



Optimizing for the future: The APR imperative and insights from Cognizant and AWS—Series I

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Executive summary

In today's fast-paced digital landscape and technology-driven world, applications are an essential part of almost every organization, particularly when they are kept up-to-date and paired with cloud services that help the business stay competitive. App modernization and cloud migration, however, can be daunting tasks, especially with large, complex application portfolios.

Application portfolio modernization (APR) and cloud migration offer numerous benefits, including enhanced efficiency, user experience, security, agility, integration, competitive advantage, scalability, flexibility and cost savings. However, they may not be the ideal solution for every organization or application.

With a thoughtful strategy, APR can help organizations streamline their application portfolios, prioritize cloud migration and modernization and achieve a successful outcome. In this white paper, we explore the positive influences of APR and cloud migration when APR is an important first step in the process and aligned with the organization's strategic goals.

We're navigating digital transformation through effective APR so businesses can simplify, modernize, optimize and secure their competitive advantage.

The market trends

Trends shaping the marketplace indicate that application modernization is our biggest bet, as reflected in leading intelligence and research that give a view into the current market with projections for the next five years and beyond.

- The application modernization services market is projected to reach \$32.8 billion USD by 2027, growing at a compound annual growth rate (CAGR) of 16.7% during the forecast period. [Source: MarketsAndMarkets](#)

- Considering the economic changes due to COVID-19 and the Russia-Ukraine War influence, the global application modernization services market is projected to reach \$50.4 billion USD by 2028 from an estimated \$21.7 billion USD in 2022, at a CAGR of 15.1% during 2023 and 2028. [Source: Valuates Reports](#)
- The application modernization services market size was valued at \$7.2 billion USD in 2021 and is projected to grow from \$8.4 billion USD in 2022 to \$24.9 billion USD by 2023, exhibiting a CAGR of 16.8% during the forecast period 2022 to 2030. [Source: Market Research Future](#)

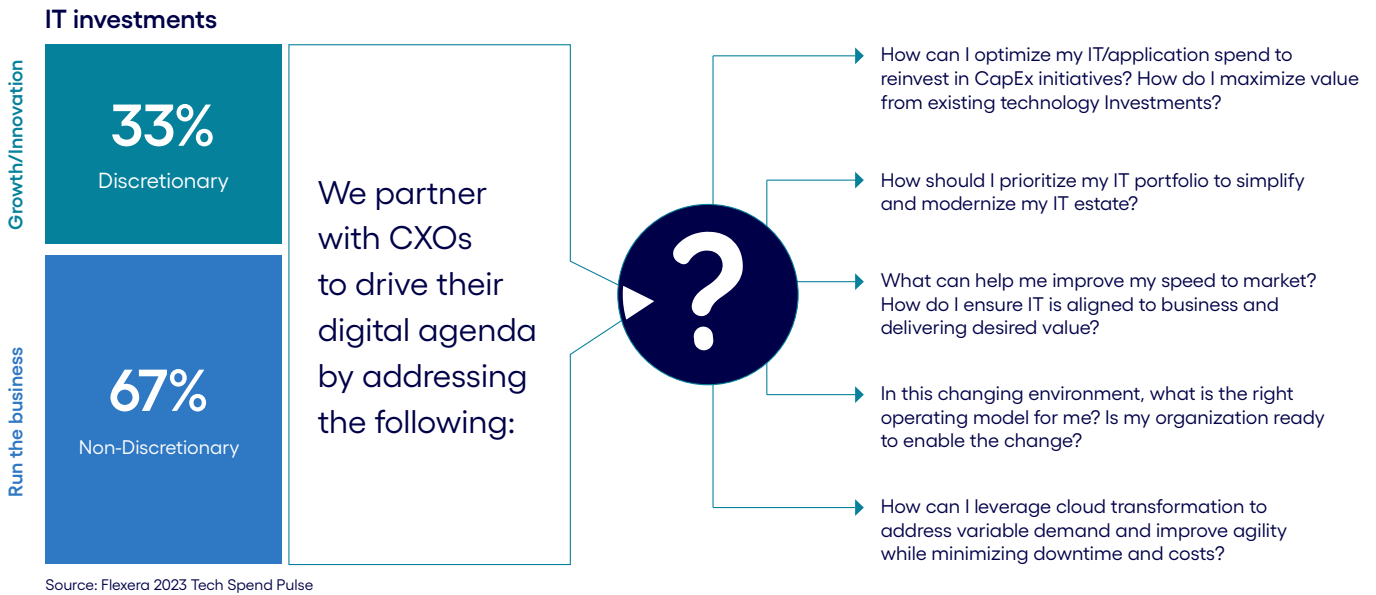
Key factors driving the growth of the application modernization market:

- Rising focus on transforming and modernizing legacy apps (modernizing existing apps and building new apps faster)
- Cloud services—Large scale migration of workloads to cloud-based and service-oriented architecture (SOA)
- Rise in demand for modern infrastructure

CIO priorities

CIO priorities are changing and evolving rapidly as digital technology has become integral to business strategy. With shrinking budgets, the need to optimize costs and reinvest in digital initiatives is a key imperative. Today's CIOs and IT leaders must look beyond the obvious levers of IT cost optimization. Reallocating funds from run the business to grow and innovate the business means freeing up operating expenses to meet expanding business needs, as shown in Figure 01.

