



Beyond Touch Glimpse

The impact of voice-assisted
interfaces on shopping in Europe



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Scenario Thinking

A glimpse into the future of voice-assisted interfaces' impact on shopping in Europe

Voice-assisted interfaces have reached a technological maturity, where they are generating enough value to become relevant for consumers and businesses. However, there is still much untapped potential in further application of this technology in a commercial context. The multitude of possible use cases suggests very high potential of voice-assisted interfaces, which will not only affect future shopping behavior, but also disrupt the nature of shopping for all involved parties.

From a consumer viewpoint, voice-assisted interfaces are able to facilitate shopping by making it Omni-present, providing guidance and answering consumer needs better than ever. On the other hand, the interaction with voice-assisted interfaces requires high customer data transparency. Hence, the success of this technology is strongly influenced by consumers' willingness to share their data as well as consumers' trust in data security offered by the respective provider.

For retailers and consumer goods companies, voice-assisted interfaces present the challenge to adapt marketing and sales approaches accordingly, but also offer a great chance to benefit from deep consumer insights and direct access. In consequence, companies have to adapt their commercial activities and the underlying processes and workflows to fit this new customer interface. Technology providers thus begin to occupy a central node in the retail value chain and are presented with the opportunity to take up retail activities themselves.

As outlined above, there are many uncertainties, which will define the actual impact of voice-assisted interfaces on European retail for these different stakeholders. Scenario design provides the

basis for decision-making in the context of great uncertainty by analyzing and structuring drivers into critical uncertainties that could impact the future. Scenarios are narratives of alternative futures that provide a sound basis for the various stakeholders to develop dynamic strategies to shape consumers' shopping experience. So what will the future of voice-assisted interfaces in shopping look like? To answer this question we have developed four possible scenarios.

In the first scenario, the new internet, market players collaborate strongly and digital voice assistants are technologically completely integrated. The dynamics of retail in Europe have changed in favor for companies that were able to leverage voice-assisted interfaces. Looking at the consumer side, they are able to enjoy the full span of advantages of connected retail due to their willingness to share their data.

The second scenario, age of heterogenic alliances, describes a future with heterogenic technology standards, where digital voice assistants have not achieved full integration and where markets follow the tune of a small group of alliances that collaborate exclusively within their cluster. Consumers only benefit from selected alliances and are able to choose with which alliance to share their private information.

In the third scenario, old Europe, market dynamics are hyper-competitive. The shopping experience will be frustrating for the consumer, due to a complex world of separate voice assistant solutions, which are neither technologically integrated nor aligned across market players.

Finally, the fourth scenario, world of aggregators, shows a world, where technology aggregators manage to become the one and only gatekeepers for consumers to enter the world of shopping. Through the success of digital voice assistants, technology companies were able to use their exclusive consumer insights to become the new retailers. These scenarios demonstrate how different the future paths could be. Let us explore each one individually to identify the opportunities and risks of each potential future.

Enjoy the ride,
Your

center
for the long view

Critical uncertainties

Drivers that shape the future of voice-assisted interfaces



Using expert interviews and AI-based natural language processing algorithms, we assembled and rated a comprehensive list of drivers that have the potential to influence the development of voice-assisted interfaces and determined their impact on the future shopping experience in Europe. The resulting list of prioritized drivers enabled us to identify the critical uncertainties in the context of voice-assisted interfaces' future impact, which formed the basis of our scenario analysis.

According to our experts' ranking, the first critical uncertainty that will determine the future of voice-assisted interfaces in retail is the level of cooperation between market players. Either the dynamics between market players can be hyper-competitive with price wars and intense marketing efforts to win customers, or it can be hyper-collaborative, where market players work in close alliances and data is exchanged within an alliance.

Drivers underlying this critical uncertainty are competition in retail and FMCG, but also willingness of new and traditional players to work together. Another driver of collaboration is the development of connected ecosystems. Monetization of customer data in retail and FMCG will also influence whether companies are willing to share and pool their data.

