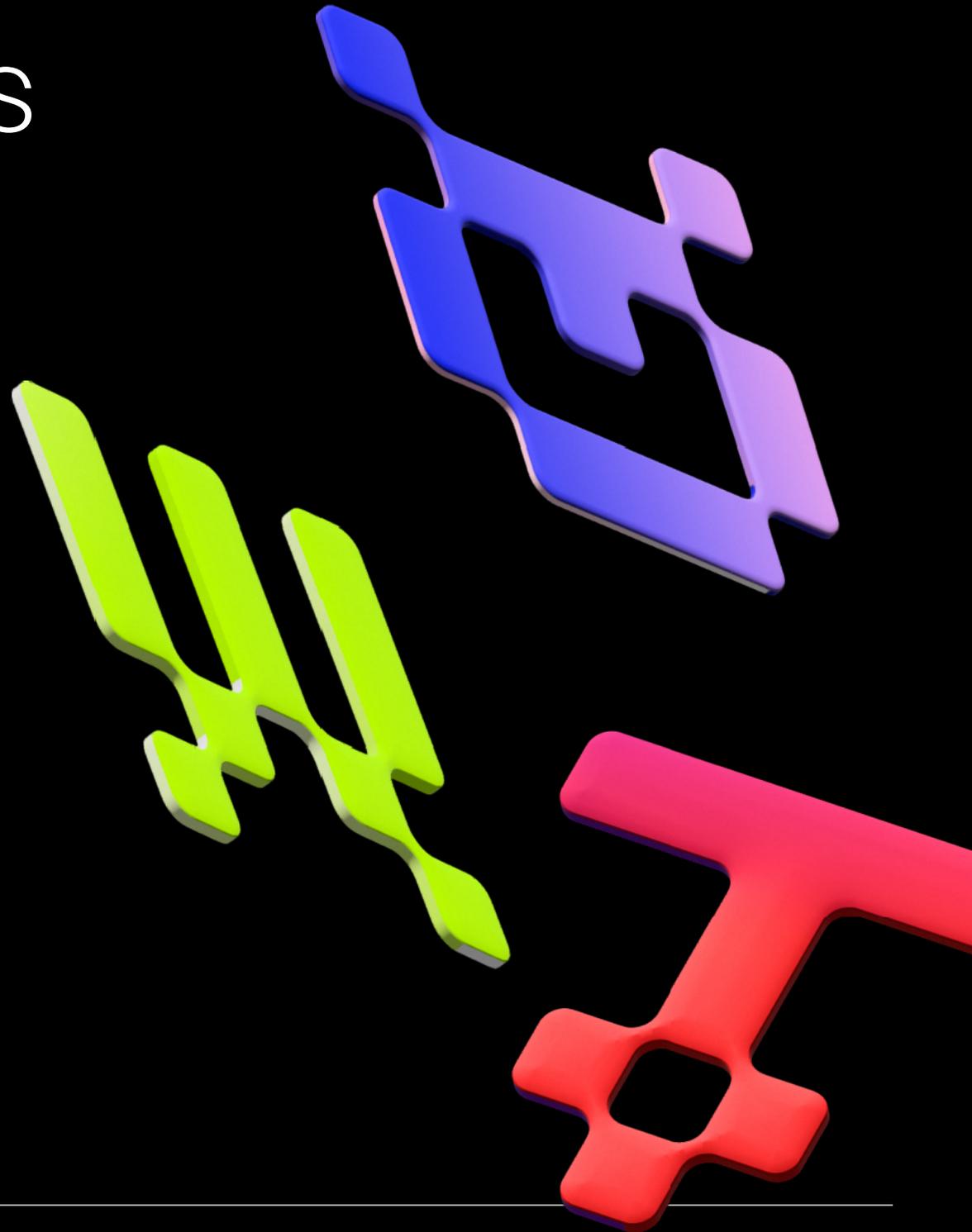# The State of Enterprise Blockchain Adoption in 2023

Key Trends, Challenges and Opportunities

Table of Contents

Letter from Casper Labs Co-founders

Let's be real. People are tired of hearing about blockchain.

The popular narrative around blockchain generally equates to crypto. Recent headlines—along with the bad actors who have exacerbated an extended downturn—have understandably generated scrutiny, exhaustion, and cynicism around the space. But focusing too much on this narrow area comes with a big risk of glossing over a larger, more promising reality with longer-term impact: blockchain is here to stay.

Instead of the ebbs and flows of digital asset markets, the increasingly creative and diverse ways that businesses incorporate blockchain into their existing systems will define (and are actively defining) its future. Blockchain's true utility is in unparalleled copy protection and digital certification, both essential for a nearly limitless pool of business applications.

Organizations of all sizes are tired of the challenges that come with proving ownership and authentication of their assets, be it a mortgage reconciliation, auto lease, patent, coupon code… you name it. Blockchain represents the first time businesses, governments, and Wall Street are able to securely store their data in a tamper-proof and fully traceable manner. This isn't a distant future, either. We have seen firsthand that **organizations are actively investing in this technology, inspiring us to gauge the pace of adoption in early 2023**.

Business adoption is often responsible for driving mainstream spread of significant new technologies, and blockchain looks to be no exception. Even in its early stages, blockchain is already following a remarkably similar growth pattern as the internet itself. What began as an anarchistic marketplace 20-30 years ago has since matured into the backbone of commerce, communication, and entertainment. Blockchain is on a parallel fast track toward becoming an undeniable net-revenue positive for businesses. Some of the world's biggest enterprises and governments today are recognizing that blockchain is not here to rip and replace their existing infrastructure, but to help them realize a more efficient output with their existing tools.

Naturally, business leaders have some questions: How does blockchain impact my existing data infrastructure and IT tooling? Will my data be secure? What are the use cases for my business? Will my team's developers know how to implement it? How does blockchain fit into our budget? Will it actually help us overcome important business challenges?

We set out to answer these questions.

In this report, you'll find that nearly 90% of businesses in the US, UK, and China are starting to use blockchain in some capacity. Yet they're grappling with surprising knowledge gaps as well as key challenges like lack of interoperability and company buy-in.

As you'll find in this report, we are in the midst of a pivotal moment for both blockchain and enterprise technology at large. Blockchain is ready for the enterprise, and enterprises are ready for it. We hope you find this report to be a valuable and lasting resource, no matter where you are in your journey with blockchain.

Mrinal Manohar
Co-founder and CEO
Casper Labs

Medha Parlikar
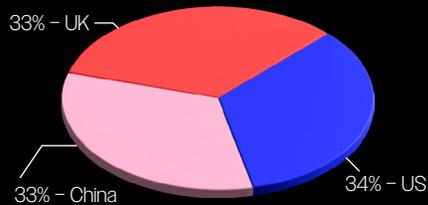Co-founder and CTO
Casper Labs

Demographics and Methodology

Zogby Analytics was commissioned by Casper Labs to conduct an online survey of 603 business decision-makers divided across three countries: US, UK, and China.

Using internal and trusted interactive partner resources, thousands of adults were randomly invited to participate in this interactive survey. Based on a confidence interval of 95%, the margin of error for 603 is +/- 4.0 percentage points.

Additional demographic information is outlined below.

Company Location

- 33% – UK
- 33% – China
- 34% – US

Revenue

- 6% — $25M-$50M
- 9% — $51M-$100M
- 8% — $101M-$200M
- 7% — $201M-$300M
- 5% — $301M-$400M
- 8% — $401M-$500M
- 11% — $501M-$600M
- 8% — $601M-$700M
- 7% — $701M-$800M
- 6% — $801M-$900M
- 11% — $901M-$1B
- 15% — More than $1B

Role

- CTO – 21%
- CEO – 18%
- CIO – 18%
- Business lead – 16%
- Software developer/engineer – 10%
- Head of engineering – 6%
- Other – 6%
- CXO – 4%

Employees

- 200-300 – 6%
- 301-400 – 3%
- 401-500 – 11%
- 501-1,000 – 27%
- 1,001-2,000 – 23%
- 2,001-5,000 – 16%
- More than 5,000 – 15%

Industry

- Consumer technology – 23%
- Financial services – 18%
- Healthcare technology – 10%
- Retail or E-commerce – 10%
- Other – 10%
- Energy and utility – 6%
- Shipping and logistics – 5%
- Automotive – 4%
- Consumer goods – 4%
- Insurance – 3%
- Travel and hospitality – 3%
- Government – 2%
- Media and entertainment – 2%
- Staffing and recruiting – 2%
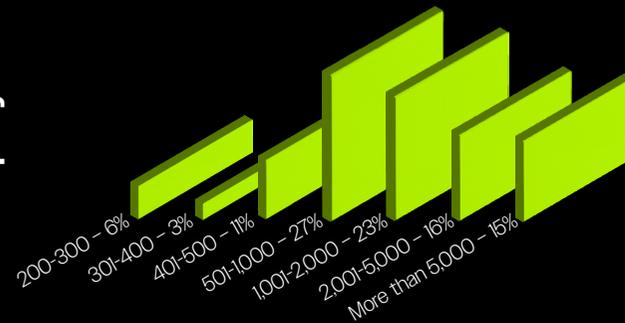
Highlights

In a survey of 603 global business decision-makers in the UK, China, and the US, we found:

81%

expect technology budgets to increase in 2023, even amid an expected downturn.

54%

still see blockchain and crypto as interchangeable terms, even though the former is just a single application of the latter.

86%

would be more interested in deploying blockchain if there were a hybrid option that allowed the secure migration of data between public and private environments.

87%

are somewhat or very likely to invest in a blockchain solution in the next 12 months. This is especially true in China, where more than half (55%) say they are very likely to make an investment, compared to US (48%) and UK (42%) respondents.

Biggest blockchain adoption hurdles

Limited developer knowledge – 25%

Lack of viable tools – 24%

Interoperability concerns – 20%

Anti-blockchain cynicism – 18%
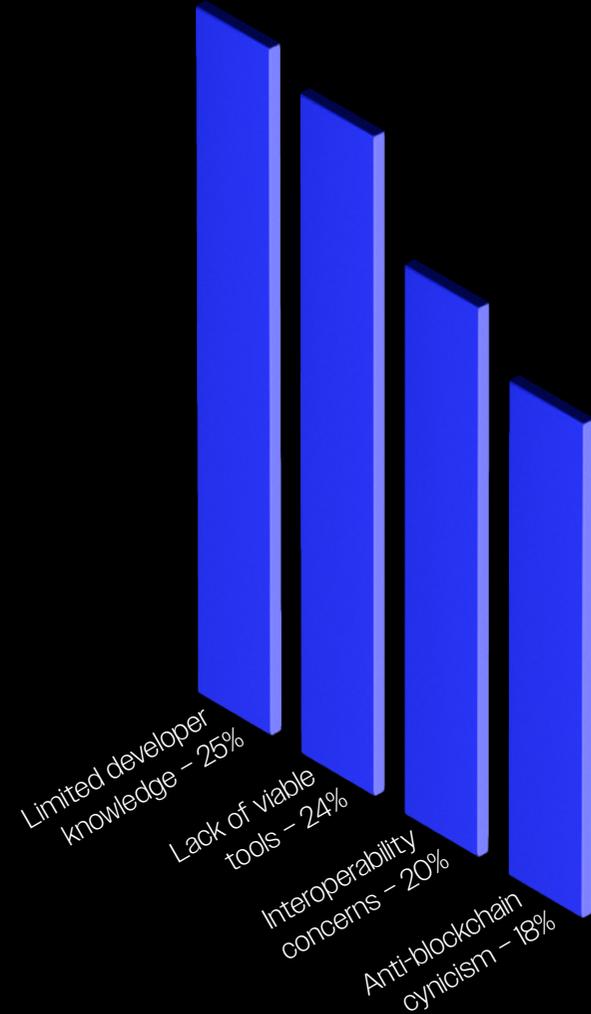
Chapter 1

State of the Industry: How Infrastructure Technology Aligns to Business Needs and the Rate of Blockchain Adoption
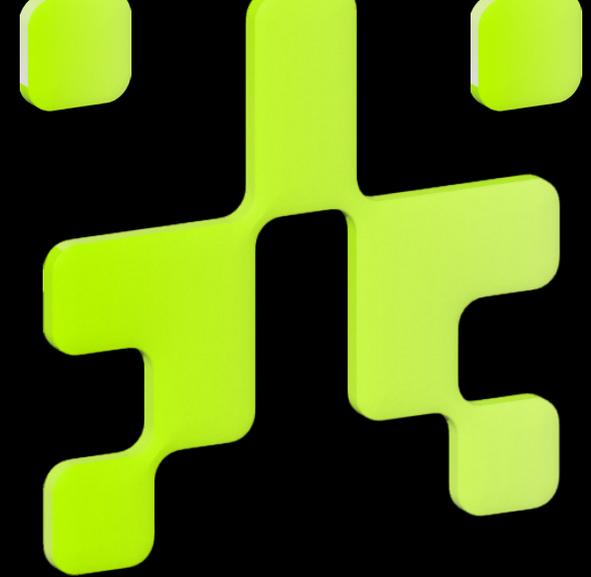
Large-scale organizations have built up robust technology infrastructures over the years. Many have adopted hundreds of technologies including SaaS solutions, developer and database management tools, web servers, and more.

