ASSURITY

# Embracing organisational uniqueness on your Enterprise Resource Planning journey

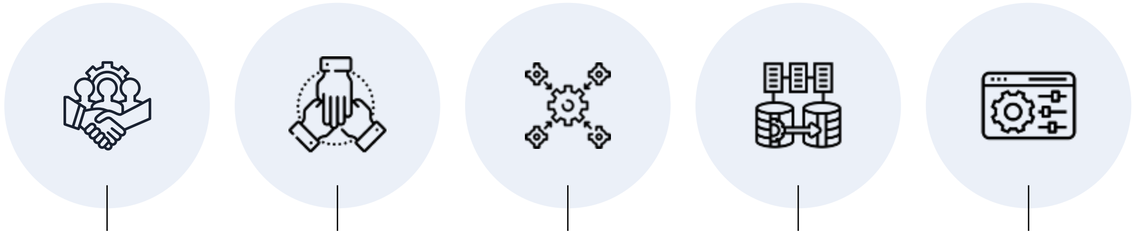
Enterprise Resource Planning (ERP) software solutions are the lifeblood of every at-scale organisation, providing information flow between business units that enable:

- **Improved Cash Flow and Visibility:** time, cost and cash visibility
- **Cost Savings:** efficient planning, procurement, customer services and improved supply chain management
- **Better Data & Cloud Security:** effective security management and resilience of data
- **Business Process Improvements:** automation of processes, workflow management and supporting resources

However, the disruption caused by implementing new ERP solutions or uplifting existing ones can be far-reaching. Poorly handled ERP change can cause interruptions to essential core functions and, perhaps more importantly, it can have a materially adverse impact on your people, the heartbeat of your operation, by causing fatigue and stress and ultimately contributing to attrition.

The trend in the ERP market and confirmed across our client base has been the move to Commercial off-the-shelf (CoTS) products or, more recently, cloud-based solutions. Successful implementations of CoTS solutions require a comprehensive understanding of your business processes, configuration, data and integration. Cloud-based solutions can also add further layers of complexity, such as where your data is held, security, latency and different integration challenges. Successfully navigating the issues raised by cloud-based CoTS implementations places a significant dependency on using suitably qualified business subject matter experts (SMEs). The impact of diverting these resources on BAU cannot be underestimated.

## Experience shows that five key themes have emerged that were not well understood at the outset of an ERP implementation. They are:



Impact on people

Cost of ownership

Integration of the ERP product

Data mitigation

Customisation vs Configuration

**Impact on their people:** ERP solutions provide out-of-the-box best practices and functionality to common business functions. That is, if the vendor marketing is to be believed, the impact on the day-to-day jobs is perceived to be low and indeed is marketed as such. However, this ignores the uniqueness and complexity of each organisation's business, its processes and its interlocking functions. Moreover, project's underestimate the limited availability of business people, with the relevant expertise, required to implement or uplift ERPs while still maintaining their day-to-day operations. As a result of supporting the implementation while maintaining their daily role functions, insufficient management of change can lead to low adoption, people burn out and disillusionment. This, in turn, can contribute to attrition and lost productivity.

**Cost of ownership:** A study by Meta Group showed that only 20% of companies implementing ERP solutions know the total cost of ownership (TCO) of their deployments. The other 80% do not fully understand the magnitude of ongoing support and infrastructure-related costs. ERP systems demand a large investment at the economic, human resource and organisational levels. This investment is made not only in the initial procurement/implementation phase, but also throughout their life-cycle.

**ERP integration:** Integration into your IT ecosystem can often be difficult; the challenges of ERP integration involve both the age of the systems to be integrated, the architecture of these systems, and the heritage documentation (or lack of) on the integrating contract. The shiny new ERP system guarantees fully integrated functions within its product; however, the successful integration of downstream and upstream systems remains firmly with the organisation.

**Data migration:** The impact and complexity of data migration should not be, but often is, underestimated. It takes time, money and people to successfully migrate data, all of which are scarce resources in direct contention with other activities in the ERP implementation. To add further complexity, different parts of your business may operate different standards in maintaining data and place a varying degree of importance on differing data elements. When an organisation overlays the regulatory aspects and management decision-making, this becomes an area of previously undiscovered complexity that drives cost, time and people pressure into your project.

