Using Virtual Reality to Convey the Information of Food Supply Chain

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Abstract : Food production, food safety, and the food supply chain are causing a great challenge to human health and the environment. Different kinds of food have different environmental costs. Therefore, a healthy diet can alleviate this problem to a certain extent. In this project, an online questionnaire was conducted to understand the purchase behaviour of consumers and their attitudes towards basic food information. However, the data shows that the public's current consumption habits and ideology do not meet the long-term development of sustainable social needs. In order to solve the environmental problems caused by the unbalanced diet of the public and the social problems of unequal food distribution, the purpose of this paper is to explore how to use the emerging media of VR to visualize food supply chain information so as to attract users' attention to the environmental cost of food. In this project, the food supply chain of imported and local cheese was compared side-by-side in the virtual reality environment, including the origin, transportation, sales, and other processes, which can effectively help users understand the difference between the two processes and environmental costs. Besides, the experimental data demonstrated that the participant would like to choose low environmental cost food after experiencing the whole process.

Keywords : virtual reality, information design, food supply chain, environmental cost

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