

Digital DNA Studio— Enhance your digital worlds with AI avatars

Digital People™ are at your fingertips –
from creation to customization and integration

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Introduction

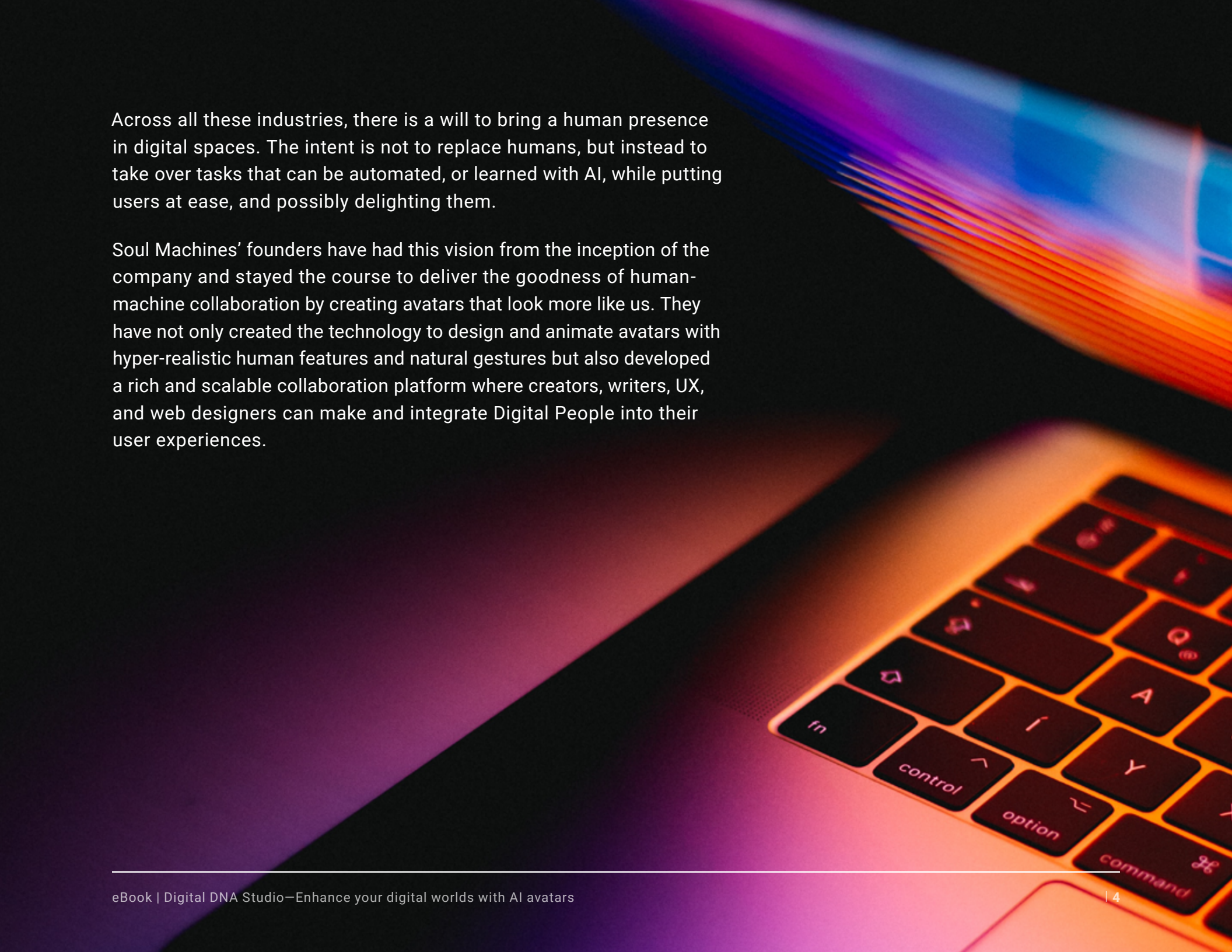
*Add human presence
to your digital worlds*

Not too long ago, chatbots were associated with e-commerce websites or customer support portals, while cartoonish and imaginative avatars were mostly found in gaming and entertainment applications. Then came the Intelligent Virtual Agents (IVA) with better CGI, AI training, and interface to digital platforms.

Today, as the metaverse becomes the inevitable and natural evolution of the internet, the demand for a new generation of avatars with realistic human features is increasing.

- **Big brands** want digital ambassadors to raise awareness.
- **Retailers** seek digital influencers to build long-term connections with their customers
- **Education and Healthcare systems** demand intelligent and empathetic digital agents to make students and patients comfortable and address their shortage of human workforce.
- **Employers** invest in the digital workforce to train and augment their human workforce.





Across all these industries, there is a will to bring a human presence in digital spaces. The intent is not to replace humans, but instead to take over tasks that can be automated, or learned with AI, while putting users at ease, and possibly delighting them.

