

About this paper

A Black & White paper is a study based on primary research survey data that assesses the market dynamics of a key enterprise technology segment through the lens of the "on the ground" experience and opinions of real practitioners – what they are doing, and why they are doing it.

ABOUT THE AUTHOR



SHERYL KINGSTONE

RESEARCH VICE PRESIDENT & GENERAL MANAGER - VOCUL

Sheryl Kingstone leads 451 Research's coverage for Customer Experience & Commerce, which covers the many aspects of how customer experience is a catalyst for digital transformation. She oversees the company's coverage of a variety of customer experience software markets spanning ad tech, marketing, sales, commerce and service.



Table of Contents

Introduction	4
Key Findings	4
Digital Transformation: What is it? And why now?	5
Figure 1: Impact of digital transformation on IT budgets	. 6
Thriving in the Age of Digitally Empowered Customers	6
Is the Glass Half Empty or Half Full?	7
Figure 2: Digital transformation plans: is your glass half empty or half full?	. 7
Figure 3: Top drivers of digital transformation	. 8
Figure 4: Top barriers to digital transformation	. 10
Are You a Skeptic?	11
Figure 5: All in or all out: Are you a skeptic or a leader?	. 11
Figure 6: Stark differences among early adopters and their skeptical counterparts	. 12
Don't Get Leapfrogged: Are You a Digital Leader or Laggard?	13
Figure 7: Digital leaders vs. digital laggards	. 13
Plenty of Silos and Vision, Not Enough Budget	13
Figure 8: Too many silos – too little budget – lots of high expectations	. 15
Figure 9: IT-led priorities for digital transformation	. 17
Conclusion	17
Methodology	18
Organizational Culture and Digital Transformation Strategies	. 18
Strategic Technology Initiatives and Desired Outcomes	. 18



Introduction

451 Research recently completed a survey to assess the attitudes of business and IT leaders toward using technology resources for digital transformation efforts. The results show that there is a wide gap between leaders and laggards in the race to transform to meet new customer expectations. Many businesses have no plans in place; those that do see a landscape fraught with potential pitfalls. In this paper, we discuss the challenges and expectations that today's business leaders face in transforming their tools and cultures.

Key Findings

- Nearly two-thirds (65%) of businesses indicated that improving customer experience is the top driver for digital transformation over the next year. We are witnessing a dramatic shift in the balance of power between many organizations and their customers across virtually all industries. Price and products are no longer enough; customers value experiences.
- Only 14% of IT budgets are considered strategic today, but within the next five years, that figure will reach 64%. Businesses are realigning their IT spending to move beyond tactical toward strategic spending on digital transformation.
- Nearly three-quarters (73%) of IT respondents stated that it was very important for strategic partnerships among vendors to create a unified customer profile and improved integration across business application.
- More than three-quarters (77%) of businesses are interested in leveraging relevant rich media content to personalize the customer interaction. The revitalization of storytelling gives businesses an opportunity to regain their footing by creating more interactive and personalized engagements with customers across mobile, social and video channels.
- A great majority (84%) of businesses ranked intelligent digital platforms as highly important, particularly those with functionality that can automate the document lifecycle process from content creation and collaboration to execution with approvals and signatures.

BLACK & WHITE | CUSTOMER EXPERIENCE AS THE CATALYST FOR DIGITAL TRANSFORMATION



4

Digital Transformation: What is it? And why now?

We are witnessing a dramatic shift in the balance of power between many organizations and their customers across virtually all industries. Price and products are no longer enough; customers value experiences. To attract, win, retain and support customers, organizations need to digitally transform their businesses by leveraging the latest applications, analytics and infrastructure to deliver a differentiated experience. Delivering that experience is no longer a luxury, but a necessity for survival.

The power of a digital transformation strategy lies in executive leadership driving its vision and objectives. Digital transformation may begin with creating the ideal experience for customers, but it quickly expands throughout all departments. 451 Research defines digital transformation as the result of IT innovation that is aligned with, and driven by, a well-planned business strategy with the goal of transforming how organizations:

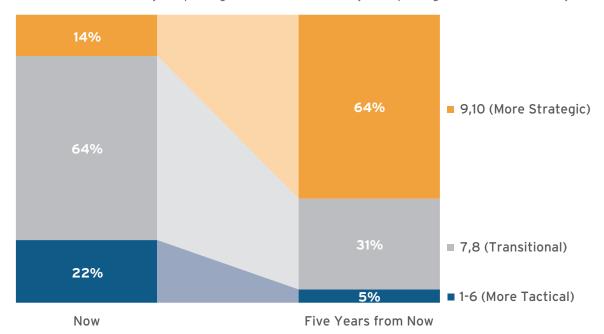
- · Serve customers, employees and partners.
- · Support continuous improvement in business operations.
- · Disrupt existing businesses and markets.
- · Invent new businesses and business models.

