

ISRG Journal of Economics, Business & Management (ISRGJEBM)



ISRG PUBLISHERS

Abbreviated Key Title: Isrg J Econ Bus Manag

ISSN: 2584-0916 (Online)

Journal homepage: <https://isrgpublishers.com/isrgjebm/>

Volume – II Issue - II (March – April) 2024

Frequency: Bimonthly



Innovative Application of Human Resource Management Based on Self Organizing DAO

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| Received: 09.04.2024 | Accepted: 13.04.2024 | Published: 16.04.2024

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Abstract

Self organizing DAO, as a new organizational form based on block chain technology and smart contracts, has the characteristics of decentralized decision-making, high transparency, and rapid motivation, making it suitable for changing traditional human resource management models. This article proposes three innovative application directions for human resource management based on self-organizing DAO: sustainable reward and incentive mechanisms, decentralized recruitment and selection, transparent performance evaluation, and feedback management. In terms of reward and incentive mechanisms, self-organizing DAO can use the token economy model to motivate employees' contributions and behaviors, establishing a fair and sustainable reward and incentive mechanism; In decentralized recruitment and selection, self-organizing DAO can achieve self certification and evaluation of candidates through smart contracts, reducing information asymmetry in the recruitment process, etc; In transparent and open performance evaluation and feedback management, self-organizing DAOs can establish a transparent and verifiable performance record system, and can also provide immediate and regular feedback through smart contract systems, ensuring that the evaluation and feedback results are fair, objective, and trustworthy. By studying these three innovative applications, we can further promote the efficiency and fairness of human resource management, and enhance the value creativity of modern organizations and employees.

Key Words: *self-organizing DAO human resource management innovation*

1. Introduction

Human resource management plays a crucial role in organizations, involving employee recruitment, training, performance evaluation, compensation and benefits, incentive mechanisms, and other aspects. However, with modernization and the emergence and

development of diversified organizational forms, human resource management requires higher flexibility and agility. Traditional human resource management methods have phenomena such as information asymmetry, centralized decision-making, and unreasonable incentive mechanisms, which greatly limit the

development and creativity of modern organizations and employees. With the development of blockchain technology and smart contracts, self-organizing DAO, as an emerging form of organization, has the advantages of decentralization and high transparency. self-organizing DAO can achieve equal participation and decision-making among participants, improving the fairness and transparency of decision-making. This makes self-organizing DAO a potential innovative application that can change traditional human resource management models, further promote the efficiency and fairness of human resource management, and enhance the value creativity of modern organizations and employees.

2. Overview of self-organizing DAO

2.1. The concept of self-organizing DAO

Self organizing DAO (Decentralized Autonomous Organization) is an organizational form based on blockchain technology and smart contract, which has the characteristics of Decentralized decision-making, decentralized authorization and automatic execution. The operational principle of self-organizing DAO is based on the automated execution of distributed ledgers and smart contracts using blockchain technology. Blockchain technology utilizes distributed nodes and encryption algorithms to ensure data security and transparency; A smart contract is an automated contract with preset conditions and execution logic, which utilizes code and algorithms to automate collaboration and decision-making.

Self organizing DAO has greater flexibility and innovation. It achieves more decentralized decision-making and management, reduces costs and risks in intermediate links, and improves organizational efficiency and transparency. Self organizing DAO has a wide range of application scenarios, including Sharing economy, community governance, public services, financial services, etc. Through self-organizing DAO, more just, open, and efficient organization and governance can be achieved.

