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Blockchain Technology in Screening Process as part of Human Resource Management

UNDERSTANDING THE BENEFIT OF BLOCKCHAIN IN
SCREENING PROCESS

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Management**

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Management*

Understanding the Benefit of Blockchain in Screening Process

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Preface

First of all, I would like to thank God Almighty, for His permission and grace, I was able to finish this paper on time and there were no significant obstacles. Gratitude my thank also to my family for the support and love also to Pamungkas (singer) for the good songs that company me to finish this research. The researcher also expresses many thanks to the parties who have helped the process of making this paper to completion that is Mr. Stefan Schenke as my supervisor and Mrs. Bettine Bergmans as my lecture for this course. This paper was written to fulfill assignments from the research advisory and report subject as one of the requirements to graduate from Saxion University of Applied Science.

The researcher realizes that this paper is still not perfect, for that I really hope for criticism and suggestions that can make the research afterwards even better. Finally, I hope this paper can be useful and add insight to the general readers.

Thank you

Farids Ramadhan

Abstract

This research discusses Blockchain Technology in Screening Process as part of Human Resource Management, also discusses the advantages and disadvantages of Blockchain technology in Human Resource Management. The main purpose of this study is to see the impact of using Blockchain Technology in the Process Screening. This study used descriptive qualitative method. Data collection was carried out using collection techniques with documents from relevant previous studies so that they could answer the objectives of this study. The results of this study prove that Blockchain technology is a new technology that can provide various benefits in the Screening Process, such as saving time, energy and funds, credential verification, and employment history. Then the second result shows that there is a limitation in Blockchain, namely the absence of specific laws governing the use of Blockchain in Indonesia, and this technology is still not supported by several computer systems.

Keywords: Blockchain, Human Resource Management, Screening Process

1. INTRODUCTION

The development of technology in this era is developing rapidly, supported by many technologies along with the new idea development process. Blockchain technology is one of the fastest growing applications for keeping financial transactions and property records safe. Blockchain technology's security features are so strong that other companies have started researching them to ensure that their systems and documents are stable. The Blockchain provides immutable records, after which transactions are entered into the database and the records cannot be changed. At the most basic level, Blockchain technology allows a community of users to have access to shared information in a secure manner. Just like the internet, Blockchain as a whole is not owned or controlled by one person (Mamoria, 2017).

Blockchain platforms can be divided into public and private alliance chains (Kosha et al., 2016 cited in Sakho et al., 2019). Now, Companies are not only using blockchain to improve their systems but also to solve company problems. Blockchain can be integrated into many sectors and processes such as finance, logistics, and food industry including human resource management. According to Melanie Swan, founder of the Blockchain Science Institute, blockchain technology can consist of three phrases 1.0 for currency, 2.0 for contracts and 3.0 for science, health, government, literacy, culture and arts (Swan, 2015 cited in Sakho et. Al., 2019). Thus, blockchain 3.0 is being popularly used for non-finance but across all functions, businesses and industries. The blockchain is a growing list of documents, called blocks that are linked using cryptography.

The importance of human resource to every organization cannot be denied. It becomes the pillar of any successful organization. Managing employees in the organization is not an easy thing. It is because employees are view as a key resource that can attain competitive advantage. Indeed, the employees are the greatest asset of the organization as they are the most reliable resource that can keep away an organization from its rivals. By definition, human resource management (HRM or HR) is a systematic approach to the management of successful employees in a company or organization to

help them achieve a competitive advantage in their market (Human Resource Management, 2021).

Blockchain has the ability to revolutionize the way Human Resources professionals recruit, track payroll, and train employees. It also includes "smart contracts" that streamline daily routine tasks. In human resource management professionals and experts expect it to interfere with the way of fulfilling responsibilities and professionals and experts expect it to interfere with the way of fulfilling customary responsibilities and duties. Not only will it create a fully verified and impartial recruitment process, but it will also streamline daily activities such as payroll and training. problems that arise from time to time in the organizational cycle, there are deficiencies in every company process and of course the management tries to resolve and improve the process and one of the main problems of the company is in the process of managing human resources. The potential use of blockchain is to examine and evaluate candidate credentials preparation, capabilities and efficiency, and their contribution to HR assignments (PwC, 2017). With blockchain it also helps process the information and data needed efficiently. Blockchain helps to process the information and data needed by each party so that the connection between parties will be assisted efficiently and effectively. (Hussain, 2020).

Human resource management covers a very large variety of activities across a wide variety of jobs, organizational levels, corporate business units, industry, and society. A big role like this also places an important role carried out by this department. This paper focuses on the process of recruiting or selecting new employees to be more efficient, which provides a good economic element. (Hamilton & Davison, 2018) HR must employ employees who have extraordinary skills and tacit understanding but who will also be able to adapt to organizational culture and systems. One of the employee recruitment processes is a screening process or selection documents and begins when a recruiter is looking for new employees.

Adaptation of blockchain in the system or process becomes a good company path, the screening process of recruitment steps is important for recruiters, they need to find job applicant documents accurately and ensure they are valid, and in this way the blockchain can play a role to help the screening process faster, more precise. And valid. With blockchain technology, HRM can enjoy one of the most secure technologies that can streamline work procedures and give more time to solve problems and communicate with stakeholders. Blockchain technology can help in hiring to save cost of communication and logistic for the purpose of verification, with ready reference and variable CV of the candidates (Hegadekatti, 2018).

