Nanotechnology Perceptions
ISSN 1660-6795
www.nano-*ntp.com*

Significance Of Internet Of Things Empowered Big Data For Cloud Assisted Enterprise Asset Management And Accounting On Cloud Platform

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Cloud assisted Enterprise asset management (EAM) is a collection of applications, platforms, and services designed to monitor and manage physical and digital assets in business operations. Improving asset quality and utilization throughout their lifespan, increasing productive uptime, and minimizing operating costs are the objectives of EAM. Enterprise assets are vulnerable to unanticipated downtime, poor performance, and shortages in supplies possibly properly managed and maintained. Multiple businesses use EAM systems to prove their conformity with regulators and avoid legal issues in case of failure. Analyzing Big Data (BD) helps accountants acquire a better insight into the customers' operations to make more educated choices, eventually leading to enhanced financial forecasts, greater risk management, and more precise financial reporting. In the IoT era, everything from valves to automobiles linked with monitors and systems practitioners combines advanced analytics into EAM data; the controlled assets are analyzed. Hence, EAM-BD encompasses managing and maintaining a company's physical assets across their lifespan, from procurement, capital planning, installation, maintenance, performance, compliance, asset disposal and risk management. Real-time data will be available, eliminating the need for laborious physical reporting with inaccurate information. EAM helps business organizations to pivot fast, resulting in better savings in increased equipment utilization, equipment maintenance, and improved spare parts turnover while cutting local labour costs and overall inventories.

Keywords: Cloud assisted Enterprise asset management , Businesses, Big Data, Internet of Things.

1. Overview:

Cloud assisted Enterprise asset management (EAM) is a technology that allows for an in-depth depiction of the assets of a business. The goal serves to monitor and improve operations for quality and efficiency through proactive efforts [1]. An EAM strategy involves the proactive and methodical management of an organization's assets from the time of installation through to disposal [2]. Achieving value for money in infrastructure and

equipment disposal is the goal of asset life cycle management (EAM) [3]. This includes all stages of asset selection, design, purchase, operation, maintenance, renewal, and disposal. Asset restructuring is crucial for building a contemporary business system that simultaneously increases corporate economic efficiency, improves social resource allocation, and boosts economic and social growth [4]. Asset restructuring can greatly enhance enterprises' economic efficiency, social resource allocation, and growth on both the social and economic fronts, a crucial tactic in building a contemporary company system [5]. Product vendors and their customers can profit from the EAM and have a better grasp of these reasons by allocating resources wisely and customizing their actions to achieve feasibility and efficiency [6]. Predictive maintenance capabilities and edge analytics are merely a few instances of how EAM capitalizes on system modernization to provide operations with crucial information for railway management scenario planning [7]. Tasks about the EAM of the utility firms' current equipment are the primary emphasis of the substantial transformation evaluations conducted for ERP modernization [8].

1.1 Motivation:

With the unique set of instructions, businesses can keep updated on how the assets are doing, schedule periodic checks and maintenance, and keep downtime to a minimum. Real-time data replaces laborious paper-based reporting and outdated or incorrect information [9]. Collateralization is a major drawback since it exposes the borrower to the danger of losing valuable assets in the event of a loan failure [10]. A further potential drawback of asset-based lending is that interest rates and fees are often higher than regular loans due to the increased risk [11]. Interest rates and costs for asset-based loans are often higher than those for conventional loans because of the greater level of risk involved. That's a further possible downside of asset-based lending [12]. The enterprise encompasses all of a company's assets, including those in different departments, at different sites, in different buildings, and maybe even in the auxiliary support functions these entities provide. [13]. The enterprise describes a company's assets, including other departments, locations, physical structures, and even additional services [14]. Several asset management risks can arise with adequate methods, resulting in operational inefficiencies, cost increases, production loss, downtime, and employee unhappiness. [[15].

The main objective of the paper:

- ✓ To design and develop a system to discuss the Cloud assisted Enterprise asset management model characteristic of accounting.
- ✓ It has been developed to account for the future model and the overview of EAM-BD to optimize the block diagram.
- ✓ The Internet of Things and using Cloud assisted Enterprise asset management have integrated and orchestrated activities within the asset management environment to guarantee effective asset utilization, minimize downtime, and decrease commissioning and maintenance prices.
- ✓ The experimental result has been validated with EAM-BD counterparts in terms of performance ratio, accuracy ratio, mean square error rate, and efficiency ratio.

The remainder of the paper is in section 2, which elucidates ways to use the current methods; section 3, which deliberates the recommendations that the EAM-BD method is analyzed; section 4, which is an experimental result; and section 5, which is an examination of the article's conclusions.

2. Literature reviews:

Zhang Wei et al. (2023) detailed that the conventional Management Information System (MIS) based on an Cloud assisted Enterprise asset management system provides features like reliable accuracy, easy navigation, accessibility, a wealth of features, and great adaptability [16]. Enterprise asset economic management data is massive, operations are challenging, and the traditional manner of handling business remains adequate with progressive business demands. A system designed to implement the social asset management system and analyses its architecture, functions, security scheme, and business model.

