

AI in Marketing
Prof. Zillur Rahman
Department of Management Studies
Indian Institute of Technology, Roorkee

Week 10
Lecture-48 AI in PR and Publicity and Social Media Marketing-II

Welcome to this NPTEL online certification course on artificial intelligence in marketing and now we will talk about module 48. So, as you can see from this slide in this module 47 and 48, we were discussing about the role of AI in public relations and publicity and social media marketing. Now this is part 2 of that chapter that is AI in PR and publicity and social media marketing, and it is module 48. Now these are the things that we will cover in this module. So, to start with we will understand social media influencer marketing and influencer marketing benefits. Then we will explore the benefits of AI augmentation for influencer marketing.

Next, we will study AI virtual influencers and the rise of virtual influencer marketing and thereafter we will explore examples of top virtual influencers. Then we will move on to understanding steps for creating virtual influencers with an example and then to explore the limitations and future of AI virtual influencers and virtual influencer marketing. So now let us start with social media influencer marketing and virtual influencers. What is influencer marketing? Online influencer marketing has steadily grown in the past decade as a strategy utilized by digital marketers for spreading brand messages with the help of social media influencers which are also referred to as SMIs.

Online influencers can be understood as micro celebrities. So that is micro plus celebrities. Micro celebrities are ordinary celebrities famous to only a niche audience and are reciprocal in their interaction with viewers. So, this is important here. It is reciprocal.

They are reciprocal with the viewers. Online influencer marketing is defined as the art and science of engaging people who are influential online to share brand messaging with their audience in the form of sponsored content. The influencer marketing is the strategy that utilizes social media outreach and the micro celebrity status. So, these two things are added. Micro celebrity status of these opinion leaders or influencers to promote services and products.

It is a strategy in which a firm selects and incentivizes online influencers to engage their followers on social media in an attempt to leverage these influencers' unique resources to promote the company's offering with the ultimate goal of enhancing firm's performance. As brands increasingly empower online influencers such as Italian fashion influencers, Chiara Ferragni American car influencer Supercar Blondie or Chinese beauty influencer

Austin Lee to present and promote their products, influencer marketing has emerged as a global phenomena and integral component of brands marketing strategies. An influencer or social media influencer is a content creator who has the expertise in an area and has built a substantial network of people as followers by producing valuable and creative content on social media platform that could be of value to the marketers. Influencers are found to have similarities with celebrities. So, there are some common things.

So as we have talked about earlier, these influencers, they are micro celebrities. However, influencers are likely to be more relatable than celebrities as they often share their personal lives and have direct interaction with their followers on social media networks. These parasocial interactions give an illusion of a personal relationships with consumers. So, they have this personal relationship with the consumers making them more susceptible to the content in influencers' posts. A fundamental difference between influencer and celebrity lies in their source of fame.

Unlike celebrities who have succeeded in some credentialed institutional settings like acting music sports, influencers are not certified by any formal institutions and accumulate followers by actively sharing content on social media. Through blogging, blogging or generating short form content, for example, Instagram, TikTok, online influencers create and disseminate content that allegedly portray their everyday lives, experiences and opinions. They maintain active relationships and regularly respond to and interact with followers. So that is another thing that is active relationship, and they regularly respond and interact with their followers by carefully managing their content, image and endorsements. Influencers aim to create distinct personal brands.

So, they have their own brand. Followers then self-select to follow influencers whose identity resonates with them. So, it is followers to influencers. So, followers select those influencers with whom their identity resonates. And then these influencers, they also resonate, picks up those influencers which resonates with the brand.

The scope of electronic word of mouth has gone beyond the influence of friends and family resulting in the broader domain of influencer marketing. As a result, there has been a shift in marketers' approaches for spreading brand messages, increasing and strengthening the customer base and creating a powerful brand image in the minds of the consumers. Organic word of mouth occurs when an existing customer shares information about the firm's offering without any direct prompting by the marketer. So, when they share on their own. With influencer marketing firm's purpose, we select and play online influencers to spread word of mouth.

