



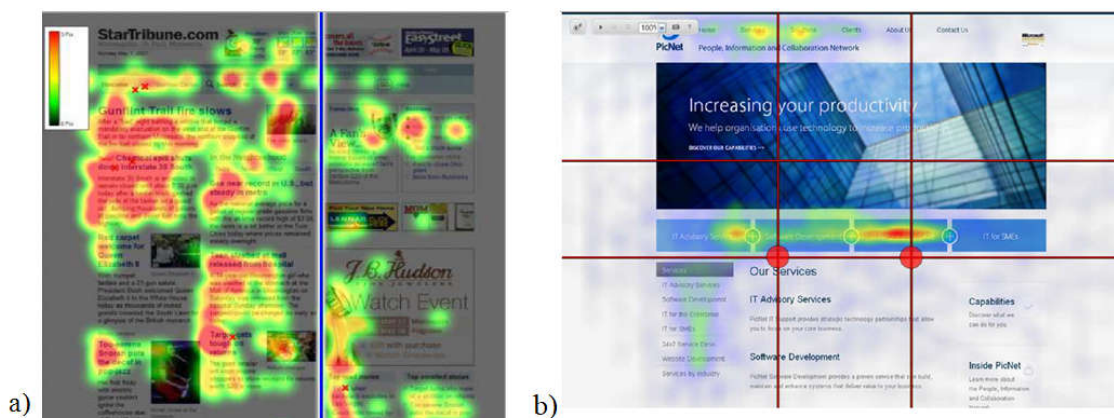
ANALYSIS OF FEATURES OF VISUAL PERCEPTION OF GRAPHIC INFORMATION FOR BUILDING THE SITE MODEL

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At the time of the formation of a new information paradigm of society, the problem of the harmonization of a visual product while taking into account the natural perception of the surrounding world is relevant. In order to identify new patterns in the users' behavior studies in various fields of science are being conducted, the generalization of which will help in creating the "correct" design of the Internet site [1]. In this paper, the relationship between the modular grid used for designing the site and the cognitive perception of information by the user are considered.

From the printing experience modern web design has inherited the principles of composition, working with fonts, and, most importantly, modular grids [1], which in modern design have greater flexibility and mathematical accuracy. Unlike printed materials, web design does not use modules of the same size, since there is no way to place all the elements the same way [1]. It has been found that most enterprises creating their web pages use standard modular grids, which are most convenient for perception, the development of which necessarily takes into account the mathematical models of modular grids that are suitable for a particular task. Their use in a competent way can make the design of Internet resources more attractive and convenient, increase the functionality of sites.

To find out the relationship between the attention of users and the rule "Golden section" were taken two different in the design of Internet pages. Pic. 1, a shows the intensity map obtained in the Eye-Tracking study of the page, according to the golden section rule: 61.8% / 38.2%. Pic. 1, b is a map of intensity for a page whose working area is conventionally divided by the "Golden Section" method into 9 parts [2].



Picture 1 – The intensity map [2]

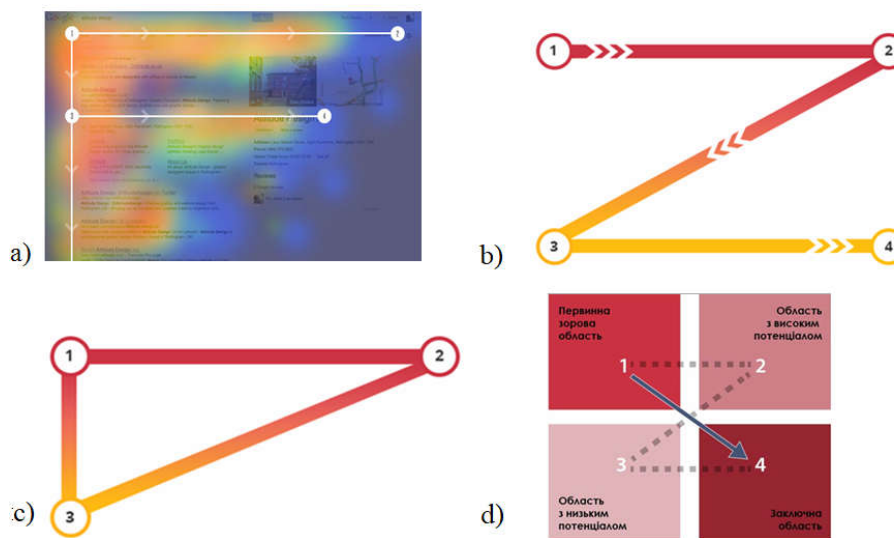
The study shows that the focus of users is more focused on the main (left) block. At the intersection of conditional lines there are points called "visual centers". This case also confirms the relationship between the attention of users and the rule of



the golden section, because in such conditions the information looks more natural [3].

It also takes into account the generally accepted order of placing the main elements of the page, which leads to the emergence of such a concept as "reading gravity", which returns readers to the logical axis of orientation, accelerating reading and understanding of the text [4].

As a result of experiments, it was concluded that the motion of the eye resembles the letter F (F-pattern) (Pic. 2, a), which repeats the natural trajectory of our vision - and it is possible to optimize the site according to it [4]. The following dependencies of the visual perception are also established: Z-pattern (Pic. 2, b), the Z-pattern is also the basis of what is called the golden triangle (Pic. 2, c) and Gutenberg Diagram (Pic. 2, d).



Picture 2 – Patterns [5]

There are studies that confirm the usability of design following the proportions of the Golden Section and the order of placing information on the F-pattern. Knowing these dependencies will help to create the "right" design of an internet page, i.e. page design in which areas of users' high attention will coincide with the zones that the developer wants to highlight.

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