MODUS CREATE

2022 STATE OF DIGITAL TRANSFORMATION

How will businesses prioritize digital initiatives in 2022?

CONTENTS

INTRODUCTION

The gap between digital haves and have-nots has never been this wide.

2021 witnessed transformative organizations surge past competitors to thrive in the new normal. Businesses realized that neither size nor legacy guarantees market share anymore. Change or perish — the message was loud and clear.

There is no doubt about the way forward. But are executives in the US ready to meet the challenge in 2022?

As a digital consulting organization, this is a strategic question for us. But it is also a question that will interest proactive enterprises looking to understand the digital appetite of their peers.

Last year, our experts had made a series of predictions in the eBook Digital Transformation Trends to Watch for in 2021. Some of those predictions, such as the widespread adoption of hybrid work and asynchronous collaboration, and the rise of super-boutique consultancies, were among the defining technology trends of 2021.

However, this year we wanted to take a different approach. This report is based on a survey of over 1,000 senior business leaders in the United States and the insights of our executive team. It will provide you with a balanced perspective on digital plans for 2022.
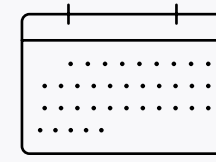
We hope this report is both compelling and useful. 2022 is going to be another fascinating year.
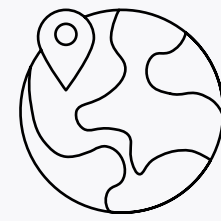
SURVEY METHODOLOGY

We partnered with the global public opinion and data company YouGov to survey business executives and managers at private, for-profit companies in the United States.
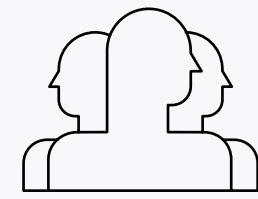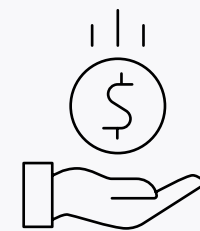
Total respondents
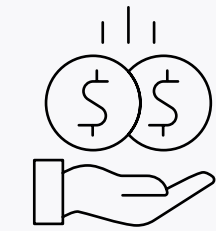**1,006**

Survey period
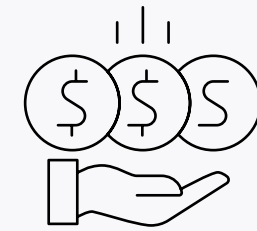**October 2021**

Survey location
United States

The respondents represented organizations by industry and annual revenue. In this report, we've defined the organization's size based on its annual revenue.

Small
< $1 MM

Medium
$1 MM to 500 MM

Large
> $500 MM

All survey respondents are senior executives who are either members of the C-Suite, divisional/group heads, or IT decision-makers.

Digital initiatives include a wide spectrum of projects, and defining them can be challenging. Therefore, for accurate responses, our survey included a specific definition of digital initiatives, which is what the phrase represents throughout this report. According to that definition, digital initiatives refer to any of the following projects:

+ Improving cybersecurity posture
+ IT modernization, like resolving technical debt or cloud migration
+ Transforming or digitizing processes for stakeholders
+ Launching new customer-facing applications or features
+ Reskilling/training employees (e.g. in Agile, low code apps)
+ Customer capture and retention in digital channels
+ Implementing AI or RPA technologies
+ Solving customer pain points with design thinking
+ Creating an internal Innovation Hub or Lab

So, let's begin with the phrase that both scares and excites businesses: **digital transformation**.

1. DIGITAL TRANSFORMATION IS FAR FROM OVER

62% of American organizations plan to pursue a digital initiative in 2022.

Digital transformation is not a covid-propelled "response" that will lose steam as the situation normalizes. It is a macro trend with deeper implications. The pandemic simply caused an acceleration of trends already bubbling beneath the surface.