Marketers are encouraged to use creative strategies to design seamless tactics for their brand communication. With new processes such as influencer marketing, the distinctive and noteworthy advantage of influencer marketing signify it as the next big thing. Now

let us talk about the influencer marketing benefits. The first benefit is leveraging influencers' follower networks. A social network is defined as a set of factors and the relationships that is the ties among them.

According to social capital theory, the structural configuration of a person's network that is who that person reaches and how. Constitute a valuable resource because it enables access to network members for information exchanges and diffusion. By working with influencers, firms can gain access to the influencers' followers' networks. Such that they leverage the structural capital embedded in these networks. Firms can use influencer network in segmentation and targeting efforts.

Online influencers build distinct personal brands and draw identity boundaries that attracts homogeneous, like-minded people. The segmentation of consumers that occurs naturally as followers self-select into a segment by following a specific influencer whose content, style and taste they like and with whom they identify. So here the company is not doing the segmentation. But consumers self-segment them depending on which influences they are following. The natural groupings of influencers' followers' networks increase segments' homogeneity defined as the degree to which members of a segment are similar to one another.

With the use of influencer marketing, firm gains a new channel to reach homogeneous consumer segments. Leveraging influencers' followers' network allows a firm to capture consumers' changing preferences. Traditional segmentation approaches tend to apply static segmentation variables, leaving them unable to identify when customers' needs change. With influencer marketing, consumers control the content to which they are exposed. By dynamically following and unfollowing influencers according to their spontaneous needs and interests.

So here this is a more dynamic way to look at the segments. Because people keep on coming and going. Marketing with online influencers thus allows firms to leverage influencers' followers' network and gain access to their homogeneous, dynamically adapted consumer segments which constitute the targeting benefits of influencer marketing. The second benefit of influencer marketing is leveraging influencers' personal positioning. Influencers strive to build their personal brands by positioning themselves according to unique characteristics that distinguish them from other influencers.

Influencers manage the positioning of their personal brands by sharing posts, images and stories on social media that are independent of any specific brand's strategic intervention at their own cost. According to social capital theory, such shared understanding or meaning constitute valuable cognitive capital that can be leveraged to facilitate firms' performance. With influencer marketing, a firm enters into a type of brand alliance with

influencers. Brand alliance with influencers and firms. So followers may transfer their shared understanding of influencers' positioning to the brand.

For example, by collaborating with Tesh Rosa, Zara's hashtag I am denim campaign evoked the impression that its products were more accessible than high fashion clothing. The third benefit is leveraging influencers' communication content. Influencers are content creators. Each influencer acts as his or her own self-contained creative agency and is capable of engaging followers by producing quality content with various tools, including text, images and videos. With influencer marketing, firms empower selected influencers to participate in their creative process of generating marketing communication on social media.

According to social capital theory, much valuable information is socially embedded. Influencers' connection with their followers are important sources of their unique and in-depth insight. By leveraging influencers' content, firms essentially gain access to their tacit knowledge about what to talk about with followers and how which constitutes an important resource for the firms. Because influencers can post content that connect the brand's products with consumers' goals, with evoking higher content relevance, influencers' generated content may be perceived as less intrusive than traditional advertisement, which should enhance consumers' attitudinal and behavioral responses to that content. Therefore, working with online influencers allows firms to leverage influencers' communication content that is categorized by high originality and relevance.

The fourth benefit is leveraging followers' trust in influencers. Social capital theory suggests that a key source of social capital accruing to an actor's social relations is high level of trust. Influencers generate trust among followers because they appear more authentic than marketing firms or brands. Authenticity results from the perception that a person behaves according to his or her true self. Influencers are also authentic to the extent that they share honest, unbiased opinions.

Celebrators and docents read scripted lines, whereas influencers offer greater credibility because they write honest reviews which are not always positive. By sending free samples to beauty influencers but also giving them the freedom to provide unbiased reviews, Sephora, a beauty brand, fosters genuineness that consumers appreciate. Consumers also consider influencers trustworthy because their relationship with followers are more communal than those with brands. Communal relationships resemble friendships in which people take care of others' needs and have a genuine concern for their well-being. Exchange relationships are transactional and quite procured in nature.

