NTT Ltd. is a leading, global technology services company. Working with organizations around the world, the services provider achieves business outcomes through intelligent technology solutions. Intelligent means data driven, connected, digital and secure. Through global assets and integrated ICT stack capabilities, the organization provides unique offerings in cloud-enabling networking, hybrid cloud, data centers, digital transformation, client experience, workplace and cybersecurity. As a global ICT provider, the business employs more than 40,000 people in a diverse and dynamic workplace that spans 57 countries, trading in 73 countries and delivers services in over 200 countries and regions.

Creating and building a single vision for NTT Ltd. to serve clients

Summary

NTT Ltd. was created as a result of the merger of 31 companies and a simple ambition, to better serve clients in a changing technology market. To deliver on this, the new organization identified four strategic imperatives, underpinned by significant transformation and a digital platform. This enables them to offer a consistent client experience in every location, empower employees to collaborate, and realize cost savings.

Vision

Strategic imperatives drive the focus towards achieving the core ambition

The need to better serve clients and differentiate in a changing technology market was the driving ambition behind the formation of NTT Ltd. Integration, however, goes beyond simply changing company names and email addresses. The challenge of bringing the disparate businesses together under one enterprise architecture is exceptionally complex. The operating companies have their own technology architectures and are all at different stages of digital maturity.

To successfully bring together each business under one vision, the new organization identified four strategic imperatives:

• **Financial** – To help achieve profitability and margin targets, drive sales of high-value services, as well as lead with consultative engagements and enhanced client segmentation.

• **Client** – Better enhance service offerings and delivery with a depth and breadth of services and solutions; globalize and standardize delivery platforms, people and processes and simplify client engagement.

• **Internal** – Drive efficiency and lower costs through the integration; as well as digitizing and modernizing the organization's technology blueprint and improving data quality.

• **People** – Enhance skills, capabilities and culture to drive the organization's transformation.

Critical to successfully delivering on the imperatives, is the alignment of IT to the business. Underpinning the strategic imperatives is a digital platform, set to be delivered by 2023, which will facilitate business integration and optimization. And, as part of the overall five-year digital ambition outlined by IT, that by 2025, the organization will be digitally consolidated. This will fully empower employees and improve client experiences.
The entire transformation ensures the business is digital across every single process. Everything from how people interact, through to how the organisation engages with vendors, partners and customers; all enabled through the digital platform, which is driven by six strategic initiatives:

- sales transformation: implementing a single sales platform with integrated digital marketing
- global shared services for end-to-end quoting/ordering, HR and finance-ops
- enabling target operating model including service-COE and regional sales entities
- strategic reporting underpinned by master data alignment, governance and standardization
- employee empowerment through digital employee experience
- rapid enablement of country-level integration across regions

With the strategic imperatives identified, and with IT aligned to the business and a five-year digital ambition in place, the organization was able to create a state-of-the-art enterprise architecture and digital blueprint to get there.

**Transformation**

**Creating a state-of-the-art enterprise architecture through the power of data**

The power of data is at the forefront of creating a unified technology strategy and digital blueprint for the organization, born out of capturing critical information into a database. A dashboard presents quick and easy insight into the current state of each operating company, the capabilities they deliver and any duplication of systems. This led to the development of a global architectural journey for all 31 operating companies as part of delivering a technology blueprint for the new global organization.

**Data at the core**

To create the enterprise architecture strategy, a detailed discovery process studied data across two workstreams: one architectural, the other ERP. In total, 65 IT architectures across the 34 businesses were analysed, coupled with extensive interviews with senior leaders from the various operating companies that now form NTT Ltd.

The information captured outlined each of the individual operating companies’ technology architectures, mapping all their elements and their various interdependencies. Documentation was also gathered around transactions, critical processes and policies that could potentially impact the implementation of future systems, applications and architectures. Other critical information discovered included market analyses, license status, usage and operational costs, as well as a view of each individual organization’s websites, platforms and marketing automation tools.

In total, more than 2,000 applications were identified as in use, with about 1,100 of those being business applications. The rest were infrastructure applications such as security systems, call mangers or active directory systems.

**Data to insights**

Given the volume of information collected, as well as the subsequent analysis needed to create the digital blueprint, the business couldn’t rely on manual processes. All essential data was captured into a database and placed alongside detailed technical analysis performed by consulting firms. Additionally, the time and effort to consolidate all the operating companies onto a global architecture with ERP at the core, was benchmarked against approximately fifty other companies to understand a realistic timeline, as well as an estimated level of effort.

This helped to create a capability model of the entire organization in an ‘as-is’ state. Business applications were mapped to architecture capabilities in order to understand how well future business processes would be served by different business applications.

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

‘Very few companies have brought together this many organizations at one time. This meant we needed an innovative approach to all elements of creating a new digital architecture. ’
The license usage of each application was also examined for both business and infrastructure applications. Gathering and analysing this information provided the integration team with the ability to see exactly what applications each company was using, and how they were being used; as well as which were being used at a group level, and which were specific to an individual region or country.

Importantly, the ability to present information on a dashboard gave the team and executive management quick and easy insight into the current state of each company, the capabilities they deliver and where duplicate systems resided. For example, the analysis showed 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.

