



Analysis of artificial intelligence application by Ukrainian retailers

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Abstract — Artificial intelligence is an up-to-date tool used in retail, which positively influences various business processes and the creation of competitive advantages in the market. Understanding this, Ukrainian grocery networks are implementing AI in order to achieve better work optimization and improve the level of customer service as well.

Keywords: artificial intelligence, retail, grocery network, marketing.

I. INTRODUCTION

Despite the economic downturn in the country, Ukrainian retail market is developing both quantitatively and qualitatively. Recent research, carried out by "GT Partners Ukraine" company, has revealed that most grocery retail leaders such as ATB, Fozzy Group, Volwest Group, Rukavychka and EKO market increased the number of its outlets in 2019 [1].

Unlike "ATB-market" LLC, "Fozzy Group" develops various objects of different formats and brands namely, shops near "Fora" house, "Silpo" supermarkets, Thrash! discounters, "Fozzy Gcash&Carry" hypermarkets, and "Le Silpo" and "Favore" premium markets. If we analyze the implementation of artificial intelligence technologies, we can see their introduction to a greater or lesser extent in the activities of Ukrainian supermarket chains.

For instance, CRM is used in its operating activities by ATB, Fozzy Group, Volwest Group, Rukavychka and EKO market. "ATB-market" LLC, "Fozzy Group" and "Rukavychka" apply chatbots for communication with clients and portable scanners/applications for optimization. However, "Fozzy Group" has most of all introduced artificial intelligence technology to its own "Silpo" supermarkets [2]-[6].

II. "SILPO" IN UKRAINE

"Silpo" supermarket chain - is one of the largest national chain of convenience stores. These are self-service stores with an assortment of about 35,000 grocery items and related products, depending on the size of the retail space [2].

Within the competitive market, trade enterprises have to constantly take care of the increase of their own competitiveness, the formation of certain competitive advantages in the appropriate spatial and temporal conditions [7]. This chain operates in a context where the consumer market is dominant, there is a fierce competition and the number of offerings on the market is growing. All these phenomena contribute motivate business owners to seek new ways to influence consumers, deliver improved services and build consumer loyalty.

Although goods offered by "Silpo" grocery chain are daily use ones, its perennial experience assists to create

modern trade offer for customers and allows the company to stay competitive.

III. THE USE OF ARTIFICIAL INTELLIGENCE BY "SILPO"

A. Loyalty cards

Loyalty cards are usual customer retention means and make offering more personalized goods possible. "Silpo", like many foreign companies, improved its usage and established app with wider functions via artificial intelligence.

The app replaces plastic cards and allows customers to use the program "Own account" in their smartphones. It also provides information on special offers for specific stores. Silpo's initiative to digitize personal offers for customers has reduced 900,000 sheets per year and saved 13 tonnes of paper per year. This implementation, in turn, lowers marketing campaign costs [8].

B. Cashier-free shops

Silpo cashier-free shops have been recently opened by the means of artificial intelligence, which allowed the company to provide more convenient payment method. What is more, it enabled them to stand out among competitors since such a system is not widely used in Ukraine.

C. QR-code payment system

Silpo is a grocery chain that has introduced not only contactless card payment system, but also QR-code one. By using Silpo app, its customers can pay by QR-code, so there is no need to use plastic card. Fast payments became possible due to the integration of Masterpass digital wallets into their app [9].

D. Intellectual System Assistant

The company has launched test of unique for Ukrainian retail market system - KISSA (Key Intellectual Silpo System Assistant). It will help to create improved customer support and automated reply questions.

KISSA robot will work with big data, will be able to learn on its own and in the process of communicating with customers, it optimizes the analytical data of the "Own Account" program [10]. With it, "Silpo" can gain better customer insight, their wants and needs, thus improving advertising campaigns and sales offers in the future.

E. Digital scanners

With the help of special digital scanners, the employees of the "Silpo" network can make an inventory of products. After scanning them the information from the devices is read out and processed by a computer program.

F. Messenger

“Silpo” has its own Telegram channel. However, it is only a means of informing customers about current trading offers, promotions and discounts.

Today's retail consumer clearly requires not only an emotional connection with a brand, but also personalized communication and unique experience. Silpo's retail chain can provide all of this to its customers using artificial intelligence.

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