# AI in the Enterprise: Show Them the Money

## Software CEO Briefing

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*Word on the street?*

*On-the-ground intelligence from 2,500 of your customers around the world finds AI is not yet delivering for a majority of enterprises.*

*Here's the latest research-driven insight on how you can improve your customers' business value and your own top-line revenue and market share.*

**RESEARCH FINDINGS**

**Reality Bites** – The numbers on AI goals versus actions
**Build the Right Thing** – The AI offerings customers want, and why
**Humans Drive Success** – The key to an AI-powered digital enterprise

**IMPLICATIONS**

**Stop Building, Start Transforming** – Lessons for Software CEOs

**40% of Digital Transformation Spending is Going to AI Initiatives**

Total $1.7 Trillion

**AI and Big Data $680 Billion**

**Other $1 Trillion**

Source: BCG analysis

# REALITY BITES

## The numbers on enterprise AI goals versus actions

### $1.7T Spending on Digital Transformation

BCG interviews and surveys find that plans for digital transformation are well underway, with enterprises aiming for improved customer relationship management (CRM), streamlined internal operations, and faster rates of innovation. In 2019, IDC estimated digital transformation spending to be $1.7 trillion. Fully 40 percent of that investment—or $680 billion—went to AI and data-related projects.

### 92% Are Increasing Annual Spending

AI continues to play a crucial role in digital transformation. As of 2019, AI has become a competitive imperative, with 80 percent of companies already investing in the technology and 92 percent reporting an increase in annual spending.

### Almost 3/4 Expect Further Growth

While automation and cost reduction remain motivators, most enterprises invest in AI as a way to move into new businesses or gain a competitive advantage. Best-of-breed customers are targeting revenue-increasing solutions and elevating data management and governance issues to their C-suite executives. Roughly 72 percent of respondents who have seen revenue growth tend to expect that success to continue in the coming five years.

## 2/3 Not Yet
## Seeing Business Value

Among the 90 percent of companies that have made at least some investment in AI, fewer than 2 out of 5 report realizing any business gains from AI in the past three years. This figure improves to 3 out of 5 when including companies that have made significant investments in AI.

## Biggest Barriers
## are Strategic

Surveys identify many roadblocks to adopting the technology, including a lack of leadership support, budget, data and talent. But the most vexing challenges are the lack of a clear AI strategy and the inability to adapt business processes to fully leverage the AI value proposition.
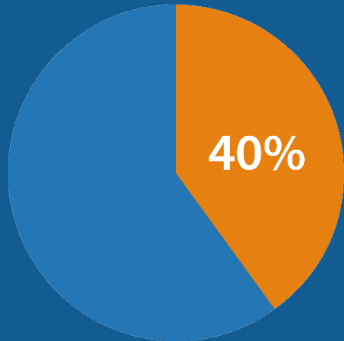
### Few Companies Report Realizing Any Business Value from AI

Received Business Gains from AI in the Past 3 Years?

**65%**
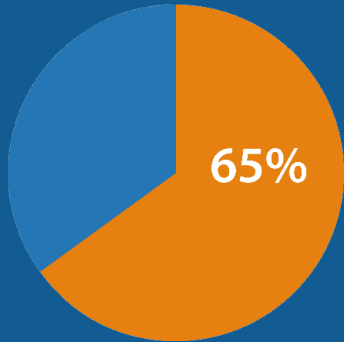
*All Companies*

■ Any business gains    ■ No business gains

**40%**

*Significant Investors in AI*

Source: *MIT Sloan Management Review* and BCG, 2019

# BUILD THE RIGHT THING

## The AI offerings customers want, and why

**AI Investment
Up 4x in 4 Years**
VC Investment in AI
and Big Data Startups

$27B

$6B

2015　2019

Sources: CB Insights, BCG analysis

### AI Investment Still Soaring

Research and development in AI solutions continues to skyrocket, by both enterprise software incumbents and startups entering the space. Nearly $27 billion in private investment entered the arena in 2019 alone as part of more than 2,200 deals.

