

February 2024

2024

STATE OF **BUSINESS-DRIVEN TECHNOLOGY REPORT**

XCELACORE is a Chicago-based technology consulting firm. As a trusted partner, we help businesses implement technology to drive innovation with flexibility, quality, and for less.

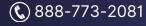






TABLE OF CONTENTS

INTRODUCTION

WELCOME TO THE 2024 STATE OF BUSINESS-DRIVEN TECHNOLOGY SURVEY REPORT!

This report gathers insights from technology and business leaders into the current trends and challenges at the intersection of business and technology. Themes and topics covered by our survey include the state of business-driven technology, business climate, emerging technology trends, and priorities for 2024 investment. Our analysis provides key takeaways across digital initiatives to help you benchmark your organization's goals amongst your executive and industry peers.

Introduction/Methodology	2
Executive Summary	3-4
State of the Industry	5-7
Major Insights	8-9
Key Technology Takeaways	10-18
Conclusion	19
About Xcelacore	20

SURVEY METHODOLOGY

Xcelacore partnered with SurveyMonkey to survey technology business executives and leaders across various industries and company sizes within the United States.







Total Respondents S

Survey Period Nov 2023 - Jan 2024

Survey Location
United States

All survey respondents are senior executives of the C-Suite, divisional/group heads, owners, IT decision-makers, project managers, business analysts, software engineers, or technology consultants.

WHAT IS BUSINESS-DRIVEN TECHNOLOGY?

Business-driven technology can include a broad spectrum of digital initiatives and priorities for organizations and their decision-makers. In this survey, our specific definition for this term, used consistently throughout the report, includes the following digital initiatives/projects:

- Cloud solutions
- DevOps
- Custom software/application development
- Business process automation, including
 QA and RPA
- <u>E-Commerce platforms</u> & <u>technology</u> <u>integration</u>
- Cybersecurity





Discover the Future: Xcelacore's 2024 State of Business-Driven Technology survey report delivers thrilling insights into cutting-edge trends and challenges at the intersection of business and technology. We've collected responses from influential technology leaders across diverse industries, including senior executives, IT decision-makers, and project managers in the US. Explore industry-transforming trends as business acumen converges with technological prowess. This report opens a window into an exciting world of innovation.

OVERVIEW

EXECUTIVE SUMMARY

KEY HIGHLIGHTS FROM THE REPORT INCLUDE:



1. Al and Machine Learning: 72% of business technology leaders believe that artificial intelligence (AI) and machine learning (ML) will revolutionize their businesses in the next five years. These technologies enable automation, data analysis for valuable insights, and overall organizational enhancement.



4. Cloud Development and DevOps: The power of cloud technology continues to propel business transformations. A remarkable 68% of business technology leaders plan to invest more or the same amount of their 2024 budget in cloud development and DevOps technologies. Tools like Kubernetes orchestration and serverless computing revolutionize application management, scalability, and efficiency.



2. **E-commerce Innovation:** The rise of e-commerce is reshaping businesses. Approximately 40% of respondents actively embrace e-commerce software technologies like mobile apps or point-of-sale systems. Trends such as improved mobile shopping experiences, chatbots for customer service, hyper-personalization through AI, and voice search are shaping this dynamic sector.



5. **Business Process Automation:** The rise of robotic process automation (RPA) is streamlining business operations by automating repetitive tasks, reducing errors, and improving efficiency. Quality assurance automation is also gaining momentum to ensure software reliability. Survey results indicate that 35% of firms anticipate the impact of robotics and automation technologies on their businesses in the next five years.



3. Cybersecurity Priorities: With cyber threats on the rise, cybersecurity has become a top priority for businesses. Notably, 33% of respondents consider cybersecurity among the top five impactful technologies in the next five years. Emphasizing measures like zero trust architecture and leveraging Al for threat detection, organizations focus on protecting sensitive data and mitigating the risks of cyberattacks.



The report concludes with actionable insights for organizations aligning their technology strategies with business objectives. It highlights the importance of evaluating technology consulting firms based on proven relationships, flexible business models, industry expertise, and proficiency in specific technologies.

Questions you may be interested in:

- 1. What groundbreaking technologies will significantly impact businesses within the next five years?
- 2. Based on survey findings, how are organizations prioritizing business technology investments in 2024?
- 3. What key benefits can organizations achieve through implementing robust business process automation?