Yet with so many tools in place—all at various levels of implementation and integration—there is plenty of opportunity to improve existing tech stacks and reassess how they deliver value.

Although IT leaders are already implementing blockchain in many different ways, it's only recently that they've begun to migrate workloads from test to production environments. More simply, they're just beginning to scratch the surface of how it can radically transform their businesses.

A clear consensus for hybrid data ecosystems emerges.

Companies today use a range of data infrastructures to power their business.

Hybrid (37%) and private (30%) are the most common data environments globally. Meanwhile, on-premises databases are still markedly more common in China (19%) than in the US (7%) or UK (5%).

Conversely, private cloud is markedly less common in China than in the US and UK.

Types of data infrastructure environments

Globally
- 37%
- 10%
- 30%
- 12%
- 11%

US
- 36%
- 7%
- 33%
- 11%
- 13%

UK
- 37%
- 5%
- 35%
- 10%
- 13%

China
- 37%
- 19%
- 21%
- 15%
- 8%

Legend:
- ■ Legacy or on-prem databases
- ■ Private cloud
- ■ Hybrid environment (i.e., on-prem and public cloud)
- ■ Public cloud
- ■ Multicloud environment

To buy or to build?
Most companies do both.

In terms of technology makeup, companies tend to prefer to buy solutions rather than develop them in-house, with IT talent shortages the most likely culprit.

Nevertheless, some solutions still require a proprietary touch: Using off-the-shelf tools with some technology built-in-house is the most common approach globally (40%).

Approaches to building a technology stack

Globally
- 20%
- 16%
- 13%
- 11%
- 40%

US
- 25%
- 17%
- 11%
- 11%
- 36%

UK
- 21%
- 13%
- 12%
- 13%
- 41%

China
- 13%
- 21%
- 15%
- 8%
- 43%

Legend:
- ■ (green) Our IT team uses off-the-shelf tools
- ■ (purple) Our IT team builds its own tools
- ■ (pink) Our IT team primarily uses off-the-shelf tools with some built-in-house tools
- ■ (red) Our IT team primarily uses built-in-house tools with some off-the-shelf tools
- ■ (blue) Our IT team uses an even mix of both off-the-shelf and built-in-house tools

Businesses are largely confident in their tech stacks.

These technology infrastructure approaches translate to 91% of global respondents believing that their existing tech stack is at least somewhat effective at enabling them to overcome their business challenges.

In fact, over a third (34%) of global businesses feel their existing tech stack is very effective. Still, there is plenty of room for IT teams to improve their tech practices and unlock significant positive impact for their company.

Effectiveness of existing tech stacks in overcoming business challenges

Legend:
- Very effective (green)
- Somewhat effective (blue)
- Somewhat ineffective (pink)
- Very ineffective (purple)
- I don't know (red)

Region	Very effective	Somewhat effective	Somewhat ineffective	Very ineffective	I don't know
Globally	34%	57	7	1	1
US	41	50	6	1	2
UK	32	58	8	1	1
China	29	62	6	2	1
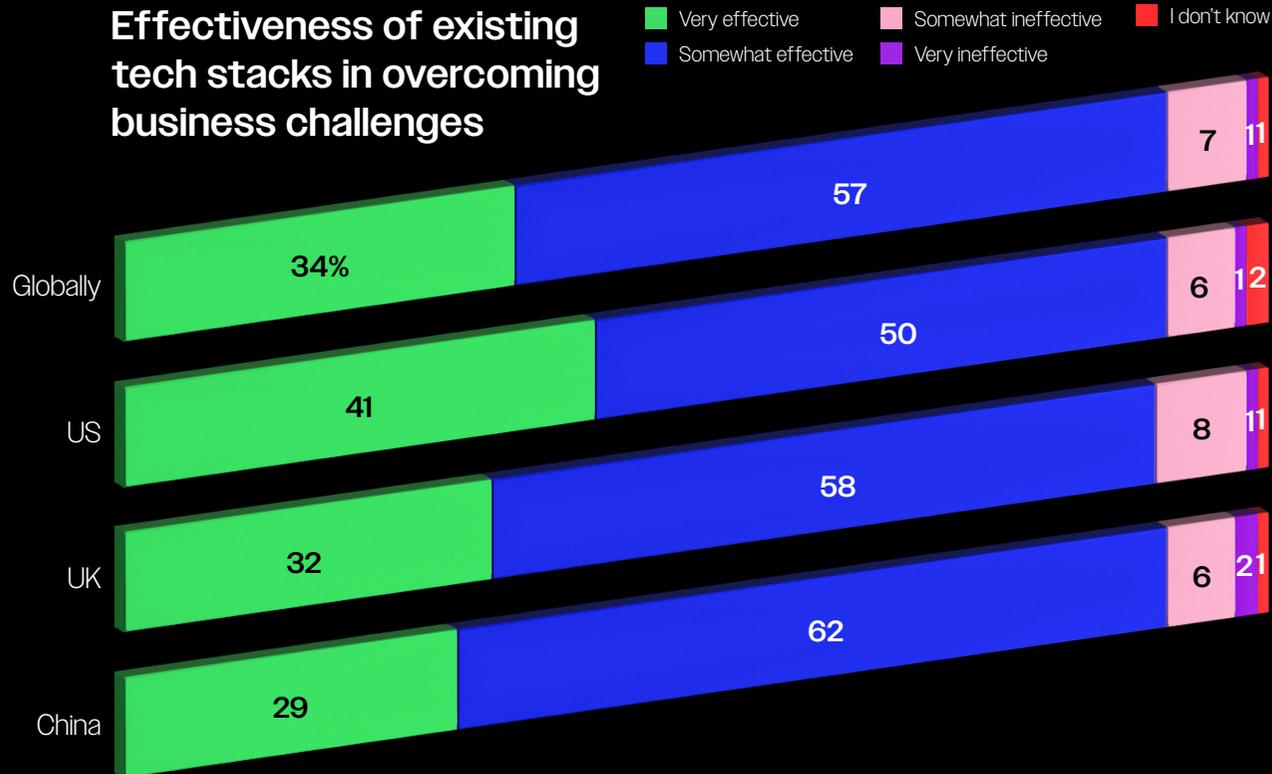
When it comes to blockchain adoption, the future is hybrid.

Even though blockchain adoption is in its early stages, nearly 90% of global respondents report deploying it in some capacity.

For companies that have implemented blockchain technology, a hybrid solution is the most common globally (38%). Private blockchains are the second most common environments for deployment everywhere except for China (27%), where public blockchains (29%) are slightly favored over private blockchains (26%).

Type of blockchain technology currently employed

Globally
- 38%
- 12%
- 23%
- 27%

US
- 39%
- 18%
- 20%
- 23%

UK
- 34%
- 14%
- 20%
- 32%

China
- 39%
- 6%
- 29%
- 26%

Legend:
- ■ Public (i.e., Ethereum, Solana, Avalanche, Algorand)
- ■ Private (e.g. HyperLedger)
- ■ Hybrid
- ■ My company doesn't employ any blockchain technology
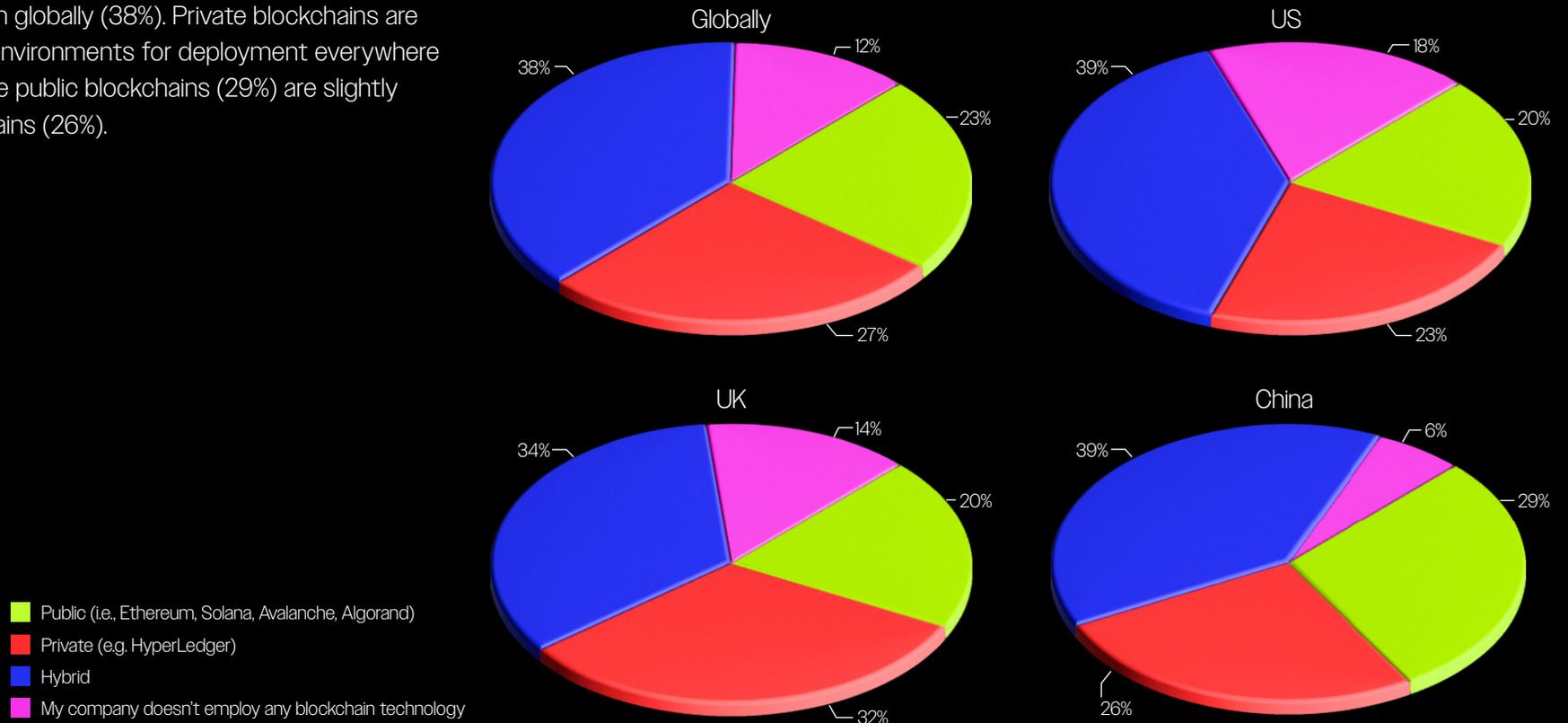
How are businesses today using blockchain?