The second critical uncertainty that will influence the impact of voice-assisted interfaces, is the level of integration with other technologies. High technological integration would co-relate to a single technology standard, e.g. linking voice-assistants to other intelligent technologies. Low integration would result in a heterogenic technology landscape, where individual devices would only deliver marginal value to consumers.

One of the identified drivers in this context is the application of A.I. in retail and FMCG and the integration of voice-assisted interfaces with face recognition technology, which would enable retailers to customize digital consumer interaction in stores and proactively engage them with suitable offerings.

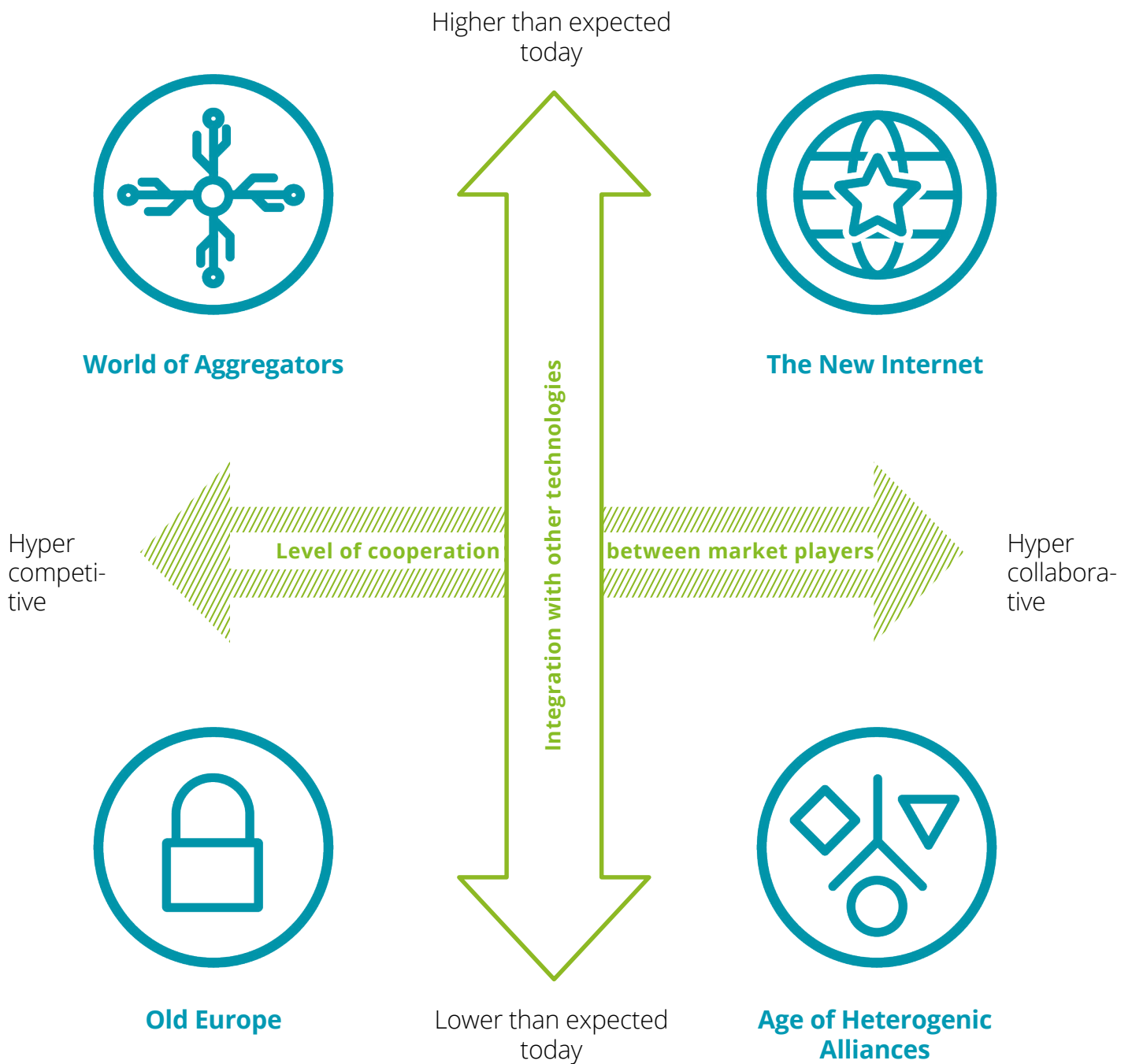
The level of technological integration also correlates with FMCG companies' interaction with consumers. A change of consumer preference to communicate with brands, shifting from complaint-driven interactions to lifestyle-framed communication, would drive efforts of FMCG companies to integrate their technologies to cater to consumer preferences. Further drivers of uncertainty in technological integration include the legal frameworks for the use of consumer data gathered through voice recognition as well as data security standards.

