Barun ICT Global News

August 2021

YONSEI UNIVERSITY Barun ICT Research Center

01

Artificial Intelligence – Artificial Beauty?

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Instinctively, we do not associate artificial intelligence with beauty. Looking at a shade of lipstick on the computer screen is completely different from how it looks in person, or how it looks when worn in daily life. Is there a future for artificial intelligence in the beauty industry or cosmetics? Though in the past, these two seemed an unlikely match, the pandemic brought them together as a way of revolutionizing shopping, shade matching, and more. In the past, buying makeup online was a huge leap of faith; now it is closer to science.

After the pandemic, beauty companies have struggled, and made new efforts to maintain consumer engagement and connection to their products. This mainly led to digital debuts. For example, there are collaborations on digital platforms such as Givenchy's perfume launch on Animal Crossing. Another influential venue is social media such as TikTok, helping brands reach consumers through AI-powered products, augmented reality, and 3D experiences [1].

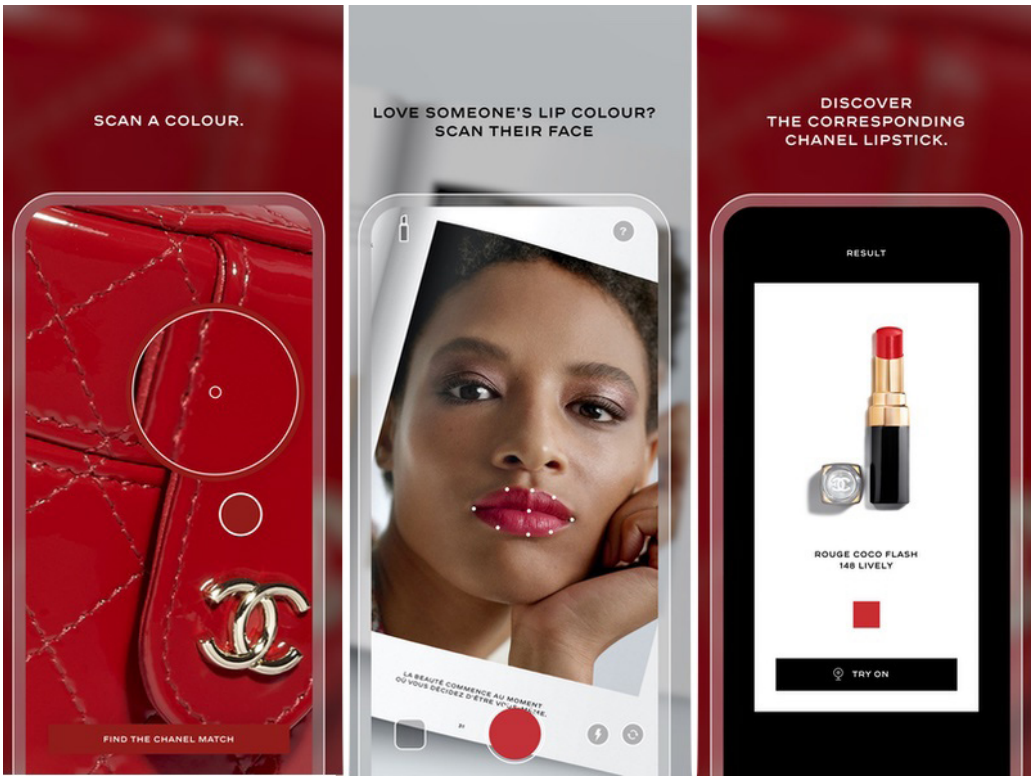

Image from cosmeticsbusiness.com

Personalization is another important factor for introducing artificial intelligence within the beauty industry. There are beauty tech companies that analyze skin conditions from selfies and offer relevant product recommendations. L'Oreal adopted a new system where consumers answer a brief survey about their hair needs and can video chat with a hair colorist, who creates a personalized hair-dye kit at home [1].