Security and copy protection are just the beginning.

As businesses buy into blockchain, many are benefiting from its two key capabilities: security (42%) and copy protection (42%).

But the technology's impact on businesses doesn't stop there. IT leaders globally are already leveraging it to fuel operational improvements and innovations including buildi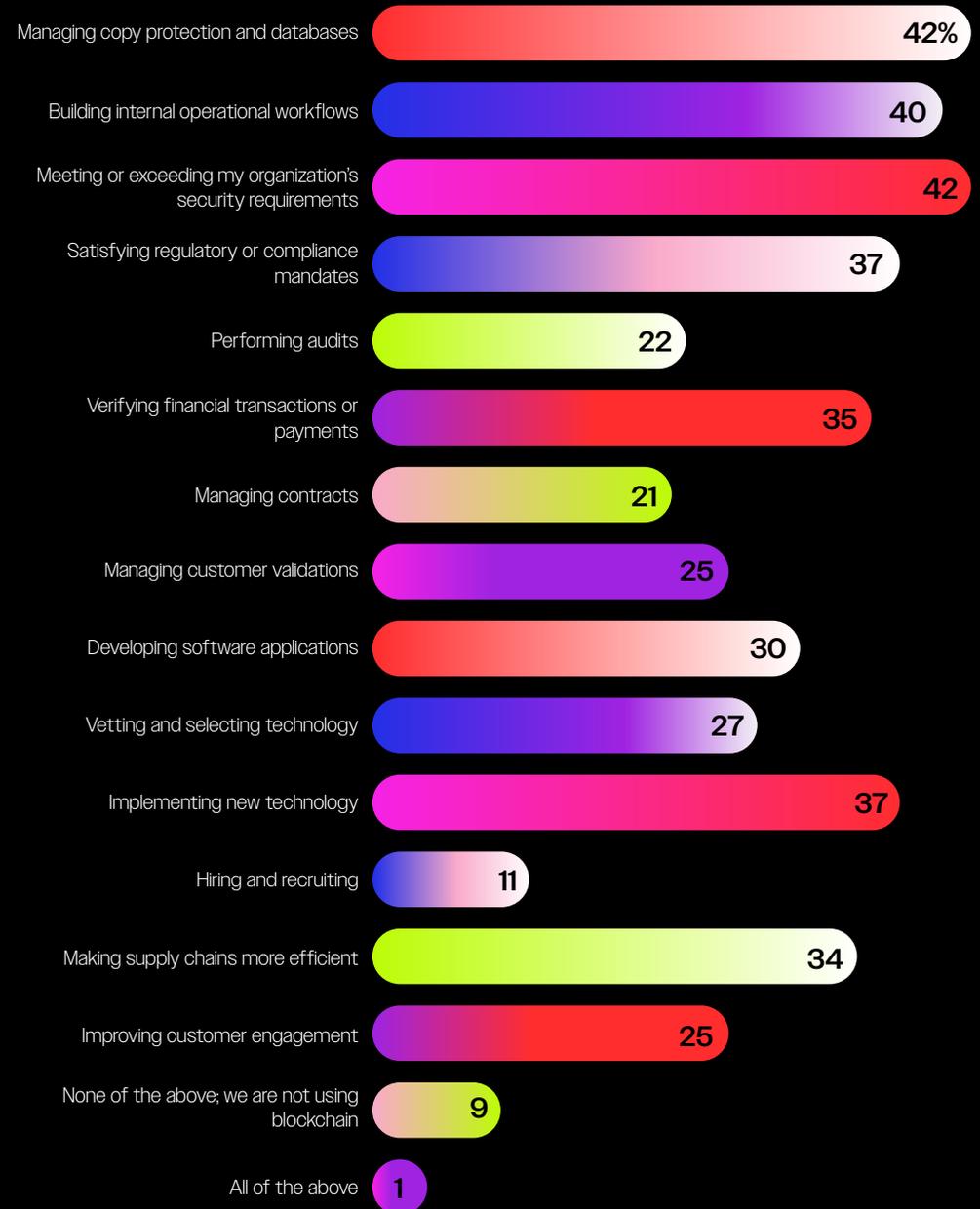ng internal operational workflows (40%), making their supply chains more efficient (34%), developing software applications (30%), managing contracts (21%), and even hiring and recruiting (11%).

How companies use blockchain today

Category	Value
Managing copy protection and databases	42%
Building internal operational workflows	40
Meeting or exceeding my organization's security requirements	42
Satisfying regulatory or compliance mandates	37
Performing audits	22
Verifying financial transactions or payments	35
Managing contracts	21
Managing customer validations	25
Developing software applications	30
Vetting and selecting technology	27
Implementing new technology	37
Hiring and recruiting	11
Making supply chains more efficient	34
Improving customer engagement	25
None of the above; we are not using blockchain	9
All of the above	1

Chapter 2

"Blockchain technology has evolved to a place of true enterprise readiness. As projects like Casper adopt the software development best practices favored by developers in non-blockchain environments, they become a much more realistic option for organizations seeking to drive efficiencies and open new revenue streams with emerging technology."

— Medha Parlikar, Casper Labs CTO and co-founder

Enterprise Understanding of— and Sentiment Toward—Blockchain

While business leaders have a developed understanding of blockchain, some misconceptions remain—specifically around where blockchain stands in comparison to other related technologies, as well as its clear distinction from cryptocurrency.

Still, leaders have a strong interest in blockchain. In addition, interest around related technologies including smart contracts is notably high, despite being the least familiar tool to respondents.

At first glance, most global business leaders self-report a strong understanding of blockchain.

Today, the majority of business leaders across global regions feel confident in their knowledge about what blockchain is and what it can offer.

This is true for companies across industries and sizes: 73% of total survey respondents say they fully understand blockchain and that they can explain its value to their team. Nearly all respondents are either positive or neutral in their attitudes toward using blockchain in their business, and only 5% claim to not understand the technology.

Level of understanding

Globally
- 22%
- 5%
- 73%

US
- 25%
- 6%
- 69%

UK
- 24%
- 4%
- 72%

China
- 17%
- 5%
- 78%
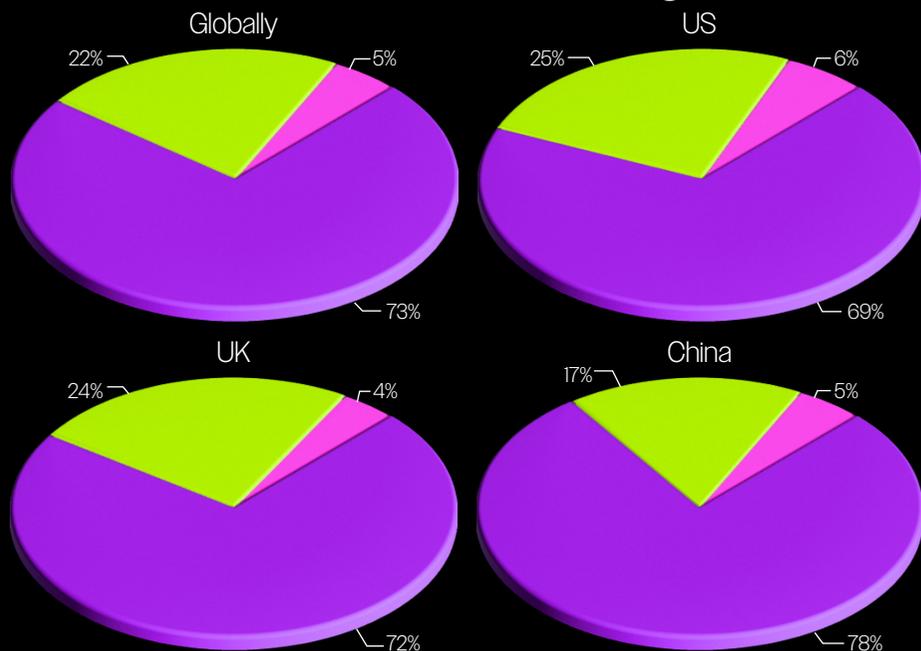
- ■ I fully understand blockchain and I can explain its value to my team
- ■ I somewhat understand blockchain but I cannot explain it to others
- ■ I do not understand blockchain

Attitude toward blockchain

Globally
- 19%
- 2%
- 3%
- 76%

US
- 20%
- 3%
- 5%
- 72%

UK
- 19%
- 2%
- 3%
- 76%

China
- 19%
- 2%
- 1%
- 78%
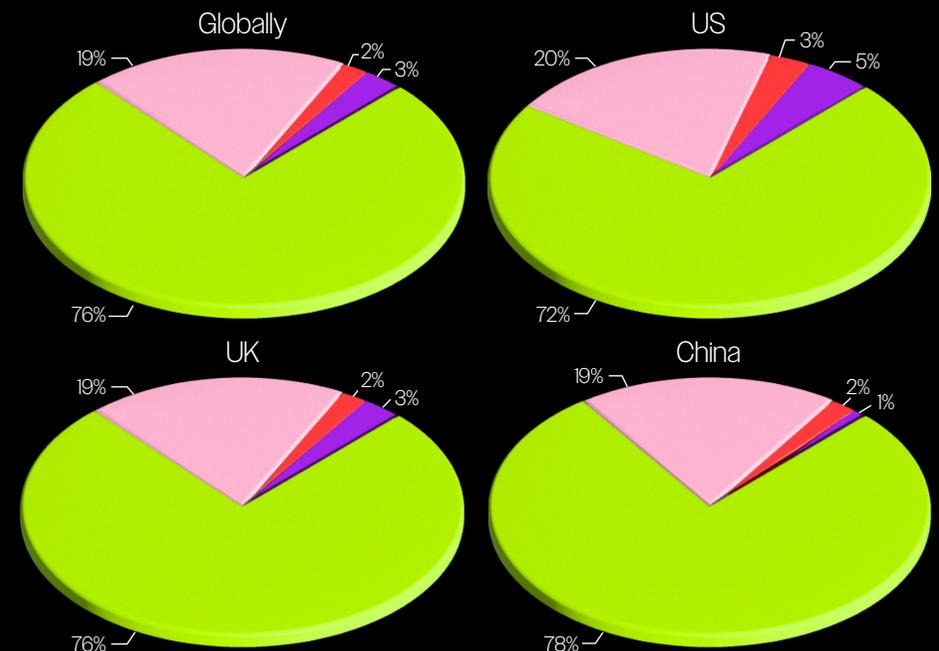
- ■ Positive; I am interested in adopting blockchain for my business
- ■ Neutral; I am aware of blockchain but haven't found a tool that makes sense for my business
- ■ Negative; I do not see any value in blockchain for my business
- ■ Not sure

However, over half of surveyed business leaders mistakenly believe "blockchain" and "cryptocurrency" are interchangeable terms.

While the majority of business leaders believe they have a strong understanding of blockchain, most of this understanding is actually limited to blockchain's applications in cryptocurrency. Currently, there is still room for education on all its use-cases and benefits.

For example, more than half (54%) of global respondents believe that blockchain and cryptocurrency are interchangeable terms.

There's a particular opportunity for greater understanding among individuals who work at smaller organizations, where respondents reported having less familiarity with the technology and its applications.

"Are blockchain and cryptocurrency interchangeable terms?"