It's no surprise then that AI and analytics are now central to product strategies for enterprise software companies. From traditional product categories like CRM, security, and ERP to newer niches like operations, RPA, and vision systems, getting AI and analytics right is an imperative for both software companies and their large enterprise customers. The result of this flood of investment? A proliferation of AI technologies and companies attacking specific "use cases" has led to increased competition.

### More Technology Is Not the Answer

Today's market offers a wide spectrum of AI tools and technologies (both open source and commercial) for enterprises and developers. From hyperscale vendors to horizontal and vertical SaaS vendors to IC and semiconductor players, everyone is coming to market with AI platforms, IDEs, services, and APIs.

Widespread AI technology proliferation and increased competition have only served to increase market confusion. Companies that capture value from their AI activities recognize that AI is not only about technology.

While enterprises report many organizational barriers to AI adoption, a lack of the right tools and technologies is only reported by 23 percent of AI pioneers. Customers are now engaging analysts and consultants to help them navigate this highly fragmented market.

## Solutions—Not Technologies—Are Needed

AI continues to transform organizations with the promise of driving huge impact. But the business value of deployed solutions can be elusive for many projects as enterprises often overestimate the speed with which AI will impact their businesses.

Software companies and product leaders, on the other hand, are making significant strategic bets on product strategy without always understanding where their customers are in the journey, their precise pain points, and how fast they can scale their businesses. In these fast-moving environments, misalignment between the software companies and the customers becomes a greater and more common risk.

## Products Must Match Needs

Genuine success with AI over time depends on enterprise software products intersecting with customer needs to deliver business value and to scale AI across the customer's organization. None of this is easy to achieve. Enterprise vendors must re-prioritize their innovation efforts to match these emerging needs:

- **Improved "Time to Value"** – As always, customers want vendors to create AI products that are easy to deploy and quick to deliver ROI. Software vendors should prioritize pre-built integrations, opinionated workflows, and easy-to-use functionality to drive value quickly.

- **Solutions Not Platforms** – Rather than bringing another platform to market, vendors need to focus on a specific customer pain point and solve that problem.

### Lack of AI Technology Not an Obstacle for Pioneer Enterprises

Issue Named as Top 3 Barriers to Adopting AI

| | |
|---|---|
| **Talent Issues** | **59%** |
| **Cultural Resistance** | **40%** |
| **Unclear Business Case** | **25%** |
| **Lack of Technology** | **23%** |

Source: *MIT Sloan Management Review* and BCG, 2018

- **Growth-Driving Capabilities** – Enterprises are prioritizing AI initiatives that grow existing lines of business and drive expansion into new markets. These priorities translate to a need for revenue-generating applications, not "replacement solutions" aimed at reducing operational costs.

- **Data Management and Infrastructure** – AI initiatives are only as good as the data they are based on. Along with building AI and data capabilities, CIOs are investing in the information architecture needed to prepare for an AI-driven future. This is opening up new software markets such as CDPs, while also creating opportunities for AI vendors to partner with these new players.

- **Customer-Centric Innovation and Co-Development** – AI initiatives require a heightened focus on customer pain points and identification of technical solutions to difficult problems in order to drive enhanced relationships. Vendors must handhold clients and create functionality to help them achieve their goals.

## The Right Services Are Equally Critical

The right software product will not be enough to grow the AI market. Studies show that most current AI deployments are not implemented properly. Many enterprises need help to realize the value of the AI technology in which they have already invested.

Software companies can help. Creating and offering the right set of enablement, support, and customer success management (CSM) services that surround the AI solution will drive customer value and adoption. In addition, teaming with consulting providers or system integrators could further help with capturing value and accelerating time lines.

