## Intelligent Evaluation System of Fashion Net Red E-Commerce Marketing Based on Multi-Dimensional Visual Saliency Algorithm

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Abstract:Based on the central neighborhood structure in the spatio-temporal domain, this paper uses the incremental information under distortion-limited coding to establish a computational model of visual saliency, that is, the length of incremental coding is regarded as a measure of visual saliency. The marketing method of "Internet celebrity + Taobao" studied in this article, Taobao will also vigorously build a "talent plan" in 2016. Under this circumstance, exploring the marketing method of "Internet celebrity + Taobao" has become the focus of people's attention, this article starts with the concept of Internet celebrity. And classify the marketing methods of "fashion Internet celebrity" e-commerce, fully grasp the fashion network red e-commerce marketing model.

Keywords: Intelligent Evaluation System, Fashion Net Red, E-Commerce Marketing, Multi-Dimensional Visual Saliency

### **1. INTRODUCTION**

The definition of Internet celebrity is now constantly broad, and Internet celebrity is an Internet celebrity. They come from different classes, different industries, and different backgrounds [1]. The early Internet celebrities refer to those ordinary people who gain the attention of the Internet masses by virtue of their own talents, and have a fan group who follows the supporters and displays themselves through the Internet platform. 2015 Internet Almost everyone is familiar with the word "red" [2]. The popular Weibo fashionista "Sydney", the national husband Wang Sicong's girlfriend, once attracted the attention of the public. The famous movie star Aaron Kwok shared intimate photos with the Internet celebrity Fang Yuan. Internet celebrities have attracted people's attention, so what are the characteristics of these Internet celebrities? How do they use marketing methods to realize the realization of fans? [3]

However, in the vast sea of digital information, the ability of the human visual system to process information appears insufficient. How to let the computer help humans to extract valuable visual information from the numerous pictures and videos has become an urgent problem to be solved. Most people do not clearly recognize the fact that cognition of the biological visual system is not a passive process of reception, but a process of active selection [4], analysis, and re-selection. This continuous selection process is called the selective attention mechanism of the biological visual system, that is, visual saliency. Further, this selection process has two manifestations: inner (covert) and outer (overt) [5].

The term "net red" has not been around for a long time, but its development can be traced back to the beginning of the development of the Internet [6]. From online writers active in forums, communities, BBS, etc., to Sister Furong, Rogue Yan, Mu Zimei, etc. who pursued the "eyeball effect", to the new generation of Internet celebrities represented by papi sauce in the self-media period, until Nowadays [7], more and more celebrities in the traditional sense are further shaping and consolidating their own image and popularity through the Internet. There are quite a few, but most of the studies focus on a certain network marketing phenomenon, lacking a more systematic and comprehensive "Internet +" marketing model theory [8]. The image visual saliency detection algorithm introduces visual characteristics in the process of analyzing image content, which greatly improves the computer's understanding of the image content and promotes the development of image processing technology [9].

Among various image processing technologies, the computer is not concerned with all the content of the image. The "Internet celebrity economy" was first proposed by Zhang Yong of Alibaba [10]. In short, it means that Internet celebrities drive economic benefits. The Internet celebrity economy is not the economic effect produced by the Internet celebrity, but the entire operation team behind the Internet celebrity, which is based on the Internet. However, it has a certain appeal in the cyberspace [11]. They claim that they use their personal vision, taste and experience to dominate the fan base, relying on the targeted marketing of the huge fan base, so as to convert fans into purchasing power. "The Internet celebrity economy of fashionistas was born in this way, while the public was still amazed by their business model. Visual saliency detection is to automatically detect the salient information that is of interest to humans through the constructed model [12].

Image saliency detection can detect more salient target areas or gaze points in the image, and in the processing of some visual tasks, it can guide the computer to pay more attention to the salient information in the image. The so-called attention selection mechanism, also known as visual saliency [13], that is, the process of selecting a specific region of interest from a large amount of information in the spatiotemporal domain. Although unnoticed most of the time, this ability is a critical and important step in the information processing of biological visual systems, enabling the visual system to deal with large amounts of redundancy at a small cost [14].