Digital transformation is real, and it's happening – our data lends more insight to the state of the transition. It is an inescapable truth that every business is becoming a digital business controlled by software, which is the manifestation of these digital transformations. As businesses continue to create a digital culture, they need to invest in new approaches to remain relevant in the eyes of their customers. Our data shows that businesses are realigning their IT spending to use their resources move strategically, rather than just tactically, on digital transformation. Only 14% of budgets are considered strategic today, but that number is expected to reach 64% within the next five years.



Figure 1: Impact of digital transformation on IT budgets

On a scale of 1-10, how will, or how do you expect, digital transformation to shift your IT spending. Now and over the next 5 years?



Because companies are projected to invest more in technology across the entire organization, it's key for executive leadership, IT and line-of-business management to collaborate on the best budget allocation to ensure strategic digital transformation spending delivers the most value to the business for competitive differentiation. The overall – but seldom-voiced – goal is survival; just ask some of those in industries that have already seen their physical products turned into digital ones and not survived the transformation.

When they begin the digital transformation process, most companies said they are likely to turn to their software providers' professional services teams or the resources of their cloud service provider. Two-thirds of respondents said they see these groups as essential partners, significantly higher than those citing systems integrators or management strategy consultants as essential guides.

Thriving in the Age of Digitally Empowered Customers

For almost two decades, 451 Research has defined the ideal customer experience (CX) as a commitment to customer interactions that are consistent, dynamic and transparent across four dimensions: brand, products and services, channel, and delivery and operations. The goal is to achieve competitive differentiation by viewing the world through the eyes of one's customers and modifying interactions accordingly. While a strong CX produces significant results, many companies continue to struggle to create a broad, all-encompassing strategy. As the lines blur between physical and digital channels, businesses must prioritize new CX strategies to thrive in the age of digitally empowered customers.



Today's customers have access to more information, choices and opportunities, redefining the 'ideal experience.' Customers now dictate the terms of engagement with businesses as they decide what they want, and where and how they want it. With almost 90% of consumers using smartphones as a critical part of their daily lives and the growing demand to meet customer expectations across a variety of touchpoints, business transformation is critical. Businesses can embrace digital transformation to improve, connect and radically change business processes, enhance customer experiences and harness innovation.

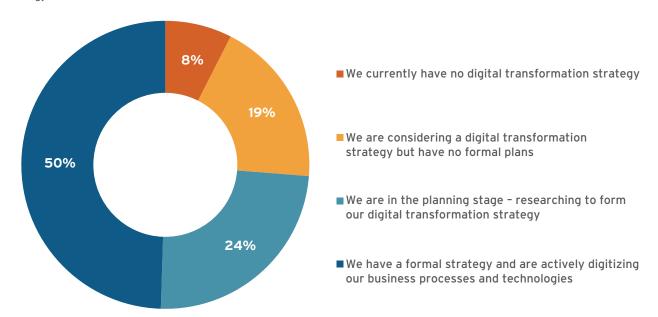
Is the Glass Half Empty or Half Full?

As businesses continue to make digital culture the center of their organization, they need to invest in new business models and technologies. However, the data shows that while half of companies have a formal strategy for digitizing their businesses (see Figure 2), roughly half do not.

Figure 2: Digital transformation plans: is your glass half empty or half full?

Source: 451 Research

Digital Transformation is the investment in new digital technologies and processes to more effectively engage customers, partners and employees, as well as to cut costs. Which of the following best describes your organization's status with regard to a digital transformation strategy?



The financial services and retail verticals are the furthest along in the digital transformation process with roughly 60% having formal strategies. These are followed by travel, hospitality and consumer packaged goods with roughly 33% actively digitizing business processes and technologies. Media communications and telco companies are the furthest behind with one in seven having no digital transformation strategy at all. Revenue also plays a significant role in organizations having formal strategies.



