Emerging Technologies: The Competitive Edge for Finance and Operations

How market leaders are outpacing change with cloud-driven innovation

EXECUTIVE SUMMARY

February 2020

Research conducted in partnership with ESG
They are the fundamental building blocks of a business: enterprise resource planning (ERP), enterprise performance management (EPM), and supply chain management (SCM) systems. For decades, they have kept office functions alive, operations humming, and goods and services flowing.

But the world is changing. In-house IT teams must advise the C-suite on strategic initiatives, not just maintain systems. Business leaders require real-time financial information to stay ahead of competitors. Consumers lack the patience to wait days for shipments to arrive. And supply chain partners are looking to execute transactions in ways that foster collaboration and build trust while getting products into customers’ hands more efficiently.

How can organizations compete more effectively in light of these challenges? By infusing fundamental business systems with innovative technology capabilities.

Now is the time for businesses to embrace artificial intelligence (AI), machine learning, internet of things (IoT), blockchain, digital assistants, and augmented and virtual reality as powerful enhancements for finance and operations systems.

### Market Overview

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How can organizations compete more effectively in light of these challenges? By infusing fundamental business systems with innovative technology capabilities.

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### Key findings: Emerging technologies passed the tipping point, delivering on their promise

The greater the number of emerging technologies in use, the better the organization’s performance. This is true whether discussing the achievement of market-leading performance in areas like financial reporting accuracy and planning capabilities, or supply chain metrics like reduced days sales outstanding (DSO) and percentage of orders delivered in full and on time (DIFOT).

The data below highlights how organizations are capitalizing on emerging technologies to enhance finance and/or supply chain operations:

- **58%** Organizations using the most emerging technologies have grown their annual revenues **58% faster** than organizations not investing in these technologies.
- **80%** Organizations using the most emerging technologies have grown their annual net income **80% faster** than organizations not investing in these technologies.
- **91%** 91% of all respondents consider SaaS an enabler of emerging technology adoption.
- **84%** 84% of organizations surveyed use at least one emerging technology in production today.
- **2:1** The benefits achieved with emerging technologies are outpacing expectations by a wide margin.
- **84%** Organizations are two- to three-times more apt to purchase prebuilt solutions rather than building their own emerging technologies (stat varies by technology).
Recommendations:
Five ways to transform finance and operations with emerging technologies

1. Modernize critical systems by migrating to SaaS.
   Take advantage of IoT, machine learning, AI, and blockchain capabilities quickly and easily with cloud-based solutions. SaaS lets organizations scale quickly and realize real-time business value at a time when it pays to move fast.

2. Switch to prebuilt solutions with embedded emerging technologies.
   Embedding emerging technology capabilities into proprietary apps is a challenging and expensive proposition, mainly because they’re so highly customized. Cloud-based, prebuilt apps, on the other hand, present a perfect opportunity to get a head-start on modernizing critical finance and operations systems.

3. Pilot a project with a measurable goal and a likely payoff.
   The research shows that emerging technologies can be applied in any number of ways for a variety of business results. As a result, identifying a preliminary project can be a daunting endeavor. We recommend selecting a specific process—ideally something manual and time-intensive—as a pilot project. These types of processes have plenty of room for improvement, which makes it easier to measure success. The payoff also tends to be greater, especially in terms of freed up human capital.

4. Don’t get left behind: Invest now.
   Many organizations continue to underestimate the value proposition of AI, IoT, digital assistants, and blockchain. That’s a mistake: Failure to actively invest in these technologies to improve finance and operations increases the risk of falling behind the competition. Start researching solutions today that meet your business and technology requirements.

5. Embrace an agile mindset.
   Our research findings indicate a strong need for C-suite support to make real progress on emerging technology initiatives. At organizations where the COO’s understanding of IoT is lacking, only 14% use IoT to improve supply chain management. That compares with 64% of organizations with IoT-savvy COOs. If you are in a finance or operations leadership position, get outside your comfort zone, explore how these emerging technologies can improve your organization’s performance, and provide employees with opportunities for upskilling.

