System Planning: Project Charter

ITAM Business Case Study

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Company History

IT Asset Management (ITAM) has evolved alongside the development of information technology. Beginning with the introduction of mainframe computers in the 1960s, the need to track and manage IT assets became evident. With the proliferation of personal computers and software licenses in the 1980s and 1990s, rudimentary asset tracking systems emerged. ITAM and Software Asset Management (SAM) became critical for managing the growing complexity of IT environments. Today, ITAM is an integral part of IT operations, incorporating automation and AI to efficiently manage assets, ensure compliance, and enhance security in an ever-evolving technological landscape. Software development delays and cost overruns were another issue in the past. These problems may result in missed deadlines, increased project expenses, and unhappy clients.

Problem Statement

In a dynamic and quick-paced environment, a corporation refers to difficulties and problems with precisely and swiftly monitoring and managing stock levels, data correctness, and supply chain procedures. There is no formal system in place to track and manage the lifecycle of IT assets because asset stages are not being tracked. As a result, there may be inefficiencies, increased expenses, security threats, and challenges with resource optimization. When the same information is present in numerous locations within an organization, it creates data discrepancies, increases storage costs, and complicates decision-making.

Technology Solution Statement

To address the problem with existing technical inaccuracy is to develop a Real-Time Inventory software. This software package will be more inclined to help solve concerns associated with on time data upgradation. For example if there is an increase or decrease in stock at one inventory it will be reflected immediately at other storages as well. The next solution will be projected to decrease ambiguities in data shared by different personnel. Moreover this will be effectively achieved by having a uniform type of dataset entry. So, by implementing the use of this type of software package major resource management can be achieved. The detailed flow is as explained below:

- Inventory manager will be uploading data into the database through easy user interface developed using frontend technologies.
- Real time updation in the resources of inventory can be handled by backend technologies and database systems.
- With the use of cloud services the real time updation of resources available at each and every inventory can be achieved.
- Other technical tools and technologies can be used to design a user as well as worker friendly application to make it feasible and accessible with convenience.
- Moreover with the help of backend tools various other features such sorting of available items, along with other user specific filters will be designed.
- It can automatically generate reports on inventory levels, usage trends, and resource allocation. These reports can provide valuable insights to management for making data-driven decisions and optimizing resource utilization.

Project Benefits

The major advantages of the project primarily revolve around two key aspects: efficient resource management and improved financial practices. To delve into specifics, the implementation of real-time inventory updates promises to revolutionize resource management by significantly reducing the margin for human error. Moreover, it will establish a comprehensive visual representation of resource availability and scarcity, offering clear insights into the status of various resources.

In essence, the project's primary benefits center on resource optimization and financial prudence. The integration of real-time inventory updates not only minimizes the potential for human mistakes but also furnishes a comprehensive overview of resource availability. This newfound visibility into resource status is expected to play a pivotal role in reducing resource wastage, thereby enhancing cost-effectiveness. These combined advantages are poised to transform resource management and financial practices, ushering in a more efficient and economically sound operational system.

