APPLICATION OF DIGITAL TECHNOLOGIES IN MARKETING ACTIVITIES
OF UKRAINIAN COMMODITY PRODUCERS

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Abstract. The article presents a comparative analysis of SAP and BAS software products available for

Ukrainian commodity producers. The pros & cons of SAP and BAS digital technological solutions using for

automation of marketing activities at the enterprises are investigated. The possibilities of SAP and BAS software

products in the context of various types of marketing activities of economic entities are considered, in particular: marketing research, marketing planning, marketing analysis, marketing communication activities, marketing pricing

marketing research, marketing planning, marketing analysis, marketing communication activities, marketing

and marketing management.

Keywords: digital technologies, marketing, SAP, BAS.

Introduction

With the spread of world markets globalization among commodity producers the interest in the

introduction of digital technologies at all stages of the supply chain, including marketing activities has

begun to grow.

The report "The Gartner's Magic Quadrant for Sales Force Automation, 2019" prepared by the

international analytical agency Gartner, which specializes in information technology analysis and

consulting, noted that interest in digital sales optimization for 2017-2018 has grown by about 100%;

companies' investments in sales management systems continue to grow and in 2018 the market of SFA-

technologies (sales automation) grew by 12.8% (i.e. by 6.9 billion dollars) and this figure is almost entirely

due to the growing use of cloud solutions [1]. Thus, the positive dynamics of the digital technologies

introduction shows that the problems of improving the efficiency of business processes of economic entities

and increasing of their operational efficiency and flexibility based on business automation are relevant.

The above problems were analyzed by various scientists, in particularly: Apalkova V.V. [2], Kaplan

R.S. and Norton D.P. [3], Castels M. [4], Yanenkova IG [5] and many others, as well as experts: Bodnar

O. [6], Ferchuk O. [7] etc. But constant updating of the supply in the digital technology market requires

their monitoring and evaluation in order to identify / select relevant software products that can meet the

growing demands of the market and producers.

I. Theoretical principles of the software products comparative analysis

Marketing management software that automates all marketing business processes (starting from

campaign planning and budgeting up to real-time tracking) is a prerequisite for all modern commodity

producers who want to be competitive in the market. Among the developers of software products for

producers there are undisputed world-class leaders and experts engaged in pioneering niche IT

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development. We will conduct a comparative analysis of SAP and BAS software products for digitization of marketing activities, which are available to Ukrainian producers and common in their business practices.

The international company SAP SE (founded in Germany in 1972) is one of the leaders in developing the latest IT solutions operating in the markets of the post-Soviet space (Ukraine, Georgia, Belarus, Kazakhstan, Azerbaijan, Tajikistan, Uzbekistan, Kyrgyzstan, Turkmenistan, Russia) and offers comprehensive solutions for all business processes in all areas of activity [8].

Since 2018, a new trademark BAS has appeared on the Ukrainian market, which combines programs for automation of corporate ("BAS ERP", "BAS Document Management CORP", "BAS Management Holding" and others) and mass ("BAS Trade Management)", "BAS Retail") market [9].

In order to clarify the features, pros and cons we compare SAP and BAS software products for their use in the marketing activities of Ukrainian economic agents. We will make comparisons according to key (in our opinion) characteristics of software products:

- the presence of a separate specialized software product that takes into account the specifics of this activity;
- taking into account the main types of marketing activities in the software product as well as the possibility of additional detailing of each of software products.

## II. Analysis of SAP and BAS software products

The marketing field (as a philosophy and methodology of doing business) combines a wide range of tasks: from market research, analytical, commodity-based, pricing, sales and communication activities to sales management and relationships with customers / partners and other stakeholders. Let's consider the possibility of implementing these tasks by means of SAP and BAS software products. Among the SAP software solutions for optimizing marketing processes (activation of customer data, prompt and intelligent customer engagement, etc.) is a special product "SAP Marketing Cloud" - a comprehensive CRM-solution for personalized marketing and automation of customer in interaction, which helps to automate and manage all marketing cycle - from planning and setting up to conducting and online analysis of the effectiveness of campaigns [10]. BAS does not single out marketing activities, and the package for integrated solutions "BAS: Integrated Enterprise Management" includes subsystems that contain elements of marketing: "Sales Management", "Customer Relationship Management", "Purchasing Management", "Monitoring and Analysis of Performance activities of the enterprise"[11]. The structural elements of SAP and BAS software products are schematically presented in Fig.1.

Obviously, SAP Marketing Cloud has better settings for marketing tasks than BAS: at least Integrated Enterprise Management is unified.