When followers witness their favorite influencers become successful, they may feel like part of the success. Because consumers perceive influencers as authentic and have communal relationships with them, they are likely to trust influencers. When firms work

with influencers, such trust benefits of influencer marketing are likely to transfer to brand-related outcomes to enhance marketing communication effectiveness. Now let us look at how to augment influencer marketing with artificial intelligence. So, AI influencer marketing is different from traditional influencer marketing.

In that it takes a more data-driven approach. Rather than relying on personal relationships or intuition, AI influencer marketing uses data to identify potential influencers and analyze their engagement traits, demographics and interest. This data is then used to create a targeted campaign that is more likely to resonate with the influencers' followers. For example, if an influencer has a large following of fashion enthusiasts, a fashion brand could create a campaign that showcases their latest clothing lines. Now let us look at how is AI used in influencer marketing.

The first is enhancing targeted precision. The second is streamlining campaign management. And the third is predictive analytics and ROI optimization. And that leads to a group of people who are influenced. Benefits of AI influencer marketing includes, first is identifying the right influencer; The second is predicting the success of campaigns.

The third is quick campaigns. Fourth is creating content. And the fifth is measuring the success of campaigns. So now we will look at AI and virtual influencer. A virtual influencer is a computer-generated character or persona that exists primarily on social media and other digital platforms. Just like human influencers, virtual influencers post videos, photos and stories on social media, interact with followers and even collaborate with brands for marketing campaigns.

Virtual or AI influencers have gained increased traction in recent years and most of them are similar to human beings in terms of their physical appearance, personality and behavior. Although they are computer-fabricated identities, virtual influencers like human influencers are content generators and personalities on social media where they exhibit human characteristics in their posts and interactions with followers and where they have also amassed a sizable following. Traditionally, virtual influencers are designed to emulate humans. However, they are not limited to human-like form. Exclusively, they are also virtual influencers in the form of animals.

Now we will look at the rise of th artificial intelligence influencers. Recent advancements in AI have led brands to incorporate service delivery through technology and a general trend towards synthetic advertising This has led to the rise of AI conversational interface and even the possibility of digital human in retail environment. In the context of social media, AI is now being used to automatically write and respond to messages, effectively aiding brands in managing their social media accounts. Within the domain of influencer marketing, AI has led to the emergence of a new kind of influencer, that is the AI influencer.

And AI influencers can have a sizable social network of followers and can be regarded as trusted tastemakers in one of the several niches. Research on AI and machine learning also points to potential positive effects that can be realized from AI influencers. Specifically, the boundary between human and bot-like behavior is becoming less distinct which makes it possible for a bot to acquire significant influence. An AI influencer can look and behave like a human influencer. Suggesting AI influencers like human influencers might have similar effects to traditional celebrity endorsers.

The technology needs to create AI influencers are already being used in advertising. Research identifies five AI building blocks. First is Natural language processing, image recognition, speech recognition, problem solving and machine learning. When used with conjunction, create an AI influencer.

The first three are used to gather information. Natural language processing derives meaning from the language contained in consumer texts such as social media posts, direct messages and tweets. Image recognition helps advertisers understand pictures and videos that people share on social media and that show true consumer behavior. The information gleaned from the images that consumers post where a brand is visible even if it is not tagged or mentioned by name can be used to assess sentiment around a brand. This technology is also able to analyze facial expressions and may in fact be better at doing so than humans. Currently, speech recognition is currently used in call centers to better understand consumer needs but could also be used by an AI influencer to gather information from videos that consumers post to social media.

Personality characteristics that are important in people life eventually become a part of their language. The way that AI can reason with people's social media comments and posts, in addition, may reveal personality tendencies, values and needs. Thus, an AI influencer can become attuned to followers' personalities and subsequently use this information to better inform the ways in which to interact with these followers. Once gathered, insights from natural language processing, image recognition and speech recognition can be used by the marketers to problem solve. For example, natural language generation technologies can take the structured data that come out of natural language processing and use them to create new unstructured text or message content.

In the case of an AI influencer, this might mean analyzing consumer post about a brand and then creating content that touches on the same topic. One of the benefits of natural language generation is the ability to maintain a consistency in brand voice which may be difficult to achieve when using human influencers. Another advantage is that AI can facilitate both convergent problem solving, wherein a single best solution is sought and divergent problem solving which allows a variety of possible solutions to be identified. In practice, AI influencers might use problem solving to build several different posts to respond to consumer sentiments. The AI influencer then has the ability to self-optimize in

real time as a result of AI assessment of behavior and reactions to a multitude of different variations.

