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**Guz, O. B.,**

PhD student, Department of  
Entrepreneurship, Trade and Logistics,  
National Technical University "Kharkiv  
Polytechnic Institute", Kharkiv

**INTELLECTUAL TRANSFORMATION OF UKRAINE'S OIL  
AND GAS INDUSTRY FOR GLOBAL COMPETITIVENESS**

The strategic transformation of Ukraine's oil and gas industry in the context of import dependence and growing global market competition is considered. In order to enter the international arena, it is necessary not only to extract resources, but also to intellectualise enterprise management. Despite external pressure, it is these challenges that are driving the revision of internal business processes. This study outlines key areas for implementing smart technologies and process optimisation to increase sustainability, efficiency and compliance with global energy standards.

**Keywords:** oil and gas industry, global market, enterprise management, business processes, intellectualisation of management.

The globalisation of economic processes affects domestic enterprises in the oil and gas industry, obliging them to continuously improve and comply with the requirements dictated by the competitive world market environment. This encourages companies to pay more attention to improving management processes.

Therefore, the direction of improving the management processes of oil and gas enterprises based on the intellectualisation of business processes determines the relevance of the research topic.

The study aims to identify the incentives for enterprises to improve their business processes when entering the global market, and to structure the ways in which enterprises in the industry can improve their management based on intellectualisation.

Oil and gas companies are striving to achieve the strategic goal of entering the global market. This creates an incentive for them to introduce innovative technologies that allow them to intellectualise their operations. Such incentives are related to:

- the need to ensure the company's competitiveness in the face of tougher competition in global markets than in the domestic oil and gas market;

- the need to comply with international standards, particularly environmental standards, which impose additional requirements on oil and gas companies;
- ensuring an appropriate price-quality ratio to attract buyers and establish a niche in the global market.

