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Building AI-ready data foundations:

A strategic leadership guide

Proprietary data is the key – and barrier – to AI success

In the rush to adopt artificial intelligence (AI), many organisations are discovering a crucial truth: AI is only as good as the data that powers it. While the allure of AI promises transformative benefits, the reality is that without solid data foundations, even the most sophisticated AI tools will deliver mediocre results.

The rise of AI tools has made implementation more accessible than ever, creating both opportunities and risks for business leaders. While competitors rush to deploy the latest AI capabilities, forward-thinking organisations are taking a more strategic approach – starting with data.

This guide provides a practical roadmap for this critical journey, from initial assessment to successful implementation. Let's understand why data foundations are so crucial for AI success.

Himanshu Soni
Analytics & AI, Practice Manager, Nexon Asia Pacific

Himanshu leads Nexon's Analytics and AI advisory practice, focusing on data governance, cloud adoption and AI implementation. His expertise spans data architecture and analytics, helping organisations build practical frameworks that enable business growth through digital transformation.

Throughout this guide, Himanshu shares insights from his experience helping organisations build strong data foundations for AI success.

It all starts with data

Modern cloud platforms like Microsoft Azure and Copilot have democratised access to AI capabilities, but technology alone isn't enough. The path to AI readiness isn't about implementing a single solution or platform – there is no silver bullet. It's about methodically developing the data and internal capabilities that will serve your AI initiatives using today's technologies and being ready for the rapid innovations coming down the line.

Successful organisations understand that proprietary data – their unique information assets – when properly organised and secured, becomes their competitive advantage in the AI race. According to McKinsey research, organisations with strong data practices are 2.6 times more likely to report successful AI implementations.[1]

Generic AI models trained on public data will give you generic results – by definition, they're designed to provide the most predictable, middle-of-the-road answers.

When fuelled by high-quality proprietary data, AI can deliver insights and efficiencies that set you apart from competitors.

"Success with AI starts with understanding what you're trying to achieve. Once you have clear business outcomes, you can build your unique data foundations to support them," explains Himanshu Soni, Analytics & AI, Practice Manager at Nexon Asia Pacific. "Get this right, and you create a sustainable competitive advantage."

[1] McKinsey & Company: The Data-driven Enterprise of 2025

The true cost of poor data

The implications of low-quality data is significant. Poor data doesn't just lead to ineffective AI – it can actively damage your organisation through flawed decision-making, wasted resources, missed opportunities and potential compliance risks.

A critical hidden cost is a loss of trust in the output. When organisations work with inaccurate data, stakeholders lose confidence in the insights – not because the analysis is wrong, but because the underlying data isn't reliable. This erosion of trust can undermine digital transformation efforts.

According to Gartner, poor data quality costs organisations an average of $12.9 million annually.[2] Recent PwC research shows that while 73% of executives say they'll use GenAI to evolve their business model in 2025,[3] data quality may stifle their plans.

To succeed with AI, organisations must first shore up their data foundations.

