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Research Report

Between reality & fantasy. Transforming influencer relations through synthetic media

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COMMUNICATION INSIGHTS

BETWEEN REALITY & FANTASY

Transforming influencer relations
through synthetic media

ACADEMIC SOCIETY
FOR MANAGEMENT & COMMUNICATION
An initiative of the Günter Thiele Foundation

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EDITORIAL



» Fantasy meets reality with the use of synthetic media.«

Over recent years, we've seen the rise of synthetic media, a novel form of content that's either partially or entirely computer-generated. Examples include artificially produced or modified texts, articles, photos, videos, audio files, and avatars.

Thanks to user-friendly tools and open-source software, creating synthetic media has become affordable and accessible to the general public, with no deep technological expertise necessary. Not only is it faster, potentially more cost-effective, and scalable, but synthetic media also marks a pivotal shift in content generation and distribution, changing the nature of creative work. Accordingly, the Communications Trend Radar 2022 identified synthetic media as one of the trends likely to influence corporate communications in the upcoming years.

In our latest research project, Sünje Clausen and I explored the potential of synthetic media by focusing on the use of computer-generated characters for influencer communication. Influencers have become a vital channel for corporate communications, communicating with stakeholders, spreading information, and promoting brands, products, and services. Virtual influencers are digitally crafted characters created and overseen by individuals, digital agencies, or companies and can emulate both human and non-human entities. Although they share striking similarities with their human counterparts, they offer new opportunities for more effective, targeted, and managed influencer communications. Virtual influencers are a relatively new phenomenon and have, so far, mostly been used in marketing (e.g., product endorsements).

This publication centers on the capabilities of virtual influencers within corporate communications, drawing insights from a case study with Sanofi. We provide readers with a brief introduction to influencer communication, highlighting both the potential benefits and challenges of virtual influencers, and offering tips for the process of designing and leveraging a virtual influencer.

We'd like to thank the Academic Society for Management & Communication for making this research project possible. Special thanks go to the University of Duisburg-Essen's student group for their development of the virtual character Sam during a Bachelor project, to our cooperation partner Sanofi for their support and input throughout the project as well as to Michelle Wloka from the Academic Society for her valuable feedback. We hope that our findings not only prove valuable but also serve as a source of inspiration to explore the vast potential inherent in synthetic media.



Prof. Stefan Stieglitz
Prof. of Business Information Systems and Digital Transformation
University of Potsdam

KEY FINDINGS

TRANSFORMING INFLUENCER RELATIONS THROUGH SYNTHETIC MEDIA

Content creation is a pivotal aspect of corporate communications, which could be implemented more quickly and cost-effectively using synthetic media. Synthetic media, which encompasses computer-generated content such as images, videos, audio, and text, was identified by the Communications Trend Radar 2022 as one of the top five trends likely to change corporate communications. A one-year research project investigated one aspect of synthetic media further: Creating and using virtual characters for influencer communication. The key findings are as follows:

- **Influencer communications** (pp. 6-7): Social media influencers are relevant organizational stakeholders that can provide valuable resources for strategic communication. These include competencies in the production and distribution of content, a unique relationship quality with their audience, and a public persona. Collaborating with them, however, also poses challenges. For instance, organizations can't always dictate their moves, and influencers often demand a level of independence and autonomy.

- **Virtual influencers** (pp. 10-13): Virtual influencers are digitally created characters with a human or non-human appearance that are created and managed by individuals, digital agencies, or companies, and have sizable followings on social media. They are similar to human influencers in many ways and open up new opportunities for corporate communications. The designers of virtual influencers have complete control over their digital existence which gives e. g., the advantage that the risk of scandals and reputational damage are lower or even eliminated compared to human influencers. However, their credibility might be perceived lower, especially for experience-related content.

- **Creating a virtual character** (pp. 14-16): With tools like Epic Games' MetaHuman Creator, the Live Link Face app, Unreal Engine and a modern iPhone, anyone can create and animate virtual characters. A pivotal phase in the development process is having a strong creative vision. This includes defining virtual influencers looks, demographics, backstory, character traits, values, and beliefs, guided by the target audience, their preferences, and the overarching objectives behind the virtual influencer or of the brand they embody.

- **Considerations when creating and using a virtual influencer** (pp. 18-19): Presently, the creation of a virtual character still includes effort and technical work, but it is expected to become faster and more efficient with the continuous technological developments. Preliminary considerations should encompass legal frameworks, financial resources, and a careful evaluation of which themes and audiences are more suitable for virtual influencers versus their real-life counterparts.

RESEARCH DESIGN

In this project, we aimed to explore the potential of virtual influencers within the realm of corporate communications. Virtual characters are a relatively new phenomenon and have, so far, mostly been used in the sphere of marketing (e.g., for product endorsements).

Thus, developing a virtual character for corporate communications in a real-world setting allowed us to gain insights into the potential of this trend. For this purpose, we partnered with the healthcare company Sanofi to explore how a virtual influencer could be developed for and integrated in corporate communications.