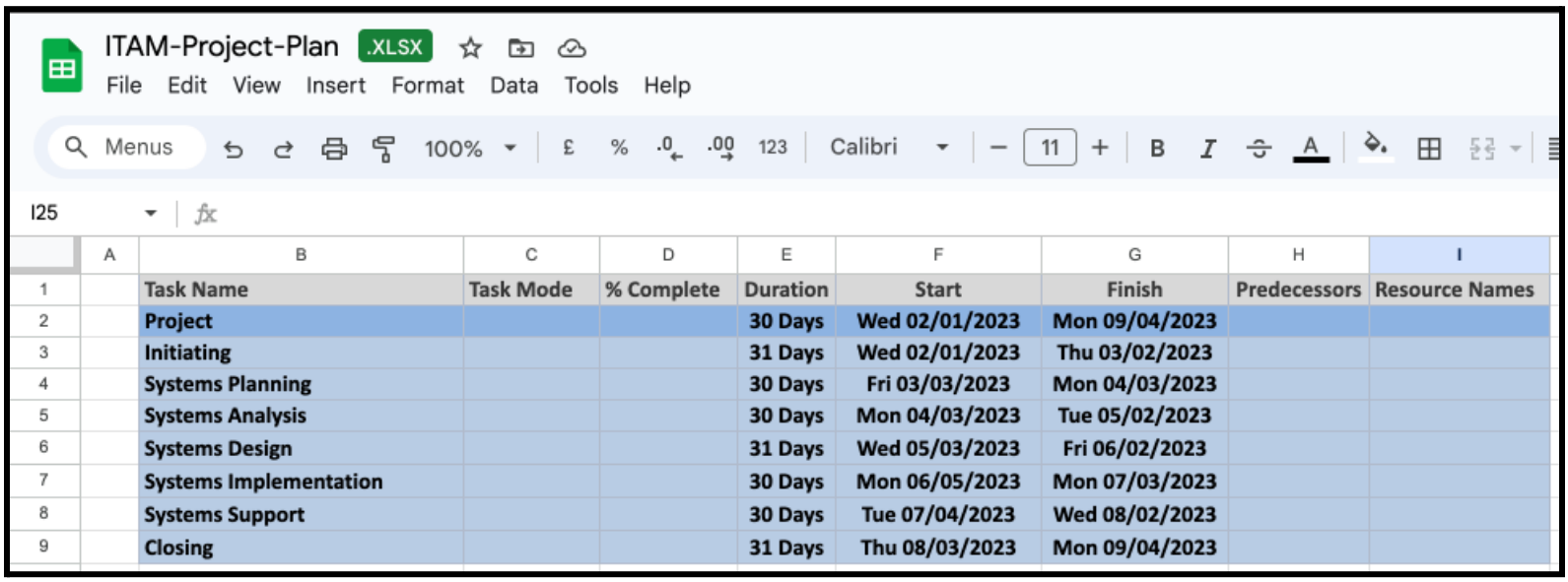
The implementation of real-time inventory updates also enhances customer satisfaction and service quality. With accurate and up-to-the-minute information on resource availability, organizations can better meet customer demands and respond to unexpected changes in real-time. This heightened responsiveness and improved customer service can lead to increased customer loyalty and positive brand reputation, ultimately contributing to the project's overall success and long-term sustainability.

Stakeholders

A formal definition of a stakeholder is: “individuals and organizations who are actively involved in the project, or whose interests may be positively or negatively affected as a result of project execution or successful project completion” (Project Management Institute (PMI®), 1996).

1. **CEO:** The CEO benefits from improved inventory management through software, ensuring efficient resource allocation and reduced errors, leading to cost savings and better decision-making.
2. **CTO:** Technical advantages include streamlined data handling, improved system integration, and enhanced data security for real-time inventory updates.
3. **CFO:** Financial management benefits from reduced resource wastage and better cost-effectiveness due to accurate inventory tracking.
4. **Inventory Manager:** The inventory manager gains efficiency and precision in managing inventory, resulting in reduced resource wastage and optimized resource allocation.
5. **Product Managers:** Product managers experience advantages in terms of optimized investments and time savings, enabling them to make informed decisions promptly.
6. **Human Resource:** The HR department may face challenges in adapting to new software, potentially impacting the recruitment process.
7. **Competitors:** Competitors may face disadvantages if they cannot match the efficiency and cost-effectiveness achieved through the software's real-time inventory management capabilities.

Project Plan



	A	B	C	D	E	F	G	H	I
1		Task Name	Task Mode	% Complete	Duration	Start	Finish	Predecessors	Resource Names
2		Project			30 Days	Wed 02/01/2023	Mon 09/04/2023		
3		Initiating			31 Days	Wed 02/01/2023	Thu 03/02/2023		
4		Systems Planning			30 Days	Fri 03/03/2023	Mon 04/03/2023		
5		Systems Analysis			30 Days	Mon 04/03/2023	Tue 05/02/2023		
6		Systems Design			31 Days	Wed 05/03/2023	Fri 06/02/2023		
7		Systems Implementation			30 Days	Mon 06/05/2023	Mon 07/03/2023		
8		Systems Support			30 Days	Tue 07/04/2023	Wed 08/02/2023		
9		Closing			31 Days	Thu 08/03/2023	Mon 09/04/2023		