Soul Machines' founders have had this vision from the inception of the company and stayed the course to deliver the goodness of human-machine collaboration by creating avatars that look more like us. They have not only created the technology to design and animate avatars with hyper-realistic human features and natural gestures but also developed a rich and scalable collaboration platform where creators, writers, UX, and web designers can make and integrate Digital People into their user experiences.

Digital DNA Studio, where Digital People™ come to life

Soul Machines Digital DNA Studio opens the door to a whole new level of creativity by providing an end-to-end platform for the creation, customization, and integration of Digital People into any type of virtual space – from desktop to mobile.



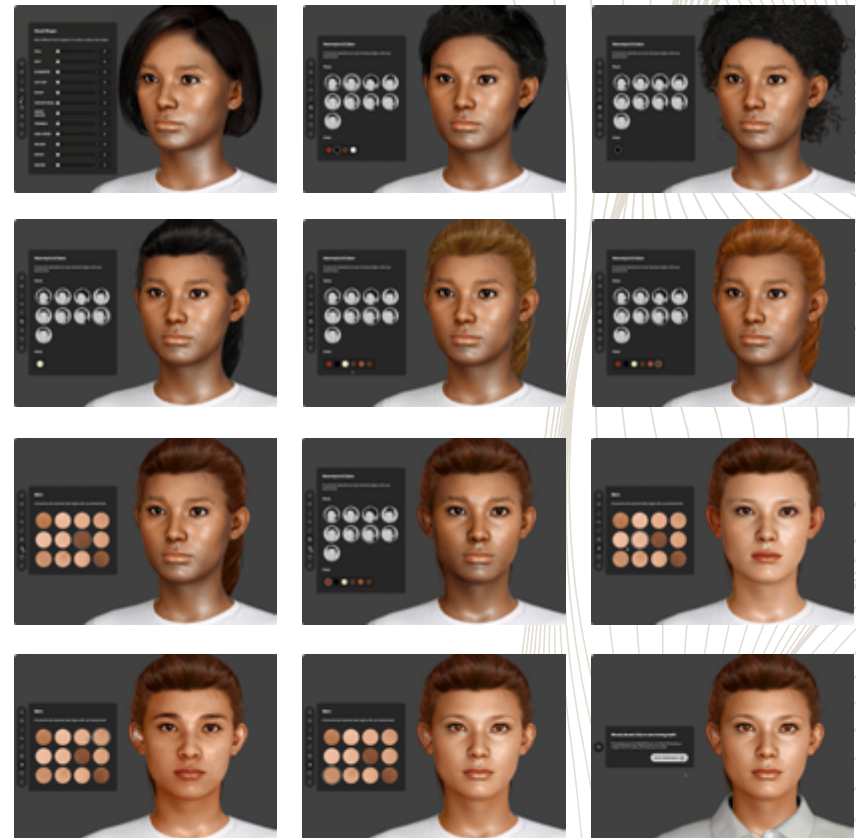
Step 1:

Give a face to your brand

Sculpt an appearance with unlimited possibilities

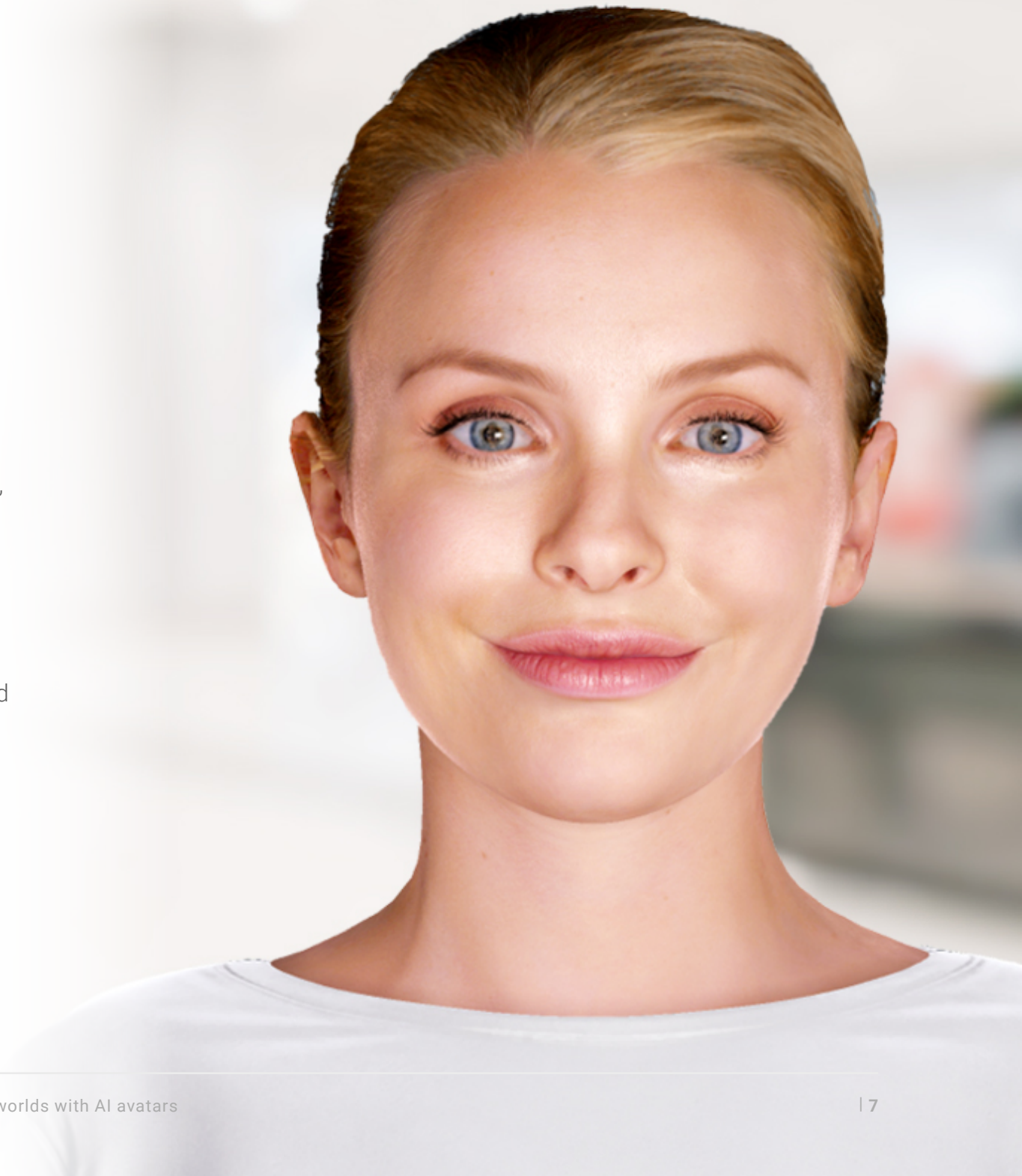
Regardless of its intended role, a Digital Person is always a brand representative, so having the freedom to sculpt its physical appearance is essential. Being able to assign this ideation to a team of creators and designers familiar with your brand, and without the recourse of technical intermediaries, is a guarantee you'll end up with the best identities for your targeted audiences.

Until you play with the Digital DNA Studio, you will have no idea how a subtle change in the shape of a head, eyes, mouth, or nose can change the look of a person. You will be amazed and amused and soon enough find yourself having to choose the perfect representative for your company, from the multiple, beautiful Digital People, that you have created.



The process is very easy and intuitive: you start with an initial face and apply changes using sliders that control the shape of the head, eyes, mouth, and nose, as well as the eyes color, hair color, skin color, and complexion. You can immediately observe the new look of the digital person while it is tilting its head from left to right.

To help you decide on the face that will give the best first and last impression, organizing A/B testing can be done quickly and efficiently with Digital DNA. Once a Digital Person has a face, it can be deployed “As Is” with a default conversation and default UI. You can present your Digital People in an animated form to your A/B testers, and let your testers know that their smile can be contagious to a Digital Person.



Step 2: Stylize your avatar

Digital DNA Studio gives you more potential than just increased diversity of human characteristics. You can become a fashion designer asserting the personality of your Digital People through their clothing and hairstyles. You can choose if they should wear a collared shirt or t-shirt and design their outfit with the patterns of your choice. So plan a Hawaiian Day once in a while to surprise and retain the attention of your audiences.

Note that while a creative team is having fun generating and testing the look of Digital People, the conversational writers, UX, and web designers do not have to sit idly rolling their thumbs. Digital DNA Studio offers a quick way to create a Digital Person issued from a stock of faces of different ethnicity, gender, and age groups. Conversational experiences, customization, and integration can be executed with these Digital People until the final brand ambassador is elected.



Step 3: Train for the job

Your Digital Person can now be hired for various use cases. You just need to give it a voice, an initial conversation, and access to content that will support and enrich its knowledge and interaction with your audiences. The sources and formats of this content will be determined by the conversational AI development tools that you use and their connection with back-end AIOps.

Today, there are numerous Natural Language Processing (NLP) tools available from world-class companies, as well as some specialty-centered NLPs targeting vertical use cases. This is the part where Digital DNA turns into a powerful collaboration platform by interfacing seamlessly with multiple platforms including Google DialogFlow ES and CX, IBM Watson, Microsoft Azure Bot Service, and Amazon LEX. Other NLPs can be utilized with minimal interface development.

The highly competitive advantage of Soul Machines Digital People is their Autonomous Animation. This means that conversation designers can focus on translating the brand's experience into natural dialog flows without worrying about the rendering of expressions and emotions which is built into every Digital Person.



As long as the writing is impactful for the end-user, and matches the voice of the brand, the Digital Person will respond with appropriate emotions based on what it has to say and how it perceives the user's emotional state¹. In addition, UX designers can control the location of the Digital Person on-screen to accommodate other visual objects.