Eduard Khlynin et al. (2023) detailed the effectiveness of internal and external information and communication technologies (ICT) needed to establish an organizational and economic framework for handling an enterprise's fixed assets [17]. To accomplish this goal, the authors create an organizational and economic system specially built for managing fixed assets in industrial firms utilizing ICT. The define the essential criteria for the structure of ICT needed to build the organizational and economic mechanisms via their study. The authors advocate maintaining the needed demand, provision, and utilization levels to improve ICT development inside a company.

Kennedy Oyoo et al. (2020) introduced the Collaboration-Based Automatic Data Validation Framework for Cloud assisted Enterprise asset management (CBADVFEAM), which is intended to supplement the usual data extraction, conversion, and loading procedure [18]. The CBADVFEAM framework can include a smart toolset based on an algorithm for detecting information abnormalities from dispersed, heterogeneous information sources, automatically validating correctness and reporting discrepancies. Finally, this study will pave the way for future research. Data from disparate systems is aggregated, standardized, and integrated during these deployments.

Cloud platform design, system analysis, and system [19] were proposed by Guo Hao et al. (2023), who reviewed and analyzed the asset management process within financial management and provided details on the Back Propagation Neural Network (BPNN) algorithm. This trend is being followed by developing and implementing enterprise finance system software, which helps with information management and improves management quality and level. A comprehensive overview of the platform's architecture and features is provided for enterprise finance management. The last step is to put the system through its paces in a realistic testing environment and then examine the data objectively. The results of the tests demonstrate the system's efficacy in providing the financial management system, proving that the study's designed financial cloud platform management system is appropriate for businesses.

The goal of Cloud assisted Enterprise asset management (EAM), according to Wei Jye Seo et al. (2021), is to increase asset performance and reliability while minimizing risks to people and the environment. One way to achieve this is through the Internet of Things (IoT) devices, which can detect, track, react to, or report on asset conditions in real time with little

to no human involvement. In [20], throughput on an organization's asset lifespan, EAM helps with planning, budgeting, maintenance, repair, and operations. Adequate governance is crucial for using IoT technologies since they are often not tailored to particular business operations. Standardization, privacy and security, data quality, company culture, business continuity, and resilience are some of the recognized categories of issues.

Financial risk analysis using Support Vector Machines (SVMs) was implemented, and the pros and cons of the findings were outlined and addressed by Xuzhang Wang et al. (2021) [21]. The ever-increasing intensity of competition in the industry puts many businesses in a precarious financial position as the market economy continues to evolve. A company's growth may be greatly aided by a financial risk analysis. As a first step, businesses should raise the standards of their financial management to identify and address any hidden dangers, head off any impending financial crises, and deal with pressing problems as soon as they arise.

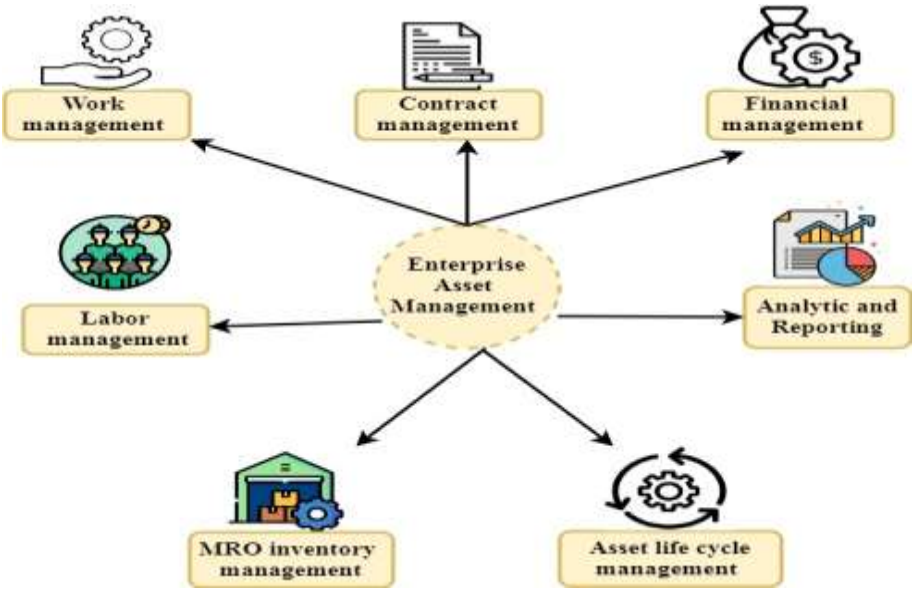
A few drawbacks of the IoT and big data for business asset management and accounting are issues in the modern day. Asset managers have always faced the essential issue of attracting and maintaining top people, and in a hybrid environment, the challenge has never been more difficult. According to a poll, leadership, recruiting, retention, and cultural concerns are all aspects of personnel risk that asset managers are worried about. [16] can overcome the disadvantages of [17] and [18] compared with the proposed method EAM-BD.

3. **Proposed method:**

Cloud assisted Enterprise asset management (EAM) software aids businesses in organizing and monitoring all the assets-related tasks, priorities, resources, equipment, and data. If not properly managed and maintained, enterprise assets are vulnerable to unanticipated downtime, poor performance, and supply shortages. Better financial forecasting, risk management, and reporting result from accountants' increased understanding of their customers' companies, made possible by big data analysis. Data asset management allows companies to consolidate, cleanse, and standardize data from several sources into a reliable database. As a result, information is more readily available and usable, and all employees are working with the most up-to-date data. Critical information may be hidden because of the time required to prepare financial reports, thereby impeding the ability to make decisions in real-time. Lack of timely financial reporting may have a devastating effect on businesses operating in fast-paced and dynamic contexts.