The level of cooperation and technological integration could potentially transform retail in Europe. Highly connected smart shopping solutions would enable an engaging shopping experience customized to consumers' individual preferences. Omni-present gathering of consumer insights would enable predictive recommendation of the right products and services just when the consumer needs them.

On the other hand, voice-assisted interface could become one of many isolated technologies with only marginal value added, due to lack of technological integration between devices and across technologies. Large players would offer their own voice assistants as one of many shopping features.

The combination of both critical uncertainties results in four plausible but highly distinct visions of the future, which are illustrated here.

Fig. 1 – Scenario matrix to describe the impact of voice-assisted interfaces on shopping in Europe in 2030



Four possible scenarios

The impact of voice-assisted interfaces on shopping in Europe in 2030

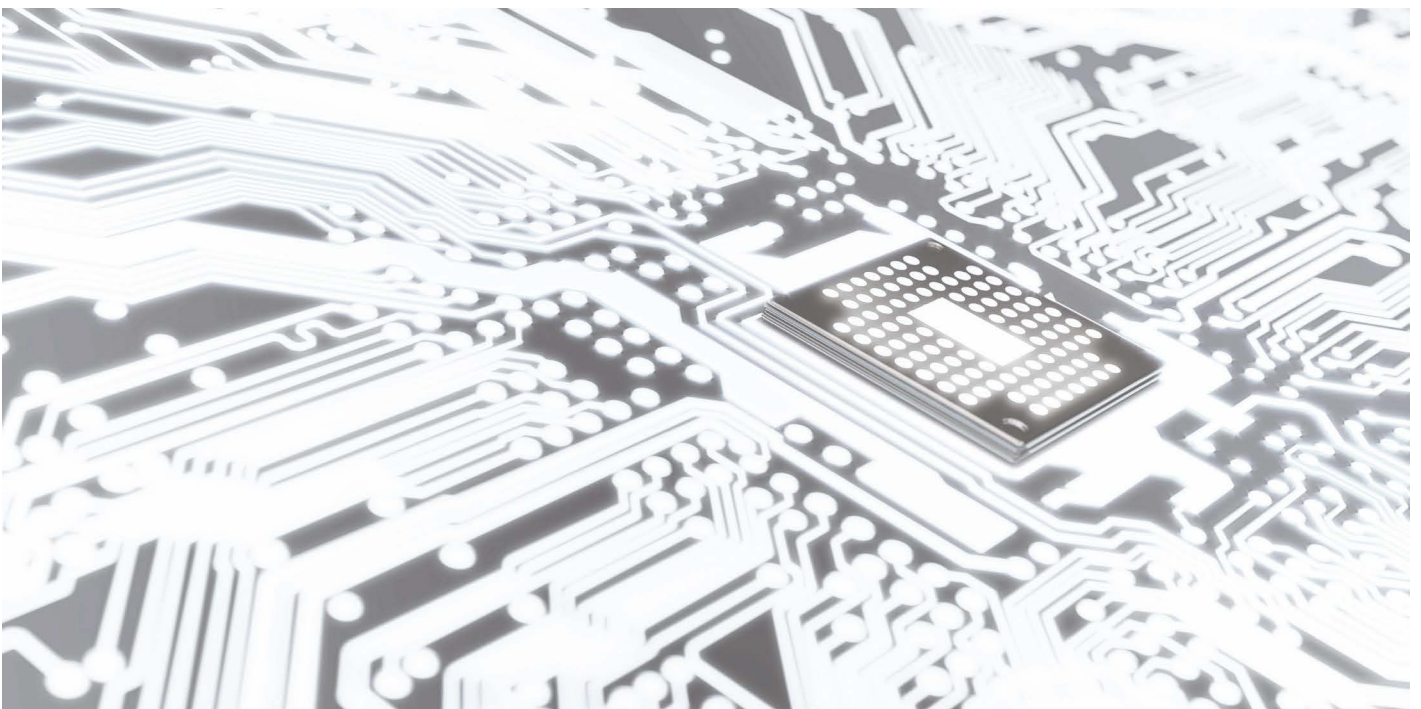
Scenario 1: The new Internet

In this scenario, market players strongly collaborate in the field of voice-assisted interfaces and voice assistants are technologically completely integrated. The nature of shopping has changed entirely. Data driven analyses and the connection of smart devices will enable predictive and automated shopping.

The relevance of retailers has decreased, as high-volume purchases are completed via direct sales. New logistics providers have emerged, taking care of home deliveries at any time. Successful retailers have reinvented their stores, integrating voice-assisted features, now focusing on experience shopping for high involvement products.

Winning FMCG companies have realized at an early stage that brand investments are essential to reach customers and to build up a direct conversation through voice-assisted interfaces. Moreover, FMCG companies focus their marketing budgets on affiliate programs with voice assistant providers, rewarding providers for promoting their products.

Customers can fully exploit the advantages of voice-assisted interfaces. Predictive offerings and automated orders provide the fullest convenience to the 'glass customer', who benefits from one shared platform across players. However, customers have to give up ownership of their data and voice assistants relieve consumers of decision power, as they filter available options beforehand.





Scenario 2: Age of heterogenic Alliances

In the age of heterogenic alliances, market players are highly collaborative. However, voice-assistants are not integrated with other technologies. Several alliances between retailers and FMCG companies have emerged, each with their own technological standards for their distinct voice-assisted interface. Data is exchanged in an open system within an alliance but technological hurdles do not allow for an active exchange across alliances.