Figure 1: Project Plan

Project plan outlines the various phases and timelines for a project scheduled to occur from Wednesday, February 1, 2023 to Monday, September 4, 2023. This project plan is organized into eight distinct phases, each allocated a specific number of days for completion. An overview of each phase is as follows:

- **Initiating:** The Initiating phase typically marks the beginning of a project. During this phase, the project team identifies stakeholders, defines the project's objectives, and clarifies the scope and constraints. This is a critical stage for setting the project's direction and obtaining initial approvals.
- **Systems Planning:** Systems Planning involves creating a detailed project plan. This phase typically includes defining project goals, creating schedules, estimating budgets,

and allocating resources. It's essential for laying the groundwork for the project's execution.

- **Systems Analysis:** Systems Analysis focuses on understanding and documenting the current processes and requirements. During this phase, the project team gathers information to design a system that meets the identified needs.
- **Systems Design:** Systems Design involves creating a detailed blueprint for the system based on the requirements identified during Systems Analysis. This phase sets the framework for development.
- **Systems Implementation:** Systems Implementation is where the actual development and construction of the system take place. It involves coding, testing, and integrating various components to build the final product.
- **Systems Support:** Systems Support focuses on ensuring the system's stability and functionality after it's been implemented. This phase includes user training, troubleshooting, and addressing any issues that arise.
- **Closing:** The Closing phase marks the end of the project. During this phase, the project team completes any remaining tasks, conducts a final review, obtains formal acceptance from stakeholders, and closes out the project.

In today's dynamic business environment, some projects may benefit from more agile approaches, which allow for greater flexibility and adaptability as requirements evolve. The choice of project management methodology should align with the project's nature and goals. Additionally, successful project management requires effective communication, stakeholder engagement, risk management, and continuous monitoring and control throughout each phase.

Technology Tools

The Information Technology Asset Management System company will require a full-fledged software suite using cutting-edge technologies which includes as below:

- Frontend Web Technologies: React JS, Angular, HTML, CSS, Chart JS, jQuery
- Backend Web Technologies: Node JS, Python, Java, Javascript, Typescript
- Database Technologies: MySQL, MongoDB, AWS RDS, AWS DynamoDB
- Cloud Technologies: AWS Cloud, Azure Cloud, Google Cloud
- Other: Tableau, Machine Learning, Data Training, Big Data

Current Solutions

There are several Commercial-Off-The-Shelf (COTS) products available in the market that could address the business problem of real-time inventory updates and managing IT assets for an ITAM (Information Technology Asset Management System) company. Here are some relevant COTS products:

- **ServiceNow IT Asset Management:** ServiceNow is a comprehensive IT service management platform that includes IT Asset Management as one of its modules. It provides real-time visibility into IT assets, tracks their lifecycle, and offers automation for inventory updates.

Pros:

- Integration capabilities with other ServiceNow modules.
- Scalability and flexibility to adapt to changing business needs.
- Regular updates and improvements from the vendor.

Cons:

- Potentially high implementation and licensing costs.
- Requires expertise to configure and maintain.

