



Why modernisation projects go wrong

While large enterprises like banks and telcos often manage large legacy IT estates with thousands of applications, a common challenge emerges: many apps are outdated, no longer fit for purpose, and urgently require modernisation, writes Stephen Ellis, the division president and general manager of Amdocs Cloud

Modernisation can reduce tech debt, cut IT costs, improve the digital experience and enable innovation. Without modernisation legacy apps can place your organisation at a competitive disadvantage and constitute a security risk. Yet, due to limited budgets and the preference to take a manual approach, modernisation teams can touch only a fraction of these apps each year.

Indeed, research shows that 79% of modernisation projects fail to deliver the expected results. This is attributed to cost, complexity, scoping, skill gaps and project fatigue, amongst other reasons¹. In contrast, based on our years of experience in modernisation projects, **Amdocs** contends that such failures are often due to a lack of focus on business value.

We hold that putting business value front and centre, and identifying the right areas to improve, is the essential first step towards a successful modernisation project.

The 'wrong' areas for modernisation

Choosing the correct focus for modernisation typically hinges on your modernisation team's approach:

- **Comfort zone modernisation:** Focuses on areas where the modernisation team is skilled. Typically, this means no one sees the whole picture: database experts identify database problems; cloud experts diagnose cloud problems and so on. In addition, where teams possess specialised tools or processes, they'll choose to target projects where those tools can be best utilised.
- **Technology-led modernisation:** This is where IT teams choose to deploy new and advanced technologies which will undoubtedly upgrade the tech. However, by not first identifying the organisation's most urgent needs, there is no guarantee if the investment will positively impact the business.
- **If it's broke, fix it modernisation:** When modernising an ageing system, it's tempting to fix not just the core problem you had identified, but every problem that comes along the way. With this approach, teams simply move through the application making improvements and consuming budget. But this means any benefits are diluted by investment in less critical fixes, and crucially, the budget could be used up before the programme has achieved its goals.
- **Follow the money modernisation:** Some systems are better budgeted than others, resulting in preferential treatment from the modernisation team, even if their issues are less severe. Unfortunately, this is the reality in many organisations.

While teams may occasionally stumble upon the perfect solution, it's more common for improvements to be isolated, where one application component is enhanced, but yields minimal overall business benefit. And often, this simply shifts the bottleneck to another area. ▶



Identify projects that address business needs

Amdocs has been helping customers with modernisation initiatives for over two decades. From our extensive experience, we've found that the key to modernisation success lies in aligning modernisation initiatives with significant, yet unmet business needs.

Selecting the right areas for modernisation begins with focusing on the business value, and then working to identify how to maximise the benefits that modernisation can bring. We call this approach **Value-Led Modernisation at Scale**.

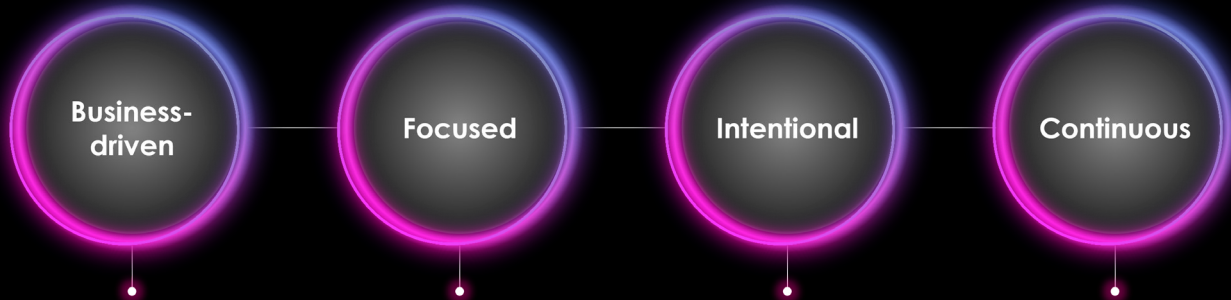


The goal of modernisation must be to deliver maximum business value

Value-Led Modernisation at Scale

Value-led modernisation prioritises business objectives, utilising AI and automation to achieve impactful outcomes.

At Amdocs, we evaluate all modernisation projects using these four fundamental principles:



- **Business-driven:** The purpose is to undertake projects that address specific business needs. The analysis and search for the right project begins with talking to the business.
- **Focused:** Analysis must be accurate and practical. The focus should go beyond app modernisation without overextending into a full IT stack review. The scope should remain within the four pillars of modernisation (see over), allowing for a broad, yet controlled assessment.
- **Intentional:** After identifying the right modernisation project, it's crucial to guard against modernisation drift. This means modernising strictly along the critical path, discerning which improvements to make, their sequence, and their budgetary implications.
- **Continuous:** Modernisation is not a one-time task but an ongoing process. It's essential to continuously re-evaluate and realign the modernisation roadmap with changing business needs. ▶



Modernisation at scale

For enterprises with thousands of legacy apps, manual analysis is clearly not a practical solution. This is where automation, machine learning and advanced AI tools come into play.

