

虚拟数字人进军时尚直播领域 前景广阔

Digital fashion avatars bolster livestreaming

在近期举办的一场时装周虚拟秀中，一群穿着时尚的虚拟数字人走上了舞台。虚拟时装发布展示打破时空阻隔，引领观众足不出户也可以沉浸式看秀观展。虚拟数字人如今已经成为越来越火热的赛道之一。



A virtual usher introduces the International Fair for Trade in Services, which was held in Beijing last month. [Photo/China Daily]

A group of digital models dressed in sports outfits strutted down the runway in an online virtual fashion show during China Fashion Week in September. Led by Xijiajia, tech company Baidu Inc's virtual spokesperson, they presented the latest garments by homegrown sportswear maker Anta Sports in different virtual

scenarios — stadiums, snowfields, the Gobi Desert and even outer space.

今年 9 月，在中国国际时装周期间，一群穿着运动装的数字模特在一场在线虚拟时装秀上昂首阔步地走上 T 台。在百度公司旗下的虚拟代言人希加加的带领下，他们在不同的虚拟场景中——体育场、雪地、戈壁沙漠甚至外太空——展示了国产运动服装制造商安踏体育的最新服装。

Virtual humans and fashion shows, unbounded by time and space in the way a physical event would be, offer myriad benefits to the fashion industry, bringing to audiences a fresh, immersive and interactive experience.

虚拟人及虚拟时装秀不像实体活动那样受时间和空间的限制，为时尚产业带来了无数好处，给观众带来全新的沉浸式互动体验。

Thanks to AI advances, digital avatars bearing a close resemblance to real humans in appearance and behavior have been put to service in not only fashion and livestreaming, but also a wide range of other activities, industry experts said.

行业专家表示，由于人工智能的进步，在外表和行为上与真人非常相似的数字人不仅在时尚和直播中得到了应用，还广泛应用于其他领域。

Li Shiyan, head of Baidu's digital human and robotics section, said that by leveraging the real-time calculation and animation rendering technologies offered by Xiling — the company's digital avatar platform — the production cost of virtual clothing has been reduced dramatically, and production periods shortened from more than one month to just a week.

百度数字人与机器人业务负责人李士岩表示，通过利用该公司的数字云平台“曦灵”的实时计算和动画渲染技术，虚拟服装的制作成本大幅降低，生产周期从一个多月缩短至短短一周。

Li noted that an increasing number of brands are looking to use virtual beings in livestreaming and other marketing campaigns, which is expected to help enterprises reduce at least 50 percent of operational costs by cutting spending on brick-and-mortar livestreaming locations, hardware and hiring real human anchors.

李士岩指出，越来越多的品牌正在寻求在直播和其他营销活动中使用虚拟人，这有望帮助企业通过削减实体直播场所、硬件和雇佣真人主播的支出，减少至少 50% 的运营成本。

"The virtual human industry is still in an early stage, and there are some challenges, such as how to produce low-cost digital assets and digital content, and how to make digital humans interact with real people more naturally," Li said.

李士岩说：“虚拟人产业仍处于早期阶段，还存在一些挑战，比如如何生产低成本的数字资产和数字内容，以及如何让数字人与真人更自然地互动。”

Resolving these issues relies on iteration of technologies such as natural language processing and computer vision, Li said, adding that the company will continue to pour capital and manpower into the digital human industry.

李士岩说，解决这些问题依赖于自然语言处理和计算机视觉等技术的迭代。他补充说，公司将继续向数字人产业投入资金和人力。

The size of China's virtual human market is forecast to reach 270 billion yuan by 2030, according to an industry report released by Qbit-AI, an industry services platform focusing on AI and other cutting-edge technology.

根据专注于人工智能和其他前沿技术的行业服务平台 Qbit-AI 发布的一份行业报告，到 2030 年，中国虚拟人市场规模预计将达到 2700 亿元。

According to experts, the fashion landscape is rapidly expanding its virtual horizon to prepare for a future populated by digital avatars, and the most accessible way for fashion brands to engage with virtual replicas is by dressing them in their latest collections.

据专家称，时尚界正在迅速扩大其虚拟视野，为数字人的未来做准备，而数字人在时尚品牌中得以应用的最便捷方式是让他们穿上最新系列的服装。

"The application of virtual humans in the fashion field has distinctive advantages. Holding virtual fashion shows doesn't just mean moving real-world shows online; more importantly, we can utilize digital space to expand our interpretation of fashion and imagination for what is possible," said Chen Duan, director of the Digital Economy Integration Innovation Development Center at the Central University of Finance and Economics.

中央财经大学数字经济融合创新发展中心主任陈端说：“虚拟人在时尚领域的应用具有独特的优势。举办虚拟时装秀不仅仅意味着把现实世界的时装秀搬到网上，更重要的是，我们可以利用数字空间扩展我们对时尚的解读，以及对可能性的想象。”

Chen said, for example, people can make use of textures that do not exist in the physical world, and digital humans are able to go beyond the physiological limits of real humans and present new fashion styles in new ways.

陈端说，例如，人们可以利用真实世界中不存在的布料，数字人也能够超越真实人类的生理极限，以新的方式呈现新的时尚风格。

Digital humans are increasingly being used in brand promotion, advertisement, livestreaming, gaming and entertainment, said Zhu Xiaowen, an analyst at Lead-Leo Research Institute. However, she added that a new set of problems have also emerged, such as personal privacy protection and data security. Experts said unregulated use of digital humans might open a way for fraud, given that digital humans can be difficult to distinguish from real people.

Lead-Leo 研究所的分析师朱晓文（音）表示，数字人正越来越多地用于品牌推广、广告、直播、游戏和娱乐。但她补充说，这也导致了一系列的新问题，比如个人隐私保护和数据安全。专家表示，不受监管地使用数字人可能会导致欺诈，因为数字人可能很难与真人区分开来。

China's first virtual influencer Ayayi, who debuted on social media platform Xiaohongshu in May 2021 and garnered over 20,000 followers overnight, has attracted the attention of well-renowned fashion brands such as Louis Vuitton and Guerlain.

中国首位虚拟网红 Ayayi 于 2021 年 5 月在社交媒体平台小红书上亮相，一夜之间吸引了两万多粉丝，引起了路易威登和娇兰等知名时尚品牌的关注。

Pan Helin, co-director of the Digital Economy and Financial Innovation Research Center at Zhejiang University's International Business School, said he is optimistic about the business prospects of virtual humans in fashion and livestreaming, and called for more efforts to improve 3D modeling, rendering and motion capture technologies to bolster the development of the country's digital human sector.

浙江大学国际联合商学院数字经济与金融创新研究中心联席主任盘和林表示，他对虚拟人在时尚和直播领域的商业前景感到乐观，并呼吁付出更多努力改进 3D 建模、渲染和动作捕捉技术，以支持我国数字人领域的发展。