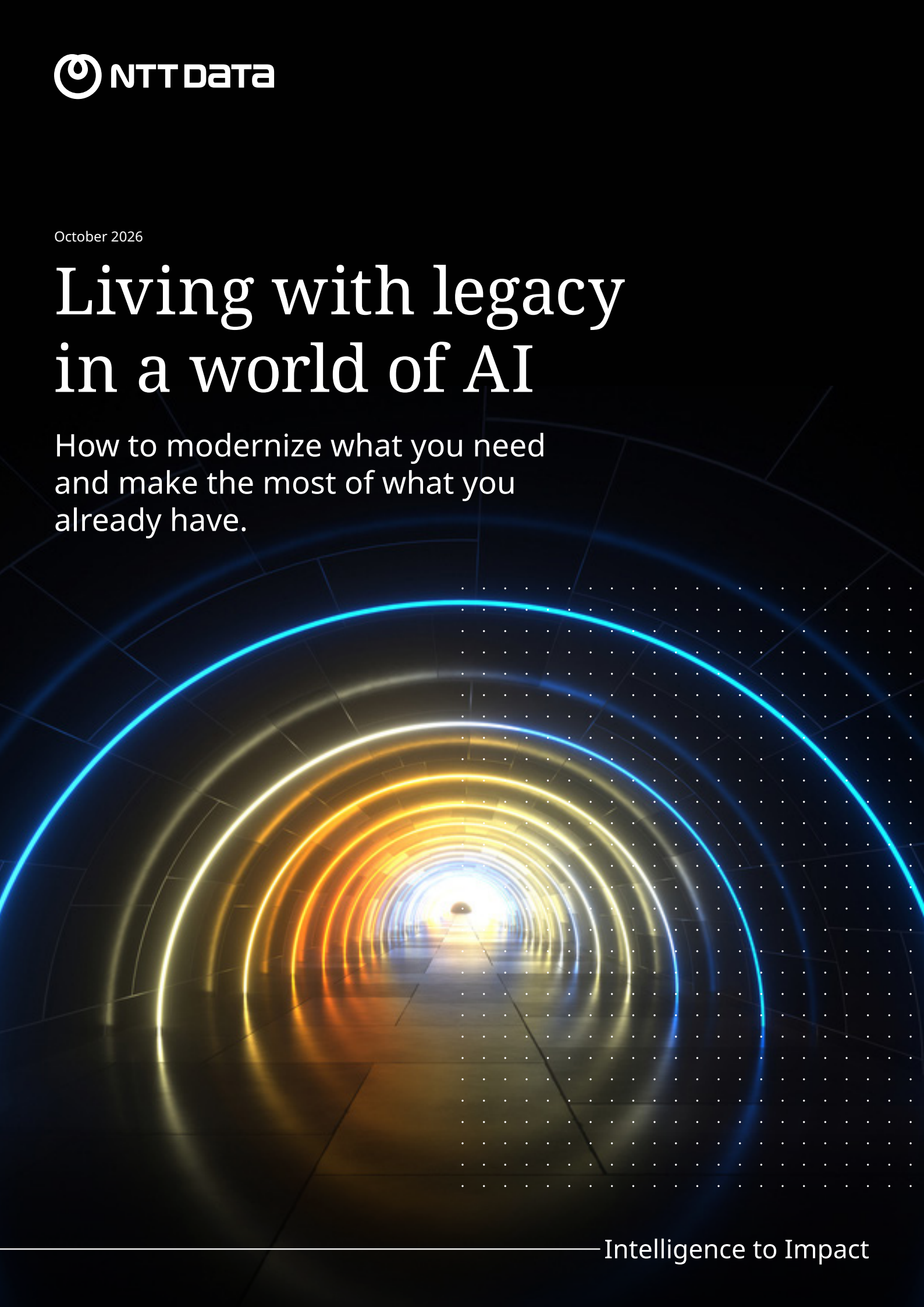
NTT DATA

October 2026

Living with legacy in a world of AI

How to modernize what you need and make the most of what you already have.



Intelligence to Impact

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APAC organizations feel pressure to invest in AI



Leaders across Asia Pacific (APAC) are using AI to improve productivity, tackle skills shortages, reduce costs and make their operations more efficient. And for good reason. They see agents taking on routine, day-to-day tasks, employees gaining hours back and new opportunities to improve customer experience and business operations.