2.2. The advantages of self-organizing DAO

Self organizing DAO has the advantages of decentralization and Decentralized decision-making, improving transparency and trust, increasing efficiency and automation, and common ownership and incentive mechanism. Self organizing DAO does not have a single central control structure, and participants can equally participate and influence the decision-making process. This decentralized organizational structure can improve the fairness and transparency of decision-making, reduce the risk of power abuse; Through blockchain based distributed ledgers, self-organizing DAOs record and publicly disclose all transactions and decisions, allowing anyone to view and verify them. This high level of transparency can increase trust among participants and reduce information asymmetry issues; Furthermore, self-organizing DAO utilizes smart contracts to achieve automated collaboration and decision-making processes, reducing human intermediate links and communication costs. Participants can vote and execute decisions through smart contracts, improving organizational efficiency and response speed; Self organizing DAO uses a token economy model to enable participants to jointly own the value and rights of the organization. This incentive mechanism can motivate participants' contributions and behaviors, and promote the development of the organization.

2.3. Disadvantages of self-organizing DAO

The current blockchain and smart contract technologies also face challenges in scalability, sustainability, and privacy protection, which limit the scale and scope of self-organized DAO

applications. In terms of governance and supervision, the Decentralized decision-making mechanism of self-organizing DAO may lead to lag and difficulties in decision-making. When facing complex decision-making and governance problems, how to achieve effective cooperation and consensus is still a challenge; At the same time, the decentralized structure of self-organizing DAO and the cryptocurrency economic model have also brought regulatory issues. Currently, regulatory agencies do not have clear regulations and standards on the legality and compliance of self-organizing DAO; The decision-making mechanism of self-organizing DAO may lead to the concentration of power in the hands of a few participants, thereby affecting the fairness of decision-making. How to balance efficiency and fairness in self-organizing DAO, ensuring the diversity and representativeness of participants, is a problem that needs to be solved.

3. Feasibility of Human Resource Management Based on Self Organizing DAO

Through self-organizing DAO's smart contracts and blockchain technology, a transparent and verifiable reward and incentive mechanism, decentralized recruitment and selection system, and performance evaluation and feedback management system can be established. Recruitment and selection, work and contribution of employees can be recorded and confirmed through smart contracts, and all data will be sent and recorded on the blockchain in the form of Cryptocurrency or token. In this way, the distribution of rewards, recruitment and selection, performance evaluation and feedback processes become open and transparent, which can avoid unfairness and tampering.

The mechanism of self-organizing DAO is based on the principles of consensus and decentralization, and employees can participate in the decision-making and evaluation of reward mechanisms, recruitment and selection, performance evaluation, and feedback processes. For example, employees can propose rewards and incentives, recruitment and selection, performance evaluation and feedback plans, and vote and make decisions through consensus mechanisms. This consensus based decision-making and evaluation mechanism can increase employee engagement, satisfaction, and sense of belonging, improve work motivation and performance, and ensure fairness and rationality.

The mechanism of self-organizing DAO can achieve automation of reward allocation, recruitment and selection, performance evaluation, and feedback management. Smart contracts can automatically distribute rewards to employees who meet the conditions based on predetermined rules, making the process of reward allocation and management efficient and accurate, reducing management manpower and costs; Smart contracts can also set a series of recruitment conditions and selection rules. When the candidate's information meets certain conditions, the smart contract will automatically perform the corresponding selection, greatly improving the efficiency of recruitment and selection, while also ensuring the fairness of the selection results. At the same time, in terms of performance evaluation and feedback, a series of performance indicators and evaluation rules can be set. When the employee's performance data meets certain conditions, The smart contract will automatically execute corresponding rewards or punishments.

In summary, it is feasible to apply the mechanism of self-organizing DAO to reward and incentive systems, recruitment and selection, as well as performance evaluation and feedback

management. By establishing transparent and verifiable mechanisms, consensus based decision-making and evaluation systems, and automated execution and management, more just, efficient, and satisfactory human resource management can be achieved.

