KELLTON TECH

Hybrid Integration Strategy for Digital Transformation

Roles and Considerations

Introduction

Digital Transformation is the ‘unicorn’ chase for the enterprises of today and the overriding mission is to achieve agility with innovation while constantly adapting oneself to the mercurial trends of the digital age. This is exactly where most enterprises come to grief.

Building excellent adaptive capacity, on the face of it, might feel fancy, but note that it largely relies on how fast an enterprise can align, re-invent, integrate, or change its systems and processes.

This, definitely, isn’t easy. It wouldn’t be wrong to say that systems of efficiency, which are the potential accelerators of change, become the first inhibitors to it.

So, the big question is—how does an enterprise enable digital transformation and drive agility given such a rigid scenario? The answer lies in Hybrid Integration. Gartner predicts that by 2022, at least 65% of large organizations will have implemented Hybrid Integration Platforms to power their digital transformation.

Hybrid Integration is the Key to Digital Agility and Growth. Why?

At a time when everything is predominantly digital, the existence of saturated, siloed systems doesn't augur well for the growth ambitions of an enterprise. Systems, when work in isolation, limit scalability and create an agility choke point, which doesn't allow enterprises to improve capacity and adopt new technologies. This is where the core motive of digital transformation blows up in the face.

Hybrid Integration is the foremost solution to the problem. The approach optimizes existing IT systems for reuse while providing for easy adoption of new capabilities with total security and negligible risk of quality damage and redundant data. To describe it in another way, integration basically harnesses the true potential of established systems while introducing the new business processes to help an enterprise increase agility, boost efficiency, and maintain its competitive value. Further, it leverages the value of data by enabling fast, seamless, and consistent data migration between applications, and accelerates the transition to the smart cloud.

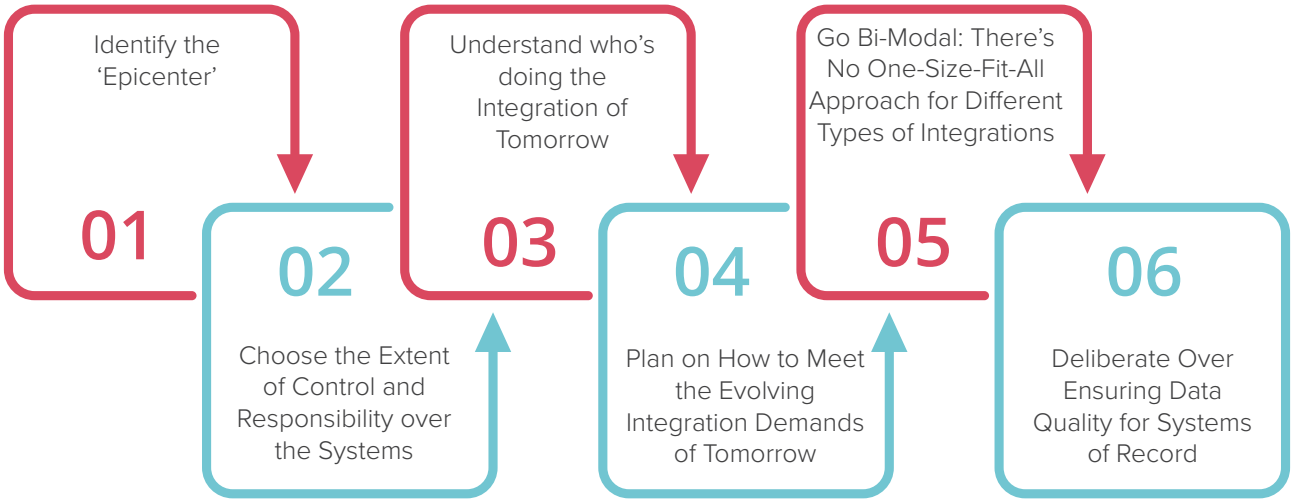
Hybrid integration also boosts customer service. Since it's instrumental in remedying the functional gaps by enabling end-to-end integration of services, both in the cloud and on-premises, enterprises are able to build a future-proof, coherent IT ecosystem with an added layer of agility and scalability.

All systems work in momentum, owing to which, the deliverability of services improves. As a result, enterprises innovate better, deliver positive customer experience, and achieve buoyant growth.

No wonder, hybrid integration is a bottom-line imperative for transformative enterprises, and in a bid to help them get the drill of it, we have curated a guide to creating an effective integration strategy.

