



FRONT  
COMMERCE

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UX &  
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WHITE PAPER

## SENSORY UX IN THE DIGITAL ERA

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How to incorporate sensory appeal in your UX design,  
& create an engaging and memorable user experience.



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## INTRODUCTION: THE RISE OF SENSORY UX

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In the competitive landscape of retail, businesses strive to forge lasting connections with their customers. Sensory experiences offer a powerful avenue to cultivate these emotional bonds, deeply etching brand imprints into the minds of consumers.

The limbic system, the brain's emotional control center, takes in sensory cues, triggering affective responses and shaping memories. As online shopping transforms the retail landscape, crafting comprehensive sensory experiences has become paramount for brands seeking to distinguish themselves in the digital realm.

While visual and auditory senses are readily catered to through high-quality images, engaging videos, and captivating background music, stimulating the senses of taste, touch, and smell presents a unique challenge. However, the rise of sensory UX design has opened up a world of possibilities, enabling brands to evoke vivid sensory experiences through evocative written descriptions and immersive visuals.

The advent of cutting-edge technologies further expands the possibilities of sensory UX design, extending beyond physical products to encompass digital environments. Haptic feedback, once exclusive to gaming consoles, now finds its way into smartphones, providing users with a sense of touch through vibrations. Scent diffusers, originally confined to aromatherapy sessions, are now being integrated into virtual reality experiences, allowing users to perceive the essence of virtual landscapes.

**90% of the information processed by the brain is visual.**

These advancements underscore the transformative potential of sensory UX design in shaping the future of digital experiences. By harnessing the power of technology to engage multiple senses, brands can cultivate deeper emotional connections with their customers, fostering brand loyalty and driving business success.

# WHAT IS SENSORY UX?

Sensory user experiences are a new approach. They aim to enhance user experience by appealing to each of the senses digitally via use of various sensory stimuli (sight, sound, touch and smell) in UX design to enhance the overall perception and engagement of a product or service.

By creating a holistic, immersive and memorable experience that appeals to all five senses a brand can create an emotional connection that leads to a positive impact on its customer.

For example, seeing a stunning sunset, hearing a nostalgic piece of music, or smelling a familiar fragrance can evoke a strong emotional reaction. This connection between our senses and emotions is why sensory experiences are so powerful and memorable.

## WHY IS SENSORY UX IMPORTANT?

Incorporating sensory appeal in UX design can make a significant difference in how users perceive and interact with a product or service. In UX design, sensory appeal is essential for creating an engaging and memorable user experience. It boosts user engagement and satisfaction by providing users with sensory stimulation beyond the visual and auditory elements. This helps to establish a stronger emotional bond between users and a product, service, or brand, leading to increased engagement and loyalty.



# 5 REASONS TO PRIORITISE SENSORY UX

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## 1. Better user engagement

Enhancing user engagement is a pivotal goal for any digital experience. Introducing sensory elements into the user interface not only captivates users but also deepens their connection with the product or service. Beyond just relying on visual and auditory cues, a multi-sensory approach transforms the user experience into a more immersive and memorable journey. As users engage with a product through various senses, their overall satisfaction significantly increases.

## 2. Triggers emotions

The profound connection between our senses and emotions is a powerful tool for designers. Crafting experiences that stimulate multiple senses has the potential to evoke strong emotional responses in users. Whether it's a surge of excitement, a wave of happiness, or a touch of nostalgia, the emotional impact of sensory-rich interactions enhances the overall user experience. It's crucial, however, to acknowledge the subjectivity of emotional responses, as individuals may react differently to the same stimuli.

## 3. Build brand recall

Memorability plays a crucial role in brand recognition. When users associate positive emotions with a sensory-rich experience, it becomes more ingrained in their memory. This heightened recall not only strengthens the connection between users and the brand but also contributes to long-term brand loyalty.



## 4. Competitor differentiation

In a market saturated with options, setting your product or service apart from competitors is essential. Incorporating sensory appeal into UX design provides a unique edge that goes beyond conventional differentiators. A distinctive user experience, marked by its multi-sensory engagement, not only attracts attention but also leaves a lasting impression.