A virtual character was developed by students from the University of Duisburg-Essen as a part of a Bachelor project, which involved the following steps:

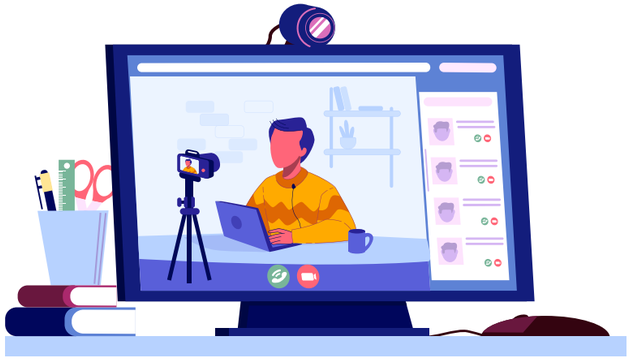
1. Investigating technical possibilities and brainstorming preliminary concepts for the virtual influencer.
2. A workshop with Sanofi to discuss initial ideas, understand the requirements, and explore possible applications.
3. Based on the requirements, development of a creative vision for a virtual character called Sam and concept for the content.
4. Preparation of the content and compiling resources (e.g., information, pictures of specific locations), receiving feedback from Sanofi.
5. Technical realization of ten Instagram stories (animated videos and snapshots) for a one-day „takeover" of Sanofi Deutschland's Instagram account.
6. Publication of posts and internal presentation at Sanofi for discussion.

Find Sam's takeover of Sanofi's Instagram account here („Digi" highlight):

ACKNOWLEDGEMENTS

The virtual character Sam was devised and designed by a group of undergraduates from the Applied Cognitive and Media Science program at the University of Duisburg-Essen, Germany. The project was supervised by Stefan Stieglitz, Sünje Clausen, Lennart Hofeditz, and Lukas Erle. The following students focused on the concept and storyline: Johanna Nießen, Jana Schmücker, Celina Kubica, and Maria Temiz. Technical realization was done by David Zittel, Victor Kosel, Henri Lenla, Maria Dentsa, and Narshika Thirumurugan. Aaron Keffel was responsible for project management. We thank the students for their work.
We would also like to thank Miriam Henn, Janina Renk, and Stefan Dietrich from Sanofi for their input and feedback throughout the project.

INFLUENCER COMMUNICATIONS



WHAT THEY ARE AND HOW THEY'RE RELEVANT TO CORPORATE COMMUNICATIONS

Social media is not only a place to connect, but also a platform to gather news and information about companies, new products, and more. Influencers play a pivotal role in bridging corporate communications with diverse audience segments. This chapter sheds light on some of the advantages and challenges of influencer communications.

WHAT ARE INFLUENCERS?

Influencers are people who are able to sway the knowledge, attitudes, and actions of their followers. They include corporate influencers, real-world celebrities, social media influencers, and ordinary social media users (Enke & Borchers, 2019).

Corporate influencers are members of an organization (e.g., employees) who are also influential on social media. They can provide an informed insider perspective, but they might not be perceived as impartial.

Real-world celebrities are musicians, artists, or athletes who gained recognition for their actions and achievements in the real world. Thus, their followings on social media allow them to reach large audiences but doesn't necessarily reflect their expertise in social media communication.

By contrast, **social media influencers** become influencers solely through their activities on social media. For example, Khabane „Khaby" Lame, who first started posting in 2020, gained more than 160 million TikTok and 80 million Instagram followers (as of September 2023) by producing humorous content, such as mocking overly complicated „life hacks".

In principle, any **ordinary social media user** can be or become an influencer based on their role and position within a social network.

A social network analysis can be used to identify, for example, key figures in a debate or community, or users that serve as an information bridge between otherwise disconnected communities (Stieglitz et al., 2018).

THE ROLE OF SOCIAL MEDIA INFLUENCERS IN CORPORATE COMMUNICATIONS

Social media influencers have emerged as vital players for organizations, performing multifaceted roles in strategic communication (Enke & Borchers, 2019). They provide several resources that are valuable for corporate communications (Borchers & Enke, 2022), including:

- **Content production:** Technical, narrative, and aesthetic skills that enable them to produce engaging and high reach content.
- **Content distribution:** Relevant number of social connections and distribution competencies for maximizing content reach (e.g., timing of posts, search engine optimization).
- **Relationship quality:** Peer-status and a specific relationship quality with their recipients (e.g., through personal contact and interaction), that enhances authenticity and credibility of content and can facilitate dialogues with relevant stakeholders.
- **Public persona:** Personal brand which allows the personalization of corporate communication.

Tapping into these resources, social media influencers can take on functions for corporate communications traditionally held by other actors (e.g., creative agencies, journalists, testimonial givers). For example, social media influencers can perform similar functions to creative agencies, but they often have their own visual and narrational style in content creation. Overall, social media influencers introduce higher flexibility in brand communication, unlock new opportunities for storytelling, and resonate with younger demographics typically elusive to conventional advertising (Borchers & Enke, 2022).

WHAT MAKES SOCIAL MEDIA INFLUENCER COMMUNICATIONS EFFECTIVE?