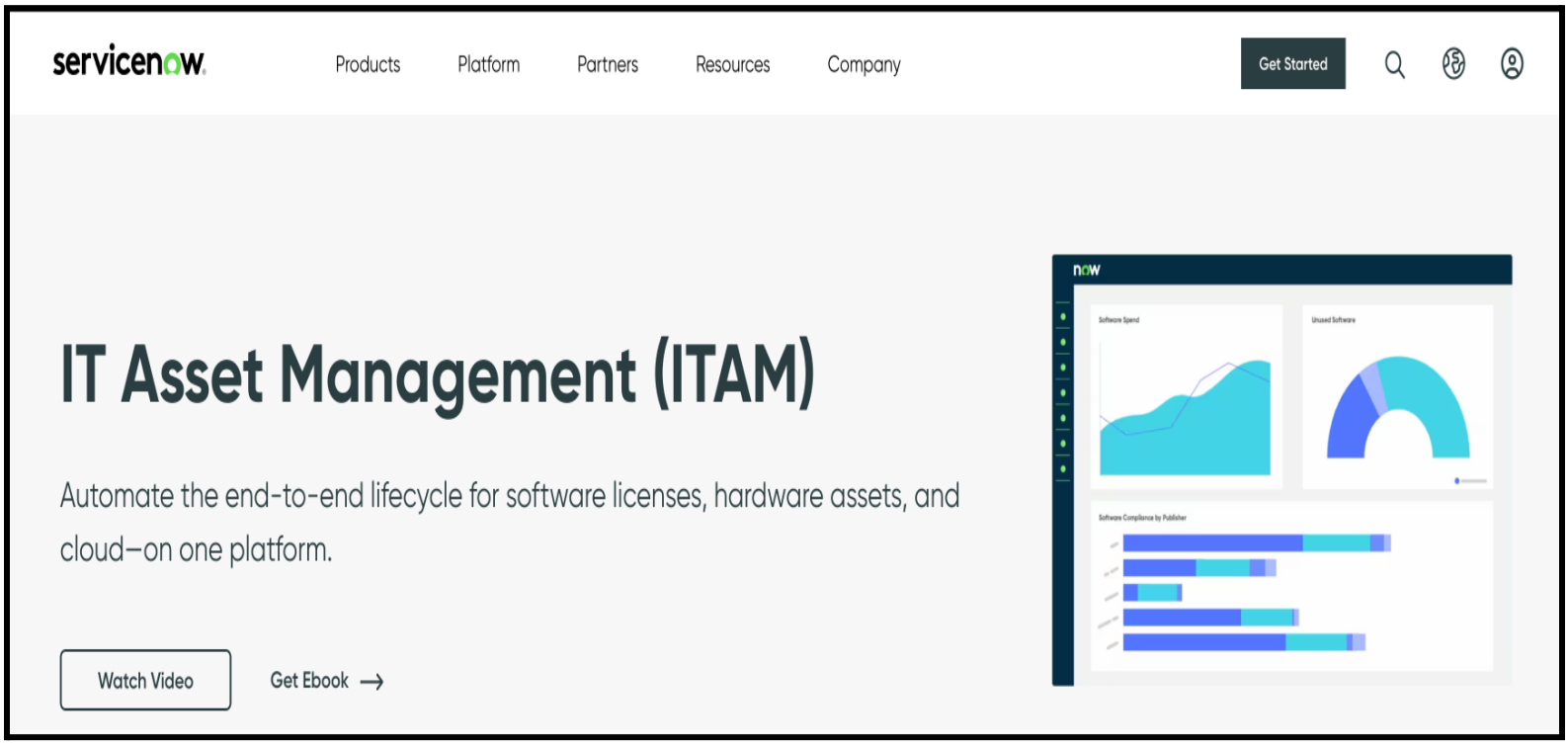


Figure 2: ServiceNow ITAM

- **SolarWinds Asset Management:** SolarWinds offers a suite of IT management tools, including an asset management solution. It allows organizations to track hardware and software assets, manage licenses, and automate inventory updates.

  Pros:

  - Part of a comprehensive IT management suite.
  - Provides real-time insights into asset status.
  - User-friendly interface.

  Cons:

  - Costs may add up if additional SolarWinds modules are needed.
  - Limited customization options compared to some other solutions.