According to Google Trends, the interest in digital transformation was already growing before the pandemic and is still at an all-time high. We are nowhere near the saturation point yet. (Ex. 1)

A report by IDC states that the global spending on the digital transformation market is projected to grow to $2.8 trillion by 2025, at a compound annual growth rate (CAGR) of 16.4%.
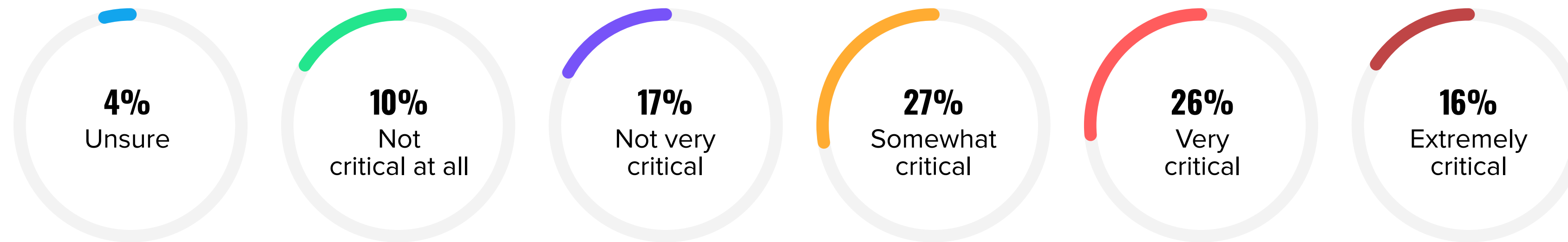
EXHIBIT 1: SEARCH QUERIES FOR "DIGITAL TRANSFORMATION" KEYWORD

Interest over time

Jan 1, 2014	Jun 6, 2016	Nov 1, 2018	Apr 1, 2021

EXHIBIT 2: HOW CRITICAL DO YOU CONSIDER DIGITAL INITIATIVES FOR YOUR ORGANIZATION'S OVERALL HEALTH?

4%
Unsure

10%
Not critical at all

17%
Not very critical

27%
Somewhat critical

26%
Very critical

16%
Extremely critical

Our survey revealed that 69% of American organizations consider digital initiatives critical for their organization, and 62% plan to pursue a digital initiative in 2022. (Ex. 2)

This might seem like a high number, but it is less than we expected.

EVERY COMPANY IS A TECHNOLOGY COMPANY

31% of organizations don't feel that digital initiatives are critical to their future, which is a clear indication of their untapped potential.

