Global Study of Composability in Enterprise Software and Evolving Business Needs

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Table of Contents

CLICK BELOW TO NAVIGATE TO EACH SECTION IN THIS DOCUMENT.

Executive Summary

- **Aging systems are a clear drag on organizational agility and ability to respond effectively to disruptions.** The current application portfolios were designed to address challenges of the past, but they are an obstacle to innovation.
- **Organizations are demanding greater IT flexibility.** As organizations consider replacements, composability is an increasingly important consideration.
- Inventory imbalance, demand volatility, and supply chain issues are the top 3 challenges organizations have faced due to the various recent global disruptions. While organizations have been agile in combating these challenges, their **major roadblocks are attributed to inflexible legacy on-premises applications and a lack of integration and alignment with newer IT apps and platforms.**
- **Clients define composability as application programming interface (API)-driven innovation followed by seamless integration between process workflows.** This is particularly important at the bottom-up operational level. Efficiency and elimination of waste, adaptability, agility for scaling the business, and accelerating new products and innovation are all attractive drivers for composability.
- While over half of the respondents claim to have a composability strategy, **the top barrier to entry for composability is a lack of executive/board understanding, and the second is a lack of cloud progression.**
- APIs, AI, and ML are all technologies identified as important for a composable approach, as respondents expect **the evolution of AI to reduce costs, enable faster time to market, and improve business planning in a composable environment.**

Key Drivers for Composability

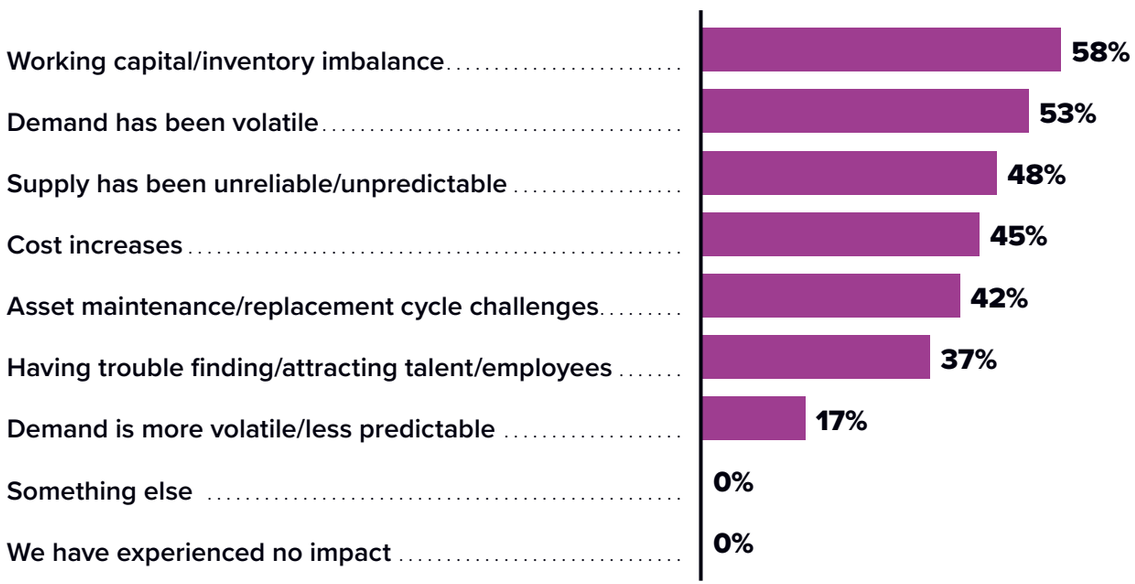
- Improved efficiency and scalability
- Democratization of information
- Reusability of digital assets
- Speed to market
- Embracement of emerging tech (e.g., event-driven architecture)
- Ease of system migrations
- Enabled connectivity of complex systems
- Reduced tech debt

Overview

Global Disruptions Still Causing Havoc, Affecting Business Capital

How have the various global disruptions (COVID-19 pandemic, Russia-Ukraine War, East/West divide, Brexit) impacted your company in this past year? (Overall rank)

(Percentage of respondents)



Top impacts faced by organizations due to global disruptions

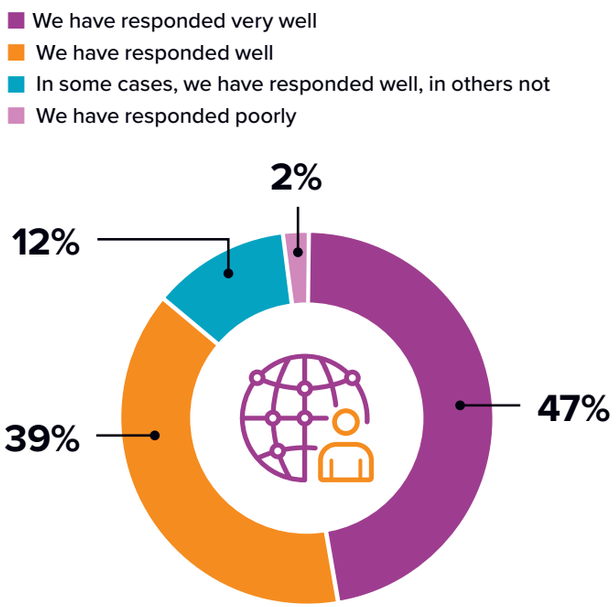
- Companies that faced **working capital and inventory imbalance** driven by demand volatility and supply disruptions comprised **58%** of respondents.
- **Disruption-driven inflation** has dramatically affected costs and gross margins.
- **Talent, lack of skills, and retention challenges** in the market impacted and disrupted normal business operations.
- As the velocity of change increases and organizations continue to embrace change, **the ability and speed to adapt and pivot will be key to success.**

Notes: Managed by IDC's Global Primary Research Group. Data not weighted. Use caution when interpreting small sample sizes. Multiple dichotomous table; totals will not sum to 100%. n = 1,025 (all respondents); Source: IDC's *NA Composability in Enterprise Software Survey,* December 2023

Roadblocks Remain Despite Agility Enabling Navigation

To what degree have you been able to adapt or respond to the global impacts?

(Percentage of respondents)



Within your C-suite, to what degree have you been able to adapt or respond to these global impacts?

(Percentage of respondents)

- While 85% of organizations noted that they are responding well or very well to global disruptions, **there is a difference in perception at the C-level.**
- While CIOs/chief technology officers (CTOs) feel that the organization responded very well, **business functions and CFOs answered differently, rating their response lower as "responded well."**
- **There is a lack of synergy and an absence of defined key performance indicators** on how various functions within the same organization evaluate success, resiliency, and adaptability.
- While agility has enabled organizations to navigate recent global impacts, they are **still limited in their ability to adapt, and there is room for improvement.**

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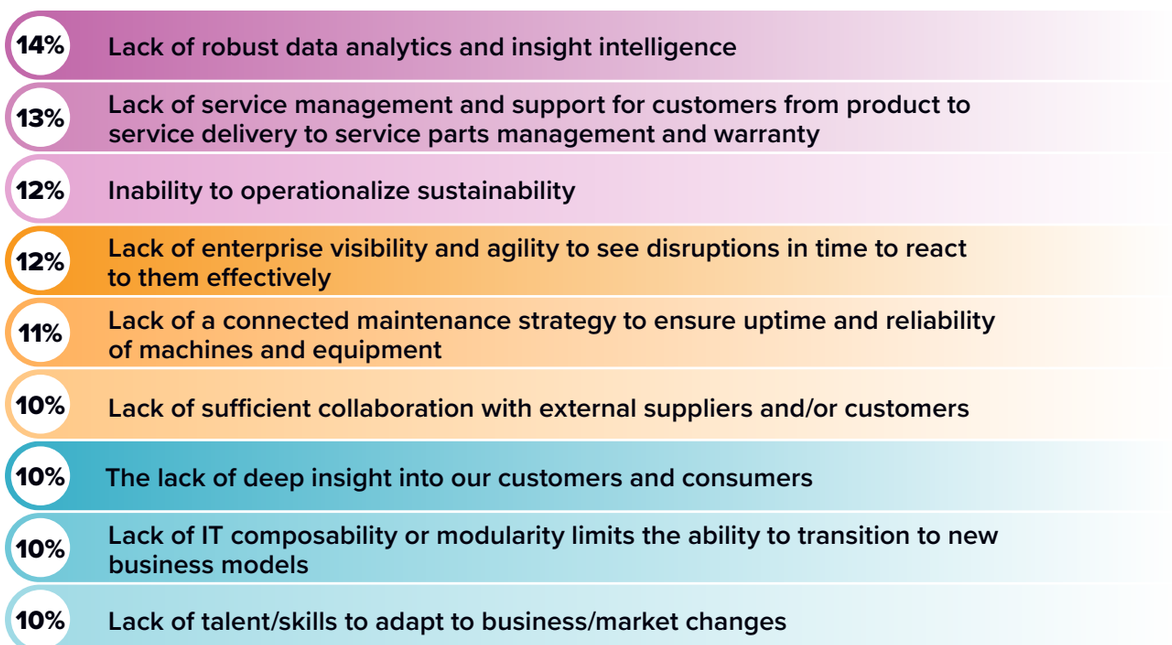
For an accessible version of the data on this page, see Supplemental Data in the Appendix.

Lack of Enterprise Visibility and Robust Data Is a Key Area of Concern

During the next 12 months, addressing the gaps is critical to an organization's success.