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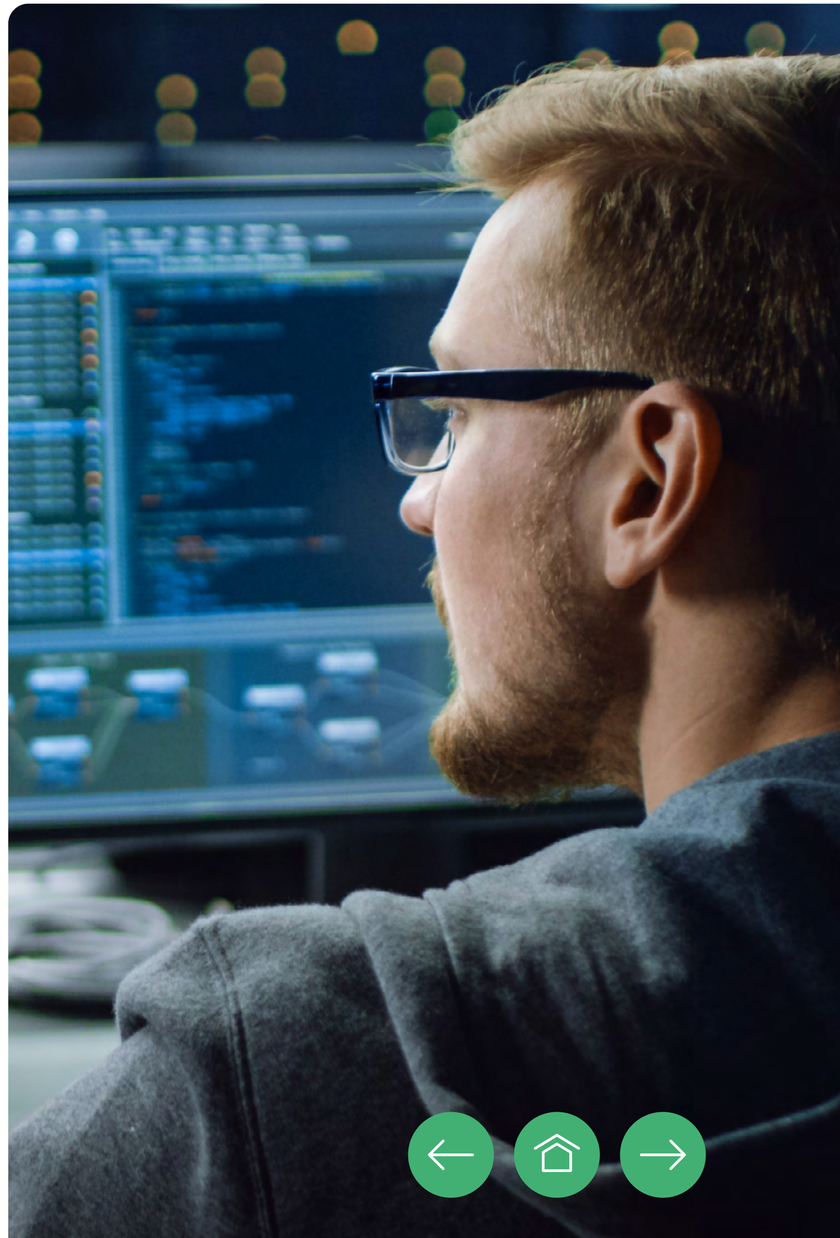


[2] Gartner: How to improve your data quality
[3] PwC: 2025 AI Business Predictions

The pillars of AI data readiness

Before diving into specific initiatives, organisations need to understand and address four critical foundations that will determine their AI success. Each of these foundations directly impacts the likelihood of deriving value from AI investments:

1 Data quality and management: Accuracy first

The old technology truism 'garbage in, garbage out' has never been more relevant in the age of AI. Given AI's speed and scale, quality data can amplify positive outcomes faster than ever – but, equally, poor-quality data can accelerate risks.

Quality data is your competitive advantage. Here's how to ensure your data is AI-ready:

Data ingestion and standardisation

- → Automating data collection and validation where possible
- → Establishing consistent data formats and standards
- → Validating data at the point of entry
- → Creating reliable master data
- → Clear data lifecycle management
- → Managing data lifecycles

While manual controls are important, modern tools can automatically monitor data quality and flag anomalies, ensuring consistency across operations. Solutions from the Microsoft ecosystem, such as Microsoft Fabric, enable automated data quality monitoring and standardisation, helping organisations reduce data management overheads while improving accuracy.

Organisations that implement standardised data management processes see significant improvements in both AI model accuracy and development speed.

AI impact

Unification drives transformation

Nexon partnered with a national non-profit to unify six state-based organisations by standardising their data collection and management processes. This transformation not only improved service delivery but enabled them to implement AI-powered chatbots and predictive analytics, something that would have been impossible with their previous fragmented data approach.

Ongoing quality control

Quality isn't a one-time effort. You need process-driven approaches to:

- Monitor data accuracy and completeness
- Clean and deduplicate records
- Maintain data freshness
- Track quality metrics
- Address quality issues at the source

AI impact

Healthcare provider sets new standards

A national healthcare organisation supporting thousands of clients implemented a comprehensive data governance framework that became a model for their industry. By separating sensitive client data into secure vaults while maintaining accessibility for AI-driven insights, Nexon helped them innovate with confidence.

Emerging AI challenges

Modern data foundations must overcome evolving AI challenges, which include:

- Efficiently handling unstructured data to feed into Generative AI
- Ensuring fairness and transparency in AI decision-making through bias detection and mitigation techniques
- Using explainable AI (XAI) to provide insights into AI-driven decisions and promote ethical AI practices
- Enabling real-time data processing to support rapid AI-driven decision-making
- Advanced security frameworks to protect AI models from potential threats

However, even with these capabilities in place, quality data is only valuable when properly integrated and accessible across your organisation.