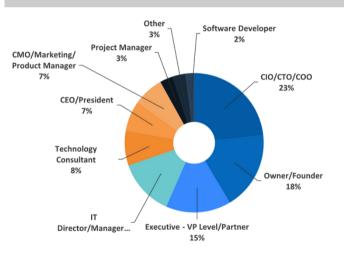




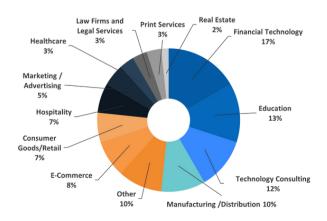
ABOUT THE REPORT

70% of business-driven tech decisions are made at the C-suite and executive helm due to the pace and importance of these decisions in driving revenue growth and marketing to current and prospective customers.

NEARLY 3/4 OF A COMPANY'S DECISIONS INVOLVING BUSINESS-DRIVEN TECHNOLOGY ARE MADE BY **C-SUITE**, **EXECUTIVE**, **AND VP** LEVELS WITHIN THE ORGANIZATIONS WE SURVEYED.



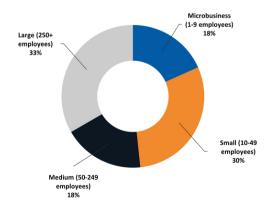
INDUSTRIES



Over 60 respondents from 15 different industries participated in the study.



COMPANY SIZE



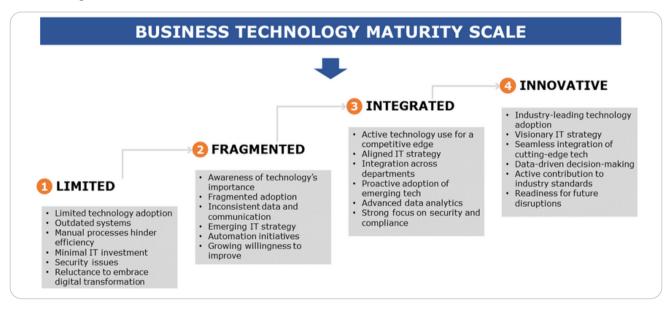
There was an even distribution of company size based on the number of employees across the US.

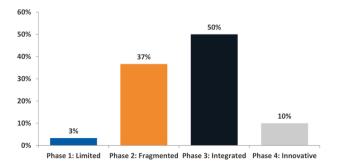


STATE OF INDUSTRY

The Business Technology Maturity Scale becomes a guiding compass, enabling organizations to navigate the dynamic landscape of technology adoption and optimization, propelling them to sustained success and competitiveness in the digital era.

The Business Technology Maturity Scale is a comprehensive framework to assess and characterize an organization's evolution in integrating and leveraging technology for strategic advantage. This scale encompasses distinct stages, from limited capability to advanced integration and continuous innovation, offering a nuanced understanding of a company's technological journey. Study participants were tasked with identifying the present status of their business's technology maturity scale within the context of the descriptions provided for each stage.





Q5: Identify your organization's level of 'Business Technology Maturity'.

See descriptions of each phase in the chart. (select one)

40% OF COMPANIES REPORTED FRAGMENTED OR LIMITED BUSINESS TECHNOLOGY MATURITY.

According to a <u>recent Gartner study</u>, by 2027, 80% of CIOs will have performance metrics tied to the sustainability of the IT organization. By traversing through this model's progressive steps, businesses can:

- Evaluate their technical maturity
- · Identify areas for improvement
- Align their technology initiatives with overarching strategic objectives



STATE OF INDUSTRY

Businesses reported that their Top 2 business challenges over the next 1-2 years are inflation/cost management and customer retention.



Q11: Rank your TOP BUSINESS CHALLENGES over the next 1-2 years.

Business leaders in this study stated that their top business challenge over the next 1-2 years is **inflation/cost management**. According to <u>Forbes</u>, the Federal Reserve successfully curbed inflation in 2023 while averting a recession in the U.S. Presently, investors foresee a shift by the Federal Open Market Committee (FOMC), anticipated to transition from rate hikes to rate cuts by mid-2024. Yet, even if the Fed successfully orchestrates a gentle economic landing in 2024, economists predict that inflation will persist above the Fed's targeted long-term inflation rate of 2%.

