Integration
Mobilization
Data Unification

From Legacy to Leading Edge

ADAPTIGENT

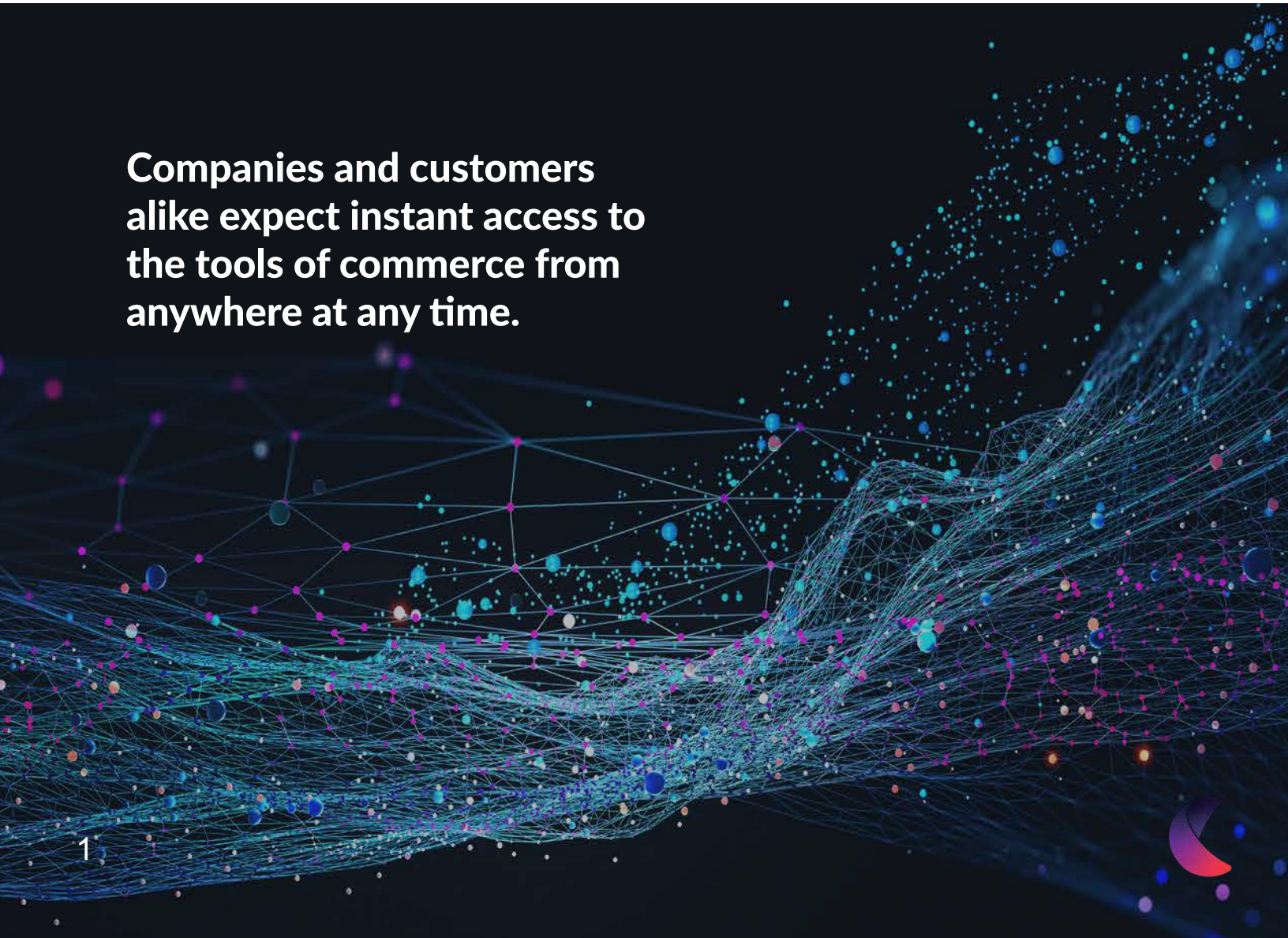
Business innovation at the speed of technology:

Don’t let core systems slow you down

White Paper

CONTENTS

This whitepaper focuses on the crucial role of mobile technology and application programming interfaces (APIs) in driving business innovation and growth. It highlights how global digital transformation has made mobile access a necessity rather than a luxury. The paper emphasizes three areas for enterprises to focus on that enable rapid new functionality: efficient data management, systems integration, and leveraging APIs.



Companies and customers alike expect instant access to the tools of commerce from anywhere at any time.

Mobile Access Isn't Nice - It's Necessary

Mobile technology and mobile access are integral to business growth and innovation. Central to improved business performance is strong collaboration between business strategy and information technology (IT). This collaboration originates in managing data, accessing information across systems and formats, and within enterprise core systems and servers. APIs are the answer to connecting software components that enable fast, new functions.