This paper provides research on blockchain implementation in the recruitment process for human resource management (HRM) processes in organizations. The recruitment process itself contains the stages of recruiting employees and this paper looks specifically at the screening process. Alternate definitions of the term "screening," such as "material separated from another material by means of a screen" or "metal or plastic mesh (as for window screens)," are applicable to the process you use to find the right candidate for the right job. This is expected to provide solutions to company recruiters so that the recruitment process becomes more efficient, faster and more transparent. Furthermore, this study is aimed at the element of efficiency in the field of financial and economic studies.

1.1 Problem Description

The using of blockchain as a technology in this digital era is very massive, lot of big company start to using blockchain to synergize with the process of the company. Many companies which started to implement blockchain technologies firstly used services from consultancy companies that are established with the purpose to help organizations in those implementations (for example Accenture, IBM, KPMG, Microsoft, Consensus, Chainsmiths) (Lukić, Salkić, & Ostojić, 2018). Blockchain can be a solution of the problem in the new world of technology, even its give complicated process but a good problem solver for the company. With many practical applications for the technology already being implemented and explored, blockchain is finally

making a name for itself at age twenty-seven, in no small part because of bitcoin and cryptocurrency. As a buzzword on the tongue of every investor in the nation, blockchain stands to make business and government operations more accurate, efficient, secure, and cheap with fewer middlemen.

Human Resources (HR) nowadays generally faces various difficulties in the world internet era and spends a lot of time of connecting, screening, and verifying the resume of applicants, conducting credentials verifications, and checking backgrounds to reduce the likelihood of poor recruitment. (Yung, Fong, & Tripathi, 2020). A recent survey by CareerBuilder revealed that 58% of employers had found false information on CVs they had received at one time or another. Ensuring the quality of this kind of information is now one of the most time-consuming challenges for human resources (HR) departments. For example, recruiters connect the profile of candidates from different channel such as direct application, recruitment agency, and social media and hiring resume verification is therefore a bottleneck (Yung, Fong, & Tripathi, 2020). Supporting the above statement, a journal from (Lukić, Salkić, & Ostojić, 2018) stated that, blockchain has the potential to reshape and completely transform business strategies and operating models of the companies. It can be used to increase efficiency of global supply chains, financial operations, asset ledgers, social networking, human resources, production, research and development, etc. Furthermore, blockchain may be used in activities that are time-consuming, repetitive in their nature and/or involve much human effort and cost.

A study of 344,250 interviews in six Glass door demonstrates that recruitment is a time-consuming method in which work interviews are prolonging (3.3 days to 3.7 days since 2009), complex interviews and background checks for employees (Chamberlain, 2015). A good recruitment process can minimize the time involved in the searching, interviewing, hiring and training. By evaluating time for the recruitment process, this also has an impact on costs that can be cut and transferred to other technical and administrative sectors. In addition to minimizing time, companies must also comply with the privacy policy regarding personal data attached by prospective employees during the recruitment process so that data misuse as regulated in Law Number 19 of 2016 can be

avoided. It can streamline these processes and make your search for viable candidates much more efficient. Good recruitment process must go through several stages, until the election of employee candidates that closely matches the needs of the company. Chungyalpa and Karisma cites in (Azmy, 2019) explained that recruitment process starts from job analysis, manpower planning, and process of recruitment & selection. Job analysis is a preliminary process in which the company conducts an investigation to determine the type of job and qualifications required to complete job process. This process will determine other stages such as training, development, performance appraisal, and career systems. Therefore, job analysis will serve as basis for the decision to determine characteristics and needs of the candidate's capacity to be recruited in accordance with the achievement of job target by company.

This research is involving the human resource department (recruiter) with the new employee (job applicant), the problem that arising from the recruiting process giving the motivation of this research is conduct. The problem of recruiting is worthy to research because as we know an organization is still recruiting new employee until this day and will continuously walking to develop and upgrade the organization itself whereas the company wanted the recruiter become efficient, low cost, and fast and get the best benefits for the company. Recruitment and selection are one of the most important things in a company because this process involves the selection and placement of the most appropriate employees among the best for the continuity of the company's activities in creating company value (Rhemananda, Simbolon, & Fachrunnisa, 2020).

1.2 Research Question

Problem: The hiring process consume lot of time and data from the applicant not sure to be valid

Objective: To increase effectiveness in hiring a new employee with valid information that makes a good decision for the recruiter

Main question:

- Does Blockchain technology actually giving impact on the screening process?

Sub question:

- Does blockchain giving a specific benefit for the recruiting process?
- Does a company need adopt Blockchain technology in their recruiting process?
- In what section of recruiting should need be improve?

1.3 Research Methodology

The paper is going to answer all of the research questions based on conducting a substantial literature review on blockchain in human resource management. A literature review is a survey of scholarly sources on a specific topic. It provides an overview of current knowledge, allowing you to identify relevant theories, methods, and gaps in the existing research (McCombes, 2020). By means of content analysis, this paper has analyzed relevant materials in range of media. To conduct this research, we look in a range of media such as:

- Books (Handbook of recycling techniques);
- Articles from Journals (Greenfile (provided by EBSCO); Journal of Environmental Management; Journal of Environmental Engineering; Journal of Agricultural and Resource Economics etc.);
- Websites;
- Newspapers and magazine articles (for example, Environmental and Resource Economics).

