EXECUTIVE SUMMARY

Unlocking the Hybrid Integration Dividend

How to transform your business with Hybrid Integration and APIs
Unlocking the Hybrid Integration Dividend

Achieve greater growth, be faster, more agile, more innovative and more efficient

Organizations are pursuing digital transformation to realize critical business goals. Achieving those goals rests on their ability to access data at great speed and in great breadth. Modernized hybrid integration and microservices-based application programming interfaces (APIs) are the means to making this happen.

When mobile operators bundle video services from third parties together with their core offerings or when auto producers enable customers to personalize features of their cars, dozens or more applications are connecting behind the scenes, sharing data, and creating a seamless experience. That is hybrid integration at work.

APIs unlock applications’ data and unique functionalities residing in disparate systems. Modern integration tools connect all these applications and their functionalities, whereas legacy integration tools are not up to the task at the same scale and across multiple environments. Some firms are adopting a cloud-native approach to integration, while others are migrating more legacy applications to a cloud environment. Many more, however, will be managing hybrid, multi-cloud and on-premises environments for a long time to come.

Breaking down monolithic integration flows into microservices will transform the way they integrate applications and data.

Our global research identified a select group of companies that have progressed further than most in modernizing their approach to integration. They are the Integrators. Their executives assert that they have developed hybrid integration strategies in which cloud-based integration and/or microservices feature very prominently. At the other end of the scale there are the Deliberators – companies that meet neither criterion.

Report revenue growth of 5% or more over the past three years.

49% Integrators
23% Deliberators

Aim to use APIs to create new revenue streams.

46% Integrators
25% Deliberators

Are able to deliver rapid innovation to market.

68% Integrators
25% Deliberators

Plan to replace all their existing integration tools with cloud-based tools.

42% Integrators
21% Deliberators

Will your business still be here in 2020?

Click here to read the blog by Charlie Li, Head of Cloud Services, North America, Capgemini
APIs have become indispensable. They are the instruments developers and IT teams use to unlock data, but they do more than that. They generate business value in their own right: they enable the creation of new products and services, they unlock innovation, create new revenue streams, and sometimes make new business models possible.

Companies born in the cloud are leveraging emerging technologies to create new models for customer experience. Traditional enterprises must answer this challenge by finding new ways to either compete or collaborate with these digital disruptors.

We have seen this across sectors, with the media industry leading the way, followed by retail, telco, and now banking. There is now a convergence of these ecosystems around different customer journeys, combining multiple sectors. For instance, buying a house brings together real estate, retail, logistics, legal, banking and insurance.

This creates the opportunity to either become the aggregator of the new customer experience, or to present services to such an aggregator. Either way, APIs are the key for enabling these ecosystems to be assembled and to evolve in response to customer demand and feedback.

**Download the report** – Unlocking the Hybrid Integration Dividend to read how Wells Fargo’s API channel extends its distribution network.

"The most immediate return on investment from APIs is, for most companies, internal productivity gains. Once organizations mature their understanding of APIs and embrace a design-first approach, architecting them as actual products, APIs can also become an important engine for new revenue streams."

David Chao
Head of Product Marketing, MuleSoft

**Get the inside track**
From our expert on how an API-first, microservices-led strategy will enable you to meet modern business challenges.

Akshay Kumar
Principal – GTM Solutions & Customer Success, North America, Capgemini
Hybrid integration at work

A hybrid integration approach involves the use of modern, cloud-based integration tools in combination with on-premises ones, such as the enterprise service bus (ESB), to connect applications in different environments. It doesn’t necessarily dispense with the ESB, which many organizations cannot afford to phase out yet.

Rather, cloud-based tools, microservices and APIs help manage integrations within the cloud and across different environments, while the ESB retains a role in managing legacy integrations. Hybrid integration is a means to gradually break that remaining hold of legacy monolithic architecture.

Integrators are in a much stronger position to deliver the business benefits of newer technologies and capabilities. They are also supremely confident of being able to deliver new services based on composite applications, and to securely expose business data with external partners – a non-negotiable criterion for collaborative innovation.

The reasons for Integrators’ confidence are clear: their integrations are highly scalable: their networks can handle sudden and significant increases in the number of service requests, while almost two-thirds also say their integrations can easily be customized.

Organizations taking part in the great migration of enterprise applications to the cloud face considerable added IT complexity. For large businesses especially, with a sizeable share of their applications and systems still running on premises, the migration is likely to take several years to complete. This creates a multi-layered challenge.

The traditional point-to-point integration approach used within monolithic systems won’t cope when hundreds or thousands of applications reside in several different environments. For many years, the ESB has provided an antidote to point-to-point by enabling integration between multiple systems. By itself, however, the ESB cannot manage the complex integration flows of a hybrid environment.

Failure to cope with this complexity will do more than compromise the IT environment. It will seriously threaten achievement of the organization’s main strategic objectives.

“Monolithic, on-premises based solutions are not built in a way to allow for the business to be agile, so it takes an army to make a change. That’s what this whole shift to hybrid integration is about: agility.”

Chris Timmerman
Chief Technologist, Dell Boomi

“With our T-Mobile One product, customers with family plans get Netflix on us. The Netflix integration with the APIs took us two weeks to get up and firing. Completing this type of integration in the past would have taken anywhere from six to nine months.”

