

## INFORMATION COMPONENT OF ENHANCING THE COMPETITIVENESS OF PUBLISHING AND PRINTING COMPANIES

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The formation and retention of competitive advantages of publishing and printing companies is influenced by numerous exogenous factors. The analysis of the specifics of functioning of the publishing and printing industry gives grounds to state that the main groups of factors that can be considered as determinants of competitiveness of the enterprises of the industry are the following: macroeconomic, financial, technical and technological, and information (tabl. 1). The last one, due to [1; 2], seems to be the special instrument for gaining the competitive advantages under the pressure of digitalization processes on printing & publishing market.

*Table 1*

**Content of determinants of competitiveness of publishing and printing companies**

No	Determinant	Content
1	Macroeconomic	Opportunity for businesses to adapt to the following trends: 1) decrease in demand for products; 2) increase in market prices; 3) reduction of labor force.
2	Financial	Ability of enterprises to perform the following activities in terms of currency fluctuations: 1) replenish funds whose purpose is to expand production; 2) optimize the volume and structure of operating expenses.
3	Technical and technological	Technological readiness of enterprises; availability of high-tech equipment in the process of Industry 4.0 intensification.
4	Information	Adequate ICT development; availability of sources of necessary information and efficiency of use of information resources

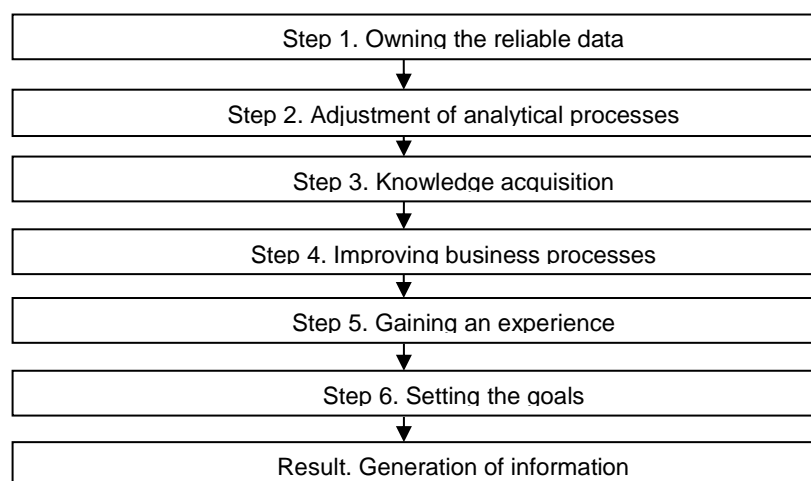
\*) Developed by authors

Possessing reliable data on market development trends, own activities and competitors' activities gives the publishing and printing company the opportunity to analyze the economic environment and to set the specific, measurable, achievable, time-bound goals. The publishing and printing company is a kind of intermediary between the information generator and the object of information flow. An information generator is a customer of a book, catalog, brochure, poster or other printed matter of a promotional nature. The information stream object is the end consumer, the target audience of the information generator. That is why the publishing and printing company can set and achieve *information goals*. The presence of correctly set and achieved information goals is a criterion for the efficiency of using information resources.

The *informational goal* of the publishing and printing enterprise is supported by the possibilities of the purpose of the publishing and printing enterprise to create the image of an effective generator of commercial information. Having achieved this goal, the publishing and printing company continues to be a mediator between the customer and the consumer, but the content of the information flow forms independently (fig. 1).

The information generator will be a publishing and printing company that owns the developed and approved original layouts. In doing so, the company moves from purely printing and publishing processes to comprehensive customer service in the selection and development of printed products of advertising nature. This requires the involvement of intellectual resources, which affects the overall cost of services.

Therefore the information determinants of competitiveness of publishing and printing companies is the general level of the development of the ICT in the economic environment of their functioning (domestic or international market), the availability of access to sources of necessary information and the efficiency of use of information resources.



**Fig. 1. Staging the process of setting the information goal**

*\*) Suggested by authors*

Analysis of the activity of printing companies in Ukraine gives us an opportunity to make the following recommendations for improving the level of competitiveness.

*For the production component of the competitiveness:*

- pricing optimization based on market price monitoring and cost management;
- improvement of the marketing mechanism of the enterprise;
- ensuring the efficiency of use of fixed assets;
- Increasing the number of customers and managing inventory;
- determining the level of technological readiness of the enterprise, taking into account market requirements and the concept of Industry 4.0;
- to conduct an analysis of the condition of the equipment and the feasibility of repairing, upgrading or replacing it with a new one;
- to prefer high-performance equipment that can be used to implement hybrid printing technologies.
- to purchase of used KBA Rapida 74-5 + LUV and RHO Durst Omega 1 equipment under leasing terms.

