

THE DATA SECURITY AND MODERNISATION ADAPTION TO THE CLOUD BY ORGANISATION



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It has been a fundamental challenge for companies historically around the world and in the UK on how to modernize their old legacy systems that runs their business. CGS has completed its research which includes the findings from a Microsoft white paper and a view from industry & consulting with organizations at the heart of the change such as The Flow Insurance, The Consultancy Group, SCAD Software, amongst some of the organizations taking on the challenge, and has been approached to help Companies transform in today's world. We review the why's and do nots of the modernization challenges and what the future brings for organizations that don't take the challenge to modernize. The research was completed after the COVID pandemic that took the world by surprise.

HISTORIC UNDERSTANDING OF LEGACY SYSTEMS

In Introduction: In today's digital age, businesses are relying more and more on technology to provide their customers with the best possible experience. With this increased reliance, it's become increasingly important to modernize systems and IT systems to keep up with the demands of a fast-paced, digital world.

What is System Modernization? System modernization is the process of upgrading legacy systems to new, modern technology platforms. This includes updating hardware, software, and processes to make the systems more efficient, scalable, and secure. The goal of System Modernization is to transform legacy systems into modern, cloud-based platforms that can support the evolving needs of businesses.



Why is System Modernization Important? Legacy systems can often be slow, expensive to maintain, and unreliable, which can negatively impact the user experience. Upgrading these systems to modern platforms can improve performance, reduce costs, and increase security. Additionally, modernizing systems can help businesses to take advantage of new technology innovations, such as artificial intelligence and machine learning, to enhance their offerings and stay ahead of the competition.

Modernization is the act of updating organizational performance, systems and tools to the most current versions or new improved infrastructure. In the context of cloud computing, modernization is the process of transitioning an organization's systems, processes, and data management to a cloud-first approach. The goal is to improve organizational and technological performance, enhance the quality of customer and employee experiences, and accelerate time to market for new offerings and updates.

LEGACY VS SECURITY

The Currency issue (continuing to run your business on legacy hardware and software models) is a hot topic in Cyber Security right now. Legacy hardware and software pose several cyber security risks such as known vulnerabilities, incompatibility with modern security measures, lack of support, outdated technology, and increased attack surface.

These systems may have known security vulnerabilities that have not been patched, making them easier targets for cyberattacks, and may not be compatible with modern security measures, making it difficult to protect against cyber threats. Additionally, legacy systems may



no longer receive support or updates from the manufacturer, leaving them vulnerable to security threats and may use outdated encryption and authentication methods that are now easily cracked by modern cyber criminals. It is important to regularly assess and update security measures to minimize these risks.

- **IoT attacks:** As the number of internet of things (IoT) devices continues to grow, organizations will need to be vigilant about the security of these devices, which can be vulnerable to cyber-attacks.
- **Cloud attacks:** As more organizations adopt cloud computing, they will need to be aware of the potential for cyber-



KNOWN DATA CYBER THREATS

However, some of the main types of cyber threats that organizations may face in the coming year include: -

- **Ransomware:** This is a type of malicious software that encrypts an organization's data and demands a ransom for the decryption key.
- **Phishing:** This involves tricking individuals into revealing sensitive information, such as login credentials or financial data, through fake emails or websites.
- **Malware:** This refers to any software that is designed to cause harm to an organization's systems or steal sensitive data.

attacks on their cloud-based systems and data.

- **Supply chain attacks:** This involves compromising an organization's suppliers or other partners to gain access to the organization's systems or data.

LEGACY SYSTEM CHALLENGE IN INDUSTRIES

In most industries, the IT department plays a crucial role in facilitating efficient and streamlined processes. However, there are industries that are averse to change and often rely on legacy systems that have not been updated. Many third-party organizations supporting companies in these industries

lack the financial resources to update and manage their IT services, resulting in the continued use of outdated systems makes it difficult to future-proof & upgrade services.

A VIEW FROM IT BUSINESS LEADERS ON LEGACY SYSTEM CHALLENGES

The Floom Insurance

Claims inflation is a significant challenge in today's insurance industry, and it particularly affects the profitability of motor insurance policies. Outdated legacy systems that are still widely used prevent insurers from taking advantage of the latest technology to control costs and prevent claims leakage. As a result, policyholders are forced to bear the consequences, which include substantial increases in policy premiums.