Figure 01



Application portfolio rationalization (APR)

The process of application portfolio rationalization is an evaluation of an organization's software portfolio to determine which apps are not competitive in either business or technical capabilities.

Areas of evaluation include redundancy, outdated status or obsolescence, and whether the app needs to be consolidated or retired. Armed with this information, the business can decide to invest further to modernize, transform and streamline the portfolio, with an explicit goal of improving efficiency, reducing complexity and lowering total cost of ownership (TCO). These steps further improve our agility in responding to rapid changes in the business.

Application portfolio rationalization (APR) has been shown to enable an average year-over-year savings of 15% to 20% in operating expenditures (OpEx).

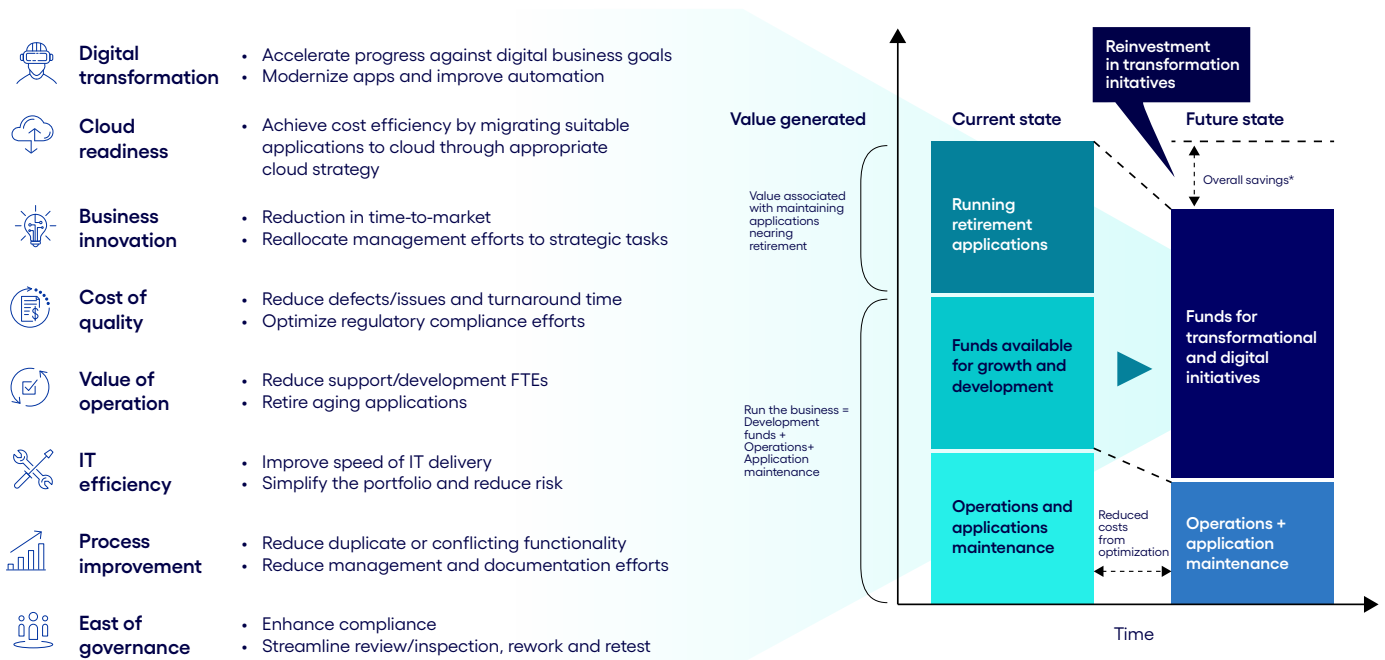
The Cognizant and AWS perspective

Through APR, organizations can transform a highly complex, costly and moderately effective application landscape into an agile, lean and productive portfolio aligned with key business needs and adaptable to an ever-changing macro climate. Effective use of portfolio rationalization can self-fund transformation initiatives and optimize TCO through application decommission, modernization and cloud migration strategy, as shown in Figure 02.



Figure 02

Application portfolio rationalization (APR) impact



Application rationalization is also necessary to ensure that organizations are not simply migrating their current problems to the cloud. Particularly when applications have been poorly designed or implemented, simply moving them to the cloud will not address the underlying issues. While a “re-host,” known as a lift-and-shift approach, can be a quick way to migrate applications to the cloud, it may not be the best approach for all applications and workloads. Rationalizing the application portfolio before migration ensures that underlying issues are addressed and only the most suitable applications are migrated.