Identification of key words

In order to support this research to finding the answer, the following key words have been used in various combinations:

- Human resource management
- Recruiting process
- Screening process
- Blockchain
- Advantage using blockchain
- Recruiting issues and problem
- Implementation of blockchain

Selection of search engine

The following search engines have been used to identify abstract summaries of relevant articles:

- Scopus
- Science direct
- Google Scholar
- Web of Science
- Google

1.3.1 Research Design

The purpose of this study is to see the implementation blockchain in recruiting process in human resource management whether its benefit or not into the process. Furthermore, this research using descriptive research because it is trying to gaining an accurate view of certain topic. Finally, this research will give impact to the recruiter or management to be used as a data and answer all the main question of the research.

1.3.2 Research Approach and methods

This research is qualitative data research that expressed in words. To support the question and the data, this research is using secondary data that already exist by applying existing knowledge to solve the problem and to look deeper about the question of this

research. The using of critical literature review and archival research will be the foundation of this research. Furthermore, to supporting the argument and the findings the evidence can take from the scientific journal, professional article and etc.

1.3.3 Data collection Method

The data collection will use the literature by using previous studies and research can help this research to find the answer. More ever, it can be developed to the instrument that can lead to observation list and questions or topic list and taking the source from the paper collections or research database.



2. Theoretical Framework

In this chapter, the writer will connect relevant theories to the topic of this research, with the hope of deepening our knowledge of the main question that the author is trying to find answers to.

2.1 Fundamentals of Human Resources Management (HRM)

If you look at how advanced technology and knowledge are in Human Resources Management which involves managing the workforce today, everything will be inversely proportional if we go back to the beginning of human history. The function of HRM as it is practiced today in modern business organizations emerged in the late nineteenth century more or less at the same time in England, France, Germany, and the United States. Then in the Asian region, Japan underwent a very similar development a decade later.

At that time HRM did not require a formal human resources department or other specialized staff to carry out the procedure. This was the setting that was practiced in most enterprises of the late nineteenth to early twentieth centuries, even in the large size of factories and mills that employed several thousand people. The functions of HRM include recruitment, training, compensation, and discipline / termination which are carried out by alternative means. Considerable dependence is placed on the labor market, for example, setting salary rates and providing motivation for hard work (through threats of layoffs and unemployment), while other HRM functions are performed by factory owners or managers or delegated to foremen and internal contractors.

Starting around the 1890s, a number of companies began to provide a variety of attractive workplace facilities designated for families and employees, such as a lunch room, medical care, recreational programs, libraries, company magazines, and company-provided housing (Eilbirt 1959; Gospel 1992; Spencer 1984). Enterprises from the German state were the pioneers in welfare work in the nineteenth century; furthermore, employers in all industrialized countries participated. The impact of this HRM raises the

function of labor management; this is written in professional writings about business organizations written by engineers. Initially these engineers were assigned to increase the production of goods with the principles of science that they mastered, to increase the efficiency of the business product system. Then they are appointed to consider improvements in the production side of 'people' including employee selection, job assignments, supervision, work speed, and compensation.

The new department is a mix of work and services from the HRM function. At the beginning of practice, many new companies dissolved this personnel department as a form of cost savings and employee turnover, because at the beginning of the formation and implementation of this new departmental idea, many employees still did not understand the work they held and there were still no permanent work rules governing them. the performance of the HRM.

The development of HRM in other countries in the 1920s was much slower, and less strategic, especially in underdeveloped and developing countries. Even in developed countries, HRM development has lagged behind. This is all due to the impact of the production boom from World War 2 that is currently happening. Japan is a country outside America and Europe that seems to have made significant progress in HRM practices in their industrialized world.

Until the 1950s HRM was intended to be part of industrial relations, but after 1960 this shifted to a narrower focus on trade unions and the relationship between workers and management, and HRM had a functional part of employee management. Over the next twenty years or so, the terms personnel management and human resource management mostly appeared and were used interchangeably, although some believed that HRM had a more sophisticated formula and had a broader concept of people management functions.

The development of HRM so far has had many obstacles and shortcomings, some of which still exist today. When compared to several other fields, such as marketing, finance, and accounting, HRM often ranks lower. This is due to various factors such as

strategic interests, company investment, and the professional status of the organization. What can be observed also, there are several companies that pay more attention to HRM because they consider people development very important for the progress of their company, there are also those that significantly reduce the amount of their investment in this department and focus more on tactical, administrative, and strategic management work. Another way that focuses on costs.

Major challenges for recruitment, as identified by several studies are: fake information, inefficient promotion and salary management, false reference and break of contract information between employee and employers and finally wrong recruitment. Software security flaws and financial data tampering are another key concern; there were even several cases of demanding ransom by hackers from the attacked human resources organizations. (Seymour, 2017)

In modern times like today, HRM is also related to humans as a resource and organizational culture that is concerned with the values, norms and beliefs of people in the organization (Machdo, 2016). Just as people and culture cannot be separated, as an individual who carries their respective cultures in a company or organization, HRM plays an important role in uniting and developing each of these cultures into a work culture that does not conflict with each other so as to produce a work habit. Positive ones in accordance with the work program being carried out.