There are many different factors that can influence the effectiveness of influencer marketing: The influencer's credibility (the source), the message conveyed, the chosen platform (channel), the target audience, and the critical synergy between the influencer and their followers. The success of influencer endorsements lies in the strong, unique relationship that they build with followers (Hudders et al., 2021). There are three core aspects that enable a unique relationship quality between audience and influencers (Borchers & Enke, 2022):

- **Approachability:** Social media influencers often present themselves as approachable by interacting with their followers (e.g., by replying to comments or messages) instead of maintaining distance and exclusivity.
- **Intimacy:** Fostering a sense of intimacy with followers (e.g., by sharing personal experiences and problems), making them appear more genuine and trustworthy.
- **Continuity:** The relationship is nurtured over time through consistent and recurrent interactions.

CHALLENGES IN PARTNERING WITH SOCIAL MEDIA INFLUENCERS

- **Hidden characteristics:** It might be unclear whether a social media influencer is a good fit.
- **Hidden action:** Not all actions can be controlled and influencers might insist on a certain amount of freedom and autonomy.
- **Context:** Regulatory and social context (e.g., advertising regulations).

Human influencers might express problematic personal views or become involved in scandals that could tarnish the brand. **Virtual influencers** offer a solution to some of these challenges while also opening up new opportunities for influencer communications (see p.10).



»THE FOCUS IS ON RELEVANCE AND CREDIBILITY«

INSIGHTS ON INFLUENCER COMMUNICATIONS FROM MIRIAM HENN, VICE PRESIDENT COMMUNICATIONS GERMANY, SWITZERLAND AND AUSTRIA OF SANOFI

Miriam Henn is the Vice President Communications of Sanofi for Germany, Switzerland, and Austria. Sanofi is a healthcare company, describing its own purpose with „We chase the miracles of science to improve people's lives." We partnered with Sanofi to explore the potentials of virtual influencers for corporate communications.

How do you view the role of social media influencers for corporate communications?

We're observing the progressive fragmentation of the public sphere. Media and journalists still play a central role but are no longer the only (information) channels. Social media are more and more preferred when it comes to gathering information, especially among young target groups.

In a Bitkom survey, 78% of those under 30 said that without social networks they wouldn't know what was happening in the world. Currently, 50 million people in Germany are active in social networks. Some 54% of Internet users aged 16 and above actively use Instagram, 38% TikTok and 27% X (previously known as Twitter) (source: Bitkom, February 2023). For several years corporate communications has been facing different requirements, as direct dialogue with the various (sub-) target groups via social media is possible and necessary. As a healthcare company, we're subject to special legislation, above all the Pharmaceutical Advertising Act (Heilmittelwerbegesetz), which prohibits us from talking about specific medicines to the general public or patients. Although this isn't an obstacle to contacting our target groups, it does require more creativity. After all, we see it as our responsibility to educate people about diseases and prevention, and to highlight research progress. Our focus lays on relevance and credibility.

» 78% of those under 30 said that without social networks they wouldn't know what was happening in the world. «

Influencers are seen as having a high level of credibility within their peer group, and they have a good sense for the relevance of topics that affect their respective target groups. Through their communities and reach, influencers bring in target groups that we would not reach through our own social media channels.

Sanofi has partnered with social media influencers before, such as @diewissenschaftlerin on TikTok. Based on your previous experience, what are the main considerations when working with social media influencers?

An influencer must fit Sanofi's purpose. For this reason, we've developed an in-house influencer selection tool to categorize potential collaborators based on various criteria. Key considerations include: Can an influencer credibly represent our topics externally, e.g., through their own scientific expertise? Do they have an active community with significant reach? What other collaborations have they previously been involved in? These are points that we considered when selecting our last collaboration.

» Through their communities and reach, influencers bring in target groups that we would not reach through our own social media channels. «

For us, influencer collaborations on Instagram and TikTok have proven most suitable, striking a balance between educating the audience and fostering dialogue. Finding the right influencer or creator is crucial because they not only have to fit the company and the topics, but also to have a high level of credibility. If they are also able to explain complex scientific issues in a simple manner, then the influencer is the perfect „fit" for us and our social media users. KPIs which we use are the engagement and conversion rate to our homepage.

How could a virtual influencer or character like Sam complement Sanofi's communication strategy?

A virtual influencer makes sense for companies on certain clearly defined topics for exactly defined target groups. Part of our communication strategy at Sanofi is to position internal experts in social media, such as our researchers, who have a high level of credibility due to their expertise. We were curious to explore how a virtual influencer that shares internal impressions from Sanofi could complement these activities.

» A virtual influencer makes sense for companies on certain clearly defined topics for exactly defined target groups. «

Our non-binary influencer „Sam" spent a day as an intern getting to know the topic of digitization in various areas of Sanofi and conveying entertaining impressions of the world of digitization at Sanofi. Strictly speaking, our pilot project „Sam" isn't an „influencer" in the narrower sense, as she was newly created. We therefore followed the „content-centric" approach (people no longer follow people, but topics) of TikTok, which Instagram also adopted. For ethical reasons, we made it transparent that Sam is a computer-generated, fictitious person.

