DELLEMC

APPLICATION PORTFOLIO TRANSFORMATION

Leveraging your applications for business advantage

ABSTRACT

Transforming from a technology provider to a business enabler is one of the major challenges facing IT organizations today.

This paper discusses how you can reduce your operational burden by aligning applications with the business. Agile organizations can invest the savings in greater innovation and compete more effectively by getting to market twice as quickly. Let us show you how.

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EXECUTIVE SUMMARY

Organizations, with agile application portfolios born in the cloud are pressuring incumbent organizations with aging application portfolios to transform the way they evolve their portfolios to remain relevant in their industry and maintain and grow market share. Organizations must adapt application portfolios to enable business experimentation and innovation. Cloud-native applications are focused on digital business innovation which accelerates the adoption of mobile, social, and cloud computing, combined with data and analytics. We are seeing the changes across all industries and not limited simply to technology companies.

It seems that everyone is now in the "software business" whether they like it or not. IT consumer expectations today are defined by external technology and service providers like Amazon and Azure. So without transforming how applications and services are built and consumed, IT will struggle to meet the fast, simple, self-service standards being set by the digital economy.

> When a **leading genetics research firm** experienced poor application availability and couldn't satisfy business needs, they engaged Dell EMC Services to identify applications suitable for cloud deployment. The results were remarkable:
>
> - 90 percent of the customer's application portfolio were cloud candidates
>
> - Dell EMC also identified the best cloud architecture suited to the customer's needs

BUSINESS CHALLENGES

New cloud infrastructure models and the introduction of cloud-native technologies create attractive opportunities to transform the application portfolio. But these opportunities also create new questions for IT organizations:

- Which applications are most valuable to the organization? Given the importance of software and online services in nearly every industry, it's critical that the application portfolio align with business objectives.

- How do cloud technologies influence portfolio strategy? The last major wave of application portfolio analysis drove consolidation and cost reduction. Now it's time to capitalize on the opportunities in areas like mobility, user experience, and big data.

- Which applications are candidates for investment? Given the opportunities presented by cloud and microservices architectures, CIOs should identify applications that will benefit the most from modernization or migration.

- Where and how do you start? Tackling these challenges simultaneously across an entire enterprise is almost certain to fail. Implementing changes incrementally will help minimize risk and maximize ROI.

APPROACH, FRAMEWORK, AND METHODOLOGY

The Dell EMC-developed application transformation framework for analysis, classifying, and prioritizing cloud modernization and migration candidates brings together our portfolio analysis capabilities and the factory model.

A FACTORY MODEL APPROACH

To support an agile application transformation initiative, Dell EMC developed an iterative approach, shown in Figure 1. It begins with an analysis of the existing portfolio, so that decisions can be made about the disposition of each application based upon its relative business and technology value. Each application is then designated as suitable for modernization, migration or retirement,. The process is then repeated as required, hence the term 'factory' model.
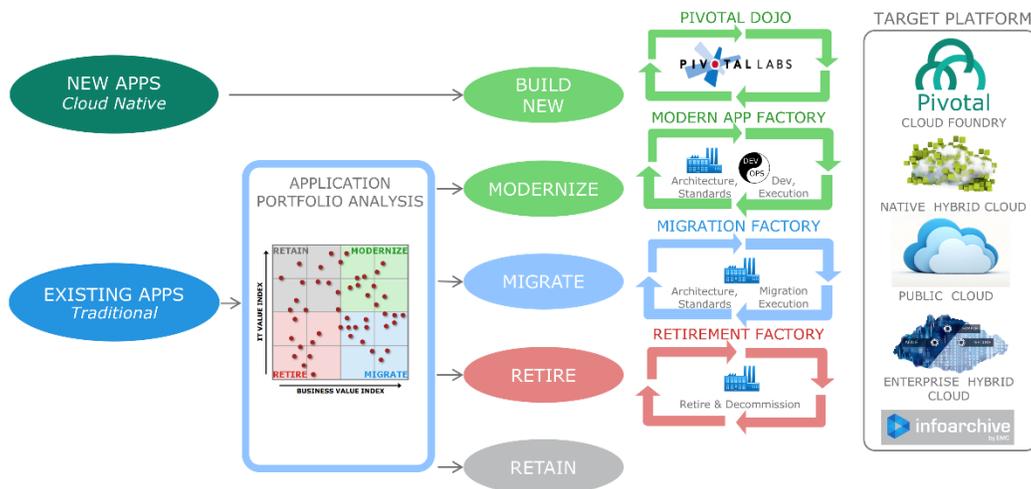
Figure 1.   Dell EMC Application Transformation Framework

The Factory Models

- The **modernization factory** is used to develop new, and update existing applications. It adopts agile and DevOps practices to establish a repeatable framework, tool chain, organization, and set of processes for building applications.

- The **migration factory** is used for replatforming applications and migrating them to cloud.