As inflation continues to be a top priority for business leaders, the study reported that the second top concern is **customer retention**. Technology executives should focus on strategies enhancing customer experience, seamless integrations, and automation to increase customer retention.

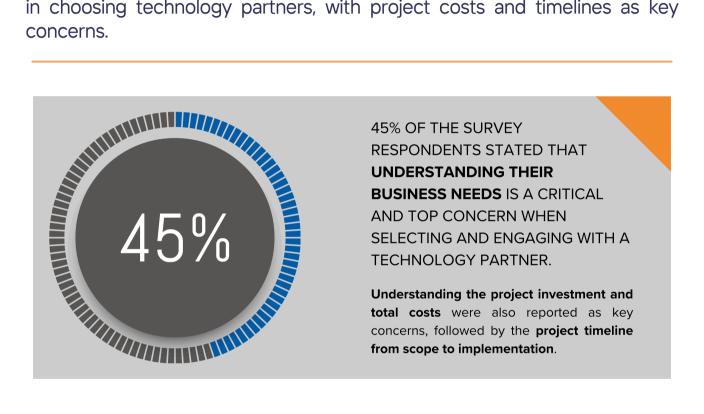
Organizations that increase customer retention rates by just 5% can expect their profits to increase from 25% to 95%. This is because existing customers tend to spend more over time.

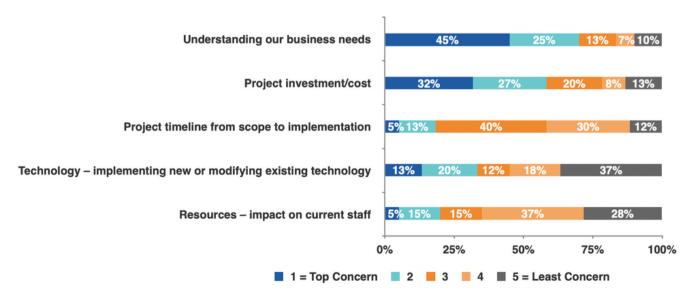
Talent recruitment and keeping good employees rank next as a top business concern. Two technological advancements noted as becoming part of the recruiting landscape are the strategic integration of online recruiting platforms and the increasing influence of Al in the talent acquisition process. **Technology innovation** is also considered a significant business challenge, whether implementing new technology or modifying existing ones. To help ease this challenge, many companies engage with a technology consulting firm or partner.



STATE OF **INDUSTRY**

Business technology leaders emphasize 'Business Needs' as the Top Priority in choosing technology partners, with project costs and timelines as key





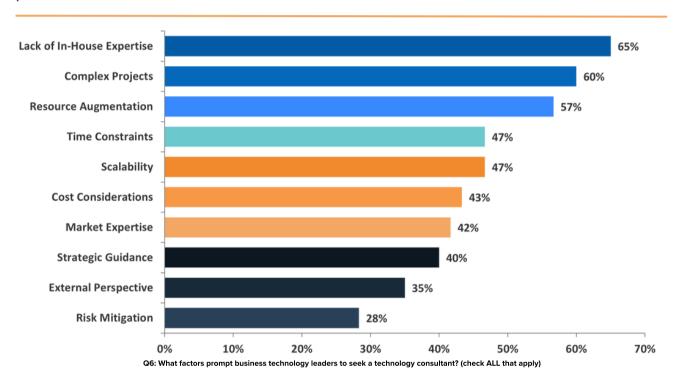
Q12: Rank your TOP CONCERNS when engaging with a technology consulting firm.





MAJOR INSIGHTS

Lack of in-house expertise and complex technology projects are the main factors that prompt technology leaders to seek a technology consultant or partner.



The majority of respondents agree that lack of in-house expertise (65%) and project complexity (60%) are the main factors that prompt them to seek the knowledge and resources of technology consultants or partners. Most (57%) also agree that resource augmentation—where consultants complement existing in-house teams during peak workloads or for specific project phases—is compelling. Time constraints are important when there is a need for rapid deployment or quick resolution of technology issues, which may not be achievable with internal resources alone. Likewise, the scalability of solutions also ranked high for partnering with outside experts to ensure adaptability to changing business needs without extensive internal restructuring. Lastly, business leaders will look for alternatives if hiring/maintaining an in-house technology team is prohibitive compared to engaging a technology consultant.