Driven by competition from the USA, successful retailers and FMCG producers have partnered with the right players, which ideally have only a limited product portfolio overlap. Offering a seamless customer journey and a complete product portfolio are crucial for winning customers for any alliance. Service bundling and loyalty programs as well as investments in voice-assisted interface along the value chain are essential

differentiators for winning alliances. It has become key for success to build up high switching costs for customers changing from one alliance to another.

Customers have to choose an alliance and thereby miss the experience or price advantages of another alliance. Alternatively, they can sign up for multiple alliances and consequently cope with several payment models and sign-up processes. Consequently, the lack of technological integration prevents customers from experiencing a seamless customer journey when switching between alliances. In order to profit from individualized offerings, customers need to provide full transparency of their data to the chosen alliance.

The impact of voice-assisted interfaces on shopping in Europe in 2030



Scenario 3: Old Europe

In this world, market players have approached voice-assisted shopping hyper-competitively, without integration with other technologies. The strongest driver for this reality is rigid legislation for data protection and strong regulation to avoid monopolies.

Successful retailers started early to invest heavily in their own voice-assisted shopping experience. Due to the lack of technological integration and market player collaboration, retailers have to focus on multi-dimensional customer relationship building, including experience, convenience and price.

FMCG companies have used voice assistants to build up direct sales channels and to start a continuous conversation with their end-consumers. Players with a broad product

portfolio, which have strongly invested in technology and brand building, were able to connect to their end consumers and strengthen their market positioning.

Customers are confronted with a complex world of separate voice assistant solutions that provide only marginal benefit. Personalized shopping is possible, but only to a limited degree, as there is no data exchange between market players. The typical customer is not using all available voice assistants, but focuses on the most relevant ones.

The preferred supplier of each segment wins its category over time, due to high complexity and switching costs for customers. In the long-term, one player is likely to dominate and the intention to control monopolies backfires.

