

## **THE IMPACT OF SEO ON SUSTAINABILITY**

**Nashchekina O.N.<sup>1</sup>, Tymoshenkov I.V.<sup>2</sup>**

**<sup>1</sup> National technical university "Kharkiv polytechnic institute", Kharkiv**

**<sup>2</sup> V. N. Karazin Kharkiv National University, Kharkiv**

Sustainability and SEO (search engine optimization) are two business buzzwords whose popularity keeps growing, thus reflecting their relevance and importance to business. At the same time, these two concepts are usually not considered as related, either from a semantic or practical point of view. In this study, we look into the possible relationship between the two and demonstrate the need for a holistic approach not only to business itself but also to the entire business-society-environment system and its intricate interdependencies.

Sustainability, in and of itself, is an integrative concept describing the balance between economic, social, and environmental components of the society (or business) development. Oftentimes, when referring to sustainability, special emphasis is put on environmental problems, such as climate change, CO<sub>2</sub> emissions, depletion of natural resources and the like. Practically any aspect of business can positively or adversely affect sustainability. A sustainability mindset is based on the permanent search for business opportunities for reducing a negative impact on the environment, with the ambitious net-zero emissions target in mind, without sacrificing economic and social goals but rather trying to create shared value through the use of innovations.

SEO is much narrower and more technical concept, related to marketing. SEO is a set of practices aimed at increasing the visibility of one's website by improving its position in the organic (non-paid) search results. The higher the position of a website on the search engine results page (SERP), the higher the click-through rate and the conversion rate. The rank of the site on the SERP is determined by the search engine algorithms, which are based on a large number of ranking factors. The major goal of search engine algorithms is to provide the most relevant results to a user's query and improve overall user's experience. This goal itself is conducive to sustainability because if users can find the necessary information more quickly, they spend less time on the search and consequently consume less electricity. The latter is important because electricity generation produces emissions and thus contributes to climate change.

Google provides guidances (best practices) for SEO. These guidances, on the one hand, help organizations and individuals improve their websites and thus the chances to be higher ranked on SERP and get more traffic. On the hand, at least some of those guidances help reduce a negative impact on the environment produced by the use of the Internet. As an example, the Google search engine favors websites/webpages with a high page speed. This is beneficial from the point of view of both users' experience and electricity consumption. A convenient website navigation also helps spare much of a user's time and, as a result, reduces electricity consumption. Other guidances related to technical issues of building a website as well as to the website content, directly and indirectly lead to the creation of shared value, i.e. economic, social, and environmental value simultaneously, without sacrificing one to another. Thus, one of the ways to build a sustainable business is to reduce the so-called carbon footprint the business website leaves on the planet.