Hearts United Group

December 5, 2016

Hearts United Group Started Joint Research on Virtual Reality with National Institute of Advanced Industrial Science and Technology

Hearts United Group Co., Ltd. (hereinafter referred to as “Hearts United Group”), is pleased to announce that it has started joint research on the safety of virtual reality (VR) content with National Institute of Advanced Industrial Science and Technology (hereinafter referred to as “AIST”).

AIST, one of the largest public research institutions in Japan, collectively conducts a variety of technological developments in a wide range of fields that are beneficial for industries and societies in Japan. Dr. Eng. Hiroyasu Ujike and Dr. Eng. Hiroshi Watanabe from Human Informatics Research Institute of AIST, as leading persons in the field of research on motion sickness, have been playing a central role in carrying out research on bodily sensations, such as motion sickness after watching video images and visual fatigue caused by watching 3D image, and in proceeding with inspection of mechanism of bodily sensations and the effectiveness of countermeasures. Recently, VR has been increasingly used in many areas, and therefore they also encourage the creation of an environment where video images can be safely watched, by hosting an international symposium regarding “VR sickness” and promoting the international standardization regarding the safety of video images by the International Organization for Standardization (IOS) in cooperation with the Ministry of Economy, Trade and Industry.

Meanwhile, witnessing a rise of VR industry, Hearts United Group has established a dedicated VR content debugging team at its subsidiary, Digital Hearts Co., Ltd., to gain experience in VR debugging services and proceed with research on technology and know-how which solve the quality issues unique to VR content.

In addition, Hearts United Group has been providing highly value added services based on its debugging know-how, with the advantage of checking the safety of VR content from the perspective of users. For example, in August 2016, Hearts United Group developed a “VR Sickness Scoring Service” that conducts an evaluation regarding the “VR sickness” through a quantification of the likelihood of experiencing this sickness using evaluation, comparison and the analysis of academically itemized biological records before and after playing.

Under such circumstances, further consideration for the safety is required in both VR hardware and content because VR has been introduced in a wide range of fields including game, medical, manufacturing and construction industries, with the development of technological innovation, and users are diversified in those fields.

Therefore, Hearts United Group started joint research with AIST on the safety of VR content, aiming at supporting the creation of new services and new products, using highly useful data continuously collected, researched and analyzed through cooperation with manufacturers and academic institutions.

Through the joint research, Hearts United Group shall continue to support technology innovation in the VR industry, mainly by conducting tests to enhance the credibility of subjective and objective evaluation methods of VR sickness, and by establishing an estimation method based on the correlation of those evaluation methods and putting that method to practical use.

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Profile of Hearts United Group Co., Ltd.

Hearts United Group URL	: http://www.heartsunitedgroup.co.jp/
Date Established	: October 1, 2013
President & CEO	: Eiichi Miyazawa
Headquarters	: 6-10-1 Roppongi, Minato-ku, Tokyo
Business activities of the group companies	: Debugging business, media business, creative business and other businesses