As you think about the future of your business, which current gaps are likely to be the most problematic if not addressed within the next 12 months?

(Percentage of respondents)



- **More than half (59%)** of respondents noted **aging, legacy/on-premises systems as the key challenge** impacting their ability to be agile and responsive.
- This is primarily due to the state of their application portfolio, which is often **neither flexible nor scalable and aligned with a previous strategy.**
- **A lack of integration and inflexible and monolithic systems were noted as the top challenges** impacting the ability of organizations to capture data and meaningful insights.
- **A lack of robust data and insight intelligence** was ranked the top priority area of focus for 2024. To leverage emerging technologies such as predictive analytics, ML, and generative AI (GenAI), organizations will need to **find solutions to capture data in an efficient and sustainable environment.**
- **Flexible systems will be important** for efficient integration, scalability, and consumption of data.

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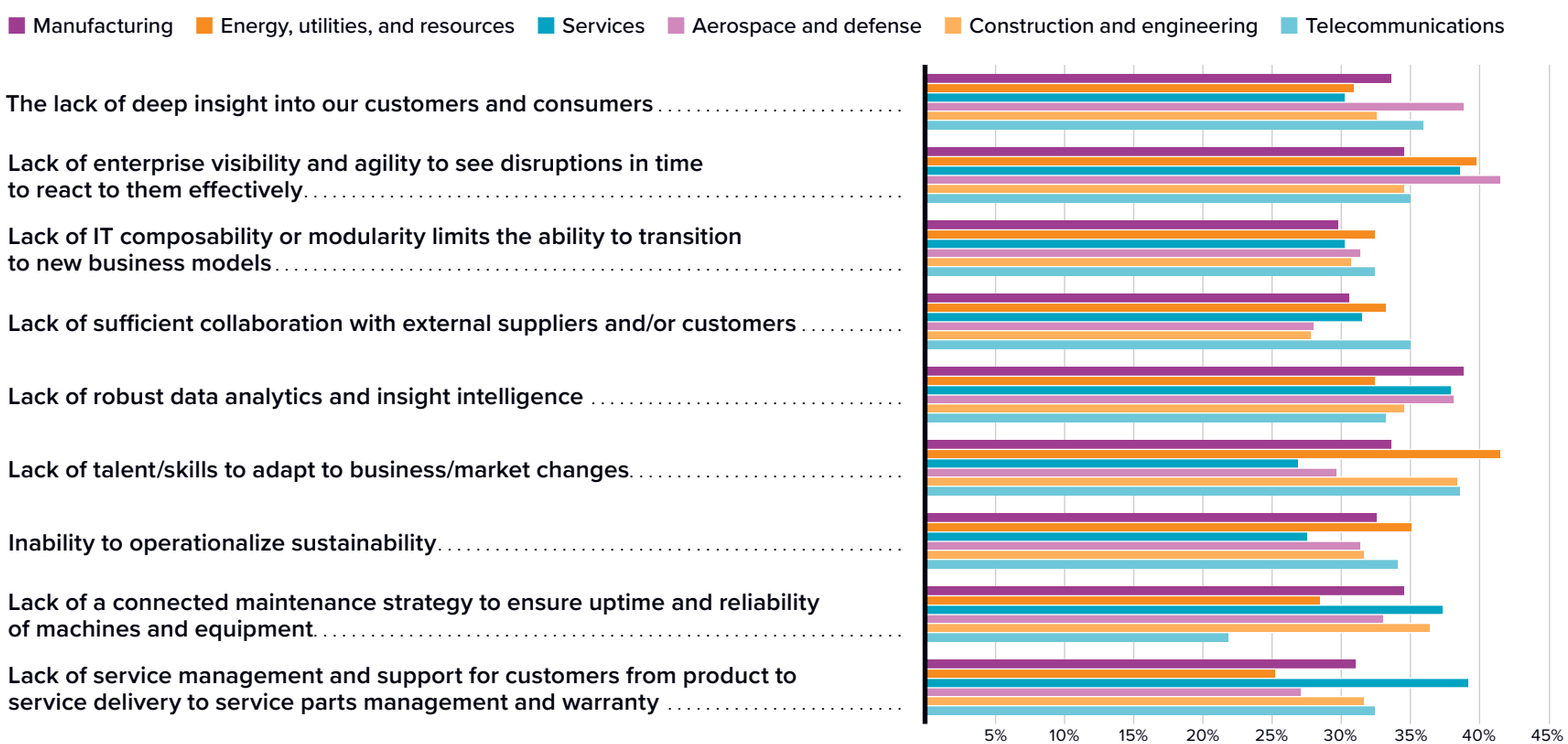
Varied Concerns for Data, Insights, and Talent Across Different Industries

As you think about the future of your business, what current gaps are likely to be the most problematic if not addressed within the next 12 months? (Ranked by industry)

(Percentage of respondents)



- **A lack of talent and skill is a key concern** for the energy and utilities, construction and engineering, and telecommunications industries **as companies navigate digital transformation.**
- Aerospace and defense are focused on data and gaining enterprise visibility and agility **to see and react to disruptions effectively.**
- The services industry is focused on service management and support for customers **as more digital tools and capabilities are introduced.**
- Manufacturing companies **are focused on data collection** and are concerned about the lack of robust data analytics and insights within their organizations.

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What Is Composability?

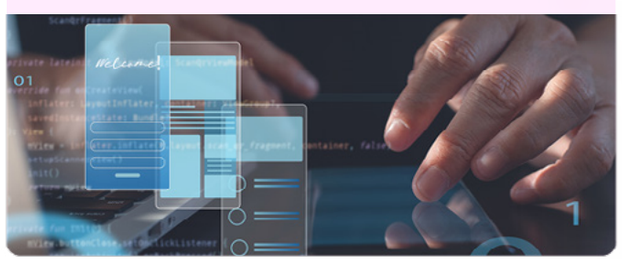
Composable Application/Software Defined

Composable application as defined by IDC:

Business-friendly term for components/modules connected via API on the product level; narratives highlight the customer experience potential of the system.

"Assembling or configuring an app via prebuilt components."

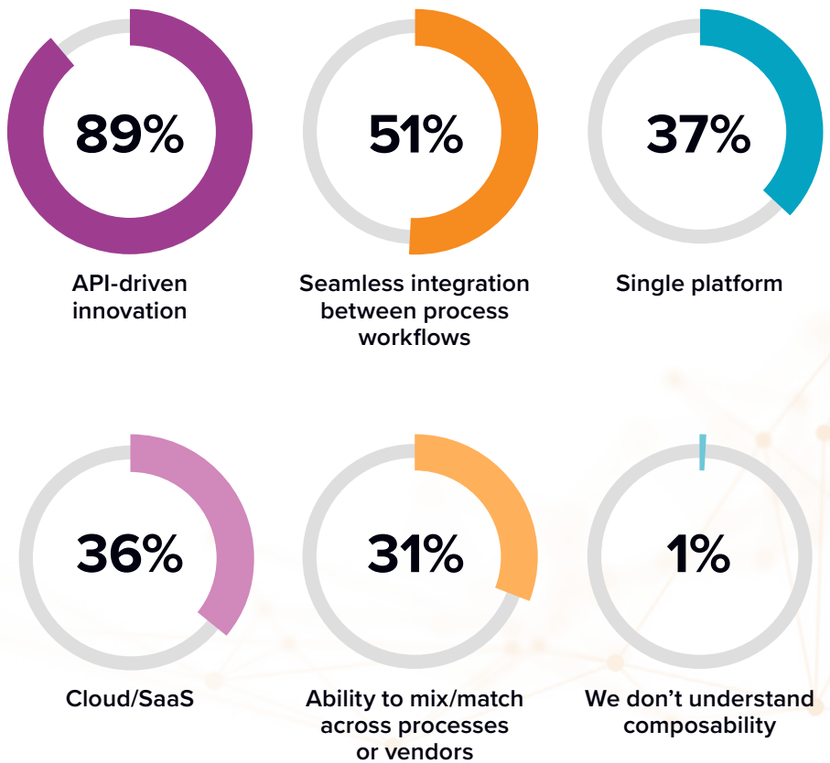
That is, these apps are designed to be **assembled and configured** quickly and easily.



Source: IDC's *Headless Systems: Understanding Architecture Style for Composed Systems of Modular Applications — Business User Perspective,* IDC #US51005323, July 2023

When thinking about enterprise software, how does your business define composability?

(Percentage of respondents)



- Organizations define composability as API-driven innovation followed by seamless integration between process workflows.
- APIs allow for the reusability of assets and reduced complexity when it comes to integration and unification.
- Within the organization, they view composability as particularly important at the bottom-up operational level to adapt to changes in the current environment as well as anticipate future shifts.

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Efficiency and Scalability Are Key Drivers for Composability

When thinking about your company, what are the key business drivers for composability?

(Percentage of respondents)

Companies view composability as an important component of agility and flexibility. Quickly adapting IT systems to meet changing business conditions means less waste and a greater ability to pivot to new opportunities.

Efficiency, elimination of waste, agility in scaling the business, and accelerating new products and innovation are the top drivers for composability.

Organizations are increasingly looking to **improve their speed and ability to react and pivot** to keep up with the pace of change.

Regional Behaviors

- **Europe and North America (NA)** noted that the top driver of composability is to make businesses more efficient and eliminate waste.
- **Asia/Pacific (APAC) and the Middle East** are more focused on scaling to new business opportunities and rapid demand changes.

