

EXECUTIVE SUMMARY

The Digital Transformation of the Consumer Journey

Lead Analyst: **Jerrold Wang, MBA**
Analyst

Contributor: **Jonathan Melnick, Ph.D.**
Research Director

Executive Summary

Digital transformation is fundamentally changing the consumer journey at every stage of the funnel across all categories of consumer products. However, different product categories are taking different strategies, leading to opportunities to learn and apply lessons from adjacent areas.

We found that the segments of consideration and use have the highest importance for digital transformation and will become hot spots of future digital innovations. We also expect that digital technologies will push toward integration among the segments of the consumer journey in the future.

To prosper through this ongoing digital transformation, AI and IoT technology vendors and consumer product brands should proactively form partnerships with each other for joint technology and product developments.



The incumbent digital solutions failed to truly transform the consumer journey

The incumbent digital solutions driving the consumer product market are digital marketing and e-commerce.

- Digital marketing focuses on creating and sending marketing content to omnichannels. Typical examples of digital marketing include search engine optimization, social media marketing, and email marketing.
- E-commerce aims to move consumers' product discovery and purchase behaviors from offline to online. Typical examples of e-commerce include online marketplaces (like Amazon and Groupon) as well as the online stores and apps of individual brands.

These incumbent digital solutions have failed to truly transform the consumer journey because they still try to push content to as many consumers as possible and because they have limited consumer understanding and solution customization due to the lack of consumer data collection.



AI and IoT-empowered digital transformation of the consumer journey is disrupting the consumer product market

Emerging AI and internet of things (IoT) technologies are fundamentally changing the consumer journey, creating unexpected disruptions for all companies in the consumer product market.

The three cases below are examples of the disruptions to online stores, offline stores, and consumer product developers, respectively:



- [Skafos](#) enables consumers to search for products using an online picture or their own
- This technology disrupts online shopping behaviors and bypasses the sales and marketing tools of online stores, such as product terms and marketing texts



- [Amazon](#) is now offering its cashier-free store technology called "Just Walk Out," to other retailers
- The technology has potential to impact all offline stores based on its high store operation efficiency and consumer time savings



- [Lululab's](#) smart mirror analyzes consumer skin and recommends its partners' cosmetic products as customized solutions
- If used widely, the product will become a serious challenge to cosmetic companies outside of Lululab's partner ecosystem

How does this report help companies in consumer product markets to survive and prosper through the disruptions?

To survive and even prosper through the disruptions, companies in the consumer product market should not just monitor the digital innovations that impact only their products or focus on one segment in the consumer journey but analyze the digital innovations that penetrate each product category and serve the whole consumer journey. The reasons are as follows:

- The use cases of digital solutions are usually transferable among different product categories. Take Lululab on the previous page as an example – the company’s strategy in the cosmetic industry can be used by food and nutrition companies as well.
- AI and IoT innovations can expand their impact from one segment to the whole consumer journey. For example, the user app supporting Amazon’s cashier-free shopping experience can also be used for product recommendations, delivery tracking, and automatic reordering.

To help Lux clients in the consumer product market, this report aims to achieve the following:

- Examine AI and IoT digital innovations that serve different segments of the consumer journey
- Analyze these innovations’ key use cases in different consumer product categories
- Provide recommendations based the trends of the future

CONSUMER JOURNEY

Awareness

PAIN POINT

Offline stores have a hard time providing consumers product information that is relevant to their demands and detailed enough. In addition, online consumers have to spend a long time finding out which products fit their precise needs.

WHAT DIGITAL ACHIEVES

Uncover Invisible Insights	Upskill Humans
Predict the Future	Make Information Accessible
Optimize	Automate

IMPORTANCE OF DIGITAL TRANSFORMATION



MODERATE

LEVEL OF INNOVATION ACTIVITY



MODERATE

HOW DIGITAL HELPS

Digital tools for offline stores can improve the efficacy of consumer education by showing detailed product information only to consumers interested in the products. Digital tools for online stores help consumers search for products in faster and more intuitive ways.

CONSUMER JOURNEY

Awareness

KEY USE CASES

The use case in offline stores is to detect consumers' interest in display content by analyzing facial expressions and gestures and adjusting content to a more specific level if consumers show high interest. Key use cases for online stores help consumers quickly search for products using photos or voice.

KEY INNOVATIONS

- In-store solutions are based on computer vision. Some can adjust content based on consumers' gesture control, while others automatically adjust content according to consumers' facial expression and attention.
- Solutions for online stores use computer vision and voice recognition to allow consumers to search products more intuitively.

KEY PLAYERS

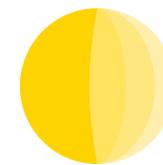


Shopper®

GESTEOS



RECONOVA



Mirow

yosh.AI



Skafos

LUX TAKE

Digital tools for offline stores can improve engagement with individual consumers, but the tools' value is limited by their low service capacity given that they can serve only one consumer at a time. The success of digital tools for online product search highly depends on the accuracy of computer vision and voice recognition.

Awareness – Case Study

INTRODUCTION

Heineken is the world's second-largest brewing company. Like other brewing brands, Heineken lacks tools deployed in bars to analyze consumers' attention and interest in Heineken's products and interact with consumers via tailored content.