With so much potential, it's easy to see why AI has captured leaders' attention. But for some, that promise is creating pressure to invest quickly while raising expectations that AI spending will deliver measurable returns.

Investment in AI across APAC is set to grow considerably. According to NTT DATA's 2026 Global AI Report, 84% of organizations in APAC expect their AI investment to increase over the next two years, with 46% expecting a significant increase.[1] Yet 53% say their biggest concern, as AI becomes embedded in their organizations, is scaling before they are operationally ready.[2]

Scaling AI is also proving harder than experimenting with it. When it comes to agentic AI, 53% in APAC have not yet moved beyond limited adoption in noncore functions and only 33% completely trust the reliability of fully autonomous agents.[1] Moving from limited use to wider deployment requires organizations to address what could prevent AI from working reliably at scale.

At this point, investing quickly is not the same as investing well. For enterprises looking to turn AI into real value, it pays to look down at what AI will depend on before looking up at what it can do.

[1] NTT DATA. 2026 Global AI Report: A Playbook for AI Leaders. December 2025

[2] NTT DATA. 2026 Salesforce Agentic Enterprise Report. September 2026

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AI does not exist in a vacuum

The value of AI to your business depends on far more than the model itself, and investing in a tool or agent alone doesn't make a deployment successful. The foundations underneath it can determine whether that investment delivers real value at all.



AI leaders in APAC emphasize the foundations that help them realize its value. Compared with other organizations, they give greater importance to effective change management (53% vs. 40%); high-quality data and a coherent data and AI strategy (53% vs. 36%); strong security and proactive risk management (51% vs. 44%); and ethical, responsible AI governance frameworks (46% vs. 36%).[1]

If you're asking AI to deliver more than your current technology can support, it's time to revisit those foundations.

Where current technology could fall short

Many enterprises have built up a complex mix of legacy infrastructure, modern cloud platforms and legacy applications. Those older systems often run some of the most important parts of the business. They're reliable, deeply customized and firmly embedded in day-to-day operations.

But they were built for a very different kind of technology. Many are monolithic, poorly documented and rely on data structures that predate the demands of AI. Information can sit in silos. Interfaces may be difficult to connect to. And valuable business logic may exist largely in the heads of employees who have worked with those systems for years.

That becomes a problem when AI needs to work across the enterprise. An agent may perform perfectly well when it has access to one system or a limited set of data. But when the information it needs is located in multiple systems and locations, the agent can only work with what it can access. As the use case expands across processes, applications and departments, that limitation becomes harder to work around.

We have seen this with organizations that can get an individual AI use case working yet struggle to take it any further because the underlying systems and data cannot support it at scale.

Addressing these foundations early can help prevent promising pilots from remaining isolated use cases.

[1] NTT DATA. 2026 Global AI Report: A Playbook for AI Leaders. December 2025

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Your legacy technology may have plenty of life in it yet

Legacy technology tends to get something of a bad rap. However, many organizations still rely on mainframes and enterprise applications that have supported critical business processes for 15 to 20 years. And they continue to do the job they were built to do. They just can't support something they were not built for — at least, not yet.

That doesn't mean you have to replace or modernize every system before you can progress with AI. For most organizations, that would be prohibitively expensive and could take years. Instead, you need to invest in modernization strategically. Some systems will need substantial modernization. Others may simply need a way for AI to interact with them.

Take a selective approach to modernization

A system that continues to perform reliably and can give AI the access it needs may have years of useful life ahead of it. One that creates unacceptable risk or prevents an important AI use case from scaling may require more extensive modernization.

Application programming interfaces (APIs), integration platforms and event streams that respond to real-time information as it happens can provide access to the data and functionality legacy systems hold. This enables you to continue getting value from your older technology.

We saw this with a large Australian manufacturing organization running older software and on-premises infrastructure. It was still able to run AI agents at some of its manufacturing sites. However, the problem was that the data the agents needed was in different systems, in different parts of the country. The agents could access some of the data from these systems, but they couldn't access all the data. In this case, connecting the information was more important than replacing the technology holding it.

There may also be instances of "forced migration." Some systems need attention regardless of your AI plans. Vendors often stop supporting older applications, creating security, operational and compliance risks, leaving you little choice but to modernize the technology that supports critical business processes.