Let's take the example of a virtual Tour Guide with access to geographic data and real-time weather data. It can greatly deepen the engagement of the viewer by supplementing its spoken response with dynamic multimodal content like maps and icons.

If you don't know how to proceed, you can learn from the Soul Machines Academy, an all-in-one platform delivering on-demand knowledge to create and launch Digital People successfully. You will have access to webinars, complete courses on ideation, persona and conversation design, technical solutions, conversational implementation, and guidelines for integration with UI and back-end resources.

In addition, conversational design can be greatly simplified and accelerated by Smart Skills available in Digital DNA Studio and presented in the next chapter.

¹ <https://www.soulmachines.com/2022/03/approved-patent-for-first-in-class-animation-of-digital-people-in-the-metaverse>



Step 4:

Optimize with Smart Skills™

Just like for real people, having competitive job skills is an important part of being successful. In Digital DNA Studio, designers can leverage a set of pre-defined competencies, called Smart Skills, and prepare Digital People to deliver services beyond the customers' expectations.

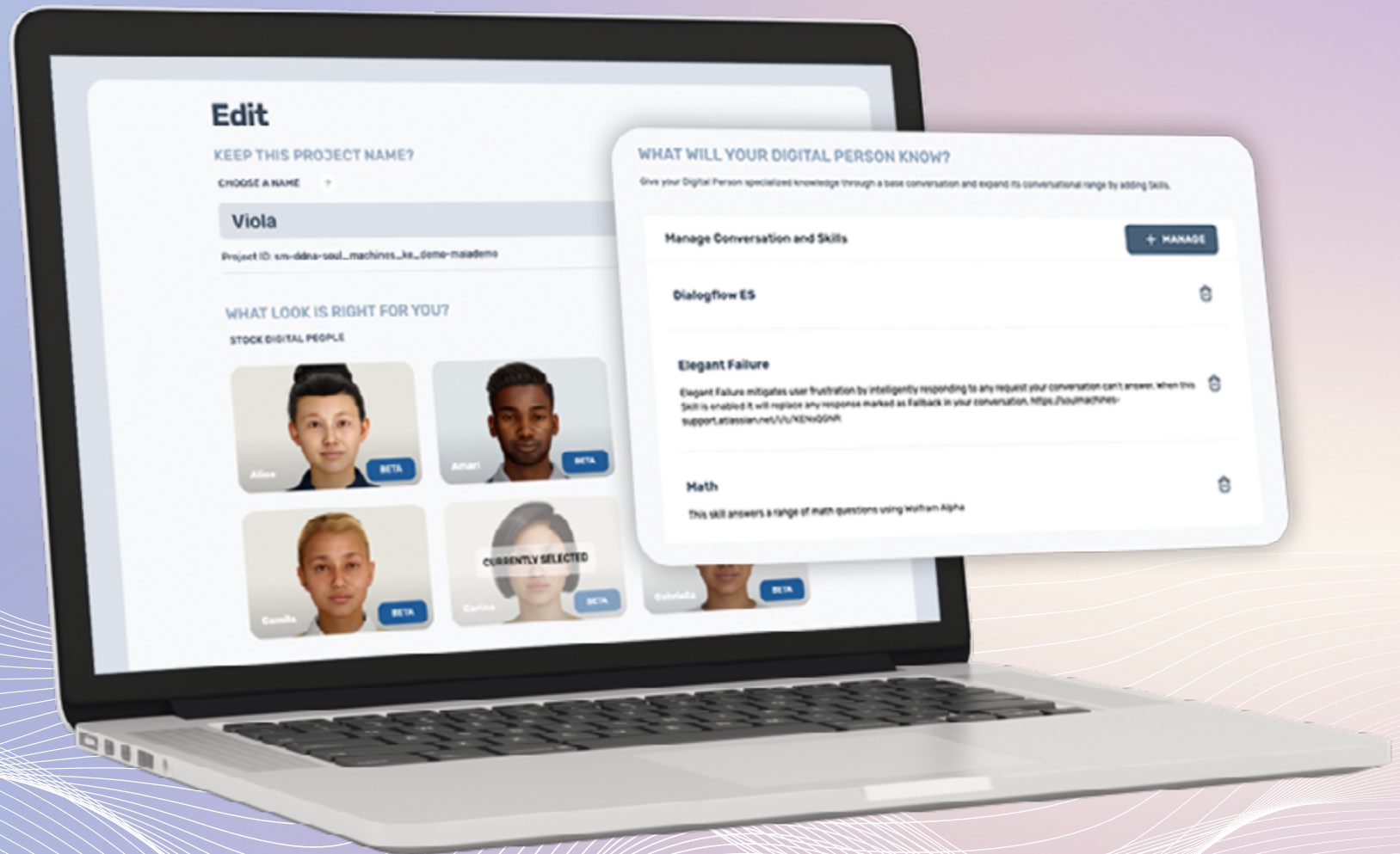
Smart Skills can be added to Digital People with the click of a button. They can be out-of-the-box conversations for common roles across a customer journey, search functions through social media and web accounts, routine and communication utilities, or more complex integration functions with external digital platforms.