USE CASE

Heineken trialed [Shopper's](#) technology, which includes a smart camera and a display. The smart camera can detect consumers' age, gender, and gestures in front of the display, so that the display adjusts generic Heineken content to tailored product information accordingly. Shoppar's technology improved Heineken's engagement with different consumer groups, and Shoppar stated that the trial achieved a 5% sales increase for Heineken in bars.

KEY PLAYERS



INDUSTRIES AFFECTED

Though this trial is only for beer, the technology can be deployed in offline stores to serve potentially all categories of consumer products.

LUX TAKE

The features of consumer detection and content adjustment have unique advantages to offer customized and real-time customer engagement. But, before it can be widely applied, this solution needs to solve two issues regarding scalability: the ability to generate content tailored for different products and brands, and the ability to interact with more consumers at the same time.

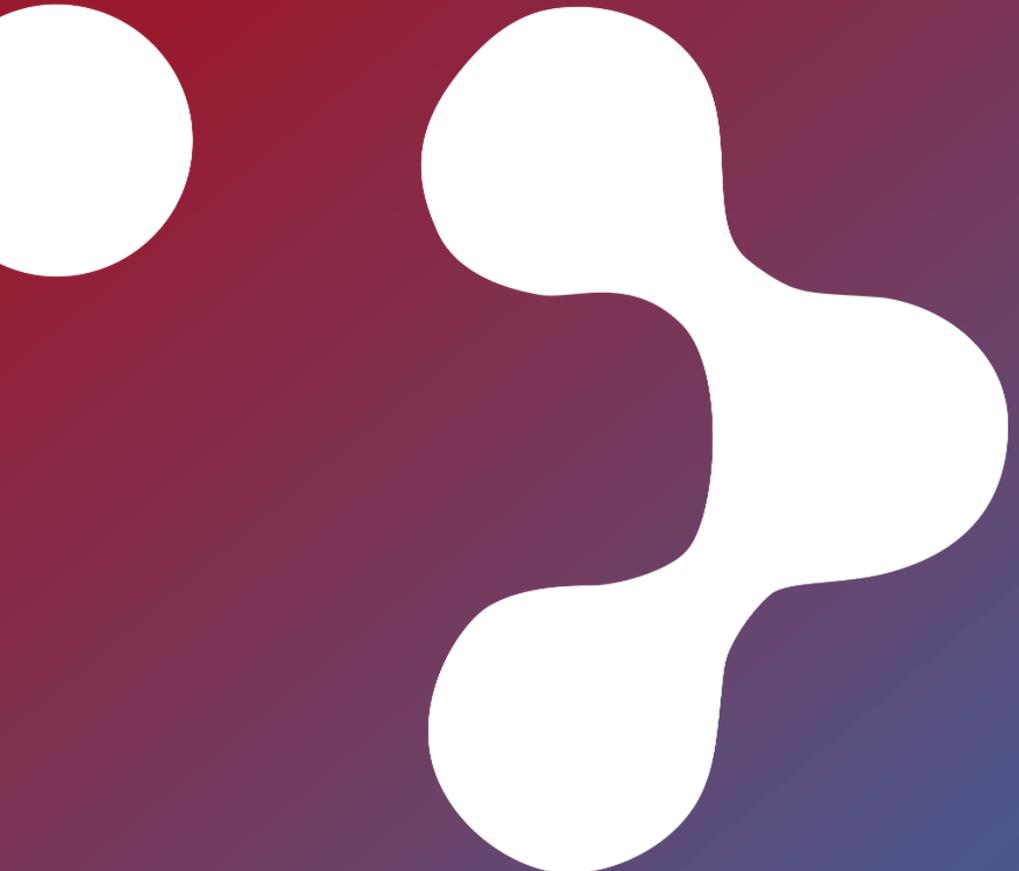
In the segments of use and retention, the level of innovation activity is outmatched by the importance of digital transformation



OUTLOOK

What's next in the consumer journey?

- **The future innovation hot spots will be the segments of consideration and use.** These two segments offer opportunities for consumer data collection, engagement, as well as demand analysis and prediction, so innovations for these segments will enable online and offline stores as well as product developers to provide customized value-added services and build consumer lock-in. In addition, these two segments have a direct impact on product sales and consumer retention, driving revenue from both new and existing consumers.
- **Digital technologies will drive integrations among the consumer journey segments.** The awareness segment will gradually merge into the consideration segment because product recommendations offered in the consideration segment can realize better effects than those in the awareness segment in terms of forming consumer awareness of and interests in the products. Additionally, the use segment will integrate with the retention segment. Technologies in the use segment enable comprehensive data collection and consumer engagement, through which they can analyze consumer satisfaction with products, playing the role of the technologies for the retention segment.
- **Online sales channels will replace some functions of offline channels.** Customized recommendations and advice from the consideration and use segments will drive consumer flow to online channels, replacing functions of offline stores in terms of enabling consumers to discover and buy products. Online channels will focus more on providing a physical experience of the products.



Innovate Smarter & Grow Faster With Lux

Contact us:

www.luxresearchinc.com press@luxresearchinc.com



[@LuxResearch](https://twitter.com/LuxResearch)



[@LuxResearch](https://www.facebook.com/LuxResearch)



[Lux Research, Inc.](https://www.linkedin.com/company/Lux-Research-Inc)

Blog:

[Lux Blog](#)

Free Webinars:

[Lux Webinars](#)

YouTube:

[Lux Research](#)