

“ARTIFICIAL INTELLIGENCE AS A DESIGN TOOL FOR A PRINTING SHOP”

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With the development of artificial intelligence (AI), it has also affected the publishing and printing business, as AI can simplify and speed up work at the stage of design, printing, checking for defects, etc. [1]. However, the use of AI is not always appropriate, as it has its specifics according to the work of each printing business and must be investigated separately.

Considering a printing shop that provides custom design development and print on demand (for example, poster design, print on t-shirts), the stage of creating the visual part can be performed using AI-tools [2, 3].

Separate software for generating images with the support of artificial intelligence is a complete AI-powered design toolkit that optimizes the process by learning preferences and suggesting a range of alternative design solutions [4]. Currently, there are many examples of such programs: Designs.ai, MidJourney, Leonardo, Ideogram, ChatGPT. For now, most of them provide free trial version [5].

Some print studios also provide customers with an opportunity to create the design by themselves using IA-tools, built into the studio shop website, that attracts the customer and saves the designer's time.

The use of generative artificial intelligence programs for a printing studio has positive and negative aspects, the comparative characteristics of which are given in Table 1.

Table 1. Advantages and disadvantages of using AI for printing studio [1, 5]

Advantages	Disadvantages
a higher speed of design creation (compared to the work of a designer)	lack of uniqueness and author's contribution to the design
involvement of the client in creating his own design attracts the consumer	the difficulty of managing the design generation result
no need for additional skills to use the AI program	high probability of visual errors during image generation
a lower price for the client due to the lack of graphic designer manual work	paid subscription to the program is required for better results

Thus, using AI for a small printing business can reduce the time of design development, as well as provide the customer with involvement in image creation. However, if the print studio has its own unique brand and author's approach to design, the use of AI is inapposite.

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