Globally
34% / 12% / 54%

US
31% / 16% / 53%

UK
36% / 8% / 56%

China
35% / 11% / 54%

Yes — No — Not sure
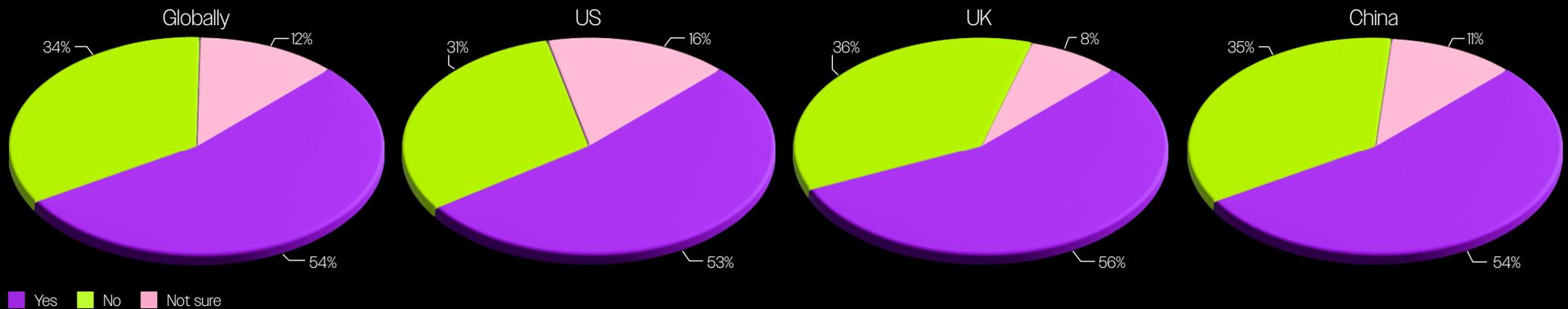
Global leaders understand crypto, blockchain and NFTs—but not smart contracts.

Unlike crypto and blockchain where proclaimed understanding is high, just roughly 30% of business leaders feel they have a strong understanding of smart contracts, web3, and distributed applications.

In fact, leaders reported they knew the least about smart contracts. While leaders are highly aware of terms like NFTs (likely due to their strong prevalence in the media), many don't realize that smart contracts play a crucial role in assigning and delegating NFT ownership rights, and can thus serve as a valuable tool for business operations.

CASE STUDY SPOTLIGHT
Casper blockchain is a gamechanger for CFOs, CTOs and governments managing patents
Casper Labs built an NFT-based chain of custody (CoC) solution for IPwe to manage public patent records on the Casper public blockchain. Patents are created and securely stored as NFTs, so that they are traceable and tradable.

Casper delivers real-time proof of ownership, making patent transactions simpler and more cost-efficient. The blockchain lays the foundation for a consortium of patent owners, patent offices and verifiers to grant, publish, own and transfer patents.

Level of understanding

	Very familiar	Somewhat familiar	Somewhat unfamiliar	Very unfamiliar
Smart contracts	30%	40	16	14
Blockchain	55	33	8	4
Crypto	58	29	9	4
Web3	30	42	19	9
Distributed applications (dapps)	33	44	14	9
Non-fungible tokens (NFTs)	46	37	12	6

Legend:
- 🟩 Very familiar
- 🟦 Somewhat familiar
- 🟪 Somewhat unfamiliar
- 🟥 Very unfamiliar
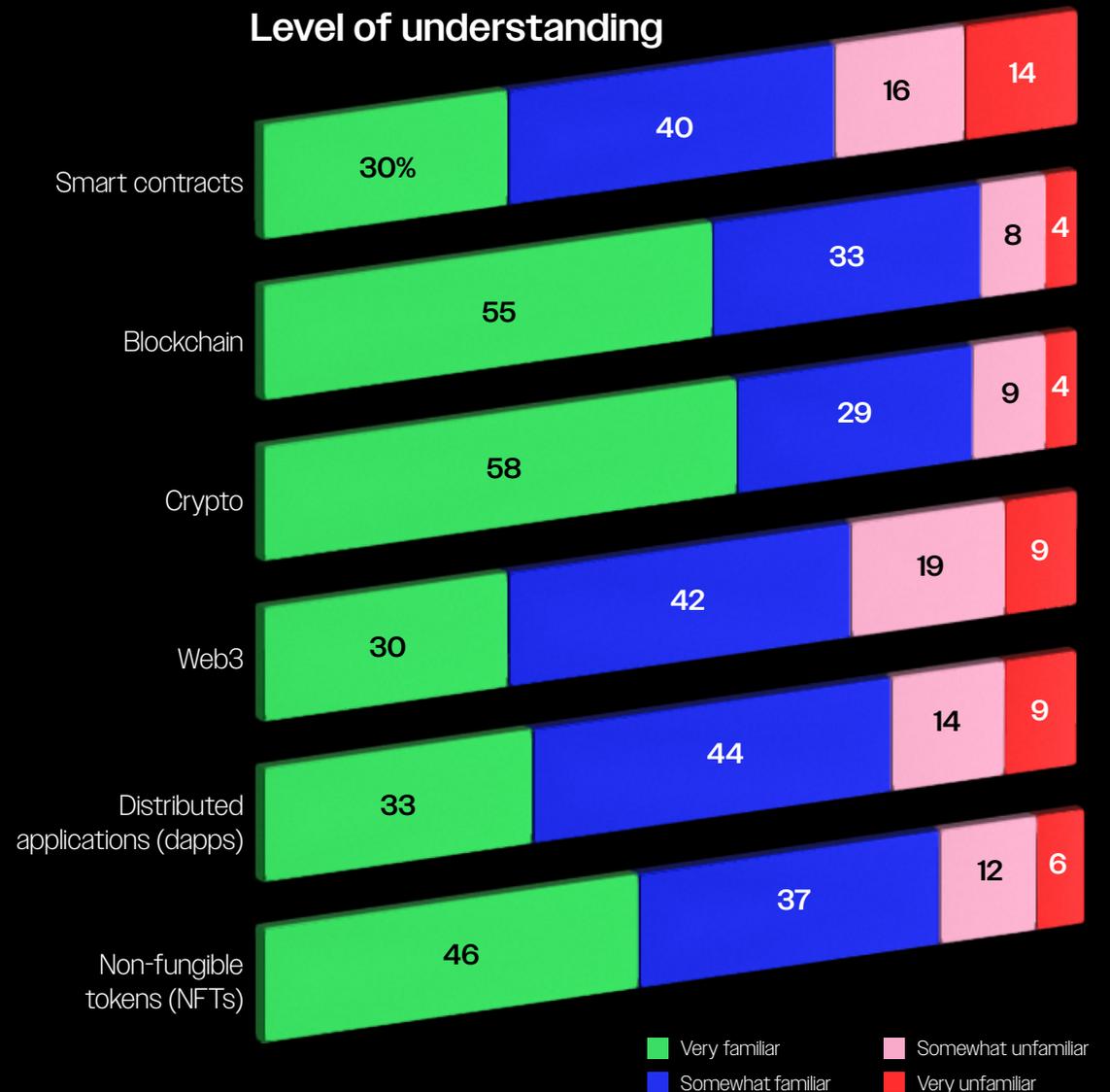
In addition to blockchain, smart contracts are most interesting to business leaders.

Despite understanding smart contracts far less than blockchain, decision-makers share the same level of interest in both technologies. Most business leaders (90%) are at least somewhat interested in blockchain, with over half of respondents reporting being very interested, while roughly the same (87%) crave a greater understanding of smart contracts.

The appetite is well placed, given that smart contracts rely on blockchain technology and are designed specifically to help businesses with automated transactions.

Level of interest

	Very interested	Somewhat interested	Mostly not interested	Not at all interested
Smart contracts	46%	41	10	3
Blockchain	57	33	6	4
Crypto	51	32	11	6
Web3	34	46	15	5
Distributed applications (dapps)	38	44	13	5
Non-fungible tokens (NFTs)	40	37	14	9
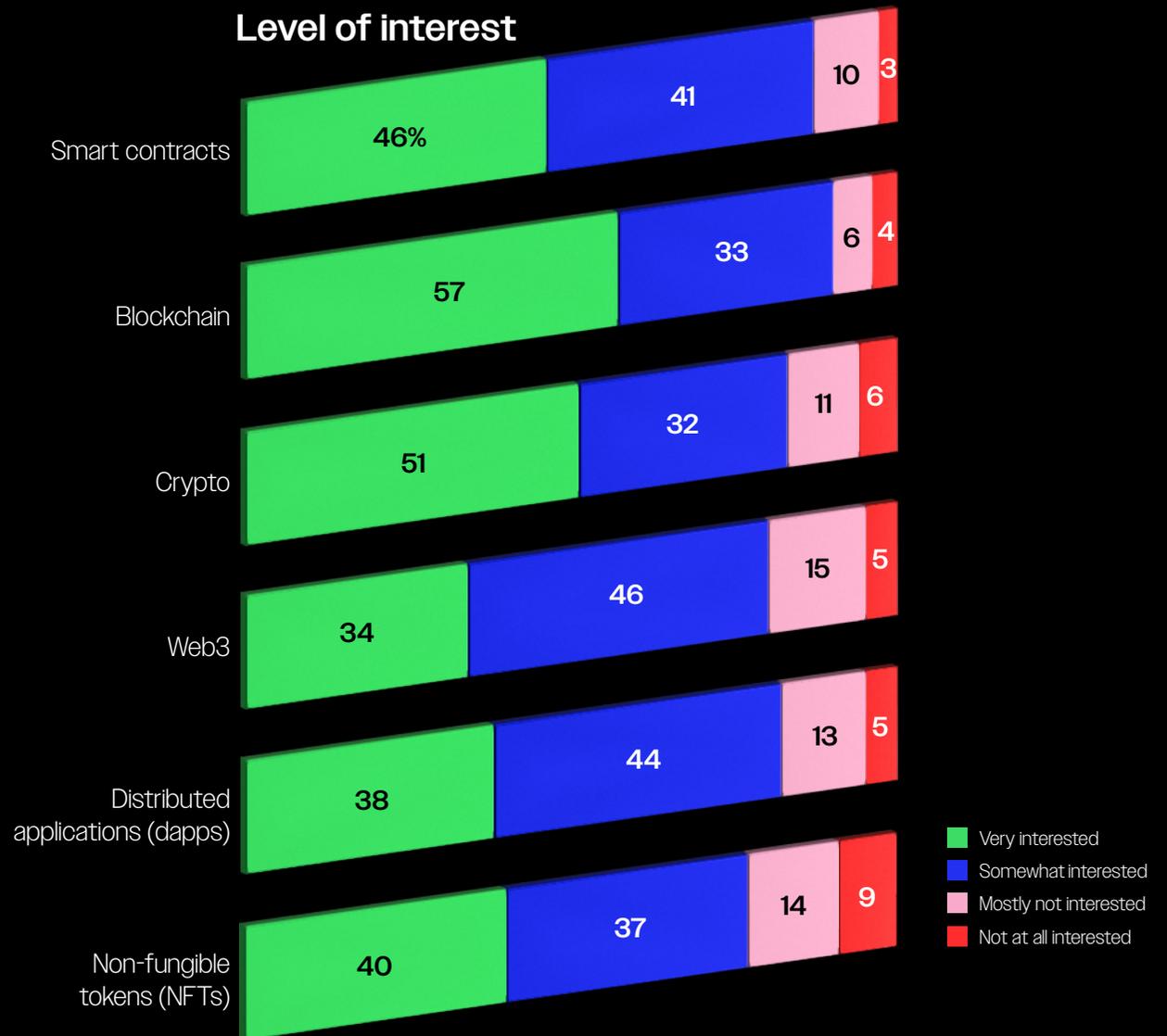
Organizations are universally bullish on blockchain adoption—with China leading the way.

The overwhelming majority of business leaders anticipate acting on their understanding and interest in blockchain technology and their recognition of a growing number of emerging applications.

In fact, 87% say they are likely to invest in a blockchain solution that meets their needs over the next year, even after experiencing ongoing macroeconomic uncertainty in 2022.

Decision-makers in China, where existing knowledge of blockchain is highest, are the most bullish on adopting the technology in 2023. Over half, (55%) of leaders in the region say they are very likely to make an investment. While not quite at China's pace, leaders in the UK (84%) and US (81%) also conveyed a likelihood to invest in a blockchain solution in 2023.