Scenario 4: World of Aggregators

In this world, large tech aggregators have emerged and redefined shopping through closed systems of voice-assisted interfaces. While voice recognition technologies are integrated, collaboration among market players is weak. Successful aggregators have defined the standards for voice-assisted interfaces and have become the gatekeeper for customers to enter the world of shopping. Big data analytics provide complete customer transparency to aggregators.

Retailers had to hand over substantial decision-making power to platform providers, leaving them in charge of critical issues, such as data and security. Some aggregators have started to extend their vertical reach, becoming the new retailers. FMCG companies focus their marketing efforts on technology

aggregators to optimize recommendation rates through voice assistants. Competitive behavior and high transparency, created through platforms, puts downward pressure on prices. Consumers benefit from low market prices and a large product variety, which are now easily accessible to customers, efficiently bundled on one platform and available with one voice command.

While fully integrated technologies give rise to the possibility of predictive offerings and increase convenience for consumers, a loss of stringency in data protection cannot be circumvented. Hereby, customers are assuming an increasingly passive role, as shopping behavior is biased by data predictions and offerings are suggested in a custom-based manner.



Conclusions and outlook

Developing specific strategies for each of the four scenarios will enable stakeholders to respond flexibly to the dynamic environment of future shopping.

Scenario design has shown that the impact of voice-assisted interfaces on shopping experience depends on a multitude of drivers, such as further developments in A.I., antitrust regulation, data privacy and many more. Designing scenarios that are shaped by the critical uncertainties 'collaboration amongst market players' and 'integration with other technologies', four extreme, yet plausible futures can be deducted.

Aside from insights into how voice-assistants will impact consumers' shopping experience, there are many relevant implications of the

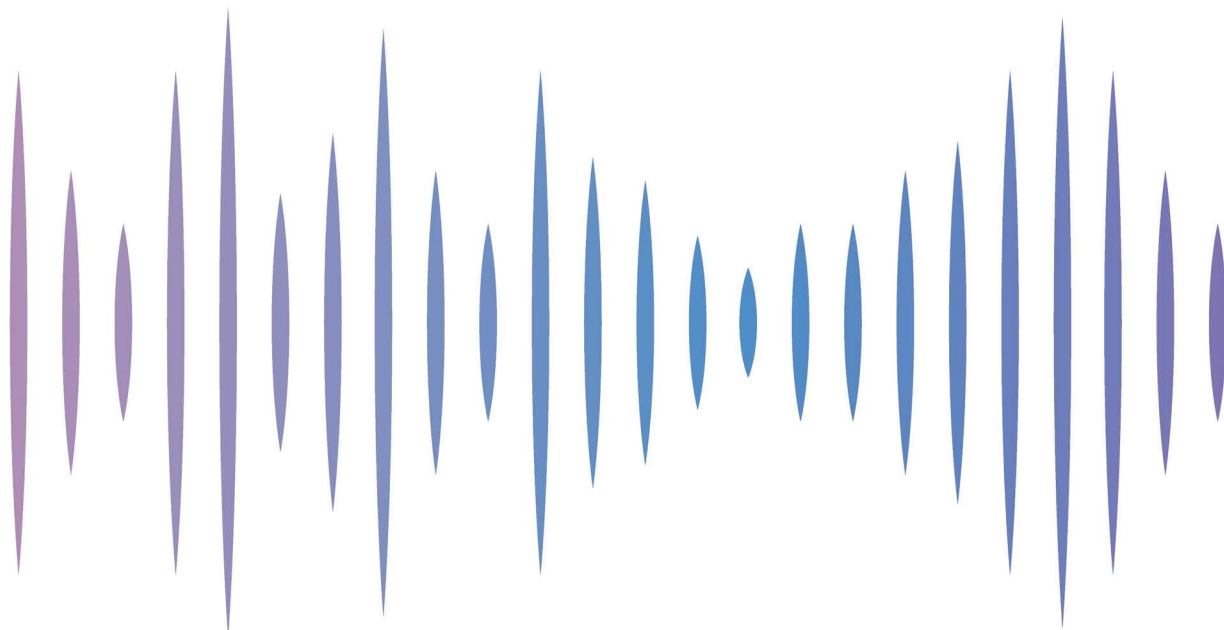
four scenarios for the application of voice-assisted interfaces for retailers, FMCG companies and technology providers. Developing specific strategies for each of the four scenarios depending on a company's individual situation will enable the decision-makers to respond flexibly to the dynamic environment and to adapt to the course of the most likely future.