AI impact

Intelligent assistants accelerate student services by 65%

Nexon helped a leading Australian university improve student services by standardising data across 11 systems. This foundation enabled AI-powered assistants that reduced response times by 65% while maintaining 90% customer satisfaction.

2 Governance and compliance: A foundation of trust

Without robust governance and compliance measures, your AI initiatives could expose your organisation to significant risks. A systematic approach to data governance isn't just about protection; it's about building trust in your AI outcomes.

Managing risk and compliance

Effective data governance needs to balance security with accessibility. This means:

- Role-based access controls that ensure appropriate data access
- Multi-factor authentication
- Protecting sensitive information
- Maintaining regulatory compliance
- Ensuring data lineage and auditability
- Creating clear usage policies

Practical governance measures include multi-layered security and specialised privacy vaults for sensitive data. These controls enable safe AI deployment while maintaining business agility.

AI impact

Balancing protection with innovation

Nexon worked with a leading Australian university to create a separate Privacy Vault for personally identifiable information (PII), ensuring that sensitive data remains protected while enabling analytics and AI initiatives across their broader data estate. This innovative approach allowed them to accelerate AI adoption while maintaining strict compliance standards.

Building data governance frameworks

Your governance framework should be strong enough to protect data but flexible enough to support innovation. Key elements include:

- → Clear data ownership and responsibilities
- → Documented data quality standards
- → Privacy and security protocols
- → Regular auditing procedures
- → Training and awareness programs

"Modern data governance needs to balance protection with innovation. It's about creating an environment where data can be both secured and leveraged effectively for AI initiatives," Himanshu explains.

To future-proof their data architecture, organisations need scalable, secure infrastructure, such as Microsoft's cloud platform. Tools like Microsoft Purview help organisations implement comprehensive governance and compliance while maintaining the flexibility required for innovation.

AI impact

National scale demands robust architecture

A nationwide healthcare provider successfully unified data across over 100 locations by implementing a cloud-first strategy powered by Microsoft and enabled by Nexon. This enabled them to scale operations while maintaining strict security standards for sensitive health information. The result was a 50% reduction in operating costs and significantly improved service delivery capabilities.

Cloud-first platforms reduce operating costs by

30%

3 Integration and scalability: An investment for the future

Success with AI requires data to be accurate, accessible and scalable. Here's how to ensure your data foundations can support growing AI demands:

Managing risk and compliance

Unlocking data trapped in silos and keeping data up to date is a universal challenge. Modern integration approaches should focus on:

- → Unifying disparate data sources
- → Enabling real-time data access
- → Supporting hybrid environments
- → Maintaining data consistency
- → Metadata-driven frameworks enable automated data flows while maintaining quality controls

Planning for growth

Your data foundations need to scale as your AI initiatives expand:

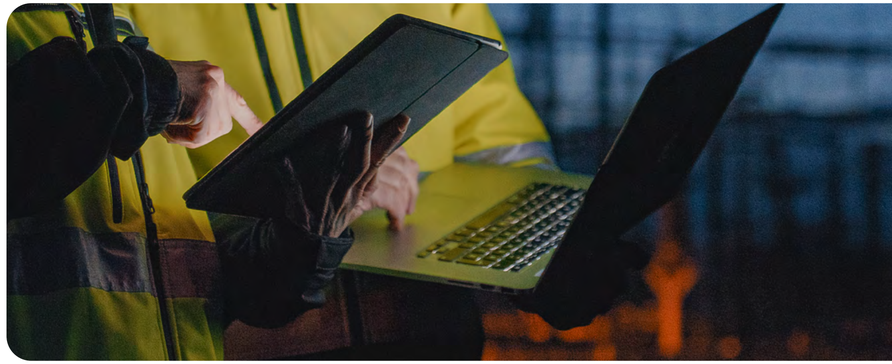
- → Build flexible architectures
- → Plan for increased data volumes
- → Enable quick deployment of new capabilities
- → Optimise performance at scale
- → Control costs as you grow

"The organisations succeeding with AI aren't necessarily the ones with the biggest budgets – they're the ones that planned their data foundations so they can adapt, deploy and scale fast," explains Himanshu.

AI impact

Multi-business integration success

Using Microsoft's cloud platform, Nexon helped a growing technical services group unify operations across three distinct businesses by implementing a standardised data framework. This integration reduced reporting time from six weeks to two weeks and enabled real-time project analytics – creating the foundation for future AI initiatives.