4. Design of reward and incentive system based on self-organizing DAO

4.1. The role and challenges of reward and incentive systems in human resource management

Reward and incentive systems play an important role in human resource management, which can stimulate employees' work motivation and make them work harder and actively. Appropriate rewards and incentives can encourage employees to surpass themselves, pursue higher work standards and achievements; Employees receiving fair and reasonable rewards and incentives can increase their satisfaction with the organization, which helps to improve employee loyalty and retention rate, and attract and retain excellent talents; At the same time, reward and incentive systems can also stimulate employees' innovation ability and teamwork spirit. Through rewards and incentives, organizations can encourage employees to propose new ideas and solutions, as well as strengthen cross departmental and team cooperation. However, implementing an effective reward and incentive system also faces some challenges. For example, an effective reward and incentive system must consider issues of fairness and impartiality. Employees hope to receive fair and reasonable rewards without being influenced by personal preferences, subjective evaluations, or discriminatory factors. Therefore, ensuring the fairness of the reward and incentive system is an important challenge; There is also a need for reward and incentive systems to be consistent with the organization's goals and values. If reward and incentive measures are not consistent with the organization's goals and values, it may lead to dispersed or unstable employee motivation and performance. Individual differences and diversity should also be taken into account, as employees have differences in abilities, backgrounds, and motivations. Therefore, different reward and incentive mechanisms need to be designed to meet the needs of different employees, And the reward and incentive system needs to provide continuous motivation and motivation for employees to maintain their continuous and efficient performance. One-off rewards and incentives may not stimulate employees' long-term motivation, so it is necessary to design long-term effective reward mechanisms to maintain employees' continuous participation.

4.2. A Framework for Human Resources Reward and Incentive System Based on Self Organizing DAO

The design of reward and incentive systems based on self-organizing DAO needs to comprehensively consider frameworks such as token economy model, contribution evaluation, transparency and participation improvement, as well as reward cycle and liquidity. By designing and implementing these mechanisms reasonably, we aim to enhance employee participation and motivation, and further promote organizational innovation and development.

Design of token economy model. The token economy model refers to the economic system framework and rules constructed for a specific token, which involves the design of token supply, allocation mechanism, use, incentive mechanism, consumption mechanism, governance mechanism, and circulation policy; By reasonably designing the token economic model, employees can be

encouraged to actively participate in and hold tokens, maintain the Scarcity and value of tokens, and promote the development of the organization. The reward and incentive system for self-organizing DAO can be designed based on the token economy model, introducing tokens as incentive units in the system. Employees can obtain tokens as rewards through contributions and behaviors. Tokens can have value, such as being convertible into currency or used to purchase products and services, to increase employee engagement and motivation.

Contribution evaluation design. Contribution evaluation design refers to an evaluation mechanism developed to motivate employees to actively participate in projects or platforms. This evaluation mechanism can be used to determine the degree of employee contribution to the entire ecosystem and provide corresponding rewards or benefits based on the degree of contribution. In order to ensure the fairness of rewards and incentives, self-organizing DAOs need to design a contribution evaluation mechanism that can evaluate employees' work performance, innovation ability, contribution, and other factors to determine the rewards and incentives that employees should receive.

Improved transparency and participation. The reward and incentive system of self-organizing DAO needs to have transparency and credibility to increase employee participation and trust. Transparency refers to the level of openness and sharing of information in the decision-making and operational processes of an organization. Transparency can establish employees' trust in the organization because they can understand the decision-making principles, resource allocation, and operational situation of the organization. Self organizing DAO formulates rules and conditions for reward and incentive mechanisms through smart contracts, using blockchain as a distributed and tamper proof "ledger" to record all reward and incentive transactions, and involving employees in the entire decision-making process of task allocation, reward allocation, etc., giving employees equal control over organizational operations and results. This transparency and participation enhancement mechanism, This enables employees to have a clear understanding of the standards and rules for rewards and incentives, and to view their contributions and rewards at any time, greatly enhancing the credibility of the organization and motivating employees to actively participate and contribute.