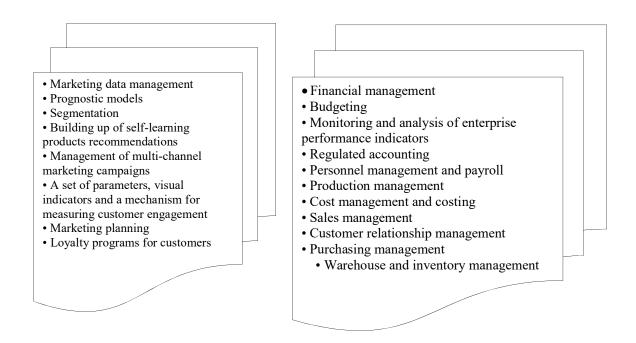


Fig. 1. Structural elements of SAP and BAS software products for digitalization of marketing activities of business entities (compiled by the authors based on materials [8-11])

"SAP Marketing Cloud" can use analytical tools of dynamic customer profiles to conduct office marketing research, which allows you to open new sales channels and enter new markets [10]. "BAS: Integrated Enterprise Management / Customer Relationship Management" accumulates statistical information on ongoing processes, which allows you to analyse the "bottlenecks" of processes, as well as calculate the probability of bringing the existing sales potential to a successful result ("sales funnel") [11] Thus, "SAP Marketing Cloud" provides more opportunities to find new innovative solutions than "BAS: Integrated Enterprise Management", which is set up to analyse existing (achieved) indicators.

Marketing planning in terms of communication and sales activities is carried out in both software products using similar tools.

Analytical tools in both "SAP Marketing Cloud" and "BAS: Integrated Enterprise Management" allow you to track the effectiveness of marketing in real time, but SAP solutions, in our opinion, are more focused on monitoring customer activity in cyberspace (in particular, in different social networks, using different means of communication) than BAS.

The marketing activities of modern economic agents are primarily related to communications with stakeholders. "SAP Marketing Cloud" implements omnichannel personalized communications and helps marketing specialists to develop the ideal customer profile, obtain comprehensive, complete data and optimize marketing communications [10]. The use of cross-channel marketing, provided in this software product, allows you to increase the level of customer engagement and increase their loyalty through the simultaneous use of different channels and methods of communication. Thus, in our opinion, "SAP Marketing Cloud" offers greater opportunities for marketing communication than "BAS: Integrated

Enterprise Management", because building up a cross-channel customer profile is a unique tool that allows you to create a single comprehensive view of each client and provides powerful information for the formation of innovative marketing strategy.

Pricing issues in SAP and BAS are solved differently: SAP has created another special service – "SAP Commerce Cloud", but "BAS: Integrated Enterprise Management" generates price lists with information about the balances of goods.

Marketing management in "SAP Marketing Cloud" is carried out using a wide range of tools: from ensuring uninterrupted communication (and document flow) between professionals to monitoring and managing the effectiveness of strategies in general [10]. "BAS: Integrated Enterprise Management / Monitoring and Analysis of Enterprise Performance" has created a special application and implemented opportunities to build up a hierarchical model of goals and targets, included tools for monitoring key performance indicators (KPI) [11], which also ensures smooth operation.

Therefore, summarizing the above, we summarize the information on software products SAP and BAS in Table 1.

## **Conclusions**

Generalizing the above facts, we can make the following conclusions.

- 1. In the market of software products for Ukrainian commodity producers, the developments from several IT companies are presented and their choice by manufacturers depends, first of all, on what technical and technological capabilities they can implement through their implementation.
- 2. "SAP Marketing Cloud" toolkit is a specialized unique software product for digitization of marketing activities of commodity producers, which makes it a leader and highly competitive among other software products.
- 3. BAS software solutions provide wide opportunities for digitization of key marketing activities of producers, but do not allow tracking customer activity while using all modern means and channels of communication (which is extremely important at the current stage of global economic development), which generally reduces competitive positions of these products. But the ability to use individual software solutions (which are implemented in existing systems of producers), as well as customization of BAS software products to personalized requirements of the producer provide them with market share.

The results of this study can be used by economic agents in practice, as well as can become the basis for further research.

Table 1 - Comparison of the capabilities of software products SAP and BAS (compiled by the

authors on the materials [8-11])