A Six-Step Guide to Creating a Hybrid Integration Strategy

The case of creating an effective hybrid integration strategy needs careful consideration of several critical aspects. Some of them being the set of tools and technologies the enterprise has acquired over the years and others are the presence of duplicate service integrations. This helps enterprises determine the integration pain points better while also figuring out the first-hand information about the challenges of building a hybrid IT ecosystem. Below, are the six essential steps for creating a tactical, finely-honed hybrid integration strategy.



Step 1

Identify the 'Epicenter'

The first thing to consider when creating a hybrid integration strategy is to identify the 'epicenter,' which means, the touchpoint where the integration tools and technologies will be hosted.

Enterprises must consider the location of their current-state systems, including the ERP and CRM systems, and analyze the integration capabilities existing in place. Further, they must also think about how to expand their IT landscapes in order to realize their integration ambitions across three timelines—the next 12 months, the next three years, and the next five years. This is important to determine the challenges and complexities of moving to the cloud while dealing with future exigencies.

Integrations must always be hosted—On-Premises, Cloud, or Hybrid—near applications and other data sources to stave off delays or freeze communication between applications.

Step 2

Choose the Extent of Control and Responsibility over the Systems

An enterprise's motivation for adopting cloud-based services is indicative of how much control and responsibility they are willing to have over their systems. The three most common approaches to building a hybrid IT ecosystem are:

Private Cloud Integration:
Using private cloud technologies, enterprises can swiftly deploy their applications and IT projects and scale up capacity on demand. If an organization has a larger chunk to move to the cloud, private cloud integration is a highly viable option to choose, since it provides maximum control over the assets. However, the downside is that such integrations require alert management and continuous upgrades similar to those of on-premise applications.

Hybrid Cloud Integration:
With Hybrid Cloud technologies, enterprises can establish reliable integrations between their SaaS applications and the existing on-premise applications and data source systems using a combination of On-premise, SaaS, and iPaaS integration platforms. The approach allows automatic scaling of capabilities when demand intensifies, minimizes the need of maintenance and upgrades, and reduces integration costs by shifting from the CapEx to the OpEx model.

Managed and Public Cloud Integration:
Such integrations involve offloading installation, hosting, and maintenance of integration technology to a third-party; thereby, disengaging from the need of hands-on maintenance and day-to-day operations. However, the only sore point is limited control over the integration assets.

Step 3

Understand who's doing the Integration of Tomorrow

Today we are witnessing that organizations are increasingly changing their approach to integration. Fueling these changes is a host of challenges that include the increased adoption of cloud applications and the urgent need of decentralizing the responsibility of integration, so as to give departments' better control over the projects. So, it's crucial to consider the eventual users of the hybrid integration strategy before ascertaining whether they are proficient in overcoming challenges. These days, most organizations are opting for a combination of traditional integration developers, non-integration developers, and the class of 'non-IT employees' called the 'citizen integrators.'

Traditional Integration Developers: These professionals are an old hand at integration technologies, brainy and adept at handling the critical requirements of the projects. They have specialized skills and knowledge in tackling acute situations; something that cannot be delegated to juniors or non-experienced developers in the hierarchy owing to the risks of quality jeopardy and system damages.

Non-integration Developers These professionals handle the day-to-day operations of integration projects and are given the responsibility of ensuring that the data is accurate and consistent across different systems. Non-integration developers work as a part of 'Shadow IT'—a name given to in-house specialized IT teams, having sufficient skills in technology to handle everyday integration functions. They aren't as tech-savvy as traditional integration developers, which make them ineligible for mission-critical projects.

Citizen Integrators: These professionals are non-IT developers, preferably business analysts or individuals, working within teams with the responsibility of implementing departmental SaaS applications. They have no knowledge regarding in-depth integration tools and advanced integration literature, so they need easy tools and consumer-friendly interface to work.

With extra staffing that includes business analysts, it has become easier for the enterprises to manage the integration workloads effectively while keeping the costs to a minimum.