Research Background

To understand the impact of emerging technologies on finance and operations, Oracle and ESG partnered to conduct a global survey of 700 finance and operations managers and executives who are regular users of ERP, EPM, and/or SCM applications on-premises and in the cloud. The survey was complemented by 10 in-depth interviews with finance and operations leaders from various industries. Unless otherwise noted, all data in this report originates from this primary research.

Our research uncovered a number of statistics that should make finance and operations leaders and their organizations take notice. Use this executive summary and its companion report to better understand how and why organizations are applying these technologies to improve the finance and supply chain applications, processes, and workflows.

READ THE FULL REPORT
Offload to the cloud:

**SaaS enablement:**
92% of respondents see SaaS finance applications as enablers for the adoption of emerging technologies.

**Prebuilt capabilities:**
Organizations that add emerging technology capabilities to finance applications by purchasing prebuilt solutions outnumber those that build solutions by two to one.

Take advantage of emerging technology benefits:

**AI effectiveness:**
37% Users of AI within financial systems report an average improvement of 33% in productivity and 37% reduction in errors.

**AI efficiency:**
4 DAYS Organizations have reduced the time needed to complete the monthly financial close process by about four days on average thanks to the incorporation of AI into their finance systems.

**IoT ROI:**
88% of organizations leveraging IoT data in their financial systems are achieving or exceeding ROI expectations.

**Blockchain ROI:**
83% of organizations leveraging blockchain technology within finance applications expect a significant return within one year.

**Digital assistant efficiency:**
38% Users of digital assistants within financial systems report an average improvement of 36% in productivity and 38% faster analysis capabilities.

Optimize finance team performance:

**Market-leading accuracy:**
9.5x Emerging technology users are 9.5x more likely than those not using emerging technologies to have market-leading financial/operational metric accuracy (38% versus 4%).

Achieve superior business outcomes:

**Grow revenue:**
58% Aggressive adopters of emerging technologies for finance and operations have grown their annual revenues 58% faster than organizations not investing in any of these technologies.

**Grow profit:**
80% Aggressive adopters of emerging technologies for finance and operations have grown their annual profit 80% faster than organizations not investing in any of these technologies.
Top emerging technology statistics:
Supply chain management

Offload to the cloud:

- **SaaS enablement:** 88% of respondents see SaaS SCM applications as enablers for the adoption of emerging technologies.
- **Prebuilt capabilities:** Organizations that add emerging technology capabilities to SCM applications by purchasing solutions outnumber those that build solutions by three to one.

Specific impacts by emerging tech:

- **AI efficiency:** 76% of organizations cite increased employee productivity as a realized benefit of AI-powered SCM.
- **IoT efficiency:** Organizations have shortened their time to produce/fulfill orders by an average of more than six business days as a result of incorporating IoT data into their supply chain systems and workflows.
- **Blockchain ROI:** 87% of organizations adding blockchain to SCM capabilities say the ROI has met or exceeded expectations.
- **Increase adoption:** 75% of respondents credit chatbots and intelligent voice assistants with increasing the use of SCM apps by suppliers and customers.
- **IoT ROI:** 88% of organizations using IoT data to support SCM say the ROI has met or exceeded expectations.
- **Reduce fraud:** 78% of respondents agree that the ability to verify supply chain monitoring with blockchain will reduce incidents of fraud in their supply chain by 50% or more over the next five years.

Optimize operations team performance:

- **Market-leading accuracy:** Emerging technology users are 6.8x more likely to describe their order-to-cash time as market-leading than those not using emerging technologies (38% versus 4%).

Achieve superior business outcomes:

- **Grow revenue:** Aggressive adopters of emerging technologies for finance and operations have grown their annual revenues 58% faster than organizations not investing in any of these technologies.
- **Grow profit:** Aggressive adopters of emerging technologies for finance and operations have grown their annual profit 80% faster than organizations not investing in any of these technologies.
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