3.1: Section 1

Figure 1 Block diagram of Cloud assisted Enterprise asset management and accounting



- EAM uses multiple systems, sensors, tools, and software solutions to help maintain, control and manage operational equipment and business assets. Using EAM is a way to optimize the operation of a business while boosting performance and longevity.
- EAM helps to manage the data, analytics, and even the physical assets of a business without requiring manual effort. Using EAM is a way to optimize current operations for improved functionality and results and gain valuable insight into how any business operates on cloud platform.
- Use EAM solutions for work management purposes, such as handling maintenance requests, scheduling maintenance appointments, and even tracking ongoing repairs in progress. Using EAM for work management helps save time and streamlines maintenance operations.
- Rather than requiring a full-time employee to manage repair and maintenance requests, the EAM solution does all the manual work and organization. With an EAM solution, the employees can spend more time tending to repairs, updates, and replacements when necessary rather than inputting and tracking data.

Asset Lifecycle Management:

Asset lifecycle management is one of the most important elements of operating a successful business or corporate entity. Controlling the asset management process is key to maximizing productivity and efficiency. Whether selling just one specific product or providing services

to thousands of individuals, knowing how to effectively manage the company's assets and their life cycles is essential for any operations professional, whether for an enterprise or small business.

Labour Management:
EAM solutions for labour management are ideal for helping streamline the operation of a business, and they are extremely helpful in reducing the time wasted each day. Rather than focusing on schedules, employee contracts, and hours worked, allowing an EAM system to do the work helps to optimize the operation and overall efficiency.

MRO Inventory Management:
Managing stock and inventory is foundational for any successful business that provides goods and products. The best EAM software or MRO inventory management solutions provide stock and inventory management functions. Maintenance, Repair, and Operations (MRO) inventory management is important to the success of enterprise operations.

Contract Management:
Managing contracts individually can quickly become laborious and overwhelming, especially when done manually. As it grows, the business will likely require more contractual agreements and business deals. Handling contracts individually and manually demands more time and resources than it should. From requesting proposals for the right kind of service providers to keeping track of contractual agreement dates and renewals, the right EAM solution can make a significant difference in managing the business or entity.

Analytics and Reporting:
Analytics and reporting are essential to running a competitive business today. Without trustworthy and reliable analytics, it becomes increasingly challenging to determine which areas of the business are thriving and which require more attention. Analytics from customer-facing activities and locations provide valuable insight into customers' wants, needs, and demands. Regarding EAM, data-driven reporting provides valuable insights into the overall maintenance of the operations, asset performance, quality of work from service providers, and inventory status.

Financial Management:
Keep track of operational costs, inventory costs, and individual investments. Monitor accounting departments and stay aligned with any financial goals set for the business or venture. Use an EAM solution to ensure they are on the right track with any budget or financial structure they have in place.

Optimized Inventory Management:
Managing the company's inventory, suppliers, and prospective partners is a full-time job. Using an EAM solution is ideal for those seeking a new method of optimizing their inventory management. From sourcing materials and equipment to managing stock and inventory, an EAM solution can help with all aspects of inventory management.

The EAM of the preferences of the management influence paths on business models and business forms before and after the application of blockchain is gradually incorporated $\theta^{overall}$, which can lead to the expression of the function computation impact of the innovation of the θ^{overaD} business model of the application of big data.

$$\boldsymbol{\theta^{overall} = \theta^{overaD}(\theta_i^0)} \quad \textbf{(1)}$$

As a third phase, determining the best option for overall management efficiency after big data's introduction included solving the influence preference on using blockchain technology in the company.

Combined with the calculated various preferences for the optimal EAM solutions, the optimal values and weight vectors for these solutions can be calculated, which are functions of $\mathbf{u}^*$

$$\mathbf{V}^* = \mathbf{v}(\mathbf{K}^*) \quad \textbf{(2)}$$

$$\mathbf{u}^* = \mathbf{u}(\mathbf{k}^*) \quad \textbf{(3)}$$

By combining the procedures mentioned above, it is possible to determine the best way to calculate the efficiency of the blockchain technology application's overall asset management system by assuming beforehand that the EAM's optimal efficiency solution will impact the management model of the application.