**Customisation versus configuration:** The previously mentioned uniqueness of your organisation coupled with an ingrained desire by your people to maintain the status quo drives complex choices between customising or configuration. The consequences of these decisions can have far-reaching implications for the success of your implementation in the project and subsequent operations. Heavily customised products may negate the primary reasons for selecting your product, namely failures in the integrated software, and complexity with the cost to maintain and upgrade your ERP system.

# Managing your risk

The critical question every organisation should ask is, 'Do we understand our risk tolerance? What is the impact on our business in the event of a significant failure, inaccurate data or a disillusioned workforce?'

The consequences of risk realisation can manifest themselves in many forms, including financial, reputational, political, and staff attrition, all of which guide the investment and planning in risk mitigation. As a north star for defining a testing risk mitigation strategy, your risk tolerance must be well-known and agreed upon in your organisation. A shared, widely understood organisational risk profile assists your teams in making wiser investment and delivery decisions. All risk mitigation investment becomes akin to Insurance premiums. No one likes to pay insurance, and stakeholders with a budget are only willing to invest if the subsequent impact of any risk realisation is well understood.

There are many factors for organisations to get right as part of the broader risk mitigation strategy—Project Governance, Project Management, Change Management, and Release Management, to name a few. One key mitigation strategy is testing. But to mitigate your risk effectively, your organisation's 'right' test strategy must consider the business risk and the consequence of failure.

Assurity employs Risk Thinking workshops to help our clients understand their risk tolerance and apply this to the testing strategy. By collectively understanding high-risk areas, delivery teams can focus efforts to deliver priority functions earlier. This, in turn, allows high-priority testing to be executed in advance and reduces the overall cost of testing. You test the things that matter first, focusing on acceptance from the first design and code delivery. This results in early identification of issues, increased confidence and streamlined testing in later stages on lower-priority functionality.

# Place your people at the heart of your delivery

ERP solutions are purchased with the best intentions that the increased functionality, integrated solution and streamlined business processes will provide far-reaching benefits to your business. And they can. But a key factor to your success will be your people's positive adoption of the solution.

Your people are the heartbeat of your organisation, and you alienate them at your peril. Yet, the people essential to successfully implementing your ERP are consistently disillusioned. Either through being removed from the new solution until an acceptance phase close to go-live or being tasked with multiple project tasks such as data migration in addition to their day jobs.

Early engagement with your people mitigates change impact, and testing can be a valuable tool in change management. Allocate sufficient time to invest in your people to define success criteria aligned with your identified risks. Deliver and test to 'success' with your people early through working demonstrations that capture issues and defects during development. Empower the decision-makers in your project and elevate their voices across the organisation, employing your organisational risks to navigate complex decision-making. A practical test strategy embeds your people's voice early and continuously throughout design, development and testing.

# Take decisions for all of product life

For all organisations, the decision to implement or change an ERP system is a significant event in their financial calendar. It requires expertise that is quite often not readily available within the existing workforce and is supplemented through 3rd Party Systems Integrators or Contractor resources. The objectives for these teams are nearly always measured on a successful ‘go-live’ to an agreed date and budget, influencing decision-making in delivery that creates a ticking timebomb for the operations teams.

The most common mistake is ignoring the longer-term impact on the business teams for servicing patch upgrades to their ERP software product. A study by Meta Group showed that only 20% of companies implementing ERP solutions knew their deployments’ total cost of ownership (TCO). The other 80% do not fully understand the magnitude of ongoing support and infrastructure-related costs.

There are two critical investment decisions that organisations can take which will reduce the cost of serving their ERP solution:

- Build resilience in your business SME teams through training on testing. Complement their business expertise with skills to scope, design and execute high-value testing activities during the project life. This, in turn, builds a foundation for efficient patch upgrades in operation.
- Assess a complementary automation approach to allow fast changes in the project but, more importantly, a quick assessment of subsequent patch updates. Maintaining up-to-date patch releases of your ERP can be a significant burden on your operations team but can be alleviated through a considered automation approach.

