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## THE ROLE OF INNOVATIONAL TECHNOLOGY IN EMPLOYEE MOTIVATION AND RETENTION

Employee motivation is an essential factor for managerial consideration due to its paramount effect on the organizational productivity and durability of cooperation. One of the influencing reasons is the historical shift of employee status change from the labor force to individuals adding to the organizational value through their personal agenda. Managers do not solely acknowledge employee contributions but also their needs and goals. New factors, conditions, and expected trends can change the employee role even further.

Currently, companies start to recognize the importance of retention and invest in employee development. Even though it depends on the industry, companies have higher benefits from the long-term employee cooperation over searching for the new stuff. It includes additional costs in HR, marketing, education, and the time-consuming process of acquaintance with staff and responsibilities. That is why innovative technology and AI helps in employee relationships. The potential use incorporates the interface between the employer, employees, and the company's desired culture [1]. AI can give a unique competitive advantage, engage employees in the decision-making process and provide them with a qualitative reason to stay at the company.

One of the particular and recently developed technologies for simultaneous motivation and retention involves gamification. As it is understandable from the title, it aims at providing employees with the game interface during work.

Since games associate with:

- interest
- energy,
- challenges,
- competitiveness,
- real-time assignments,
- reward for the efforts,

it can have a direct relation to employee productivity.

Also, it gives freedom to the managerial imagination in motivating employees and assisting with goal attainment. They can design unique assignments and tasks correlating to the organization or department. As in the game industry, each one can have a specific structure differentiating it from the other. This way, employees can follow their progress in a specially designed application or program. The visual representation guides them through daily tasks and shows their immediate accomplishments. Employees can evaluate their contribution and productivity at a specific moment in time.

It substantially boosts motivation since employees can see how much is left till the desired goal or reward. It also diminished their contact with managers for the individual data progress. Instead of waiting for the monthly assessment or distracting the manager from other responsibilities, they can access the required data at any given moment. An important note is that employees can change their goals based on access to data. For instance, an employee plans to achieve a quantitative goal on sales. At the same time, a glance in the productivity log allows understanding that the qualitative goal is more attainable for this specific month. Without the data or its control, employees can unsuccessfully try to achieve the quantitative goal, while the actual data allows them to adapt to the situation while receiving benefits.

Another factor is that gamification can increase the connection between employees, which positively affects retention and motivation. Generally, people stay at a company longer when they have relationships with employees, prioritizing connection over the financial gain at another place. In turn, gamification allows the creation of a collaborative networking environment [2]. Not only do employees have shared leadership and common purposes, but they can also interact with each other due to the network engagement.

Relatedly, the personal interest in the game triggers individual motivation [2]. It enhances engagement, improves efficiency and effectiveness. On the practical side, the concept of gamification can support fundraising as achieved in real-life trials, including the case of IHobo launched by the homelessness charity Depaul [2]. Its results include increasing awareness of the issue while enjoying the high popularity of the platform. Employees can contribute to organizational productivity or to its social responsibility while collaborating in a comfortable, convenient, and informative prototype.

Moreover, gamification has application in employee learning and development. Its characteristics include:

- Flexibility time and content.
- Individual achievement rewards, badges, progress.
- Shared collaboration communication, support, leaderboards.
- Increasing levels of complexity help in overcoming obstacles.

Innovative technology provides a gradual guide through studying.

Research on its implementation in the education industry proves that it generates a conducive environment for learning and increases the perception of information [3]. Opportunities for learning and development range from monitoring progress and use to the prolonged memory of acquired knowledge. To sum up, with the development of market forces, trends, and technologies, managers use new applications in motivating and retaining employees. AI and gamification are suitable tools with unique capabilities to design prototypes according to organizational needs. Managers can use it for varying purposes, including developing existing employees or hiring new ones.

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## ВИКОРИСТАННЯ СИСТЕМ ШТУЧНОГО ІНТЕЛЕКТУ ДЛЯ ПРИЙНЯТТЯ УПРАВЛІНСЬКИХ РІШЕНЬ

Системи штучного інтелекту, за визначенням, орієнтовані на вчинення деяких «інтелектуальних» дій. В кінцевому підсумку, все різноманіття можливих їх практичних реалізацій переслідує дві мети: допомогти людині в прийнятті рішень або замінити її в певних ситуаціях. На сьогоднішній день системи штучного інтелекту в менеджменті використовуються для аналізу та моніторингу великих обсягів даних, в тому числі— аналізу асоціацій, кластерного аналізу, класифікації об'єктів, систем надання рекомендацій за прецедентами, а також в автоматизації рутинних операцій, системах попередження та розв'язання задач, що можуть бути автоматизовані.

Найбільш відомими прикладами використання систем штучного інтелекту в прийнятті рішень  $\epsilon$ :

- системи контекстуальної реклами, що базуються на алгоритмах прецедентного зв'язку та генерується системами інтелекту «на базі подібного» і тим самим збільшує ефективність сповіщень, оскільки кожен реципієнт отримує інформацію, що  $\varepsilon$  цікавою саме йому
- системи автоматичного розпізнавання та протидії щодо кібервторгнень, що дозволяють співробітникам відділів технологій та служб інформаційної безпеки своєчасно реагувати на ситуації, що вимагають якомога швидшого розв'язання. В окремих випадках такі системи можуть бути повністю автономними та взагалі не вимагати реакції адміністративного технічного персоналу
- системи прийняття рішень щодо узгодження-неузгодження рішень відносно надання фінансування, що використовуються в банківських та приватних фінансових установах та використовуються для обробки великого обсягу даних (кредитні історії, фактори ризику, обсяги доходів реципієнта)
- пошукові системи, що використовують штучний інтелект для контекстуального пошуку, а також пошуку за подібними запитами. В тому