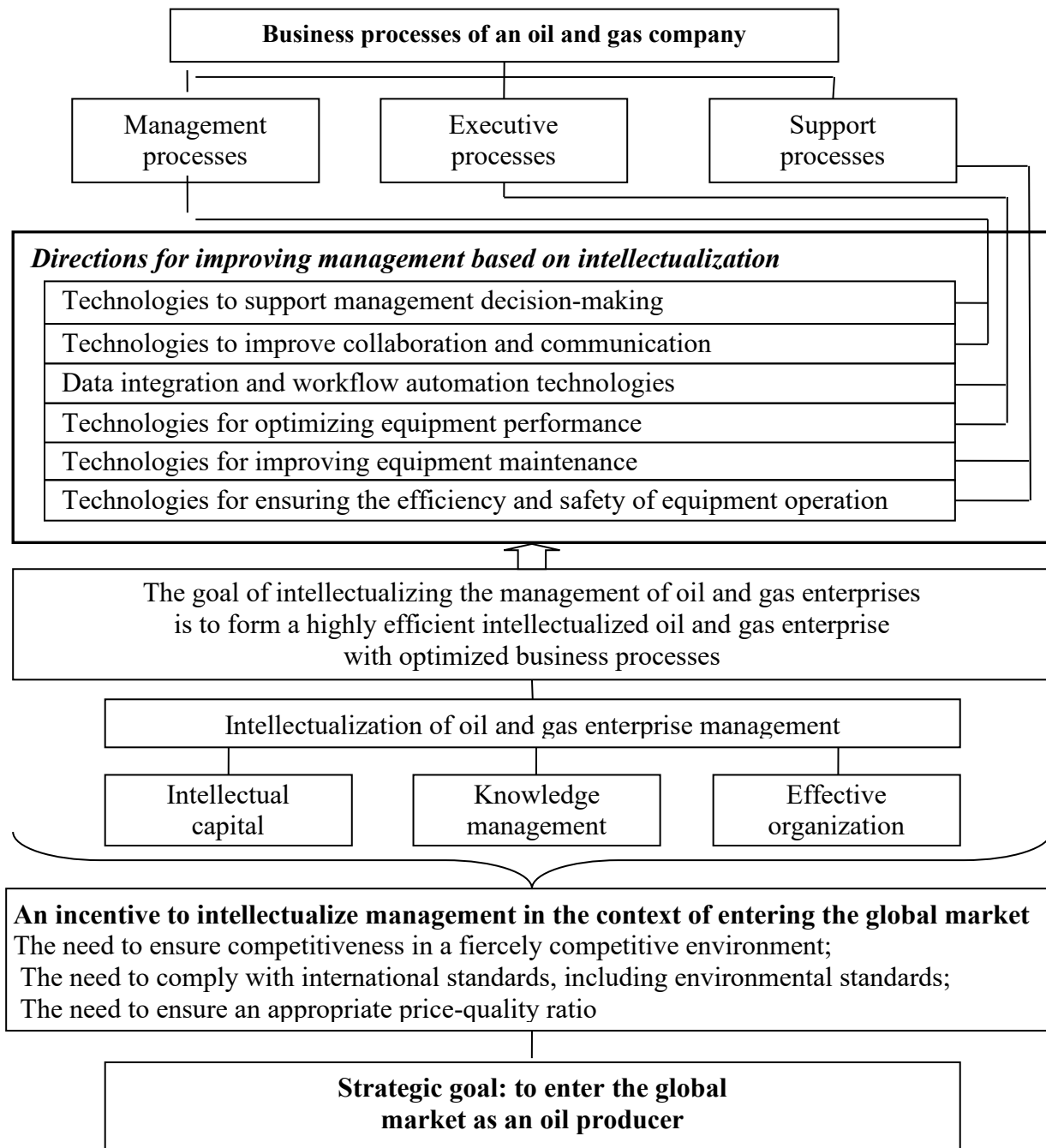


Fig. 1. Directions for improving the management of an oil and gas enterprise based on intellectualization

Source: compiled by the author [1, 2, 3, 4, 5].

Figure 1 illustrates the author's vision for improving the management of an oil and gas enterprise through intellectualisation.

Oil and gas enterprises are guided by incentives to choose the path of management intellectualisation, which involves attracting intellectual capital,

improving knowledge management, and implementing measures to improve work organisation efficiency. This ultimately allows them to achieve their strategic goal of forming a highly efficient, intellectualised oil and gas enterprise with optimised business processes.

In this context, a study of the technological capabilities and advantages of smart oil and gas fields would be very interesting. V. Kochkodan, the author of this study, provides a classification of smart oil and gas field technologies by functionality [5]. This classification can be used to outline the main directions for improving the management of oil and gas enterprises through intellectualisation, which include:

The introduction of management decision support technologies into the activities of such enterprises;

improving cooperation and communication;

Data integration and workflow automation;

optimising equipment operation and maintenance.

ensuring the efficiency and safety of equipment operation

These technologies contribute to the comprehensive improvement of the business processes of oil and gas companies, including management, executive and support processes.

## References

1. Дмитрук В. В. Вектор ціннісно-орієнтованого менеджменту нафтогазових підприємств. *Ефективна економіка*. 2020. №8. URL: <http://www.economy.nauka.com.ua/?op=1&z=8127> (дата звернення: 14.04.2025).

2. Овецька О.В., Ткачук Р.Д. Управління потенціалом нафтогазового підприємства в умовах трансформації операційної моделі (на прикладі Хрестищенського ВБР). *Науковий вісник ІФНТУНГ. Серія: Економіка та управління в нафтовій і газовій промисловості*. 2021. №2 (24). С.17-24.

3. Фадєєва І. Г. Нафтогазовий комплекс як об'єкт стратегічного управління на засадах синергетичного підходу. *Вісник Хмельницького національного університету*. 2010. № 4. Т. 4. URL: [https://journals.khnu.km.ua/vestnik/pdf/ekon/2010\\_4\\_4/033-040.pdf](https://journals.khnu.km.ua/vestnik/pdf/ekon/2010_4_4/033-040.pdf) (дата звернення: 14.04.2025).

4. Харченко Ю. А. Напрями вдосконалення операційної системи підприємств нафтогазової галузі. *Ефективна економіка*. 2022. №2. URL: <http://www.economy.nauka.com.ua/?op=1&z=10031> (дата звернення: 14.04.2025).

5. Кочкодан В.Б. Технологічні можливості та переваги інтелектуальних нафтогазових родовищ. *Інфраструктура ринку*. 2019. Вип.31. С.799-807. URL: [http://www.market-infr.od.ua/journals/2019/31\\_2019\\_ukr/123.pdf](http://www.market-infr.od.ua/journals/2019/31_2019_ukr/123.pdf) (дата звернення: 14.04.2025).