4 People & processes: Beyond technology

"Success with AI isn't just about technology – it depends equally on having the right people and processes," says Himanshu. "Organisations that invest in their teams, manage change and create a data-driven culture will see sustainable results.

According to Boston Consulting Group research, 74% of organisations struggle to scale AI initiatives effectively, with resource and capability constraints cited as key barriers.[4] The report finds that even with widespread AI implementation across industries, only 26% of organisations have developed the necessary foundations to move beyond proofs of concept and generate tangible value.

In reality, most organisations face resource and skill gaps when implementing AI. The key is to start small, focusing on high-impact areas while gradually building internal expertise.

Success requires:

- → Clear roles and responsibilities for data management
- → Ongoing training and skill development programs
- → A balance of technical and business expertise
- → Strong collaboration between IT and business units

[4] Boston Consulting Group: AI Adoption in 2024: 74% of Companies Struggle to Achieve and Scale Value

Change management

Becoming a data-led organisation requires bringing people on the journey:

- → Executive sponsorship and visible leadership
- → Clear communication about goals and benefits
- → Early wins to build momentum
- → Regular feedback and adjustment

Creating a data-driven culture

Organisations need to foster a culture where data quality is everyone's responsibility:

- → Establish clear data ownership and accountability
- → Implement data quality metrics and reporting
- → Reward data-driven decision-making
- → Encourage continuous improvement

Understanding these four pillars – data quality, security, integration and people – provides the framework. Let's explore how to implement these principles with a systematic approach.

Building your data foundations: A step-by-step guide

Just because you are holding data, doesn't mean that it is inherently useful or even worth the risks of storing it at all. To avoid being paralysed by the endless potential of AI, it is critical to define the specific business outcomes you want it to help you achieve.

Step 1
Assess your state and maturity

→ **Step 2**
Define clear business objectives

→ **Step 3**
Create a scalable architecture

→ **Step 4**
Measure success

- ? What data do you currently collect and store?
- ? Where does your data reside?
- ? What are your current data quality levels?
- ? What are your existing governance practices?
- ? Where are the gaps and challenges?

A data maturity assessment identifies quick wins while building toward longer-term transformation. Many organisations discover that what they thought was a technology challenge is actually a data quality and governance issue.

AI impact

Merger enables $20B digital transformation

When two major financial institutions merged, they needed to unite 11 separate data systems supporting 1,600 staff and half a million customers. Using a methodical data assessment and integration approach, Nexon helped them unify their systems and create a digital foundation that enabled AI-powered customer service, automated workflows, and real-time analytics across the merged organisation in just months.

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Measure success

Determine tangible objectives and success metrics

Identify priority use cases

Set realistic timeframes

Plan for scalability

Establish governance frameworks

"While every organisation is different, we typically help clients establish their core data foundations within 6-8 weeks, which positions them to tackle specific use cases quickly," explains Himanshu.

"The key is balancing your long-term vision for AI with quick wins that demonstrate value and executive buy-in. This builds momentum and support for larger transformation initiatives."

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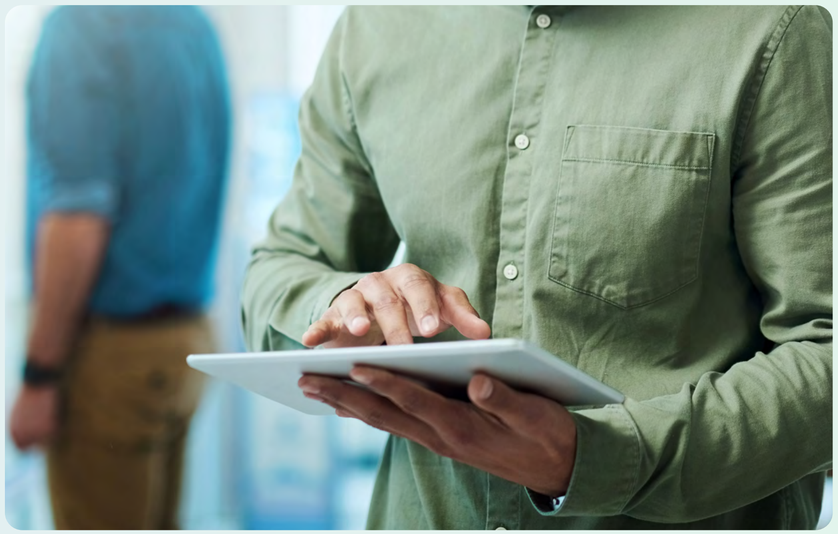
Step 1
Assess your state and maturity →

