6 DIGITAL TRENDS FOR 2022

An update for tomorrow's product development.

www.uid.com

User Interface Design GmbH

6 DIGITAL TRENDS FOR 2022

What will the future of digital products and services look like? For your successful product strategy, our innovation experts always keep a close eye on the latest trends in design, technology, society, and business. We have compiled the most important digital trends for 2022 for you: From Hygge interfaces to Sense Design and Design Tokens – in our trend report, you can find out which 6 innovations will change your digital product development in the future.

1 / HYGGE INTERFACES

#VIRTUAL DETOX
#EMOTIONAL ROBOTICS
#UX-ART

1 / HYGGE INTERFACES

Danish coziness thanks to intelligent technology

Digital products are ubiquitous in our lives and work: Wearables track every step. Cars drive autonomously and are a navigation system, news center, movie theater and music player all in one. On our smartphone, hundreds of apps compete for attention every second and flood users with information. Hygge interfaces support the trend towards more mindfulness, digital detox, or meditation. Mental health, productivity, and the desire for simplification will become decisive criteria in the purchase of digital products and services in the future.

The Danish term “hygge” is actually an interior design trend. It describes a cozy, safe and comfortable atmosphere in which we can enjoy a good life. What does that mean in terms of technology? Digital services should be low-key, less technical, and feel more natural – in both product and interface design: A clear and reduced design focuses on the essentials and does not distract. Through more intuitive and natural forms of interaction, such as control via speech, gestures or facial expressions, technology fits naturally into our lives.

Technology itself can contribute significantly to simplifying our world: Intelligent systems can collect data about their users and use it to their advantage. This way, they get to know their users and adapt to individual life and usage situations: For example, a messaging service derives knowledge from the behavior of users whether they have 5 minutes to have a new message pushed or a summary at the end of the day is enough. Users thus control the technology in a less active manner; it would rather almost operate invisibly in the background.

Our tips for your project

- Provides a clear information structure.
- Makes interaction more human.
- Holds back the technical features so that the interface blends naturally into the environment.
- Presents information and content in a context-sensitive manner.
- Uses innovative technologies and intelligent systems to learn the routines and environments of users and automate processes based on them.

This has inspired us

The smart heating control from Tado works quite autonomously. It considers the time of day, the weather report, open windows or the presence and absence of the users and regulates the temperature automatically. Product and interface design are also regulated so that the product integrates unobtrusively into the user’s home.

2 / TAILOR-MADE EXPERIENCES

#CUSTOMER TOOLS
#CUSTOMIZATION
#PERSONAL INTERFACE
#ADAPTIVE UI

2 / TAILOR-MADE EXPERIENCES

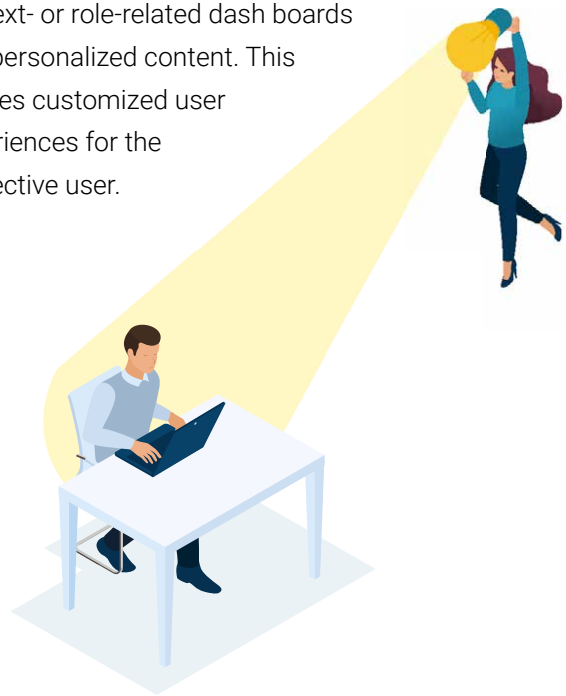
Interfaces, created just for me

The hype around 3D printing or DIY shows: One size fit all has outlived its usefulness. Users expect individualization at all levels. They want user interfaces that reflects their personality and habits as much as possible, rather than the best. Designers must face these increased user needs and consider the possibility of individualization as early as the individual steps of product development. They must enable users to customize and utilize products the way they want. To achieve this, user interfaces must be above all: highly flexible.

This is enabled by big data and intelligent systems: Networked environment sensors and/or sensors integrated in the smartphone collect data about the users, their preferences, and their behavior. With their help, user interfaces adjust adaptively and automatically to the individual needs of the users.

Examples include a personal color scheme, touch targets that vary depending on finger size, or font sizes and contrasts that adapt to the user's visual preference.

The adaptation not only concerns design parameters, but also content parameters such as context- or role-related dash boards and personalized content. This creates customized user experiences for the respective user.



Our tips for your project

- Identify what kind of personalization adds value to your users and to what extent you can automate it.
- Check what data you need to individualize experiences. How can you collect and process them?