The level of digital awareness varies considerably with the industry. Media/Entertainment (66%), Finance/Accounting (59%), Research/Engineering (54%), Manufacturing (50%) and Healthcare (45%) have a high percentage of executives who believe digital initiatives are either extremely or very critical to their organization's overall health. Wholesale/Retail (35%), Real Estate (25%), and Construction (23%) rank at the bottom. (Ex. 3)
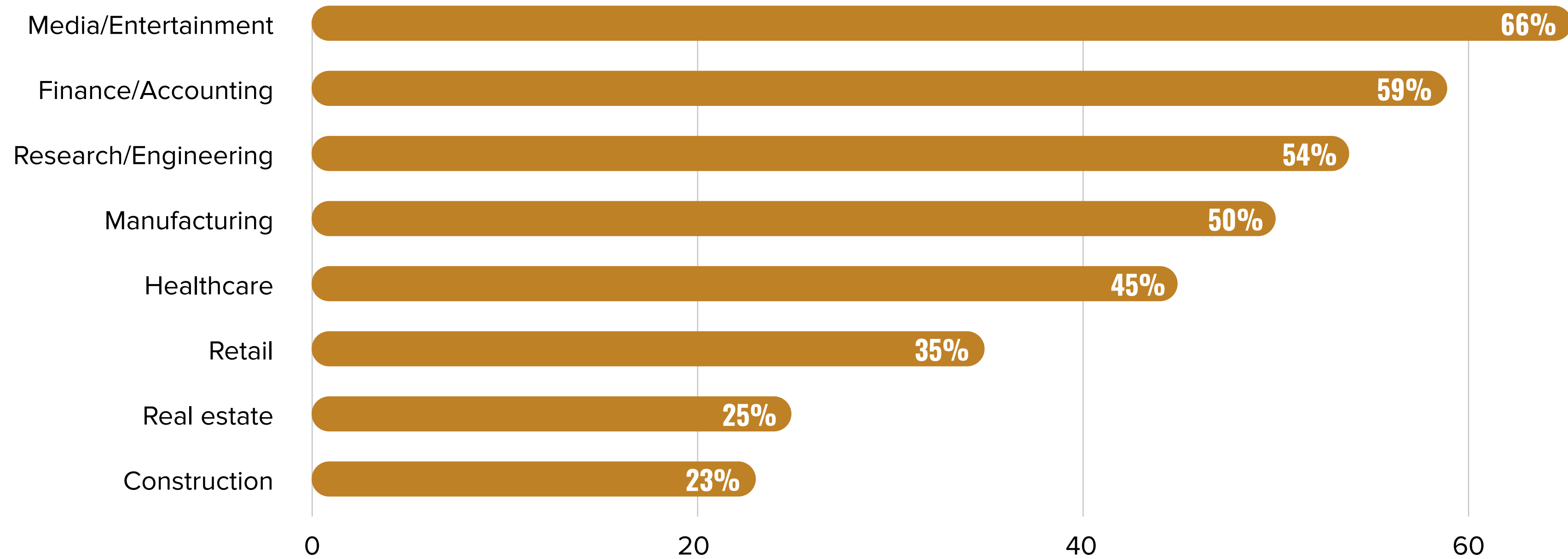
At Modus, we have witnessed various organizations from supposedly "traditional" industries embrace innovative digital initiatives with great results. For example, Bright MLS, a real-estate organization, solved one of the most pervasive issues in real estate, i.e., pricing insights for realtors with a new mobile app. Similarly, educational institutions that have traditionally relied on legacy technology are modernizing rapidly due to increased cybersecurity concerns.

As organizations realize the need to embrace digital initiatives, this industry-based disparity will continue to fade away. In today's world, every company is a technology company. They just need to realize that.

" **Technology in education is hitting a legacy point and increasing risk. We are seeing a lot of companies getting worried about scalability and data security.**

— Sarah McCasland, VP of Consulting Operations, Modus Create "

Industry	Percentage
Media/Entertainment	66%
Finance/Accounting	59%
Research/Engineering	54%
Manufacturing	50%
Healthcare	45%
Retail	35%
Real estate	25%
Construction	23%

THE ENTERPRISE STRIKES BACK

Large enterprises have witnessed unprecedented disruption, particularly in the previous decade. In 2020, the average lifespan of a company on the Standard and Poor's 500 Index was just over 21 years, compared with 32 years in 1965. There is a clear long-term trend of declining corporate longevity, which is expected to fall even further throughout the 2020s.

In 2016, McKinsey predicted that by 2027, 75% of the companies quoted on the S&P 500 would have disappeared from the list.

However, large enterprises are catching up with growing interest and spending in digital initiatives. (Ex. 4 and 5). 69% of large and medium companies are pursuing at least one of the digital initiatives listed in the survey compared to just 49% of small companies.

82% of larger enterprises, 74% of mid-level firms, and 57% of smaller American businesses consider digital initiatives critical to their business.

