

Human Resources Management with Blockchain

NAME OF STUDENT: AU YEUNG YAT HEI

STUDENT NUMBER:2227329

Blockchain technology

- ▶ Consist of many “blocks” of data “created” with time sequences.
[1]Madhani P. (2022)
- ▶ The “blocks” order cannot be changed.
- ▶ Each of “block” is verified by cryptographic digital signatures [2]Balon B., Kalinowski K. and Paprocka I. (2022) p.2

Blockchain - Characteristics

- ▶ Decentralized- by means of consensus algorithms
- ▶ Durability – verify each transactions
- ▶ Anonymity – each user is assigned an authority to confirm the transaction
- ▶ Audibility – able to verify the previous data
- ▶ Transparency – availability to users
- ▶ Security – avoid fraud
- ▶ Invariability – cannot changed saved data

[2] Balon B., Kalinowski K. and Paprocka I. (2022) p.2

HR – Innovation with application of Blockchain

(Wang Tao(2022) p.3)

- ▶ Create new platform to link up various parties:
- ▶ Jobseekers
- ▶ Enterprise
- ▶ Government
- ▶ Cooperative partners

[3](Wang Tao(2022) p.3)

Blockchain structure

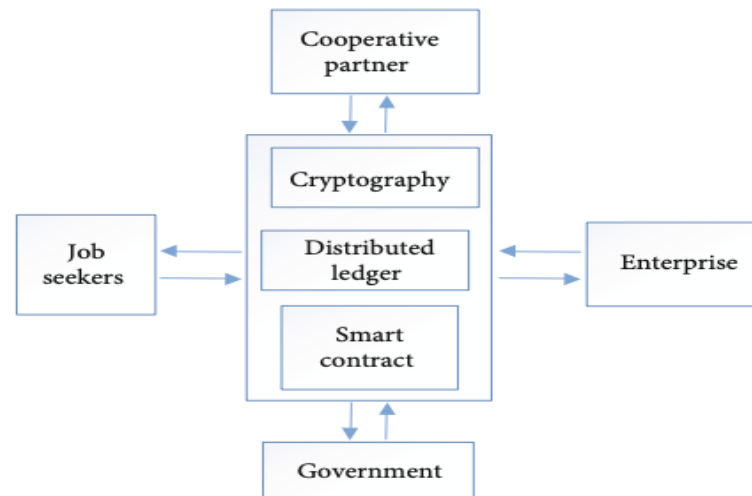


FIGURE 1: Blockchain-based HR services platform.

[3]Wang Tao (2016)p.3

Which HR function can be done by Blockchain

- ▶ Recruitment
- ▶ Payroll
- ▶ Employee data
- ▶ Smart Contracts
- ▶ Compliance and Regulations
- ▶ Security

[4] Eliacik E. (2022)

Benefits

5 promising uses for blockchain in HR

Blockchain's distributed ledger technology lets multiple parties share trusted data and execute transactions securely without a middleman, which makes it ideal for common HR processes.



Payroll

Easier identity verification and direct mobile payment facilitate cross-border payments to vendors, contractors and "unbanked" gig economy workers.



Recruitment

Tokenized candidate identities and virtual credentials such as transcripts and resumes reduce paperwork and speed background checks.



Employee data

Records can't easily be altered, which adds a layer of security that could minimize internal fraud and external hacks.



Contract management

Smart contracts could help enforce employment agreements and automate benefits administration.



Personal blockchains

Employees could carry blockchains that document their professional identities to each new employer.

[5](NEC And PERSOL CAREER Start PoC Of Recruitment Service For International IT Engineers Using Blockchain Technology (HRTech News Desk, 2020))

Case - NEC

- ▶ Using blockchain Technology for recruitment
- ▶ Main features:
 - ▶ Evaluating Skills
 - ▶ Streamline the recruiting process
 - ▶ Make sure required skills from candidate can be spotted

[5](NEC And PERSOL CAREER Start PoC Of Recruitment Service For International IT Engineers Using Blockchain Technology (HRTech News Desk, 2020))

Case - NEC



Overview of the new direct recruiting service

[5] HRTech News Desk, (2020)

Conclusion

- ▶ Cost effective
- ▶ More accurate talent matching
- ▶ Less time consuming screening [8] Li L. and Zheng Huimin and Dong Yinhong (2021)
- ▶ Less chance of false academic information of candidate [8] Li L. and Zheng Huimin and Dong Yinhong (2021)
- ▶ Less manual error
- ▶ Minimize bias
- ▶ Trust [6]Madhani P. (2022)

Reference list / Bibliography

1. Madhani P. (2022) *Blockchain Applications in HR: Key Advantages available* at : https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4104409 (Assessed: 15th November, 2022)
2. Balon B., Kalinowski K. and Paprocka I. (2022) *Application of Blockchain Technology in Production Scheduling and Management of Human Resources Competencies*
3. Wang T. (2016) "The Innovative Use of Blockchain in the HR Services Industry", *A Study on the Innovative Use of Blockchain in the Human Resources Service Industry*, pp.3
4. Eliacik Eray (2022) *Is HR ready for Blockchain available* at : <https://dataconomy.com/2022/06/blockchain-in-hr/#Conclusion> (Assessed: 18th November, 2022)
5. HRTech News Desk, (2020) *NEC and Technology Available* at : <https://techrseries.com/recruitment-and-on-boarding/nec-and-persol-career-start-poc-of-recruitment-service-for-international-it-engineers-using-blockchain-technology/> (Accessed: 20th November, 2022)
6. Madhani P. (2022) *Enhancing HR Performance with the Application of Blockchain available* at : https://www.researchgate.net/profile/Dr-Pankaj-Madhani/publication/363135581_Enhancing_HR_Performance_with_the_Application_of_Blockchain/links/630f1d80acd814437fef3f1d/Enhancing-HR-Performance-with-the-Application-of-Blockchain.pdf (Assessed: 18th November, 2022)
7. Baker P. (2021) *Blockchain HR technology: 5 use cases impacting human resources Available* at: <https://www.techtarget.com/searchhrsoftware/tip/Blockchain-HR-technology-5-use-cases-impacting-human-resources> (Assessed: 20th November, 2022)
8. Li L. and Zheng HuiMin and Dong Yinhong (2021) *Mechanism Construction of Human Resource Management based on Blockchain Technology available* at <https://www.degruyter.com/document/doi/10.21078/JSSI-2021-310-11/html> (Assessed : 15th November 2022)
9. Human Resource *Management Implications of Blockchain Technology (2022) Available* at <https://www.onrec.com/news/news-archive/human-resource-management-implications-of-blockchain-technology> (Assessed : 24th November 2022)

The End