Actionable insight:

When considering your technology partners, look at ones who can augment and complement your inhouse resources with these advantages:

- · Fill skill set gaps
- Proven project experience
- 24/7 resources
- Flexible model of onshore, nearshore, and offshore

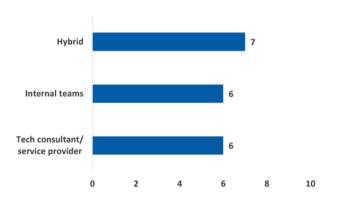




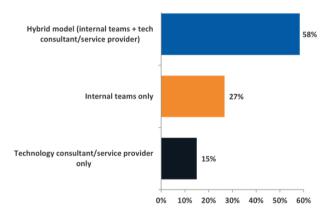
MAJOR INSIGHTS

Hybrid implementation models—internal teams + tech consultants/service providers—for business-driven technology are more successful.

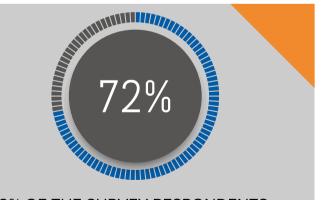
Business technology leaders agree that **using hybrid models**—internal teams + tech consultant/service providers—for technology implementation leads to a more successful outcome. Yet, 42% of companies reported using only internal teams or an outsourced partner.



Q8,9, and 10: In your experience, rank the success rate of technology implementations by the different models.

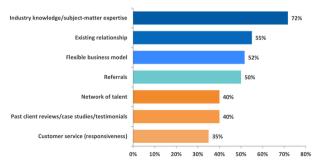


Q7: How is business-driven technology implemented within your organization?



72% OF THE SURVEY RESPONDENTS
PRIORITIZE FIRMS WITH DEEP INDUSTRY
KNOWLEDGE AND SUBJECT-MATTER
EXPERTISE FOR A NUANCED
UNDERSTANDING OF INDUSTRY
CHALLENGES.

Existing relationships, a flexible business model, and referrals were also reported as key methods for business technology leaders in evaluating and vetting technology partners.



Q13: What are your methods for evaluating/vetting business technology consulting firms?



KEY TECHNOLOGY TAKEAWAYS

To gain insights into how business leaders are adopting new technology trends, the motivations behind their implementation, and their plans for investing in specific technologies beyond the year 2024, our survey asked them questions about why they are doing so, how they are doing it, and what the future holds for their organizations.

97%

The majority of technology leaders believe that implementing technology aligned with business goals is critical to **increasing revenue** and **improving internal efficiency**.

70%

Nearly 3/4 of respondents reported that their organizations will be budgeting more or the same for **cybersecurity**, **custom software/custom software development**, and **cloud development/DevOps** in 2024.



BUSINESS LEADERS SHARE CURRENT PROJECTS AND PLANS FOR 2024 TECHNOLOGY INVESTMENTS



39%

OF RESPONDENTS ARE **ACTIVELY IMPLEMENTING CYBERSECURITY** AND **CLOUD DEVELOPMENT/DEVOPS**PROJECTS.



36%

OF RESPONDENTS HAVE AN **ESTABLISHED PLAN OR ARE CONSIDERING** IMPLEMENTING **E-COMMERCE SOFTWARE TECHNOLOGIES.**



73%

OF FIRMS INDICATE THEY WILL INVEST MORE OR THE SAME OF THEIR 2024 BUDGET TO SUPPORT CYBERSECURITY TECHNOLOGIES.

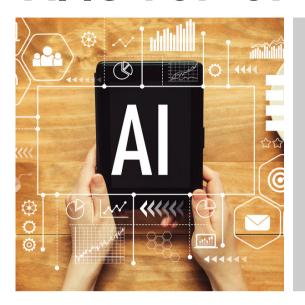


68%

OF FIRMS INDICATE THEY WILL INVEST MORE OR THE SAME OF THEIR 2024 BUDGET TO SUPPORT CLOUD DEVELOPMENT AND DEVOPS TECHNOLOGIES IN 2024.