Chuck Knostman
Vice President, Strategy and Technology, T-Mobile

Read T-Mobile’s remarkable journey from monolith to microservices in Unlocking the Hybrid Integration Dividend report.

Read why hybrid integration works best.
Industry perspectives on APIs

Banking
Better customer engagement, faster time to launch new services and products to customers, a consistent single view of customer data, and strong security and compliance are key to organizations in this sector. The use of APIs has helped banks to improve the scalability and reliability of their back-end systems, allowing them to meet these objectives, with reduced time to market and improved customer experience cited most frequently.

Consumer Products and Retail (CPR)
Retail companies rely on the availability and accuracy of data to serve their customers and improve their overall experience and engagement. CPR companies have realized clear benefits from API use in the forms of reliability, scalability, and security of their systems, leading to a better customer experience.

High-tech
Speed to launch a new product is of utmost importance for high-tech companies. Two-fifths of these firms have leveraged APIs to slash the time needed to bring a new product to market, as well as to upgrade an existing one. Better scalability of their systems to support growth is another benefit cited by high-tech enterprises.

Manufacturing, Telecom and Communications
Reducing time to market is also a top priority for manufacturers and telecoms companies. Close to 40% of respondents in both sectors have put APIs to work to meet this objective, substantially cutting the time they need to introduce a new product. APIs have also helped many to improve their compliance capabilities.
Ensuring hybrid integration success

Implementing a technology strategy is almost always a far tougher challenge than developing it. This is certainly true of hybrid integration. The largest barrier to improving an organization’s integration capability is most commonly the complexity of its IT estate. Cybersecurity concerns are also a common refrain, as they are today in almost any technology initiative.

Complexity need not paralyze IT leaders as there is an array of integration tools and platforms available to help organizations implement a hybrid approach.

A conspicuous gap between Integrators and Deliberators exists when it comes to the value of securing CFO support for integration, which may be one of the reasons why budget constraints are a bigger obstacle to improved integration for Deliberators. Integrators work harder to garner the support of this critical member of the senior management team.

C-level leadership is also likely to be needed to overcome two other common pitfalls: inertia and legacy thinking. When the ESB first made its appearance, it removed many of the integration constraints that enterprises were facing. It fitted neatly with the service-oriented architecture (SOA) approach that many IT teams were enthusiastically implementing at the time. Both the ESB and SOA approach achieved their mandate in a predominantly on-premises world and still provide benefits to some organizations.

Falling back on some of the legacy integration practices associated with them is easy when pressure is on to grow the number of integrations quickly, but they are severely constrained in their ability to manage a complex hybrid IT estate.

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Unlocking the Hybrid Integration Dividend

The first step to modernizing integration capabilities is to identify the requirements based on your business goals and technology roadmap. Each business has its own specific set of circumstances, priorities and challenges that affect your choice of transformation roadmap, but there are commonalities. We have created recommendations based on common scenarios to help your organization through its transformation journey.

**Cloud-first strategy adoption**

**Transformation action plan:**
- Define an optimal cloud-first implementation strategy
- Evaluate data security requirements and regulatory/compliance issues
- Model the integration features needed to support short, medium and long term business and IT needs
- Select an enterprise-class hybrid integration platform that can support your transition.

**API-first strategy**

**Transformation action plan:**
- Define and prioritize your organization’s corporate goals
- Leverage a comprehensive API assessment and adoption framework.

**Legacy modernization**

**Transformation action plan:**
- Identify the legacy systems that form the backbone of your organization
- Create a business case for modernizing your IT estate
- Leverage available capabilities to speed your transformation.

**Legacy middleware/ESB modernization**

**Transformation action plan:**
- Make a strong business case for modernizing your integration platform based on a 360 degree assessment
- Make use of a comprehensive cloud integration assessment framework to clarify the advantages of adopting a modern iPaaS-based integration platform.

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**Recommendations**

**Details of Webinar**

In our latest webinar with IDG, Akshay Kumar, GTM Solutions, Customer Success Lead, Capgemini, is joined by Frank Liberio, ex-CIO, Fortune 500 company, and Sanjna Verma, Product Marketing, MuleSoft, to discuss the impact of APIs and hybrid integration on an organization’s success, and offer recommendations for modernizing your integration approach.

Find out how integrators profit from APIs and hybrid integration by signing up for our experts’ webinar.

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**Research background**

The insights and analysis in this document are based on a survey of 818 IT executives in companies in 16 countries turning over upwards of €500m a year and 80% turning over €2bn or more. Some 66% of the sample are IT directors, 20% are senior IT architects and the remainder are C-level executives. The sample companies are split between Europe (40%), North America (40%) and Asia-Pacific (20%). In-depth interviews were conducted with half a dozen technology leaders to complement the research. A more detailed analysis of the research can be found here: [https://www.capgemini.com/unlocking-the-hybrid-integration-dividend](https://www.capgemini.com/unlocking-the-hybrid-integration-dividend)
About Capgemini

A global leader in consulting, technology services and digital transformation, Capgemini is at the forefront of innovation to address the entire breadth of clients’ opportunities in the evolving world of cloud, digital and platforms. Building on its strong 50-year heritage and deep industry-specific expertise, Capgemini enables organizations to realize their business ambitions through an array of services from strategy to operations. Capgemini is driven by the conviction that the business value of technology comes from and through people. It is a multicultural company of 200,000 team members in over 40 countries. The Group reported 2017 global revenues of EUR 12.8 billion.

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