Mike Moran, Director of Product at The Floom Insurance

The Consultancy Group

A growing emphasis on Digital Transformation across the market has seen a trend in organizations reviewing their legacy system landscape, in part driven by the changes enforced on us all during the pandemic. CRM and ERP platforms are at the heart of these modernization plans, particularly as cloud-based solutions have become more popular due to advantages around scalability, cost efficiencies and improved data management capabilities.

Dan Carter, Senior Consultant at The Consultancy Group

Cioux Consultancy Practice

Legacy systems pose security vulnerabilities and lack support due to their complex code and instability in the fast-paced world of technology. Organizations are advised to transition to green and carbon-friendly services /data centers in the cloud to

reduce costs and stabilize their production platforms. While there may be initial costs, managing the transition effectively can greatly improve IT infrastructure efficiency. Delaying this move becomes increasingly costly for organizations each year. As we are witnessing a gradual shift away from legacy systems.

Roger Brown, Principal Consultant Vice President at Cioux Global Services Group

“Legacy anchors organizations to the past, whilst the cloud beckons them towards a future of innovation and agility. Projects often with many unknowns makes the journey more challenging. The key is a Partner with whom you can together embrace these challenges head-on and resolve as a team”

Shaun Orpen CEO at SCAD Software

INCREASING TECHNOLOGY CHANGES

Modernizing legacy systems involves assessing, planning, selecting a platform, such as cloud or updating hardware/software, and implementing automation to improve efficiency, security, and support evolving needs. This can help businesses stay ahead and offer better customer experience.

LEGACY SYSTEMS TO CLOUD COMPUTING

Cloud computing refers to the delivery of computing resources, such as servers, storage, software, and services, over the internet. It offers several different deployment models and service models, which can be categorized into the following concepts:

Deployment Models:

Public Cloud: These are cloud services provided by third-party providers over the internet and

are accessible to anyone who wants to use them.

Private Cloud: These are cloud services hosted on a private network and are accessible only by a particular organization or company.

Hybrid Cloud: This is a combination of public and private cloud services, where a company can use both to meet their computing needs.

Multi-Cloud: This is the use of multiple cloud services from different providers, to meet the computing needs of an organization.

Service Models:

Infrastructure as a Service (IaaS): This is a cloud service model that provides virtualized computing resources such as servers, storage, and networking over the internet.

Platform as a Service (PaaS): This is a cloud service model that provides a platform for developing, running, and managing applications over the internet.

Software as a Service (SaaS): This is a cloud service model that provides software applications over the internet, typically accessed through a web browser.

Cloud computing adoption has been rapidly increasing in the industry, as it provides several benefits such as cost savings,

scalability, flexibility, and accessibility. According to Gartner, the worldwide public cloud services market is projected to grow to \$397.4 billion in 2024, up from \$242.7 billion in 2019. Industries such as healthcare, finance, education, and retail are among the top adopters of cloud computing.

ORGANIZATION LEGACY SYSTEMS

It is estimated that a significant number of organizations globally still use legacy systems, often due to their familiarity and the difficulty in transitioning to new technology.

This information is not publicly available, and the number can vary greatly depending on the definition of "legacy systems." However, it is safe to say that a substantial portion of businesses in the UK are still using legacy systems, as they are often deeply integrated into the company's processes and may be challenging to replace.

WHAT ARE THE FINANCIAL BENEFITS MOVING FROM LEGACY TO MODERN?

Moving from legacy systems to modern systems can bring a range of financial benefits, including:

Increased efficiency: Modern systems are designed to be user-friendly, efficient, and flexible, which can lead to

increased productivity and reduced costs.

Scalability: Modern systems are designed to scale as a business grows, which can help organizations avoid the cost of investing in new hardware or software as they expand.

Lower maintenance costs: Legacy systems often require ongoing maintenance and support, which can be expensive. Moving to modern systems can help reduce these costs, as they are often designed to be more self-sufficient and require less maintenance.

Improved security: Modern systems are designed with security in mind, and often have built-in security features that can help reduce the risk of data breaches and minimize the cost of recovery.