3.2: Section 2

Figure 2 Overview of EAM-BD

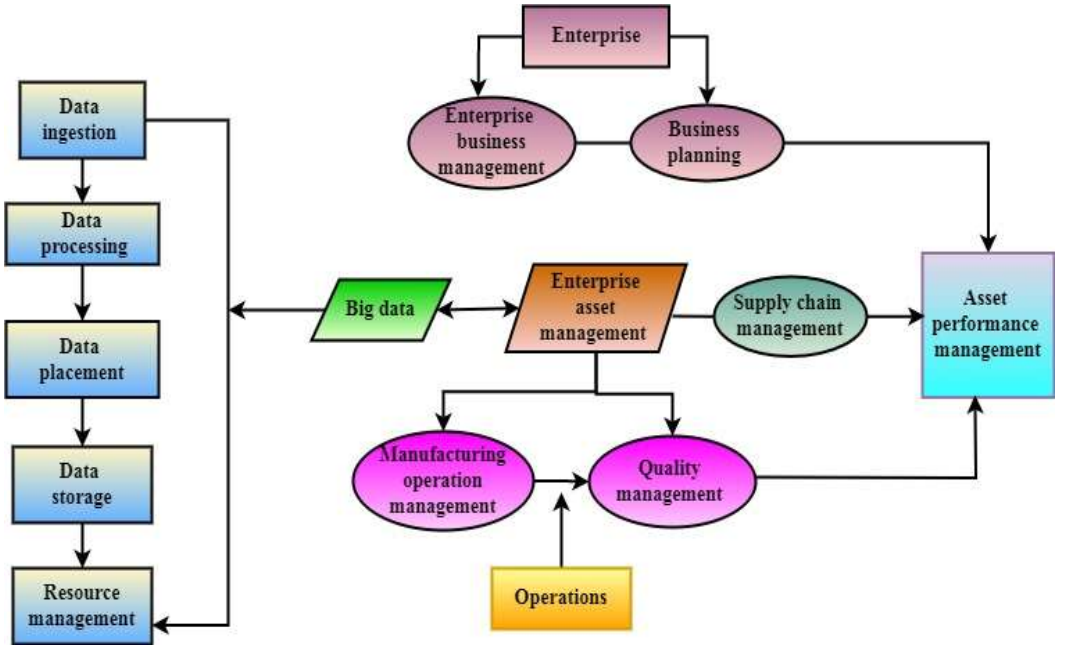


Figure 2 illustrates the marginally improved performance of EAM systems, mostly due to cost accounting's discovery of departmental expenditures or asset breakdowns. Retrieving

and acting upon data at different levels is challenging and requires many interfaces, even in the most efficient businesses.

- Asset Performance Management software allows data to flow from every level and be correlated and analyzed. This data can help managers and key stakeholders identify potential preventative maintenance downtime based on asset condition health or maintenance schedule spares, as well as stock for the next maintenance window. This understanding shows that benefits such as fewer invasive maintenance, lower stock levels, and identified needed resource levels are apparent across all departments.
- Asset management deployment models may take different shapes with various essential production assets. Equipment for mechanical and process operations and instruments and valves for improvement fall into this category.
- Access to data has been there for a while, but the ability to combine data from many sources to get a complete picture of the plant is rather recent. Key decision-makers may begin to handle current and future concerns with high confidence using this knowledge.
- To conclude their relationship, consumers may see a pattern in vibration measurements superimposed on top of their energy consumption data. There is a new degree of potential for plant improvements made possible by this capacity to merge data housed in separate databases.
- Identifying a key valve producing a future fluid level concern is feasible by reviewing the unit's active warnings; this valve has many travel deviation alarms. Suggestions, including a record of prior actions in response to this problem, are accessible via an additional link. A work order is generated and appended with suggestions. It is then forwarded to the EAM system to ensure that maintenance attends to it immediately.

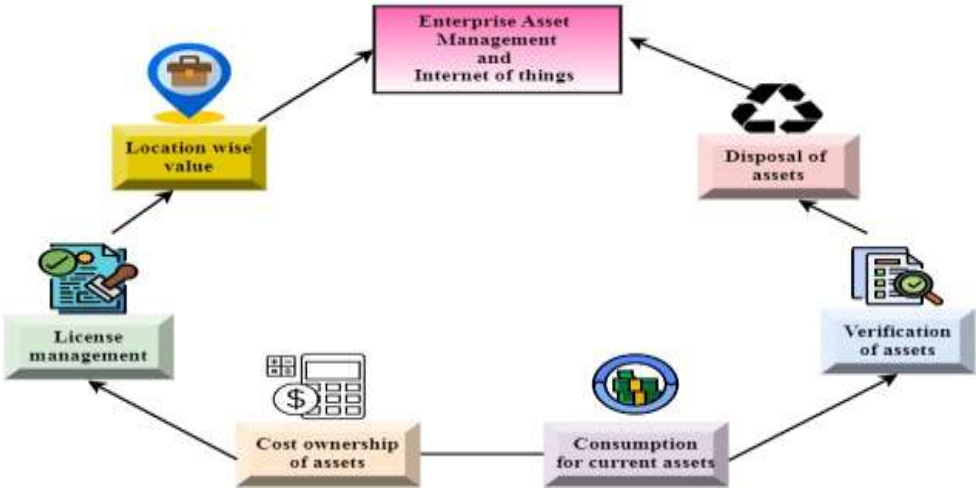
Combined with the calculated various preferences for the optimal CCR solutions, the optimal values and weight vectors for these solutions can be calculated, which is a function of j^*

$$\boldsymbol{\theta_j^{*overall}, j^* = \{j \lceil max\left(\theta_j^{overall}\right)\}} \quad \textbf{(4)}$$

As shown in equation (4), the value of j^*, and is thus affected by the changes in the ranges of value, as shown in the subsequent relational formulation.