Step 2
Define clear business objectives →

Step 3
Create a scalable architecture →

Step 4
Measure success

- Start with high-impact, manageable projects
- Create clear data ownership
- Build in security from the start
- Implement quality controls
- Ensure proper data classification
- Plan for integration needs



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Define clear business objectives

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Step 4
Measure success

- Define key performance indicators
- Monitor data quality metrics
- Track business outcomes
- Measure user adoption
- Assess ROI

Making it happen

Understanding what you need to do is one thing – translating that into business value is another. Organisations that succeed typically overcome one or more common challenges:

Resource constraints and skills gaps:

- → Start small with high-impact projects
- → Partner with experienced providers
- → Leverage cloud capabilities
- → Build internal capabilities
- → Focus on sustainable growth

Aging, disconnected legacy systems:

- → Take a phased approach to modernisation
- → Use integration layers where needed
- → Prioritise critical systems
- → Plan for hybrid operations
- → Maintain business continuity

Tangled, complex and disparate data:

- → Standardise data processes
- → Automate data collection where possible
- → Clean and validate data at the source
- → Implement strong governance frameworks

Modern tools enable automated quality monitoring across data sources, automatically detecting and flagging inconsistencies before they impact AI systems.

Cloud platforms like Microsoft Azure allow organisations to start small and scale as needed while maintaining enterprise-grade security and performance.

Beyond basic infrastructure

Organisations racing to maximise the impact of data and AI need to embrace sophisticated data architectures that go well beyond traditional infrastructure.

Leading organisations are implementing frameworks like Medallion Architecture (a structured approach to organising data), which enables them to rapidly transform raw data into analytics-ready insights using a multi-layered approach to data processing and quality control.

Similarly, data vault designs significantly improve the integration of complex, disparate data sources, reducing integration efforts and costs while maintaining strict data governance and security protocols. These approaches enable both innovation and protection.

Experienced partners can help accelerate this journey. For example, Nexon's approach to data consolidation helps organisations build foundations that support both current and future AI initiatives.

Leveraging the Microsoft Cloud ecosystem

With deep expertise across the Microsoft cloud ecosystem – which is already embedded within organisations – Nexon helps organisations consolidate and maintain strong data foundations through Microsoft's comprehensive framework:

- Azure Data Services enable unified data management, from ingestion to analytics
- Real-time analytics, reporting and visualisation capabilities through PowerBI, enabling immediate insights from your data assets
- Dynamics 365 integrates business processes and customer data
- Microsoft Fabric provides end-to-end data analytics and AI capabilities
- Microsoft Purview ensures comprehensive data governance and compliance
- Microsoft 365 and Copilot powering productivity and efficiency
- Microsoft Foundry helps developers collaborate to build, test and deploy generative AI applications on an enterprise-grade platform

Nexon's proven approach typically helps organisations establish data foundations within 6-8 weeks. This rapid time-to-value is enabled by:

- Proven deployment experience across industries
- Pre-built accelerators for common business uses and scenarios
- Deep data integration expertise
- Systematic implementation approach

This integrated ecosystem helps organisations:

- Accelerate time to value with pre-built connectors and tools
- Ensure security and compliance across all data assets
- Scale AI initiatives efficiently using cloud infrastructure
- Maintain consistency across data operations
- Leverage emerging AI capabilities as they become available
- Unlock the transformative power of AI customer service and sales agents that thrive on accurate and real-time data with the potential to drive sales, cut costs and improve customer satisfaction 24/7/365

Taking action: Your path to AI success

The race to implement AI is really a race to get your data foundations right. Organisations that pause to methodically prepare their data foundations will be the ones that can move fast and achieve sustainable competitive advantage.

"The window of opportunity is right now. Organisations that act decisively to build their data foundations today will be the ones leading their industries tomorrow. But success requires starting smart – with clear outcomes in mind and a systematic approach to implementation," says Himanshu.

"The technology is ready now and improving by the day – the question is, will your data support it?"

AI impact

Rapid two-week deployment enabled by standardised data

When a major financial services provider faced a critical systems challenge, Nexon helped them migrate their entire customer service operation to an AI-enabled cloud platform in just two weeks. Their prior investment in standardising data and processes meant they could focus on innovation rather than struggling with data.