We underlined the playful character with GIFs integrated into the various scenes. Sam thus clearly addresses a younger target group, especially prospective hires. It's important to evaluate upfront which topics and target groups are more suitable for virtual influencers and which for real influencers.

Due to rapid technological progress – especially latest developments in artificial intelligence – I am firmly convinced that virtual influencers will increase in relevance. There are already very good tools for the AI-based creation of avatars. And if avatars are already able to joke with each other and show emotions, then at some point they will hardly be distinguishable from humans, and we are more likely to run into an ethical discussion. This makes it even more important to identify them as avatars or virtual influencers.

VIRTUAL INFLUENCERS

A NEW ERA OF INFLUENCER COMMUNICATIONS?

Many things on social media aren't real. With the advent of virtual influencers, we're entering an era in which the images, videos, and personalities of the people we encounter only exist in the digital world. What lessons can be drawn from previous research about virtual influencers?

UNDERSTANDING VIRTUAL INFLUENCERS

Virtual influencers are digital entities with a human or non-human appearance that are created and managed by individuals, creative digital agencies, or companies. They share social media content and engage in interactive communications with the aim of obtaining influential status among social media users (Mouritzen et al., 2023). In many ways, virtual influencers are similar to human influencers as they can engage with significant audiences on social media and can establish relationships with their audience (Byun & Ahn, 2023).

CLASSIFYING VIRTUAL INFLUENCERS

There are many types of virtual influencers that can be distinguished based on their level of realism and anthropomorphic traits (see taxonomy p.11). The website „virtualhumans.org" provides a good overview and could be a starting point for identifying a suitable influencer for a campaign.

SOURCE CREDIBILITY AS A FACTOR FOR EFFECTIVENESS

Virtual influencers are a relatively recent phenomenon. A literature review suggests that while people prefer human influencers, virtual influencers have the potential to be just as effective as their human counterparts, or even more so (Byun & Ahn, 2023). However, there are only few empirical studies on the effects of virtual influencers on the recipients such that they do not allow for a comprehensive assessment. Further, most studies are conducted in the field of marketing and thus, might not address all aspects that are relevant to corporate communications. Here, we address the perception of the credibility as a factor that could influence the effectiveness of virtual influencer communications.

Early research by Yale researchers Hovland et al. (1953) on **persuasive communication** (i.e., communication that aims at influencing recipients) found that the **credibility of the source** influences the effectiveness of persuasive communication. Credibility is determined by several components:

1. **Expertise:** Perception of the communicator as a source of valid assertions. This perception is informed by the communicators' knowledge, skills, competence, and qualification to make claims about a certain topic.

2. **Trustworthiness:** The audience's belief in the communicator's honesty, sincerity, and integrity.

3. **Attractiveness and similarity:** Perceived physical attractiveness of the communicator and relatability (e.g., similar demographics) between the communicator and the audience.

While the first two components of source credibility were proposed in the seminal work (Hovland et al., 1953), attractiveness and similarity were identified as relevant components in subsequent research (Lou & Yuan, 2019). Several marketing studies have since found that the perceived credibility of social media influencers can enhance relationship-building between

TAXONOMY OF VIRTUAL INFLUENCERS

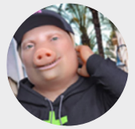
Types of virtual influencers based on the level of anthropomorphism and perceived reality-virtuality compiled by Mouritzen et al. (2023)

Perceived Reality-Virtuality

Mixed Reality

Virtuality

Hyperrealistic Non-Humans



John Pork



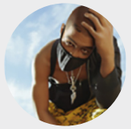
Bee Influencer

- Have a low to moderate anthropomorphic appearance. These virtual influencers may take the form of an animal (e.g., a bee or a lizard) or an unreal being (e.g., an alien or a monster).
- Appear to „exist" in the physical world among humans, with some exceptions.
- Tend to make the boundaries between virtuality and reality blurred.

Hyperrealistic Humans



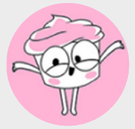
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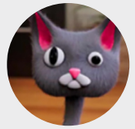
Blawko

- Have a highly anthropomorphic appearance. These virtual influencers may be hard to distinguish from real-life influencers.
- Appear to „exist" in the physical world among humans and actively participate in human activities (e.g., attending fashion shows or going to restaurants).
- Make the boundaries between virtuality and reality very blurred/non-existent.

Unrealistic Non-Humans



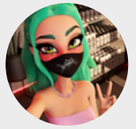
Good Advice Cupcake



Noodle

- Have a low anthropomorphic appearance. These virtual influencers may take any form, including non-alive „humanized" objects and cartoon characters.
- Tend to exist in a virtual world, although may occasionally „visit" the physical world.
- Create clear boundaries between reality and virtuality.

Unrealistic Humans



Polar



Kizuna AI

- Have an anthropomorphic appearance, often in a cartoon character form. These virtual influencers can be easily distinguished from real-life influencers.
- Tend to exist in a virtual world, although may occasionally „visit" the physical world.
- Create clear boundaries between reality and virtuality.