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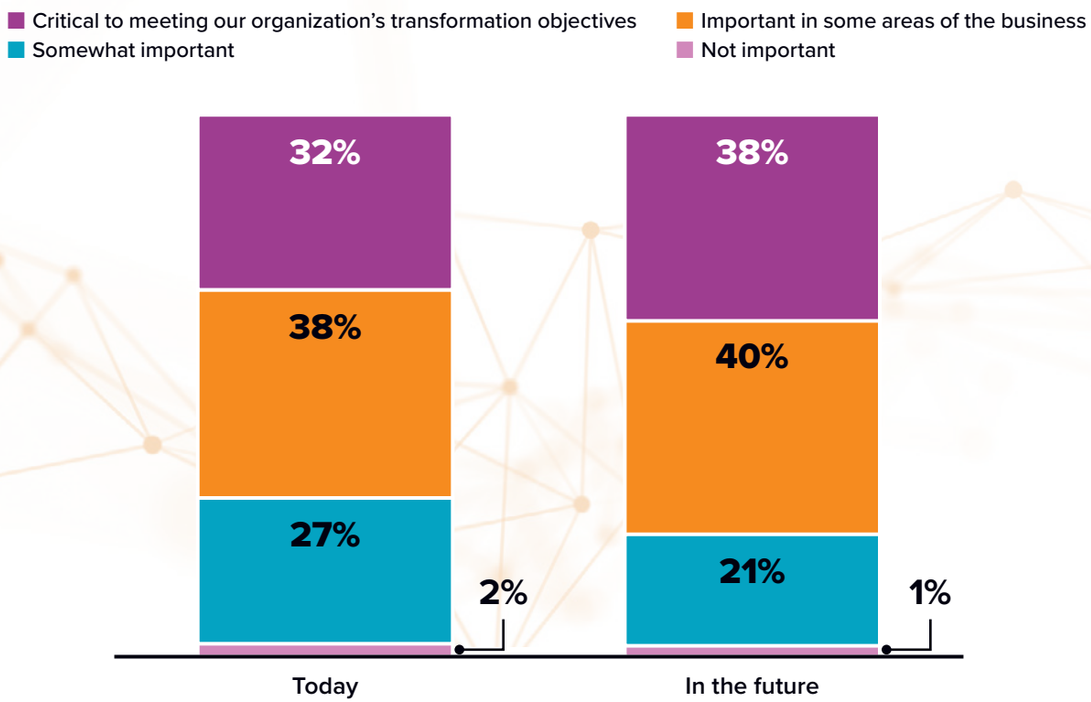
Composability Is an Important Driver in Software Buying Process … and in the Foreseeable Future

How important is composability in the decision-making process of buying enterprise software?

(Percentage of respondents)



- Organizations recognize the **importance of composability for business evolution.**
- **Over 70%** of companies say that it is critical to **meeting organization transformation objectives today.**
- **Composability will continue to increase in the future,** with 78% of organizations acknowledging it as important in the future and those who consider it unimportant dropping to 1%.
- **Organizations are moving (deployed or planning) to a composable application environment** to boost business agility by adjusting their IT landscapes and business models to effectively accelerate digital transformation.

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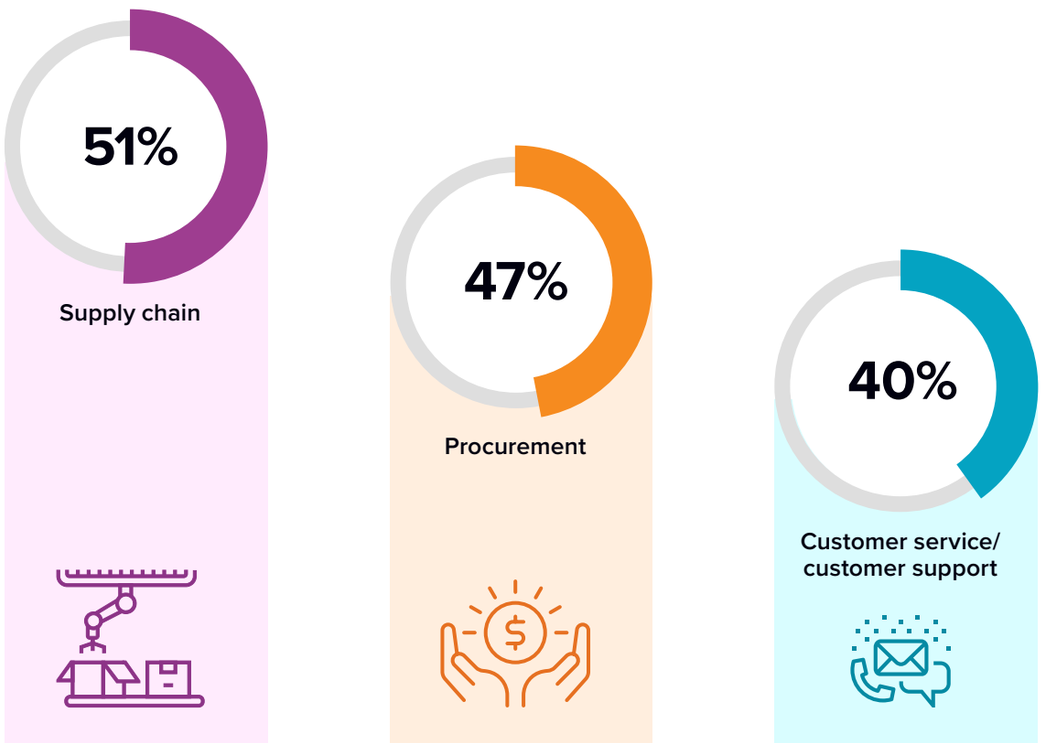
Top 3 Business Areas That Will Benefit the Most from Composability

What are the top 3 areas that you would prioritize for software/application composability?

(Percentage of respondents)



- Organizations are focused on **prioritizing operational areas in businesses.**
- Across all respondents, **supply chain (51%) and procurement (47%) are the top 2 functional areas** prioritized for composability.
- From a business process perspective, organizations reported **procurement (procure-to-pay/quote-to-cash), customer relationship/services, and enterprise asset management as the top process areas** that would benefit the most from composability.

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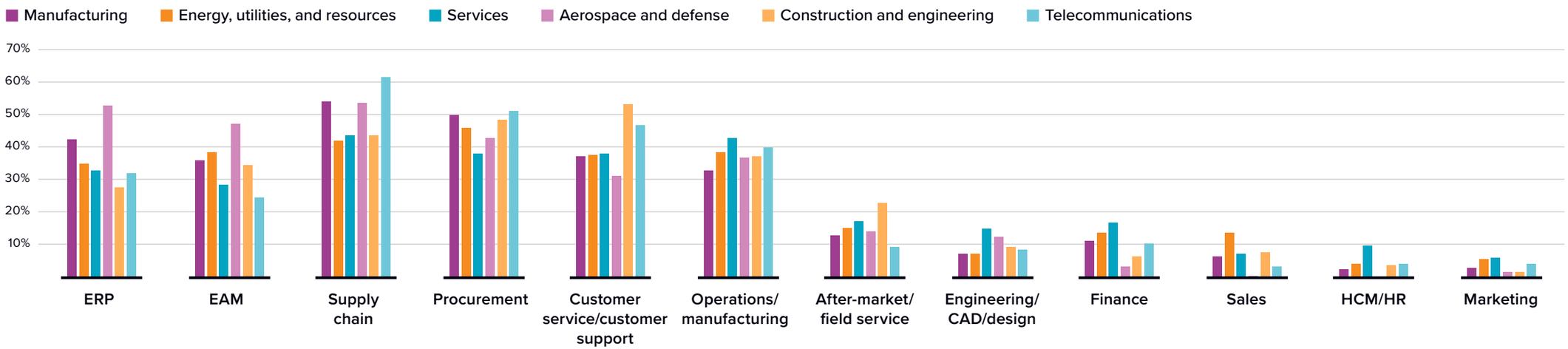
Top 3 Business Areas That Will Benefit the Most from Composability (continued)

By industry, what are the areas that you would prioritize for software/application composability?