# Integrate early and continuously

You've purchased a working product, proven software that seamlessly integrates core ERP functions that should realise efficiency gains. But whether the functional product achieves successful downstream and upstream business outcomes is not an issue the ERP product can solve. Therefore, one of the key risks you face is integrating into your broader IT ecosystem.

A robust integration strategy that validates business success in your ecosystem is essential. From the programme's outset, this should be a key focus, building confidence that your new ERP solution will realise your business goals. Furthermore, this can be achieved as early as a parallel activity during the design and configuration stage. Building stubbed interfaces allows you to validate the integration early and becomes a valuable tool for injecting and consuming test data, taking integration off the critical path, and building early and enduring business confidence.

# Embrace early data migration

During ERP implementations, data migration is an area that is often backloaded in the project delivery plan. Compounding the issue, this is a complex area requiring deep analysis and usually requires the very business subject matter experts in high demand for design decisions. This causes the project teams to shuffle data migration down the priority list, choosing to address the challenge later when they believe there will be more time available from critical resources. Unfortunately, this is very rarely the case.

Typically the data migration will throw up challenges that can cause significant course correction in the configuration or business process of the ERP solution. Addressing this challenge early is sound advice, bringing these issues to the forefront at a less costly stage of the program and reducing regretful spending. Quite often, these issues only manifest themselves over time, being identified through exercising business and system processing. And there is no better place to find them than during all phases of testing. You've minimised your opportunity to test out data migration issues if this task completes during or sometimes even after the acceptance test phase.

# Minimise customisation

Of Assurity's clients, the ones that maintain a stoic adherence to configuration over customisation cite this as one of the most important factors in their success.

Every organisation is unique in its objectives, culture and business processes. When you couple this with your people's desire to maintain the status quo and the previously mentioned goals of the project team to hit a go-live deadline, the focus easily moves to customising the software. And you do this at your peril. Heavily customised ERP software becomes complex, not just in the project delivery but for maintenance during operations.

In some instances, the effort and risk to maintain the customisations outweigh maintaining up-to-date releases of your ERP solution. Negating some of the very benefits for which you undertook the ERP implementation.

Our experience has shown that successful implementations not only mandate configuration as a rule but also put comprehensive governance structures to ensure this happens. Decisions to customise require explicit approval from outside of the project teams, with an all-of-life lens

# The Assurity difference

## Our goal is to de-risk your delivery and progressively build enduring confidence for you.

Every quality assurance project we take on starts with the ‘Assurity Way of Working' with you. Every organisation has a unique set of objectives, associated risks and success criteria. We work collaboratively with our clients to co-design the right test strategy to support their ERP delivery with agreed outcomes. We achieve this by working with Steering Committee stakeholders, Business Functional Unit owners, Project Management, Technical teams and Operational staff to deliver a risk assessment. This creates a shared understanding of your risk tolerance which not only underpins your test approach but provides a platform for teams to navigate complex decision-making during the project life.

Identifying what is important and embedding acceptance from the start with a shared definition for success puts everyone on the same page. An effective test strategy articulates the approach to risk mitigation and defines the value of the approach and the path necessary to get there.

A further crucial differentiator at Assurity Consulting is our belief in Human-centred testing This puts people right at the heart of a holistic testing approach. Human-centred testing goes directly to the users of your ERP system, engages them in workshops, draws out their positive and negative views, and involves them in system design and acceptance from the first code drop. This unique approach leaves nothing to an assumption in your ERP systems and processes while addressing one of the most significant sources of project shortcomings – excluded or disaffected business users. With human-centred testing, your people provide direct input on the systems with which they will eventually work, promoting inclusiveness. Our human-centred design services are built upon the principles of co-design and growing internal capability to improve your teams’ resilience and performance. This provides a foundation for effective system upgrades or patches in the production environment with empowered teams who have documented knowledge on lean tests that mitigate risk.