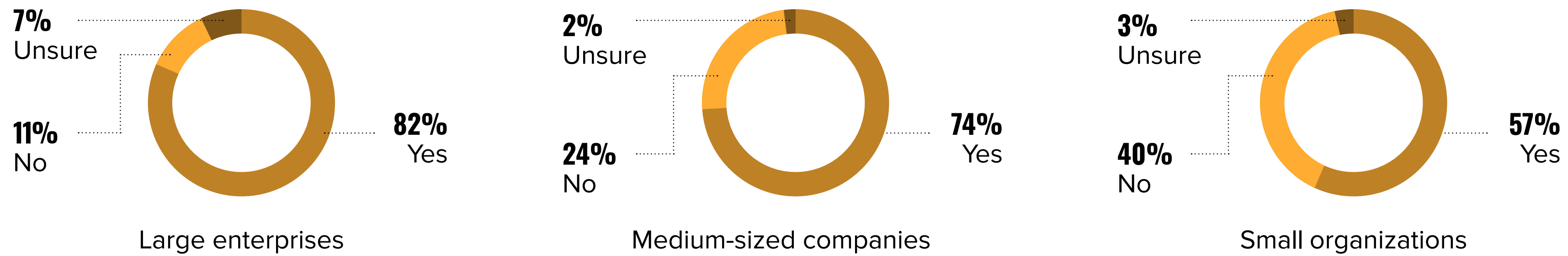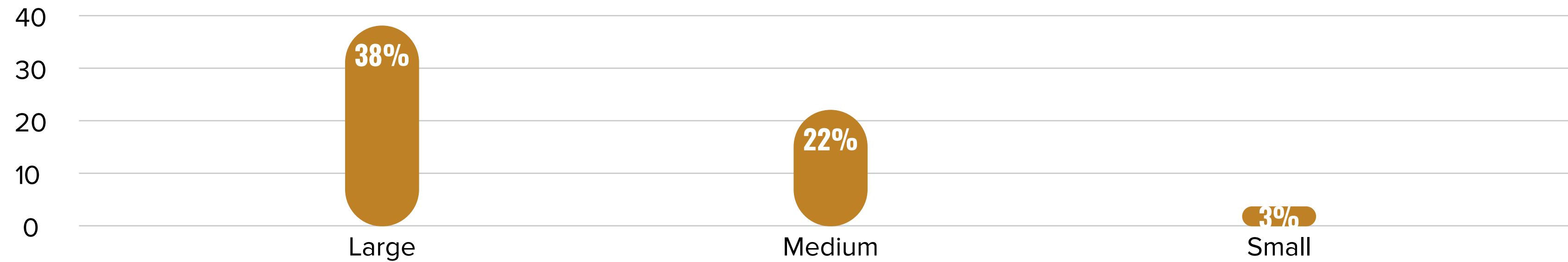EXHIBIT 4: ARE DIGITAL INITIATIVES CRITICAL TO YOUR ORGANIZATION'S OVERALL HEALTH? (BY ORGANIZATION SIZE)

7% Unsure
11% No
82% Yes

Large enterprises

2% Unsure
24% No
74% Yes

Medium-sized companies

3% Unsure
40% No
57% Yes

Small organizations

EXHIBIT 5: PERCENTAGE OF ORGANIZATIONS WITH PLANNED DIGITAL SPEND EXCEEDING $1 MILLION IN 2022

38% Large — 22% Medium — 3% Small

38% of large enterprises plan to spend over $1 million on digital initiatives in 2022. (Ex. 5)

Until recently, conventional wisdom dictated outsourcing IT projects to save costs, which is precisely what most large enterprises did. However, digital experiences are becoming a core part of their business model. For example, hotel companies are shifting from booking rooms to travel experience, while pharma companies shift focus from pills to health outcomes. In large enterprises, there is an increased desire for transformational change.

> " **In an analog world, IT was a commodity to be outsourced for the cheapest cost available. In the digital economy, it is the core IP with which you differentiate and enable value.** "
>
> — *Pat Sheridan, CEO, Modus Create*

The pace of digital transformation will continue to accelerate. Your business needs a digital strategy, regardless of industry.

Organizations that treat IT as the core IP to deliver value will outpace those treating it as a cost center.

As large enterprises reach digital maturity, you can no longer rely on speed to grab market share. Instead, focus on user experience to stand out in the market.