## 5. Reach a wider audience

Human preferences are diverse, and individuals resonate with different senses. By incorporating a variety of sensory elements into design, UX professionals can create a more comprehensive and inclusive user experience. This approach broadens the appeal of the product or service, making it accessible to a wider audience. As designers cater to various sensory preferences, ensuring that the experience speaks to a diverse range of users, it increases its overall impact and effectiveness.



# CREATING AN IMMERSIVE, MULTI-SENSORY USER EXPERIENCE ONLINE

The connection between our senses and emotions is what makes an experience powerful and memorable.

Sensory UX aims to enhance overall perception & engagement of a product or service by appealing to each of the 5 senses in a digital environment.

It boosts user engagement and satisfaction by providing users with sensory stimulation beyond the visual and auditory elements. This helps to establish a stronger emotional bond between users and a product, service, or brand.

**Better user engagement**

**Triggers emotions**

**Build brand recall**

**Competitor differentiation**

**Grow your audience**

## 6 ways to create a multi-sensory user experience

### 1. Identify the senses that you want to engage

Before designing your website, it is important to decide which senses you wish to engage and how. Start by identifying the sensory stimuli that are most appropriate for your product or service. For example, a wine seller may want to use the sound and image of a cork popping to create a more immersive experience, while a perfume creator might prefer to enhance their user experience with aromas.

### 2. Use interactive elements

To engage the user's sense of touch, use buttons or other interactive elements that provide haptic feedback when clicked or tapped. This will allow the user to feel a physical sensation when interacting with your brand, making the experience more engaging and immersive.

### 3. Use high-quality visuals

To engage the user's sense of sight, use high-quality images and videos that are relevant to the website's content and purpose. Your visuals may take a step away from your product itself, for example, a photo printer may find it more effective to use videos of people showing positive emotions rather than a simple photo of a print.



#### 4. Use sound effects and background music

To engage the user's sense of hearing, use background music or sound effects to create a more immersive atmosphere. It is important to consider your user's context, sound may not be effective if your user is most often in a public place, for example.

#### 5. Don't ignore the power of text

To engage the user's sense of taste and smell, provide information about food and drink, or about scents that can be experienced through other means.

#### 6. Test and optimise

Through user testing and feedback, as well as iterative design processes you will be able to optimise & improve your user experience appropriately. Especially whilst you try to find the right balance, sensory overload could have a negative effect.

Consider the hidden sensory potential of each element

Words elicit taste

Images can evoke odors

Sounds simulate touch

## Technical Limitations

Technical limitations can pose a challenge when incorporating sensory appeal into UX design. For example:

- The tools needed to produce AI generated content may not be compatible with your platform.
- Without the proper technology, the addition of high-quality visuals may have a negative impact on your web performance
- Without an adapted front-end it may near impossible to replicate your user experience to different channels, eg. desktop to mobile

A modern e-commerce architecture that is capable of adapting to an innovative UX may be the way to go. **Browse the use case on the next page** to understand how your e-commerce platform could be the key to implementing the ideal user experience for your brand.



# CREATING AN EFFECTIVE DIGITAL USER EXPERIENCE FOR A PRODUCT THAT REQUIRES TASTE, SMELL OR TOUCH



Online UX shapes how we perceive products we taste, touch or smell. Despite the absence of scents or textures in a digital world, it's possible to target various sensory stimuli synthetically. Consider the hidden sensory potential of each element; words can elicit taste, images can evoke odors, sounds can stimulate touch, etc.

## Sight

- Vibrant, well-contrasted images & videos evoke emotions, add visual interest & create balance.
- Thoughtfully designed layouts ensure clear & intuitive navigation, enhancing the overall user experience.
- Motion design animates your digital product with precision and the appropriate effects.

## Smell

- Use descriptive images & text to stimulate the sense of smell, encouraging imagination and memory.
- Consider adding real scents post-purchase, such as scented packaging.
- Encourage users to describe the smell of your product in reviews or explore scent technology for a more immersive experience.

## Sound

- Sound effects offer feedback on button clicks & emphasize key actions.
- Background sounds immerse users to set atmospheres or moods.
- Voiceovers provide additional information or guidance, improving the overall user experience.

## Taste

- Engage the sense of taste through descriptive videos showcasing someone tasting your product.
- Use imagery to present food or beverages, appealing to the sense of taste.
- Describe taste using words that captivate the user's imagination or memory.

