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Под редакцией А.Н. Солдатова, С.Л. Минькова

E-COMMERCE SOLUTION FOR THE SALE OF MICROWAVE LINE ACCESSORIES

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The article is devoted to the topic of effective using e-commerce channels for the promotion of microwave accessories in a coaxial path. Termin "e-commerce" is revealed. The author describes instruments for creating a full online shop for microwave accessories with online payments and delivery services.

Keywords: e-commerce, B2B, microwave components, CMS, website

Today, the microwave component market is a small-size B2B [1] segment of the big electrical component market. Like any small-size market, the microwave component market has trouble. This trouble is "customer cost" which means the cost of classical ATL (magazine, TV, Radio) and BTL (exhibitions, conferences, presentations) marketing promotion channels per one new customer. This article is dedicated to an e-commerce channel like a very cheap channel for the promotion of microwave products on the local and global markets.

First, it would be a good idea to describe the word "e-commerce". In general, "e-commerce" means all money transactions through the global network. Payments by credit card, payments by mobile phone, mobile app transactions, etc. This is "e-commerce". The paper covers only one segment – online shops. This is a website with a list of goods and prices for each good. People can buy physical or digital goods on the website and receive them by delivery services during the next hours/days.

There are two types of online shops:

1. Online shop with physical goods like Amazon [2]. On these websites like Amazon and E-bay you check photo/video/text description of physical goods and, if all is OK, you pay by credit card/PayPal [3] and wait for delivery of your order. Through the next hours or days, you receive your order on the post or from the courier.

2. Online shop with digital goods like Steam [4]. On this website, you pay for a digital copy. It can be a game, movie, article, or book. These shops are more flexible and you can get a free trial version for users. "Goods delivery" in this case is download or content watching.

Microwave equipment can be sold like physical goods in online shops of type 1. We can create a seller account on Amazon or create a website with a

domain name. For effective e-commerce website development, we can use CMS. Table 1 presents a comparison of the most popular CMS.

T a b l e 1

Comparison of CMS on the market

CMS	Possibilities	Qualification Requirements	% market [5]	Support
Wordpress	Wide	Low	59	+
Opencart	narrow	Middle	1	+
Drupal	Wide	High	5	+

The simplest CMS for e-commerce is WordPress. You can install it on your server and enter a list of your equipment with photos (only photo with good quality) and full-text description (including key technical parameters). Text description of your goods must be SEO compatible with an effective organic promotion in search systems like Yandex or Google. Further, you must add plugins for the payment system and delivery system. You can add special plugins on your website for automatic payment receiving and delivery calculation.

The final step is to create an advertising campaign in Search Systems through Yandex and Google advertising networks. You can pay for showing, for clicking your website, or for registration. Depending on the target action, you will pay the price for each user. We have a website on the web and advertising, so we have created an e-commerce channel.

References
1. Radio Frequency (RF) Components Market Size, Share & Trends Analysis Report By Product (Power Amplifier, Filters, Duplexer), By Application (Consumer Electronics, Military, Automotive), And Segment Forecasts, 2019–2025 [Electronic resource]. –URL: https://www.grandviewresearch.com/industry-analysis/radio-frequency-rf-components-market (date of access: 6.04.2020).
2. Amazon main page [Electronic resource]. – URL: https://www.amazon.com (date of access: 6.04.2020).
3. PayPal main page [Electronic resource]. – URL: https://www.paypal.com (date of access: 6.04.2020).
4. Steam main page [Electronic resource]. – URL: https://www.steam.com (date of access: 6.04.2020).
5. 3 free wordpress penetration tools [Electronic resource]. – URL: https://www.geckoandfly.com/25008/wordpress-penetration-tools-test-sql-injection-xss-vulnerabilities/ (date of access: 9.04.2020).