The survey revealed differences of opinion between respondents in IT and line-of-business roles; 58% of IT department respondents stated that their organization has a formal digital transformation strategy, compared to 43% of line-of-business respondents. Because success demands broad collaboration, it's essential that digital transformation not be just an IT-led strategy. This is especially important because improving the customer experience – which is often led by line-of-business CX practitioners who focus on the customer journey, such as CMOs and chief customer officers – is the top reason for embracing digital transformation. Nearly two-thirds (65%) of businesses said that improving the customer experience is the top driver for digital transformation over the next year (see Figure 3).

Remember: Experiences, not price or products, will be the battleground of the future. As companies use CX to increase competitive differentiation and use technology to enhance the ability innovate, collaboration between line-of-business and IT personnel is essential.

Figure 3: Top drivers of digital transformation

Source: 451 Research

In your opinion, what are the main drivers for digital transformation? (Select All that apply)



While most industries prioritized improved customer experience, the telco industry, by contrast, prioritized the ability to create new business models as well as reducing costs through operational efficiencies. Although the telco industry is truly feeling the impact of disruption by new and more nimble entrants, digital experiences represent a revolutionary shift in the brand-customer relationship.

BLACK & WHITE | CUSTOMER EXPERIENCE AS THE CATALYST FOR DIGITAL TRANSFORMATION



8

Financial services organizations are 12 percentage points more likely to leverage the opportunity in data growth for digital transformation than the average and roughly 21 percentage points higher than the public sector organizations, restaurants and hospitality companies. One critical aspect is the use of digital technologies to obtain mastery over the vast stores of data. Ultimately, the essence of putting digital technologies to work in a transformative way is ensuring that data and insight connect people with the right information and processes that lead to a better experience for customers, partners and employees.

So, what is holding organizations back?

It's the same old story: people, processes and related technology investments continue to provide challenges. Interestingly, creating the business case for transformation is top of the charts at 44%, followed by overcoming organizational hurdles and silos, and then the complexity of legacy systems. However, retail and CPG respondents were worried less about the ROI and more about finding skilled workers, which is a very important distinction given how important the in-store experience is to the retail industry.

Metrics for measuring digital transformation need to be developed and embraced to drive organizations' overall strategies and goals. While it's easy to allocate the cost to the IT department, the age of digital disruption extends beyond IT to incorporate all areas of the business – no company or department is immune to its effects. Digital initiatives provide both qualitative and quantitative measurements back to the organization.

A few approaches include measuring net promoter score and customer satisfaction for customer engagement along with reduction in fraud and data breaches. There is also ability to introduce new products to market, response time and employee retention. Strong leadership and a disruptive attitude are necessary to guide organizations through rapid changes in technology, customer behavior and business models.



Figure 4: Top barriers to digital transformation

In your opinion, what are the main barriers to digital transformation? (Select All that apply)



Since businesses tend be siloed, they often try to leverage legacy systems that were once considered transformational but now force a layer of complexity due to lack of APIs, monolithic architectures and point-to-point integrations. The complexity of existing applications coupled with organizational silos can be a detriment to meeting the business goals of digital transformation, such as improving customer experience, creating a competitive advantage and enhancing the ability to innovate. This is one reason why 73% of IT respondents stated that it was very important for strategic partnerships among vendors to create a unified customer profile and improved integration across business applications. The leading industry verticals, retail and financial services, were 12 percentage points higher than the average for how important a unified customer profile is to their respective organizations.



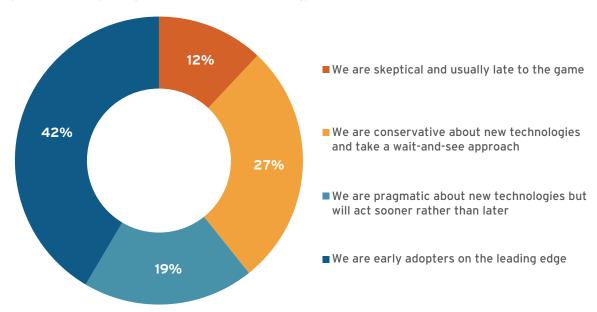
Are You a Skeptic?

The survey explored organizations' attitudes toward adoption of technology – from skeptics to early adopters. Because most of the survey respondents were IT and line-of-business decision-makers and influencers, it's not surprising that 42% of them considered their organizations to be early adopters.

Figure 5: All in or all out: Are you a skeptic or a leader?

Source: 451 Research

How would you best describe your organization's adoption of technology?



