USU

White Paper

Revolutionizing ITAM with AI: A Blueprint for the Future

Content

Introduction

According to **Forbes**, the AI market is forecast to reach $407 billion in 2027, a 368% increase from the 2022 estimates, and 64% of businesses are expecting AI to increase productivity. While there is concern about the impact of AI on the workforce, the **World Economic Forum** believes AI will create 97 million new jobs and a **Microsoft report** states that 55% of leaders are concerned about finding enough talent to fill AI roles. Additionally, Microsoft found that 75% of knowledge workers are already using AI (such as ChatGPT and Microsoft Copilot) and realising the benefits.

Artificial Intelligence (AI) in the context of IT Asset Management (ITAM) refers to the application of machine learning algorithms and techniques to automate and optimize various ITAM processes. These can include asset discovery, inventory management, license optimization, and lifecycle management. AI can analyse large volumes of data, identify patterns, make predictions, and even make decisions, all of which can significantly enhance the efficiency and effectiveness of ITAM.

Understanding AI in the Context of ITAM

There are several types and subsets of AI which all serve different purposes and, as AI use progresses, each will need to be accurately chosen for the appropriate roles.

Generative AI

Form of AI that can generate new, original content

Machine Learning (ML)

Subset of AI that involves training a model using data

Natural Language Processing (NLP)

Involving interaction between computers and human language

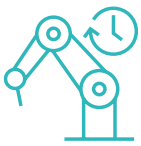
Robotic Process Automation (RPA)

Involving automation of repetitive tasks

01 | Generative AI (a.k.a. GenAI) is a form of artificial intelligence that can generate new, original content and is the spearhead of the current explosion of AI tools and interest, driving services such as ChatGPT and Copilot for Microsoft 365 through recent advances in Large Language Model (LLM) technology.

02 | Machine Learning (ML) is a subset of AI that involves training a model using data. In the context of ITAM, ML can be used to predict future trends such as asset utilization and lifecycle stages, enabling proactive asset management.

03 | Natural Language Processing (NLP) involves the interaction between computers and human language. It can be used in ITAM to automate the processing of contracts and other text-heavy documents, extracting key information such as contract terms and renewal dates.



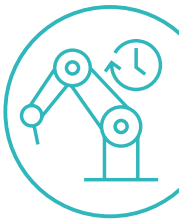
04 | Robotic Process Automation (RPA) involves the automation of repetitive tasks. In ITAM, RPA can be used to automate routine tasks such as data entry and report generation, freeing up ITAM professionals to focus on more strategic tasks.

By leveraging these four types of AI where most appropriate, ITAM professionals can drive efficiency, reduce costs, and improve decision-making within their organizations.

Similarities and Differences

All three concepts - automation, ML, and AI - involve the use of technology to perform tasks, reduce human effort, and increase efficiency.

They all have the potential to significantly transform business processes and are key drivers of digital transformation – however they are not necessarily interchangeable. Therefore it is imperative you use the right tool for each job. Some of the key differences include:



Automation is rule-based and does not involve learning from data. In contrast, ML and AI involve learning from data and improving over time.

ML is a subset of AI focused on learning from data, while AI is a broader concept that includes not only learning but also understanding and reasoning.

Automation is generally easier to implement and understand, while ML and AI can be more complex and require specialist knowledge and skills.

Understanding these concepts and their interrelationships is crucial for ITAM professionals as they navigate the evolving technology landscape.

Core Applications of AI in ITAM

Asset Management is a broad and growing discipline with several areas where the use of Artificial Intelligence can bring significant benefits. Here we look at some of the most likely places to begin.

Invoice recognition and automated processing:

AI can be trained to recognize and extract key information from invoices, such as vendor details, invoice numbers, dates, and amounts. This not only speeds up the invoice processing time but also reduces errors that can occur with manual data entry. Furthermore, automated processing can schedule payments, send reminders, and even flag anomalies for review, ensuring a smooth and efficient invoice management process.

Contract management and compliance monitoring:

AI can analyse contracts to extract key terms, obligations, and risks, thus helping organizations ensure they are meeting their contractual obligations and maintaining compliance. AI can also monitor changes in external regulations and automatically review contracts for compliance, alerting organizations to potential issues before they become problematic. This proactive approach to contract management and compliance monitoring can save organizations time and resources while reducing legal risks.

Natural language queries for faster insights:

As Natural Language Processing (NLP) allows ITAM professionals to query data using natural language, it makes it quicker and easier to access insights. Rather than clicking through various screens, reviewing multiple databases, or running several reports, users can simply ask questions like “What is the total cost of software licenses last quarter?” or “How many Oracle database licenses do we have deployed in EMEA?” and the system will return the relevant information. This not only makes data more accessible to ITAM professionals but also to stakeholders and executives – helping highlight the value of ITAM data and speeding up the decision-making process across the business.