Likelihood of investing in a blockchain solution, 12 months from now

Globally
- 39%
- 6%
- 3%
- 4%
- 48%

US
- 34%
- 9%
- 4%
- 6%
- 47%

UK
- 42%
- 8%
- 4%
- 4%
- 42%

China
- 40%
- 3%
- 1%
- 1%
- 55%

Legend: ■ Very likely ■ Somewhat likely ■ Somewhat unlikely ■ Highly unlikely ■ Not sure
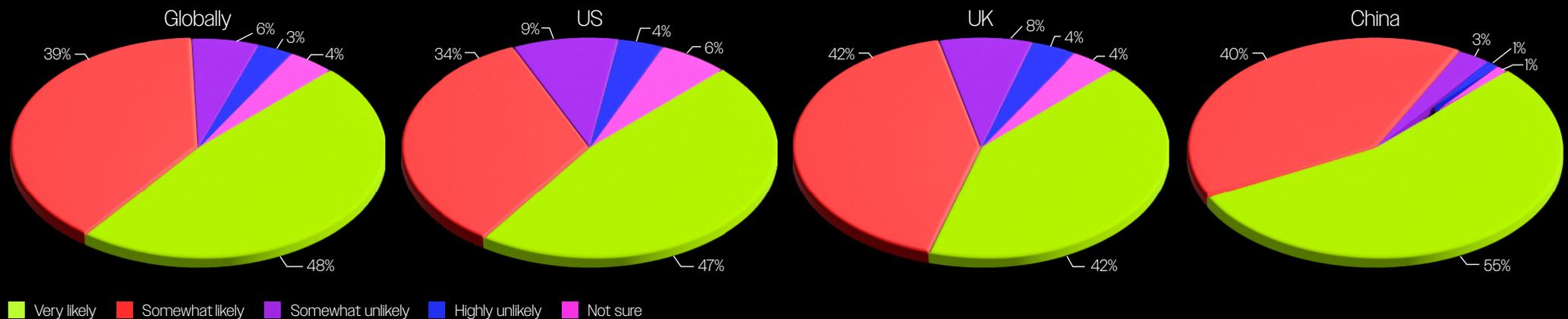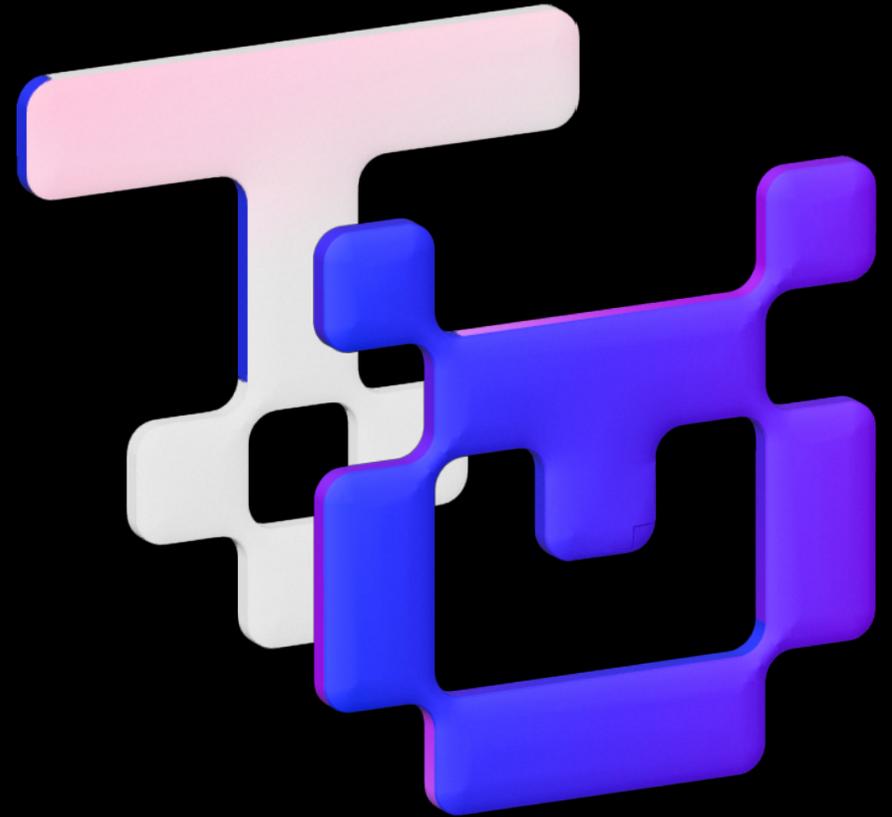
How Blockchain Technology Can Fill Existing Gaps

Despite decision-makers' willingness to adopt blockchain, leaders still crave more education about all the ways in which it can make an impact on their business.

Several organizations are still weighing their options, holding out for a tool that meets their needs.

When considering blockchain technology, leaders will prioritize a solution that is easy for developers to understand and implement. And they're likely to opt for hybrid solutions that are flexible, customizable, and scalable.

More than half of business leaders are still seeking the right blockchain provider.

Existing challenges have stifled organizations' ability to make progress on their intentions to build a more effective toolstack using blockchain technology. Though 35% are satisfied with their current blockchain solution, over half (51%) of business leaders either have not deployed blockchain yet and are considering it, or have deployed blockchain and are evaluating other solutions.

Current state of blockchain deployment

Globally: 24%, 2%, 12%, 27%, 35%

US: 33%, 3%, 13%, 25%, 26%

UK: 23%, 4%, 10%, 29%, 34%

China: 15%, 1%, 13%, 26%, 45%

- We haven't deployed any blockchain technology and aren't planning to
- We haven't deployed any blockchain technology, but we are considering it
- We have deployed blockchain technology and we are satisfied with our solution
- We have deployed blockchain technology and we evaluating alternatives
- None of the above

Despite clear and continued enthusiasm for blockchain, challenges remain.

While business leaders have developed a significant amount of interest in adopting blockchain technology, key obstacles remain—specifically regarding developers' knowledge of the tool.

For those who have implemented blockchain, over half (52%) of global respondents shared that developers faced a steep learning curve. Lengthy implementation timelines (39%) and regulatory and compliance hurdles (39%) were subsequent challenges during the onboarding process, all signaling the need for stronger developer resources such as professional blockchain services to make implementation successful.

For those who haven't yet adopted blockchain, limited developer knowledge is the largest obstacle holding them back. Because legacy blockchain tools have long been built on highly specialized programming languages, a tool that's compatible with more familiar languages could be more appealing and easier for teams to implement without dedicated professional services.

Obstacles experienced during or after implementation

Globally (n=529)
- 52%
- 32
- 41
- 39
- 24
- 14

US (n=167)
- 49
- 28
- 41
- 37
- 23
- 17

UK (n=173)
- 52
- 38
- 42
- 41
- 29
- 11

China (n=189)
- 56
- 30
- 39
- 38
- 20
- 15

Legend:
- None; there were no obstacles
- We didn't see immediate ROI
- We face regulatory/compliance hurdles
- Implementation took too long
- It was hard to use and maintain
- Steep learning curve for developers

Obstacles to blockchain adoption

Globally (n=74)
- 26%
- 20
- 18
- 12
- 11
- 12
- 24
- 3
- 16

US (n=35)
- 17
- 20
- 14
- 6
- 11
- 17
- 26
- 3
- 26

UK (n=29)
- 29
- 14
- 29
- 11
- 7
- 29
- 4
- 9

China (n=11)
- 46
- 36
- 36
- 18
- 27
- 9

Legend:
- None
- Other
- We understand blockchain, but don't have a viable use case
- We've attempted adoption, but were dissatisfied
- We face regulatory roadblocks to adoption
- We don't have the budget
- There's too much cynicism or skepticism in the company
- Blockchain is not interoperable with our existing tech
- Our developer's knowledge of blockchain is limited

Limited education prevents widespread blockchain adoption.

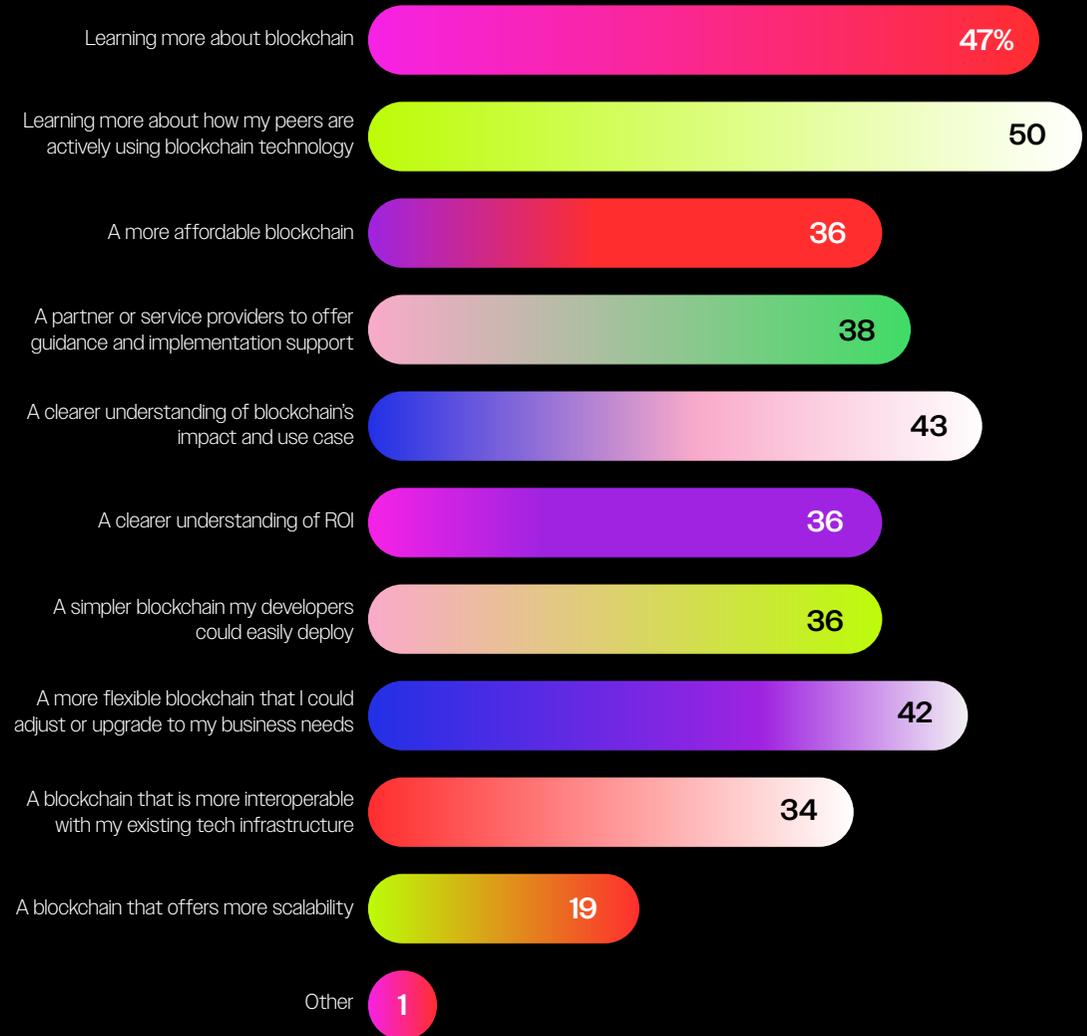Leaders across regions, industries, and company sizes admit that more dedicated educational resources are needed for successful widespread blockchain adoption. The overwhelming majority (98%) of respondents say they would be more likely to adopt blockchain for their business if they learned more about the technology and understood how their peers were using it.

Not only do decision-makers crave education about how blockchain technology functions, but they also long for examples of use-cases and proof of impact in addition to more flexibility from current blockchain solutions, which can be notoriously time-consuming and complex to deploy.

"Which of the following would increase your likelihood to adopt blockchain for your business?"