Organizations with more than \$10bn in revenue and 5,000+ employees represented the largest cohort of early adopters. The survey found that respondents in the media, CPG and restaurant verticals were the most skeptical of technologies compared to financial services and retail organizations, which were 30 percentage points higher than the skeptics in adopting leading-edge technology.

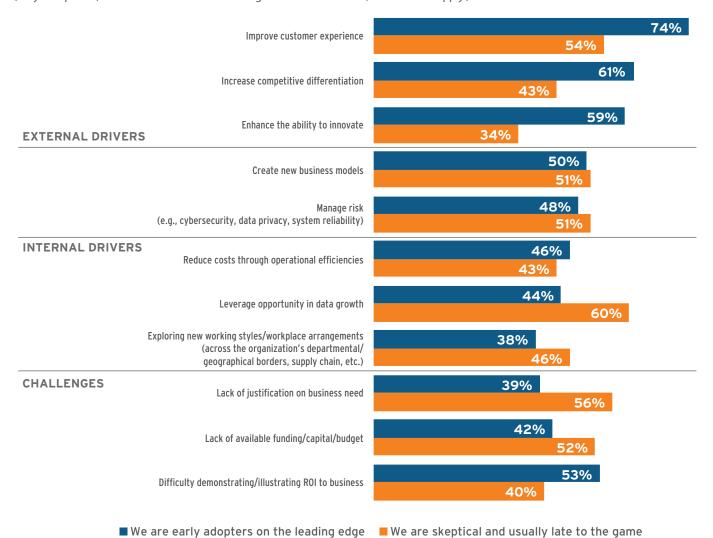
Even more interesting are the stark differences between early adopters and their skeptic counterparts. Early adopters of technologies are significantly more likely to prioritize improving the customer experience, increasing competitive differentiation and enhancing the ability to innovate as top drivers of digital transformation.



Figure 6: Stark differences among early adopters and their skeptical counterparts

Q: In your opinion, what are the main drivers for digital transformation? (Select all that apply.)

Q: In your opinion, what are the main barriers to digital transformation? (Select all that apply.)



Although leveraging data growth is very important, the research suggests that skeptics are using the growth in data for measuring internal operations and improving employee workplace issues. These issues are important, but businesses must take an outside-in approach toward customer experience and innovation. While skeptics don't see a business need for digital transformation, they also struggle with funding. Although funding can be a challenge for early adopters as well, they tend to struggle more with proving the return on investment.

It's all about balance. The right technology can have a transformative effect that helps businesses innovate, break down siloes and create the competitive differentiation with results that drive all the way to the bottom line.

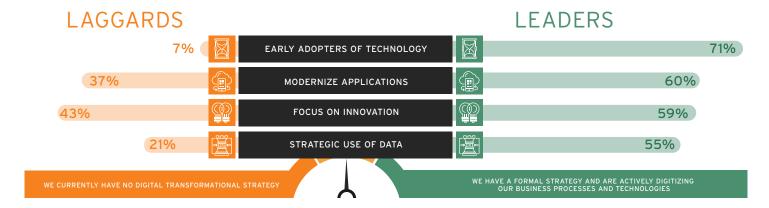


Don't Get Leapfrogged: Are You a Digital Leader or Laggard?

The actual state of digital transformation is different at each organization, depending on its maturity, the industry in which it operates, its employees and many other factors. As we stated earlier, roughly half of our respondents have a formal digital transformation process.

Figure 7: Digital leaders vs. digital laggards

Source: 451 Research



Less digitally mature organizations tend to focus on individual technologies and have approaches that are tactical and operational in focus, compared to forward-thinking companies that embrace digital with an eye toward transforming their businesses. This discrepancy represents the most significant difference in our survey, and signals not only a fundamental shift in the way applications are being built and deployed but, more importantly, the value that can be derived from the data that lies within. The ability to capture, analyze, understand and act upon information includes the capacity to recognize patterns, images and sentiment, as well as to plan, predict and identify actions and make decisions. All this is driving demand for a more modern application stack. The desire to capture and analyze new forms of data is playing a powerful role in improving digital innovation.

Growth in customer data for contextualized experiences, empowered by modern technologies such as mobile, cloud and machine learning, will create a significant gap between digital leaders and laggards when it comes to using technologies for strategic innovation.