Section: 3

Figure 3 Cloud assisted Enterprise asset management and Internet of Things



As seen in Figure 3, the rise of the IoT is accelerating the pace of change in the computing industry. Interconnected self-learning sensors, machines, and appliances are the next major developments in computing. With this level of intelligence, these technologies can take the initiative and provide humans with capabilities they have never had before. The number of connected devices in the IoT will eventually exceed that of mobile phones. This new computing revolution is one of the most competitive areas that businesses cannot afford to disregard. The IoT has a profound impact when managing business assets and interacting with equipment.

As this pattern continues to grow, Cloud assisted Enterprise asset management presents an excellent opportunity for the company to capitalize on it. Examining how EAM may use IoT to maximize the value of assets, guarantee their optimal performance, and release their hidden potential.

Retirement & Disposal of Assets:

The assets that can be discarded from the current inventory are called disposable assets. These assets may have been destroyed, deteriorated, or beyond their economic useful life, among other factors. When assets become outdated, it may be difficult to determine when to replace them. When sensors connected to the Internet of Things (IoT) stop collecting data, they automatically notify the system.

Cost of Ownership for assets:

A lot of money goes into buying assets and spending more on their deployment, verification, maintenance, downtime, and eventual disposal. The IoT allows for the optimization of procurement via real-time control of the supply chain. Using information about inventory levels in real-time makes informed decisions. A proactive system of health monitoring sensors is installed in the assets, significantly decreasing downtime. Reducing the Cost of Ownership is the overarching goal of asset lifecycle management efficiency improvements.

Contracts & License Management:

An effective system for tracking contracts is essential for every business with various fixed assets. An Asset Management System that the IoT enables may be used to map vendors' maintenance and license contracts. Detailed contract conditions allow suppliers to be tracked for every device. These suppliers may be used to monitor and mark any breakdown.

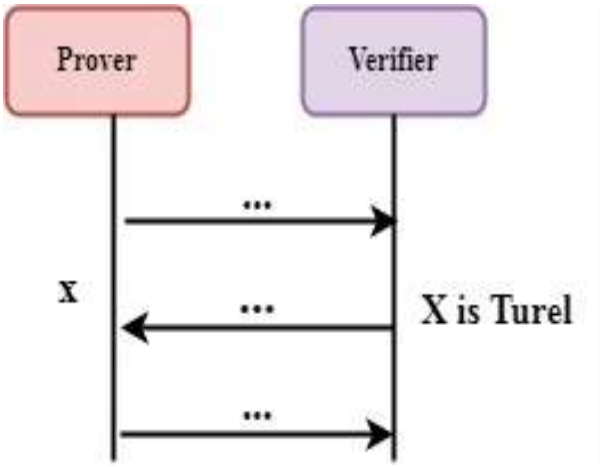
Consumption Trends for Current Asset

Using an organization's asset management system supported by the IoT, consumption patterns of existing assets may be discovered. The most quickly consumed products, unused inventory, consumer demands, and unfulfilled purchase orders may all be examined using this. Automating the use, expenditure, and most valued consumables is possible.

Operational Intelligence:

The information collected from the devices allows machines to communicate with one another. Using IoT, operations, floor work, and production may all be optimized. Enhanced operational efficiency and execution may be achieved by real-time notifications for critical events detected by these sensors across the production. Process efficiency is enhanced by the automated gathering of data from devices, which optimizes the use of current resources and correlates them with business activities for optimal outcomes. In this machine-ruled society, the assets now communicate with one another and with centralized systems that guide us.

Figure 4 Interactive proof and non-interactive



Interactive and non-interactive proofs are the two basic ways zero-knowledge proofs are often classified, as seen in Figure 4. During an interactive proof, the verifier is an integral part of the process, making many proposals to the prover for the verification scheme and then checking the results using a verification tool. Unfortunately, the interactive proof technique isn't very reliable as it uses probability to decide whether the prover's information is true, and it takes a long time for the system to respond. It additionally has poor verification efficiency. Using a non-interactive approach, zero-knowledge proof on the blockchain, has several benefits, including fast reaction time, high verification efficiency, and high dependability.

Problem definition: Unplanned downtime caused by mismanaged assets results in unforeseen expenses that eat away at the bottom line. Finding the optimal mix of remedies for asset management issues is difficult due to the wide variety of causes of the result and discussion of accuracy ratio, performance ratio, and mean square error rate.

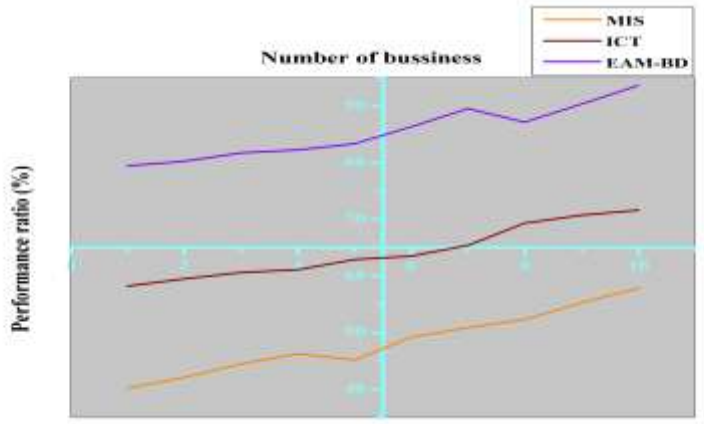
4. Result and discussion:

Managing a company's physical assets is key to Cloud assisted Enterprise asset management .This process starts with capital planning and continues throughout the asset's lifespan, including installation, performance, maintenance, compliance, risk management, and disposal. To compare asset management firms' profitability, analysts use return ratios. Return on equity and return on assets are the two most used measures of financial performance. As a proportion of typical assets, these ratios are calculated as return on average assets less net income applicable to common shareholders. EAM involves systematically managing physical assets throughout their lifecycle, from acquisition to disposal. Optimizing the EAM processes can lead to cost savings, improved productivity, and enhanced decision-making capabilities, whether a large corporation or a small business.

