4. Використання дронів під час воєнного часу: поради для цивільних - Центр демократії та верховенства права. *Центр демократії та верховенства права -*. URL: https://cedem.org.ua/consultations/vykorystannya-droniv/

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INFLUENCE OF LEADERSHIP ON THE FORMATION OF AN EFFECTIVE TEAM

Описано значення лідерства в управлінні та його вплив на ефективність команди. Розкрито ключові риси, які характеризують успішного лідера, та роль лідера у формуванні згуртованої команди. Виділено особливості розвитку лідерських навичок у сучасному бізнессередовищі та запропоновано стратегії їх вдосконалення.

Ключові слова: лідерство, управління, команда, ефективність, стратегічне мислення.

The article describes the importance of leadership in management and its impact on team performance. The key features that characterize a successful leader and the role of a leader in forming a cohesive team are revealed. The features of leadership skills development in the modern business environment are highlighted and strategies for their improvement are proposed.

Key words: leadership, management, team, efficiency, strategic thinking.

Effective management of any industry requires educated, active personnel capable of making responsible decisions in a situation of choice and taking responsibility for them, as well as taking initiative and striving for self-improvement and self-development in their professional activities. A modern manager must be a leader, and one that the team follows, which, in turn, allows the business to be successful. The topic of leadership is relevant because the tasks set by enterprises can only be solved if a good team and, in turn, an effective leader interact. Leadership, in turn, is expressed in the impact on the team: it makes them show their strengths and restrain the manifestation of weaknesses.

The term "leader" in English means "director", "boss", "manager". The definition of the term "leadership" has two meanings:

- First, it is the ability of an individual to influence other people to achieve certain goals;
- secondly, a management function that involves using the leader's influence to motivate employees to achieve the organization's goals.

The term "leader" becomes meaningful only in conjunction with the concept of "goal"; there is no leader without a goal. Leaders have several characteristics that characterize them:

- high activity and initiative;
- influence on others;
- acting in accordance with values;
- possession of information;
- are role models;
- are responsible not only for their actions but also for the results of the team [3, p. 184].

The main role in creating a team is played by the leader. A team is a group united by a common goal. An effective team is "one for all and all for one". In other words, it is a group of people who work as a single organism.

In modern business organizations, the importance of teamwork skills is growing, as the rapid pace of change in commodity and territorial markets dictates the priority of choosing teams that solve urgent business development tasks in a certain period of time. The team leader plays a different role at all stages of team development, and the productivity and efficiency of this team largely depends

on his or her ability to competently and competently accompany the team in its growth, providing the necessary resources and support.

Only a leader with the right qualities can create an effective team. A leader is often perceived as a superman, able to foresee the development of the situation, make the right decisions and lead the team even in difficult times and turbulent situations. However, managing a team is far from alchemy and requires mastery of a number of tools that guarantee effective team leadership. A leader must perform the following main functions:

- unite people;
- protect the interests of his team and each of his employees;
- implement changes and innovations;
- organize activities that will achieve maximum results with minimum resources [4].

The leader should do the same work as his team, but should strive to help employees find the internal motivation to achieve it. Where a boss sees his employees as subordinates, a leader sees his employees as part of a team and seeks to empower them to exceed minimum expectations.

Leaders who inspire and empower have a greater ability to influence team actions. Inspiring and empowering people builds loyalty and trust, which are positive qualities that create a strong, productive corporate culture. When everything is based on productivity without developing loyalty and trust, it often negatively impacts team performance [1].

Peter Drucker said: "Management is the art of doing things right, and leadership is the art of doing the right thing." Indeed, a true leader is able to inspire a team to do great things and create miracles, and if he is also a strategic leader, his team is "doomed to success". According to P. Drucker, in a close-knit team of like-minded people led by a recognized leader, ordinary people become capable of extraordinary things.

A leader-manager must convince his subordinates that they should not be afraid to take on the most difficult tasks, that they have the right to take risks, and that mistakes often become the key to success. In 604 BC, the sage Lao Tzu said: "The best ruler is the one whom people only know exists. A somewhat worse ruler is the one who is obeyed and loudly welcomed. The worst of all is the ruler who is despised by the people. Don't respect people, and they will stop respecting you. But when a good leader speaks honestly, when his work is done and the goal is achieved, people will say: "We did it ourselves."