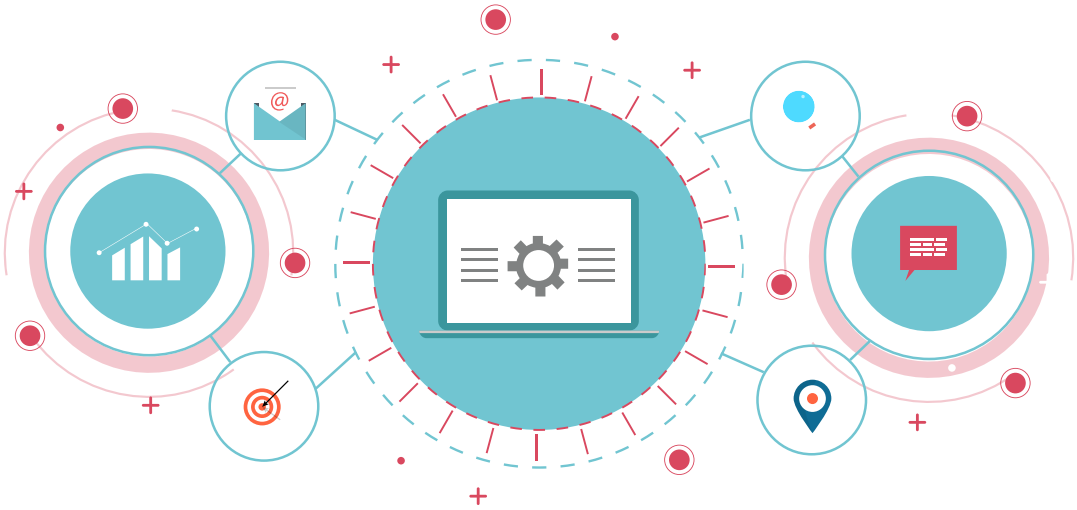
Step 4

Plan on How to Meet the Evolving Integration Demands of Tomorrow

An increase in the number of SaaS applications adds to the demand for integration projects and aggravates the complexity subsequently. Traditional integration teams grapple with the escalating demands and are largely seen as an 'inhibitor' to realizing the full potential of the new/evolving business applications and enabling business teams in leveraging them in a timely manner to achieve the expected outcomes.

One way to keep up with the burgeoning demand is to reduce the amount of new development that needs to be done and leverage the capabilities of the integration assets already in place, such as services, architectures, and orchestrations. Establishing integration asset repositories, registering all assets in the catalog, and enabling ease of asset discovery by the developers simplifies the development life cycle of integrations, increases reuse, and improves the agility of integration teams in meeting the business demands.

The integration platforms of tomorrow are also gearing up to make the process of developing new integrations a piece of cake with iPaaS platforms transforming into low-code development environments with built-in connectors and orchestrations for a plethora of SaaS applications. Adopting such iPaaS platforms as a standard for SaaS applications integration within a company will help in reducing the time for on-boarding new applications and features in the cloud. Such low-code environments can also be worked on by citizen integrators, the non-IT professionals, or non-integration specialists working within teams.



Step 5

Go Bi-Modal: There's No One-Size-Fit-All Approach for Different Types of Integrations

No two projects are similar. Some are non-urgent while some are mission-critical and carry a high degree of complexity. Some require microscopic attention while some need rapid development. This explains why different projects require different modes of integration for simpler, faster, and more effective delivery schedules. Seasoned analysts and thought leaders refer to this trend as bi-modal IT.

Mode 1 Development:
Complex big bang integration projects, which require meticulous planning, long execution duration with elongated multi-stage testing cycles, proper governance, and a rigorous architectural review, fall under this category. These projects are typically strategic in nature and end up with new systems or a huge chunk of functionality that does not make sense to be rolled out in smaller

Mode 2 Development:
Integration projects that require agile methodologies with iterative incremental functionality rollouts and where the business needs and end system functionalities evolve at a faster pace fall into this category.

Step 6

Deliberate Over Ensuring Data Quality for Systems of Record

While implementing new integration options, enterprises must spare a thought to consider how these changes are going to impact the quality and stability of the projects. Various factors, like who's doing the integration, what approaches are selected to build integrations, and what are the risk-cutters, should be closely scrutinized to ensure that enterprises are getting the best value out of their integration strategy. Further, enterprises must ensure that there remains a proper level of governance for compliance with quality standards, and only authorized users are allowed access to the application data.

What Next?

Kellton Tech delivers fast, reliable, and robust hybrid integration platforms at scale that meet modern business needs. With our technology-agnostic approach and use of multiple COTS platforms, including those of Software AG, Oracle, and MuleSoft, we have helped enterprises tap into the potential of cloud, fuel innovation, and unlock new streams of revenue and growth. Our team of experts conducts extensive R&D in our well-equipped laboratories to push our capabilities incrementally and enable large-scale hybrid integrations that outperform in a digital world.

About the Author

Ram Kanumuri is Vice President, Digital Integration at Kellton Tech. He is an enterprise integration expert and technology evangelist who has created enterprise-level integration solutions and platforms for retailers, distributors, oil & gas, energy, utility, insurance, and financial institutions using platforms from multiple vendors such as Software AG, MuleSoft, and IBM. He is renowned for his technical expertise and for his keen ability to design innovative solutions for complex, enterprise-grade, integration problems. He is passionate about leveraging the latest technology and product innovations to develop solutions, tools, and techniques that deliver maximum ROI for our clients.

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