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WHITE PAPER

Evergreening: The path to perpetual modernization.

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Introduction

In today's fast-paced technological landscape, staying ahead is not just a competitive edge — it's a necessity.

Many financial organizations are trapped in a cycle of technical debt, struggling with outdated systems that stifle innovation and efficiency.

Enter evergreening: a proactive approach to continuously maintaining and upgrading IT systems.

Imagine a forest that remains lush and vibrant throughout the seasons, constantly renewing itself to stay healthy and resilient. This is the essence of evergreening in the IT world. It goes beyond merely keeping up with the latest software versions; it ensures that your IT infrastructure remains robust, secure and capable of supporting your organization's evolving needs.

This white paper explores the critical importance of evergreening, highlighting its benefits, challenges and strategies for successful implementation.

Join us as we delve into how evergreening can transform your technical landscape, paving the way for sustained growth and resilience in an ever-changing technological environment.

Discover why embracing this approach is not just smart but essential for future-proofing your organization and unlocking the potential of a continuously thriving IT ecosystem.

The concept of evergreening

Evergreening refers to the ongoing process of updating and upgrading software to keep it current and functional.

This involves several key components that contribute to a successful evergreening strategy. Overcoming various modernization challenges is crucial for thriving in an evergreened ecosystem.

Cloud-nativeness

Embracing cloud-native architecture allows for scalable, resilient and flexible applications. These systems fully utilize cloud environments for rapid deployment and seamless updates.

Continuous improvement/ Continuous deployment (CI/CD)

CI/CD pipelines automate the integration of code changes and their deployment to production, ensuring frequent and reliable software updates that are less prone to errors.

Observability and monitoring

Implementing robust observability and monitoring practices provides insights into the performance and health of applications. This enables proactive identification and resolution of issues, ensuring systems remain reliable and perform optimally.

Automated testing

Automated testing maintains software quality and reduces the time required for updates. By automating repetitive testing tasks, organizations can identify and resolve issues faster, leading to more stable releases.

Agility

Agile methodologies promote iterative development, enabling teams to respond swiftly to changes and deliver customer value more efficiently. Agility is essential for adapting to evolving requirements and market conditions.

The importance of automated testing

Automated testing plays a vital role in the evergreening process, especially in the banking sector, where it significantly reduces the time required for software upgrades and enhances overall system reliability.

According to the World Quality Report 2024-25, companies using automated testing services reduced operational risks by 86% and lowered development costs by 23%.

86%

reduction in operational risks

23%

reduction in operational risks

Beyond up-to-date ecosystems: The true essence of evergreening

Evergreening is more than just keeping software ecosystems current; it represents a continuous modernization process where all peripheral elements work in harmony.

By mastering evergreening, an organization optimizes its entire software development and deployment process, making it more efficient and resilient.

Achieving evergreening involves integrating cloud-nativeness, CI/CD, automated testing, agility, microservices architecture, DevOps culture, security integration, observability and monitoring of core operations.

This holistic approach ensures software systems are up-to-date and capable of evolving seamlessly with technological advancements and regulatory changes.

Many banking regulations mandate that financial institutions maintain robust, secure, and resilient IT systems. By leveraging evergreening, financial institutions can stay compliant, manage risks, enhance security and improve operational resilience.

Key regulations include:

1

Digital Operational Resilience Act (DORA)

Enhances the digital operational resilience of financial institutions, ensuring their ability to withstand and recover from digital disruptions.

2

Basel III

Improves the banking sector's capacity to deal with financial stress, enhances risk management and increases banks' transparency.

3

Sarbanes-Oxley Act (SOX)

Imposes rigorous internal controls and reporting standards to prevent corporate fraud.

4

Environmental, Social and Governance (ESG) regulations

Requires financial institutions to incorporate sustainability into their operations.

The debate: Smaller incremental upgrades vs. periodic releases

Periodic releases involve rolling out updates at defined intervals, allowing organizations to thoroughly test and validate new features and improvements before deployment.

This approach aligns well with the regulatory requirements in the banking industry, providing stability and predictability.

For financial institutions operating in regulated environments, periodic releases offer:

Compliance assurance

Ensuring each release complies with industry standards, reducing the risk of non-compliance.

However, periodic releases may not be as beneficial for financial institutions, due to:

Delayed innovations

Waiting for scheduled upgrades can delay the adoption of new technologies, regulatory updates and new product features.

Larger, more disruptive upgrades

Periodic releases can result in larger upgrades with more complexity that may require significant downtime and resources for thorough testing and implementation.

The debate: Smaller incremental upgrades vs. periodic releases

Evergreening IT systems involves smaller, incremental upgrades that keep the infrastructure up to date with the latest security patches, features and technological advancements.

This approach ensures that the systems are always current, reducing the buildup of technical debt and potentially lowering the risk of large-scale disruptions.

Evergreening offers several advantages:

Agility and flexibility

Continuous updates allow banks to quickly adapt to changing market conditions and technological advancements, keeping them competitive.

Enhanced security

Regular updates ensure that the systems are protected against the latest threats, reducing the risk of breaches and compliance issues.

Test automation

Test automation is key to evergreening and allows for higher-quality testing while reducing project timelines, creating a fast, repeatable project framework that enables more regular upgrades.

Conclusion: Evergreening for continuous innovation

Just as an evergreened forest remains vibrant and resilient through continuous renewal, evergreening your IT systems ensures they stay robust, secure and capable of supporting your organization's evolving needs.

Continuous, incremental updates protect against vulnerabilities by reducing the window of exposure. They are easier to manage and less likely to introduce major issues compared to larger, periodic releases.

Users benefit from access to the latest features and improvements without waiting for the next scheduled release, leading to greater efficiency, higher satisfaction, and long-term cost-effectiveness.

By adopting evergreening, financial organizations can maintain a more resilient, secure and efficient software ecosystem that is better equipped to handle evolving customer expectations and keep pace with technological advancements and regulatory requirements.

Through evergreening, your technical ecosystem can achieve a state of perpetual modernization and readiness for the future, much like a forest that thrives through continuous growth and renewal.

About Teciem

Teciem is a global provider of front-to-back treasury and capital markets software solutions, serving banks and financial institutions of all sizes. We deliver award-winning solutions for trading lifecycle and risk management, helping clients to operate seamlessly across asset classes and global markets. Built on decades of domain expertise, our solutions – Kondor, Summit, Opics, Sophis, Fusion Invest and Fusion Risk – are trusted by more than 340 financial institutions (and many of their subsidiaries) worldwide, including a majority of the top 100 global banks.

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