There is a 'human link' between organizational culture and HRM issues as seen the definition of culture put forward by Hofstede defines culture as: "Culture is the collective programming of the human mind that distinguishes the members of one human group from those of another. Culture in this sense is a system of collectively held values "is contrasted with Armstrong's.(Machdo, 2016).

Focus of HRM on "the people working here who individually and collectively contribute to the achievement of its objectives". Managing employees of any organization or company is an area of Human Resource Management, where the values, beliefs and behaviors of employees share are called organizational culture. So that HRM

occupies an important special war, one of which is to develop the organizational culture that has been brought by each individual. An organizational culture that creates a work culture indirectly, but clearly feels that it can advance the performance of employees to work hard for the sake of advancing the company which also has an impact on the income and profits of the company itself. Culture isn't only seen in light of organization success, it also is seen as the cause of business. (Machado, 2018)

Armstrong's in his book said that HRM was defined by Boxall and Purcell (2003; 1) as all those activities associated with the management of employment relationship in the firm. He also noted that Human resources include the knowledge, skills, networks and energies of people and, underpinning them, their physical and emotional health, intellectual capabilities, personalities and motivations. (Armstrong, 2016). However HRM is not simply there to solve problems. It can be considered as philosophy about the ways in which people are managed at work that is underpinned by a number of theories relating to the behavior of people and organizations. (Armstrong, 2016).

2.2 Screening process

Screening has an alternate definition of the term "screening", such as "material being separated from another material through a screen" or "metal or plastic mesh (such as for window screens)," applies to the processes you use to find the right candidate for the right job. This is expected to provide solutions for corporate recruiters so that the recruitment process becomes more efficient, faster and more transparent. Furthermore, this study is aimed at the element of efficiency in the field of financial and economic studies. Screening stage aims to investigate from several candidates through job application letter, Curriculum Vitae, work experience, education level, and compatibility of competence with job position. (Azmy, 2019)

Those selected after the assessment center screening are further invited for an in-house interview with HR and senior managers. In all levels of assessments, the companies assess applicants for attitude and the soft skills required to perform well. Finally, successful interviewees are offered employment with the companies. (Machdo,

2016). With the screening process, it makes it easier for HRM to be able to choose the right person to hire, and to be able to go through the next process.

Nowadays there are many methods used for this screening process, not only from seeing the valid documents that applicants bring such as CVs, resumes or other supporting documents, but also online screening methods or telephone screening which can make it easier for Managers to start the recruitment process even though participants is out of town. Of course, online screening cannot replace the importance of face-to-face interviews and other processes. (Zeuch, 2016).

2.3 Blockchain

When Blockchain technology began to exist, the first application that was tested on the platform was Bitcoin. Because Bitcoin was the first application on the Blockchain technology, one might say that Bitcoin is Blockchain. However, Blockchain is not Bitcoin. Blockchain is so complex that, still, there are very few human beings who understand each part of it. In fact, Blockchain is so complicated that we (Humans) keep on finding more and more ideas that this technology can solve every day

We could say that Blockchain is solving problems. However, for some large Financial Organizations, it's causing certain issues. Some of these matters, of course, are getting addressed and if you keep up with the news, you realize that more and more companies are beginning to use Blockchain Technology for many purposes.

The Blockchain is truly revolutionary, as it's not for solving just one issue for some people, but can fix many problems for everyone. It has re-invented the financial institution, and the proof of that is simply because Blockchain is running and has existed for nine years already, beginning in 2008. The blockchain is a globally distributed database that is completely decentralized, meaning it has no boss, or someone that we could blame or award. It is running on all computers, and it's unstoppable

The Blockchain is built up from multiple blocks that are un-replaceable. (Soze, 2017) Therefore, its chain system represents the single source of truth. Once there is a new

block created and added to the existing blockchain, it replicates itself on its system, which resides on the internet, then just synchronizes the same details on all the computers that are running blockchain. This replication is what makes it un-replaceable. Therefore, it provides full transparency in all administration. Because there is no human intervention in the process of adding and further expanding when new blocks are created every 10 minutes, it exhibits an efficiency that no person has ever achieved. Because each time a new block becomes visible on all computers in the world, it allows full accessibility to all human beings. (Soze, 2017)

The development of blockchain cannot be separated from financial developments and the use of the currency itself. Moving on thousands of years ago when the world was not familiar with paper currency as it is now, at that time people traded in exchange for food, which was a basic necessity to survive in nature and moved places looking for new food sources. Along with the development of the times, and people are already familiar with the social system and the settlement where they live, trading and payment methods have also developed. If previously used food to be exchanged for other items, then they began to think about how to have one item that cannot be replaced with another and become an official item in the trading process.

The emergence of the idea of using paper money for the first time also experienced a difficult process, and it was difficult for people to accept being accustomed to using precious metals for their payment method. The more developed countries that use it, the more booming this new payment method in society, and more and more want to follow this trend. Many countries that use it does not mean that this banknote has not failed, if the precious metal has a limited supply and has a high value, in contrast to paper money that has a large supply, the more it is printed and distributed, the lower the price will be used as a method payment.