Machine learning final AI building block allows for continuous improvement in the process and movement towards fine-grained and insightful interactions as the AI influencer learn from every contact with consumers. The use of AI in influencer marketing therefore represents a potentially creative investment for many marketers as it allows brands to have meaningful one-to-one conversation with consumers along their path to purchase. When judged by their level of human likeness, virtual influencers can be broadly split into two categories, enemy like virtual influencer and human like. Enemy like virtual influencers refers to those that are not humanoids, rather they are anthropomorphized to fit into human social networks, whereas humans like VI's are more like human in terms of their appearance and interaction. On one hand, findings show that human like VI's tend to engender feelings of airiness among their followers due to their high resemblance to humans.

This is also referred to as the uncanny valley effect. On the other hand, it has been argued that VI's are effective marketing tools because of their attractiveness, human like functionality and audio-visual features. Interestingly, VI have been found to elicit higher word of mouth intention but lower trust when compared to human influencers. Although VI and human influencer shares commonality in terms of celebrity status and marketing value. VI's are essentially computer-generated personas who mimic varying degrees of humanness and behaviour.

Now let us look at AI virtual influencers. So let us take a look at this post from Miquela Sousa, a virtual influencer with over 2.7 million followers on Instagram. By all accounts, the post looks real. Miquela, a 19-year-old Brazilian-American model influencer and singer is posting a sponsored post for Calvin Klein and posing with fellow model Bella Hadid.

So this is about that ad. But Miquela is a computer-generated character introduced by Los Angeles company Brud in 2016. Each month almost 2,600,000 people listen to their her music on Spotify. Miquela works with major brands ranging from Prada to Samsung and she is even given interviews at Coachella. All of which raises the question, why should companies pair real human influencers to promote their product when they can create their own personal influencer from scratch? So that is the big question. Before we consider the pros and cons of virtual influencers, let us show some examples.

First, as previously mentioned, there is Lil Miquela. When you scan through her Instagram post, you quickly realize her captions make her sound like a regular teenager. In fact, in the following post, she even sounds like she has real emotions writing, one of the angel boy's friends blew up at me at lunch and stomped out as I ugly cried in front of

about 50 strangers and now he won't respond to any of my texts. So, this is that VI. While her caption is fake, her followers comment are real. Many of Lil Miquela followers responded with empathy or shared experiences like one comment that read, this same thing happened to me once, you will get through it.

Besides Lil Miquela, there are other virtual humans out there. For instance, Xinhua News, a Chinese media outlet, unveiled an AI news presenter in 2018 who can work 24 hours a day without breaks, reducing news production cost. A year later, they unveiled a female AI news anchor known as Xin Xiaomeng. In another example, Balmain, a fashion label, commissioned photographer Cameron-James Wilson to create a diverse virtual army of models for Olivier Rousteing's 2018 collection. The campaign was met with mixed reviews.

One follower wrote, "This is disgusting. I do not understand why they think these models are attractive and others commented as if Photoshop wasn't enough. What's wrong with their world? Hashtag real people, hashtag real models please." So they were, people want real people and real models. And last but certainly not least, there is KFC's Colonel Sanders mocking the very trend of virtual influencers while taking part in it. Let us now take a look at the top 15 virtual influencers of 2023 as compiled by HubSpot in order to gain insight into the new social media world of virtual influencers and their followers.

So, this is about the KFC thing that we were talking about here. So, these are the 15 top virtual influencers. The first is Lil Miquela with almost 3 million followers on Instagram. There is no surprise why Lil Miquela tops the list. The second is Imma. Imma is a virtual influencer from Tokyo commanding an audience of almost 400,000 on Instagram.

The third is Barbie. Barbie needs no introduction. These days you can catch her on YouTube entertaining more than 11 million subscribers. The fourth is Lu of Magazine Luiza. Lu is popular Brazilian influencer with a staggering 6.5 million Instagram followers. She's a spokesperson for Magazine Luiza, a Brazilian retail conglomerate. The fifth is Apoki. Apoki is a South Korean singer and entertainer. Currently she has 4.5 million followers on TikTok since debuting in 2019.