Low — *Perceived Anthropomorphism* — *High*

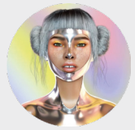
recipients and influencers (e.g., Yuan & Lou, 2020) and purchase intentions of influencer-promoted products (e.g., Weismueller et al., 2020). Influencer endorsements are more effective if they match the expertise of the influencer (Hudders et al., 2021).

The perception of the credibility of virtual influencers might differ from the perception of human influencers. For example, individuals might not perceive the influencers to have a mind, that is, the **perceived capacity to act** and the **perceived ability to feel and sense** (Gray et al., 2007) which in turn could influence the perceived credibility of their social media communication (Li et al., 2023).

Understanding another entity's mind is important for humans to understand and predict their behavior and helps us to form social connections (Waytz et al., 2010). How we perceive the mind of another entity matters as it guides our behavior and expectations towards that entity (Wiese et al., 2022). Mind perception also extends to the perception of non-human entities (e.g., animals, robots) as having a mind (Wiese et al., 2022). While humans often attribute agency (i.e., the capacity to act) to robots, humans are less likely to perceive robots to have the ability to feel and sense.

Given this, Li et al. (2023) conducted multiple studies and found that humans perceive virtual influencers to have **lower sensory capabilities**, leading to a **lower perceived credibility** of product endorsements. However, when using objective rather than experience-related terms in products endorsements, the perceived credibility of virtual influencers' endorsements improved. These findings suggest that virtual influencers might be more suitable for **communicating factual content as opposed to experience-related information.**

EXAMPLES OF VIRTUAL INFLUENCERS ON INSTAGRAM



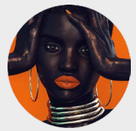
Lil Miquela *@lilmiquela*
**2016 | 2.7 million followers*
created by the Los Angeles technology startup Brud

Lil Miquela shares lifestyle posts featuring, e.g., her hobbies and relationships with other virtual influencers. She has partnered with brands like Prada and MINI electric, released music, and has her own NFT collection.



Lu do Magalu *@magazineluiza*
**2009 | 6.5 million followers*
created by Brazilian retail brand Magalu

This virtual influencer fuses technology and retail innovation. As a brand ambassador of Magalu, Lu's social media accounts feature unboxing videos, product reviews, and software tips on behalf of the company.



Shudu Gram *@shudu.gram*
**2017 | 241 thousand followers*
created by fashion photographer Cameron-James Wilson

Shudu is a virtual fashion model managed by "The Diigitals", an all-digital model agency. Black virtual influencers, especially when managed by white people, have been criticized for allowing brands to associate with Blackness without actually supporting black people (e.g., Sobande, 2021).



Nobody sausage *@nobodysausage*
**2020 | 7.5 million (Instagram), 21.1 million (TikTok) followers | created by motion graphic designer Kael Cabral*

Nobody Sausage started as a personal project for practicing character animation. The first dance video immediately went viral on TikTok. The virtual character has amassed a huge followership and collaborated, e. g., with Hugo Boss and Netflix.

ADVANTAGES AND RISKS OF VIRTUAL INFLUENCERS

Previous research highlighted several characteristics in which virtual influencers differ from human influencers. These characteristics offer advantages, but can also have problematic implications for their audience, the represented individuals, and society at large (Mouritzen et al., 2023):

Customization

The designers of virtual influencers have complete control over their digital existence. This includes shaping their **physical features** and also their **backstory** (e.g., origin), **behavior**, and the **content** they share.

✔ Allows designers to tailor virtual influencers to the interests and demographics of specific target audiences or to align influencers seamlessly with brand values.

✗ Can contribute to promoting unrealistic societal beauty and lifestyle standards (e.g., skinniness, flawless skin), especially if the influencers are difficult to distinguish from humans.

✗ Enables new forms of misrepresentation and the commercial exploitation of marginalized groups (e.g., Shudu Gram, a Black South African virtual influencer, is created and managed by a white person from England).

Ownership

Virtual influencers are created and owned by an individual, media agency, or company.

✔ Lowers or eliminates the risks of scandals and reputational damage, an inherent risk with human influencers.

✗ Owners of virtual influencers can choose to stay anonymous which might be abused for exhibiting unethical behavior without the risk of being identified.

Flexibility and scalability

Virtual influencers aren't subject to the same constraints as human influencers as they can be anywhere, anytime, and perform any task.

✔ Can save time and resources (e.g., travel expenses, equipment) and open up new possibilities for content generation.

✔ More scalable as virtual influencers can be simultaneously active on multiple platforms and produce more content.

✗ Can promote unrealistic expectations of human lives and abilities, inducing intimidation or fear of missing out among audiences.

Automation

With growing possibilities to automate content generation and communication with artificial intelligence, virtual characters will be increasingly automated in the future. This enables, for example, **bidirectional relationships** with followers.

✔ Increases scalability through automated content generation.

✔ Enables the acquisition of valuable consumer insights.