(Percentage of respondents)



Top business area of focus for composability by industry

- **Telecom:** Supply chain and procurement
- **Construction and engineering:** Customer service/support and procurement
- **Aerospace and defense:** Supply chain, ERP, and enterprise asset management (EAM)
- **Manufacturing:** Supply chain and procurement
- **Energy, utilities, and resources:** Procurement and supply chain
- **Services:** Supply chain and customer service/support

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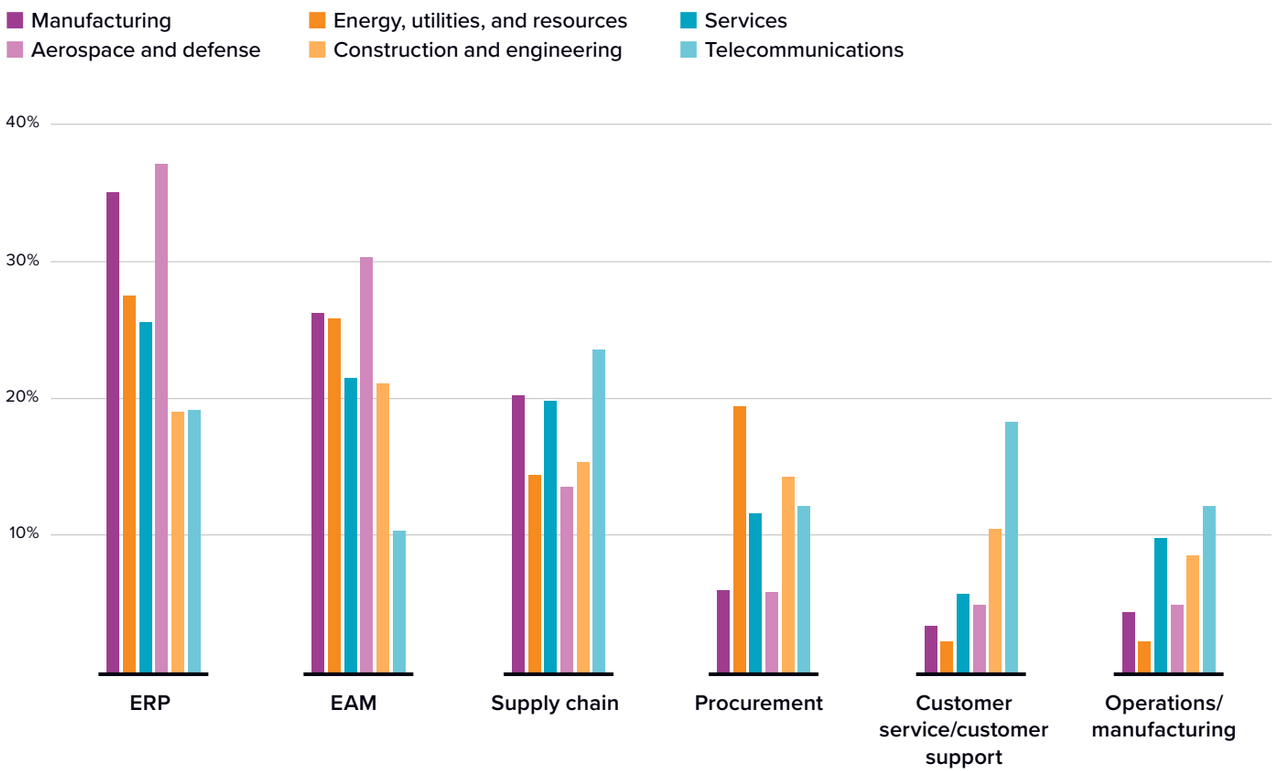
Operational Improvements Are the Key Focus for Organizations

What are the areas that you would prioritize for software/application composability?

(Percentage of respondents)



ERP and EAM were the top 2 areas of priority, highlighting the need for products that need more support.

Organizations are increasingly **looking for more flexibility and ways to integrate applications** into their unique complex environments.

Industry Insight

- **Aerospace and defense; services; energy, utilities, and resources; and manufacturing** reported ERP as the top area of priority as they work to streamline and improve operations across the value chain.
- **Telecommunication companies** are focused on the supply chain, as they prioritize controlling and reducing costs while boosting performance.
- **Construction and engineering and service companies** are focused on EAM as their top area due to their efforts to improve operations and control over their assets and equipment.

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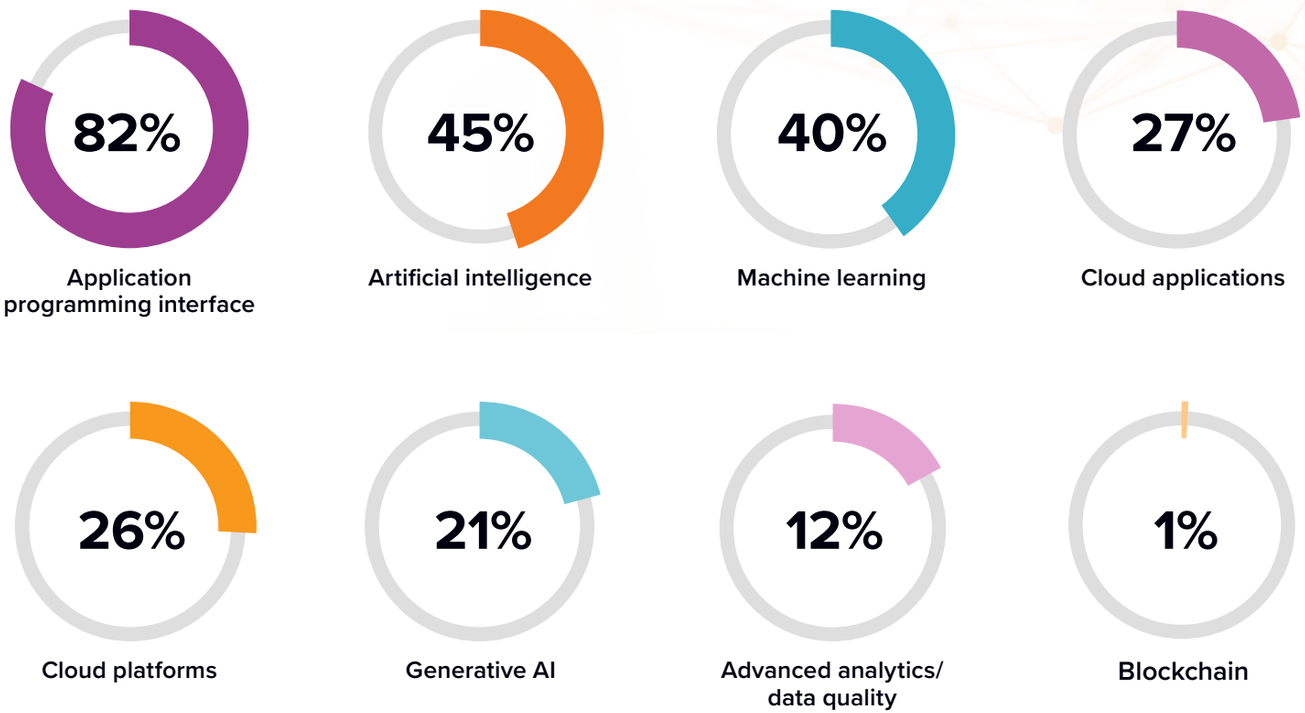
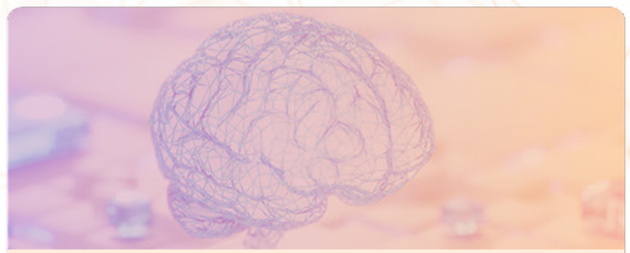
APIs Dominate as Prerequisites for Composability

What technologies do you think are a prerequisite for a composable approach?

(Percentage of respondents)





- **APIs, AI, and ML** were ranked as the **top 3 technologies important for a composable approach.**
- Organizations noting **APIs as the top technology prerequisite for a composable approach,** which aligns with their view of composability being an API-driven innovation, comprised 82% of respondents.
- **Modernization of both applications and platforms via the cloud** remains an important foundation for composability.

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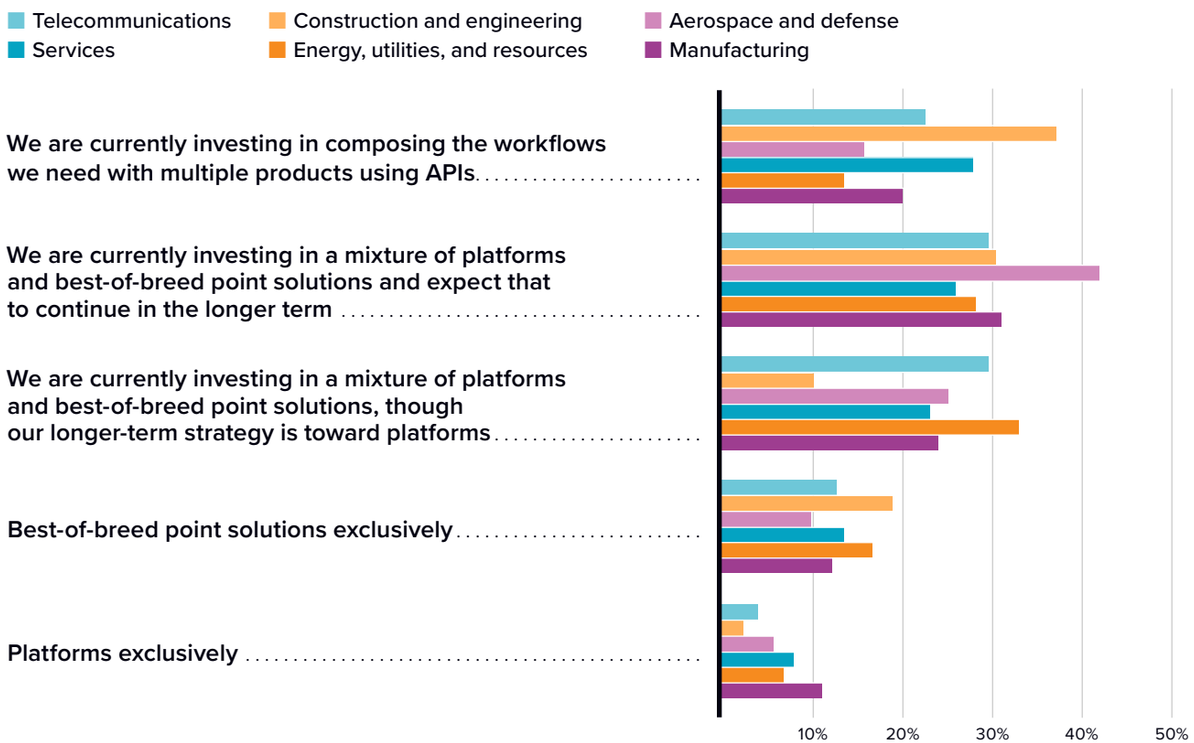
Organizations Leveraging APIs to Invest in a Mix of Best-of-Breed Solutions

By industry, what approach are you taking when purchasing or replacing enterprise applications?