The sixth is Nobody Sausage. Nobody Sausage is a bit of a wild card. She is an animated sausage who performs dance and skits in colorful outfits. The seventh is Good Advice Cupcake. Then the eighth is Shudu. The ninth is Code Miko and the tenth is Kyra.

Eleventh is Guggimon and Janky. Thirteenth, Any Malu. Fourteenth Ion Gottlich and fifteenth is K/DA. It is a K-pop girl group from LA consisting of four members, Ahri, Akali, Evelyn and Kai'Sa. The group was developed in 2018 by Riot Games, the company behind League of Legends. Now let us look at the motivation for following virtual influencers. Why do people follow virtual influencers? A recent research

identified six primary motivations for why social media users and consumers follow virtual influencers.

The first is novelty. Second is information. Third is entertainment. Fourth is surveillance. Fifth is aesthetic. And sixth is integration and social interaction. Now how to create a virtual influencer and exemplar? How to create a virtual influencer can be a complex process that requires a combination of technical skills and marketing savvy. Let us take a look at the detailed step by step instructions on how to create a virtual influencer by Animost as an exemplar.

The first is avatar. Creating a virtual influencer avatar can be a fun and creative process but it also requires some technical expertise. Here are the general steps for creating a virtual influencer avatar. The first is define personality and style. Before starting a virtual influencer, you must define their personality and style.

It includes their preferences, values, beliefs and physical appearance Think about your target audience and what kind of influencers will resonate with them. The second is choose a platform or software to create an avatar. There are many platforms and software options for creating a virtual avatar. Some popular ones include Adobe Fuse, Mixamo, Daz Studio and Vroid.

The third is to design your avatar. Once you have chosen your background, you can start designing your avatar. Animost tools and features can be used to create the look of your virtual influencer including their face, hair, body and clothing. You can add accessories and other details to make your avatar stand out. The fourth is animate your avatar.

To bring your virtual influencers to life, you need to animate them. Animation tools from Animost can help to create movements and gestures that match your influencers personality and style. They can include walking, waving and other actions that will make your influencer more approachable and engaging. The fifth is to create content. Once you have your virtual influencer avatar, it is time to create content that showcases their personality and engages with your target audience. They may include social media posts, videos and other digital content featuring your avatar in different settings and situations.

The second is audience. Before creating content for your virtual influencer, you must define your target audience. They include understanding the demographics, interests, values and behaviour. And it will help you create content that resonates with them and builds a loyal following. Once you know your target audience, you can develop a content strategy that speaks to their interests and needs. You must create a content calendar, develop themes and messaging that aligns with your virtual influencers personality and style and create a mix of content types for example images, videos and blog post.

Social media is a powerful tool for building an audience for your virtual influencer, identifying the social media channels that your target audience uses and creating accounts for your virtual influencer. Regularly post engaging content that speaks to your target audience, use relevant hashtags and interact with your followers to build a community around your virtual influencer. Collaborating with other influencers can help you reach a new audience and build credibility. Identify influencers who share your target audience and collaborate with them on content or promotions. Paid advertising can be a way to reach a larger audience and build awareness for your virtual influencers.

Consider social media ads or influencer marketing platforms to promote your content and reach new audiences. Finally, it is essential to measure and adjust your audience building efforts using analytic tools to track audience growth, engagement rates and other metrics. Use this data to define your content strategy and tactics to better reach and engage with your target audience. The next is the technical skills. Building a virtual influencer audience also requires technical skill besides the strategy outlined above.

Here are some technical skills that can help you create and promote your virtual influencer. 3D modeling and AI assisted design, animation, digital marketing, video editing and web design. Now let us look at a case study. Three brands that have successfully incorporated virtual influencers into their marketing strategy. The first is Samsung's hashtag team Galaxy featuring Lil Miquela. Samsung went all out when it came to expanding their hashtag team Galaxy and invited Lil Miquela to join the squad.