EXECUTIVE TAKEAWAYS
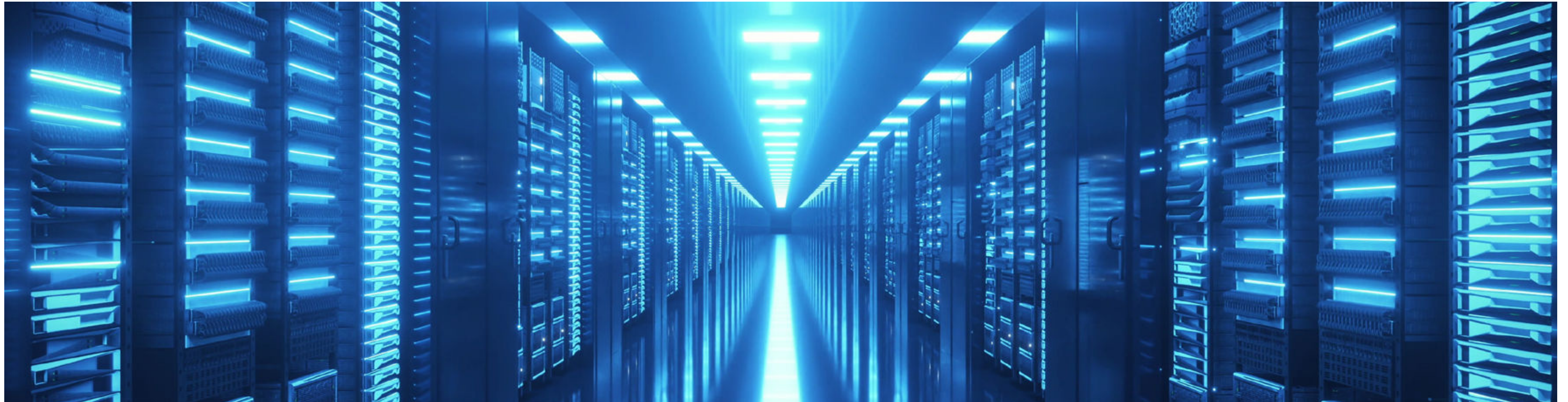
2. CYBERSECURITY IS A TOP PRIORITY

32% of American organizations plan to invest in improving their cybersecurity posture in the next two years, making it the most popular digital initiative across the board. (Ex. 6)

What's also striking is that cybersecurity is one of the leading digital initiatives regardless of the company size, and to some extent, the industry. According to another report by Gartner, increasing investment in cyber/information security was the most popular investment among CIOs.

Technology is devolving into the legacy realm faster than ever before and cyberattacks are increasing in both frequency and intensity. It can be intimidating for executives to join a new company and inherit the responsibility of their overall IT security. Moreover, it's especially difficult to evaluate security posture internally as it requires deep technical expertise and an understanding of the constantly shifting threat landscape. Security assessments help leaders deal with this problem, give a big picture, and plan actionable steps.

32% of American organizations plan to strengthen their cybersecurity posture in 2022.

REACTING TO CYBERATTACKS

Unlike some more advanced digital initiatives, investing in cybersecurity posture isn't a hard sell to executives as failure to do so can jeopardize their entire business.

Severe Impact: The repercussions of a poor security posture can be particularly severe. A report by Cyber Security Ventures predicts that cybercrimes will cost the world over $10 trillion by 2025. Already, the average cost of a data breach is over $4 million, according to IBM.

Higher Awareness: There have been several high-profile cyberattacks in the past 12 months. A recent report by Check Point Research stated that organizations experienced an average of 1,739 cyber attacks each week in July 2021, just in the education industry. Wider media coverage about cyberattacks has made organizations better aware of the need to strengthen cybersecurity.

Regulatory Compliance: Total fines under GDPR have exceeded $1.5 billion, and several new data protection laws are planned by countries like India, Canada, Vietnam, and South Korea in 2022. A strong cybersecurity posture is critical to protect user data and comply with privacy regulations.

Role in M&A: According to a report by Forescout, 73% of respondents feel that companies with an undisclosed data breach are an immediate deal-breaker in M&A strategy.