The impact of voice-assisted interfaces on the various market participants differs strongly in each scenario. Along the value chain, manufacturers and retailers will experience unique challenges, as will specific industries and brands. Across all scenarios, a shift along

sales channels will shake up the status quo.

For instance, in a world of aggregators, retailers will lose much of their power and potentially even their entire digital customer interface to technology aggregators. Hence, retailers will have to find new roles in such a scenario. FMCG companies will be able to sell more directly to consumers as they shift their engagement away from retailers to technology providers, who eventually take over retailers' places.

On the other end of the scenario-matrix, in a world of heterogenic alliances, the odds will be more in favor of large retailers that will be



able to lead an alliance. Therefore, retailers should focus on positioning themselves in the center of a strong alliance. On the other hand, FMCG producers will face a choice between high costs of engagement in multiple alliances or the risk of choosing the wrong alliance. Therefore, their focus should be on partnership management and strategic positioning within the voice-commerce market.

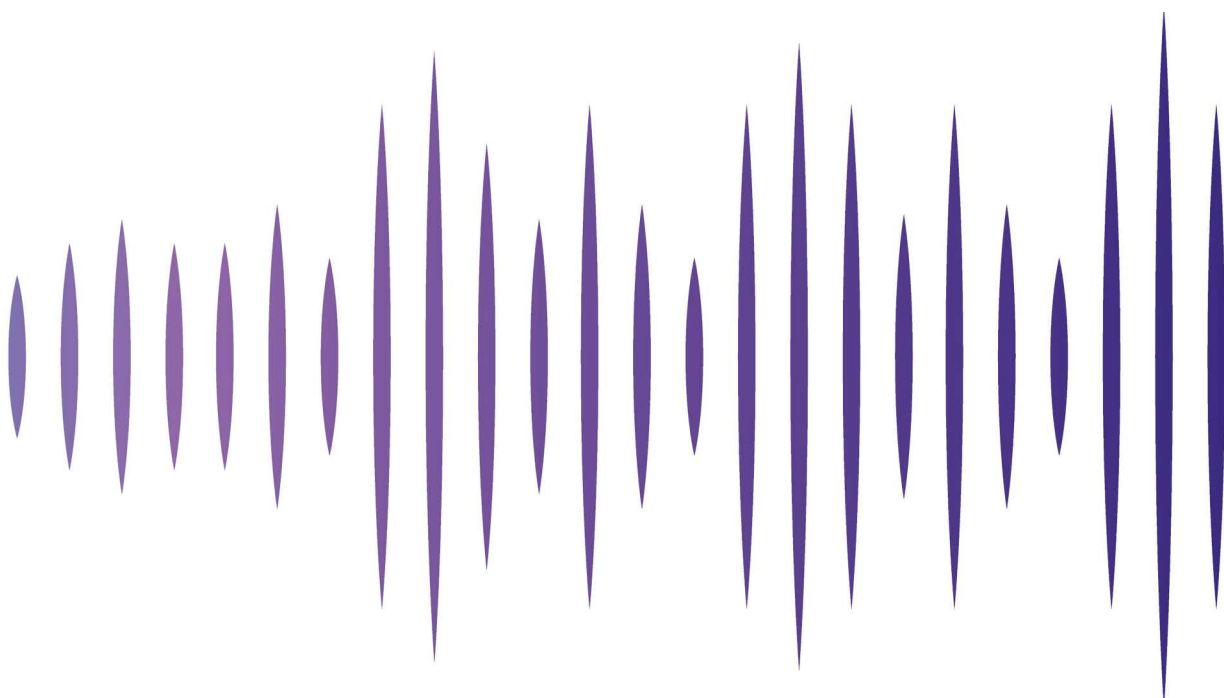
With each of the four scenarios being an extreme and challenging, yet plausible potential future, thinking about the different strategies needed to prepare and actively drive the transformation for each one will be

crucial. Stretching decision-makers' minds will also allow for flexible responses to newly emerging challenges. While all four scenarios may be radically different, they share one common theme: Foresight, vision, and close cooperation between decision-makers in retail, FMCG, technology providers and potentially further industries will be required to navigate the ever-changing future.

