NTT Ltd. is a global technology services company bringing together the expertise of leaders in the field, including NTT Communications, Dimension Data, and NTT Security. They partner with organizations around the world to shape and achieve outcomes through intelligent technology solutions. They employ more than 40,000 people in a diverse and dynamic workplace, and deliver services in over 200 countries.

Summary
When NTT Ltd. was created from the merger of 31 different companies, there was a need to create a standardized technology architecture to ensure the merger delivered against its objectives of increased efficiency and lower costs.

The team first conducted an exhaustive discovery process in order to understand exactly where each company was in terms of digital maturity. This was followed by an in-depth analysis of the data to understand how the existing platforms supported specific technology and business functions. This was then used to create a blueprint for the digital architecture of the future organization.

The digital platform enables the organisation to offer a consistent client experience in every location, empowers employees to collaborate, and realizes cost savings.

Vision
Why NTT Ltd. needed a unified enterprise architecture
In July 2019, 31 companies including Dimension Data, NTT Communications and NTT Security were brought together to form NTT Ltd.

The 31 organizations, which varied in size, had built up their own technology architectures, each at their own stage of digital maturity. This sets the merger apart from other large mergers, which usually involves two companies coming together.

The success of the project hinged on the ability to leverage the integration process to drive the maximum benefit, in terms of increased efficiency and cost savings.

Integration is more than simply bringing companies together. NTT Ltd. needed to create a state-of-the-art enterprise architecture strategy that would meet multiple business requirements including budget, timelines and strategic objectives.

This complexity meant the team had to take an inclusive approach to the integration process, understanding the ‘as-is’ status of each organization and finding ways to link them to the future state.

With a team comprised of enterprise architecture skills from across the 31 businesses, the process started well ahead of the official launch of the new company.

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Mark van Bavel, Executive Vice President, Digital Platform Architecture, NTT Ltd.
Transformation

How data and due diligence powered the creation of a unified technology strategy

The first step in the process was a detailed discovery process with two workstreams, an architectural workstream and an ERP workstream.

With aggressive timelines set for the integration of the ERP system it was necessary to gather as much information as possible. This involved a deep technical analysis of each of the individual operating companies’ architectures, mapping all the technology elements and their various interdependencies.

Discovery

This was followed by in-depth interviews with more than 100 people from across the various operating companies.

During the interview process it was important for all participants to understand they were part of the process and what the objectives were. All the information was meticulously captured and analysed. This was followed by obtaining the associated documentation required to gather transactions, critical processes, and policies that might impact the implementation of future systems, applications and architectures.

This allowed the team to capture crucial information from these environments, including market analyses, license status, usage and operational costs. It also enabled a view of the individual organization’s websites and platforms, as well as the various marketing automation tools.

In addition to individual interviews, the team also took advantage of workshops that were being held as part of the broader integration process with teams from HR, marketing, finance and logistics, among others, to gather as much information as possible.

Mark van Bavel, Executive Vice President, Digital Platform Architecture, NTT Ltd.

‘Very few companies brought together this many organizations at one time and this meant we needed an innovative approach to all elements of creating a new digital architecture.’

Capture

Captured and assessed information from 56 companies, 1,400+ business applications, 1,000+ IT and infrastructure applications

Map

All business applications mapped to 160 architecture capabilities (processes) to understand overlaps and application breadth

Analyse

Conducted a per domain analysis, application lifecycle analysis, license and utilization analysis along with an analysis of the alignment to partner strategy and our EA principles

Blueprint recommendation

Create technology and architecture map, per domain roadmap and detailed architecture, and strategic approach

Phase 1:

Blueprint analysis approach
After a detailed analysis of all the data, the team were able to create a vision of the future enterprise architecture, as well as a roadmap to align all the operating companies and ensure they were at the same maturity level. Taking a data-driven approach was vital in setting the foundation for all future decisions.

The ERP workstream was slightly different given the strategic importance of the platform and the potential for variances even between versions of the same system.

The team created a long list of all the systems in use, which was then narrowed down to a short-list of three, before a final decision was made.

Analysis
The information analysis was a significant task. It was complemented by technical analysis of existing systems, benchmarked against approximately 50 other organizations, and conducted by outside consulting firms.

The analysis showed that across the companies there were more than 2,000 applications in use, with about 1,100 of those being business applications. The remainder being infrastructure applications such as security systems, call managers or active directory systems.

This enabled NTT Ltd. to create a capability model of the organization, mapping the business applications to the architecture capabilities in order to understand how well future business process would be served by the different business applications.

The license usage of each application was also analysed, and where this information wasn’t available it was inferred by looking at the total size of the company and the number of users. This was performed for both business and infrastructure applications.

This enabled the integration team to see exactly what applications each company was

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using and how they were being used. This included understanding which were being used at a group level and which were specific to an individual region or country. The information was presented as a dashboard, providing the team and executive management with quick and easy insight into the current state of each company, the capabilities they deliver and the duplication of systems. As an example, the analysis indicated that across the various organizations, 14 marketing automation platforms from four different vendors were in use, with two of those making up the bulk of the usage. This level of insight allowed the team to make critical decisions on the technology standard for the future organization.

Based on this intelligence and the overall enterprise architecture principles, the team was able to make a set of technology recommendations for particular business functions. These selections were then reviewed by the relevant business teams working on the merger strategy.

The enterprise architecture principles provided the guide for all of these decisions, but another key factor was the existing strategic relationships with vendors such as Microsoft, SAP and Cisco.

Once the selection had been finalized, both in terms of platform and functionality, the team was able to create roadmaps that would take each part of the new organization from their ‘as-is’ state to a fully integrated technology environment.

These roadmaps were then used to determine the cost of the deployment of new platforms, setting budgets and targets for potential cost savings.

Results

What a global digital platform offers to NTT Ltd. and their clients

With a set of blueprints in place to guide the organization in the process of creating a unified technology platform, the focus is now on realizing outcomes.

The common digital platform streamlines the process of creating a unified client experience across the global organization. As each part of the overall project reaches completion, clients will have the ability to procure products and services in the same way, irrespective of their location, or where the service is being delivered, simplifying the overall client experience.

It enables NTT Ltd. to create a global network of centers of excellence, where they can provide access to the highest level of skills.

By creating a unified view of each customer, insights are gained into every service provided and their performance, allowing them to proactively identify issues and resolve them quickly.

NTT Ltd. employees will have access to the best possible tools and will enjoy a uniform experience wherever they are, enabling them to collaborate seamlessly with colleagues across the world.

By standardizing on a core set of technologies they are paving the path to unlock significant savings from consolidation and standardization, reduced support and maintenance costs, and better license utilization.

Mark van Bavel, Executive Vice President, Digital Platform Architecture, NTT Ltd.