This has inspired us

Siri knows routine processes and how apps have been used so far. Based on this, Siri suggests to its users what they might do next. For example, if the user writes a text, Siri recommends names of movies, places, and other objects that he/she recently looked at on his/her smartphone. Google offers something similar in Gmail or WhatsApp. Here, quick responses to messages are suggested. These are based on previous messages and thus match the user's choice of words.

3 / DESIGN SYSTEM ENGINEERING

#MULTIBRAND DESIGNSYSTEME

#DESIGN TOKENS

#DESIGN PATTERN

3 / DESIGN SYSTEM ENGINEERING

Closer to the code with design tokens

Design systems are becoming increasingly important for developing a consistent UX. In the process, they are becoming quite similar in structure to code frame works. That is, design systems structure themselves according to how they will be implemented in the future. This simplifies the cooperation between design and development by gaining quality and reducing time – for example, for coordination.

If interfaces increasingly better adapt to users, design systems must also become more and more flexible. Interfaces are also becoming more diverse in terms of form, resolution, and type of interaction. Design systems must be able to respond to these changing requirements.

More and more design systems, such as Google Material Design, rely on Design Tokens. They can be used to better manage the design parameters within a design system. Design Tokens store all the values that make up the visual style of an interface.

This can be a color, a font, spacing, the opacity, object styles or animations. They replace static, hard-coded values. On the one hand, this ensures that design and development work with the same style values in all design files and code. On the other hand, individual design parameters such as a font can be updated quickly and consistently across a product and product range.

Our tips for your project

- Evaluate early on whether a design system makes sense for your product and, if so, which structure is appropriate for your use case.
- Determine and communicate who is responsible for the structure and maintenance of the design system.
- Make targeted use of new tools such as Design Tokens and Smart Layouts.
- Establish a regular exchange between design and implementation to optimally build and maintain the design system.

4 / SENSE DESIGN

#VOICE USER INTERFACE

#BEYOND SCREEN

#EMOTIONAL VOICE

#PHYSICAL INTERACTIONS

4 / SENSE DESIGN

The view beyond the screen

For the past 30 years, screen interfaces and apps have been the universal solution for digital products. But thanks to technological progress, UX designers are no longer limited to the rectangular (touch) screen. Alternatives for a more natural interaction have long been available: Voice user interfaces are becoming more and more reliable. And through vibrations, interfaces can also be experienced haptically.

Time to look beyond the screen: Digital products should appeal to more senses than just the visual one. Sense Design makes interaction a multisensory experience by extending classic input and output methods with other sensory possibilities – such as haptic feedback or voice control – Information can be conveyed specifically only via individual senses, for example, if it does not require full attention. Or they are communicated via several senses at the same time, if designers want to make sure that the information reaches the user.

Sense Design thus supports communication between humans and computers: It not only provides a better understanding but creates a sensory and potentially immersive experience.

Additional information:

Which one is right at which time? The Placeona method can be used to determine which is correct:

www.uid.com/en/news/placeonas

Our tips for your project

- Analyze the opportunities and benefits of sensory interaction types for your product: What needs of users are met by alternative modes of interaction? With which tasks do they best play to their strengths? Where does their use add value?
- Explore ideas beyond the conventional interface in the early innovation phase of your product development.

This has inspired us

The DualSense controller of the PlayStation 4 uses haptic feedback and dynamic resistances (adaptive triggers). These are not just nice add-ons. They change the feeling of play by making the environment tangible for the player through different senses and by creating tension: For example, the player senses the surface over which he/she is walking. A lawn feels very different from sand or rough, hard ground. This provides players with a more realistic feel for the game world and increases immersion.

5 / SERIOUS PRODUCTS

#KNOWLEGE TRANSFER
#E-GOVERNMENT
#WARNING APPS

5 / SERIOUS PRODUCTS

Sensitive processes digitalizing

The home is becoming a smart home, the car an entertainment system and wearables a health tracker – large parts of our everyday lives are already digital. But Corona has shown: In the public sector, there is still a need for digital backlog demand. However, digitization will gradually find its way into public administration as well.

The challenge: Many of these processes and activities are highly complex and extremely sensitive. Consumer applications focus primarily on design features such as intuitiveness, fun, and immersion. Sensitive applications, on the other hand, must build trust and guarantee security and reliability. In addition, they must consider urgent aspects of inclusion so as not to exclude anyone.

Our tips for your project

- Ensures data protection according to the standard.
- Also pay attention to equal opportunities: Everyone must have access to the product and service.
- Therefore, design your project to be accessible to all users.

This has inspired us

Current examples of sensitive applications are the Corona and NINA warning apps. But the challenges described above must also be considered in the digitalization of various processes in the healthcare sector – such as electronic prescription, electronic patient files or digital health applications. The individual needs of the different target groups must also be considered to create the greatest possible trust in the process and the digital application.

