THE NEW ERA OF DIGITAL CARE:

Te role of

Digital Humans

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Artificial Intelligence (AI) has become a **key tool to ensure the short and long-term competitiveness of companies**. In fact, this technology is already being applied in numerous sectors to improve operational efficiency, increase productivity, among others. AI has also revolutionized the way companies interact with their customers and users. In fact, according to Globant data for the year 2025, AI is expected to be involved in 95% of customer experiences, and 15% of global customer service interactions will be driven by this technology.

In recent years, companies have faced numerous difficulties in being able to meet the number of needs posed by an exponential number of increasingly digitalized users. Interactions with different audiences have increased rapidly, but the resources to serve them have not been able to grow at the same speed. It is at this point where digital humans can become a powerful ally to help teams and companies **be more efficient, improve and accelerate the user experience.**

In this e-book we will explore in depth the role of digital humans in the era of digital care, **the process of creating them, the technologies that shape their appearance and personality** and how they can help companies improve their customer service, optimize your business processes and increase brand value.

95%
Customer experiences

15%
Global interactions

1. What are digital humans?

Digital humans are lifelike avatars powered by artificial intelligence (AI) that can listen to and understand people. These entities can be applied both in the physical world through kiosks and in web browsers and mobile operating systems, where they can serve an infinite number of customers simultaneously.

Companies and institutions need to interact optimally with their customers and generate an impeccable user experience to sell products, present their company, serve their students or accompany their patients. Seemingly simple tasks like answering questions or charging for a service can become memorable experiences. How to make it possible? Digital humans are designed to respond to well-defined personalities and offer a personalized user experience, be available 24x7, have extensive knowledge and speak in any language.

This is possible because behind a digital human is a complex Artificial Intelligence (AI) platform that operates in real time, acting as the "brain" behind each virtual entity. This advanced AI not only guides their behavior, but also equips them with communication skills, allowing conversations with these autonomous agents to be natural and authentic. In this way, new possibilities open up for human interaction with technology.

> "
> *Hello! I'm Ana, your virtual assistant.*
> *I am here to help you with any questions or*
> *information you need about our services. How*
> *can I help you today?*
> "

The digital human **has an AI brain** that allows it to connect to any knowledge system, whether it is a **natural language processing (NLP) engine, a generative AI (LLM) or a knowledge base.**

It also bases its knowledge on collaboration with the human who supervises its learning and training, adjustment and improvement of functioning. For example, experts can provide guidance, corrections, and feedback to help fine-tune and improve AI responses and skills in a collaborative learning process.

Digital humans have the ability to permanently retain acquired knowledge and can quickly transform into a highly efficient entity with access to an infinite database of responses, which enables them to manage multiple user interactions simultaneously and offer effective solutions. to a wide variety of questions and requirements.

1.1 Interactive vs Non-Interactive Digital Humans

Interactive digital humans are those who can interact with users in real time. They can answer questions, provide information, and adapt their responses based on user input. These digital humans can be used in a variety of applications, **from customer service assistants to emotional support coaches.**