A typical example of a practical Smart Skills is the YouTube skill which, in the event of a failure in the conversation, will redirect the Digital Person to find the best matches in selected YouTube accounts.

This skill not only enriches the knowledge of a Digital Person by tapping into the video channels of external sources but also facilitates collaboration.

Another Smart Skill is the ability of a Digital Person to respond in a language different from the one used to define its base conversation. This means that an English-speaking designer will be able to engage audiences speaking other languages by simply activating the translation skill.

Taking advantage of Smart Skills can make deployment faster, easier, and at a lesser cost, and also expand use cases as new skills are released from Soul Machines, its partners, and any developers interested in packaging their own skills for re-use or distribution using the Smart Skills API.

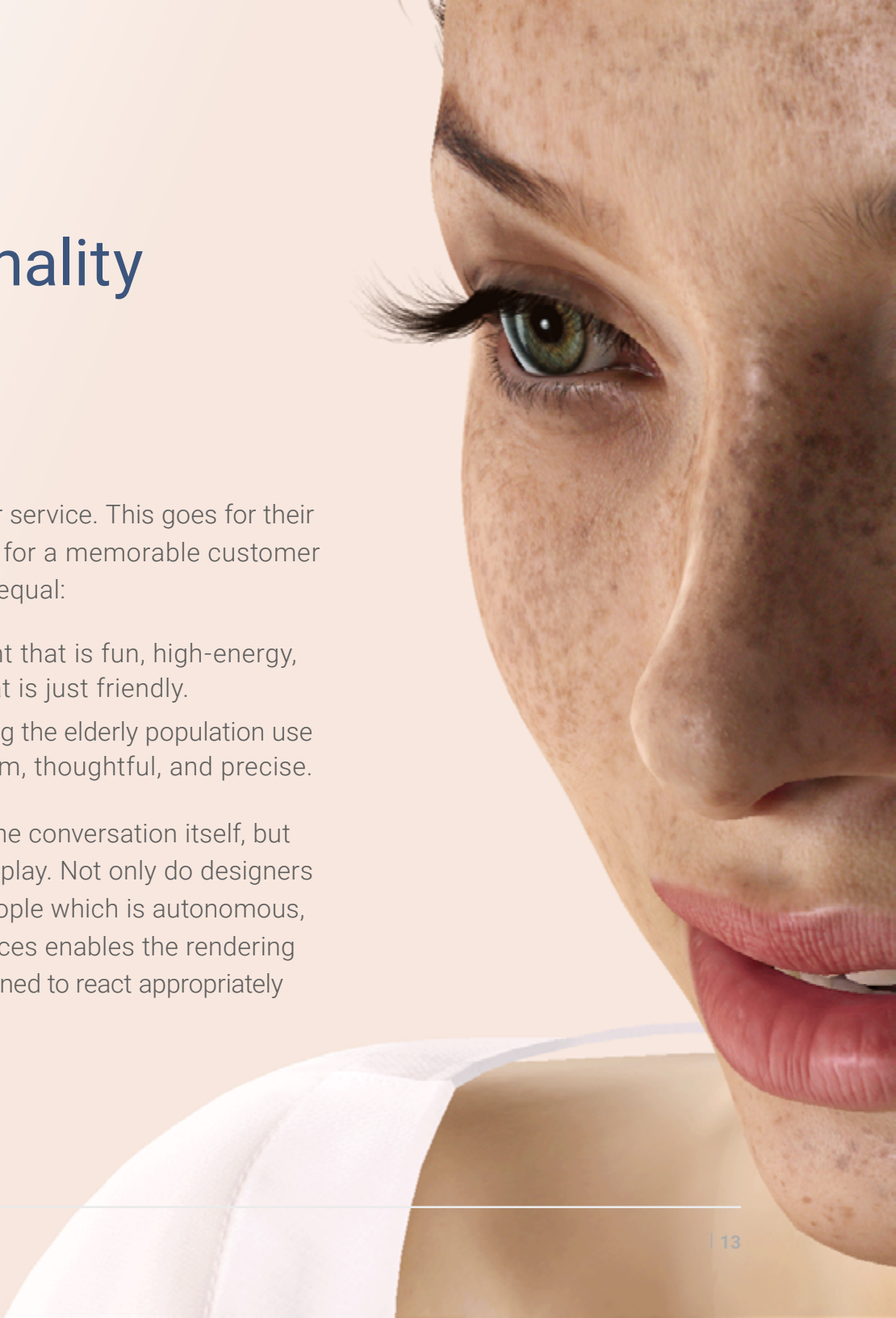


Step 5: Captivate with a personality

Virtual agents are appreciated for the consistency of their service. This goes for their conversation, tone of voice, and facial expressions. But for a memorable customer experience, not all virtual assistants should be created equal:

- To talk about consumer products, a digital consultant that is fun, high-energy, and peppy will probably sell more than someone that is just friendly.
- On the other hand, a digital healthcare assistant helping the elderly population use and read their blood pressure monitor should be calm, thoughtful, and precise.