Dataset Description:

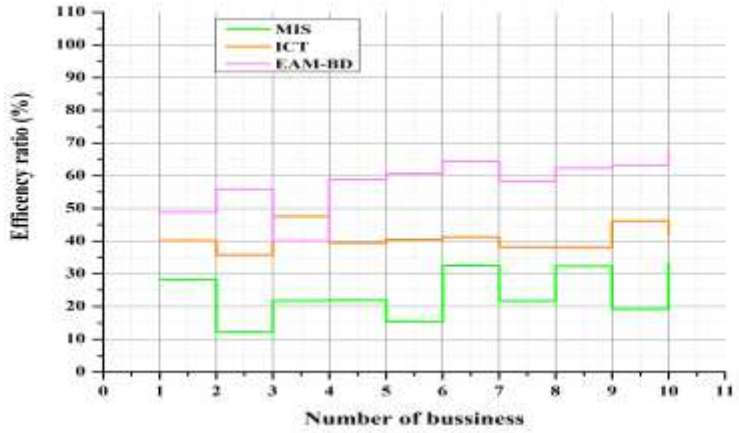
Companies that are closely held may be evaluated in several ways. One is looking at similar public companies and comparing their enterprise value to EBITDA or price-to-earnings ratios. Another is by analyzing analogous transactions. Similar companies' net debt-to-Ebitda ratios assess tightly held firm debt when net debt cannot be found. Daily, the value of tightly held firms is adjusted in response to changes in the market for similar companies or by using the market movement of an appropriate industry index. Industry and size of the tightly held asset determine the criteria for selecting comparable firms. Questions about the net worth computation, including assets and liabilities, may be answered by any billionaire or their agent.

Figure 5 Performance of Cloud assisted Enterprise asset management



An organization's physical assets are overseen and cared for by EAM members at every stage of their lifetime, as seen in Figure 5. This includes everything from initial planning and procurement through installation, performance, maintenance, compliance, risk management, and asset disposal. EAM's integrated software, systems, and services make operational asset and equipment management easier. Improved asset quality and utilization, more productive uptime, and lower operating costs are the goals of Cloud assisted Enterprise asset management (EAM). Everything from planning and building to commissioning, operations, maintenance, replacement, and demolition falls within the purview of EAM. All assets, regardless of kind or location, are part of the Cloud assisted Enterprise asset management (EAM) scope.

Figure 6 Efficiency of Cloud assisted Enterprise asset management and accounting



Faster equipment turnover, higher equipment utilization, reduced local labour costs, and total inventory result from the improvements highlighted in Figure 6 of EAM, which allow these businesses to adapt swiftly. Asset management efficiency is all about the optimum utilization of assets to get maximum revenue for an organization. Further, asset management efficiency is focused on optimum uses of assets. Additionally, asset management efficiency focuses on high asset turnover in an organization. Ratios that measure the efficiency of a business often look at its costs concerning its income. How efficiently a business receives, spends, and utilizes its assets may be gauged by its ratios. The Cloud assisted Enterprise asset management system (EAM) records the asset's maintenance expenses and trends over time to determine the business's replacement cost.

Figure 7 Accuracy of BD-EAM

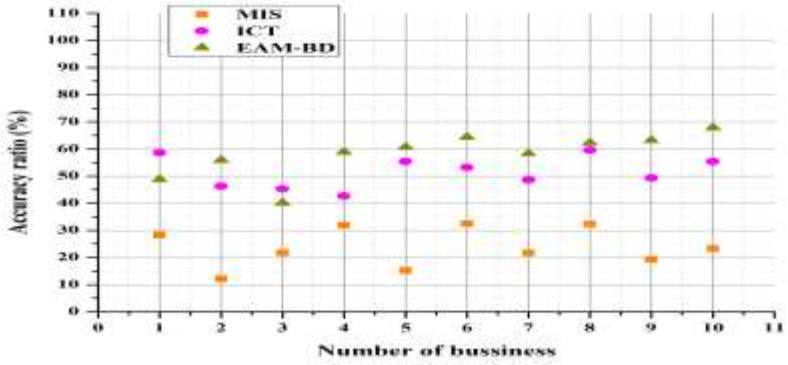
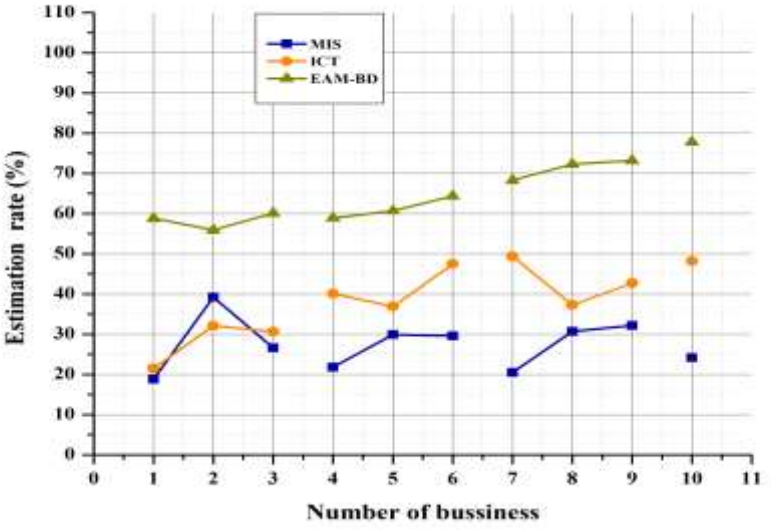