Aristotle taught us that "leadership consists in determining the public good and serving it." Responsible leaders should be aware of global development trends and try to understand them. They should be proactive not only to improve business efficiency, increase turnover, strengthen brand positions and liberalize legislation, but also to fulfill their role and responsibility to the world.

Leadership is not limited to managing people. It is an art and a science that requires a deep understanding of human psychology, social dynamics and strategic thinking. Leaders must not only be charismatic, but also competent, able to adapt to rapidly changing conditions and make informed decisions. It is important to note that leadership is not an innate quality; it can be developed and improved through training and practice [2, p. 37].

Thus, the results show that effective leadership not only increases team spirit, but also improves interaction between employees, coordination, and conflict resolution. The study demonstrates that leaders with strong leadership skills have a positive impact on the team, creating an atmosphere of trust and cooperation, which ultimately leads to improved team performance. Practical recommendations include developing leaders' motivational skills, stress management and emotional resilience, and implementing strategies to improve communication and team cohesion.

Leadership is not just a role or a position, it is a responsibility and a privilege. Leaders who understand the importance of their role and strive for continuous improvement can make a difference in the world. It is important to remember that each of us can become a leader in our field if we strive to develop and inspire others to achieve.

References:

- 1. The impact of leadership on team performance. URL: https://yur-gazeta.com/dumka-eksperta/vpliv-liderstva-na-efektivnist-roboti-komandi.html (accessed 05.11.2024).
- 2. Kopchak Y.S., Matveev M.E., Motorniuk U.I. Features of the influence of different leadership styles on enterprise management. Scientific notes of Vernadsky TNU. 2024. № 2. C. 33-39.
- 3. Leadership in the enterprise management system. Bulletin of Khmelnytsky National University. Economic Sciences. 2019. № 5. C. 184-187.
- 4. Research on the formation of an effective management team. Economy and society. 2021. Issue 25.

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BIG DATA APPLICATIONS IN CROP YIELD PREDICTION (ЗАСТОСУВАННЯ ВЕЛИКИХ ДАНИХ У ПРОГНОЗУВАННІ УРОЖАЙНОСТІ)

У публікації досліджується вплив баз даних на прогнозування врожайності, розглядається їх значення в сучасному сільському господарстві. Оскільки попит на продукти харчування зростає, інтеграція різноманітних джерел даних, таких як супутникові зображення, дані про погоду та показники стану ґрунту, стає життєво важливою для підвищення продуктивності. Були виділені передові методи аналітики, включаючи машинне навчання та статистичні моделі, які підвищують точність урожайності шляхом врахування факторів навколишнього середовища. Крім того, було розглянуто роль систем моніторингу в реальному часі з використанням датчиків Інтернету речей, що надає фермерам практичну інформацію.

Ключові слова: Бази данних, прогнозування врожайності, аналітика даних, машинне навчання, точне землеробство, супутникові зображення, датчики Інтернету речей, екологічні фактори, здоров'я ґрунту, моніторинг у реальному часі, системи підтримки прийняття рішень, історичні дані, стійкість сільського господарства, прогнозне моделювання, тематичні дослідження.

This publication explores the impact of big data on crop yield prediction, addressing its significance in modern agriculture. As food demand rises, the integration of diverse data sources, such as satellite imagery, weather data, and soil health metrics, becomes vital for improving productivity. There were highlighted advanced analytics techniques, including machine learning and statistical models, that enhance yield accuracy by considering environmental factors. Additionally, there was examined the role of real-time monitoring systems using IoT sensors, providing farmers with actionable insights.

Keywords: Big Data, Crop Yield Prediction, Data Analytics, Machine Learning, Precision Agriculture, Satellite Imagery, IoT Sensors, Environmental Factors, Soil Health, Real-time Monitoring, Decision Support Systems, Historical Data, Agricultural Sustainability, Predictive Modeling, Case Studies.

Data collection and integration are crucial steps in leveraging big data for crop yield prediction. This process involves gathering diverse datasets from multiple sources to create a comprehensive view of agricultural conditions. High-resolution satellite imagery provides valuable information on crop health, land use, and growth stages, allowing for monitoring changes in vegetation and assessing crop conditions. Accurate weather data, including temperature, precipitation, humidity, and wind speed, are essential for understanding how environmental