At Amdocs, we utilise automation to rapidly identify the quickest path to cost optimisation. This may include reallocating development resources, improving team skills and reducing turnover across application portfolios. As an example, our tooling can help assess and prioritise the disposition of applications for migration to cloud, evaluate technical debt and assess risk and business value. With effective use of these tools today, even small teams can rapidly perform tasks that would previously have taken armies of expert consultants. Amdocs' tooling is what

makes modernisation at scale possible.

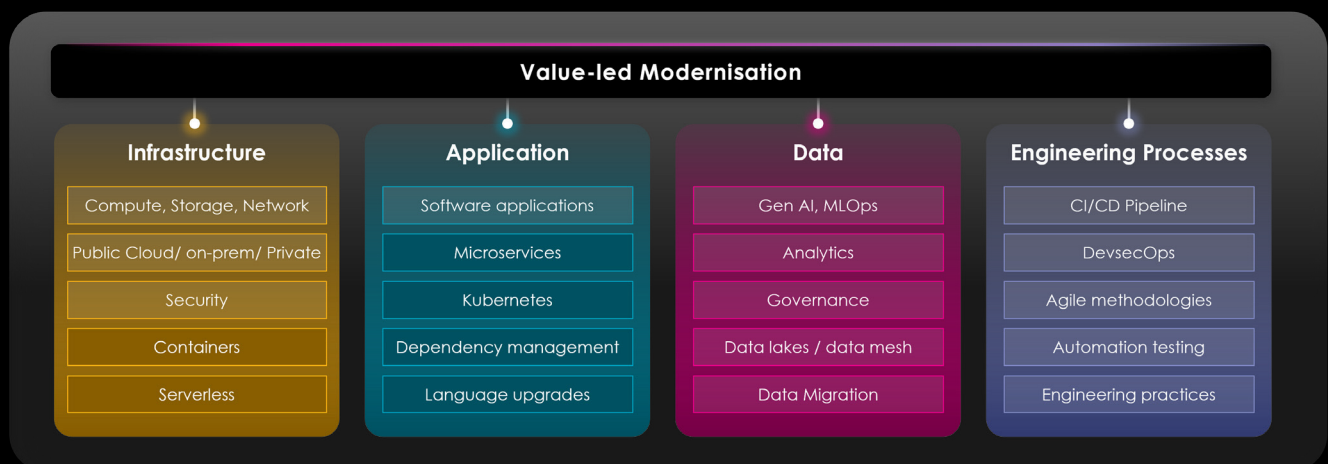
Still, tooling is only 80-90% of the solution. For example, it can identify deficiencies, but it doesn't tie those deficiencies to a specific business value. This is where consultants provide essential added value, combining automated code-level analysis with technical and business expertise. We analyse the information received and craft it into the optimal modernisation plan. We begin by conducting a brief evaluation, promptly followed by creating a modernisation roadmap that's designed to address specific business needs efficiently and cost-effectively. Then, we move rapidly to the operational phase, aiming to secure quick wins.

Tips for successful modernisation

- **Employ the right technology:** For example, in application migration to the cloud, Amdocs uses automation to create a roadmap and portfolio governance across hundreds of applications, sorting each into Rehost, Refactor, Rearchitect, Rebuild, or Retire buckets. We also navigate inside deeply complex applications to analyse internal structures, dependencies and communication patterns.
- **Touch only what needs to be touched:** With an identified business need in mind, employ automation to quickly identify the most efficient path to optimising costs, reallocating development resources, improving team skills and reducing turnover across application portfolios. Don't touch anything else unless it will help resolve an unmet business need.
- **Measure outcomes and know when to stop:** Metrics are crucial to determine when you've met the business need. But once target metrics have been met, stop modernising to avoid wasting resources.
- **Maintain a modernisation roadmap:** Value-led modernisation is an ongoing process that runs in parallel with the assessment of evolving business needs. Both business needs and technology are constantly changing. Have a prioritised roadmap of jobs to be done, and update it regularly.