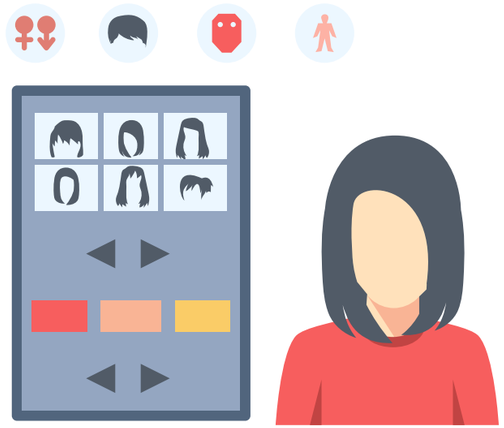
✗ Could be used to mislead or exploit users.

DEVELOPING A VIRTUAL INFLUENCER

REQUIREMENTS AND DEVELOPMENT PROCESS

How could corporate communications tap into the potential of virtual influencers by creating their own virtual ambassador? This chapter adresses requirements and considerations for developing a virtual influencer.

CREATING A CONCEPT FOR A VIRTUAL INFLUENCER



To engage recipients and sustain their interest, it's important to have „a strong creative vision to humanize the virtual character and an engaging story-telling around their lives" (Moustakas et al., 2020, p. 4). Therefore, the first step in creating a virtual influencer is to develop a creative vision. It should be guided by the target audience(s) and their interests as well as the aim behind the virtual influencer or of the brand or company that it represents. The vision should contain details regarding the virtual influencer's appearance, demographics, and personal history. For example:

- **Form:** Are they human, animals, objects or purely fictional?
- **Human features:** If resembling humans, chart out their gender, age, cultural, and, if relevant, religious background. Also, decide how they will reveal their artificial nature (if at all).
- **Residence:** Real or fantastical? Does this location exist in the real world (e.g., a city, country, island, outer space, etc.)?
- **Background:** Define their educational trajectory and professional life. What is their lifestyle?
- **Core values:** What do they cherish? Authenticity? Spirituality? Growth?
- **Personality traits:** Are they humorous, compassionate, ambitious, kind, genuine, curious, nerdy?
- **Hobbies and interests:** For example, sports (which ones?), travel, art, new technology?
- **Politics:** Doe they (openly) endorse specific causes (e.g., Black Lives Matter, Fridays for Future)?

Furthermore, the concept should specify the virtual influencers' **personality, values, and beliefs.** For example:

While not every facet will feature in their online persona, a rich creative vision ensures a holistic, consistent virtual influencer. It paves the way for audiences to resonate and foster connections with.

A VIRTUAL CHARACTER FOR SANOFI

The workshop revealed that because Sanofi operates in the healthcare sector, it's subject to rigorous parameters for communications around medical products, health conditions, and medical procedures such as the German Pharmaceutical Advertising Act (Heilmittelwerbegesetz). Every piece of content associated with Sanofi undergoes stringent checks and approvals.

Given these restrictions, launching a virtual influencer with autonomous social media activities wasn't viable. Instead, the project focused on developing a virtual character that (so far) only appears with approved content on Sanofi's own Instagram account. Therefore, while the virtual character could become a virtual influencer, the current concept can be more accurately described as a **virtual corporate ambassador.**

Besides these formal considerations, the workshop identified two suitable topics: The digital evolution in healthcare, and Sanofi's employer branding and recruitment initiatives. The project team also discussed personality traits, hobbies, and interests that would allow the creation of an engaging, likeable character aligned with Sanofi's values. Based on these and other considerations, the project team developed the virtual character **Sam**.

Sam is a medical student interning at Sanofi. During a **one-day takeover** of Sanofi Deutschland's Instagram account, Sam showcases various areas in which **digital technology is used in healthcare** (e.g., machine learning's role in drug development). Lastly, Sam reflects on the experience and draws attention to **opportunities for working for Sanofi** (i.e., vacancies, writing a thesis).



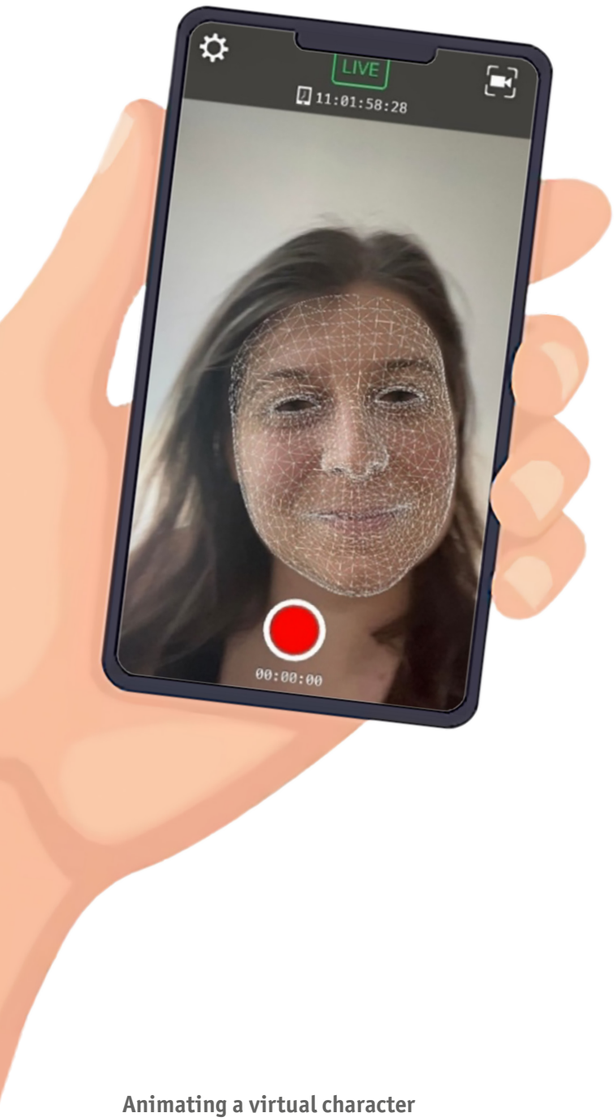
The virtual character „Sam"
Sam signing off from the one-day Instagram takeover.

