

A STUDY ON THE APPLICATIONS OF AUGMENTED REALITY IN MERCHANDISING

Podorozhniak A., Vinogradov B.

National Technical University «Kharkiv Polytechnic Institute», Kharkiv, Ukraine

The rapid development of foreign and domestic trade, market globalization, robust expansion of international connections and a surge in the popularity of eCommerce have led to an increased competition in the trade industry. Over 90% of retail sales are completed in store, where things like color, placement, packaging of products, etc., play a vital part in the sale process [1, 2]. Therefore, the ability to present the product in the most attractive, and noticeable way while also creating a positive and financially beneficial business image would be an obvious advantage to the seller.

In most Ukrainian retail chains, proper display, stocking and rearrangement of shelves, and placement of goods are completed with manual labor. A shift towards full or partial automatization seems quite promising for the industry. Listed below are a few crucial areas of merchandising that would benefit from an upgrade in efficiency: searching for, and identifying products and product information (price, availability, expiration date, etc); checking the availability of inventory with a main database; determining product shelf-space usage in comparison with other competitors.

The popularity and availability of mobile internet and smartphone use in Ukraine is growing. Since 2018 more than 45% of Ukrainians were active smartphone users, according to experts [3]. Consequently, to solve the aforementioned issues, one can use computer vision to identify products and augmented reality technology to display clues and data in real time.

The purpose of the report is to research the possibilities of applying augmented reality technology to increase employee efficiency in merchandising, specifically in the process of identifying and placing products on the shelves.

This study will analyze the effectiveness of modern tools and methods of computer vision and augmented reality technology, as well as their application within the realm of mobile devices and particularly those running on iOS. In addition to this research study, a mobile application prototype has been created that has the ability to process and analyze smartphone pictures and then display further product information.

References

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3. Smart Ukrainians 2018. (March 13, 2018) *KMIC, LEAD9 Mobile Marketing*. URL: <https://www.facebook.com/LEAD9/posts/1728357953914523>.