If you have a large legacy estate, a selective approach to modernization makes the process far more manageable. It allows you to continue getting value from technology you have trusted for years while directing investment toward the systems that genuinely need attention.



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Use business priorities to set the direction



Modernization presents you with many options. You can move workloads to the cloud, replace applications, update infrastructure or change the way you manage your data.

Our 2026 Global AI Report found that organizations leading in AI invest more in rebuilding core applications with embedded AI capabilities, rather than simply adding AI tools to existing systems.[1]

The choices you make must be informed by the problem you want to solve or the improvements you want to see. Start with your opportunities. Where would AI make the biggest difference and create the most value? That's where you invest.

A specific use case gives investment decisions context

Let's say you want an agent to help employees resolve customer inquiries. That agent may need access to customer records, product information, previous interactions and internal policies. Some of that information may reside in modern cloud applications and some in older systems.

Looking at everything the use case depends on begins to show you where technology changes are needed. Existing applications may already provide some of what the agent needs. An integration layer might provide access to another. A third may require modernization because its architecture makes reliable access difficult.

This gives you a way to modernize in stages, with investment tied to something the business wants to achieve. It also gives you something concrete to measure. When the use case has a defined purpose, you can see whether the changes you make deliver the outcome you set out to achieve.

[1] NTT DATA. 2026 Global AI Report: A Playbook for AI Leaders. December 2025

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Three areas to strengthen for AI to scale

1. Make sure your data is AI-ready

AI is only as good as the data it can access. In non-AI environments (and even chat style AI), bad data could lead to bad decisions but humans could review and intervene. In an agentic AI world, bad data leads to bad actions, often taken autonomously without human intervention. The impact can be material and costly to you, your customers and your reputation.

When modernizing, the first place you should look is your data. Poor data is rarely a new discovery. Most organizations already know where their data is unreliable and have found ways to work around it. People create their own reports, introduce manual processes and step in when something needs fixing.

AI has no such workaround. If the data you give it is unreliable, the output it produces can be unreliable too. And, as the saying goes, “garbage in, garbage out.”

Start by cleaning and consolidating your data as much as possible. This can give AI a stronger foundation without requiring you to undertake a large and expensive platform or software modernization program straight away.

2. Build on a platform that can support AI

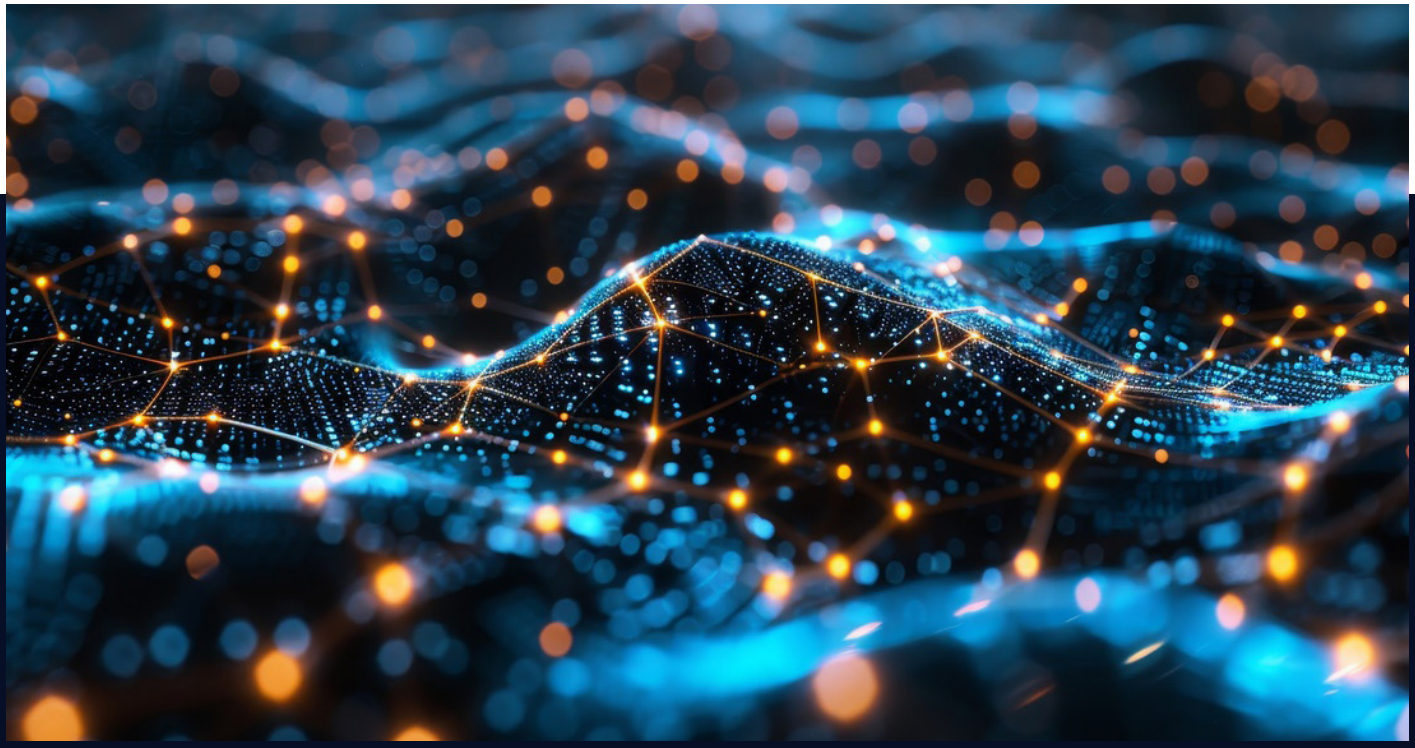
Sometimes, you won’t have a choice. Your platform may need to change before it can provide the environment your AI needs.