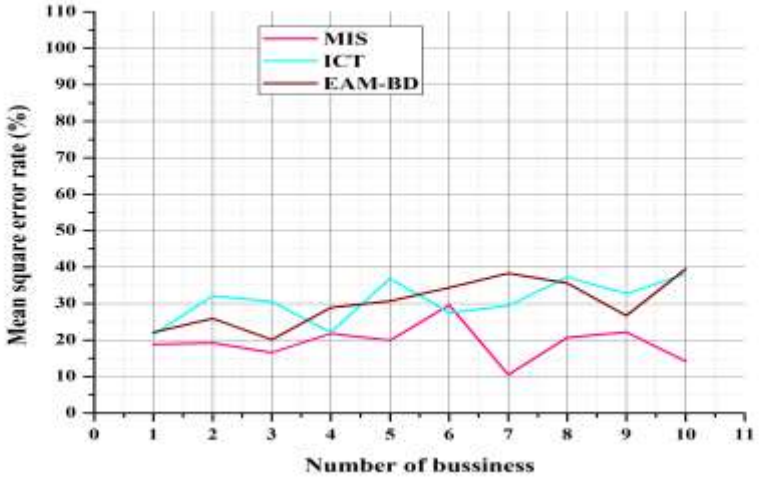
Figure 7 shows That's because enterprise data identifies opportunities that teams working in silos cannot. It can align digital and business strategies to meet data requirements. One way to capitalize on the enterprise data model is to use the right data analytics tools for better organizational decision-making. EAM is crucial because it allows businesses to monitor, evaluate, control, and enhance the dependability and quality of their assets. Most organizations own hundreds of thousands, if not millions, in assets. Accountants may better understand their customers' companies and make better decisions by analyzing big data. This leads to better financial forecasts, risk management, and accurate reporting. Asset Management experts may accomplish 95% asset data accuracy, often with few resources, by integrating best-practice asset tracking procedures with the business asset repository and using data gathering technologies.

Figure 8 Estimation of Cloud assisted Enterprise asset management and accounting



As shown in Figure 8, estimating the costs of maintenance work orders is frequently required for planning and assessment reasons. To plan and evaluate the expenses, the processor calculates the prices of all resources and supplies added to a maintenance work order or exploded. AM's value lies in the fact that it facilitates the monitoring, evaluation, management, and optimization of asset dependability and quality for businesses. Most organizations own hundreds of thousands, if not millions, in assets. EAM software is a key asset for businesses, offering benefits such as optimized asset lifecycle management, improved maintenance, cost efficiency, enhanced operational efficiency, compliance and risk management, seamless integration with other business systems, and contribution to the environment. A customer initiates an EAM by establishing an account with a private bank or custodian and depositing assets into the account. To delegate responsibility for overseeing the client's investment portfolio and asset allocation, the client appoints an EAM and grants them power of attorney.

Figure 9 Mean square error rate in BD-EAM



The mean squared deviation, as shown in Figure 9, measures the average of the squares of the errors and the average squared difference between the actual and estimated values. It is used to estimate unobserved quantities. Unplanned downtime and reduced productivity may occur when equipment is not adequately maintained and breaks down or malfunctions. It might be particularly troublesome for essential assets needed for day-to-day operations. Unplanned downtime caused by mismanaged assets results in unanticipated costs that consume away profits. Finding effective solutions to issues with asset management may be difficult since there are many potential causes. ERP systems are intended to streamline all operational processes within an organization. These platforms usually help manage finances, sales, production, human resources, and production.

Interface: To create the capability to fulfil regulatory returns, businesses must examine their cultures, capital needs, product development processes, investment plans, marketing tactics, distribution, operating model, and related infrastructures. The result section concludes the performance ratio, accuracy ratio, mean square error rate and estimation ratio.

5. Conclusion:

Cloud assisted Enterprise asset management (EAM) software aims to regulate and proactively improve operations for quality and efficiency by providing an in-depth overview of company-owned assets. Asset management principles focus on effective management and oversight of valuable resources to optimize their performance and ensure their safekeeping. By adhering to these principles, businesses can improve operational efficiency, reduce downtime, and make informed decisions. Plant, equipment, and facility lifecycle management encompasses all phases from design to commissioning, operations, maintenance, decommissioning, and replacement. The importance of EAM software in modern business cannot be overstated. It is critical in optimizing asset performance, extending asset lifespan, reducing costs, and ensuring regulatory compliance. Automatic scheduling of required maintenance and repairs is made possible using predictive analytics. Resiliency is enhanced while responding to or handling emergencies and unanticipated occurrences, and critical assets may be prioritized to improve productivity. Companies need effective Cloud assisted Enterprise asset management to maximize profits, save expenses, and maintain a competitive edge in today's market. This empowerment extends beyond efficient asset management and is pivotal in advancing environmental responsibility. The trajectory ahead suggests that EAM can evolve into a robust framework where technological integration aligns seamlessly with ecological considerations.