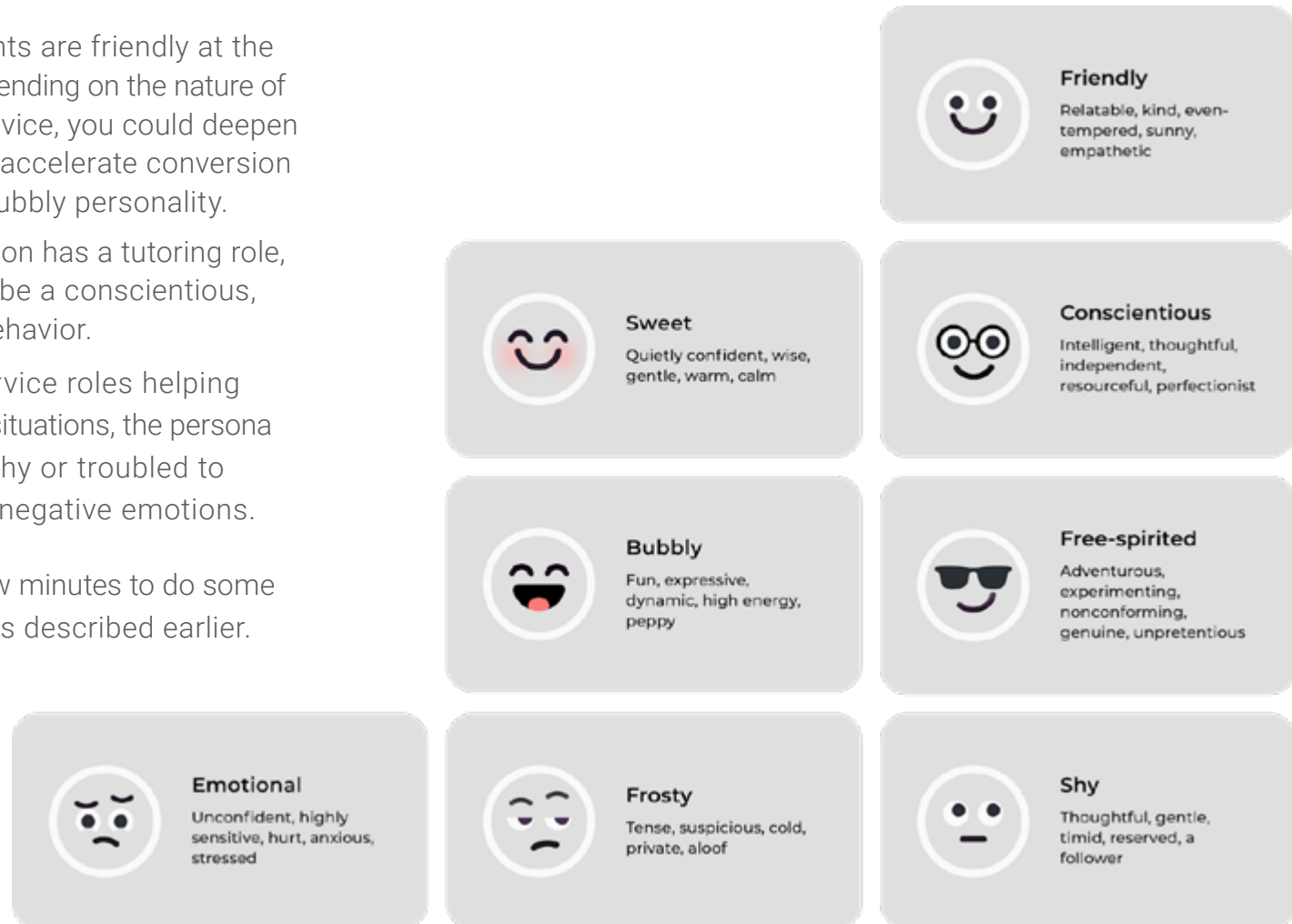
This tuning of the personality is far more complex than the conversation itself, but this is where the expertise of Soul Machines comes into play. Not only do designers not have to worry about the animation of their Digital People which is autonomous, but Soul Machines advanced research in cognitive sciences enables the rendering of behavioral styles making them more human-like and trained to react appropriately to their job.