Our 2026 Global AI Report found that AI leaders are investing in scalable, secure AI platforms and addressing infrastructure bottlenecks that could limit AI performance.[1]

So, your second port of call when modernizing is your platform. Older platforms were never built for the demands of AI, and modernizing them can give you an environment that is better equipped to support what you want AI to do. Moving from an old mainframe environment to the cloud is one example, as the cloud provides underlying structures that are more capable of supporting AI.

Platform or software modernization can be expensive and involve a significant amount of work, so it may form part of a longer-term modernization program.

[1] NTT DATA. 2026 Global AI Report: A Playbook for AI Leaders. December 2025



3. AI changes the rules of governance



Establish accountability up-front

Traditional governance was designed for human-led processes. People create information, make decisions and move information through established governance processes. With AI, the logic behind a decision may be less clear, making it more difficult to understand why an agent has acted in a particular way.

This means you need to build accountability in from the outset. Decide which use cases can move forward and which carry too much risk. Once you've made that decision, you need to firmly establish where responsibility lies if an agent behaves unexpectedly or produces an outcome you need to explain. Often, decisions about risk tolerance levels sit beyond IT and need to have senior executive or board oversight.

Understand how AI makes decisions

Traceability and explainability are particularly important in highly regulated industries. If you have to explain how a decision was made for audit purposes, you need to know why and how AI came to make the decision. Without having this information, you could face serious consequences.

Control your agents

Governance also becomes more complicated as the number of agents grows. You need to know whether existing agents remain current and whether they continue to perform the tasks they were created to do. As more people gain the ability to create agents, you also need controls around how new agents are introduced and the roles they perform.

Human judgment remains an important part of this process. AI can generate information, but people still need to apply logic and act as a final check. That requires enough understanding of an agent's purpose and where it gets its information to apply critical thinking to what it produces.

AI will continue to change, and your approach to governance will need to change with it. In the old days, risk policies were often updated yearly. Now it needs to be ongoing. You may never reach a point where every risk has disappeared. However, you can continue to adapt your governance so you understand the risks and can mitigate enough of them to proceed with confidence.



Invest in the right things first

Where you invest first is as important as what you invest in.

As we often tell our clients, there is little value in buying beautifully designed taps if the pipes underneath are corroded and failing. The taps may be exactly what you need, but for you to get the most out of them, the infrastructure must support them.

To drive your business forward, infrastructure must be considered in your AI investment decisions.

We can help you make those decisions based on the technology you already have and the outcomes you want to achieve. We'll look at the pipes first — see where you are and what needs to be done to get you where you want to be. The answers we give you may not always be the ones you want to hear, but they'll give you a clear view of what needs attention first.

By doing that, we'll help you invest in the right things, in the right order and build an environment where AI can work — and scale — as intended.

Discover how NTT DATA's Advisory Services can help you modernize what you need and make the most of what you already have.

Visit nttdata.com to learn more.

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