On the other hand, **non-interactive digital humans** are those that do not have the ability to interact with users in real time, such **as a character in a video game or an animated film.** Although they may look and act like humans, they cannot respond to user input or adapt their responses based on user interaction.
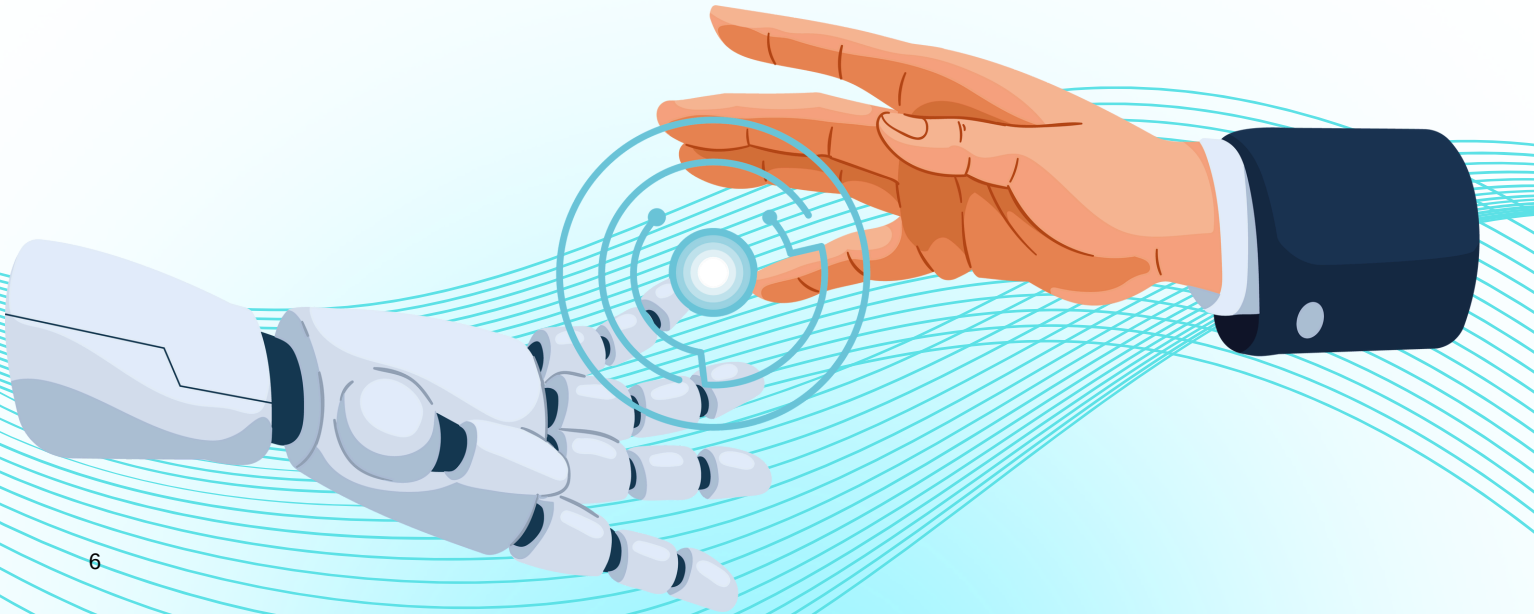
1.2 Potential market applications and use cases

Beyond digitalization and sustainability, inevitable changes for any company that wants to lead its sector in 2023, there is a **growing demand for "humanization" of products and services.** Multiple studies show that digital humans can increase users' sense of comfort and also reduce customers' fears of external judgment because they can facilitate 100% confidentiality and are available 24x7.

In this sense, in addition to the basic fields of evolution of bots in digital care, new work spaces are emerging, including the financial sector, in which autonomous agents manage user information, confirm viability, present credit options and inform about the status of the processing process. **In the sports field, the figure of the digital ambassador of a football club arises in charge of managing interactions** with the fans, acting as a web host and as an event presenter and animator of the previews of the matches.

Other use cases include **the retail sector**, with the figure of the virtual personal shopper trained with AI to learn about the collection, a brand's star products and seasonal trends, in addition to assisting in the entire online purchasing process. In the case of the health sector, the implementation of digital humans in care continuity leads to a significant improvement in coordination between different health care centers.

In short, these virtual assistants are the perfect ally to complement, help and enhance human capabilities in areas as diverse as the **automotive industry** (workshop appointment management), education (student onboarding and virtual tutoring), consumption (brewer master) and smart facilities (access control and reception management), among many other possibilities.

2. The process of creating and integrating a digital human

Digital humans are born through an automated AI platform that allows them to gesture, react with empathy and even joke. The technology behind these digital humans uses Natural Language Processing (NLP) to understand and generate knowledge from language, through syntactic, semantic and pragmatic analysis. In addition, advanced 3D models are combined with AI-generated voices and a cognitive model to offer a complete communication experience.

This technology improves the efficiency of the conversion funnel by using auditory, textual and visual forms of communication. For example, Wehumans digital humans are hyper-realistic digital assistants, capable of learning and improving through AI and Machine Learning algorithms. They can replicate real conversations and be programmed for a variety of functions adapted to the needs of each company, which makes them unique.

The process of creating digital humans mainly covers three areas that shape beings with unique appearance and personality.

2.1 Person: define your physical appearance and personality

Personalization is a crucial phase in creating a digital human, as it allows you to define your physical appearance and personality. This process requires attention to detail to create a complete digital human with a unique identity. Each physical factor and character trait intertwine to give life to a digital being with a distinctive appearance and personality. To define the physical appearance of the digital human, tools such as advanced 3D models and facial animation techniques can be used to create realistic expressions and gestures.

Regarding personality, different techniques can be used to define the character traits of the digital human. From data analysis to determine the user's interests and preferences and adapt the digital human's personality accordingly, to Natural **Language Processing (NLP) techniques to allow the digital human to understand and generate natural language and thus interact more effectively with users.**

Furthermore, the space and screens in which the digital human is presented are also important to maximize its communicative capacity. Different formats and designs can be used to adapt to the needs of each company and offer a personalized user experience.