# HUMANS DRIVE SUCCESS

## The key to an AI-powered digital enterprise

### Beyond Automation to New Capabilities

AI will not eliminate human jobs. In the same way that typewriters changed the role of secretaries, and PBX redefined the role of telephone operators, AI will revolutionize the jobs involved with leveraging the technology. Over 80 percent of enterprises expect their workers will need to change their skill sets. Similarly, 80 percent expect their company's productivity to improve.

### AI Success = Technology + People + Process

AI does not know what to do with itself. Employees will provide the knowledge that powers AI's algorithms; in turn, AI will help employees to be more successful. Working together, people and technology can build off each other's strengths to create a competitive advantage with better customer relations, more streamlined operations, and faster innovation. Software companies need to focus on enablement and adoption: Embedding AI in the context of day-to-day workflows and end-to-end business processes is critical to drive impact.

*"Even with rapid advances, AI won't be able to replace most jobs anytime soon. But in almost every industry, people using AI are starting to replace people who don't use AI—and that trend will only accelerate."*
—Erik Brynjolfsson
Director, MIT Initiative on the Digital Economy

### AI to Transform Workforces
AI's Predicted Impact on Employees

| | |
|---|---|
| **Change Current Skill Sets** | **84%** |
| **Improve Productivity** | **79%** |
| **Augment Current Skill Sets** | **79%** |
| **Reduce Workforce** | **47%** |

Source: *MIT Sloan Management Review* and BCG, 2018

## The Right People
## Are Critical

AI will require employees to be open to change and retraining at all levels of the enterprise. Operational workers must learn to design and engineer processes rather than just execute them. Teams will no longer operate in a hierarchical top-down manner; a faster, more efficient "agile at scale" model will take over. And top executives must behave as coaches, setting the context and the goals, and then stepping back to trust the players to succeed.

## Technology Must Consider
## Human Impact

Software vendors must focus more on how their products will impact the employees who will be expected to assist with their deployment and who will be influenced by their functionality. They will need to pay close attention to the three most important factors informing enterprise product R&D and value propositions: (1) how algorithms and humans will work together; (2) how operating models will evolve; and (3) how customer engagement will change.

# STOP BUILDING, START TRANSFORMING

## Lessons for Software CEOs

*The journey to an AI-powered bionic company is well underway. Pioneer enterprises are deploying growth-oriented projects that aim for scale across the organization. Now it's time for software companies to deliver on the promises of ROI and digital transformation, with less R&D and more solutions implementation. Here's how to "Show Them the Money"—and increase your revenue.*

### Lesson 1. Know Thy Customer—Today and Always

- **Match Market Maturity** – Customers are in different stages of AI adoption and maturity. Go-to-market efforts need to focus on identifying customers that are ready to adopt your solutions. Avoid spending resources on targeting enterprises that don't have the ability to absorb your technology.
- **Go Slow to Go Fast** – Transformations take time. Be realistic about sales cycle times and the speed with which your clients can scale given their AI maturity. Many of your customers need experiential proofs of concept. CEOs need to set realistic expectations with their boards, employees, and investors, as well as consider this factor in hiring and business plans.
- **Evolve with Customers** – Be prepared to pivot and adapt as enterprises and their customers adapt and change their business processes to compete in the bionic future. Your people and culture need to support the process of designing a different set of value propositions, re-engineering solutions, and building new product offerings that address your customers' evolving needs.

### Lesson 2. Reinvent Your Product Strategy

- **Establish Use Case and Business Case before Experimentation** – Software companies must fully understand the value creation impact, competitive landscape and their right to win before embarking on building software. Even in this fast-paced market, doing basic TAM, competitive analysis, and "customer need to product fit" validation will sharpen focus and improve success.