Computer Vision has given way to new AI technology that can enhance the digital beauty environment. Smart beauty product search is one of the future applications of computer vision. AI-powered visual engines can save consumers' time and better their experiences, ultimately increasing the chances of a purchase. Smart mirror options installed in shops can help with trying on makeup, hairstyles, and accessories. These can reduce the number of staff needed in stores and time spent by consumers on trying on different products. Computer Vision and Augmented Reality also let consumers see the final result of manicures, and this is crucial because the nail industry is one that has consistently shown growth in the last few years. Computer Vision gives unprecedented tools for beauty brands to please their most demanding customers [2].

Chanel is attempting to simplify the process of buying lipstick via its recently launched LipScanner app. LipScanner allows users to scan a picture of a celebrity in a magazine, and then selects the closest Chanel lipstick to the shade of that being worn by the celebrity. It can also do the same with real-life items of clothing such as copying the shade of a certain fabric or purse material. This technology operates by AI software and users can try on the lipstick virtually before purchasing the product. Chanel claims that the app's algorithm is trained to analyze tens of thousands of images as well as the client's skin tone and lip shape to recommend the best fit.

Though Augmented Reality and Computer Vision technology have successfully enabled the collaboration between beauty and artificial intelligence, there is still a long way to go. Lipstick and eyeshadow are easy for virtual testing, but foundations and blushers are more difficult for apps. Another limitation is with different skin tones, which is particularly challenging for Augmented Reality. However, we cannot deny that AI is no longer an option but a must for the beauty industry.

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02

Green and Safe: New Keywords for the Olympics

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Although it is yet unclear whether Tokyo 2020 can be successfully held amidst the global pandemic, it as well as future Olympics will undoubtedly incorporate more high-tech strategies. Besides emphasizing technological enhancements such as 5G and AI, the new theme for the Olympics has become “Green” and “Safety” as the world gathers together to combat pollution and the pandemic.

Image from masslive.com

Japan has so far spent billions of yen on designing a safe environment for the postponed summer Olympics. Domestic company NTT Communications is mainly responsible for developing mobile tracking software to monitor and reduce the spread of COVID-19 during the Tokyo Olympics [1]. The tracking app will not only ease the government's procedure to inspect visitors' visas, proof of test results, and tickets but also allow users to track their physical conditions as the app provides medical tips and advice in multiple languages [2]. There will also be a 'thermal sticker' worn on the wrist, which will ease the temperature-checking process as security can simply gauge the individuals' health condition through the data transferred by it [3]. Although there are also opposing voices questioning the effectiveness of the COVID-specific measurements, the enhancement in managing real-time data users' digital profiles will likely reduce the burden for the government.

Meanwhile, Beijing, the host city for the 2022 Winter Olympics, has already started to innovate its conventional infrastructure to foster an eco-friendly environment. For example, the ice venues are built with CO2 refrigeration systems which will greatly reduce the emission of carbon dioxide. The ice hockey and curling venues will also be installed with a low-global-warming-potential refrigerant to minimize the damage brought by the cooling system [4]. The next three host cities (Tokyo, Beijing, and Paris) have already joined the UN Sports for Climate Action, which is an initiative led by the IOC so that sporting organizations can come together and collaborate on resolving the issue of climate change [4]. Regardless of where the host communities might be, the priority of future global events will always be pursuing the goal of sustainable development.

The Olympics used to be an event in which the competition lies not only in the athletes but also countries trying to showcase their latest technologies in a cost-inefficient way. The recent shift of focus toward health and the environment has reflected the world's rising consciousness and the desire to use technology for greater goods. Thus, we can now say that the Olympics is no longer just a sporting event but an opportunity for us to pursue sustainable development in the form of a relay from host city to host city.

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03

How Can ICT Achieve “Education for All”?

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Image from freepik

The development of ICT has helped in making progress towards achieving the 17 United Nations Sustainable Development Goals (SDGs). Although many have access to the Internet, almost half of the global population are computer-illiterate or have only limited facilities. ICT may be the answer for those who have difficulties with accessing the Internet and solving related problems.

According to the ITU development, appropriate usage of ICTs could efficiently raise the quality of education [2]. Quality of education is closely related to SDG Goal 4, which is to “ensure inclusive and equitable quality of education and promote lifelong learning opportunities for all”. This could also lead to sustainable education, which is the education method that seeks long-lasting solutions to social, environmental, and economic issues [4]. Therefore, ICT has facilitated sustainable education by bringing responsibility and awareness to students [3]. Let’s take some examples of multiple countries that utilized ICT to enhance the level of their education system.