From the thousands of data points collected, five core insights drove the overall decision-making, and subsequent development of the digital blueprint:

- **Digital is critical** – Throughout the course of the discovery and analysis, large numbers of manual processes were discovered across the individual operating companies. To achieve the overall ambition, digital had to be at the core of the new organization; and with that, a significant amount of change management for employees in terms of updating processes.

- **One global system** – An underinvestment in IT was apparent. A number of operating companies had delayed IT spend, meaning out-of-date systems were common. This, however, presented an opportunity for the new organization. Rather than upgrading systems, many of the operating companies could simply leapfrog into one global system. This would help eliminate the risks old systems posed around data, process automation and support.

- **Reduce complexity to boost experience** – With the different operating companies having such a wide variety of systems and process, along with a distinct lack of automation, client and employee experience could be significantly impacted. The drive to a digital platform will better enhance the experience and service offerings across the new organization for all.

- **Cost reduction** – The duplication in terms of licenses and procurement of technologies provided a massive opportunity to save costs across platforms, licenses and infrastructure. Additionally, a saving in the resources required to manage the number of systems, meaning skilled people can now be deployed to other areas of the organization to further drive innovation.

- **Adopt digital innovation** – Throughout the discovery and analysis process, a number of innovative digital capabilities were discovered. These can be leveraged across the new organization.

These insights enabled the team to make critical decisions in the production of the digital blueprint, as well as design the global architectural roadmap. Taking a data-driven approach was vital in setting the foundation for all future decisions.

**From the ‘as-is’ to the ‘to-be’ state – a global architectural journey**

Armed with data-driven insights, the integration team aligned the 31 operating companies to a global architectural roadmap, and the subsequent production of the digital blueprint. And finally, the ‘to-be’ technology for the new organization.

The global architectural journey model was broken down into four distinct phases, driving the organization towards becoming a digital. One that has an intelligent center, yet also an intelligent edge – meaning a standardized and globalized array of platform-enabled services, yet with the flexibility and autonomy to adapt at a local level to client needs.

The journey will see the operating companies move across each of the phases at varying pace. From local business silos at the very beginning, through to the standardized technology phase, which helps create IT efficiency and reduces costs and risk. From this follows an optimized core, where operational efficiency and business transparency are drivers, helping to reduce costs further and increase organizational responsiveness. And finally, the move to a fully-fledged digital business.
Based on this intelligence and nine enterprise architecture principles, (which included among other things, establishing a secure, compliant, platform-based architecture, as well as leveraging cloud), the team made a set of technology recommendations across the business domains.

Existing strategic relationships with vendors such as Microsoft, SAP and Cisco were also of significant value. From this, the team created roadmaps to take each part of the new organization from their ‘as-is’ state to a fully integrated technology environment.

The benefits of this approach were significant and helped in a number of areas, namely:

- **Data driven decision making:** The level of due diligence and data-driven insights and decisions helped to build rapid internal alignment.
- **Strawman capability and operating models:** Starting with a capability model to frame the information gathering was vital.
- **Impartial:** Every operating company had something to contribute to the ‘to be’ state. Reflecting the good, and not just the issues, is important to link back to the individuals and build buy-in for the strategy.
- **Constant business partner engagement:** Constant engagement and review with the business is needed. This is reflected in the capability model that needs to reflect the ‘language’ of the operating companies.
- **Database-driven analysis:** The level of complexity generated by the data captured meant the process could not be managed manually. An IT portfolio tool was needed, in this case Alfabet.

**Results**

**A transformation showcase**

For NTT Ltd., the journey to a digital blueprint creates a vast array of benefits not only to the organization, but more importantly, to its clients. The most important of which is the ability to showcase its own Infrastructure-as-a-Service capabilities, along with the full array of technologies and services it provides to clients.

The organization is now firmly on a globalization, standardization, centralization and digitization transformation journey. One that will see it achieve its core ambition, delivered through strategic imperatives, underpinned by a digital platform.

As the organization merges and consolidates its IT Infrastructure, it’s also able to showcase its own IT infrastructure-as-a-Service capabilities, along with the full depth and breadth of its own technologies and services. The initiative is an architecture-led, best practice solution based on offerings and services from the organization and its partners, coupled with a roadmap and program to get the business there. It’s a living, breathing example of transformation in full flight. And, one which the organization’s own clients can take advantage of.

The globalization of NTT Ltd. helps establish the organization as a model company based on a best practice architecture, underpinned by its own services and Infrastructure as-a-Service capabilities. Not to mention the raft of benefits around infrastructure standardization and commodity process, as well as the benefits of a multimodal approach.

Taking a multimodal approach gives the organization a stable global database, stable core systems and innovation on the edge through APIs and other mechanisms. This is what allows a degree of freedom on a per-client or per-country basis to meet local requirements, but without impacting the core business processes and the core business data model.

The new organization will have a unified view of each customer, as well as insight into every service provided. Additionally, the performance of every service, at every location, allows them to proactively identify issues and resolve them quickly. Employees will have access to the best possible tools and will enjoy a uniform experience wherever they are, allowing them to collaborate seamlessly with colleagues across the world.

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