Cognizant and AWS’s value proposition—Key differentiators

Experience:

- Experience in delivering end-to-end engagements: ~8 to 10 APR engagements (apps range 500 to 1000+) per year with credentials to deliver recommendations from an APR engagement on-time and in-budget
- Leverage the business domain knowledge to bring in our unique perspective and define the approach for engagement in any domain (Healthcare, Insurance, Life Sciences, Retail, Oil & Gas, BFS and others)

Framework:

- Utilize the strength of Cognizant’s proprietary APR framework (scalable, repeatable and customizable/AHP)
- Apply our execution model with underlying standardized tools and templates, a reference capability model to drive workshops for analysis, and sample deliverables to meet client objectives and requirements

Approach:

- Focus on building the right foundation as part of APR by defining suitable opportunities for implementation based on business case
- Right team composition to deliver expected outcomes (domain, APR, tool and tech experts including consulting lead), using Cognizant’s internal extended team for best practices, analysis review and recommendations validation

Benefit realization:

- Leverage our partner ecosystem to benefit similar engagements as needed, and collaborate with AWS for cloud migration opportunities
- A modernization approach that enriches business capabilities, cuts time-to-market (TTM) and reduces total cost of ownership (TCO)

Principal objectives of APR and outcomes

Below are six reasons why application portfolio rationalization is recommended before cloud migration and application modernization:

Cost optimization

Rationalizing the application portfolio involves assessing and prioritizing applications based on their business value, complexity and cost of maintenance. This helps to identify redundant or obsolete applications that can be retired or consolidated, which reduces the overall cost of maintaining and supporting the portfolio. With fewer applications, organizations can streamline their IT operations, save money and focus on investing in modernizing critical applications.

Better alignment with business goals

Rationalizing the application portfolio helps to align IT investments with business goals. It ensures the organization is investing in

applications that are critical to its success and strategic objectives. This enables IT to support business operations more effectively and efficiently, and improve overall performance.

Improved operational efficiency

Rationalizing the application portfolio reduces the number of applications and platforms that must be supported. It also reduces IT complexity, which in turn improves operational efficiency, decreases downtime and enhances the overall reliability of the IT infrastructure.

Better security and compliance

By rationalizing the application portfolio, organizations can reduce the risk of security breaches and compliance violations by having fewer applications. Fewer apps mean less attack surface, making it easier to monitor and secure the IT environment. Also, by eliminating outdated and unsupported applications, there is less risk of vulnerabilities and compliance issues associated with legacy software.

Better ROI on modernization

Rationalizing the application portfolio helps to ensure that investments made in application modernization are well-targeted and have the greatest impact. By identifying and prioritizing applications that are critical for migration and modernization, organizations can focus resources on areas that will deliver the most value and achieve the highest ROI.

Better resource allocation and increased agility:

By streamlining the application portfolio, organizations can free up resources for modernization efforts. This ensures that modernization efforts are focused on business-critical applications. It also helps organizations become more agile and responsive to changing business needs. By modernizing critical applications, organizations can more easily adapt to new market conditions and stay ahead of the competition.



Successful targets for APR assessment

Following are five target scenarios where APR can help organizations optimize their costs and application portfolios:

- **Mergers and acquisitions:** When organizations merge or acquire another company, they often inherit redundant applications that need to be rationalized. APR can help identify redundant applications and consolidate them to reduce costs and streamline the application portfolio.
- **Business changes:** As organizations evolve and grow, their application portfolios may no longer align with their business goals. APR can help organizations assess and identify applications that are no longer necessary or are not delivering value. This can help organizations reduce costs and ensure that their application portfolios are aligned with their business objectives.
- **Technology changes:** As technology constantly evolves, organizations often find that their legacy applications are no longer compatible with modern platforms. APR can help identify these outdated applications and replace them with modern applications that are better suited to the organization's needs. This can boost performance and reduce costs in the long run.
- **Exponential discretionary spend:** As organizations look to optimize costs, they may find that too many applications are not delivering value. APR can help identify and remove these applications, to reduce costs and free up resources for more critical initiatives.
- **Compliance and risk management:** Organizations may need to rationalize their application portfolios to ensure compliance with regulatory requirements or to manage risks associated with outdated or vulnerable applications.

Conclusion

Application portfolio rationalization (APR) presents a strategic approach to simplifying, modernizing and securing application portfolios, thereby accelerating digital transformation. By aligning with business objectives and leveraging cloud migration, organizations can achieve significant operational efficiencies, cost savings and improved competitive positioning. This white paper has underscored the importance of a thoughtful APR strategy, emphasizing its role as a precursor to successful cloud adoption and the modernization journey.



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