Along with the development of globalization, innovation in banknotes has progressed into another currency that is used, namely Swift. The Society for Worldwide Interbank Financial Telecommunication was started around 1973, which enables all

financial institutions to carry out secure financial transactions transfers in a reliable environment around the world. (Soze, 2017)

This idea is evidence of the revolutionary development of using the internet to make payments. (Soze, 2017) just like some of the above currencies, the use of the help of the internet to pay payments with a card makes many people who do not believe in its performance, and think this method will fail in the near future. But of course, the predictions of some of these people are refuted by the widespread use of the Swift method in the financial world. Many people have benefited from this internet-assisted payment, offering various conveniences and conveniences that allow users to stay at home while making payments without having to bother queuing and wasting time and effort. The SWIFT method is also widely used by companies in paying their employees' salaries, by transferring their monthly wages through this internet-assisted transfer.

Back again with the booming explosion of the internet revolution. Other digital methods have also been introduced for making payments by various companies that provide additional security for transactions. Even though it has a higher price, this technology makes it possible to make long-distance transactions which allows connecting people we have never met to connect to the internet. One example of this remote payment is Paypal. In 2008 a new currency was introduced; this is the first digital currency called bitcoin. It is not introduced by banks or governments but rather is a form of software that runs on a protocol called Blockchain. (Soze, 2017).

It is the first known digital currency that is running on a technology called blockchain. It is entirely decentralized. Therefore, no one has control over it. It also is known as electronic money or digital currency. However, it is a peer-peer payment system. Therefore, it's software. It has no real presence whatsoever, as it's growing on your computer's hard drive. In fact, on every computer that exists in the world. (Soze, 2017).

2.4 Blockchain in Human Resources Management

The Blockchain technology is considered as one of the major catalysts transforming the next generation of industry structure. This digital ledger technology is integrating the computational and physical components of the smart industry by providing a fair, cost-effective, accurate, traceable and secure system. (Onik, Hasan., Et al, 2018). With blockchain technology, many things that can be facilitated in this case are Human Resources Management.

Blockchain has the ability to revolutionize many different sectors of business, especially Human Resource Management (Soules, Casey., 2020). Not only in Human Resources Management, but in several other sectors blockchain has also been introduced and used.

With the development of an increasingly advanced industry, forcing companies to present solutions so that the fulfillment of their employees' needs is met by creating a recruitment process that is fast, stable and accurate, so that the recruiter's performance can be maximized. Since the world is now on its way to adopt another industrial revolution (industry 5.0), industries of all level are in need of a smart employee hiring and management system. Internet-based and computer-aided human resource management system has already been a popular way of hiring and employee evaluation. (Onik, Hasan., Et al, 2018).

Blockchain has the capability, and is projected, to fully transform and disrupt the everyday activities of a Human Resource Manager. The blockchain will allow companies to prosper in an affordable, accessible, and efficient manner. Employers and employees will benefit with the outcomes of the Blockchain disruption within this field. According to Enrique Rubio (2017), disruptive innovation in Human Resources can be described as creating and delivering a new value proposition to transform its operations and become more agile, using technology as a tool.

However, the authenticity of human resource information directly affects the motivation, rate and efficiency of human resource management. Job seekers may hide unpleasant results and present fraudulent information during the recruitment process. Some job applicants submit inflated resumes supplementing with fake training and

diploma certificates, references, awards, promotions and so forth whereas others deliberately exaggerate their qualifications and abilities. (Onik, Hasan., Et al, 2018). Inevitably, high job competition forces prospective workers to add some false information to make their resumes and documents look more attractive.

Although blockchain technology is most commonly known for the cryptocurrency, Bitcoin, it is forecasted to change the “normal” off all areas of business. The technology began with infiltrating the finance, real estate, and energy sectors, but Forbes states that all industries should be ready for Blockchain's “game-changing” possibilities (Ahmed, 2019). As of now, employee recruitment is a complicated process. There is an increasingly Competitive landscape when it comes to the hiring process. On average, a company will lose \$ 14,900 on one “bad hire” (Ahmed, 2019).

During the process of recruitment, there are two main areas in which they are vulnerable to falsification. With the implementation of Blockchain, the uncertainty of credentials and employment history will completely disappear, saving both time and money. Although this technology may not fit into the current flow of work, human resource Professionals should get ready to acknowledge these new ways. (Onik, Hasan., Et al, 2018).

The organization's logistical requirements are specifically designed, and the implementations are to be handled by the organizations themselves, with the HR division playing a key role in meeting the basic needs of the internal departments. As soon as the organization's needs are satisfied, the directors and administrators take responsibility for ensuring that they are fulfilled. Recruitment is the next step in the staffing process. This practice enables a corporation to recruit the personnel required to ensure the organization's continued service. Depending on the nature of work opening, a company may hire employees from a variety of different places. There are several forms of procurement to pursue in order to meet management needs. We should not depend on one type or one source until we have the requirement or job description from the technical people; instead, we should look for and enforce the right type.