Predictive analytics for asset lifecycle management

Predictive analytics uses historical data to predict future outcomes. In the ITAM context, predictive analytics can forecast trends such as when physical assets will need to be replaced or when software licenses will need to be renewed. This allows organizations to plan ahead, making informed decisions about IT asset investments and more accurately plan and manage renewals. Predictive analytics can also identify patterns that may indicate potential issues, such as a piece of hardware that is likely to fail, allowing organizations to take preventative action, reducing downtime and user dissatisfaction.

AI-driven cybersecurity in ITAM

A strong relationship with cybersecurity is a key aspect of ITAM, and AI can significantly enhance an organization's ability to protect its IT assets. AI-driven cybersecurity solutions can monitor network traffic, identify suspicious behaviour, and detect threats in real-time. They can also learn from past incidents to predict and prevent future attacks. In addition, AI can automate routine security tasks, freeing up IT staff to focus on more strategic initiatives.

Benefits to the Wider Organization

The benefits of AI in ITAM extend beyond the IT department to the wider organization. These can include:

→ Cost Efficiency

By optimizing IT asset utilization and reducing unnecessary purchases, AI in ITAM can lead to significant cost savings. This directly impacts the organization's bottom line, freeing up resources for other strategic initiatives.

→ Operational Efficiency

AI can automate routine ITAM tasks, freeing up IT staff to focus on more strategic responsibilities. This improves operational efficiency and can lead to accelerated maturation of the ITAM practice.

→ Risk Mitigation

AI can help identify potential risks, such as non-compliance with software licenses or impending asset failures. By proactively addressing these risks, organizations can avoid costly penalties and system downtime.

→ Strategic Planning

The insights derived from AI can inform strategic planning. For example, understanding the organization's IT asset needs can guide budgeting and IT strategy development.

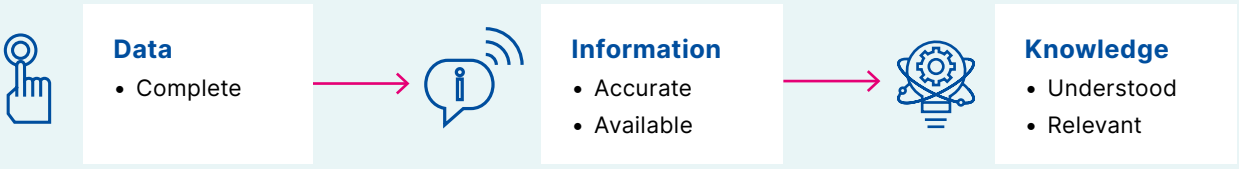
Trustworthy Data: The Foundation of Effective AI

Trustworthy data is the cornerstone of any successful AI implementation. The reliability of patterns, decisions, and suggestions generated by an AI tool is contingent upon the quality of the data provided to it; thus, if the input data is incomplete or inaccurate, the resulting outputs will reflect those same deficiencies too.

In the context of ITAM, this means accurate, complete, and timely data about the organization's IT assets. This includes data about the asset's lifecycle, usage, cost, performance, and more. Failure to get this right can lead to missed optimisation opportunities, wasted spend, and potential compliance issues.

The framework for trustworthy data applies as much to AI as it does to human stakeholders.

Framework for trustworthy data



Why Trustworthy Data Matters

Accuracy

AI models are only as good as the data they are trained on. To ensure that AI assisted decisions and recommendations are as accurate as possible, it must be built upon strong, robust data.

Timeliness

AI models need up-to-date data to provide relevant insights. Outdated data can lead to missed opportunities or incorrect assumptions about the current state of IT assets.

Completeness

Missing data can lead to gaps in the AI model's understanding of the IT assets, leading to incomplete or misleading insights.

Ethical/regulatory considerations and data governance

You must consider what data is being collected, who has access, and – perhaps most difficult of all – what inferences the AI system could draw from the data. AI algorithms can identify patterns and correlations that may not be immediately apparent to human analysts. These inferences could lead to new insights and strategies but could also result in unintended biases or ethical concerns if not carefully managed.

While this is not primarily an ITAM concern, it is important to consider how ITAM data and AI systems will contribute to the wider organisational position and what steps may need to be taken to reduce risks.

For more information on how to ensure trustworthy data, **see our whitepaper here**.

AI's Role in Strategic ITAM Development

Aligning AI capabilities with business objectives

AI in ITAM should not be implemented in isolation. Instead, it should be aligned with the broader business objectives of the organization. This could include cost reduction, risk mitigation, or improving operational efficiency. By aligning AI capabilities with these objectives, organizations can ensure that their ITAM strategy is contributing to their overall business goals.

AI as a driver for ITAM maturity and innovation

AI can drive ITAM maturity by automating routine tasks, providing predictive insights, and enabling proactive asset management. This not only improves the efficiency and effectiveness of ITAM processes but also frees up ITAM professionals to focus on strategic initiatives. Furthermore, AI can drive innovation in ITAM by enabling new ways of managing IT assets, such as predictive maintenance and real-time asset tracking.