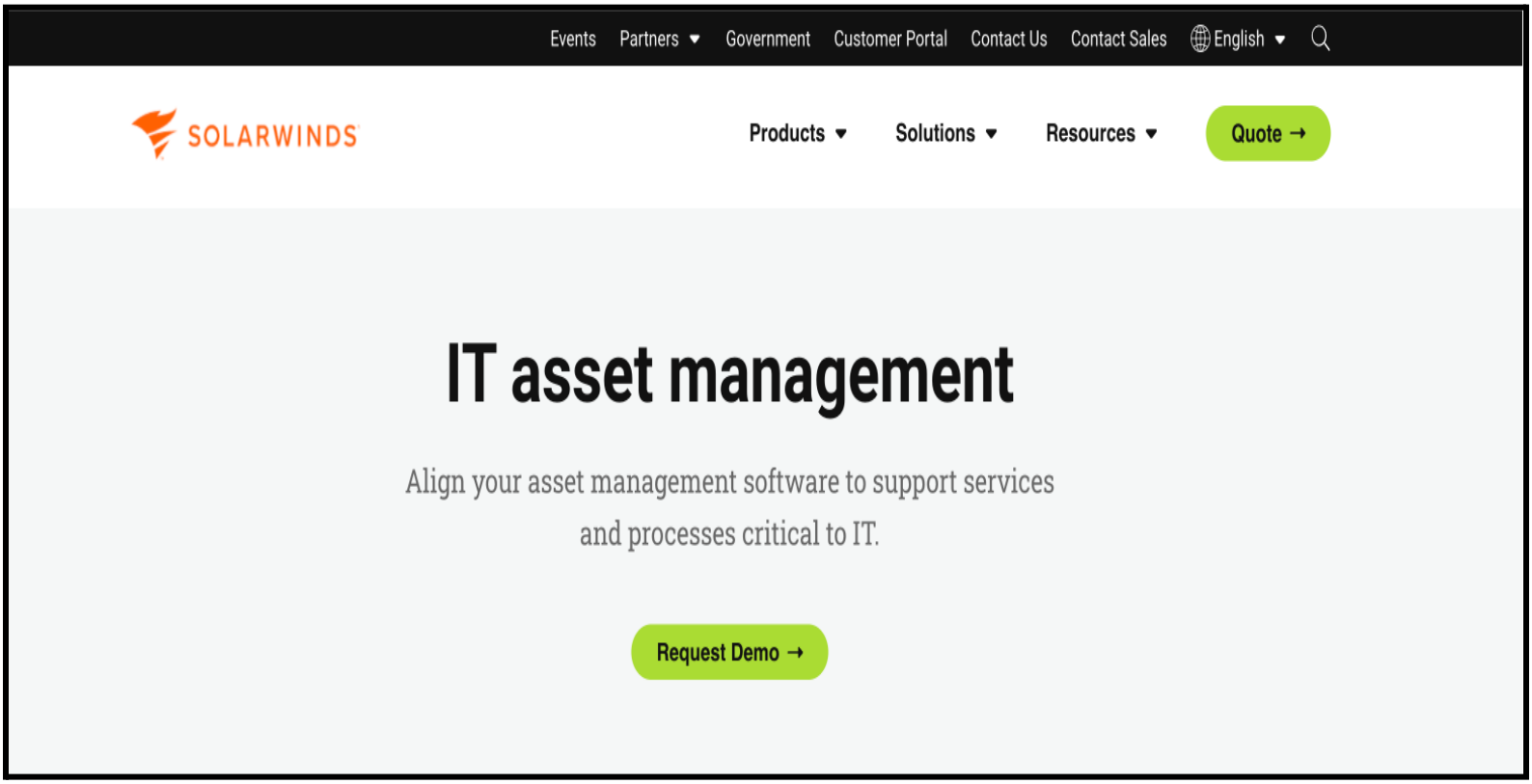


Figure 3: SolarWinds ITAM

- **IBM Maximo Asset Management:** IBM Maximo is an enterprise asset management system that can be adapted for IT asset management. It offers real-time tracking of assets, maintenance scheduling, and comprehensive reporting capabilities.

  Pros:

  - Strong asset lifecycle management features.
  - Integration with other IBM solutions.
  - Scalable for large organizations.

  Cons:

  - Higher upfront costs.
  - May require significant customization to meet specific ITAM needs.