2.5 Credential Verification

Before this technology was implemented, CareerBuilder found that 58% of hiring managers have reported the fact that they caught a lie on a resume. With the use of Blockchain Technology, this number would closely near 0%. ((Soules, Casey., 2020) Many professionals such as Abakar Saidoc believe that when implemented, Blockchain has the potential to wipe out traditional Resumes / CVs. Blockchain will have up-to-the-minute data regarding things such as a candidate's educational history, skill sets, and accolades / rewards (Biswas, 2018). With the use of blockchain technology, it allows recruiters to see valid educational background data from prospective employees, thereby minimizing fraud and other errors.

The main challenge, therefore, is how to guarantee accurate and trustworthy data is supplied by applicants. Recruiters generally rely on the resume and or supporting paperwork submitted by applicants in the hiring process, such as certifications, job reference letters, payslips, tax and insurance evidence. (Yi, Suk., 2020) With this blockchain, it will not only store information that has been entered and verified by other users, but also can change documents such as academic credentials and training certificates to the desired platform.

Another way in which companies can be sure information in the blockchain is truthful is the CV verification process. CV verification is a development of blockchain technology that works with decentralized verification programs and platforms to ensure that candidates are presenting truthful background information. (Soules, Casey., 2020).

2.6 Employment Histories

Tight job competition, sometimes encourages opportunities for several parties to cheat, one of which is by faking work experience as desired. If the global economy grows as fast as we expect, employment will grow much faster than the rate needed to continue tightening the labor market. (Smith, 2018) This is nothing but just to impress the recruiter and hope to be accepted by the fake job experience. Blockchain will also allow recruiters to see a candidate's full employment history. (Soules, Casey., 2020).

Due to the large number of prospective employees who modify and falsify the job history data in their CVs to make them more attractive, recruiter has a little suspicion about the credibility of the CV. For this reason, one of the functions of this blockchain is to automatically see data from the work history that has been followed before.

CareerBuilder reports that 55% of candidates embellished responsibilities on their resumes, 34% have falsified their job titles, and 26% have lied pertaining to companies that they work for (Soules, Casey., 2020). Later, recruiters may face difficulties accessing references to potential job candidates for reasons such as millennial recruiters who usually have a growing history of work and it is possible to have experience abroad. Checking this reference also tends to take some time, especially if those who apply at one time are up to thousands of CVs. So that blockchain technology can greatly assist recruiter in selecting suitable worker references as the company wants. On the blockchain, not only positive information will be seen, but negative information about previous work history will also be seen, such as changes in title and reasons for dismissal due to cheating. This can clearly show weaknesses and strengths that help recruiter to better identify and select the candidates needed by the company, and enable them to make the best decisions

2.7 Blockchain limitations

With so many advantages in the use of blockchain technology in various sectors, especially in Human resource management, of course the same as various other technologies that have many benefits and advantages, of course, also have weaknesses. In blockchain technology, one of which is that this technology does not yet have official regulations governing it, so it is still vulnerable to the risk of hacking or closing the trading platform used. Then this technology is still ineffective and not suitable for several computer systems, so there is still a need for continuous development and further testing. Then the last thing is this technology relies on entries manually entered by the user so as not to delete all intermediaries. (Fisher, et al., 2019).

3. Methodology & Analysis

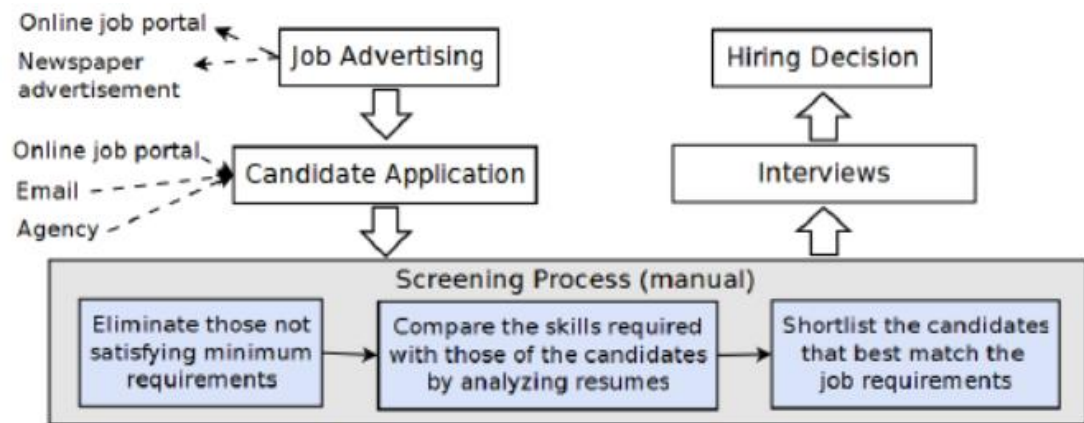
As we all know, the use of Blockchain technology in the industrial world, especially in the Human Resource Management sector, is very helpful in the screening of documents needed by the HR team. This paper will show research from other journals and a more in-depth breakdown on the use of Blockchain in Human Resource Management.