The choice of one behavior versus another is possible in Digital DNA Studio with the click of a button. Designers can choose among 8 behavioral styles which will affect the overall ‘feel’ of the character:

- All digital assistants are friendly at the minimum, but depending on the nature of the product or service, you could deepen engagement and accelerate conversion with a sweet or bubbly personality.
- If your digital person has a tutoring role, a better fit might be a conscientious, or free-spirited behavior.
- In the case of service roles helping people in difficult situations, the persona may need to be shy or troubled to strongly react to negative emotions.

In any case, take a few minutes to do some simple A/B testing, as described earlier.



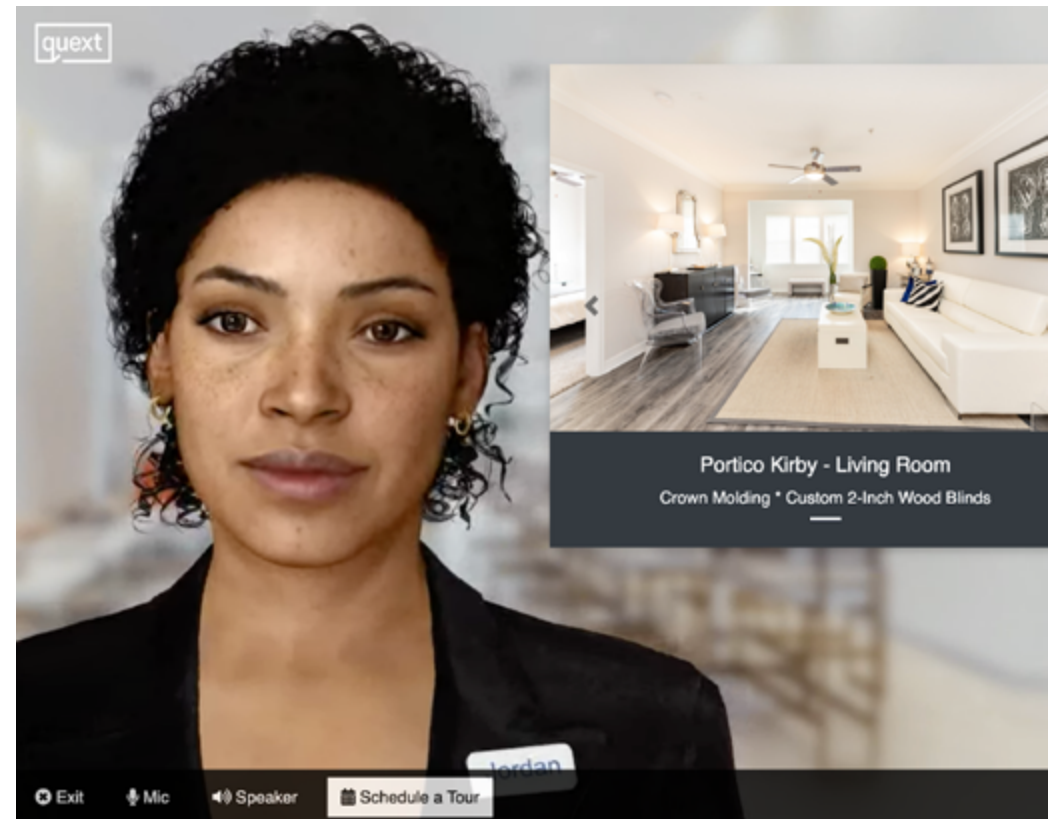
Step 6: Choose a living space

It is now time to assign a residence to your Digital Person: either a dedicated webpage or a web widget appearing at the bottom of a webpage.

Webpage

If its objective is to raise awareness, attract new audiences, generate demand, and retain attention, a hosted webpage is an opportunity to design a custom and eye-catching UI with visual interactions.