EXHIBIT 6: WHICH OF THE FOLLOWING DIGITAL INITIATIVES WILL YOUR ORGANIZATION INVEST IN THE NEXT TWO YEARS?

32%	Improving cybersecurity posture
27%	IT modernization, like resolving technical debt or cloud migration
22%	Transforming or digitizing processes for stakeholders
20%	Launching new customer-facing applications or features
18%	Reskilling/training employees (e.g. in Agile, low code apps)
17%	Customer capture and retention in digital channels
15%	Implementing AI or RPA technologies
13%	Solving customer pain points with design thinking
11%	Creating an internal Innovation Hub or Lab

With the rise of open source solutions at work, libraries can become attack vectors, further amplifying the risk of cyberattacks. In November 2021, Log4Shell, one of the biggest security vulnerabilities in IT history, was discovered in Log4j, a popular Java logging framework used by almost all big tech companies, affecting hundreds of millions of devices.

> "**Governments all around the world are cracking down and putting power back in consumer hands, making data privacy a major reason behind widespread cybersecurity initiatives.**"
>
> *— Jay Garcia, Chief Scientist, Modus Create* "

GATEWAY TO DIGITAL TRANSFORMATION

Projects aimed at improving cybersecurity posture are an excellent way for executives to get a complete overview of their technology infrastructure - from cloud environments and APIs to security culture.

Proactive organizations address security issues at two levels — 1) **tactical**: fixing high-risk vulnerabilities on priority 2) **strategic**: introducing structural changes to prevent further vulnerabilities. The latter creates the foundation for more sophisticated digital initiatives.

All the security assessments in the world can't help you if you have brittle systems and don't improve the core tradecraft of software development. Most data leaks are associated with nonautomated legacy technologies or lapses in basic security practices such as outdated roles and permission matrices.

Therefore, by focusing on improving the overall quality of the software development process, organizations can adopt a more proactive approach to dealing with cyberattacks. That's why security assessments are often a great way to enable more strategic application modernization initiatives.

Increasing threat surface and data privacy legislations have made cybersecurity a top priority for executives in 2022.