Reward cycle and liquidity. A shorter reward cycle can motivate employees to participate more frequently in activities or projects, as they can receive recognition and rewards faster; However, the reward cycle should also balance employees' actions and actual contributions to avoid excessively frequent rewards leading to unsustainable economic models. Reward tokens with high liquidity allow employees to freely buy, sell, exchange, or transfer rewards, improving the flexibility and practicality of rewards. This not only provides employees with the value of receiving rewards, but also economically motivates them to participate and contribute more actively. The reward and incentive system for self-organizing DAO should be designed with a reasonable reward cycle and liquidity based on the actual situation. Rewards can be periodic, such as every month or quarter, to motivate employees to continuously perform well. In addition, considering the liquidity of tokens, employees should be able to convert them into other currencies or use them to purchase goods and services at any time.

5. Innovative application of recruitment and selection based on

self-organizing DAO

5.1. The problems and challenges faced in traditional recruitment and selection processes

Traditional recruitment and selection processes face many problems and challenges, such as high time and cost, unequal information, subjective bias, inability to ensure fairness, difficulty in quantification and standardization, etc. The traditional recruitment and selection process usually requires a lot of time and manpower, from posting positions, screening resumes, to interviews, hiring, the entire process is time-consuming and resource intensive; Unequal information between recruiters and job seekers may lead to unsatisfactory recruitment results. For example, job seekers may find it difficult to fully understand the specific requirements and work environment of the position, while recruiters may also find it difficult to fully understand the abilities and experiences of job seekers; The traditional selection process mainly relies on the professional abilities of the interviewer, and the subjective bias of the interviewer may affect the selection results. For example, interviewers may be influenced by irrelevant factors such as the candidate's appearance, gender, age, race, etc., while neglecting their true abilities and potential; Due to various reasons, fairness may not be guaranteed in the traditional recruitment and selection process. For example, some companies may have internal referrals or network relationships, which may prevent some excellent job seekers from obtaining fair opportunities; Due to the lack of quantitative and standardized means, the traditional recruitment and selection process has become more difficult to evaluate and compare the abilities of job seekers, and if there is discrimination or unfairness in the recruitment and selection process, it may pose legal risks.

5.2. Innovative application plan for recruitment and selection based on self-organizing DAO

By utilizing blockchain technology and smart contracts through self-organizing DAO, a decentralized, fair, transparent, and fully autonomous recruitment and selection process can be achieved, while also improving efficiency and reducing costs.

Decentralized job posting application. Through self-organizing DAO, any member can propose job requirements and decide whether to publish them through community voting. This approach ensures that all positions are based on the true needs of the organization, rather than being determined by a few people.

Transparent application process application. The application of transparent application process aims to provide real-time feedback and transparent evaluation process for candidate applications. It ensures that the rights and interests of candidates are respected in the recruitment and selection process, reduces discrimination and unfair treatment, and increases transparency and trust between the organization and candidates. Job seekers can view and apply for positions on the DAO platform. Their application information will be recorded on the blockchain and can be viewed by everyone, ensuring the transparency and openness of the application process.

Automated screening process application. The application of automated screening process includes job data collection and organization, requirement keyword matching, screening criteria setting, automatic screening anchoring, prediction and comprehensive scoring, result output and visualization, etc. Through smart contracts, self-organizing DAO can automatically filter out applicants who meet the job requirements. This method not only improves screening efficiency but also avoids human bias.

The application of full participation in the interview process. The application of full participation in the interview process includes candidate evaluation, interview training and arrangement, interview feedback and evaluation decision-making, candidate notification, and other processes. Self organizing DAO can invite community members to participate in the interview process and decide whether to hire applicants through voting. This approach can ensure fairness in the selection process and also enable community members to participate more in organizational decision-making.

Reward distribution application for smart contracts. The reward distribution application of smart contracts includes reward condition setting, reward information recording, data self inspection, automatic reward distribution, reward log recording, and reward query management. If applicants are hired, they will receive rewards through smart contracts. This method can ensure the timely and accurate distribution of rewards.