*For the financial component of the competitiveness:*

- optimization of the share of material production in the order structure;
- optimization of the salary fund through cooperation with freelance specialists;
- management of accounts receivable and payable.

*For the information component of the competitiveness:*

- implementation of programs for organization of work of project teams;
- to develop product pages or companies on social networks Facebook and Instagram.
- intellectualization of services on the basis of strengthening their analytical component.

The implementation of the proposed measures will help to increase the competitive potential of publishing and printing companies, in particular by releasing resources of production and commercial activity. The result of the intellectualization of advertising services in a strategic perspective is a chain reaction and synergistic effect, namely: the strengthening of competitive positions and the formation of a successful image of the service provider enhances the importance of the commercial results obtained by the customer of such services.

Ensuring the competitiveness of the publishing and printing company should occur at the expense of the following main groups of processes: information support processes; processes of material support; processes of intellectual support. It should be noted that. In addition to the presented ones, the process of renting exhibition space, accompanying thematic conferences and professional forums (for example, creating presentation materials) may occur situationally. The result of each of these processes, apart from the actual product they are aimed at, can be the economic effect that the printing company and the customer will have. The presence of economic effect is due to the optimization of the provision of services in complex advertising support due to economic cooperation and synergism of different companies.

Information support processes, as well as the intellectual processes, are characterized by the intangible nature and form of the result obtained. This is the reason for the difficulty of measuring the economic impact of the cooperation of companies within this block. In particular, the complexity of clearly calculating the cost of

providing information services leads to variations in their market prices and, therefore, to the uncertainty of the economic effects of information processes. This block includes the following processes: information content of advertising materials; placement of advertising messages on different advertising space; informational support of brand pages on social networks; development and filling of the site. The subjects of their implementation are the IT company, consulting and advertising agencies, content manager. At the same time, the printing company, acting as an integrator of various processes of corporate advertising support, creates value of such service and creates value at the expense of that speed of rendering of advertising services through optimization of processes of cooperation of the involved companies. The customer communicates only with the integrator (publishing and printing company), and saves time searching for contractors. At the same time, responsibility for the quality of services to the customer is also the sole responsibility of the integrator, which should be taken into account when implementing the proposed recommendations.

The economic efficiency of processes is generally defined as the ratio of the benefits received and the costs incurred in implementing these processes. The benefits (publishing and printing company) within the block of information processes are the following:

1. Increasing the volume of income through the provision of new information services.

2. Cost savings for full-time employees in the case of contacting freelance specialists for: maintaining customer pages on social networks; filling in customer site data or updating existing texts on site pages.

Costs for the implementation of information processes are payments to IT companies, consulting and advertising agencies, content management specialist under contracts for services. In view of the above, it is proposed to calculate the effectiveness of IT support processes using the following two performance metrics: revenue efficiency and cost effectiveness.

*Revenue efficiency* is calculated by the formula:

$$E_i^r = \frac{\Delta R_i}{\sum C_i}, \quad (1)$$

where  $E_i^r$  — an indicator of the support processes economic efficiency by the revenue;

$\Delta R_i$  — an additional revenue of the publishing and printing company, obtained through the provision of new information services;

$\sum C_i$  — the amount of expenses of the publishing and printing company for the payment of contracts with the contractors for the provision of information services.

Processes will be considered effective if  $E_i^r > 0$ , and the calculated value increases in dynamics.

*Cost efficiency* is calculated by the formula:

$$E_i^c = \frac{C_i}{S_i}, \quad (2)$$

$E_i^c$  — the effectiveness indicator of information support processes by cost;

$C_i$  — costs for the information services from the contractor;

$S_i$  — a payroll fund for a full-time employee capable of doing similar work.

Thus, the indicator  $E_i^c$  involves a comparison of the costs of outsourcing services and the salaries of staff members. IT support processes will be considered effective if  $E_i^c < 1$ .

Given that some types of information services are situational in nature, it is obvious that the benefit of the publishing and printing company is from working with third-party individual specialists instead of creating a full-time position. It is advisable to analyze the cost of some types of information services provided by third parties and the amount of labor costs involved in the creation of appropriate units. The main such services are: information content of advertising materials; placement of advertising messages on different advertising space; informational support of brand pages on social networks; development and filling of the site. All of these services are combined by the general concept of internet marketing which is a promising area for further research.

## References:

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