

the scale and accuracy of the initial versions were at a low level, and the size of the text basis was bigger than the size of the model.

That fact was positive and negative at the same time, because when ChatGPT 3.5 was released, the quantity of the parameters became bigger and different kinds of errors appeared. The main aim of the research is to develop the algorithm of minimising them. In this article we will classify these errors as general  $\varepsilon_g$ , random  $\varepsilon_r$  and filter  $\varepsilon_f$ . General and filter errors are not decreasing the accuracy too much, but the other type, random errors can influence on the output data user gets on the plane of constructing fictional reality, and that fact isn't always obvious, that's why we should endeavour to minimise the percentage of all errors.

One of the solutions to the problem is to develop a correct query to the model from the user side. There're 3 main principles of correct request: accuracy of input data, limitations and the form of output data. The first component of that formula implying that the user should always type in the model all the aspects of the request: thus, the model will maximise its accuracy in the dialogue. The second principal refers to the limitations: user should always limit the flow of the parameter's probabilities, typing what the model shouldn't output. The third constituent – the form of the data: mostly the output data generates in simple text, but the user can point on, for example, table form.

If the principles of correct request are followed, error frequency will decrease. That mainly concerns the most dangerous type – random errors, but the other types will also go down. It is expected that the proportion of all types of errors occurring in an interaction session will tend to zero with the development of this innovative solution and other minimisation techniques.

Thus, the basic algorithm for minimising various kinds of errors of generative language models (GLM), including those in solving logistic problems of various kinds, has been considered in the article. As a result of the research, there are 3 main principles of the correct request to the GLM: accuracy of input data, limitations and the form of output data. The proportion of errors in output information will tend to zero with the development of models and new minimisation techniques.

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## **DIGITAL TRANSFORMATION OF SOCIETY: MODERN ACHIEVEMENTS AND FUTURE PROSPECTS**

### **Цифровая трансформация общества: достижения современности и перспективы будущего**

Digital transformation is a process of profound changes in society caused by the introduction of digital technologies in all spheres of life. It is radically changing the

economy, social relations, culture, education, healthcare and many other areas. The abstract examines the key achievements of digital transformation in the modern world, as well as its prospects in the future.

For modern society, digital transformation is a goal, a tool and a way of setting goals and paving the way to a sustainable future.

Therefore, the purpose of the following study is to define the concept of digital transformation, to identify the achievements of modernity and the prospects for the future of digital transformation.

Modern achievements:

- Accelerating economic growth: Digital technologies make it possible to automate processes, increase production efficiency and accelerate innovation.
- Improving the quality of life: Digital technologies provide new opportunities for learning, communication, leisure, healthcare, etc.
- Strengthening democracy and civil society: Digital technologies facilitate the dissemination of information, strengthen civil society and provide new opportunities for political participation.
- New Business opportunities: Digital technologies open up new markets and business models, allowing entrepreneurs to reach a global audience.
- Expanding access to information: Digital technologies provide unprecedented access to information and knowledge.

Future prospects

- Development of artificial intelligence: Artificial intelligence will play an increasingly important role in various fields, from automation to medicine.
- The growth of virtual and augmented reality: Virtual and augmented reality will change the way we interact with the world, including in education, entertainment and commerce.
- Blockchain and Cryptocurrencies: Blockchain technologies will change the way businesses do business, store data, and manage finances.
- Internet of Things: The Internet of Things will connect all devices and objects to each other, creating smart cities and homes.
- Biotechnology and genetic engineering: Biotechnology and genetic engineering will revolutionize medicine and healthcare.

Results: digital transformation presents both huge opportunities and serious challenges. In order to maximize the benefits of digital transformation and mitigate its negative consequences, it is necessary to create a solid legal and ethical framework for the development of digital technologies. It is important to ensure equal access to digital technologies, strengthen cybersecurity, protect privacy and develop ethical principles for the use of artificial intelligence and other advanced technologies.