(Percentage of respondents)



Organizations **value flexibility driven by APIs.**

Modular architectures reduce the risk of changes made within one element impacting the wider organization due to their independent nature.

Modular programs lend themselves to iterative processes more readily than monolithic ones.

Industry Insight

- **Aerospace and defense and manufacturing organizations** are focused on a mixture of platforms and best-of-breed point solutions.
- **Construction and engineering and service companies** are investing in composing workflows for multiple products through APIs.
- **Energy, utilities, and resources and telecommunication companies** are investing in a mixture of platforms and best-of-breed point solutions in their long-term strategy.

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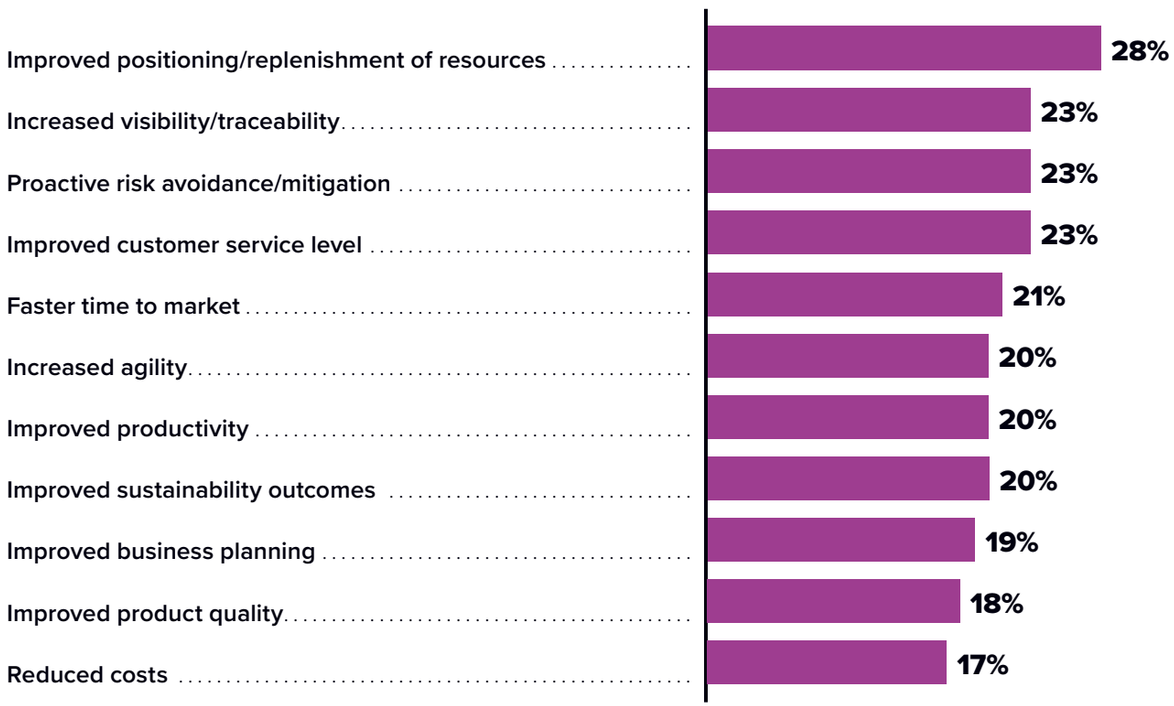
AI Improves Positioning and Increases Visibility and Traceability

What benefits have you seen from AI/ML deployments in your business?

(Percentage of respondents)



Of organizations that have deployed AI, 28% note that it helps improve positioning and replenishment of resources within their organization.

Top benefits of AI at the C-level in the current organizational environment

- **CTOs:** Improved positioning and proactive risk avoidance/mitigation
- **CIOs:** Improved customer service and increased visibility/traceability
- **CFOs:** Improved customer service and productivity

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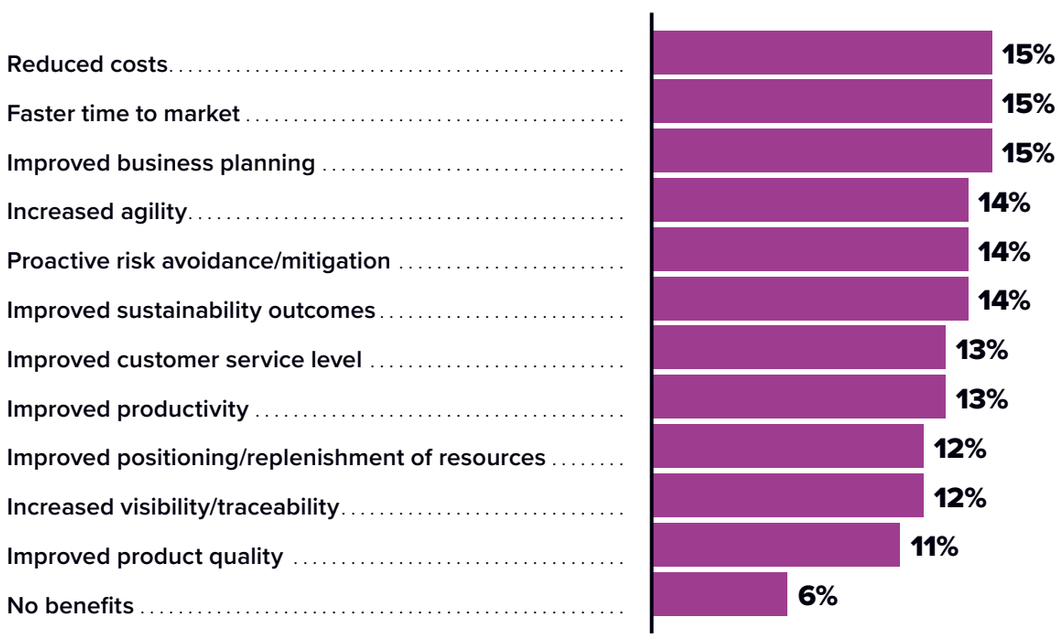
AI Expected to Reduce Costs, Enable Faster Time to Market, and Improve Business Planning Within Composable Environments

What benefits have you seen from AI/ML deployments in your business? What role do you see for evolving AI in a composable environment?

(Percentage of respondents)



As organizations implement composable strategies, **AI is an important tool** to help identify opportunities and drive greater benefits.

APIs, AI, and ML are all technologies identified as important for **extracting the full benefits from a composable approach,** and respondents expect the evolution of AI to further reduce costs, enable faster time to market, and improve business planning in a composable environment.

Top benefits of AI at the C-level in a composable environment

- **CTOs:** Improved positioning, reduced costs, and faster time to market
- **CIOs:** Proactive risk avoidance/mitigation, increased agility, and increased visibility/traceability
- **CFOs:** Reduced costs, improved sustainability outcomes, and improved customer service levels

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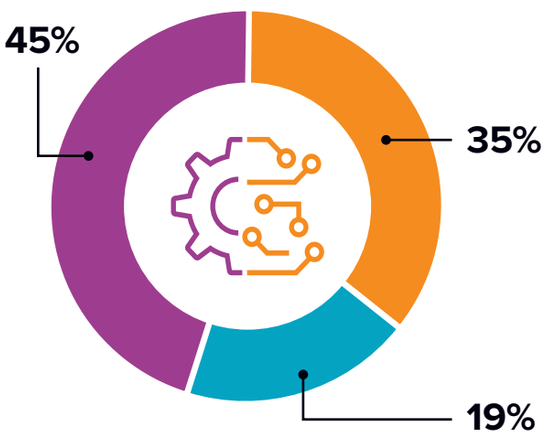
How to Move Forward with Composability

Even With a Composability Strategy in Place, There Are Significant Implementation Challenges

Thinking about your business today, at what level is enterprise software composability a priority?

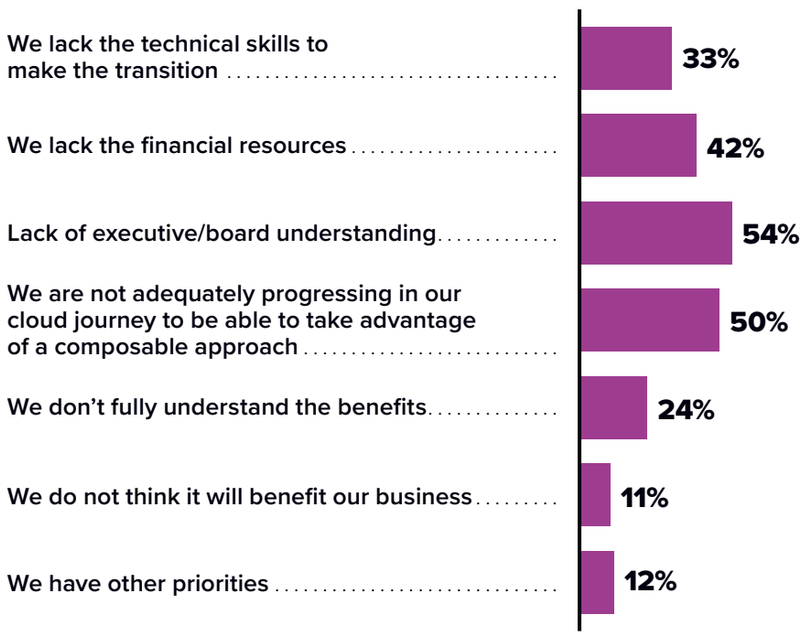
(Percentage of respondents)

- **Operational priority:** from the bottom up
- **Tactical priority:** process leaders (operations, supply chain, marketing, asset management, finance)
- **Strategic priority:** board level



What are the barriers to a composable approach for your organization?