AI IS TOP OF MIND

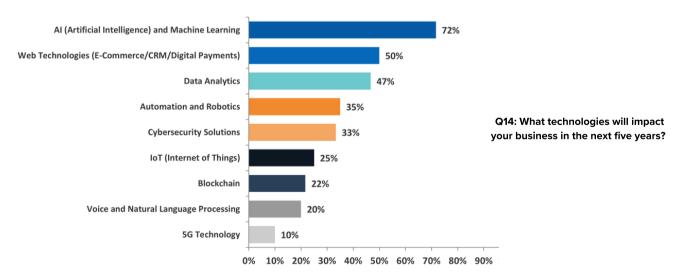


72% OF BUSINESS TECHNOLOGY
LEADERS REPORTED THAT **ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING**ARE THE TOP TECHNOLOGIES THEY SEE
IMPACTING THEIR BUSINESS IN THE NEXT
FIVE YEARS.

Impact of Artificial Intelligence?

According to McKinsey & Co., 60% of companies with reported Al adoption are using generative Al to help:

- automate business processes
- · accelerate value-add efficiencies within client work
- · analyze data and trends
- improve overall organizational performance
- **Web technologies**, including e-commerce, CRM, and digital payments, ranked high for impact in the coming years.
- Data analytics, powered by AI, will become a more critical strategic component and role within organizations.
- **Automation**, including robotics, streamlines operational efficiency and helps businesses provide more efficient service and personalized customer experiences.
- Organizations are increasing **cybersecurity** investments to protect sensitive data and maintain customer trust. Cloud security is a priority, with measures like access controls, encryption, and testing/monitoring.





Actionable insight:

Artificial Intelligence (AI) and Machine Learning (ML) technologies are closely intertwined with cloud computing. With the increasing availability of computational power and storage in the cloud, businesses can leverage AI and ML algorithms to gain valuable insights from large datasets. AI and ML enable automation, predictive analytics, and improved decision-making—enhancing the efficiency and competitiveness of organizations.



FINTECH/ E-COMMERCE LEAD SOFTWARE DEVELOPMENT

RESEARCH INSIGHTS

The Financial Technology and E-Commerce industries lead the way regarding software or custom software development projects. Here's what our study uncovered:

- For Fintech and E-commerce firms, 80% reported that software projects were complete or in progress, much higher than the overall survey average of 63%.
- 93% of Fintech/E-commerce agree that the #1 benefit of business-driven tech implementation is driving revenue growth.

74%

OF ALL SURVEY RESPONDENTS
REPORTED THEY PLAN TO
INVEST MORE OR THE SAME
BUDGETARY DOLLARS FOR
SOFTWARE/CUSTOM
SOFTWARE DEVELOPMENT IN
2024.



SOFTWARE DEVELOPMENT TRENDS

- Artificial Intelligence (AI) and Machine Learning (ML): Integration of AI and ML in software development for enhanced automation, predictive analysis, and intelligent decision-making. 67% of our survey respondents noted that AI and ML will impact their businesses in the next five years.
- **Cloud-Native Development:** Increasing adoption of cloud-native technologies for scalability, flexibility, and efficient resource utilization in software applications.
- **Low-Code/No-Code Development:** Growing use of low-code/no-code platforms to enable faster development with minimal hand-coding, empowering non-developers to create applications.

"Xcelacore's team worked with <u>PayMaple's</u> product owner to plan and develop the MVP version of the POS application within ten weeks. This application is hosted on the Microsoft Azure cloud. It is based on the MVC framework and .Net Core platform utilizing Azure SQL, Azure Functions, <u>Azure Blob Storage</u>, Redis Cache, and other Azure services. PayMaple has chosen to continue our partnership in building out its technology infrastructure, and we're thrilled to be part of it!

- Adnan Adamji, Xcelacore Co-founder and Partner





REVOLUTIONIZING RETAIL: E-COMMERCE INNOVATION



49.8%

ACCORDING TO <u>INSIDER INTELLIGENCE</u>, BY 2027, **M-COMMERCE** (MOBILE COMMERCE) WILL ACCOUNT FOR ALMOST HALF OF US E-COMMERCE SALES.



42%

OF FIRMS REPORTED THEY WOULD INVEST **MORE OR THE SAME BUDGETARY DOLLARS FOR E-COMMERCE SOFTWARE** IN 2024, SUCH AS POINT-OF-SALE SYSTEMS OR MOBILE APPS.