In an international journal published by AMA International University of Bahrain in 2018 entitled A recruitment and Human Resources Management Technique Using Blockchain Technology for Industry 4.0 states that a recent survey by an Australian business review conducted in 2017 identified that a \$ 250,000 monetary loss to the hiring company can happen yearly due to a bad hiring of an employee on an annual salary of \$ 100,000, also In a study by Robert Half conducted amongst Human Resource (HR) Managers in Australia identified that an unsuccessful hiring in an organization may negatively affect productivity (55%), lower staff morale (23%), and cause financial loss (19%). This proves that the use of traditional methods in the recruitment process will cost a lot of costs that do not need to be incurred by the company. By using Blockchain technology, the recruitment process will run fast and can save a lot of time and money. With the implementation of Blockchain, the uncertainty of credentials and employment history will completely disappear, saving both time and money (Onik, 2018). So that Blockchain technology can have a real impact on the recruitment process carried out by Human Resource Management, such as valid data verification credentials so as to minimize the occurrence of data fraud submitted by prospective employees.



An interview conducted by (Karmen, A ,2015) finding that 59% of respondents are satisfied with the requirement and selection process carried out in the company, remaining 41% are not satisfied with the process. They believe certain change need to be made for the effectiveness of the process. This figure giving fact that requirement of new employee needs to be change or update.

Furthermore, in Another survey reveals that 74 percent of employers had wrong hiring. It was also identified that 45 percent of workers' skills did not match with their claims and 33 percent had lied about their qualifications (Hayes, 2017). Survey founds, 10 percent out of 2,257 hiring managers stated that they do not have adequate tools to find the right person to hire. (Seymour, 2017). Associated Press news stated, India faces a very high rate of employment through fake certificates stating one single state had identified a total of 1832 such cases in the year 2017 (Associated press (AP). (2017). Blockchain technology, screening errors like this are very likely to be avoided. CV verification is a development of Blockchain technology that works with decentralized verification programs and platforms to ensure that candidates are presenting truthful background information. (Soules, 2020). By looking at history stored data will greatly make it easier for HRM to make choices to choose the right candidate. Blockchain has the potential to wipe out traditional Resumes / CVs. Blockchain will have up-to-the-minute data regarding things such as a candidate's educational history, skill sets, and accolades / rewards (Biswas, 2018).

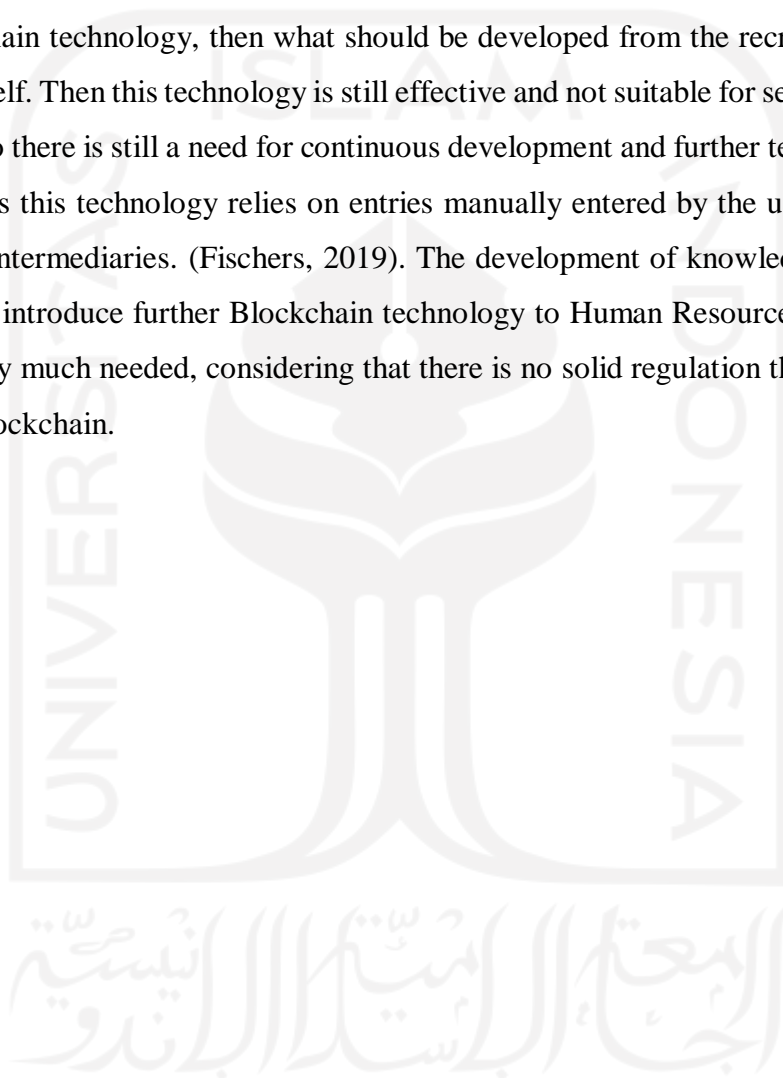


A figure and finding from (Singh, Rose, Visweswariah, Chenthamarakshan, & Kambhatla, 2010) showing a process of recruitment process with manual screening. Interviews, written assessments, group meetings, and other forms of assessment are used to evaluate the top few applicants that are shortlisted during the screening process. The final hiring decision is based on the input from these screening systems. The screening task, which is boring and time consuming, is the subject of this article. A candidate's profile is complex, and his different characteristics are often not strictly equivalent to those of others. For eg, nominee A may have extensive technological expertise but lack the desired business domain experience. Candidate B, on the other hand, may have the requisite domain skills but may have marginally less technical knowledge than Candidate A. Another nominee, C, could be much more adaptable, with expertise in a wide range of technological and business realms but lacking the necessary mastery in a single technical field. must immediately review each applicant's resume and determine whether or not to shortlist the nominee. To the conclusion, Screeners are now facing a lot of pressure to recruit employees fast because the exponential growth of labor-intensive businesses relies on it. Screeners also rely on limited samples of applicant pools or rankings given by third-party recruiting agencies to screen and shortlist applicants due to time constraints.

