

Accelerate Digital Initiatives With an Agile Modernization Approach

NTT DATA Application Transformation Lab

In today's hyper-competitive world, enterprises have little patience for disruptive technology upgrades, lengthy re-platforming programs or complex application overhauls. But if your enterprise has key business functionality locked up in outdated platforms, what options do you have?

Eliminate legacy bottlenecks with a platform for continuous improvement

With NTT DATA Application Transformation Lab, you can accelerate innovation by enabling incremental change and modernization for continuous digital improvement. Our collaborative approach, driven by unique intellectual property (IP), helps you understand the full business value of your current

application investments, model innovative future states and accurately implement change — with minimal risk.

An Application Transformation Lab consists of three comprehensive processes — application discovery, destination mapping and transformation management — all underpinned by the NTT DATA Transformation Manager, our patented application value mining technology. We apply the right mix of technology and expertise to fit your unique requirements and business objectives. Each Application Transformation Lab process delivers specific business outcomes, while complementing and supporting the other processes in your transformation journey.

Benefits:

- Accelerates transformation by focusing on business requirements, not technology
- Enables incremental and continuous transformation with minimum risk through unique IP and automation
- Understands legacy processes and systems in a collaborative environment
- Addresses the complete picture, including business logic, data, integration and user experience
- Provides a cost-effective entry point for modernization
- Accelerates agile, DevOps and cloud initiatives
- Minimizes typical risks that derail modernization projects
- Addresses any language, database or custom application

NTT DATA Application Transformation Lab

Application Discovery

Gain a deep understanding of current application use, business value and rules, and detailed mechanics.



Destination Mapping

Model new target use cases and opportunities for innovation, then iteratively map the process models to get there.

Transformation Management

Trace business rules, use cases and data to outcomes to create an accurate and adaptive model of business and technology change.



Gain a fresh digital business perspective

Identifying and extracting business logic is an obstacle for the maintenance, enhancement and modernization of custom applications. With our **application discovery process**, you can build a complete model of your custom application assets that reveals business usage, value and dependencies.

In this process, we apply our unique IP to analyze your application code and data structures, and then generate a three-dimensional objective visualization of your applications and related data assets, as well as the business functionality

they support. Our tools use intelligent pattern matching to automatically identify and document code rules, which are then abstracted as business rules that are identified by type (such as validation, calculation, process, security and presentation). The mechanically generated business rules are written in language that's easy for your business analysts and business stakeholders to understand. Our experienced systems and business analysts collaborate with your team to validate the generated business rules and their links to logical interface modules (such as screens, reports and batch processes), use cases and data elements to ensure they represent an accurate picture of your current state.

The result: an objective, three-dimensional view of your applications that enables operational improvements, enhancement and compliance changes, portfolio rationalization and other digital modernization efforts. This process also reduces the risk of functionality gaps, one of the most common sources of budget overruns and project delays in traditional modernization engagements.

Focus on the destination, not disposition

Our **destination mapping process** is perfect for engaging your business stakeholders in driving digital innovation that's not constrained by your current state. This is critical when incremental process and technology change is seen as too limiting, or where it's difficult to separate current business processes from existing technology constraints. Our structured process helps you understand the full impact of new initiatives, capture business requirements and model different ways of changing the customer experience.

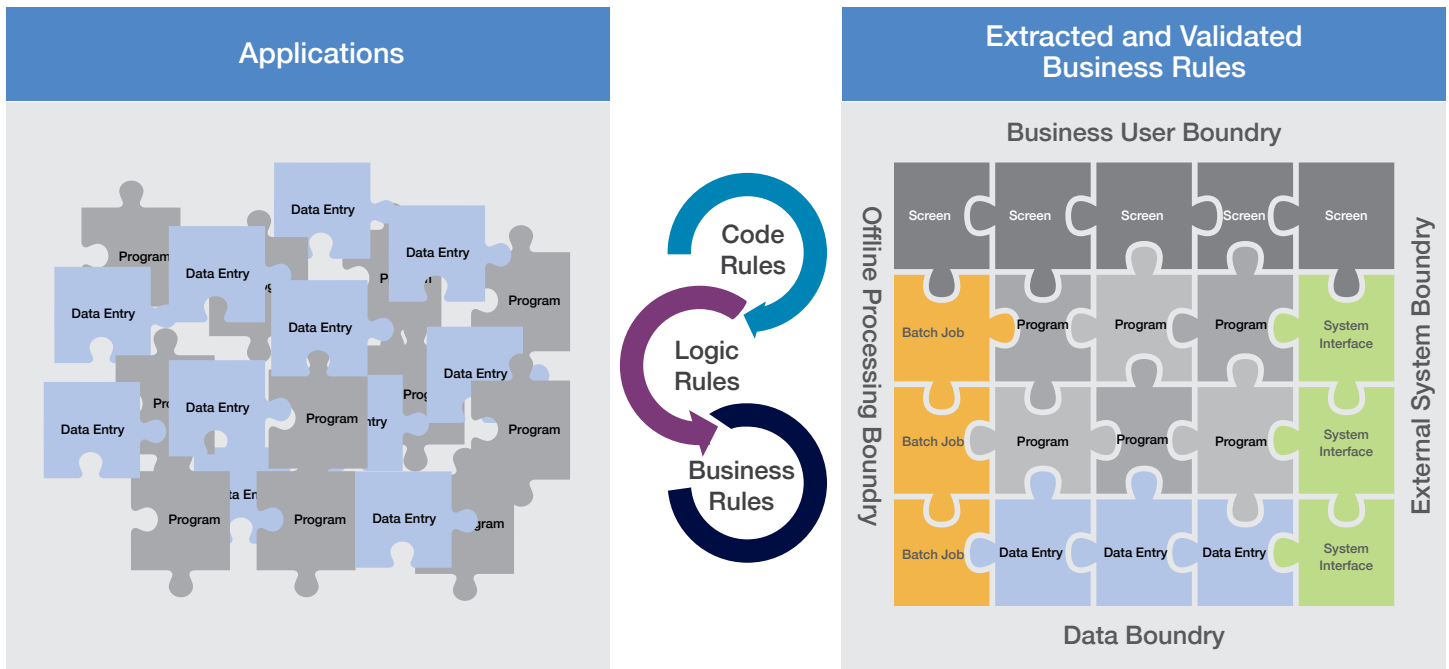
The application discovery process can include:

- Business rules extraction
- Mechanical/structural analysis
- Data model linking
- Usage capture

The destination mapping process can include:

- Future-state journey mapping
- Outside-in process definition
- Use case dependency linking

Creating a clear foundation for innovation



Destination mapping begins with future-state journey mapping to model the ideal customer experience. It then connects to supporting processes in the NTT DATA Transformation Manager, and subsequently breaks them down into future-state use cases that create the foundation for innovation projects, asset mapping and asset transformation. These use cases can be linked back to current-state use cases to reduce rework and enable evaluation of the changes required to meet the future-state journey map.

The destination mapping process allows the implementation of a product backlog of incremental transformation, which eliminates typical risks in traditional modernization projects and creates a clear path to delivering innovation.

Transform valuable business assets with accuracy

When you're ready to initiate change, our **transformation management process** ensures your transformation is implemented in a planned and controlled way to mitigate risk and accelerate innovation. This process defines the necessary and desired changes for business improvements and expansion, evaluates related risks, and eliminates

decision-making based on educated guesses and anecdotal experience. The ability to model change at the business, application and data levels exposes the true impact of change and eliminates the uncertainty of not knowing what you don't know.

This process also accelerates the transformation of applications through intelligent pattern matching and tactical code conversion (TCC), an NTT DATA technique to automatically convert the syntax and data references of existing code to fit specific transformation targets. NTT DATA builds TCC capabilities on a case-by-case basis by finding repeatable patterns in existing applications. The ability to add automation to extract meaning from existing systems and build standard translations can significantly reduce effort and risk in overall re-engineering efforts, as well as in targeted refactoring for platform and cloud migrations, and other integration projects.

Data transformation is a critical component of any significant transformation. The NTT DATA Data Workbench, a rule-based tool that's part of Transformation Manager, transforms and migrates data from source databases or flat files into target databases. The tool

corrects existing data that's invalid due to data entry errors, performs adjustments and standardization while converting values to modern data types, restructures redefined or overloaded data structures, and manages many other transformation functions. Data Workbench lives within Transformation Manager and recognizes its activity, including current- and future-state modeling. As a result, it synchronizes data transformation with changes to business functionality and application source code. This addresses another common source of expensive exceptions in traditional modernization projects — data incompatibility with new systems.

The transformation management process can include:

- Impact modeling
- Dependency reporting
- Design generation
- Data transformation
- Cloud migrator
- Consolidation



“Modernization projects focused on technology platforms first can be limited in vision and slow to return results. Our innovative Application Transformation Lab approach uses patented application value mining technology to eliminate the roadblocks common to traditional migration programs and accelerate our clients’ digital modernization initiatives.”

Take advantage of an accurate and adaptive knowledge base

We use Transformation Manager in every Application Transformation Lab to gain and maintain a deep understanding of the functionality in your business systems’ assets.

Transformation Manager consists of patented analysis, visualization, modernization and development tools specifically created to support transformation and customized for every client. Our technology toolset combines an extensible object repository, a powerful extraction and analytics engine, and an intelligent linking system to create an unparalleled source of transformational knowledge. This allows us to deliver initiatives with a high degree of precision and to provide an

accurate, adaptive and accessible base of information to your team for ongoing transformation programs.

Accelerate transformation with a global business and IT services leader

With an Application Transformation Lab, you can avoid overly complex and time-consuming migration projects while rapidly incorporating valuable legacy assets into your digital modernization plans. Every lab is supported by a team of NTT DATA experts, who work with you to ensure that it remains as adaptive as the outcomes it delivers. Enable continuous transformation, customer engagement, deep insights and new priorities today with an Application Transformation Lab.

— **Glen Foley**,
Vice President
Application Modernization
NTT DATA Services

Visit nttdataservices.com/applicationmodernization to learn more.

NTT DATA Services partners with clients to navigate and simplify the modern complexities of business and technology, delivering the insights, solutions and outcomes that matter most. As a division of NTT DATA Corporation, a top 10 global IT services and consulting provider, we wrap deep industry expertise around a comprehensive portfolio of infrastructure, applications and business process services.

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