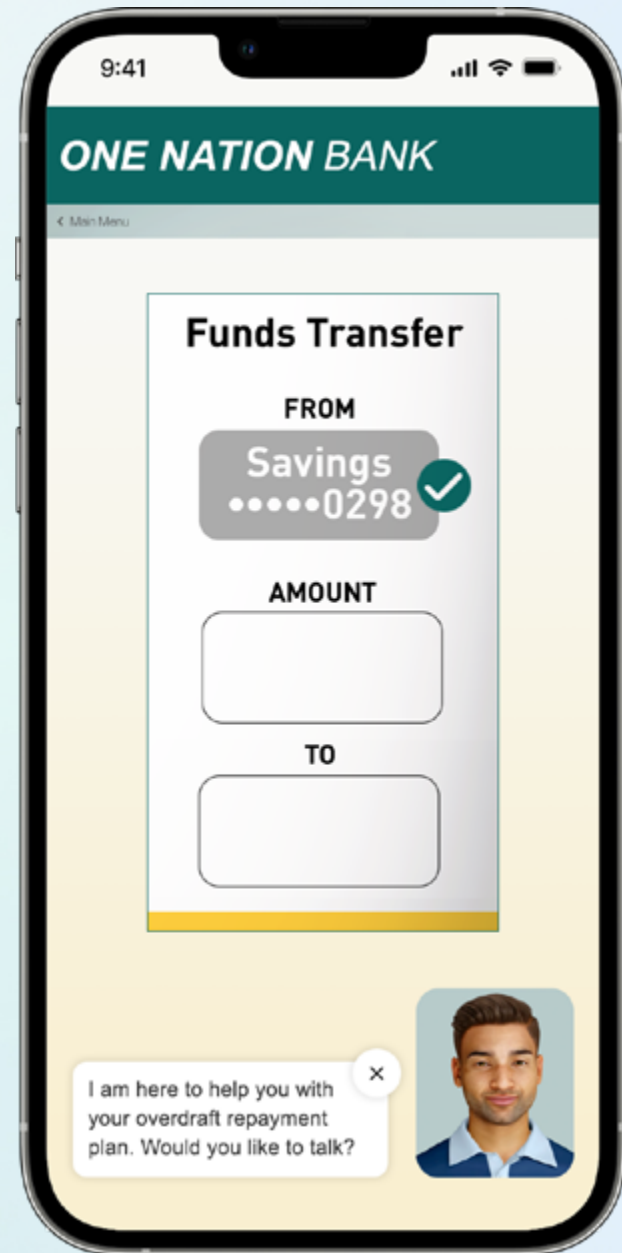
An example use case could be a virtual real-estate agent available 24/7 to tour apartments, or a virtual educator explaining a lab tutorial. The Digital Person is not only animated with face and body gestures but also moves on the page to make room for content cards such as images, videos, or actionable items like menus and buttons. Its placement and hand motion, such as waving or pointing, are triggered by the intent of the conversation.



If no movement occurs after a certain amount of time, the Autonomous Animation takes over to maintain the attention of the viewer by changing the camera field of depth. All these capabilities exist whether you choose to use a standard or custom web UI. The former would consist of a color background and a simple logo. The latter would be designed using the Web SDK supplied with Digital DNA Studio.

Web Widget

If the objective is to show your customers that you care by distributing a discrete but consistent presence across your website or app, a web widget is an opportunity to improve the customer journey and accelerate conversion with always-on and integrated assistance. Using a simple copy of an embed code generated in Digital DNA Studio, followed by a local or global paste to your website, you can guide and support visitors at every endpoint, maximizing your outreach and impact.



Step 7:

Adapt to optimize success

Once a Digital Person is deployed on a website, Digital DNA Studio reports common experience metrics such as the number of conversations, their duration, and number of turns. This information is valuable, but when it comes to the success of the experience, perhaps no metric is more important than the happiness of customers. This data called “valence” is available in the Digital DNA EQ dashboard. It reveals the fluctuation of happiness at the different turns of the conversation with the Digital Person. A retailer can, for example, find which products trigger

happiness or confusion. This empathy-centric data is valuable to understand what customers want and if the experience pleases them.

Some Smart Skills complement the EQ Dashboard. For example, the Digital CXO solution collects Net Promoter Score, Customer Effort Score, and Customer Satisfaction spontaneously from users and then later export the scores to Business Intelligence tools.

869

Total Interactions

↓ 67% previous term

04:24 Minute(s)

Avg. Interaction Length

↑ 8% previous term

21

Avg. Conversation Turns

↑ 11% previous term

6 – 7 pm

Peak Usage Hour

2 – 3 am previous term



Conclusion

The creator economy is exploding with new opportunities for brands to build authentic connections. With Digital DNA Studio, you can inspire, entertain, educate and amplify your voice at scale with your own Digital Influencer, Digital Ambassador, and a diverse and inclusive Digital Workforce.

Soul Machines will continue to develop Smart Skills to unleash the imagination of creators, content producers, UX, and web designers. It will also promote Smart Skills developed by its partners and customers, and build a powerful and rich ecosystem where Digital People can thrive in 2D and 3D virtual spaces.



About Soul Machines™

Soul Machines is a global pioneer in humanizing AI, dedicated to delivering the full capabilities and goodness of human and machine collaboration in a responsive, relatable and unprecedented way. Composed of some of the world's best AI researchers, neuroscientists, psychologists and innovative thinkers the company's unparalleled autonomous animation – featuring its patented Digital Brain – brings technology to life by creating dynamically interactive and emotionally responsive Digital People with personality and character that allow machines to talk to us face-to-face.

Soul Machines has deployed the world's first Digital People with some of the biggest corporate brands in the world in Financial Services, Technology, Automotive, Healthcare, Entertainment, and Education industries. Soul Machines currently has over 200 employees with offices in San Francisco, Los Angeles, New York City, London, Tokyo, Melbourne and Auckland.

For more about Soul Machines, visit soulmachines.com.



If you are a creator or designer passionate about transforming impersonal and transactional user experience into engaging and meaningful connections, request a demo with one of our experts.

If you are an industry leader wanting to revolutionize customer and brand experiences at scale, inquire about the Soul Machines Partner Program.