Reference:

1. Al-Fedaghi, S., & Al-Huwais, N. (2018). Cloud assisted Enterprise asset management as a flow machine. International Journal of Modeling and Optimization, 8(5), 290-300.
2. Trad, A. (2021). The Business Transformation Framework and Enterprise Architecture Framework for Managers in Business Innovation: The Alignment of Cloud assisted Enterprise asset management and Enterprise Architecture Methodologies. In Empowering Businesses With Collaborative Enterprise Architecture Frameworks (pp. 1-38). IGI Global.
3. Shi, W. (2021). Analyzing enterprise asset structure and profitability using cloud computing and strategic management accounting. PloS one, 16(9), e0257826.
4. Evbuomwan, N. (2022, January). A Tale of Two Utility Companies-Towards an Cloud assisted Enterprise asset management (EAM) Transformation Assessment. In 2022 30th Southern African Universities Power Engineering Conference (SAUPEC) (pp. 1-6). IEEE.
5. Zeng, Y., & Wu, C. (2022). An Exploration of the Existing Problems of Enterprise Asset Restructuring Accounting, the Causes, and Their Countermeasures. Proceedings of Business and Economic Studies, 5(5), 20-24.

6. Zhang, L., Fakieh, B., & Shang, L. (2022). Financial management of asset-liability ratio of small-and medium-sized enterprises in dynamic nonlinear system. Fractals, 30(02), 2240064.
7. Perevozova, I., Dzoba, O., Minakova, S., Bondarenko, S., & Vasylyk, O. (2021). Current asset management of industrial enterprises in the context of implementation of a marketing strategy. Social Development and Security, 11(1), 237-258.
8. Dongxiao, N., & Bin, M. (2019). Research on Risk Assessment of PowerGrid Cloud assisted Enterprise asset management Based on the Life Cycle Cost Management Theory. International Journal of Accounting, Finance and Risk Management, 3 (4).
9. Karomatovna, M. J. (2023). Impact Of Cloud Assisted Enterprise Asset Management On The Processes Of Globalization In The Economy Of Uzbekistan. British View, 8(5).
10. Cheng, J. X., Wang, G. R., & Liu, J. (2021). Research on the construction of multi-dimensional power grid enterprise asset health evaluation index system. In E3S Web of Conferences (Vol. 257, p. 02071). EDP Sciences.
11. Ball, A., Gelman, L., & Rao, B. K. N. (Eds.). (2020). Advances in Asset Management and Condition Monitoring: COMADEM 2019. Springer International Publishing.
12. Zakhary, V., Amiri, M. J., Maiyya, S., Agrawal, D., & Abbadi, A. E. (2019). Towards global asset management in blockchain systems. arXiv preprint arXiv:1905.09359.
13. Biedermann, H., & Kinz, A. (2019). Lean smart maintenance—value adding, flexible, and intelligent asset management. BHM Berg-und Hüttenmännische Monatshefte, 164(1), 13-18.
14. Al-Fedaghi, S., & Al-Huwais, N. (2018). Cloud assisted Enterprise asset management as a flow machine. International Journal of Modeling and Optimization, 8(5), 290-300.
15. Shi, W. (2021). Analyzing enterprise asset structure and profitability using cloud computing and strategic management accounting. PloS one, 16(9), e0257826.
16. Wei, Z. (2023, October). Application Research of Computer Big Data Technology in Enterprise Economic Management System. In 2023 2nd International Conference on Data Analytics, Computing and Artificial Intelligence (ICDACAI) (pp. 315-319). IEEE.
17. Khlynin, E., Korovkina, N., Zhukov, R., Kozlova, N., & Myasnikova, E. (2023). Effect of information and communications technology on the efficient operation of the organizational and economic mechanism of enterprise fixed assets management. Relações Internacionais no Mundo Atual, 2(40), 06376.
18. Oyoo, K. (2021). Collaboration-Based Automatic Data Validation Framework for Cloud assisted Enterprise asset management . In Proceedings of the Future Technologies Conference (FTC) 2020, Volume 2 (pp. 639-657). Springer International Publishing.
19. Hao, G. (2022). Design of enterprise financial management cloud platform based on neural network algorithm. Mobile Information Systems, 2022.
20. Seo, W. J., & Evans, N. (2021). Internet of Things Adoption Challenges in Cloud assisted Enterprise asset management Organisations. In 14th WCEAM Proceedings (pp. 175-186). Springer International Publishing.
21. Wang, X., Luo, X., & Hu, Y. (2021, September). Enterprise accounting and financial risk analysis system based on decision tree and SVM. In 2021 4th International Conference on Information Systems and Computer Aided Education (pp. 2015-2018).
22. https://www.kaggle.com/datasets/frtgnn/500-richest-people-2021