

Development of Interactive Digital Media Content using Iris Recognition Techniques

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1. Background

Today's interactive digital media creates dynamic, continuous, and multiple information communication, which overcome traditional single-medium based communications methods. Interactive media, which is characterized by two-way information communication including consumers' active participation, shows integrative quality and positive influences on consumer attitude towards brands compared to the visualization and communication methods of a single medium [1].

Despite the fact that research about interactive media is gradually increasing, only a few studies investigating the interaction between digital media content and the consumers behavior have been conducted [2].

The main purposes of this study are, firstly, introduce the case study of development of interactive digital media content using consumers' iris recognition techniques and, secondly, examines the influence of experiencing interactive media on the brand satisfaction and intention to purchase.

2. Case of Interactive Digital Media Content using Iris Recognition

The Interactive Digital Media using Iris Recognition was installed in the ACUVUE Pop-up store progressed for a month and half since 10th of February 2013. This digital media content aimed to inform consumer about the efficiency of beauty contact lenses by offering consumers with a special brand experience. The core of the special brand experience was that the ACUVUE interactive digital media made the first attempt to utilize digital media technology in South Korea when offering consumers with iris recognition, iris analysis and virtual eye makeup services. The digital media content was developed based on the academic researches of digital media's information provision and expression style and researches of interrelationship between the digital media and participant. With this detailed planning, the ACUVUE interactive media using iris recognition was able to greatly appeal to the consumers.

The ACUVUE interactive digital media content experience consists of the following steps:

2.1. Experience of ACUVUE EYEDEFINE STUDIO



Picture 1. Construction of ACUVUE EYEDEFINE STUDIO, Olive Young, Myoung-dong, Seoul

2.2. Registration and Recording of Consumer Irises

In the next step of ACUVUE interactive digital media experiences to obtain the identity of each consumer, personal information was registered along with recordings of the face and irises.



Picture 2. Registration and Recording of consumer Irises Process

2.3. Interactive Digital Media Content Interaction

After the consumer was seated in front of an interactive digital media, barcode was used to check the identity, and personal analysis of iris was provided. The analyzing service was composed of ① iris color, ② iris size, ③ transparency of sclera, ④ eye size, ⑤ inclination of the eye and it was designed to compare the consumer's analysis to the average measured value.

An appropriate ACUVUE beauty lens was chosen and consumers virtually wear it. Then a virtual eye makeup service that matches well with the eye and the lens was offered.

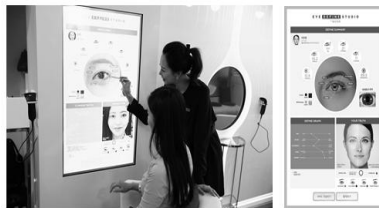
The virtual eye makeup was processed in steps of ① eyebrows, ② eye shadow, ③ eye line, ④ mascara, and ⑤ point makeup.



Picture 3. Eye analysis and eye makeup services

2.4. Findings Report

After the analysis of the eye and virtual eye make-up, the final report summary was printed and sent to consumers' mobile phones.



Picture 4. Findings Report

3. Consumer Survey

The current study used survey method to obtain empirical data on the influence of interactive digital media on the consumers' attitudes towards brand. Survey data was collected in March, 2014. A total of 120 women who are in their 10's, 20's and 30's and who have finished the digital media program participated in this study via a paper-and-pencil survey. From this survey, it was found that the satisfaction level of the interactive digital media using iris recognition experience was 4.3(83%) and satisfaction level of interactivity between this interactive digital media and the consumer was 4.57(91%). Also, the purchasing intention of consumers with digital media experience was 4.00(80%). Therefore, it was concluded that the high satisfaction level towards the digital media experience led to positive images towards the brand.

4. Conclusion

This new interactive digital media content using iris recognition increased the consumers' participation by providing personal information about their own irises. Moreover, the imaginary eye makeup matching the iris color provided users with an emotional experience which led to an increase in brand satisfaction.

From this study, it was understood that the interaction between digital media and the consumer plays a very important role in increasing the consumer's satisfaction and purchasing intention towards brand.

5. References

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