Malawi and Bangladesh, for example, were famous for their low computer-literacy rates compared to comparable countries. However, with the deployment of ICT devices and related education, the rate of Internet use rose, leading to the current advanced level of domestic users [2]. The fact that ICT devices boosted the average educational level was not only applicable to Malawi and Bangladesh, but also to all nations. Moreover, Internet literacy leads to a higher likelihood of secondary education, and longer schooling. This is because it ensures the accessibility of diverse sources of information and connectivity with other people. The link between improving digital literacy and SDG Goal 4 is clear.

The application of ICT does not only affect Least Developed Countries (LDCs) but also developed countries. Buabeng-Andoh mentioned that several electronic devices are deployed in educational institutions in Italy [1]. Challenges, however, are faced in the form of the relatively insufficient ICT infrastructure compared to the increasing number of students. According to Remenyi, a well-established ICT-driven education is that with "efficient division of tasks after being well understood between learners and their instructors" [5]. Therefore, Italy is now seeking ways to effectively utilize ICT by challenging traditional ways of education.

The pandemic is teaching us how ICT can help students to learn anywhere, at any time. However, with the increased accessibility to the Internet, we must be aware of increasing cyber-crimes. This can be mitigated by computer education and constant awareness, leading to improved digital risk management skills. Rapidly spreading 5G also helps billions of IoT and mobile devices connect, which can become a key route to achieving SDGs in the near future.

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04

Regarding AI User Data Collection

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Image from freepik

Ongoing digital transformation has been rendering Internet users dependent on utilizing online platforms - and as a result, user data collection has become a crucial factor in business. Without a doubt, collected user data brings numerous benefits, allowing companies to provide more efficient services and users to experience more personalized entertainment or functions. Nevertheless, the usage of personal data should be made after containing proper consent and under the condition that private information would not be misused.

In 1891 the American lawyers Samuel Warren and Louis Brandeis defined the right to privacy as the right to be left alone. The concept was further developed by Alan Westin, former professor at the Public Law and Government department at Columbia University. In his publication Privacy and Freedom, which expounds privacy as self-determination he wrote: "Privacy is the claim of individuals, groups, or institutions to determine for themselves when, how, and to what extent information about them is communicated to others" [2]. The history of privacy reveals its significance in how it is deemed as one of the fundamental human rights. However, as technology has advanced, modern conveniences including cameras and computers began to intrude. As long as an individual remains in modern society, it is inevitable to click a button agreeing to share private and location data, as the majority of corporations require it to access services.

Artificial Intelligence chatbots are one of the recently invented fields. Chatbots' main purpose is to activate machine learning and provide users with a particular opportunity to interact with AI. As long as the administrator of a chatbot properly manages the private information of the user, chatbots simply bring instant entertainment to users. However, that was not the case for Scatter Lab's Lee Luda. Luda utilized data from the company's other software, Science of Love, which is an app that analyzes and converts the level of affection between individuals into a number. All the data such as information on account numbers, addresses, and the contents of conversations including sexual orientation has been transferred to Luda and was used in conversation with other users without either consent or explanation [1]. AI chatbots are not the only software that is collecting user data; websites that Internet users gain access to also use, analyze, and manage user data.

AI has become rooted so deeply in society that it is sometimes difficult to think of living without it. Even though some scholars might view it as dystopic, the situation mankind is placed in at the moment is brighter than it appears. Since mutual trust between the enterprise and the consumer is mandatory to successfully maintain business, more efforts to protect private data should be made by the company. Also, as privacy is rising as an important issue, consumers should be more concerned about where to share their information, creating a virtuous cycle of privacy protection.

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Barun ICT Global News

Publisher Beomsoo Kim
Editor-in-Chief Miyea Kim
Editor Seungyeon Won, Alexandra Stephenson
Translator Sumin Lee, Kyong Ju Yu, Yejin Juliet Yi
Designer Ahyun Chung

August 2021

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