As first steps to prepare for uncertainty, companies can assess their specific situation according to their respective industry and segment positioning to identify and evaluate individual risks and opportunities. Critical questions to be answered include, whether

the own industry segment is even impacted by a potential development in voice assisted interfaces, if there are ways to escape the consequences or mediate them and whether potential opportunities that voice-assisted commerce entails can be leveraged.

Based on this assessment, decision makers can develop individually fitted strategies that are flexible enough to adapt to change. Modifying strategy according ever-changing conditions requires constant monitoring of the scenarios' key parameters, which should be a continuous process following the first positioning.



Methodology

Introduction to scenario design and methodology

This study is based on the seven-step scenario design methodology of the Center for the Long View (CLV), which applies the guiding scientific principles of objectivity, reliability, and validity. This study is the outcome of comprehensive research, expert interviews, and a scenario workshop involving selected industry experts from the technology and the retail sector, as well as the global Deloitte network and experienced scenario practitioners from the CLV.

Our scenario design methodology starts with the formulation of a focal question in order to determine the project's scope and strategic direction. The focal question for this study was the following: How will voice-assisted interfaces impact the future shopping experience in Europe in 2030? What are the resulting opportunities and risks? Our study thus aimed to analyze two distinct issues: Firstly, the impact of voice-assisted interfaces on the future shopping experience in Europe in 2030, and secondly, the implications in terms of opportunities and risks for retailers, FMCG companies, technology providers and consumers.

As scenarios are a way of understanding the dynamics that shape the future, the second step of our methodological approach represents the identification of driving forces that have the potential to impact the outcome of the focal question. These drivers can be grouped into five categories, known as STEEP forces, which consist of social, technological, economic, environmental, and political factors.

In order to determine this study's long list of drivers, we primarily made use of interviews with selected Deloitte experts and our AI-based research tool, CLV Deep View. Deep View uses proprietary natural language processing algorithms to read millions of data sets with the aim of identifying patterns between key words, phrases, people, companies, or institutions. This allows us to gain a holistic understanding of highly complex issues and interrelationships, as well as identifying global trends. It also helps to avoid the bias of traditional approaches that often have a built-in tendency based on the character, mood, or preference of the scenarists.

In a third step, we prioritize and cluster the identified drivers into critical uncertainties. This is necessary, as not all driving forces are uncertain. Some may be predictable and unlikely to vary significantly in any of the scenarios. Thus, critical uncertainties must fulfill two criteria: First, they must have a high impact on the outcome of the focal question. Second, they must be highly uncertain or volatile. Initially, all uncertainties appear unique, however, by analyzing the comprehensiveness and correlation of each critical uncertainty we can establish the building blocks for our scenario framework.

The scenario framework is developed in the fourth step of our scenario design approach. The critical uncertainties determined serve as axes that are combined into a matrix, resulting in four highly divergent but plausible scenarios. In our study, the two critical uncertainties are reflected in the level of cooperation between market players and the