She was a perfect choice for that campaign as she embodied the tagline do what you can't flawlessly. Miquela feature was great as it appealed to the creative death the new Samsung phone allowed its users to reach and highlighted the innovative nature of the brand. So, this is about that campaign. The second is the World Health Organization and Knox Frost against coronavirus. Back in 2020 when the world was first struck by the pandemic the World Health Organization understood the importance of using young people to stay at home and follow social distancing guidelines.

To deliver this message to its target audience the organization partnered with Knox Frost, a virtual influencer with the history of promoting health and wellness, particularly on the topic of mental health. So, this is Knox Frost. The third is Prada's Candy. Turns out you don't necessarily have to choose a virtual influencer to collaborate with among already existing figures. You can solidify your brand's presence in the metaverse by creating a virtual influencer of your own.

That is exactly what Prada did. After partnering with Lil Miquela back in 2018 and leveraging the benefits of virtual influencer marketing Parada decided to take it a step further introduce candy a virtual influencer created to promote the launch of the remake of Parada signature of elements candy. Now what are the limitations of virtual

influencers? While there are many advantages to using virtual influencers there are also some potential drawbacks that brands and businesses should consider. One disadvantage of relying on virtual influencers is that they lack the personal touch that human influencers can provide if not managed properly. They can result in a less genuine connection with followers and decreased trust in the influencers' recommendations. Another potential issue with virtual influencers is that they may not be able to adapt to unexpected situations and changes in the market.

They are pre-programmed to act and respond in certain ways which can limit their effectiveness in certain situations. Transmitted content creator campaigns while efficient may also result in content that feels formulaic or generic. This can lead to a lack of creativity and personality in the influencers content which may ultimately decrease engagement and impact. Finally, there is a risk that virtual influencers may become too popular or mainstream leading to over saturation and decreased effectiveness. As more brands and businesses turn to virtual influencers the novelty and excitement surrounding them may wear off making it harder for them to stand out in the crowded market.

Now what are the futures of virtual influencers? The first is greater personalization. As AI technology becomes more advanced it will become easier to create virtual influencers that are highly personalized and customized to each user's preference. This could involve using artificial intelligence and machine learning to create avatars that respond to users input and behavior providing a more immersive and personalized experience. The second is increased virtual increased tactical use in marketing. Virtual influencers are already being used by brands and marketers to promote products and services. As the industry matures, we can expect to see more sophisticated marketing campaigns that use virtual influencers to engage with the target audience and build brand awareness.

The third is integration with virtual and augmented reality. Virtual influences are a natural fit for virtual and augmented reality experiences, and we can expect to see more of these integrations in the future. This could include virtual influencers appearing in virtual reality games or virtual showrooms or using augmented reality to provide immersive product demonstrations. The fourth is growth in niche markets. Virtual influencers can appeal to niche audiences that may be underserved by traditional influencers. We can expect to see more virtual influencers emerge that caters to specific niches such as gaming, anime or sports.

The fifth are the ethical considerations. As virtual influencers become more widespread, there will be an increased scrutiny around the ethical implications of using computer-generated personalities to promote products and services. There will be a need to establish guidelines and best practices around virtual influencer marketing to ensure transparency and authenticity. The sixth is autonomous AI influencers. Completely autonomous AI influencers are not yet commonplace.

Most virtual still have some level of behind-the-scenes human intervention. However, recent research predicts that completely autonomous AI influencers will soon become more prominent on social media because they will be able to represent and act on brand values and engage with followers anytime, unlike celebrity endorsers whose endorsement activities in support of brand are often regulated to short bursts of activity that fit in around other obligations. So, to conclude, AI virtual influencers are rapidly becoming a popular trend on social media platforms. With their unique ability to create engaging content and connect with audiences in a personalized way, virtual influencers are quickly taking over the world of social media. As brands seek to reach younger and more tech-savvy audiences, AI virtual influencers offer an innovative and effective marketing strategy that can help them connect with their target market. While some may question the authenticity of these AI virtual influencers, their growing popularity and impact on social media cannot be denied.

It is clear that AI virtual influencers are here to stay and businesses that are willing to embrace this trend may be able to reach new heights of success in their marketing efforts. And these are the 12 sources from which the material for this module was taken. Thank you.