Actionable insight:

The latest e-commerce trend is breaking down the barrier of financial restraint. More and more E-commerce businesses are accepting multiple payment options to close more transactions. From a range of payment options that include digital wallets or payment platforms like Apple Pay or Paypal to offering 'buy now, pay later' plans like Klarna, e-commerce customers are granted more access and flexibility and are more likely to become repeat clients. Other e-commerce trends include:

- Improved mobile shopping experience from a mobile-friendly website to seamless checkout processes
- Chatbots 24/7 customer service
- Hyper-personalization utilization of large datasets and AI to personalize shopping experiences
- Voice search voice assistants and smart speakers are changing the way people search and shop



SURGE IN CYBERSECURITY PRIORITY

RESEARCH INSIGHTS

We reviewed the survey results and found that cybersecurity is a top priority. Here's what we learned:

- 33% of survey respondents reported that cybersecurity was in the TOP 5 of business technologies that would impact their firms over the next five years.
- Nearly 40% of respondents are actively in progress implementing cybersecurity projects.
- Cybersecurity is one of the leading digital initiatives regardless of company size and, to some extent, industry.

73%

OF SURVEY RESPONDENTS
REPORTED THEY PLAN TO
INVEST MORE OR THE SAME
BUDGETARY DOLLARS FOR
CYBERSECURITY SERVICES IN
2024.



Actionable insight: Start with a vulnerability assessment.

- Catalog assets and resources
- Identify security vulnerabilities
- Assign quantifiable value & importance to resources
- Mitigate/eliminate the most valuable resources

CYBERSECURITY TRENDS AND TESTING

- **Zero Trust Architecture:** Zero Trust is a security framework that assumes no trust by default, even within the internal network. Access controls are strictly enforced, and verification is required from anyone trying to access resources.
- Al and Machine Learning in Threat Detection: Artificial intelligence (Al) and machine learning (ML) in cybersecurity involves analyzing vast amounts of data to identify real-time patterns, anomalies, and potential threats.
- Ransomware Protection and Response: With the increase in ransomware attacks, organizations focus on preventive measures, robust backup strategies, and efficient incident response plans to minimize the impact of ransomware incidents.

"As cyber threats continue to evolve, cybersecurity testing has become and will remain a critical aspect of software testing and QA services. Ensuring the security of software applications is paramount to protect user data and maintain trust."

- Madhav Shelke, Xcelacore Technology Consultant



CLOUD AS AN ESSENTIAL PLATFORM

RESEARCH INSIGHTS

68% of business technology leaders reported that their firms plan to **invest more or the same** of their 2024 budget to support **cloud development** and **DevOps** technologies in 2024. 39% also said their companies are actively 'in progress' implementing cloud and DevOps projects.

CLOUD DEVELOPMENT AND DEVOPS TRENDS

BY 2026

75%

OF COMPANIES WILL ADOPT A
DIGITAL TRANSFORMATION MODEL
PREDICATED ON CLOUD AS THE
FUNDAMENTAL PLATFORM.

- GARTNER, 2023



Actionable insight: Follow agile project management(APM) standards:

- Requirement analysis
- Solution and scoping
- Implementation
- Deployment
- **Kubernetes Orchestration**: Kubernetes has become a leading platform for container orchestration, allowing efficient management, scaling, and deployment of containerized applications in a cloud environment. Our experts focus on tools that aggregate or provide APIs for integrations and on tools like Kubernetes and Docker that continue to transform how developers manage cloud deployments by enabling more efficient workflows and scaling of applications.
- **Serverless Computing**: The adoption of serverless architectures is on the rise, enabling developers to focus on code without the need to manage the underlying infrastructure. This approach is cost-effective and scales automatically based on demand.
- **DevSecOps Integration**: Security is increasingly integrated into the DevOps pipeline, giving rise to the concept of DevSecOps. This trend emphasizes the importance of incorporating security practices throughout the development lifecycle, promoting a more proactive and holistic approach to cybersecurity. When it comes to data in the cloud, improved security is a top priority, as is a migration away from conventional system architectures that aren't as efficient.

"Edge computing—backed by the cloud—is an emerging trend in cloud computing that enables moving computation and data storage closer to the devices and sensors that generate it. This approach, in turn, minimizes latency and bandwidth requirements by enabling faster and more efficient data processing."

- Sachin Sancheti, Xcelacore Technology Consultant







OF FIRMS INDICATE THAT ROBOTICS AND AUTOMATION TECHNOLOGIES WILL IMPACT THEIR BUSINESSES IN THE NEXT FIVE YEARS.