## Touch

- Enhance the user experience by providing physical feedback when buttons are pressed.
- Use images with textures to convey how a product feels.
- Show visuals of someone touching your product, with close-ups for a detailed perspective.





# USE CASE: DEVIALET

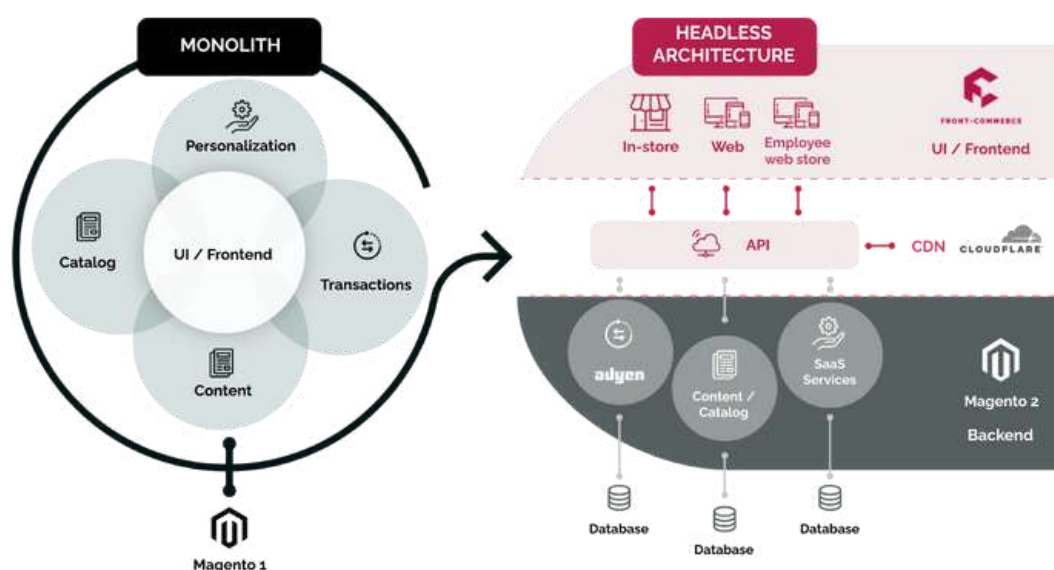
Devialet is a French audio technology company that produces high-end speakers and amplifiers for B2C and BtoB markets. Devialet's online store reaches customers in 37 countries. In 2020 they were met with the challenge of needing a better UX, with a custom design that would match the high-end design & powerful sound produced by their products. This user experience also needed to meet today's standards in terms of performance.

## Architectural evolution

Migration from Magento 1 to Magento 2

Decoupling the frontend and backend

Implementation of a headless commerce platform



**“The challenge for Devialet? To have a better UX, with a custom design that meets today’s standards in terms of performance.”**

**– Frédéric Martinez, PH2M**

## THE SOLUTION: OPTIMISE AND IMPROVE

Although the existing website was technically perfect before the replatform, by decoupling the back-end and front-end and implementing Front-Commerce, a fluidity could be brought to the website's UX that was not possible before.

After deciding to migrate to Magento 2, Devialet chose a headless approach to allow their web integrators to concentrate on the front-end without worrying about any impact that development may have on the Magento back-end. The separation of these trades created the autonomy needed internally to move with the changing needs of today's consumer.



## Custom Built Features

Working together, several internal issues have been improved. For example, Front-Commerce now has better compatibility with CDNs. This is worthwhile when there are peaks in web traffic, and was the case with Devialet, whose platform relaunch coincided with a new product launch. We also were able to optimize memory & resilience as a result of this project.