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№	Kinds of	SAP Marketing Cloud	BAS: Integrated Enterprise
	Marketing		Management
	Activity		8
1	Marketing research	- analytical tools for dynamic customer	-analysis of "bottlenecks";
•	marketing research	profiles allows you to open new sales	-setting up a "sales funnel"
		channels and enter new markets	
2	Marketing planning	- integrated calendar of marketing	- calculation of projected demand;
		campaigns;	- creation of variants of indicators
		- planning, distribution, monitoring of	with a possibility of comparison
		budgets	
3	Marketing analysis	- A / B testing and optimization;	- BCG analysis;
		- tracking of marketing activities with	- ABC / XYZ analysis;
		built-in dashboards;	- comparative analysis of
		- work with hidden trends and customer	performance indicators of managers;
		behavior based on predictive models; - analysis of success and profitability of	<ul><li>statistical analysis (stocks);</li><li>statistical and analytical reporting</li></ul>
		actions:	tools (various graphic forms, etc.)
		- taking into account KPI indicators in real	tools (various grapine forms, etc.)
		time	
4	Marketing	- conducting multi-channel campaigns to	- business processes of organization
	Communication	attract customers and conversions;	of interaction with clients;
	Policy	- accurate targeting and segmentation based	
		on the creation and training of predictive	
		models	<u> </u>
	- customer	- construction of a cross-channel client	- keeping a file of the client, partner,
	relationship	profile; - insights about the client's intentions "at	- analysis of customer loyalty, loyalty cards,
	management	the moment";	- managing the effectiveness of sales
		- targeting identified and anonymous	processes and agreements with the
		clients in real time;	client:
		- understanding of the client's path, his	- advanced customer order
		interests, attitude to the brand;	management, standard and individual
		- automated creation of unique contextual	sales rules, offers
		interactions for each client;	
		- targeting / retargeting clients with	
	1 1 6	relevant messages and recommendations	Б 3
	- channels of	o E-mail;	o E-mail
	communication with stakeholders,	o o advertising; o o chat / contact center;	
	first of all, with	o o In-store;	
	clients	o o social networks (Twitter, FB, others)	
5	Marketing pricing	- built into another service (SAP	- formation of price lists with
	<i>6</i> 1 <i>6</i>	Commerce Cloud)	information about the balances of
		<u> </u>	goods
6	Marketing	monitoring and managing the effectiveness	- construction of a hierarchical model
	Management	of strategies;	of goals and targets;
		- establishing a budget framework;	- formation of strategy of relations
		- ensuring uninterrupted communications	with partners;
		between specialists	-monitoring of target indicators with
			explanation of initial data

## References

- 1. The Gartner's Magic Quadrant for Sales Force Automation, 2019. Gartner Blog Network. URL: https://blogs.gartner.com/tad-travis/2019/07/11/gartner-magic-quadrant-sales-force-automation-2019/ (дата звернення: 30.05.2020)
- 2. Apalkova V.V. Konzepziya rozvytku tsufrovoi economiku v Yevrosoyuzi ts perspectyvy Ukrainy [The concept of digital economy development in the European Union and prospects of Ukraine].

- Bulletin of Dnipropetrovsk University. Series: Innovation Management. 2015. Issue 4. pp. 9-18 [in Ukrainian].
- 3. Kaplan R.S., Norton D.P. Sbalansirovannaya Sistema pokazatelei. Ot strategii k deistviyu. [Balanced scorecard. From strategy to action]. 2nd ed. M.: ZAO "Olymp-Business", 2003. 320 p. [in Russian].
- 4. Castells M. Informazionnaya epokha. Ekonomika. Obshchestvo I culture. [The information age. Economy, society and culture]. M.: GUVSHE, 2000. 608 s.[ in Russian].
- 5. Yanenkova I.G. Tsifrova transformatsiya promyslovosti Ukrainy: klyuchovi aktsenty. [Digital transformation of Ukrainian industry: key accents]. Problems of the economy. № 4, 2017. URL: <a href="https://www.problecon.com/export\_pdf/problems-of-economy-2017-4\_0-pages-179\_184.pdf">https://www.problecon.com/export\_pdf/problems-of-economy-2017-4\_0-pages-179\_184.pdf</a> [in Ukrainian].
- 6. Bodnar O. Tsyfrovizatsiya ta konkurentospromozhnist' biznesu klyuchovi draivery rozvytku ukrainskoi economiku. [Digitalization and competitiveness of business key drivers of the Ukrainian economy]. URL: https://business.ua/litsa/ item / 2452-tsifrovizatsiya-ta-treningospromozhnistbiznesu-klyuchovi-drajveri-rozvitku-ukrajinskojiekonomiki [in Ukrainian].
- 7. Ferchuk O. Tsyfrovizatsiya biznesu: yak Ukraini vstyhnuty za svitivymy trendamy [ Digitalization of business: how Ukraine can keep up with global trends]. URL: https://www.althoughda.com.ua/columns/2018/12/26/643874/ [in Ukrainian].
- 8. Vse produkty SAP. [All products. SAP]. URL: <a href="https://www.sap.com/cis/products.html">https://www.sap.com/cis/products.html</a> [in Russian].
- 9. Novaya platforma Business Automation Framework I klientskiye lizenzii BAS [New Business Automation Framework and BAS client licenses]. URL: <a href="https://january.ua/company/news/2019/novaya-platforma-business-automation-framework-baf-i-klientskie-litsenzii-bas/">https://january.ua/company/news/2019/novaya-platforma-business-automation-framework-baf-i-klientskie-litsenzii-bas/</a> [in Russian].
- 10. SAP Marketing Cloud. AtlantConsult website. URL: https://atlantconsult.ru/solutions/sap-hybris-marketing/
- 11. Rishennya BAS. [BAS solution. BAS]. 2019. URL: https://www.bas-soft.eu/ [in Ukrainian].

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