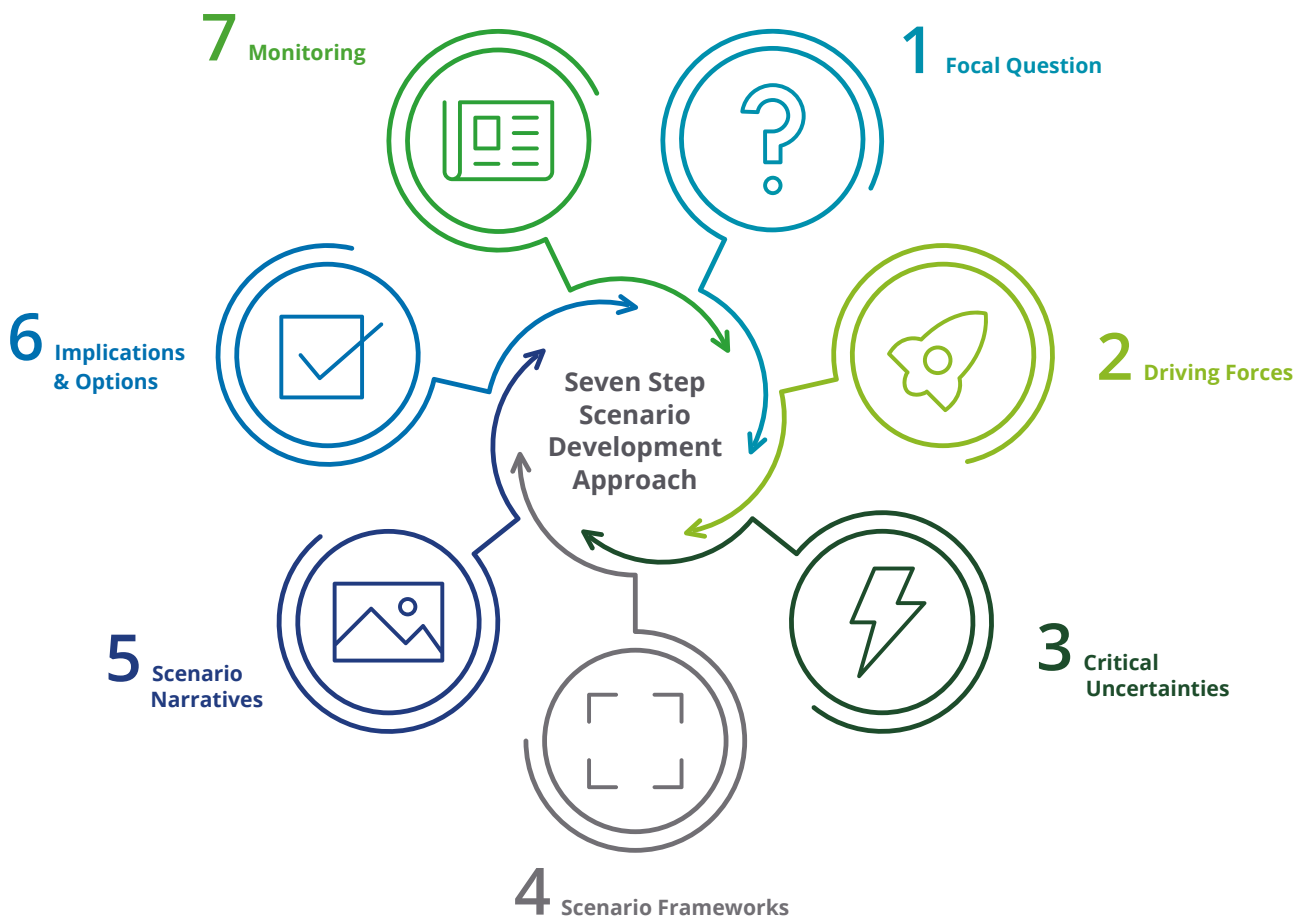
degree of technological integration of voice-assisted interfaces with other technologies.

Having established the scenario matrix, we develop scenario narratives in a fifth step. Scenario narratives define the framework conditions and atmosphere of each scenario within the context of a story. By using the previously identified drivers to reverse-engineer the milestones that would lead to each future, we can determine the key elements for each scenario.

Then, in a sixth step, we make use of these scenario narratives to derive resulting implications for the stakeholders involved. In our study, we analyzed the four scenarios with regard to their implications for technology providers, retailers, consumer goods companies and the consumer.

In a seventh and final step, we define key indicators for each of the four scenarios to enable the monitoring of trend developments. The aim of this step is to observe which scenario is most likely to materialize.

Fig. 2 - Seven step scenario development approach



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