For a robust security posture, go beyond tactical fixes and focus on modernizing the overall software development process.
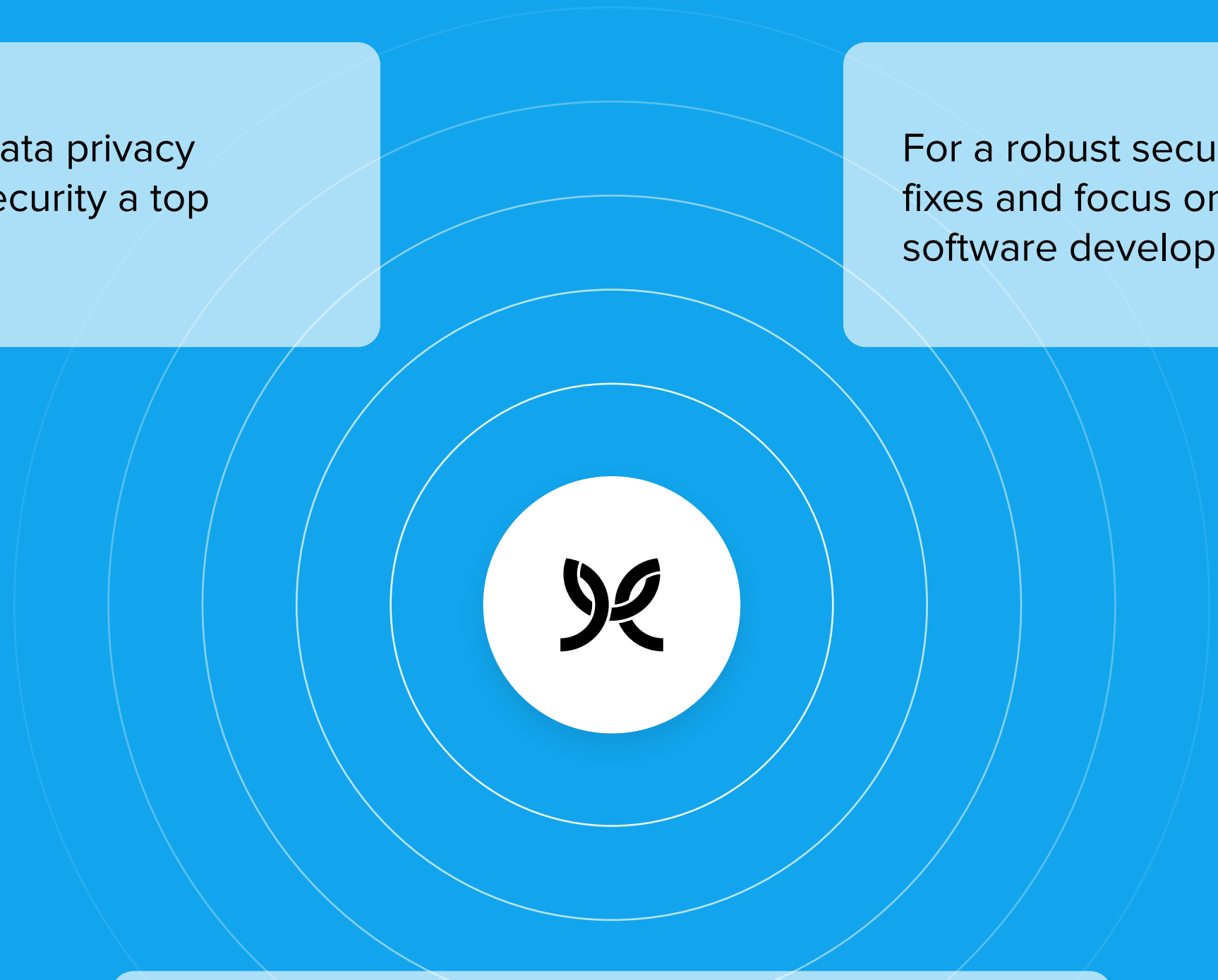
Watch out for nonautomated legacy technologies and outdated roles and permission matrices, which often cause data leaks. A full people, process, and product audit is usually necessary to uncover all risks.

EXECUTIVE TAKEAWAYS
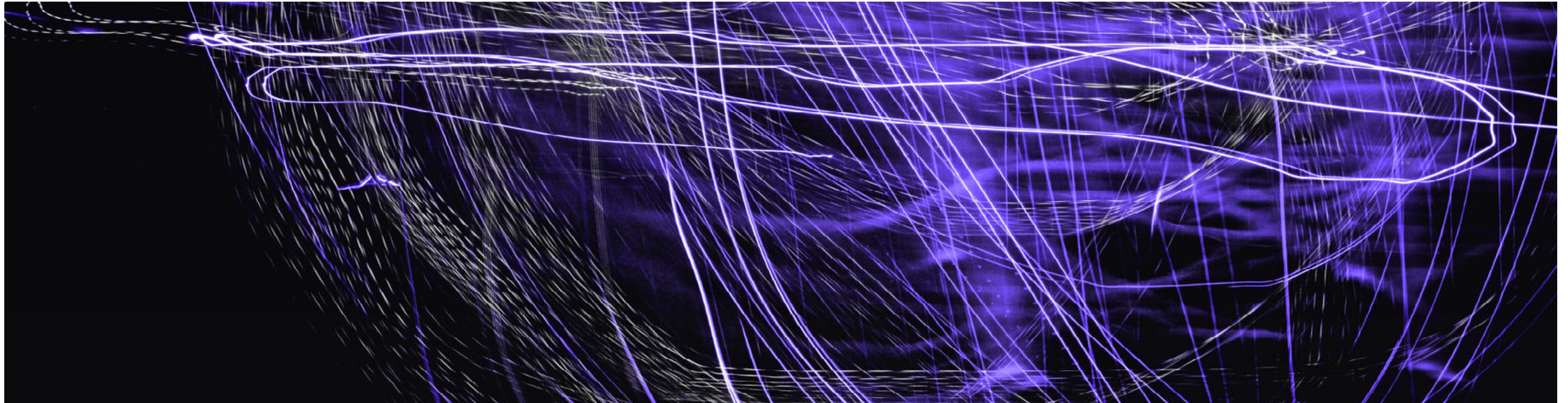
3. DECENTRALIZATION OF INNOVATION