From the perspective of the "Internet celebrity" phenomenon itself, we will sort out its development context and analyze the existing problems. The development stages of "Internet celebrities" are divided into text era, graphic era and broadband era [15]. Content analysis method is an objective, systematic and quantitative research method for dissemination content. Use quantitative data to perform quantitative analysis and make inferences about facts and conclusions. It includes establishing research objectives and determining the overall content of the research [16].

### 2. THE PROPOSED METHODOLOGY

# 2.1 The Multidimensional Visual Saliency Algorithm

In the image frequency domain, the peaks of the magnitude spectrum correspond to repetitive parts in the image [25]. Therefore, Gaussian smoothing of the entire log-magnitude spectrum suppresses the repetitive parts, which attenuates the background information. However, many salient regions are also repeated patterns. Here, the KL distance is generally used as a measure of the distance between the two density functions, so that the above process is transformed into an optimization problem solution, and then 1D- is obtained. At this time, the 1D-row vector can be regarded as a linear filter acting on the image block.

They can better detect image edges. The operator is an optimal edge detection operator obtained by analyzing and summarizing the previous edge detection algorithms. It has good anti-noise performance and generates relatively good boundaries. Of course, many existing image visual saliency detection algorithms do not directly use edge features, but the saliency maps obtained by most detection algorithms have high saliency at the edges of objects. In order to analyze the amplitude spectrum information intuitively, we construct the one-dimensional signals ft1() and ft2(), and draw their waveforms and the corresponding logarithmic amplitude spectrum, as shown in Figure 3.1. The first line is the original periodic signal ft1(); the second line is the logarithmic amplitude spectrum after Fourier transform of the signal ft1() (for better display effect, to avoid negative values in the logarithmic spectrum, in the original amplitude Add 1 to the spectrum, such as formula (3.1): The saliency model based on conditional information entropy proposed in the previous section is difficult to solve directly due to the high dimension. In this section, the paper discusses efficient algorithms for solving this model under different prior assumptions.

In fact, for the optimization problem of (3-6), there can be two different solutions: Muwen focuses on the graph-based Because the graph-based segmentation algorithm. segmentation algorithm has the advantages of fast segmentation and accurate segmentation, the graph-based segmentation algorithm is used in many applications. The graph-based segmentation algorithm studied in this paper is based on the segmentation algorithm proposed by et al. Therefore, the three peaks of 1(w) are caused by the repeating pattern of ft1(). Actually, the three prominent peaks in 2(w) are also caused by repetitive low-frequency signals (nonsalient segment signals), while the two local peaks in 2(w) (inside the red box) are caused by repetitive high-frequency signals (significant segment signal). The eye tracking dataset gives the data (points) for human eye tracking. According to the saliency map Sx() obtained by the algorithm, the ROC curve can be drawn by the hit rate (HR) and false alarm rate (FAR), and the algorithm performance can be measured by calculating the area under the ROC curve (AuC). The saliency detection algorithm is designed to be able to detect salient regions. For one-dimensional signals, the purpose is to detect significant segment signals and suppress non-significant segment signals. The higher the average amplitude of the

significant segment, the better the detection effect; the lower the average amplitude of the non-salient segment, the better the detection effect.

# **2.2** The Fashion Influencer and E-Commerce Marketing

At present, Internet celebrity marketing mainly focuses on entertaining the public. With the improvement of the Internet system, there are already many mature and relatively complete Internet celebrity promotion teams, but there are some bad orientations. Compared with hard advertising, Internet soft text marketing is It is more inclined to emotional guidance rather than directly saying that their products are worth buying. During the guidance process, the advertisements are invisibly hidden in the storyline and selfexperience, and the audience's psychology and emotions are influenced by highly instructive texts. Energy is the focus of communication, and the choice of emotional energy is the essence of people's communication [10].