Bringing testers in at the start – long before software implementation begins – establishes a lean, targeted testing effort, identifying and testing what matters. It allows for identifying high-priority critical tests, embedding acceptance from first code delivery to completion of ‘go-live’ and approval while building progressive confidence in your ERP system capability. It also means testers know what software is being implemented, are party to the business analysis and process design, and are across the business and its goals. This contributes to a reduced ‘acceptance overhead’ as go-live draws near; by preparing for production at project commencement, the final testing phase is often delivered in as little as two weeks.

# Complementary automation strategies

**The choices for organisations boil down to three options:** no automation, building automation based on a tool or open source automation tooling. For the latter two, you can have capability created in-house, or you can purchase a service.

Careful consideration must be given to whether this is a journey you wish to embark on, as the investment is not insignificant. For some of our clients, the decision has been that it's a step too far, given the investment required coupled with the added complexity of introducing automation while delivering or maintaining their ERP. For other clients, we have designed an automation strategy that has delivered continuous testing frameworks and enabled the acceptance of patch upgrades in 4 hours.

Automation is not appropriate for every organisation or every client of Assurity's. It is important to understand the wider IT strategy, technical environment and investment required to select, implement and employ the right automation approach for you. Automation does not provide a return on investment in the short term; in most cases, its payback materialises in years two to four, depending on the approach. So why would you undertake automation? When implemented correctly as part of a wider IT strategy, automation provides the following key benefits.

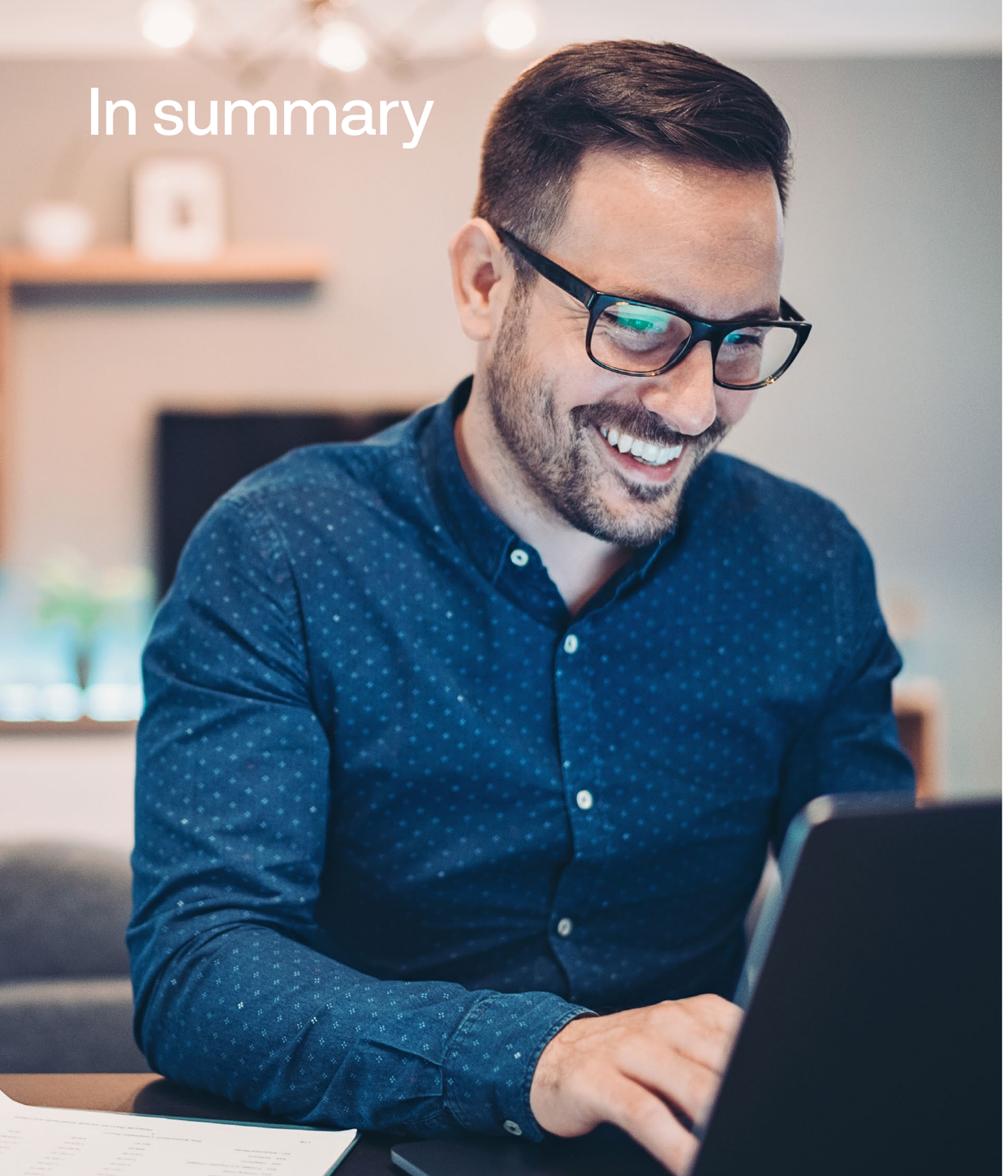
**Trust in change:** Automation can be designed and created to run continuously throughout the project and verify the changes on each iteration or code drop. Target automation of the right functions builds trust in your teams to deliver quickly, making fast incremental changes with instant verification.