SOFTWARE AND HARDWARE FOR CREATING A VIRTUAL CHARACTER

To create high-definition 3D graphics and animations for virtual influencers, the software company Epic Games supports the complete workflow in their game engine **Unreal Engine.** It integrates Epic Games' **MetaHuman Creator** for avatar design and **LiveLink** for animations.

The **MetaHuman Creator** (metahuman.unrealengine.com) also developed by Epic Games is a powerful tool for **designing lifelike virtual characters**. Developers can start by using a preset provided by the MetaHuman Creator, or alternatively design characters from scratch. Creators can customize the hairstyle, complexion, facial features, height, body proportions, clothing, accessories and more. Post-design, the **model** of the virtual character can be exported to Unreal Engine.

In Unreal Engine, the virtual character can be **animated** with **Live Link**, a real-time synchronization technology developed by Epic Games. By capturing facial expressions and head gestures of a live performer, Live Link transposes this raw data onto the virtual character in Unreal Engine. A requirement for using Live Link is **compatible hardware for motion capture**. Currently (September 2023), the Live Link Face app for recording is only available for iOS mobile devices (iPhone or iPad) equipped with a TrueDepth camera.



Animating a virtual character
Example of the Live Link tracking mesh used to capture and transfer facial and head movements from a human to the virtual character in real time (picture from Epic Games).

CREATING ANIMATED CONTENT

Creating video content of a virtual character in Unreal Engine involves the following steps:

1. **Storyboarding:** Decide on the narrative or visual objective of the video. What objects, textures, camera angles, and animations are required?

2. **Creating the scene:** Develop or import the scenery for the video. For example, real-world locations (e.g., a building, room, park etc.) and objects (e.g., an AR headset) can be imported into Unreal Engine, while custom objects with various textures can be created from scratch.

3. **Lighting essentials:** Position different sources of light in the scene to enhance realism and visual appeal. Unreal Engine provides different types of lighting with adjustable intensity and color.

4. **Character animation:** Set up a connection to Live Link to animate and record the virtual avatar's head and facial movements in real time. Time codes should be used to synchronize the input from different sources (e.g., Live Link face capture and audio recordings of the voice).

5. **Camera dynamics:** Position and configure your camera within the scene to capture the desired visual narrative. Different camera settings (e.g., perspective) can be set and animated throughout the scene (e.g., tailing the character).

6. **Capture and render:** Use the movie capture feature of Unreal Engine to capture the scene as a video, rendering it frame by frame.

7. **Post-production (optional):** Fine tune the video with effects, music, captions etc. and export it in a required format (e.g., for Instagram).



Creating a scene
The screenshot shows a scene crafted in Unreal Engine as well as an excerpt from the Instagram video that was created from this scene. In this scene, Sam showcases an augmented reality (AR) glass and explains how Sanofi uses AR.

LESSONS LEARNED

CONSIDERATIONS FOR VIRTUAL CHARACTERS IN CORPORATE COMMUNICATIONS

Virtual influencers offer new opportunities for corporate communications. However, collaboration and the creation of these virtual entities require strategic deliberation.

REFLECTIONS FROM THE SANOFI CASE STUDY

The technical approach allowed high **flexibility** with regard to scene creation. For example, the camera could be positioned to give an impression of Sam recording herself with a smartphone (selfie-perspective). Furthermore, we integrated real locations (e.g., a picture of Sanofi Germany's headquarters in Frankfurt) and specific objects (e.g., the exact AR glasses used at Sanofi) to enhance the character's **realism** and credibility.

Sam has a human female **voice**. While this enhances perceived humanness and facilitates the synchronization of the voice and facial expressions, using a synthetic voice is advisable to reduce reliance on individuals and paving the way for **automated content generation**.

Content authenticity – striking a balance between Sam's digital nature, Sanofi's values and requirements, and creating an authentic and endearing character – was crucial. The digitalization of the health care sector emerged as a suitable topic for a virtual character, and Sam conveyed plenty of facts. Both factors are important for the perceived **credibility** of the virtual influencer. Additionally, Sam shared some personal information (e.g., being a pharmacy student), experiences (e.g., having lunch), and feelings (e.g., being excited) in the Instagram stories. These elements are important for forming a **relationship** with the audience.