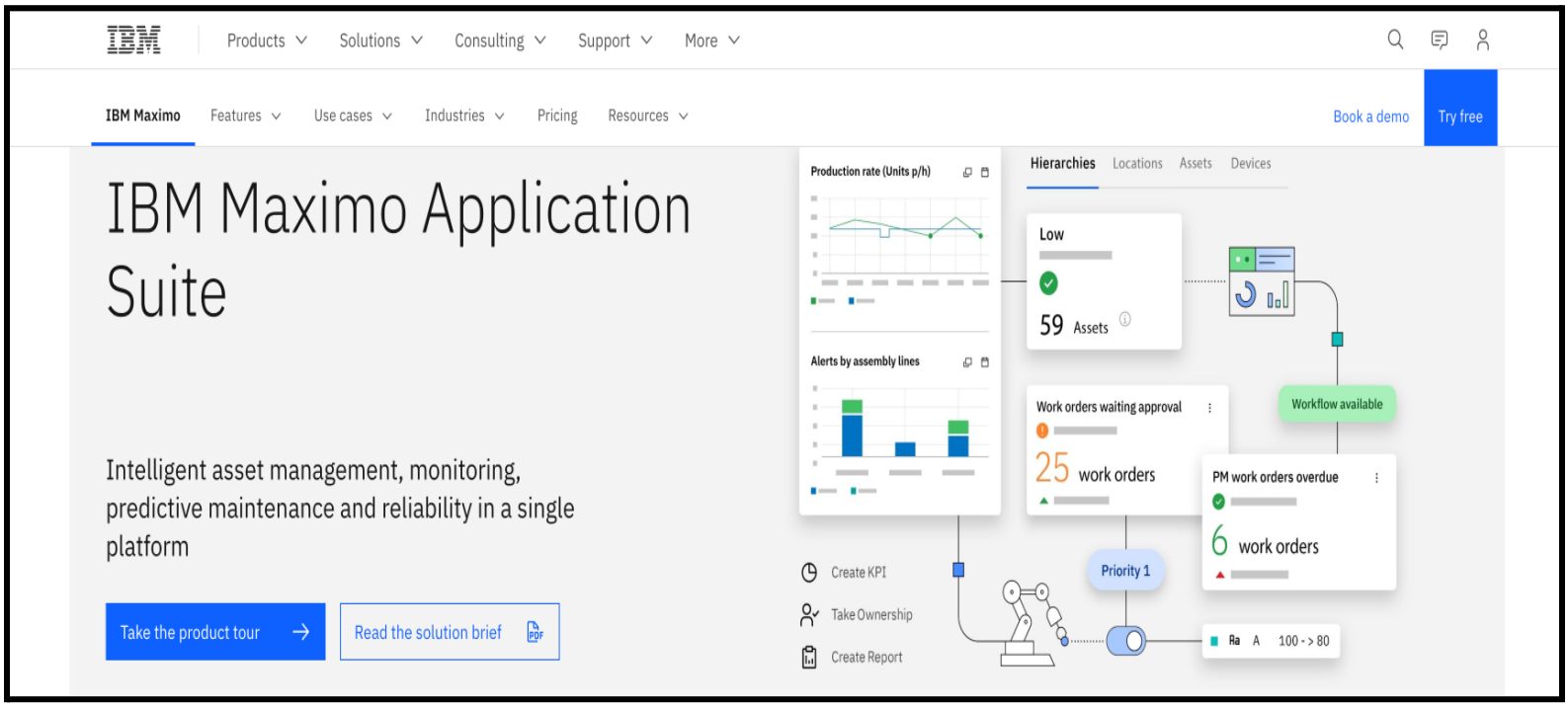


Figure 4: IBM Maximo

- **Freshservice:** Freshservice is a cloud-based IT service management and asset management solution. It offers real-time asset tracking, automated updates, and a user-friendly interface.

  Pros:

  - Ease of deployment and scalability.
  - Cost-effective subscription pricing.
  - Regular updates and improvements.

  Cons:

  - Limited customization options compared to on-premises solutions.
  - Dependency on internet connectivity for real-time updates.