- The **retirement factory** is intended for applications that will be rendered obsolete. It increases the velocity of the retirement while maintaining access to critical structured and unstructured data for compliance and governance reporting.

AN AGILE PATH

Dell EMC Services quickly identifies opportunities using automated analysis of application portfolios. Dell EMC's application profiling services prioritize key business and technological values to maximize operational impact and financial benefit. Dell EMC then conquers the transformation of the entire application portfolio with an iterative, incremental approach to provide quick wins throughout the transformation process—because multiyear, monolithic application rationalization programs are unrealistic given the pace of business today.

Evaluation can be completed 50-70 percent more quickly with this approach versus employing traditional, manual, spreadsheet–based techniques. This means that your organization can start application transformation more quickly, resulting in near–term business benefits. In addition to time reduction, Dell EMC's approach also ensures portfolio decisions are aligned with architectural, security, and compliance policies.

Your organization will receive a comprehensive strategy and roadmap that culminates with a TCO / ROI analysis to provide you with the knowledge and confidence as to where your greatest opportunities lie.

AGILE PORTFOLIO ANALYSIS

We determine disposition on an application-by-application basis, leveraging a "hypothesis-led" approach. For example, applications that drive systems of engagement with customers and the market are more likely to be candidates to be rewritten as cloud-native using PaaS and microservices.

We've found that the best and most cost-effective approach is to identify and prioritize groups of applications based on their business impact and then do the profiling, architecture assessment, and disposition analysis.

As we discussed earlier, in putting our agile application profiling and disposition analytics to work, there are four basic recommended outcomes that are considered: retain, migrate, modernize, or retire. A sample disposition of applications, based on their relative technical and business value, is shown in Figure 2.
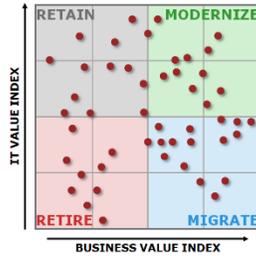
Figure 2.   Application disposition models

These four disposition models identify transformation candidates based on business and technical value. The applications that are classified as "Retain" do not require further discussion, as the workloads mapped to this disposition model undergo no changes. Let's next take a closer look at the three remaining disposition alternatives and how the associated paths are structured.

Modernize. This disposition path involves targeting the strategic applications that could benefit from redesign and rewriting for cloud-native architectures, PaaS, and microservices models. Our modernization development practices emphasize efficiency and adaptability at scale. They incorporate agile development methods and DevOps best practices and are supported by non-invasive discovery tools and decision support solutions.

While the intent is to emulate the best practices of leading technology companies like Amazon and Google, organizations should be careful to balance new practices against coexistence with legacy applications and data to ensure a manageable transition. Rewriting applications can help with this by breaking up monolithic, legacy applications into smaller services that can integrate with existing data sources.

Migrate. This disposition path focuses on applications that may benefit from migration away from traditional infrastructure and operating systems to a cloud-enabled, hybrid infrastructure.

In a replatform operation, the application stack is updated as part of the migration, and code-level remediation is performed to enable running the application on the new platform. Unlike the reinvestment path, there is no plan to enhance or add functions.

Retire. This disposition path is focused on legacy applications that need to be archived or decommissioned. The retirement process moves applications from active production to retirement and remediation, data archiving, and decommissioning. It is important to ensure that all of the target application's interdependencies are captured during this process. If the data is vital, it can be archived for future use.

This **major global banking company** was in the midst of a huge data center consolidation project when they found they couldn't quickly uncover application interdependencies.

Dell EMC was brought in to perform application portfolio and cloud suitability analyses. As a result, they were able to:

- Drive $7M cost removal in first 90 days

- Create highly accurate blueprints for 150 applications in 90 days

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MOVING FORWARD

Inefficient, outdated processes add unnecessary risk, time, and cost—from initial design through to production and ongoing maintenance. Application portfolio transformation is not just about improving the development process, but also about increasing the cost efficiency and flexibility of the current application portfolio.

Dell EMC's portfolio of innovative transformation "factories" - Modernization, Migration, and even Retirement will ensure that we maximize your ROI while being able to capitalize on business opportunities as they appear in the marketplace.

CONCLUSION

Identifying the applications that can bring the greatest value from a transformation initiative most quickly is the key to success in a software-driven economy.

Our experience has shown us that companies that reduce their operational burden by aligning applications with the business can invest the savings in greater innovation and compete more effectively. We've seen agile organizations get to market twice as quickly, enabling them to spend twice as much time and effort on business innovation, and increase application adoption by 40 percent.

Application transformation projects may seem daunting, but with Dell EMC's bite-sized, agile approach, we are focused on helping you realize the highest near-term business impact. Dell EMC is at the forefront in working with customers around the world to realize their application transformation goals—making it easier for them to reduce the cost, effort, and risk of developing, deploying, changing, and maintaining applications as they shift IT investments from maintenance to innovation.

CONTACT US

To learn more, contact your local representative or authorized reseller.

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