The key is to start now, but start smart

The path forward is clear: start with a thorough assessment of your current data foundations and develop a strategic roadmap. As a certified Microsoft partner with proven experience across industries, Nexon can help accelerate your journey from initial assessment through to AI innovation.

Ready to start building your AI-ready data foundations?

Book your no-obligation data foundations assessment today.

About Nexon Asia Pacific

Nexon is an award-winning digital consulting and managed services partner for mid-market, enterprise and government organisations across Australia. We offer clients a uniquely broad suite of solutions requiring end-to-end capabilities coupled with specialist expertise in security, cloud and digital solutions. As a certified and accredited local and state government provider, CREST and ISO-certified, Nexon partners with world-class technology vendors to deliver innovative and integrated solutions.

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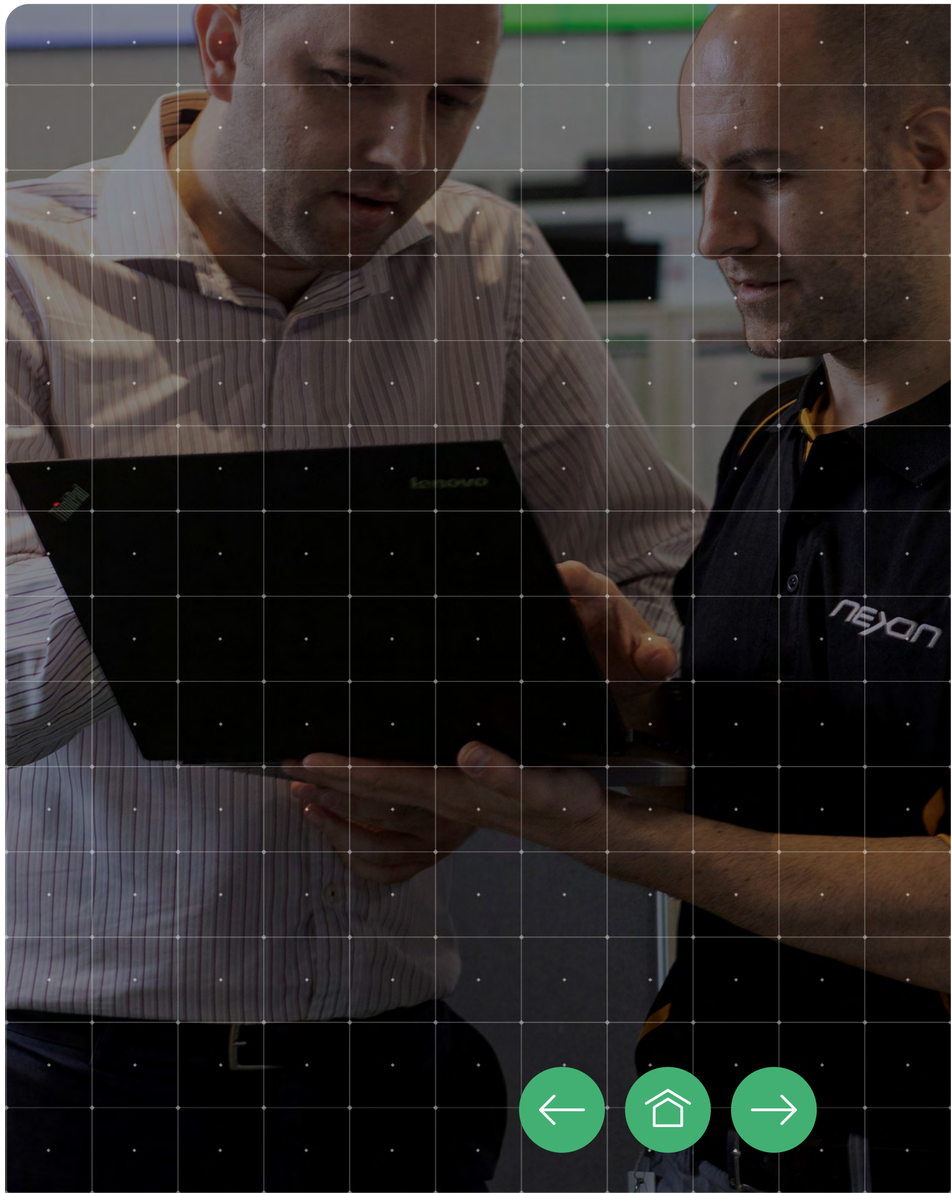

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