Mobile access has become the centerpiece of our work and personal lives. It profoundly changes the way companies:

- Relate to their customers
- Interact with employees
- Bring products and services to market
- Access key internal metrics about business-critical functions

Enterprise mobility is no longer a pathway to convenience and efficiency in the new world of remote workers; it's the *driver* of business innovation and growth. Outperforming peers and building innovation requires strong, intentional collaboration between business strategy and forward-looking technology. On its own, strategy can lack sufficient tools for execution and technology can misalign with business needs.

Before we look to the future of data integration for business innovation, let's consider how the mainframe and mobility enabled leaps and bounds already.

1954
IBM releases the mainframe

1960s
IMS/DC and CICS created

1973
Telco uses the term "online"

1980s
Early graphical user interfaces (GUIs) change computer interaction to focus on visual appeal

1980s
The need to share customer information leads to creation of DB2 and IDMS

Late 1990s
E-business boom drives companies to expose internal applications to customers via web browsers

Early 2000s
Screen scraping emerges to collect and transfer code and data

2006
Linux becomes mainstream on the mainframe

2006
Amazon launches its cloud offerings, ushering in an era of infrastructure on demand[1]

2008
First API management solutions emerge[2]

2010
Businesses enable customers to place orders on mobile apps, requiring more data connections and security[3]

2020
COVID-19 drives a rise in remote working. 67% of U.S. workers report doing business on their personal devices[4]

2022
Forbes declares APIs the critical building block for business innovation[5]

Today
86% of the world's population owns a smartphone with apps[6], and nearly 60% all global web traffic is from mobile devices[7]

Innovating Through Data Mobility

Improved business performance hinges on providing real-time information access to all who need it. For companies seeking to innovate, mobile devices are the dominant data consumption option. Consider:

86% of the world's population owns a smartphone[8]

87% of companies rely on their employees using personal devices to access business apps[9]

32% of web visits are from desktop computers[10]

Successful creation of mobile applications – and the systems that enable data to move in milliseconds - remains a differentiating factor in business innovation. From improving responsiveness to increasing revenue and bolstering customer satisfaction, a successful mobile platform requires streamlined access to:

- Mainframe applications
- Core systems data
- Workflows and processes

Companies in all industries realize that data integration is a prerequisite to maintaining a competitive edge.

Embracing APIs as Imperative

Collaboration with business strategy and IT is vital. When building their tech stack, businesses may opt for a best-in-class approach that incorporates multiple vendors. This is a reasonable approach, however, managing various server-and-cloud-based applications can be difficult[11].

The good news for IT departments is that APIs enable tech staff to support integration quickly and effectively. APIs also create the flexibility to connect processes and programs across virtually any system in nearly any data fomat. Furthermore, API integration makes it possible for a single application to pull in data from other applications, serving as a kind of hub[13]. In sum: APIs are vital to addressing complex business integration needs.

But as powerful as integrated APIs can be, businesses also have limited budgets for technology and staffing. Ease of implementation and low sustainability costs are necessary for adoption. Low-code development and enterprise integration are two key strategic areas of investment that can drive innovation[14].

Why use APIs

- APIs are a safer way to transfer data compared to unregulated data scraping.
- API standards incorporate security, rights, and consumer permissions.
- APIs are stable, accurate and fast.
- API connections allow computers to talk to each other using a common format[12].

97% of enterprise IT leaders agree that successfully executing an API strategy is essential to secure their organization's future revenue and growth[15].

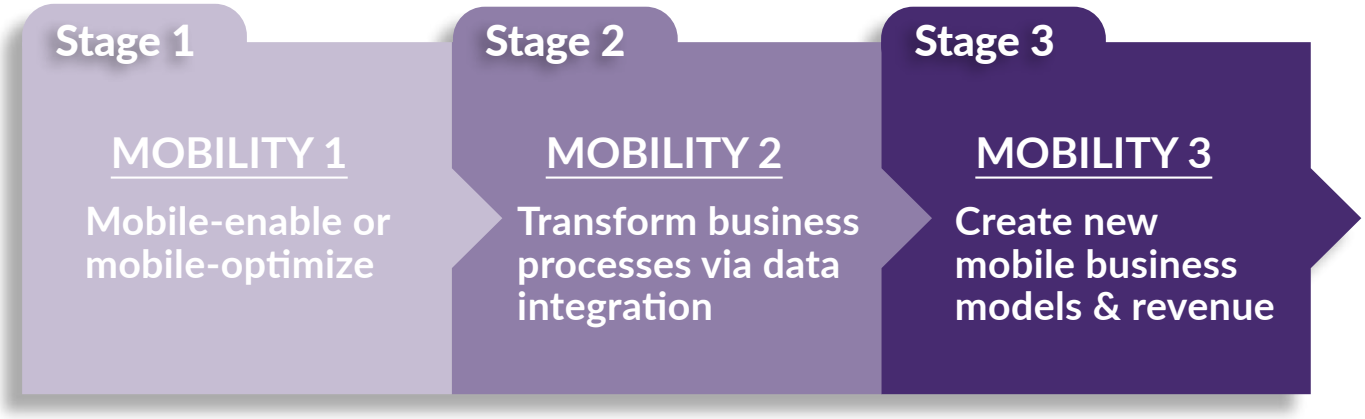
APIs enable collaboration, and they're good for business:

- Enterprises with advanced API management processes experience up to 47% better business results[16].
- API management solutions in enterprises are expected to grow from 20% to nearly 80% in the next 5 years[17].
- The API management market size may surpass USD 94 billion by 2032 – up from USD 5 billion in 2022[18].

Three Stages of Mobility for Innovation

The goal of most organizations, regardless of industry, is to create a data-integrated enterprise that raises business performance to the highest possible level. Being a top performer requires innovating to stay ahead.

In The Financial Times, Heena Jhingan describes three stages of mobility typically seen in modern companies, with Stage 3 being the most-desired goal[20]:



Stage 1 Mobility – In this stage companies seek to mobile-enable/optimize their websites and applications to increase customer engagement.

Stage 2 Mobility – Here, organizations take mobility up a notch and look to transform business processes, like expense reporting, via mobility.

Stage 3 Mobility – In this highest stage of mobility, organizations leverage mobile technology to create entirely new business models and revenue streams. Here, both B2B and B2C companies have greater opportunities to directly reach their target markets, improve profitability and add new customers. This is also where it's crucial to success for an enterprise organization to be able to leverage existing assets, including legacy systems.

If achieving stage 3 is the goal, why aren't more companies creating new revenue models and reaching new customers? Surprisingly, it's not always about finances or technology, says Don Spoerke, product evangelist at Adaptigent.

"The major competitors to innovation are 'do nothing' and 'do-it-myself.'" Many companies are risk-adverse and would rather not interfere with their existing systems. Alternatively, they may underestimate the scope and believe that their in-house team is best equipped.

According to the MIT Sloan School of Management, a company can innovate along any of 12 different dimensions with respect to its:

1. offerings
2. platform
3. solutions
4. customers
5. customer experience
6. value capture
7. processes
8. organization
9. supply chain
10. presence
11. networking
12. brand[19]

Each of these benefits from technology and strategy alignment.

"The major competitors to innovation are 'do nothing' and 'do-it-myself.'"

- Don Spoerke
Product Evangelist, Adaptigent

Bolstering Business with Mainframe Assets

No cloud computing comes close to matching the speed, reliability, security and – perhaps most importantly – the cost-efficiency of mainframes[21].

If APIs are a network of connecting pipes, where do the pipes originate? Often the answer is mainframes. Mainframe servers play a significant role in IT infrastructure. Companies rely on mainframe systems they bought years or decades ago, and they're also investing in brand-new mainframes[22]. The mainframe market size is USD 5304 million and is forecast to reach USD 6188 million by 2028[23].

Mainframes exist in most major industries, including:

Banking/Finance	• 92 of the world's largest 100 banks use mainframes • 95% of ATM applications are written in COBOL, the mainframe programming language
Retail	• 18 of the top 25 retailers use mainframes • 90% of all credit card transactions are processed on mainframes
Insurance	• All 10 of the world's largest insurers use mainframes
Production IT	• 68% of the world's production IT workloads run on mainframes
Business, general	• 71% of the Fortune 500 use mainframes

If those numbers are surprising, consider that every day worldwide, there are:

95 million posts on Instagram

4.5 billion likes on Facebook

8.5 billion searches on Google

A single mainframe manages 30 billion transactions per day[24].

“We need to talk about mainframes as the asset that they are. A mainframe is like a house -- it’s a big investment, a commitment. Over time you may want to make updates. Do you tear down the house or abandon it? No, you change some parts and use what you have.”

- Bob Schattke
Senior Architect, Adaptigent

Unlocking Innovation Potential

According to Harvard Business Review, "unbundling software functionality into API-accessible business capabilities is a hallmark of leading digital companies[26]". With the data mobility offered by APIs, enterprises can design new services that add value to their brands and significantly improve customer service in days, rather than months.

Companies with the right set of tools, an aligned business strategy, low-code platforms and coordinated APIs can unleash their data and speed towards innovation. Businesses looking to stand out in a competitive landscape and respond to changes with agility must embrace mobility, use APIs, and integrate data.

Discover how your businesses can harness the power of APIs for innovation and growth. Visit www.adaptigent.com.

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Adaptigent is a software technology company offering solutions to help businesses harness the power of APIs for innovation and growth. A global distributor of the Fujitsu NetCOBOL compiler, Adaptigent seamlessly integrates core systems. More than 2,500 organizations globally trust Adaptigent solutions. Visit www.adaptigent.com.