## Enterprises are in Different Stages of AI Adoption

### Percent of Total Customers in Each AI Market Segment



Bar chart:
- Pioneers: 20%
- Investigators: 30%
- Experimenters: 18%
- Passives: 32%
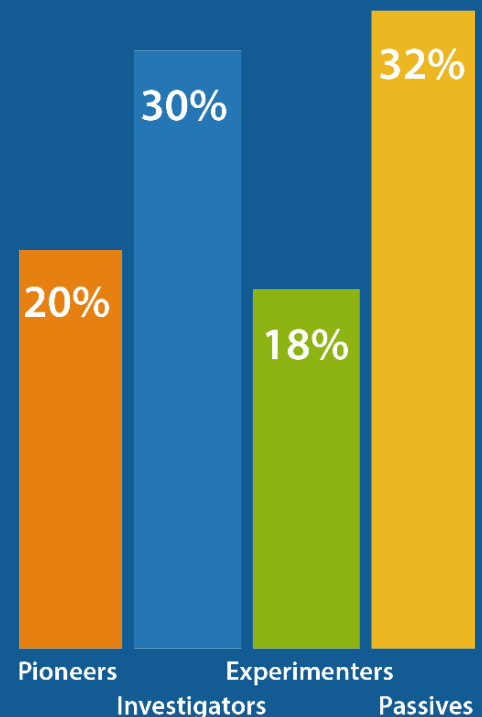
Segmentation of global enterprises based on their self-reported understanding of AI, and whether they are currently piloting or adopting AI in their organizations or not. Source: *MIT Sloan Management Review* and Boston Consulting Group, 2019

- **Adopt an ROI-Driven R&D Mindset** – Balancing the "exciting" work of R&D with the "boring" work of integration and processes is a critical challenge for vendors—and one that is historically underfunded. The key is to manage R&D by encouraging the right projects and eliminating the wrong ones. To help software vendors better understand their efforts in an industry-wide context, BCG has developed a Research and Development Index. This measure can help provide critical governance and improve your innovation ROI.

### Effective R&D is Critical
BCG Research & Development Index

$$\frac{\text{Organic Revenue Growth Year 0 - Year 1}}{\text{R\&D Investment Year 0}} = \text{RDI}$$
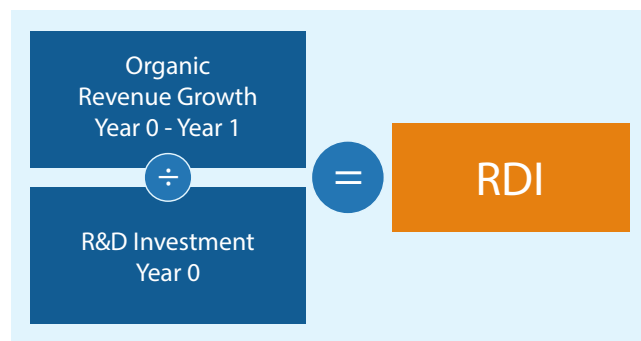
- **Choose the Right Foundation Architecture** – It's critical to design products and make early investments in data integration, UX, modularity, automation, telemetry, and commercial enablement. The correct foundational investments will pay rich dividends and help avoid roadblocks as you scale.

- **Elevate Product Management** – In order to stay abreast of evolving needs and cultivate long-term customer relationships, enterprise vendors must build a robust product management function with deep ethnographic and customer-research capabilities.

## Lesson 3. Partner Early for Transformation

- **Identify the Right Partners** – No product will stand alone to create a solution. You will need to tap multiple partners, including advisory and consulting firms, technology partners, and partners with solution-specific and legacy expertise to deliver a complete solution. Identify and partner with these key organizations now in order to land customers and drive success.

- **Build a Customer Success Management (CSM) Program** – Your software company must have a robust function dedicated to ensuring that customers are deriving value from your offerings. This is also critical to successfully managing product-market alignment and AI change.

# The Bottom Line

AI is already transforming pioneering companies into digital enterprises. This transformation will continue across mainstream organizations, creating a massive opportunity for software vendors and customers, alike. It's important to act now: Find the right strategy, develop the right products, offer the right services, and identify the right partners in order to emerge as a key player in the AI-powered enterprise.

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