Plenty of Silos and Vision, Not Enough Budget

For decades, businesses have sought a comprehensive picture of customer activity and behavior but have been thwarted by data that remains siloed or unanalyzed. Figure 8 highlights the pain of data silos and manual processes along with the lack of funds allocated toward meeting digital transformation. Today, 80% of businesses have seven or more data and applications silos.



The amount of information businesses hold that relates to customers has been expanding for years, but it has expanded into disconnected silos, so it is difficult to stitch together a seamless overall view. There have been many attempts to synthesize separate data resources into a holistic customer view – customer relationship management, for example. CRM was notable around the turn of the century for creating an appetite for a broader customer view but was also notable for its inability to satisfy the needs of a diverse set of stakeholders: marketers, salespeople and service teams, etc.

As businesses come to grips with a rapidly changing set of technologies (especially with regard to communication channels, each of which comes with a new set of content requirements and customer expectations), it is apparent that they must break down the silos since the best outcomes are ones that have a complete unified view of the customer. This requires bringing together data across the different silos for transparency and insight on:

- · Activity (How many times has this person been contacted, and what were the results each time?)
- Intent (What has this person been shopping for, and what were the purchases?)
- Satisfaction (Have customers expressed sentiments about their experiences so far, or can the business infer sentiment from other signals?)
- Influence (Do customers have a platform to recommend your product to others or dissuade them from buying?)
- Preferences (How does this person want to be contacted, and when?)
- Context (What in-the-moment circumstances exist that affect whether to make an offer, such as an open service ticket that needs to be resolved?)

Incorporating all of these elements and other variables into a 360-degree view of customers is at the heart of the business use case for many related technologies – applying machine learning to detect buying intent, creating personalized emails and web landing pages, and deciding what contact channels to support.



Figure 8: Too many silos - too little budget - lots of high expectations

SILOS



MANUAL PROCESSES



80% have 7 or more silos of data and applications

89% expect to eliminate majority of manual processes within 3 years

BUDGETS



CLOUD



34% allocate less than 25% of IT budgets toward digital transformation today

79% place a high importance on cloud applications

Business processes for getting a reliable and complete view of what customers want (and how they want to be contacted) are taking shape. However, 89% of respondents said they expect to eliminate most manual processes within the next three years. In the digital era, the need to respond quickly to customer expectations and the aggressive actions of rivals demands a transformative approach that discovers and automates efficiencies, crafts engaging user experiences and readily adapts.

This is a fantastic vision, but many companies don't truly understand what it takes to embark on full automation. Many businesses have made investments in premises-based transactional businesses applications (ERP, CRM, commerce, etc.), but many times, legacy applications with monolithic architectures are detrimental to digital transformation goals. These transactional systems can be extended or augmented with more modern cloud-based business applications that provide a more agile digital platform.

More than three-quarters (80%) of businesses are interested in investing in newer digital platforms that enhance customer experience and business agility. They will look to the cloud to make that happen: 79% of respondents placed a high importance on cloud applications.

Early adopters place a significant importance on cloud applications and the related infrastructure to support them. Even businesses with greater than \$10bn are now completely dependent on cloud with 91% saying they recognize its importance to the future of digital transformation. While line-of-business respondents were only slightly more interested than their IT counterparts, both teams were fully onboard with the importance of cloud across applications, development platforms and its related infrastructure.

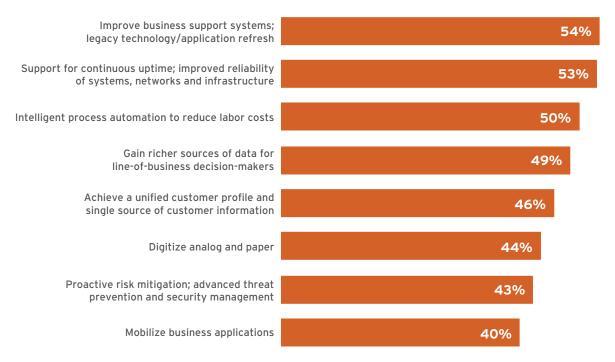
Finally, one in three businesses allocated less than 25% of their IT budgets for digital transformation. Midsized organizations allocated less than their larger counterparts with more than 5,000 employees. CPG and manufacturing companies indicated they are allocating a small percentage of the overall budget. With 64% of organizations shifting their budgets toward more strategic spending on digital transformation, we expect budget allocations to change fairly quickly over the next few years. However, line-of-business managers are more confident in the loosening of wallets than their IT counterparts. The question will be the shift in power over who controls the technology budget dollars for digital transformation.