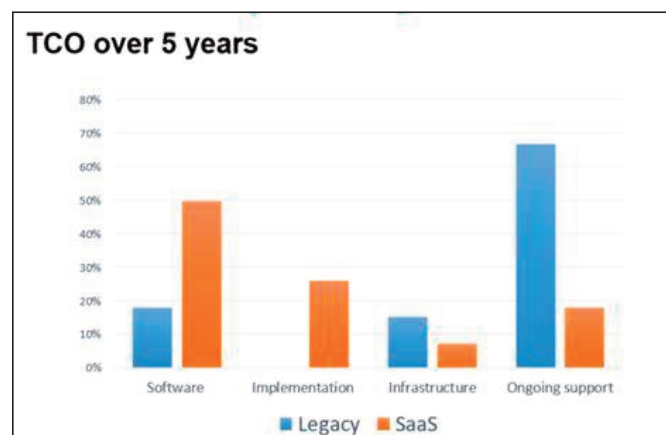
Better decision making: Modern systems often have advanced analytics and reporting capabilities, which can help organizations make more informed decisions and improve overall financial performance.

This was prepared by CGS Consultancy Services part of the CGS Group
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WHAT ARE THE FINANCIAL BENEFITS MOVING FROM LEGACY TO MODERN?

Increased competitiveness: By adopting modern technologies, organizations can stay ahead of the competition and remain relevant in their respective industries, which can lead to increased revenue and market share.

Overall, moving from legacy systems to modern systems can bring significant financial benefits to organizations, including increased efficiency, scalability, and improved decision-making capabilities.



THE FUTURE LEGACY CHALLENGE

The future for companies using legacy systems depends on several factors, including the specific needs of the company and the current state of technology. In general, companies that continue to rely on legacy systems may face difficulties in modernizing their operations, keeping up with the latest technology advancements, and meeting the demands of customers and stakeholders. However, some legacy systems may still serve a business's needs and may be more cost-effective to maintain than to replace.

DELIVERING SYSTEM MODERNIZATION IN ORGANIZATIONS

Deploy to production: Deploy the modernized system to production and monitor it to ensure it is performing well and meeting the needs of users.

Continuously evaluate: Continuously evaluate the performance of the modernized system and make necessary improvements to ensure its success in the long term.

By following these steps and engaging all stakeholders in the process, you can successfully deliver a system modernization project that meets the needs of

needs, which can be helpful in making unbiased recommendations for change.

Project Management: Migrating from legacy systems to digital technologies can be a complex and time-consuming process. IT consultancy firms can provide project management expertise to ensure that the transition is smooth and efficient.

Technical Knowledge: IT consultancy firms have the technical knowledge and skills to help organizations implement new technologies and integrate them into their existing systems.

Cost Savings: By working with an IT consultancy firm, companies can often reduce costs associated with digital transformation, as the firm will have experience negotiating with vendors and suppliers.

Overall, IT consultancy firms such as Accenture, IBM, Microsoft, Cioux (CGS), The Consultancy Group, SCAD, and others can provide valuable support to companies looking to move away from legacy systems and embrace digital technologies. They can help organizations navigate the challenges of digital transformation and ensure a smooth and successful transition. ■



Ultimately, the future for companies using legacy systems will depend on their ability to effectively manage and update their systems to ensure that they continue to meet the needs of the business. This may involve a gradual transition to modern systems, or a complete overhaul of their technology infrastructure. Companies that embrace digital transformation and invest in modern technology will likely be better positioned to meet the challenges of a rapidly changing business landscape.

Microsoft have now stopped support on old legacy systems, and if they do it's at a large cost to encourage organizations to move to the cloud to gain cost efficient savings. This way organization can gain more efficiencies and reduce their carbon footprint.

the business and supports its goals.

USING IT CONSULTANCY COMPANIES TO MOVE TO DIGITAL AWAY FROM LEGACY SYSTEMS

There are several reasons why companies might use IT consultancy firms to move away from legacy systems and towards digital technologies:

Expertise: IT consultancy firms have a wealth of experience in helping organizations modernize their technology infrastructure and move away from legacy systems. They can provide expertise on the latest technology trends and best practices for digital transformation.

Objectivity: IT consultancy firms provide an objective perspective on a company's technology