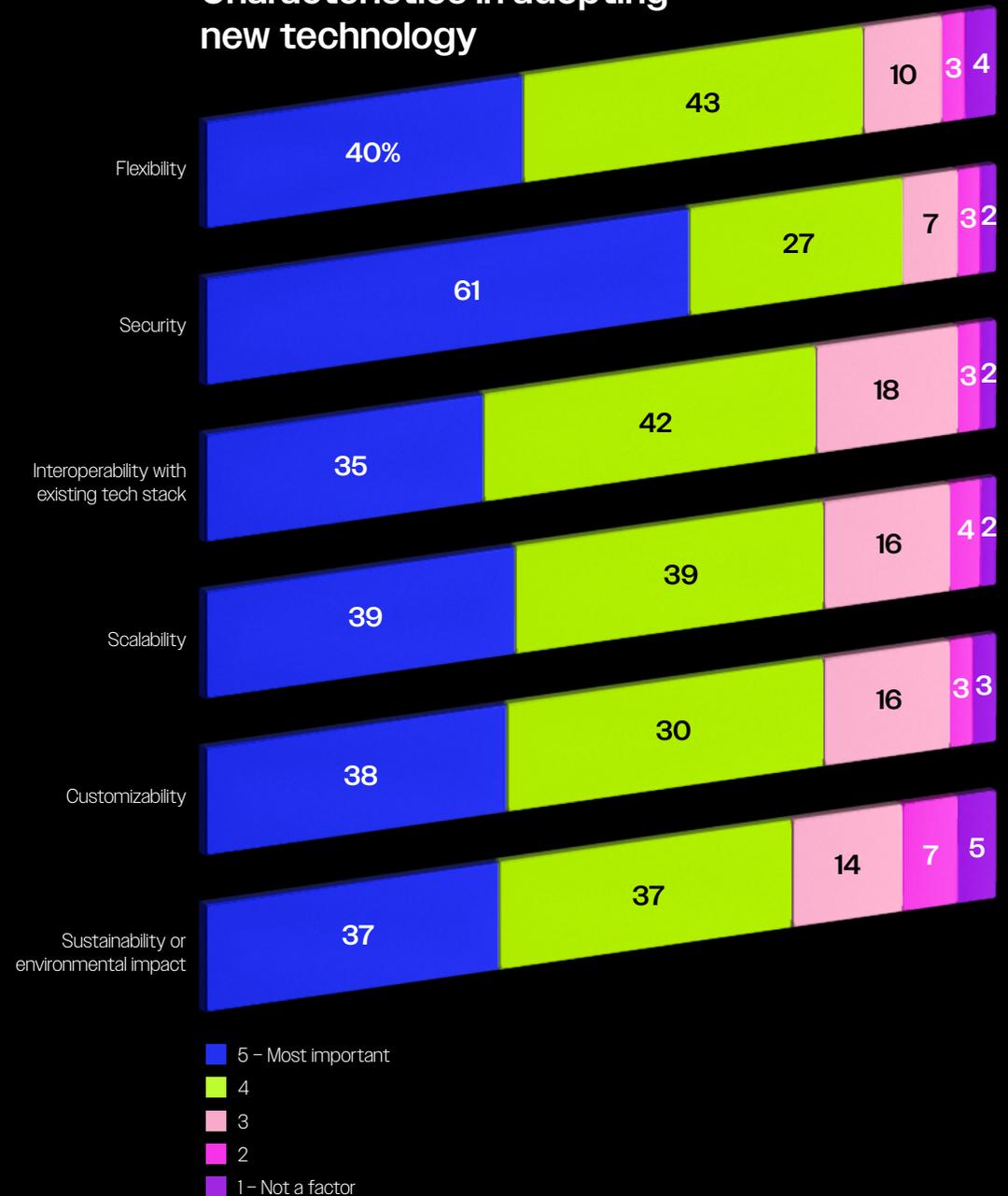| Category	Value
Learning more about blockchain	47%
Learning more about how my peers are actively using blockchain technology	50
A more affordable blockchain	36
A partner or service providers to offer guidance and implementation support	38
A clearer understanding of blockchain's impact and use case	43
A clearer understanding of ROI	36
A simpler blockchain my developers could easily deploy	36
A more flexible blockchain that I could adjust or upgrade to my business needs	42
A blockchain that is more interoperable with my existing tech infrastructure	34
A blockchain that offers more scalability	19
Other	1

When it comes to adopting new technology, security reigns supreme.

Even with more education, decision-makers aren't willing to settle for any blockchain solution. Because the tool is used to manage company and customer data, leaders naturally require any consideration to meet expected security requirements.

Following security, global leaders will prioritize: flexibility (83%), scalability and customizability (78%), and interoperability (77%), which ensures organizations can seamlessly plug new tools into their existing infrastructure without significant backend re-engineering. While decision-makers in the US and the UK will prioritize a tool that offers customizability, flexibility, and scalability, in China, sustainability or environmental impact and interoperability with their existing tech stack is ranked as a higher priority.

Characteristics in adopting new technology

Characteristic	5 – Most important	4	3	2	1 – Not a factor
Flexibility	40%	43	10	3	4
Security	61	27	7	3	2
Interoperability with existing tech stack	35	42	18	3	2
Scalability	39	39	16	4	2
Customizability	38	30	16	3	3
Sustainability or environmental impact	37	37	14	7	5

Legend:
- 5 – Most important
- 4
- 3
- 2
- 1 – Not a factor

Decision-makers are more likely to adopt a hybrid blockchain solution.

Lastly, when seeking the right blockchain tool, business leaders across demographics will continue to prioritize both private and public capabilities, so organizations don't have to make trade-offs regarding control, trust, and flexibility.

The overwhelming majority (86%) of respondents would be more interested in deploying blockchain if there were a hybrid option that allowed the secure migration of data between public and private environments.

"I would be more interested in deploying blockchain technology if there were a hybrid option that allowed one to migrate data securely and privately between private and public environments."

Globally: 9%, 2%, 1%, 2%, 46%, 40%

US: 9%, 2%, 1%, 3%, 45%, 40%

UK: 10%, 3%, 1%, 1%, 50%, 35%

China: 7%, 1%, 1%, 1%, 45%, 45%

Legend:
- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree
- Not sure
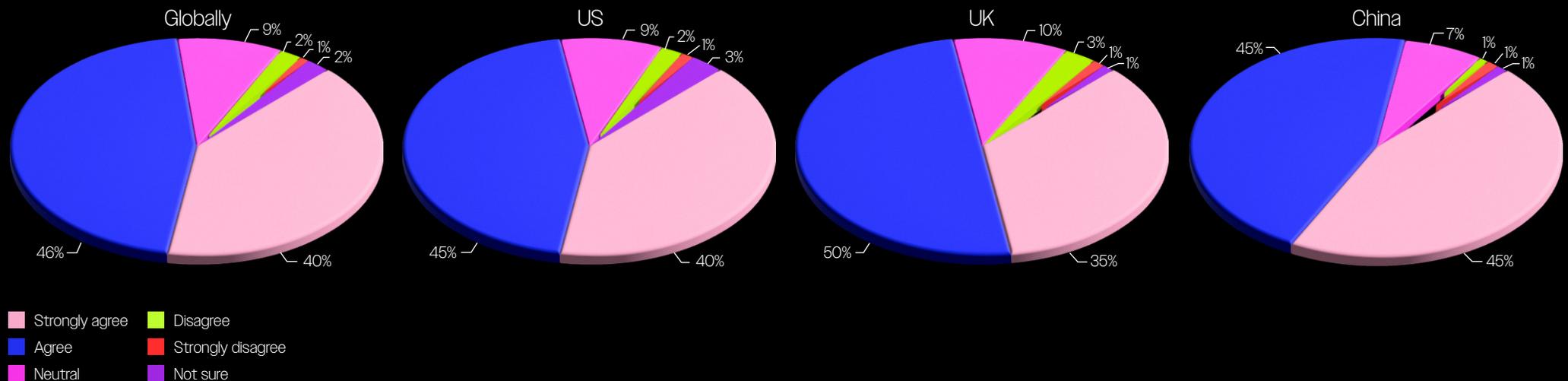
Chapter 4

Assessing Business Readiness for 2023 and Beyond

In spite of global economic uncertainty heading in 2023, organizations are facing the new year with confidence.

No doubt, there are concerns and challenges. Many are worried about difficulties in staffing and hiring, others are grappling with outdated or inefficient technology. And nervousness surrounding the global economy can't be ignored.

Nevertheless, many are reporting higher budgets than they were expecting. And, as a result, their sights are set on growing revenue and strengthening security.

For organizations fortunate enough to have healthy budgets to spend, the majority plan to adopt new technologies to help them meet those lofty goals.

Technology budgets are expected to increase in 2023.

Even amid a looming downturn, the global majority (82%) expect their business' technology budgets to increase at least somewhat in 2023. Respondents in the UK and US are somewhat more bold in their expectations than those in China: 27% and 24%, respectively, said they predict their budgets will be much higher compared to 14% of respondents in China.

These bullish budget projections also apply more specifically to software: Over half (54%) of companies globally expect more money to be poured into software in the next 12 months.

2023 technology budget, compared to 2022

	Much higher	Somewhat higher	Much lower	Somewhat lower	No change	Not sure
Globally	22%	60	3	6	8	1
US	24	59	4	5	7	1
UK	27	52	3	8	9	1
China	14	67	4	6	8	1
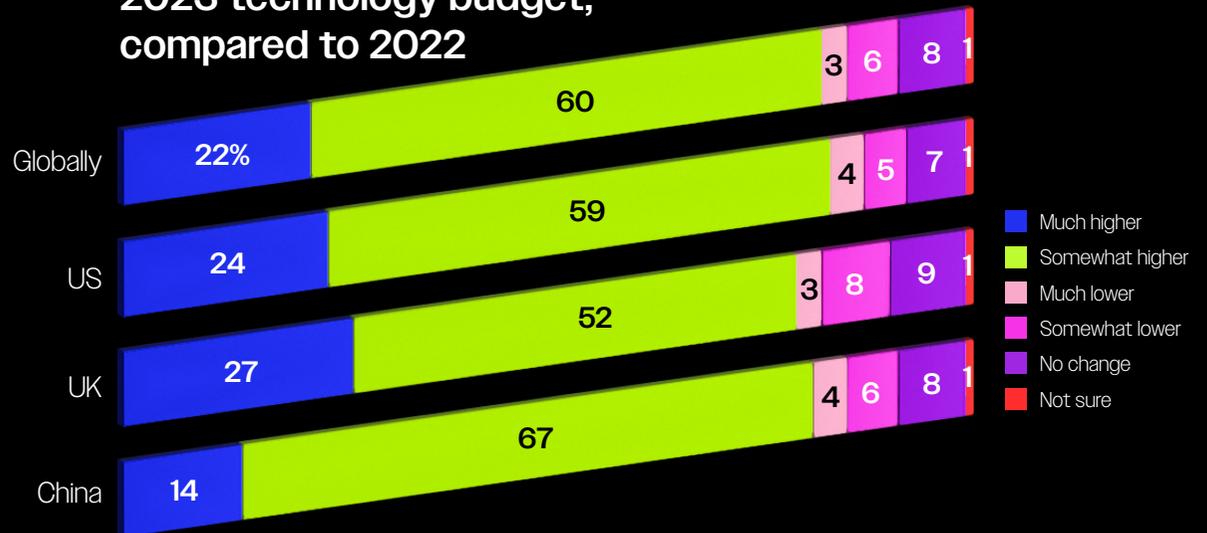
Expectations for software budget changes in the next 12 months