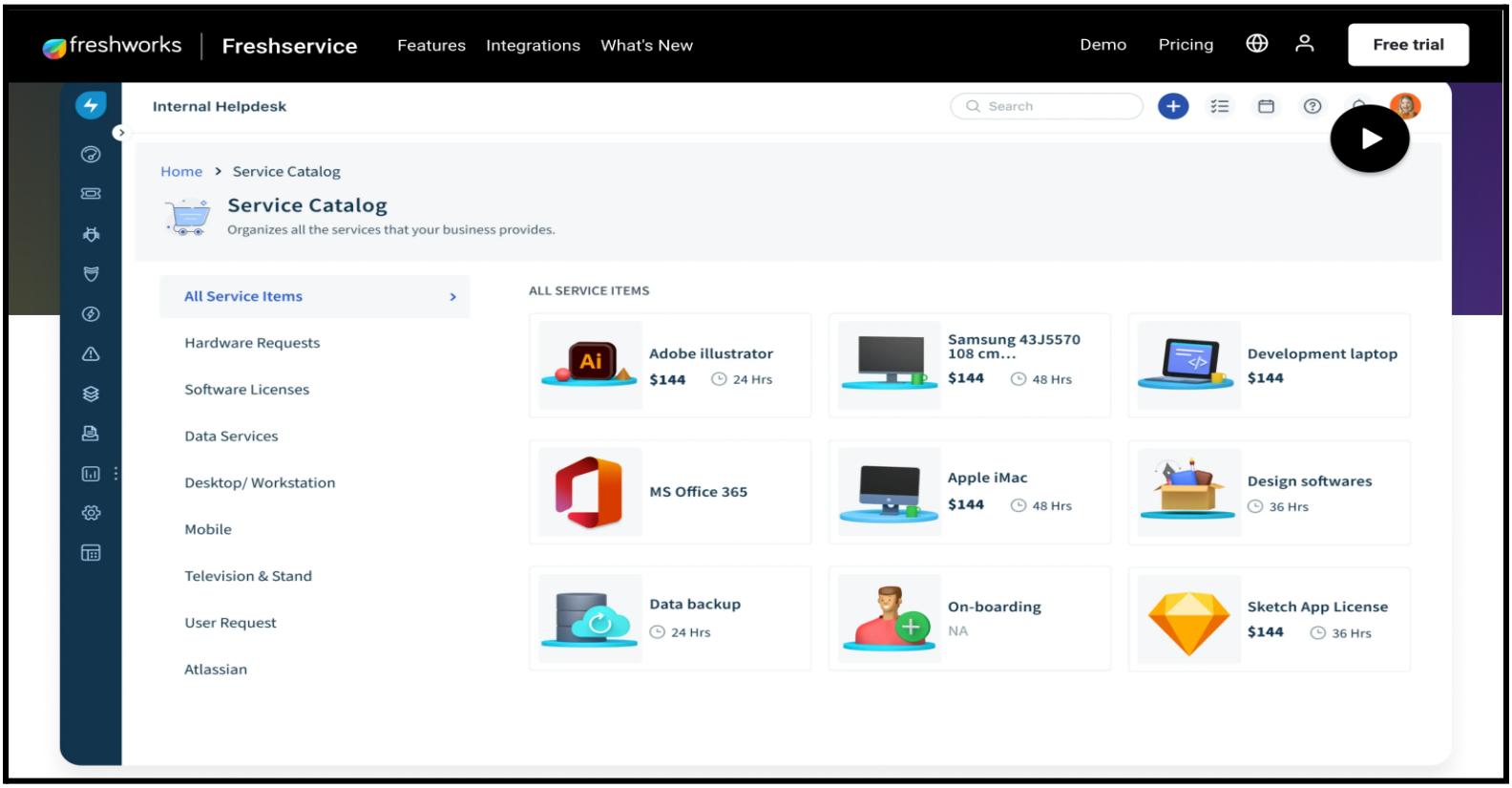


Figure 5: Freshworks ITAM

Pros and cons of COTS technology solutions over In-House or On-Prem Solutions:

- **Pros of COTS Solutions:**
    - Rapid Deployment: Solutions are typically ready to use, reducing the time required for development and testing compared to in-house solutions.
    - Vendor Support: Vendors provide support, updates, and maintenance, reducing the burden on internal IT teams.
    - Scalability: Many solutions are designed to scale as your business grows, making them suitable for both small and large organizations.
    - Best Practices: It often incorporates industry best practices and compliance standards, ensuring regulatory compliance.
- **Cons of COTS Solutions:**
    - Cost: Upfront licensing and subscription costs can be high, especially for larger organizations.
    - Customization Limitations: Solutions may not perfectly align with unique business processes, requiring customization that can be complex and costly.
    - Limited Control: Organizations have limited control over the development and update roadmap of COTS solutions, which can be a drawback if specific features or changes are needed urgently.

When choosing between a COTS solution and an in-house or on-premises solution, it's essential to assess your organization's specific needs, budget, and long-term goals. Considering factors such as customization requirements, scalability, and the level of control you want over the solution's development and maintenance.

References

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