(Percentage of respondents)



- **More than half (57%)** of organizations report having **a composable strategy in place.**
- **Almost half (45%)** say **composability is very important** and prioritize it at the operational level.
- **A lack of executive/board-level understanding** is cited as organizations' top barrier to composability.
- **Education and planning around ROI and investment strategies** are needed for board education.
- Leaders should focus on **understanding the cause and effect and benefits of composability** to help drive future decision-making processes.

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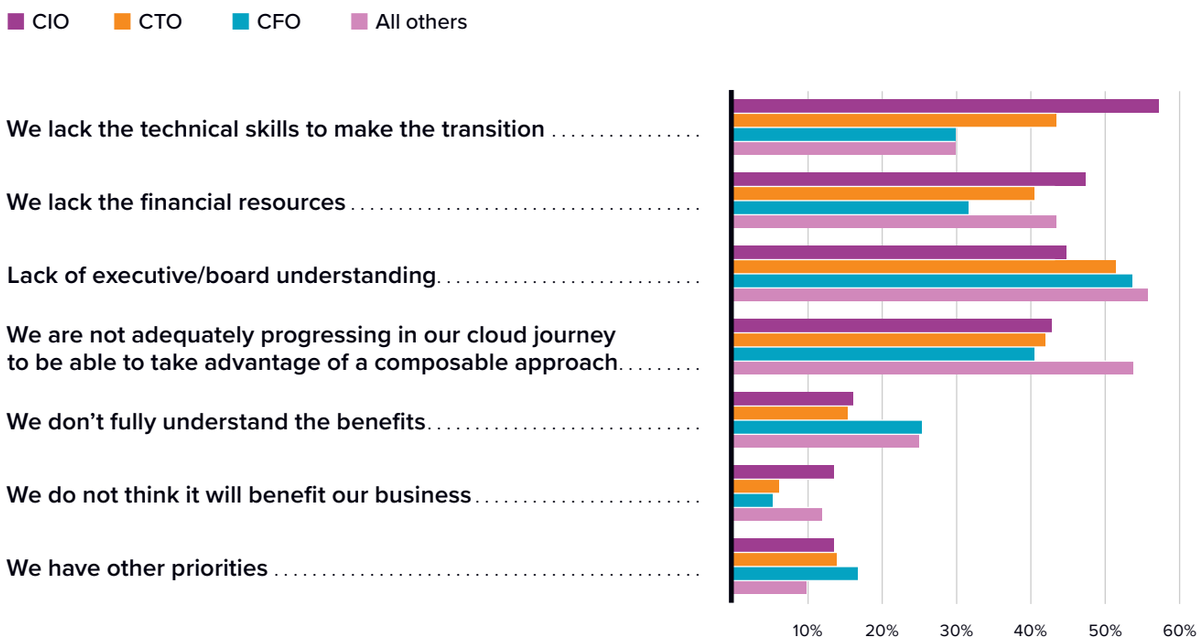
Skills, Knowledge, and Technology Barriers Remain Despite Senior Executives' Enthusiasm

By seniority level, what are the barriers to a composable approach for your organization?

(Percentage of respondents)



While leaders all agree that composability will benefit the organization, **a lack of board-level understanding and a shortage of technical skills** are the top 2 barriers.

C-level barriers to composability

- **CIOs:** Lack of technical skills and financial resources as a key barrier
- **CFOs:** Lack of board understanding and current cloud environment
- **CTOs:** Lack of board understanding and technical skills

Regional barriers to composability

- **APAC:** Lack of board understanding and maturity of cloud journey
- **NA:** Lack of board understanding and financial resources
- **Europe and Middle East:** Inadequate progress in their cloud journey and lack of board-level understanding

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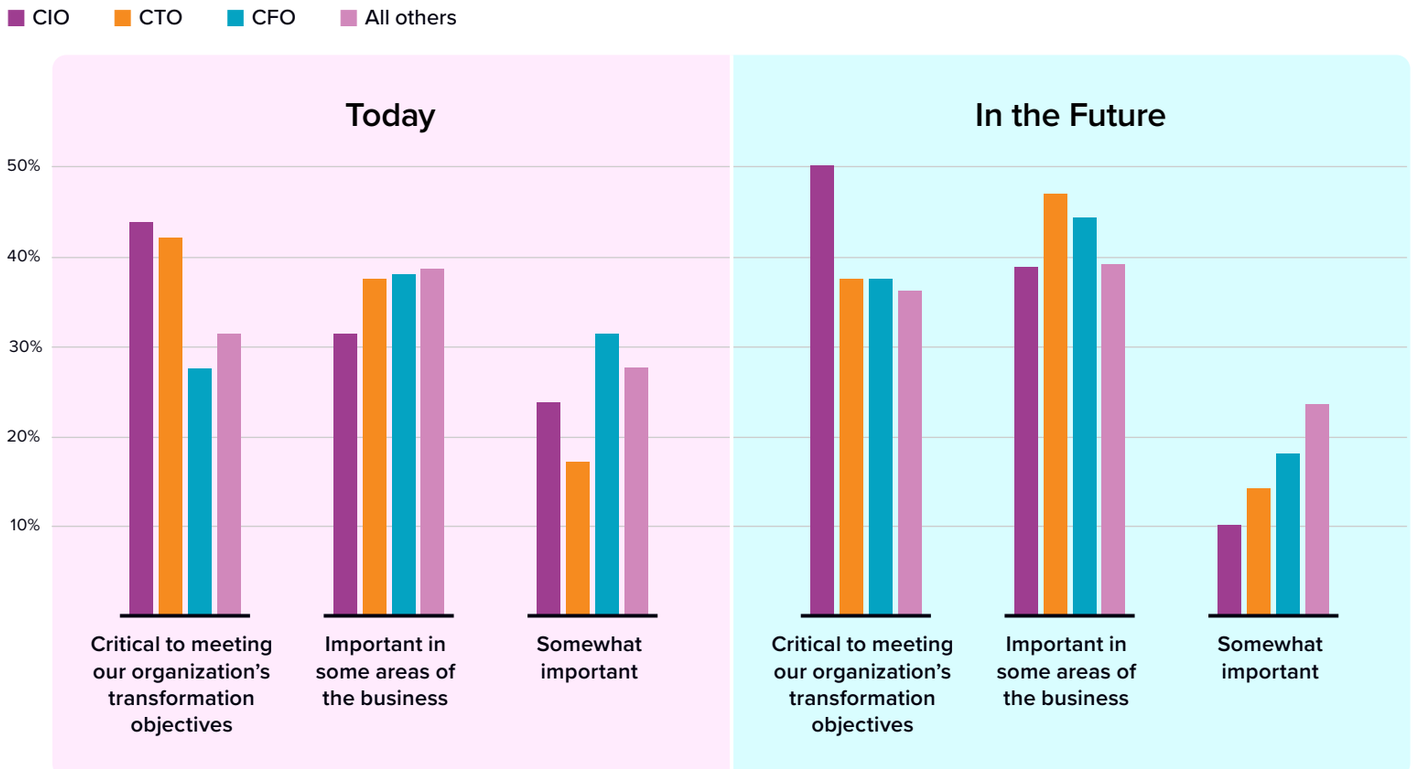
Composability Influences Software Purchase Choices Today and in the Future

How important is composability in the decision-making process of buying enterprise software?

(Percentage of respondents)



- As organizations navigate their digital transformation journeys and aim to improve business efficiency, productivity, and agility, **composability will continue to drive software purchase decisions.**
- Today, **CIOs and CTOs** are recognized as the **primary composability champions** within organizations.
- In the future, **CFOs will increasingly recognize how critical composability is** to meeting transformation objectives, and other leaders will acknowledge the increasing importance of composability.