OVER 1/3 OF RESPONDENTS HAVE AN ESTABLISHED PLAN OR ARE CONSIDERING IMPLEMENTING QUALITY ASSURANCE OR ROBOTIC PROCESS AUTOMATION TECHNOLOGIES.



THE RISE OF BUSINESS PROCESS AUTOMATION

RESEARCH INSIGHTS

82% of business technology leaders reported that working more efficiently internally is an essential benefit of business-driven technology. Business process automation—enabled by technology—provides many benefits, including cost savings, accuracy, scalability, and improved utilization.

BUSINESS PROCESS AUTOMATION TRENDS

96%

OF THE NEARLY 1,000 JOB TYPES IN THE US, INVOLVE TASKS THAT CAN BE ASSISTED BY OR BENEFIT FROM TECHNOLOGY.



Actionable insight:

Looking to utilize AI? Start with select AI + automation, like these use case examples:

- Intelligent document processing in banking, legal, insurance and healthcare industries
- Supply chain planning and optimization
- Software development and testing
- **Hyperautomation:** Comprehensive integration of RPA, AI, machine learning, and other advanced technologies to automate and optimize business processes enhance overall efficiency.

"The impact of AI technology will play a role in both backend efficiency and streamlined customer experiences."

- Mansoor Anjarwala, Xcelacore Co-founder and Partner

- **Robotic Process Automation (RPA):** Increased adoption of RPA for automating repetitive, rule-based tasks, reducing errors, and improving the speed of various business processes.
- Quality Assurance (QA) Automation: Growing emphasis on automated testing processes to ensure the quality and reliability of software and business applications, enhancing overall product integrity. QA Testing can be a time-consuming and mundane process. That's where automation comes in. Automating QA Testing allows businesses to complete the testing cycle in hours instead of days, freeing up valuable company resources.

"<u>QA Testing's</u> role will keep evolving with more preference for open source tools like Selenium, Cypress, and Playwright over licensed tools. Parallel automated executions across devices and browsers will be key with the spread of devices and browsers. Test data management is becoming another important aspect leading to the rise of tools with better generation, maintenance, and refreshing test data."

- Madhav Shelke, Xcelacore Technology Consultant



CONCLUSION

As you have explored the 2024 State of Business-Driven Technology survey report, it is evident that the dynamic landscape of technology integration and innovation presents challenges and opportunities for businesses. At Xcelacore, we understand the importance of staying ahead in this ever-evolving landscape.

With our expertise in business technology development and integration, we are wellequipped to guide your organization through these emerging trends. Whether harnessing the power of Al and machine learning, capitalizing on e-commerce innovation, fortifying your cybersecurity defenses, leveraging cloud development and DevOps technologies, or streamlining processes through robotic process automation (RPA), Xcelacore can be your trusted partner on this transformative journey.

With Xcelacore as your technology partner, you can navigate the complexities of business technology integration with confidence. Our goal is to help you harness the full potential of these trends and emerge as a leader in your industry. Together, we can drive innovation, redefine customer experiences, and achieve sustainable growth.

WHAT'S NEXT FOR YOUR ORGANIZATION?

Take the next step towards realizing your organization's full potential in business-driven technology.

<u>Contact Xcelacore</u> today to schedule a consultation with our experts and discover how our tailored solutions can drive innovation, streamline processes, and enhance your competitive edge.

We're happy to discuss your technology challenges and ideas!









ABOUT US

OUR SERVICES



<u>Cloud Development +</u> <u>Devops</u>



<u>Custom Software</u> <u>Development</u>



QA Testing + Automation



Robotic Process Automation



<u>E-commerce</u>



<u>Salesforce</u>



<u>Cybersecurity</u> <u>Testing</u>



WordPress Development



Hosting + Maintenance

BUSINESS-DRIVEN TECHNOLOGY CONSULTANTS

Matching business objectives and requirements with technology strategies, Xcelacore's focus is the design and implementation of technology solutions that drive businesses forward. Our experts provide a unique blend of business, technology, and marketing leadership that helps our clients navigate technology investments and implementation, increase ROI, and sustainability.



We always keep customer service top of mind, and we strive to make sure we add value.



We bring management consulting-level experience to mid-size markets at affordable prices.



Our project management and delivery methodology is proven to deliver results.

Industries We Serve

Hospitality

Healthcare

Ecommerce

Education

Fintech

Marketing Agencies

Trust Our Tech Expertise