As businesses redesign their IT strategies to be more responsive to line-of-business needs, fundamental building blocks for a digital transformation platform include a cloud services foundation, an API and microservices strategy for the digital glue, and cognitive systems that use natural language processing and machine learning.

Top issues for IT-led initiatives are all to improve the overall foundation for application refresh, infrastructure reliability and process automation. The adoption of cloud-based infrastructure and the interest in shifting legacy business applications to the cloud can be major points of differentiation. There are real alternatives to a company building and operating its own datacenter. Organizations now have the option to focus their own IT initiatives on the things that will help differentiate their businesses, and shift everything else to a SaaS provider or external cloud.



Figure 9: IT-led priorities for digital transformation



Priorities do vary by vertical. Manufacturing's top priority is to digitize analog and paper-based processes and provide mobile business applications. The CPG, media and publishing industries focus heavily on achieving a unified customer profile and single source of the information and richer sources of data.

Conclusion

451 posits that many of the success stories in this still early transformation period will feature the most important of all audiences – the end customer and how digital transformation in all its forms (automation, accessibility, portability, etc.) make doing business easier and more rewarding.

451 provides some examples and use cases in the companion paper to this work: *Customer Experience* as a Catalyst for Digital Transformation.



Methodology

In Q4 2018, we surveyed 400 IT and line-of-business customer experience decision-makers and influencers across more than 10 verticals. We asked a wide range of questions aimed at measuring how organizations are addressing the need for improved customer experience, and where these efforts fit within broader digital transformation strategies. The study explored the following key themes:

ORGANIZATIONAL CULTURE AND DIGITAL TRANSFORMATION STRATEGIES

Topics included:

- Budgets
- · Drivers and inhibitors
- Impact on organizational structure
- · Desire and ability to innovate
- Changing customer and employee expectations
- Impact on key organizational processes

STRATEGIC TECHNOLOGY INITIATIVES AND DESIRED OUTCOMES

Topics included:

- Existing and future architectures
- · The role of cloud
- The convergence of marketing, sales and commerce
- Strategic technology initiatives





Adobe + Microsoft share a vision to enable our customers to embrace and realize digital transformation to compete in an evolving and complicated environment. And a critical element to digital transformation is customer experience. Businesses must invest in new technologies and processes to more effectively engage customers, partners or employees. These are key areas where Adobe and Microsoft are helping brands transform their businesses to meet the demands of consumers today and in the future:

- Aligning and managing data sources to create a unified customer profile
- Delivering and optimizing personalized experiences across all channels or devices and context
- Employing artificial intelligence to manage complex tasks and automate processes
- Simplifying workflows across teams and streamline customer experiences
- Harnessing cloud infrastructure and framework to build secure, scalable and compliant business operations





About 451 Research

451 Research is a preeminent information technology research and advisory company. With a core focus on technology innovation and market disruption, we provide essential insight for leaders of the digital economy. More than 100 analysts and consultants deliver that insight via syndicated research, advisory services and live events to over 1,000 client organizations in North America, Europe and around the world. Founded in 2000 and headquartered in New York, 451 Research is a division of The 451 Group.

© 2019 451 Research, LLC and/or its Affiliates. All Rights Reserved. Reproduction and distribution of this publication, in whole or in part, in any form without prior written permission is forbidden. The terms of use regarding distribution, both internally and externally, shall be governed by the terms laid out in your Service Agreement with 451 Research and/or its Affiliates. The information contained herein has been obtained from sources believed to be reliable. 451 Research disclaims all warranties as to the accuracy, completeness or adequacy of such information. Although 451 Research may discuss legal issues related to the information technology business, 451 Research does not provide legal advice or services and their research should not be construed or used as such.

451 Research shall have no liability for errors, omissions or inadequacies in the information contained herein or for interpretations thereof. The reader assumes sole responsibility for the selection of these materials to achieve its intended results. The opinions expressed herein are subject to change without notice.



NEW YORK

1411 Broadway New York, NY 10018 +1 212 505 3030



SAN FRANCISCO

140 Geary Street San Francisco, CA 94108 +1 415 989 1555



LONDON

Paxton House 30, Artillery Lane London, E1 7LS, UK +44 (0) 203 929 5700



BOSTON

75-101 Federal Street Boston, MA 02110 +1 617 598 7200