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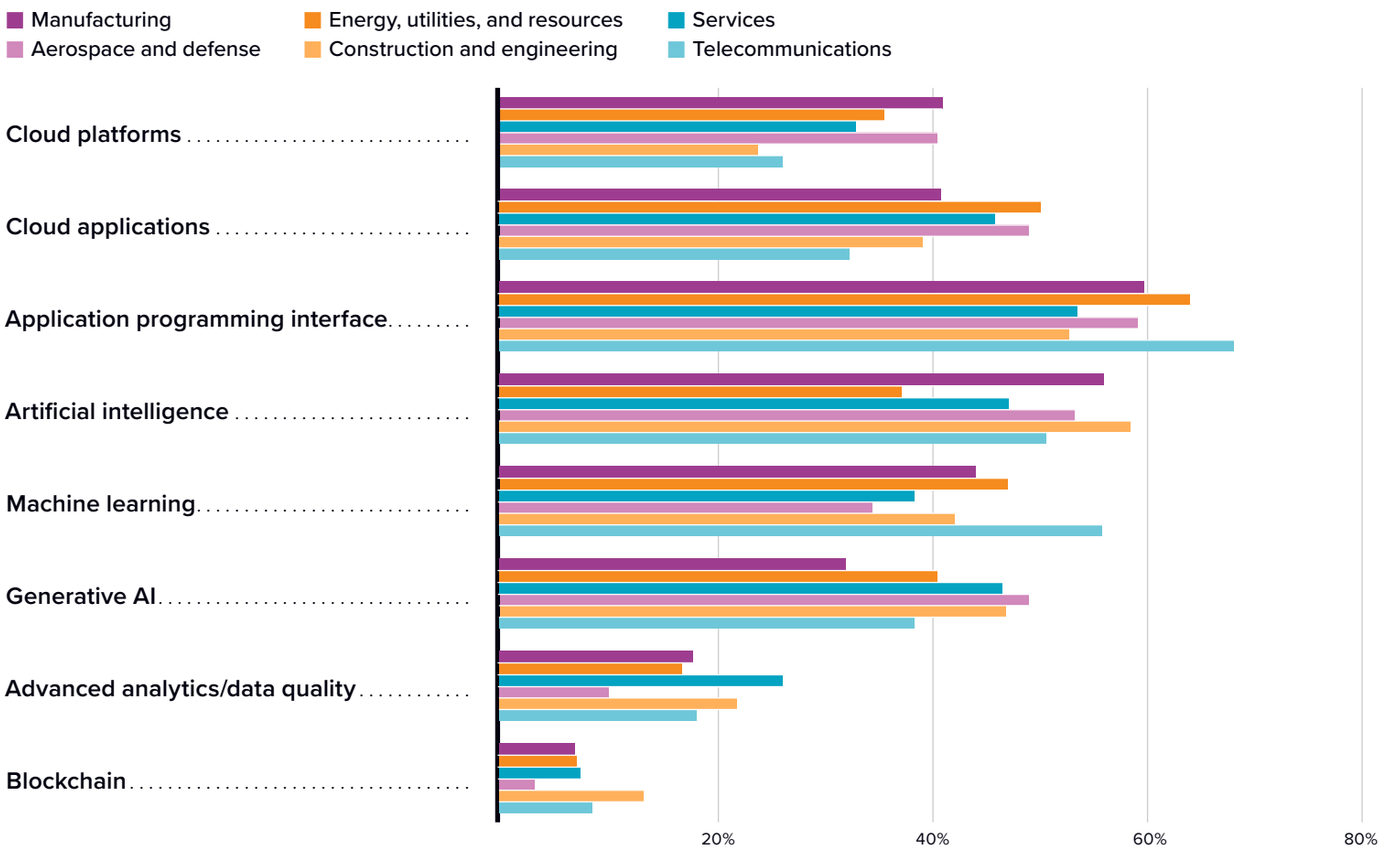
APIs Set Foundation for Composable Approach

How important is composability in the decision-making process of buying enterprise software?

(Percentage of respondents)



- **APIs, AI, GenAI, ML, and cloud were all recognized as important technologies for a composable approach.** This varied between industries. Telecommunications is focused notably on APIs and ML.
- Companies, especially those in manufacturing and aerospace and defense, are increasingly **looking to migrate to the cloud and are seeking solutions that are multicloud compatible.**
- **The benefits of cloud/software-as-a-service applications allow organizations to be more scalable** and up to date with the latest versions to support new technologies and provide robust security and data protection.
- **To increase flexibility and scalability, solutions should be multicloud enabled** with open APIs that are not locked in to one ecosystem.

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Essential Guidance

Furthering cloud investment with composability

Technology underpins innovation

- The world has a new normal of disruptions that requires underpinning technology to help organizations quickly respond in the digital world. **Organizations are demanding greater IT flexibility to increase business performance** in the unpredictable market conditions while continuing to invest in needed technology and increase the number of apps in their landscape.
- **IT modernization is a top priority** for manufacturers to meet new challenges and seize opportunities.

Flexibility and easy integration is key

- Organizations need to evolve from their current state of inflexible, monolithic applications toward cultivating a portfolio that is more modular and adaptable to business change. **Technology systems of cloud, APIs, composability, AI/ML, and GenAI can help organizations of all types move to the next level of value,** moving quickly beyond legacy issues.

Composability is the next evolution

- **Composability facilitates stability, growth and scalability, higher business and revenue performance, and operational benefits.** APIs, AI, and ML are all technologies identified as important for a composable approach as organizations expect the evolution of AI to reduce costs, enable faster time to market, and improve business planning in a composable environment.

API-driven innovation boosts integration

- **Organizations define composability as API-driven innovation followed by seamless integration between process workflows.** This view of composability from the operations and those doing the work must be turned into a business case to show how composability increases the value of a cloud investment when tied to a cloud strategy.

Appendix: Supplemental Data

The tables in this appendix provide accessible versions of the data for the complex figures in this document. Click "Return to original figure" below the tables to get back to the original data figures.

SUPPLEMENTAL DATA FROM PAGE 6

To what degree have you been able to adapt or respond to the global impacts?

	% of respondents
We have responded very well	47%
We have responded well	39%
In some cases, we have responded well, in others not	12%
We have responded poorly	2%

Notes: Managed by IDC's Global Primary Research Group. Data not weighted. Use caution when interpreting small sample sizes. Multiple dichotomous table; totals will not sum to 100%. n = 1,025 (all respondents); Source: IDC's *NA Composability in Enterprise Software Survey,* December 2023

Return to original figure

SUPPLEMENTAL DATA FROM PAGE 6

Within your C-suite, to what degree have you been able to adapt or respond to these global impacts?

	CIO	CTO	CFO	All others
We have responded very well	76%	64%	41%	44%
We have responded well	19%	25%	39%	42%
In some cases, we have responded well, in others not	2%	9%	17%	12%
We have responded poorly	2%	2%	1%	2%
We have responded very poorly	0%	0%	1%	0%

Notes: Managed by IDC's Global Primary Research Group. Data not weighted. Use caution when interpreting small sample sizes. Multiple dichotomous table; totals will not sum to 100%. n = 1,025 (all respondents); n = 80 (CIO), n = 64 (CTO), n= 160 (CFO), n = 721 (all others);
Source: IDC's *NA Composability in Enterprise Software Survey,* December 2023

Return to original figure

Appendix: Supplemental Data (continued)

SUPPLEMENTAL DATA FROM PAGE 8

As you think about the future of your business, what current gaps are likely to be the most problematic if not addressed within the next 12 months? (Ranked by industry)

	Manufacturing	Energy, utilities, and resources	Services	Aerospace and defense	Construction and engineering	Telecommunications
The lack of deep insight into our customers and consumers	34%	31%	30%	39%	33%	36%
Lack of enterprise visibility and agility to see disruptions in time to react to them effectively	35%	40%	39%	41%	35%	35%
Lack of IT composability or modularity limits the ability to transition to new business models	30%	32%	30%	31%	31%	32%
Lack of sufficient collaboration with external suppliers and/or customers	31%	33%	31%	28%	28%	35%
Lack of robust data analytics and insight intelligence	39%	32%	38%	38%	35%	33%
Lack of talent/skills to adapt to business/market changes	34%	41%	27%	30%	38%	39%
Inability to operationalize sustainability	33%	35%	27%	31%	32%	34%
Lack of a connected maintenance strategy to ensure uptime and reliability of machines and equipment	35%	28%	37%	33%	36%	22%
Lack of service management and support for customers from product to service delivery to service parts management and warranty	31%	25%	39%	27%	32%	32%

Notes: Managed by IDC's Global Primary Research Group. Data not weighted. Use caution when interpreting small sample sizes. Multiple dichotomous table; totals will not sum to 100%. n = 1,025 (all respondents), n = 395 (manufacturing), n = 123 (energy, utilities, and resources), n = 171 (services), n = 118 (aerospace and defense), n = 104 (construction and engineering), n = 114 (telecommunications); Source: IDC's *NA Composability in Enterprise Software Survey,* December 2023

Return to original figure

Appendix: Supplemental Data (continued)

SUPPLEMENTAL DATA FROM PAGE 12

How important is composability in the decision-making process of buying enterprise software?

	Today	In the future
Critical to meeting our organizations' transformation objectives	32%	38%
Important in some areas of the business	38%	40%
Somewhat important	27%	21%
Not important	2%	1%

Notes: Managed by IDC's Global Primary Research Group. Data not weighted. Use caution when interpreting small sample sizes. Multiple dichotomous table; totals will not sum to 100%. n = 1,025 (all respondents);
Source: IDC's *NA Composability in Enterprise Software Survey,* December 2023

Return to original figure

Appendix: Supplemental Data (continued)

SUPPLEMENTAL DATA FROM PAGE 14

By industry, what are the areas that you would prioritize for software/application composability?