Building an AI-ready ITAM team

Building an AI-ready ITAM team involves upskilling existing team members and/or hiring new ones with the necessary skills. This includes understanding AI and machine learning concepts, data analysis skills, and the ability to work with AI tools and platforms. Furthermore, an AI-ready ITAM team should have a mindset of continuous learning and be ready to adapt to the rapidly evolving AI landscape.

Preparing for the future of ITAM in an AI-driven world

The first, and perhaps most important, thing for ITAM professionals to do is to embrace AI. It's clear that AI is coming to the world of ITAM and so we must all make sure we are best positioned, and willing, to take advantage of it wherever appropriate. 79% of business leaders agree that they need to adopt AI to remain competitive but 59% worry about quantifying the gains in brings to users and the wider business.

What else must we do?

Invest in training

- Prepare yourself, your team, and your stakeholders for the changes AI will bring to ITAM processes. Provide training on AI technologies and capabilities to set expectations and ensure rapid adoption.
- AI will start in a few limited areas such as invoice and contract processing but will, over time, expand into other areas such as compliance management, asset lifecycle management, and automated reporting. Make sure you are focusing in the correct areas to prepare for success.

Ensure data quality

AI is only as good as the data it can access. Make sure your data is consistent, accurate and trustworthy so any recommendations from your AI tools as build on as solid a foundation as possible.

Develop strategic approaches

As companies begin to explore the possibilities of integrating AI into ITAM, organizations will be required to develop strategic approaches regarding processes, tools, and systems.

Set realistic goals

AI is not a solution to every problem; it is simply a tool; a that is better suited to some situations than others. Do not believe, and do not let your leadership and stakeholders believe, that simply adding AI will automatically fix all issues. Just as buying a SAM tool does not fix all issues now, AI will still require great people and robust process to succeed.

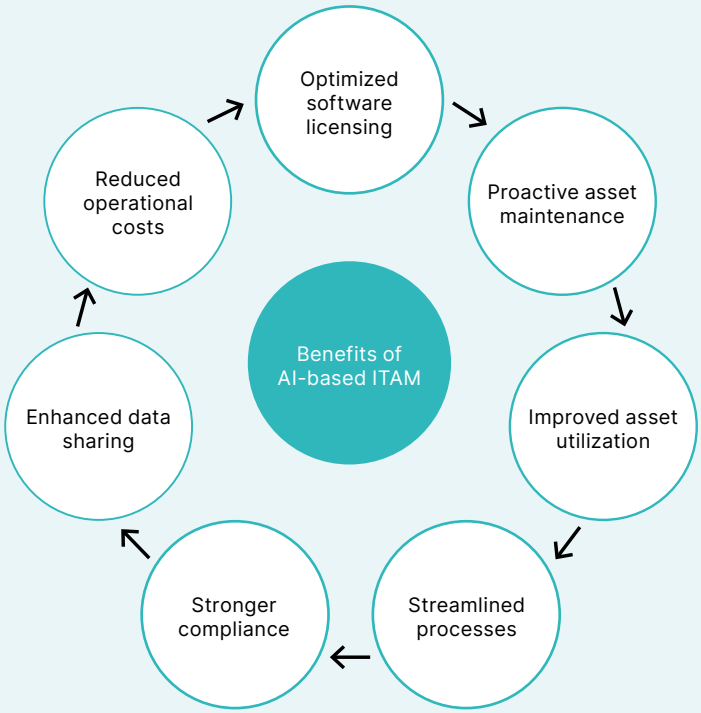
Understand the challenges

The adoption of AI in ITAM should be carefully planned, considering data privacy, staff training, initial investments, how you quantify success, and what the desired outcomes are in the long-term.

Benefits of AI-based ITAM

In the field of IT asset management (ITAM), artificial intelligence (AI) is a decisive factor. We can harness AI technology to simplify IT asset discovery, improve data accuracy and increase operational efficiency. This is not just a technology upgrade, but a paradigm shift that enables organizations to manage their IT assets more effectively.

Benefits of AI-based ITAM



Conclusion

With AI's predictive analytics and advanced decision-making capabilities, ITAM managers can look forward to a future where operational costs are reduced, software licensing is optimized, and asset utilization is maximized – all this providing more time for strategic actions, learning, and growth.

However, this journey requires a cultural shift. Organisations must foster an environment where agility and adaptability are at the forefront, ensuring teams are equipped to harness the potential of AI. This will be underpinned by continuous learning and development, keeping pace with the rapid advancements in AI technology.

But the planning and change management must be robust, and clear goals, expectations, and KPIs must be agreed with leadership for the best chance of success. The possibilities that AI offers for IT asset management, both in its current form and as it continues to adapt and change in the future, are numerous and exciting. Make sure you have the mindset, skills, and support to capitalise on this opportunity to optimise, modernise, and revolutionise your IT asset management practice as we head towards 2030.

Get in touch for further information.

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