canadian multinational insurance company and financial services

Requirement:

The company wanted to remodel their experience portal to support all the digital channels and provide a responsive UX to help members and sponsors to easily interact with the application.

Photon's involvement:

Photon was involved in the remodeling of the experience portal. The new experience improved the overall customer experience, enabled better digital asset and content management, and improved security and privacy. Photon's involvement includes:

- Build responsive wireframes to support the Member and Sponsor experience functionality and the functional flow
- Developed the global style guide which can be leveraged across both the portals (Sponsor and Member)
- Developed the mockup screen based on the global style guide for three breakpoints (web, mobile, tablet)

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- Developed the UI components in a shared library leveraging React styled components
- Support for branding the UI components for customers
- Developed multiple SPA using the UI components from the shared library
- Designed and developed GraphQL services to support the front-end application using Node and Apollo
- Consumed inhouse SOAP and REST services using Node and exposed as GraphQL business objects
- Integrated with AEM Content as a Service for all the labels and messages

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Conclusion

While there is much road to travel between today's capabilities and the emerging vision of the digital future, enterprises should embrace and integrate the creative product design process throughout the digital transformation journey.

Experiences that result from the creative product design process are not superficial but enable changes to be made for supporting people, process, and technology. The new CX that arises requires integration and reorchestration of how business relates to customers on all channels. Through an iterative process of observation, ideation, rapid prototyping, and testing, Photon's creative services blend innovative digital technologies with human-centered design expertise to create meaningful experiences that people love to use.

Connect with Photon to design 5-star rating worthy apps and shape digital experiences of the future.

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