2.2 Intelligence: the "mind" of a digital human

The **training process is essential so that the digital human can learn and improve over time.** During this process, you are given information and taught to interpret it and make decisions based on it. The goal is for the digital human to be able to adapt to different situations and offer personalized and relevant responses to each user.

In addition, there are v**arious techniques and tools that can be used to provide intelligence to these digital beings.** For example, machine learning can be used to improve the digital human's ability to learn and adapt to new situations.

And Natural Language Processing (NLP) can be used to enable the digital human to understand and generate natural language.

2.3 Integration: how digital humans can interact with companies' information systems and adapt to their environment

The process of integrating a digital human into the technological fabric of a company is crucial to guarantee a fluid and efficient interaction. To achieve a successful integration, different factors must be considered. First of all, it is important that the digital human can interact with the company's information systems in a secure and reliable manner. To do this, authentication and encryption techniques are used to protect information and guarantee user privacy.

Furthermore, it is **essential that the digital human can adapt to the company's environment and offer a personalized user experience.**

This involves understanding the needs and preferences of users and adapting the personality and responses of the digital human accordingly. D**ata analysis techniques can also be used to collect information** about user behavior and improve the digital human's ability to interact with them.

3. Custom-made Virtual Assistants

The work in the Wehumans **3D Studio plays a key role in the realization of the various digital humans.**

This consists of daily work in the study and analysis of different work formats to allow the creation of digital humans in the shortest possible time, as well as **ensuring that the deployment and integration of digital humans works smoothly.**

3.1 Customizable 3D humans: they embody the personality, voice and nature of each brand

Physical characteristics

Outfit

Animations

Money

Languages

The design of a personalized digital human allows the choice between hundreds of variables of appearance, tone of voice, clothing, language and all the characteristics necessary to represent a business in the virtual environment. **The creation of a personalized digital human is the materialization of the ideal employee,** the one who best represents the brand's values and emanates the company's vision and mission.

Trained with powerful Artificial Intelligence and Machine Learning algorithms, these avatars understand 350 languages and are **capable of responding to thousands of people at a time, 24 hours and 365 days a year.** In addition, they are endowed with the capacity for learning, movement and simulation of feelings. Wehumans digital humans talk, listen and move. **They have well-defined personalities and behind them is an AI platform that determines behavior,** EQ and speech in real time so that the conversation can flow naturally. Custom humans embody the personality, voice and nature of the brand they represent.

3.2 Digital clones: a representation identical to the person in 3 dimensions

Digital clones are **born in the image and likeness of a real person. From images of the face and the study of gestures**, at Wehumans we generate an identical three-dimensional model.

In an increasingly digitalized and competitive world**, digital clones provide added value to the skills, training and talent ecosystem**. A digital clone can run a website, provide training, present advertisements, or generate audiovisual content. The applications are almost endless: **as far as the imagination allows.**
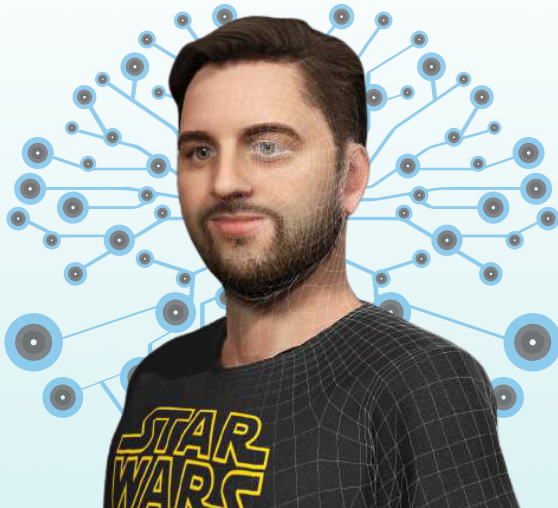
4. The future is now

Emergen Research estimates **the global digital human avatar market size to reach $527.58B by 2030 and will register a compound annual growth rate (CAGR) of 46.4% during this period**. Major technological and economic trends suggest that digital humans will become increasingly relevant in the near future and companies that adopt this technology will have a significant competitive advantage by offering a personalized and highly efficient customer experience.

Digital humans represent a technological innovation that is revolutionizing the way companies interact with customers in an increasingly digital world in which, at the same time, 85% of users say they prefer to talk to a person than interact with a machine. **These avatars equipped with the capacity for learning, movement and simulation of feelings allow companies to interact in a more human and efficient wa**y, strengthen and personalize their bond with their users, differentiate themselves and be more competitive, providing a perfect ally so that human teams can Focus on high-value tasks, oversight and improvements.

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