With some of the case studies above, the question arises, what specific benefits does Blockchain technology provide to Human Resources Management? The answer, of

course, lies in the advantages of the technology offered by Blockchain, as quoted from the Asia Blockchain Review website, which states that HRM will be facilitated in terms of proving identity, easy to proof qualifications, facilitating employee engagement through smart contracts, and improving privacy, cut coast. and secure employee data.

After entering a world that offers facilities in Human Resource Management such as Blockchain technology, then what should be developed from the recruiting or HRM process itself. Then this technology is still effective and not suitable for several computer systems, so there is still a need for continuous development and further testing. Then the last thing is this technology relies on entries manually entered by the user so as not to delete all intermediaries. (Fischers, 2019). The development of knowledge and special training to introduce further Blockchain technology to Human Resources Management will be very much needed, considering that there is no solid regulation that supports the rules in Blockchain.



4. Conclusion

This research examines how the impact of Blockchain technology on Human Resource Management specifically in screening process, data taken from several international journal data. This study aims to answer main questions and sub-questions; the main question is about how this technology impacts the screening process. Some of the questions above are in line with the aims of holding this research, which is to explain more deeply about the impact and benefits that Screening process will get if using Blockchain technology.

After conducting research and literature studies from several journals, researcher found all the answers to answer the main questions and sub-questions that were the problems of this research. Researcher found that Blockchain technology is a new technology that companies or organizations are starting to introduce and apply in the Screening process. With Blockchain technology, HRM work is facilitated by data verification that must be done to select prospective new employees, with this technology it will greatly minimize the frauds that are often carried out by job seekers such as falsifying some of their information on resumes to make it look attractive, the use of this technology allows data what is displayed to the HRM team is valid data and cannot be changed.

This also applies to employment history and displays the real reason these job seekers quit their previous job, and of course this makes it easier for Human Resources Management to choose and select the right person to join their company. The use of Blockchain technology will greatly save the funds that companies spend on selecting their new employees every year, in other words this technology can save money, time and effort for the recruitment process so that all of that can be focused on other technical sectors to maximize profits and company progress.

With the many advantages of using Blockchain technology, it does not mean that this technology has no weaknesses. One of the drawbacks is that this technology in practice still requires special training and studies to be able to maximize its use by the

HRM team, besides that there are no specific regulations governing the use of Blockchain technology, this technology is still not suitable for several computer systems, and there are still many companies that still comfortable with the use of traditional systems in their Human Resource Management recruitment process. By knowing the strengths and weaknesses of Blockchain technology, researcher hopes this research will be useful and can be used as a reference for using Blockchain technology in screening process.

Policy Brief

Executive Summary

This policy brief discusses recommendations whether a company or organization should adopt Blockchain Technology in Human Resource Management, especially in the Screening Process or not. This paper describes the various advantages that will be obtained if you use this technology in the screening process.

Statement Issues

The use of Blockchain technology has been introduced in the industrial world, both in the financial, logistics, trade, manufacturing, public service sectors and has been introduced in the Human Resource Management sector. In Blockchain technology, the security features are so strong that research has begun to be carried out by other companies to ensure that their systems and documents are stable. Especially in the Human Resource Management sector, the use of Blockchain will greatly assist the recruitment process, in this paper specifically discusses the use of Blockchain in the Screening Process. The advantages that companies will get if they use Blockchain technology in their HRM are:

1. Save time with a lot of validated data stored on the Blockchain, making it easier for HRM managers to ensure the identity of thousands of applicants.

2. Save costs and energy, by saving time as described in point 1, this is also directly proportional to the reduction in the budget for costs and energy spent.
3. Credential Verification, the use of Blockchain technology can minimize errors and fraud in data input for applicants.
4. Employment History will show how applicants quit and were dismissed from their previous jobs.
5. Privacy of personal data will still be guaranteed by the company so that the data privacy of applicants is only used for recruitment purposes only. What has been regulated in the ITE Law number 11 of 2008 article 43.

The ITE Law number 11 of 2008 also explains that companies that are legal entities and those that are not legal entities have the freedom to use information technology and electronic transactions aimed at advancing the interests of the company so that they can keep up with developments in the future.

Policy Alternatives

The first alternative, basically every company uses a variety of new technologies is a step of progress that aims to facilitate work in various sectors so that they can keep up with the times.

The second alternative, the use of the new technology is deemed unnecessary and can still be effective for using the old method. Then it is a freedom which is the right of the company.

Policy Recommendations

1. Every company that adopts a new technology is required to consider the needs of the company and its human resources.
- 2 There is no specific law regulating the application of Blockchain technology in Human Resource Management, so that companies wishing to adopt this technology must

conduct their own research and, in its implementation, remain obedient to the applicable ITE Law.



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