6. Performance evaluation and feedback application based on self-organizing DAO

6.1. The problems and limitations faced by traditional performance evaluation and feedback

Traditional performance evaluation and feedback have problems and limitations such as subjectivity, time delay, lack of participation, goal bias, and lack of feedback mechanisms. Firstly, traditional performance evaluation often relies on the subjective evaluation of employees by supervisors or superiors. Supervisors or superiors may have personal biases, subjective judgments, and preferences, which may result in inaccurate and unfair evaluation results, affecting employees' motivation and motivation; Secondly, traditional performance evaluation is usually an annual or semi-annual process, and the evaluation results only receive feedback after a certain period of time. This delay may result in employees not being able to timely understand their performance and adjust and improve their work methods; The third traditional performance evaluation is usually handled by the management or personnel department, and the participation of employees in the evaluation process is low, resulting in employees being unable to effectively participate in the formulation of evaluation standards and the design of feedback mechanisms, and unable to express their opinions and opinions; The fourth traditional performance evaluation usually focuses on the individual performance of employees, neglecting the contribution of team collaboration and overall performance, which may lead to employees sacrificing team cooperation and the pursuit of overall goals for personal performance, affecting the effectiveness of team cooperation; Finally, traditional performance evaluations typically focus only on results and overlook feedback on processes and development opportunities. This may make it difficult for employees to understand their growth space and improvement direction, limiting their development and potential release.

6.2. Innovative Application of Performance Evaluation and Feedback Based on Self Organizing DAO

Self organizing DAO can be better applied to performance evaluation and feedback, improving the fairness, accuracy, and participation of evaluation. This evaluation method based on blockchain and smart contracts can break the limitations of traditional evaluation, create a more open, fair, and balanced evaluation system, and promote the growth and development of individuals and teams.

Comprehensive governance evaluation mechanism. Through self-organizing DAO, all staff can Co-determination evaluation standards and methods, and formulate rules and procedures for performance evaluation through voting, discussion and consensus. This can ensure the fairness and accuracy of the evaluation process, and enable members to participate in the decision-making process, enhancing their sense of participation and identification.

Real time data recording and feedback. Through blockchain technology, self-organizing DAO can record the work performance and contributions of members in real-time, such as task completion, contribution, participation, etc. This can provide real-time feedback to members, help them understand their performance, and make adjustments and improvements based on the feedback.

Reward application based on smart contracts. Automatically distribute rewards through smart contracts, providing fair and accurate rewards to members based on performance evaluation results. Rewards can be allocated based on pre-set evaluation criteria and performance results to avoid the impact of subjective factors on rewards.

Transparent and open feedback on evaluation results. The evaluation results of self-organizing DAO are transparent and open to all members. Members can view their own and other members' evaluation results, jointly supervise and evaluate, and reduce information asymmetry and unfairness. Transparent and open evaluation results also help motivate members to strive for better performance.

Feedback loop and continuous improvement application. The flexibility and quick decision-making ability of self-organizing DAO allow members to quickly adjust and improve their work methods. Performance evaluation and feedback should be seen as a cyclical process, where members can continuously receive feedback and improve, promoting the continuous growth of individuals and teams.

Multidimensional evaluation application. Traditional performance evaluation usually only focuses on the completion of work results and goals, while neglecting other important performance indicators such as teamwork, innovation ability, learning ability, etc. Performance evaluation based on self-organizing DAO can comprehensively consider multiple dimensions and evaluate the performance of members.

Application of data-driven evaluation decision-making. Performance evaluation based on self-organizing DAO can utilize data analysis and data-driven methods to evaluate the performance of members based on a large amount of work data and indicators. This can reduce the influence of subjective factors and improve the objectivity and accuracy of the evaluation.

7. Conclusion

The innovative application of human resource management based on self-organizing DAO can break traditional human resource management models and limitations, and achieve more fair, just, and efficient human resource management. This will greatly promote the development and efficiency of the organization, achieve increased employee participation and satisfaction, and bring more opportunities and possibilities for the organization and employees through the innovative application of human resource management based on self-organizing DAO. At the same time, it also brings more challenges and risks. Therefore, organizations need to fully understand and prepare, gradually explore and implement, in order to truly realize the value and potential of

innovative applications of human resource management based on self-organizing DAO.

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