**"We make things possible by removing technical barriers for our clients."**

– Pierre Martin  
CTO, Front-Commerce



**"Front-Commerce provided us with training adapted to our context and to the type of people being trained. The project then took place in a context of mutual trust where we were able to share our difficulties and benefit from a very reactive and definitely expert support! The Front-Commerce teams are also present to provide us with advice that goes beyond the simple framework of the PWA."**

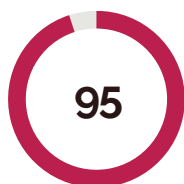
– Benjamin Brailon, Devialet



**Conversion  
rate**



**Organic  
traffic**



**Lighthouse  
score**

**"The results obtained are beyond our expectations and we know that there is still room to go further, especially on mobile."**

– Benjamin Brailon  
Omnichannel Manager, Devialet



# THE FUTURE OF SENSORY EXPERIENCES

As technology progresses, we anticipate a more sophisticated integration of sensory elements into digital interactions. Emerging technologies like virtual and augmented reality offer immersive possibilities beyond traditional screens.

Personalization will play a pivotal role, with data analytics and AI tailoring sensory elements to individual preferences. Adaptive experiences, dynamically adjusting based on user behavior, will become more prevalent.

Expectations include seamless multi-sensory integration, synchronizing visual, auditory, haptic, and olfactory stimuli for a holistic user journey. Ethical considerations regarding user privacy and consent will be paramount.

Sensory UX's impact will extend beyond digital interfaces, influencing healthcare, education, and entertainment. Industry-specific applications may use sensory elements to reduce stress or enhance learning.

Sensory experiences in UX will be marked by technological innovation and by staying attuned to these developments, designers can continually elevate user experiences and set new standards for digital engagement.

## **The latest trends and technologies in a nutshell:**

- The use of virtual and augmented reality to create immersive experiences in the consumer space is getting more frequent.
- Digital assistants have matured, and today there is space to go further with voice UI to interact with customers.
- As personalized and experiential marketing drive technical innovation, the services and integrations on the market are improving.
- Whilst it is not yet possible to smell scents via our mobile devices, progress is being made.



## BRANDING READY FOR THE FUTURE

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**Online retail is moving fast and the only way to keep up the only way to keep up is with an agile business that's technically ready to adapt at scale. This includes UX design and capabilities. Undertaking digital transformation now will prepare you for the obstacles of tomorrow.**

A modern commerce architecture helps a brand stand out from its competitors with an improved user journey. Until recently, companies had to completely overhaul their systems every three years. With a headless commerce approach, the technical barriers to digital transformation are removed. Creating an on-brand user experience via a performant, flexible and future ready platform is now accessible to all.

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“You need to get to the future, ahead of your customers, and be ready to greet them when they arrive.”

— Marc Benioff

**To help negate the challenges of building an ergonomic e-commerce experience, Front-Commerce has built a full featured PWA storefront, that is 100% customizable in terms of UX. Our FEaaS pulls together a mix of current and future web standards to create a tailored fit so retailers can focus on defining their brand experience.**

Progressively migrating a frontend-as-a-service has a clear positive financial impact, improving long term costs and margin optimization. Integrating services and features seamlessly into the creative design, and managing them independently means developers spend 15% less time on frontend tasks. Product, design, and marketing teams also work better together, and in tandem.

In a consumer-centric market, a performant user experience is paramount. With a tailor-made digital storefront and a headless architecture you can provide engaging & valuable content from different sources, creating a custom UX that meets your customer's needs and gives them the brand experience they are looking for.

Put your customer at the forefront of your business. Empower your teams to deliver an authentic brand experience in a digital context with the tools they need.



## THE BIT WHERE WE TOOT OUR OWN HORN

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Front-Commerce is the only digital storefront that improves the customer, merchant & developer experience, at the same time.

An ultra-fast front-end based on PWA & MACH standards, we help brands evolve their current e-commerce platform to a headless commerce approach by integrating the back-end of their choice with Front-Commerce's best of breed technical stack based on React, NodeJS & GraphQL.

Front-Commerce does the decoupling of the frontend and backend for its clients to provide a state of the art front-end experience and a headless commerce architecture. Our solution is compatible with most backends, allowing us to integrate easily into your systems. You can stay in touch with your customers and we keep all technical considerations up to date.

[Get the fact sheet](#)

**Contact Front-Commerce**  
contact@front-commerce.com

 [click here!](#)

## Some of the brands powered by Front-Commerce

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JEROME DREYFUSS ✪ DEVIALET CENTRAKOR KAPORAL

 **autobernard.com**

 **collégien**  
Depuis 1947

 **FABRIQUE DE STYLES**

 **BONNE GUEULE**

 **THUASNE**