	Manufacturing	Energy, utilities, and resources	Services	Aerospace and defense	Construction and engineering	Telecommunications
ERP	43%	35%	33%	53%	28%	32%
EAM	36%	40%	29%	47%	35%	25%
Supply chain	54%	42%	44%	54%	44%	62%
Procurement	51%	46%	39%	43%	49%	52%
Customer service/customer support	38%	38%	39%	31%	54%	47%
Operations/manufacturing	33%	39%	43%	37%	37%	40%
After-market/field service	31%	15%	17%	14%	23%	10%
Engineering/CAD/design	8%	7%	15%	13%	10%	9%
Finance	12%	14%	17%	3%	7%	10%
Sales	7%	14%	8%	0%	7%	3%
HCM/HR	3%	4%	10%	0%	4%	4%
Marketing	3%	6%	6%	1%	2%	4%

Notes: Managed by IDC's Global Primary Research Group. Data not weighted. Use caution when interpreting small sample sizes. Multiple dichotomous table; totals will not sum to 100%. n = 1,025 (all respondents), n = 395 (manufacturing), n = 123 (energy, utilities, and resources), n = 171 (services), n = 118 (aerospace and defense), n = 104 (construction and engineering), n = 114 (telecommunications); Source: IDC's *NA Composability in Enterprise Software Survey,* December 2023

Return to original figure

Appendix: Supplemental Data (continued)

SUPPLEMENTAL DATA FROM PAGE 15

What are the areas that you would prioritize for software/application composability?

	Manufacturing	Energy, utilities, and resources	Services	Aerospace and defense	Construction and engineering	Telecommunications
ERP	35%	28%	26%	37%	19%	19%
EAM	26%	26%	22%	30%	21%	10%
Supply chain	20%	15%	20%	14%	15%	24%
Procurement	6%	19%	12%	6%	14%	12%
Customer service/customer support	3%	2%	6%	5%	11%	19%
Operations/manufacturing	5%	2%	10%	5%	9%	12%
After-market/field service	1%	2%	2%	2%	5%	1%
Engineering/CAD/design	1%	1%	1%	0%	4%	2%
Finance	1%	2%	2%	0%	0%	0%
Sales	1%	0%	1%	0%	1%	0%
HCM/HR	0%	0%	0%	0%	1%	0%
Marketing	0%	2%	1%	0%	0%	1%

Notes: Managed by IDC's Global Primary Research Group. Data not weighted. Use caution when interpreting small sample sizes. Multiple dichotomous table; totals will not sum to 100%. n = 1,025 (all respondents), n = 395 (manufacturing), n = 123 (energy, utilities, and resources), n = 171 (services), n = 118 (aerospace and defense), n = 104 (construction and engineering), n = 114 (telecommunications); Source: IDC's *NA Composability in Enterprise Software Survey,* December 2023

Return to original figure

Appendix: Supplemental Data (continued)

SUPPLEMENTAL DATA FROM PAGE 17

By Industry, what approach are you taking when purchasing or replacing enterprise applications?

	Manufacturing	Energy, utilities, and resources	Services	Aerospace and defense	Construction and engineering	Telecommunications
We are currently investing in composing the workflows we need with multiple products using APIs	20%	14%	28%	16%	37%	23%
We are currently investing in a mixture of platforms and best-of-breed point solutions and expect that to continue in the longer term	31%	28%	26%	42%	31%	30%
We are currently investing in a mixture of platforms and best-of-breed point solutions, though our longer-term strategy is toward platforms	24%	33%	23%	25%	11%	30%
Best-of-breed point solutions exclusively	12%	17%	14%	10%	19%	13%
Platforms exclusively	11%	7%	8%	6%	2%	4%

Notes: Managed by IDC's Global Primary Research Group. Data not weighted. Use caution when interpreting small sample sizes. Multiple dichotomous table; totals will not sum to 100%. n = 1,025 (all respondents), n = 395 (manufacturing), n = 123 (energy, utilities, and resources), n = 171 (services), n = 118 (aerospace and defense), n = 104 (construction and engineering), n = 114 (telecommunications); Source: IDC's *NA Composability in Enterprise Software Survey,* December 2023

Return to original figure

Appendix: Supplemental Data (continued)

SUPPLEMENTAL DATA FROM PAGE 21

Thinking about your business today: At what level is enterprise software composability a priority?

	Total
Operational priority: from the bottom up	45%
Tactical priority: process leaders (operations, supply chain, marketing, asset management, finance)	35%
Strategic priority: board level	19%

Notes: Managed by IDC's Global Primary Research Group. Data not weighted. Use caution when interpreting small sample sizes. Multiple dichotomous table; totals will not sum to 100%. n = 1,025 (all respondents); Source: IDC's *NA Composability in Enterprise Software Survey,* December 2023

Return to original figure

SUPPLEMENTAL DATA FROM PAGE 22

By Seniority Level, what are the barriers to a composable approach for your organization?

	CIO	CTO	CFO	All others
We lack the technical skills to make the transition	57%	44%	30%	30%
We lack the financial resources	47%	41%	32%	44%
Lack of executive/board understanding	45%	52%	54%	56%
We are not adequately progressing in our cloud journey to be able to take advantage of a composable approach	44%	42%	41%	54%
We don't fully understand the benefits	16%	16%	26%	25%
We do not think it will benefit our business	14%	6%	6%	12%
We have other priorities	14%	14%	17%	10%

Notes: Managed by IDC's Global Primary Research Group. Data not weighted. Use caution when interpreting small sample sizes. Multiple dichotomous table; totals will not sum to 100%. n = 1,025 (all respondents); n = 80 (CIO), n = 64 (CTO), n= 160 (CFO), n = 721 (all others);
Source: IDC's *NA Composability in Enterprise Software Survey,* December 2023

Return to original figure

Appendix: Supplemental Data (continued)

SUPPLEMENTAL DATA FROM PAGE 23

How important is composability in the decision-making process of buying enterprise software?

Today	CIO	CTO	CFO	All others
Critical to meeting our organization's transformation objectives	44%	42%	27%	31%
Important in some areas of the business	31%	37%	38%	39%
Somewhat important	24%	17%	31%	27%
Not important	1%	3%	3%	2%

In the Future	CIO	CTO	CFO	All others
Critical to meeting our organization's transformation objectives	50%	37%	37%	36%
Important in some areas of the business	39%	47%	44%	39%
Somewhat important	10%	14%	18%	24%
Not important	1%	2%	0%	1%

Notes: Managed by IDC's Global Primary Research Group. Data not weighted. Use caution when interpreting small sample sizes. Multiple dichotomous table; totals will not sum to 100%. n = 1,025 (all respondents); n = 80 (CIO), n = 64 (CTO), n= 160 (CFO), n = 721 (all others);
Source: IDC's *NA Composability in Enterprise Software Survey,* December 2023

Return to original figure

Appendix: Supplemental Data (continued)

SUPPLEMENTAL DATA FROM PAGE 24

How important is composability in the decision-making process of buying enterprise software?

	Manufacturing	Energy, utilities, and resources	Services	Aerospace and defense	Construction and engineering	Telecommunications
Cloud platforms	41%	36%	33%	41%	24%	26%
Cloud applications	41%	50%	46%	49%	39%	32%
Application programming interface	60%	64%	54%	59%	53%	69%
Artificial intelligence	56%	37%	47%	53%	59%	51%
Machine learning	44%	47%	39%	35%	42%	56%
Generative AI	32%	40%	47%	49%	47%	39%
Advanced analytics/data quality	18%	17%	26%	10%	22%	18%
Blockchain	7%	7%	8%	3%	13%	9%

Notes: Managed by IDC's Global Primary Research Group. Data not weighted. Use caution when interpreting small sample sizes. Multiple dichotomous table; totals will not sum to 100%. n = 1,025 (all respondents), n = 395 (manufacturing), n = 123 (energy, utilities, and resources), n = 171 (services), n = 118 (aerospace and defense), n = 104 (construction and engineering), n = 114 (telecommunications); Source: IDC's *NA Composability in Enterprise Software Survey,* December 2023

Return to original figure

About the IDC Analysts

Sarah Lee
Research Director,
Manufacturing IT Strategies, IDC

Sarah Lee is Research Director for IDC Manufacturing Insights responsible for the IT Priorities & Strategies (ITP&S) practice. Sarah's core research coverage includes IT investments made across the manufacturing industry and manufacturers' progress with digital transformation. Based on her background covering the manufacturing space, Sarah's research also includes an emphasis on the technology enablers that help manufacturing executives make better-informed operational decisions.

More about Sarah Lee

Simon Ellis
Group Vice President,
Manufacturing and Supply Chain, IDC

As a program vice president, Simon Ellis is responsible for providing research, analysis, and guidance on key business and IT issues for manufacturers.
He currently leads the supply chain strategies practices at IDC Manufacturing Insights, an IDC industry research company that addresses the current market gap by providing fact-based research and analysis on best practices and the use of IT to assist clients in improving their capabilities in critical process areas.
Within the supply chain practice, Simon is directly responsible for research in the supply chain planning strategies practice while also managing the supply chain execution strategies practice. These supply chain practices specialize in advising clients on supply chain network design, sales and operations planning, global sourcing (profitable proximity and low-cost sourcing), transportation, logistics, and more. He also supports IDC Retail Insights IT strategies practices.

More about Simon Ellis

About the IDC Analysts (continued)

Mickey North Rizza
Group Vice President,
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Mickey leads the Enterprise Applications and Strategies research service along with a team of analysts responsible for IDC's coverage of next generation of enterprise applications including digital commerce, employee experience, enterprise asset management and smart facilities, ERP, financial applications, HCM and payroll applications, procurement, professional services automation and related project-based solutions software, supply chain automation, and talent acquisition and strategies. In her role, Mickey and the team advises clients on these intelligent, modern, and modular enterprise applications for businesses of all sizes with an emphasis on the key trends, opportunities, innovation and the IT and Business Buyer concerns, requirements, and buyer behaviors.

More about Mickey North Rizza

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