Accurate scoping with the four cornerstones of modernisation

While modernisation programmes are often referred to as app modernisation, be careful this term does not restrict your view of what is required. Aligning tech capabilities with business needs extends well beyond simply refactoring applications or turning monoliths into microservices. Amdocs has identified four pillars of modernisation, where each pillar addresses a critical component of modern IT systems and business operations: ►





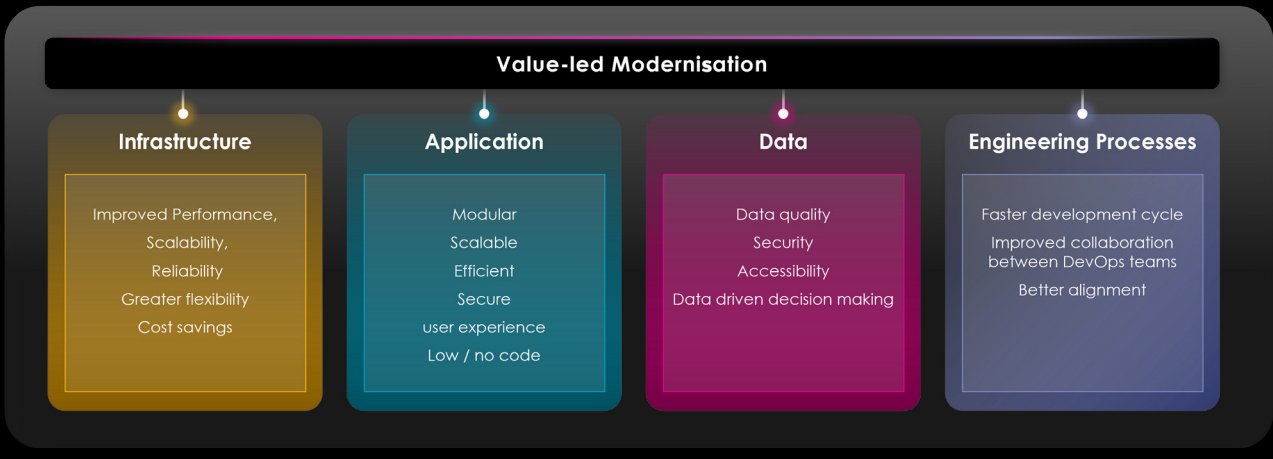
- **Infrastructure:** Refers to the foundational technology platforms on which applications and data reside. Modernising infrastructure improves performance, scalability and reliability. The ideal infrastructure for most companies is public cloud and includes compute, storage, networking and security. In some cases, it makes more sense to leave certain workloads in an on-prem environment.
- **Applications:** Focuses on the software applications themselves – how they are designed, built and maintained. App modernisation can involve refactoring or rebuilding legacy applications to be more modular, scalable, efficient and secure. This is essential for integrating new functionalities, improving user experience and ensuring that applications can access the benefits of modern infrastructure, like cloud computing, as they work to deliver compelling business value.
- **Data:** Covers the way data is stored, processed, utilised and kept secure. Modernising data management and governance involves ensuring data quality, security and accessibility, enabling advanced analytics and data-driven decision-making. Businesses need to ensure that their data

architecture supports big data technologies, real-time analytics, and is compliant with data protection regulations.

- **Engineering processes:** Refers to the methodologies and practices used in developing and maintaining software. Modernising engineering processes means adopting agile methodologies, DevOps practices and continuous integration/continuous deployment (CI/CD) pipelines, leading to more efficient and faster development cycles, improved collaboration between development and operations teams and better alignment with business objectives. Yet, this first requires getting developers to adopt these methodologies, which can be challenging.

Together, these four pillars move forward iteratively and cohesively. This means that investment that significantly advances one pillar while leaving others behind will often result in inefficiency, as the full benefits are only realised once all pillars are aligned.

The figure below lists the benefits from modernisation efforts invested in each pillar.



Bringing it together

“ Assessing the four pillars above through a prism of delivering business value, will enable you to identify the right areas for modernisation. ”

To achieve modernisation success, it's essential to utilise advanced tooling, and assess and build coordinated modernisation programmes that reference all four pillars. With this approach you can fully realise the business benefits you are targeting.

Amdocs' added value

After several decades of large-scale application and infrastructure development the need for modernisation has never been more pressing.

Done the wrong way, modernisation is a haphazard endeavor characterised by repeated failures and a few stellar successes. Done correctly, focusing on the business priorities, modernisation is a programme of steady improvement and wise investment that consistently aligns a company's tech with its.

With approximately 30,000 employees across 90 countries, Amdocs offers deep technical knowledge and expertise in

each of the four pillars of modernisation. These credentials are accompanied by an unmatched delivery record and a practical, business orientation.

Our Value-led Modernisation at Scale approach, and our AI-driven and automation tooling, ensures modernisation initiatives deliver optimal return for effort invested, whatever the scale. For more information:

Visit [Amdocs Value-led Modernisation at Scale](#) or Email at cloud@amdocs.com

REFERENCES

1. Wakefield Research 2022