	Significantly increase	Slightly increase	No change expected	Slightly decrease	Significantly decrease
Globally	27%	47	7	15	4
US	27	49	8	12	4
UK	24	42	10	20	4
China	31	49	2	12	6
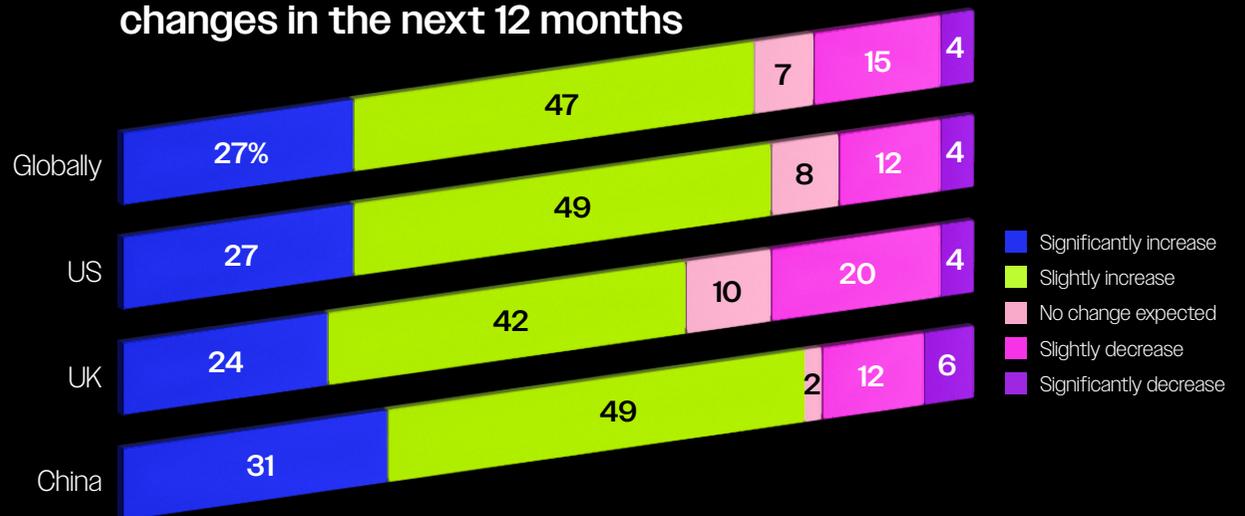
Optimism persists in the face of uncertainty.

Respondents remain optimistic about their companies' future. Globally, nearly half (48%) describe their outlook as very optimistic, with another 44% saying they are somewhat optimistic.

US firms (60%) remain decidedly more optimistic about the future than their counterparts in the UK and China. Approximately 40% of respondents in those geographies say they are optimistic.

"How optimistic do you feel about your company's future?"

Globally
- Very optimistic: 48%
- Somewhat optimistic: 44
- Somewhat pessimistic: 6
- Very pessimistic: 1
- Not sure: 1

US
- Very optimistic: 61
- Somewhat optimistic: 31
- Somewhat pessimistic: 6
- Very pessimistic: 1
- Not sure: 1

UK
- Very optimistic: 41
- Somewhat optimistic: 48
- Somewhat pessimistic: 8
- Very pessimistic: 2
- Not sure: 1

China
- Very optimistic: 42
- Somewhat optimistic: 54
- Somewhat pessimistic: 2
- Very pessimistic: 1
- Not sure: 1

Legend:
- Very optimistic
- Somewhat optimistic
- Somewhat pessimistic
- Very pessimistic
- Not sure

Companies feel prepared for 2023.

Optimism likely stems not only from bigger budgets, but also from a sense of readiness to take on what lies ahead. 2022 was a challenging year in many ways: between COVID's long tail, a raging war in Europe, growing interest rates and inflation, and numerous other factors, an economic downturn feels virtually unavoidable. Yet an overwhelming majority of respondents (83%) feel that, since Q3, they are at least somewhat more prepared to deal with future challenges.

That's not to say that 2023 will be smooth-sailing. But knowing what to expect (whether based on past recession or trustworthy predictions) and bracing for it has helped companies feel more steady. Less than 5% feel less prepared than they did in Q3.

Level of preparedness since Q3 2022

Globally — 12% · 4% · 48% · 36%

US — 16% · 5% · 45% · 34%

UK — 11% · 3% · 1% · 54% · 31%

China — 9% · 4% · 45% · 42%

- ■ Significantly more prepared
- ■ Somewhat more prepared
- ■ Somewhat less prepared
- ■ Significantly less prepared
- ■ No change
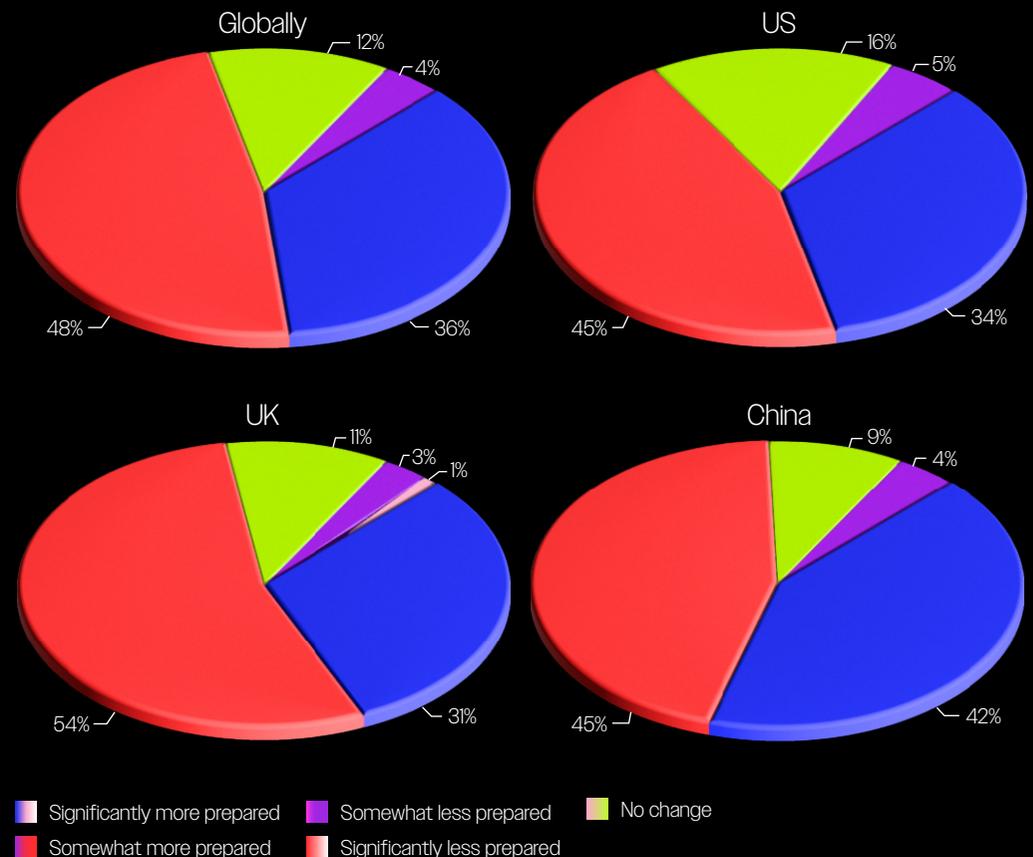
Top business challenges vary by geography.

The biggest challenge organizations share moving into the new year is a lack of staff to reach their full potential (33%), followed by—no surprise—budget constraints that make it difficult to reach goal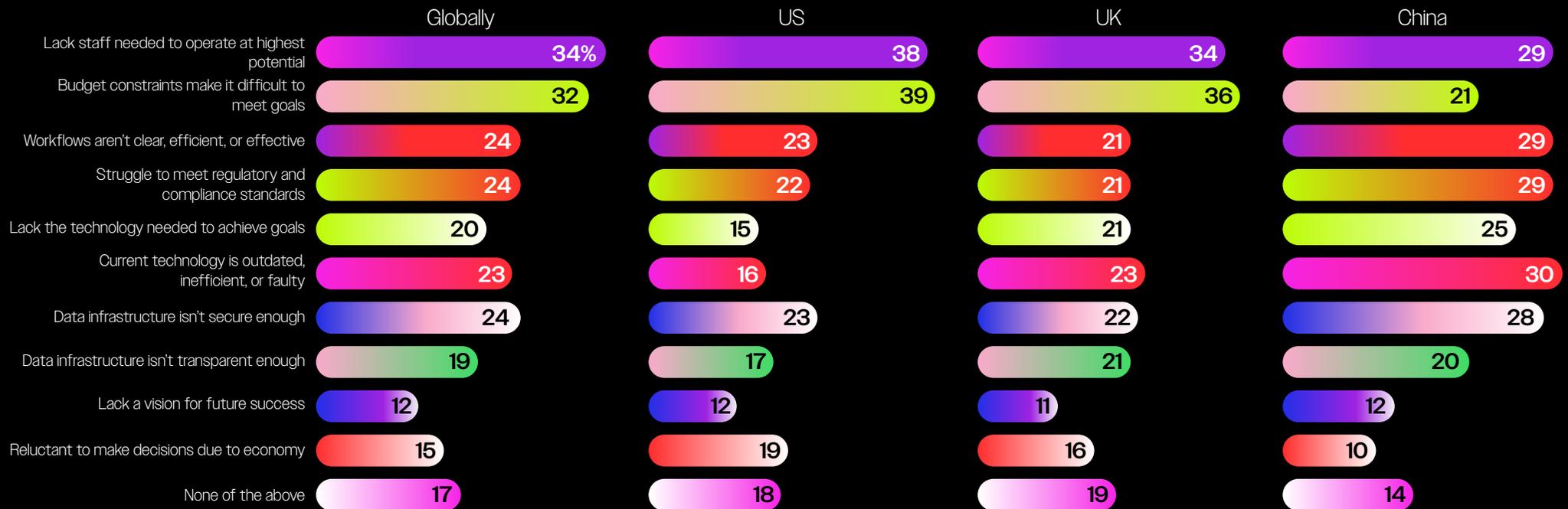s. But there's some geographical nuance. In the US, budgets are not only the top concern (39%), but also a bigger concern than anywhere else.

In China, meanwhile, just 21% are worried about financial constraints. There, respondents are more worried about outdated technology (30%). In fact, it's their top challenge. Meeting regulatory requirements is also of particular concern in China—29% called it a challenge.

In the UK, respondents' top challenge is their budget too (36%), though staffing challenges are close behind.