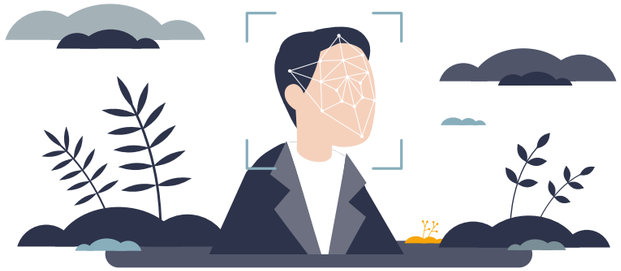
Overall, the **engagement** with Sam's stories was similar to other content on Sanofi's Instagram channel. While engagement might increase once Sam becomes more known and appreciated among followers, the question remains which return would be required to justify the additional effort for creating Sam's content.

„Regarding our research project, there was still a lot of technical 'manual work,' such as recording Sam's voice. In addition, very high computer capacity was needed to develop and animate Sam. But I am sure that the technology will develop further very quickly, so that the creation of virtual influencers in corporate communications will become faster and more efficient, like what we have seen with the simple user interface of ChatGPT. However, it is important to evaluate in advance for which topics and target groups virtual influencers make sense and for which real influencers.

Another important aspect is community-building, i.e., how an influencer cultivates their relationship with their followers. A company can also build up a (virtual) influencer itself, analogous to a corporate influencer approach, to retain communication sovereignty over its own topics. For me, however, the question of credibility arises here. 'Independent' influencers will always be more credible in their communities.

We are currently in the conceptual phase as to what a continuation might look like, considering a sensible cost-benefit ratio. We are currently seeing a growing number of healthcare professionals who are active as healthcare influencers. This potential can also be extended to virtual influencers. Stay tuned!"

Miriam Henn, Vice President Communications Germany, Switzerland, Austria, Sanofi



KEY CONSIDERATIONS FOR COOPERATING WITH OR CREATING A VIRTUAL INFLUENCER

Synthetic media allows the (increasingly automated) creation of virtual characters. Some of these characters have gained millions of followers on social media, offering new opportunities for influencer communications. When it comes to integrating these virtual characters into a communication strategy, there are two primary avenues for corporate communications.

First, they can **collaborate with agencies or individuals that manage existing virtual influencers,** much like traditional human influencer partnerships. Here, corporate communications benefits from leveraging the influencer's public persona and community as well as its creators' expertise in content creation and distribution.

Distinct advantages over human influencers include enhanced controllability, potential for enduring partnerships, and scalability.

Second, corporate communications can **create (or oversee the creation of) virtual characters** as corporate influencers or prospective independent influencers in specific areas. This allows the unprecedented tailoring of virtual characters to specific target audiences and brand values. However, it also requires corporate communications to build on their own community.

In this research project, we explored the latter approach. Based on the study, we highlight three key takeaways for creating virtual characters:

1. **Identify suitable topics for virtual influencer communications.** Influencer endorsements are more effective if they are aligned with the influencers' expertise. Preliminary findings indicate that endorsements from virtual influencers rooted in personal experience or sensory perceptions might come across as less credible. Therefore, virtual influencers might be more suited for conveying a topic from an informative or factual angle rather than a personal one.

2. **Think about how to build a relationship between the virtual influencer and the audience.** What makes influencer communications effective is the unique relationship that influencers build with their followers. Many virtual influencers use similar tactics to their human counterparts to foster intimacy and trust (e.g., sharing personal thoughts and feelings). While this strategy elicits comparable reactions, this approach might not be suitable for every context. And the virtual and fictional nature of these characters should always be transparent to prevent potential misunderstanding.

3. **Evaluate required resources and long-term perspective.** Currently, developing a virtual influencer takes time, expertise, and resources. While it can be expected that more elements of the workflow can be automated in the future, initial investments remain significant. Therefore, for experimenting with virtual influencers in corporate communications, it is easier to approach existing virtual influencers.

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COMMUNICATIONS TREND RADAR

How do social changes, new technologies or new management trends affect communication work? A team of researchers at Leipzig University and the University of Potsdam (Germany) observe new developments in related disciplines.

Launched in 2020, the Communications Trend Radar identifies and publishes annually the five most important trends for corporate communications.

The research series helps communication managers to identify important relevant changes beyond their own discipline at an early stage. To this end, societal, management, and technology changes are observed and evaluated.

The Communications Trend Radar 2024 is expected to be published in February 2024.



For 2021, the Communications Trend Radar identified Denialism, Virtual Corporate Communications, Sustainable Communications, Digital Nudging and Voice Interaction.



The five trends identified for 2022 are Language Awareness, Closed Communication, Gigification, **Synthetic Media** and Cybersecurity.



For 2023, the Communications Trend Radar identified State Revival, Scarcity Management, Unimagination, Parallel Worlds, and Augmented Workflows.

All reports can be downloaded at bit.ly/publicationsAGUK.

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The Academic Society for Management & Communication is a non-profit think tank for corporate communications. Through collaborative research and knowledge sharing, it aims to actively shape the future of corporate communications. The initiative was founded in 2010, and is currently supported by six professors, four universities, and more than 45 corporate partners.

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