Network subcultural communities have a strong sense of group identity. For the "Internet celebrity" group, in order to maintain the stability of their fan groups, they have higher requirements in terms of emotional investment, emotional feedback and emotional regulation. In order to further dig into the core category of the Xiaomi case, in the process of comparing the initial materials, concepts, and categories, the main story line of the Xiaomi case is refined through language description. The main story line of this chapter is a true reflection of the initial materials of the Xiaomi case, and it is a refinement of the core part of the Xiaomi case. Selective decoding has an important impact on the theoretical construction of this study, and is an important part of the case study process using grounded theory. The reason why video marketing can be favored by fans is that it is highly dynamic and intuitive, and can allow fans and consumers to more intuitively find problems and improve trust in the process of design, production, and delivery.

Compared with other traditional media such as newspapers and TV, advertisment marketing uses We-media such as Weibo as the carrier of dissemination, and the cost of advertisment is very low. No matter which traditional media is used, high advertising costs are required, and as people gradually disengage from traditional media, or rogue youths tamper with Edwardian aristocratic dressing styles and adopt the iconic duck-butt hairstyle, use wandering Defend your own living space by creating chaos in the streets. In contrast to the stylistic characteristics used to express group differentiation in such subcultures, style may also be used only as a description of subculture types.

### **2.3** The Intelligent Evaluation System of E-Commerce Marketing

In the experience interactive marketing, there will be a sneaky exchange of experience objects. Adding too many modifications to the good conditions of the Internet celebrity, such as image filters and PS retouching, will cause many fans to buy back things that are not It is suitable for a large number of fans. At the same time, Sina Weibo will also cooperate with "fashion influencers" and their companies, and they will use official resources to promote and cultivate outstanding influencers to continue to develop fashion influencers. Fan economy, improve the efficiency of its realization. It's not just "fashion influencers" who are marketing themselves.

The visual saliency detection model based on the frequency domain generally transforms the image into the frequency

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domain, then extracts the information of the salient area by processing the frequency domain information, and finally restores the output saliency map through inverse transformation. It is not difficult to find that when el, decreases, the model tends to a low distortion threshold, and Sx() tends to be equal everywhere; on the contrary, when el, increases, the model tends to a high distortion threshold, and the difference of Sx() increases. It can be seen that generally speaking, increasing el, can bring better discriminative characteristics. Therefore, transform as much original image information into the frequency domain as possible to extract more image information and perform better saliency detection. This paper adopts the paradigm model often used in academia to sort out the complex relationship between the nine categories obtained in the previous step. The main axis decoding is aimed at forming the main category, rather than constructing the theoretical model of this paper.

Based on the model model, this paper organizes and summarizes the causal conditions, phenomena, contexts, mediating conditions, action (interaction) strategies and results. : Gravity calibration model will be called the method of operation and detection. The gravitational model is difficult to obtain visual focus through iteration. Feedback is an important part of the marketing model. Most of the improvements in production of "Internet celebrity + Taobao" come from feedback from fans and consumers, and different marketing plans are formulated through different feedbacks. In the hearts of fans, they are no different from stars, and this kind of star halo is fun for the Internet celebrity. At the same time, this star halo makes her products have a wider market, and it is possible for one of their Weibo to be new. Drain millions of store transaction records, so the advantage of this kind of self-marketing lies in this.

### **3. CONCLUSIONS**

"Internet celebrity + Taobao" can also become the Internet economy, then the rapid changes of the Internet will be the characteristics of its marketing methods, otherwise it will be eliminated by a steady stream of new forms, and the Internet celebrity economy can also become a "fan economy". In order to The saliency detection algorithm in the frequency domain is improved to detect the integrity of the salient region, and the saliency detection algorithm AHFT is proposed. The AHFT algorithm uses Gaussian smoothing to deal with the problem of high amplitude caused by background information.

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