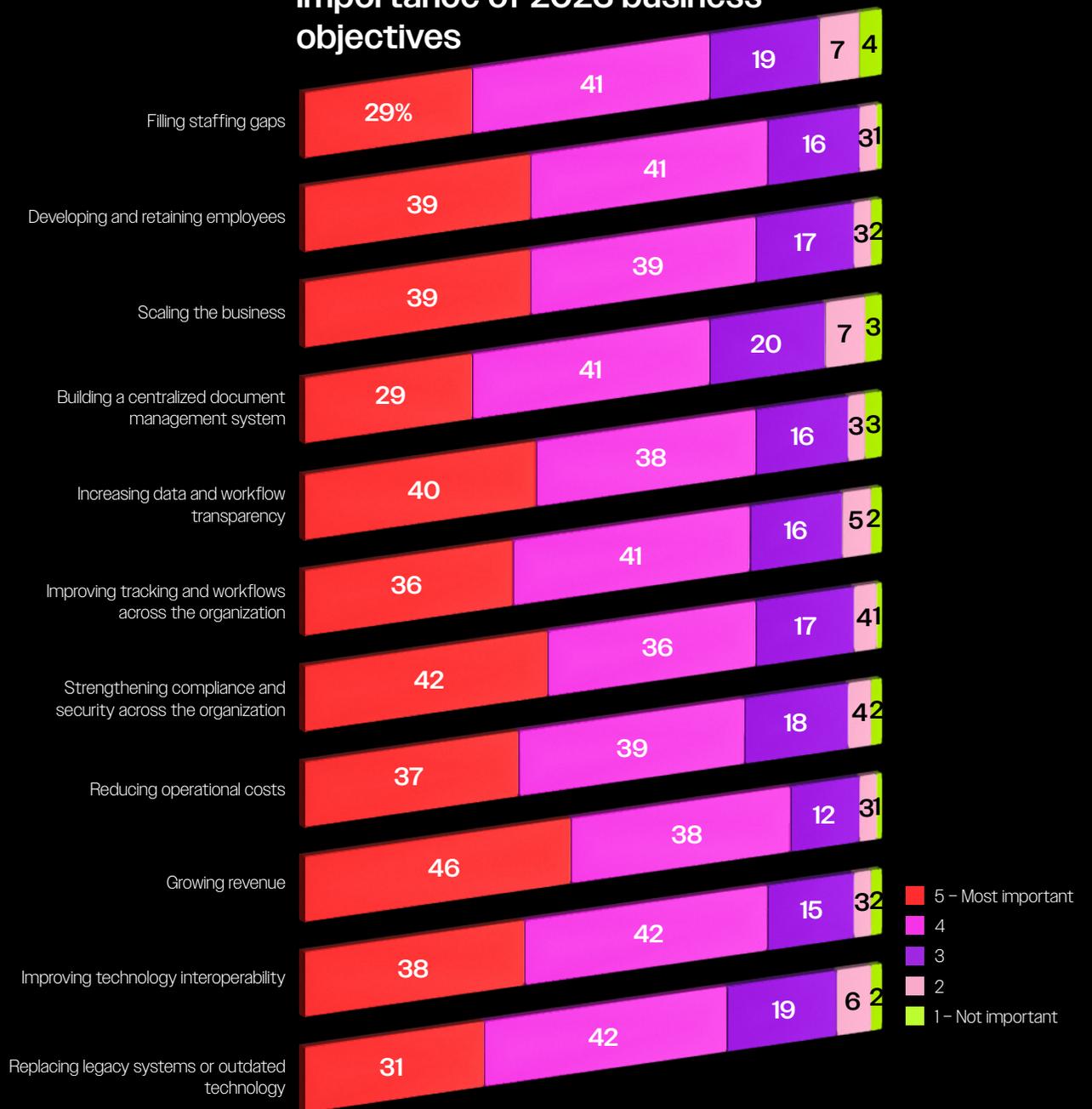|	Globally	US	UK	China
Lack staff needed to operate at highest potential	34%	38	34	29
Budget constraints make it difficult to meet goals	32	39	36	21
Workflows aren't clear, efficient, or effective	24	23	21	29
Struggle to meet regulatory and compliance standards	24	22	21	29
Lack the technology needed to achieve goals	20	15	21	25
Current technology is outdated, inefficient, or faulty	23	16	23	30
Data infrastructure isn't secure enough	24	23	22	28
Data infrastructure isn't transparent enough	19	17	21	20
Lack a vision for future success	12	12	11	12
Reluctant to make decisions due to economy	15	19	16	10
None of the above	17	18	19	14

2023 business priorities span revenue and tech changes.

Despite obstacles—and in light of economic pressure—the top business objective organizations report going into the new year is growing revenue. Nearly half of respondents (46%) called it their most important priority in 2023. Strengthening security and compliance was a close second. It's the most important priority for 42% of respondents.

Technology was at the forefront of several 2023 goals: increasing data and workflow transparency was the most important priority for 40% of respondents, with improving technology interoperability (38%), improving tracking and workflows (36%), and replacing legacy systems (31%) emerging as key priorities as well.

Importance of 2023 business objectives

Filling staffing gaps: 29% | 41 | 19 | 7 | 4
Developing and retaining employees: 39 | 41 | 16 | 3 | 1
Scaling the business: 39 | 39 | 17 | 3 | 2
Building a centralized document management system: 29 | 41 | 20 | 7 | 3
Increasing data and workflow transparency: 40 | 38 | 16 | 3 | 3
Improving tracking and workflows across the organization: 36 | 41 | 16 | 5 | 2
Strengthening compliance and security across the organization: 42 | 36 | 17 | 4 | 1
Reducing operational costs: 37 | 39 | 18 | 4 | 2
Growing revenue: 46 | 38 | 12 | 3 | 1
Improving technology interoperability: 38 | 42 | 15 | 3 | 2
Replacing legacy systems or outdated technology: 31 | 42 | 19 | 6 | 2

Legend:
- 5 – Most important
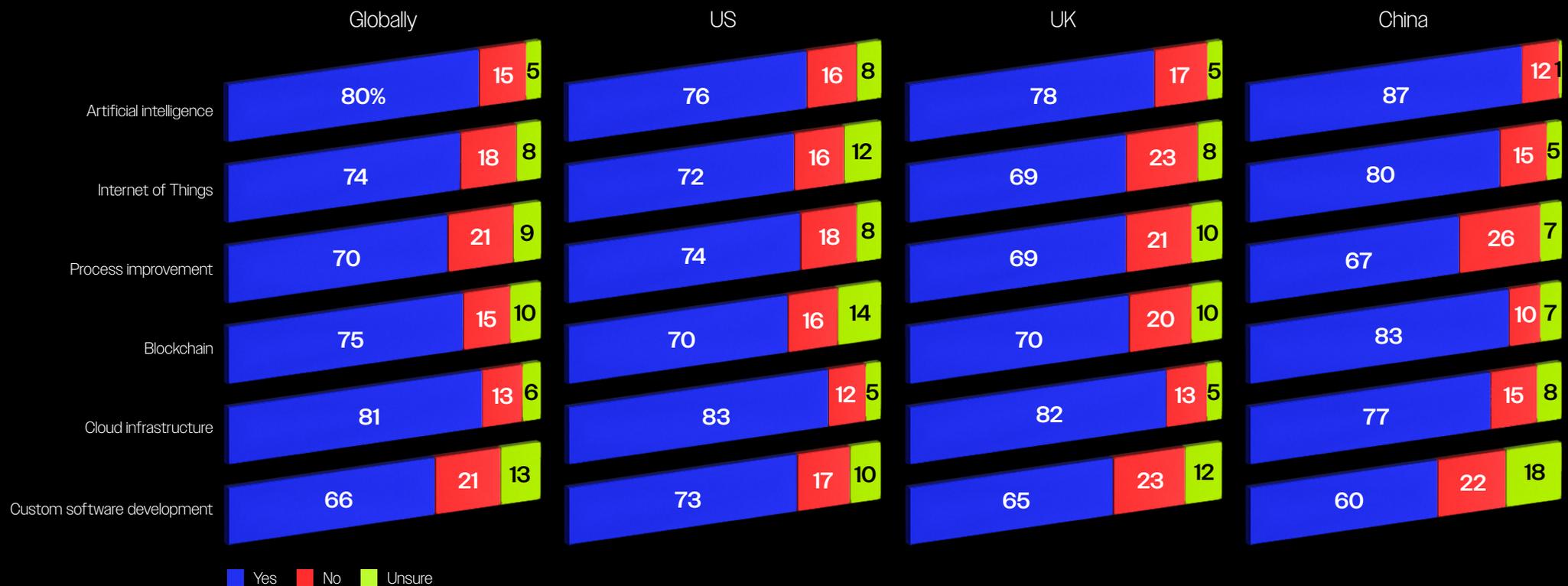- 4
- 3
- 2
- 1 – Not important

Tech adoption can fuel value.

As companies head into 2023 and lay the foundation for success, technology will be essential based on the priorities they've established. To realize their goals—from growing revenue, to increasing transparency, and even retaining employees—many plan to adopt new tools.

Over the next 12 months, roughly 80% of global respondents plan to adopt AI and cloud technology, well-established solutions that have proven their value across use cases and industries. Blockchain is now almost equally critical to business. Two thirds of global respondents predict they will adopt in the next 12 months—an indication that they recognize its value and transformation potential.

"I predict we will increase spending on the following tools:"

Globally

	Yes	No	Unsure
Artificial intelligence	80%	15	5
Internet of Things	74	18	8
Process improvement	70	21	9
Blockchain	75	15	10
Cloud infrastructure	81	13	6
Custom software development	66	21	13

US

	Yes	No	Unsure
Artificial intelligence	76	16	8
Internet of Things	72	16	12
Process improvement	74	18	8
Blockchain	70	16	14
Cloud infrastructure	83	12	5
Custom software development	73	17	10

UK

	Yes	No	Unsure
Artificial intelligence	78	17	5
Internet of Things	69	23	8
Process improvement	69	21	10
Blockchain	70	20	10
Cloud infrastructure	82	13	5
Custom software development	65	23	12

China

	Yes	No	Unsure
Artificial intelligence	87	12	1
Internet of Things	80	15	5
Process improvement	67	26	7
Blockchain	83	10	7
Cloud infrastructure	77	15	8
Custom software development	60	22	18

Legend: ■ Yes ■ No ■ Unsure

Beyond the hype cycle: the blockchain era is here.

NFT security. Supply chain management. Background screening and vetting. The business use cases for blockchain continue to grow every day. Enterprises are seizing the opportunity to radically transform operations, fundamentally increasing data transparency and trust.

And as blockchain gains traction and matures, there's endless opportunity to innovate and identify new applications for the technology that can unlock value in previously unknown, surprising ways. The time to adopt, experiment, and iterate is now.
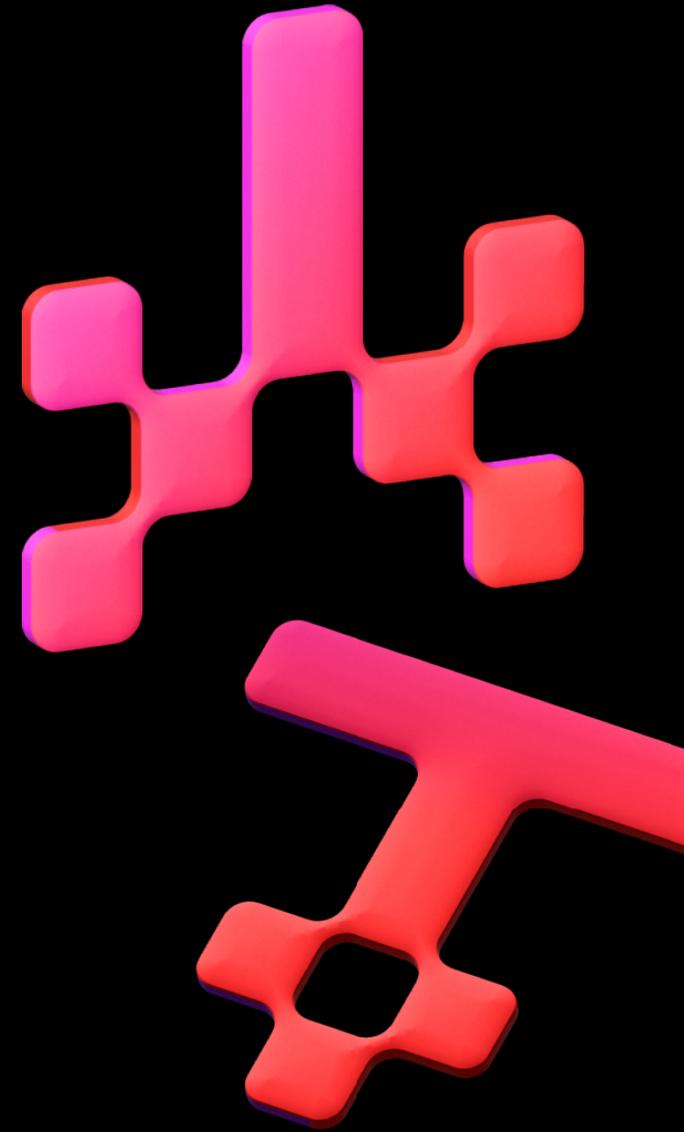
About Casper Labs

Casper Labs is the enterprise blockchain software leader. Casper Labs built the first layer-1 blockchain for the scale and operational needs of business, creating complete transparency for all business transactions. Casper Labs delivers applications and services that drive revenue and radical efficiency for companies and governments. We are on a mission to build the essential foundation for an entirely new era of customer value and business success.