KVRTE GARDEN

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ABSTRACT

This product visualizes online shoppers' action through VR space in real time, as they enter a web site. It visualize customer behaviors in a real clothing retail store chain, all items are placed according to their categories(e.g. outwear, pants), and you are able to see the users' movements linked to their current action online, in virtual space. The purpose of this product is to let people realize what is missing in the idea of web marketing, by restoring humanity to online shopping. When we think of web marketing, we treat users as numbers when in reality it is necessary to think more sensuously when considering communication between people. Normally at a clothing store, if a clerk sees a customer looking at the same item for 10 minutes, he would go speak to the customer. Furthermore, if a customer has been looking at the same jacket and pants several times, the clerk would be able to tell that the customer is having a problem deciding what to wear.

So far, nothing has been done to the current situation of web marketing. So we developed a product, to understand what we need, to get to know our customers better and to provide the best value optimized for each individual.

CCS Concepts

•Human-centered computing → Empirical studies in interaction design; Empirical studies in visualization;

Keywords

VR, Virtual Reality, Data Visualization, WEB Marketing

1. MOTIVATION

KVRTE GARDEN is a virtual reality system that seeks to enhance the online shopping environment by allowing merchants to carefully analyze the actions of shoppers in online shopping websites, therefore allowing merchants to gain a better understanding of their customers which in term allows them to construct better websites tailored towards the

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needs of their audiences. In the previous online shopping websites it is hard for merchants to obtain any forms of information except for the sales figures, with KVRTE GARDEN, it is possible for merchants to know in which section of the website the shoppers are lingering at and how much time they spent browsing through specific items. With this it becomes possible for shoppers to give better recommendation and suggestions for individual shoppers, creating a more personalized and effective shopping experience.

2. RELATED WORKS

Here are some comparable projects in this subject.

Mixpanel [2] is a web customer analyzing service and it can perform user segmentation. However it could not provide actual actions for customer service staff on site making its functions limited to that of a mere analyzer and observer. KVRTE GARDEN seeks to take this customer analyzing function by providing website managers options to actively communicate with the online shoppers such as instant messaging and recommendations.

Intercom [1] is customer messaging platform for mobile app, websites, social-media, and e-mail. However it could not provide actual actions and segmentation for customer service staff on site.

3. DEMONSTRATION

The following steps are what a user will experience using the KVRTE GARDEN system. First a HTC Vive head mounted display was attached to the user's head. Through KVRTE GARDEN VR system, the user can observe online customers as VR avatars entering a virtual store in the VR system which represents the shopping website itself. Each customer is colorized according to their rank with gold being the highest rank followed by black and finally white as the lowest rank. The VR user uses the controller to move around the store and by focusing on each customers, he/she can see data and shopping history of each customer. During the VR experience, the user can change their view point to a birds eye view to observe the entire virtual store from the top.

1. Attach a HTC Vive head mounted display to the user's head
2. User can now move to where he want to go using the controller
3. When the avatar is at the center of the viewpoint, the user can see details of customers' status along with

their history and other data

4. The user can change their viewing mode to the birds eye view

4. INSTALLATION OF KVRTE

KVRTE can be easily installed onto ones' website by simply install measurement tag to all pages of your site or to specific pages you intend to implement web customer service. The tag measures access info per cookie, user behavior within the site and manages delivery of customer serving actions. Specific user tags can also be installed to pages specifically designed to be logged in by users. This will send necessary membership information to KVRTE. One can also customize ones' tag setup to only send intended data to KVRTE. One can also connect membership info to KVRTE via API connection or CSV import. Conversion tags can also be installed to pages where users will land after purchases or after sending inquiry. One can choose what data to send to KVRTE depending on what information you need to use to segment users on KVRTE. Once the KVRTE tags has been properly installed, users can use KVRTE GARDEN to observe the actions of web browsers on the installed website.

5. CONCLUSION

By experiencing the feeling of humanity during an experience, it was discovered that previous web marketing does not take "human feeling" into account. By incorporating a sense of humanity, the user can feel that they should treat online shoppers with the same kind of integrity using web marketing as customers in a real store. For example, when a customer stays for 5 minutes on the same product page, the website registers a blank time in the access log when in reality the customer may be pondering whether to purchase the product or not. In this case, the website manager may be able to suggest coordination between the item and past purchases of the said customer and then offer special discount coupons or find other ways to engage the customer. This will increase the likelihood that the customer will become more engaged with the website.

6. REFERENCES

- [1] Intercom. Web customer chat service.
<https://www.intercom.com/>.
- [2] Mixpanel. Web customer analyze service.
<https://mixpanel.com/>.

Figure 1: User is able to see the customers' ranks, their purchase history, and records of past actions done through KVRTE

Figure 2: This screen shot displays what each customer is checking out at the moment as thumbnails holding on each figure's hands

Figure 3: KVRTE GARDEN enables the user to have the birds eye view of the whole store and a general behavior of the customers

Figure 4: The avatars are color-coded depending on their ranks. The more a customer purchases the higher ranking they get. Golden avatars represent the highest rank, followed by black and finally white avatar as the lowest rank.

“KvRT3 GARDEN” Install plan - Floor Plan

Figure 5: KvRTE GARDEN Floor Plan