**Reducing business stress during upgrades:** Effective automation strategies develop tests that support validating the latest release works both upstream and downstream in your wider IT ecosystem. Without automation, a larger commitment is required for business users to perform acceptance in parallel with or instead of their day-to-day operations.

# Building testing resilience in your business

As previously mentioned, a critical risk to any ERP implementation and operation is the adverse impact on your people. Purchasing an ERP system provides assurances that it performs ERP functions, both now and for future releases. But it does not guarantee its successful and continued operation in your business, which can materially impact your people.

Whatever your testing strategy, it's crucial to build testing resilience in your business SMEs. It provides them with the structure and training to perform testing that alleviates frustration and allows them to articulate management information on risk without stress. Numerous ERP engagements have reached out to Assurity after commencement when it has become apparent that SMEs know the business operations, but the practice of testing was alien and stressful. We advocate building SME test training plans that provide the tools to define the testing scope, schedule, test data, defect management test execution and reporting. It provides a foundation to support business SME testing of your ERP in the project but also delivers an ongoing asset that is continually available for subsequent upgrades.



# In summary

ERP engagements that have achieved or exceeded expectations for our clients have all identified the following characteristics when delivering and maintaining ERP solutions.

- A change programme that placed their people at the heart of the ERP implementation with appropriate plans to support their well-being and operational day job. Early engagement was planned that provided support, training and tools that enabled their expertise to be used effectively while minimising the impact on their daily tasks.
- A clear understanding of the cost to their organisation, both in delivery to operations and the subsequent cost to serve. This was evidenced in their business case and subsequent investment decisions in delivery that built resilience in project life that paid dividends post go-live.
- An integration strategy that provided early assurance in advance of system functionality. Typically this was achieved by testing the integration points through manual or automation approaches.
- A focus on data migration that front-loaded difficult decisions during the design phase of the implementation. Successful projects delivered migrated data into the first test phase, understanding that latent issues surfaced over time in processing, reporting or time-based events.
- A stoic adherence to configuration over customisation, acknowledging changes in business processes are easier and cheaper than system customisation. Minimising cost impacts in projects and subsequent upgrades.

While testing on its own does not achieve these outcomes, an effective strategy will make a considerable contribution to identifying and mitigating risk during your ERP journey. Delivering management information across people, process and technology gives you early and enduring confidence in your ERP project.

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# About the Author

As General Manager of Assurity's Test and Quality Assurance practice, Russell is responsible for leading, defining, and delivering our service offerings nationally. Russell also drives the direction and development of the Assurity Cloud Platform that delivers innovation on quality services.

Russell is an experienced IT Delivery Consultant, specialising in strategic quality change on large-scale programmes in the Banking, Financial Services, Telco, and Government arenas. Before immigrating to Aotearoa New Zealand, he enjoyed an IT career across Europe with Deloitte Consulting & Daimler Chrysler before settling on these shores. He is passionate about delivering successful outcomes through co-design, collaboration, and placing people at the heart of change.

Russell is a passionate fisherman when not spending quality time with his family supporting their equine pursuits.

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