6 / IMMATERIAL WORLD

#CLOUD COMPUTING

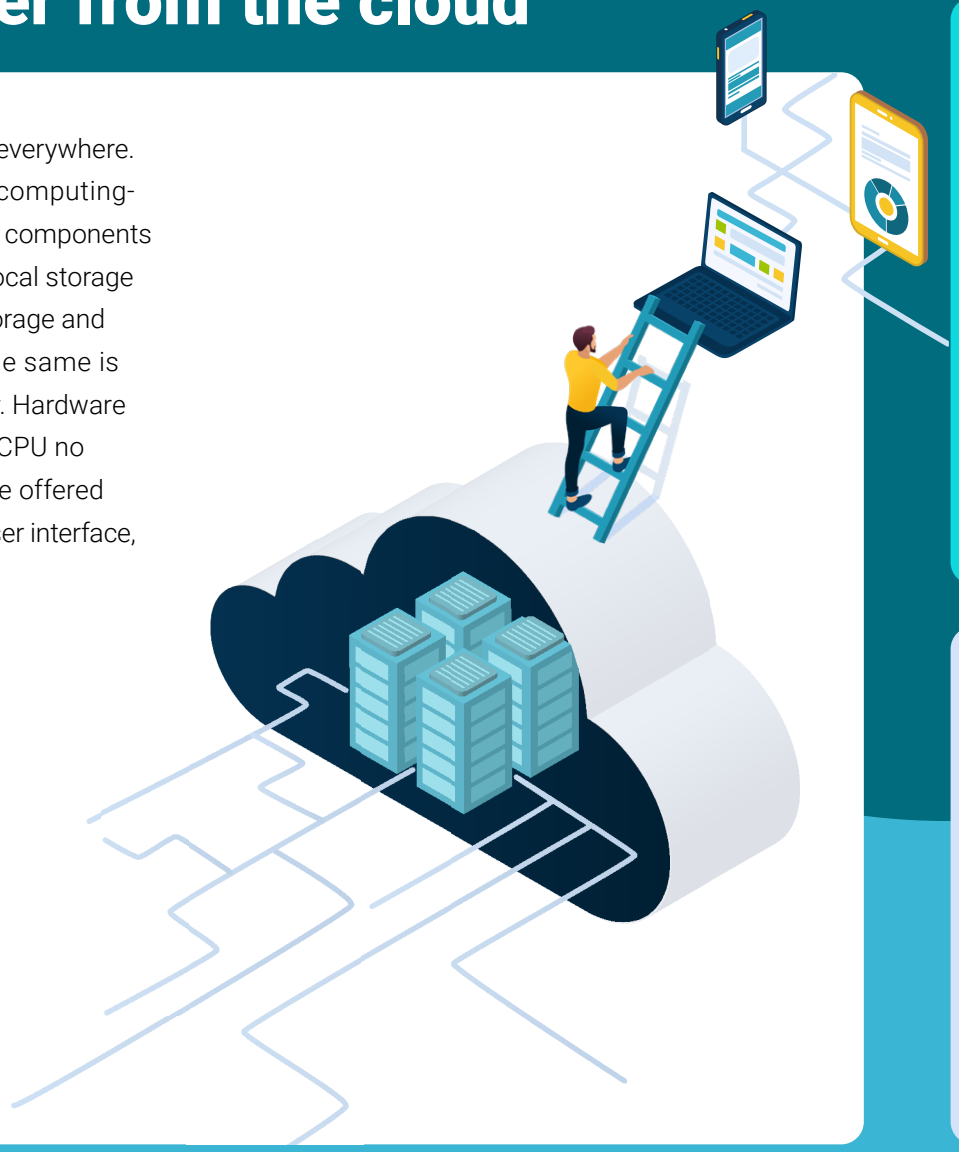
#CLOUD EVERYTHING

#UX IN CLOUD COMPUTING

6 / IMMATERIAL WORLD

Computing power from the cloud

5G brings promises of fast Internet – everywhere. At the same time, the proportion of computing-intensive, high-performance hardware components is reduced to a minimum: Instead of local storage media, data is outsourced to cloud storage and processed there on a large scale. The same is increasingly true for computing power. Hardware components such as RAM, GPU and CPU no longer exist physically "on site" but are offered via the cloud. Services, including the user interface, are only streamed to the end user.



Our tips for your project

- Check whether and how you can save hardware components by switching to cloud strategies.
- Consider the extent to which you are dependent on (future) global players in cloud computing. It may be worthwhile to offer your own cloud.
- Ensure that networked systems are compatible.

This has inspired us

The gaming industry is already moving to the cloud: Several providers provide gaming PCs or individual components such as graphics cards on demand in the cloud. This turns almost any laptop or desktop PC into a gaming computer that customers can use to play computation-intensive games.

UID
User Interface Design GmbH

Ludwigsburg
Berlin
Dortmund
Mannheim
Munich

THE AUTHORS

PATRICK MUCHOWSKI

User Experience Designer

MARCEL MORAWECK

User Experience Consultant

Would you like to know what your future will look like? We will help you pick up the trends of tomorrow and transform them into meaningful and value-added products and services. From many years of experience, we understand business, users and current technologies. In discovery sprints, design thinking and futures thinking projects, we combine future trends with rapid prototyping for you.

WOULD YOU LIKE LEARN MORE?

Shape the innovations of tomorrow with us today!
www.uid.com/en/services/innovation