Creating an innovation lab for new product development and ideation was the least popular digital initiative from our list among American companies we surveyed. (Ex. 6)

Only 11% of American organizations plan to create an innovation lab in the next two years.

There can be two reasons behind the decline in popularity of innovation labs — **1)** Most organizations already have one and therefore don't need to invest in it for the next two years. **2)** There is a general decline in the popularity of dedicated innovation cells.

The answer isn't conclusive, but there are enough signs to favor the latter.

After a period of steady increase, the interest in innovation labs has waned from 2017 onwards. (Ex.7) A report by Capgemini states that close to 90% of all innovation centers fail.

The past five years have witnessed several high-profile organizations shut down or scale down their innovation labs. On the other hand, organizations like Audi, McKinsey, and Verizon continue to support vibrant innovation centers. So, what makes them different?

Only **11%** of American organizations plan to create an innovation lab in the next two years.

Interest over time
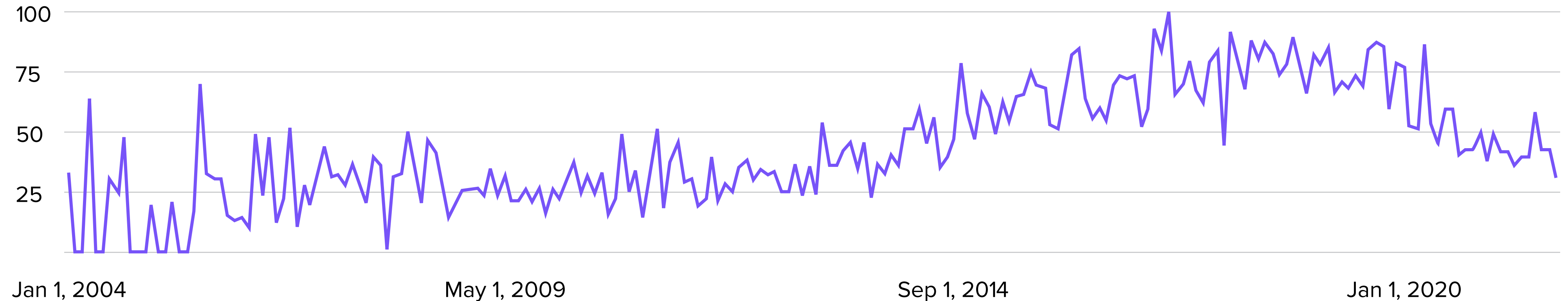
FROM THEATER TO THROUGHPUT

Many innovation labs succumb to making cosmetic/ experimental changes rather than working on real user problems. As a result, they tend to lose alignment with the organization's strategic goals and bear the brunt in times of crisis.

What separates high-performing innovation centers from the rest is their emphasis on throughput over theater. For example, Audi Business Innovation is a leading innovation center in the automotive industry. It works with cutting-edge technologies such as VR and AR. However, all of its work is aligned to solving real-world problems for potential customers, suppliers, partners, and internal stakeholders. This makes ABI an essential component of Audi's overall global strategy.

The shift from theater to throughput means focusing on product maturity rather than innovation for its own sake. Successful Chief Digital Officers have a knack for understanding new growth opportunities by working with sales and marketing and enabling new channels to turn opportunities into revenue streams. Innovation in the digital age boils down to how well your organization is set up for software development.

> " **No one wants an island of misfit toys with unclear links to ROI. It's much cleaner for organizations to measure increased throughput.** "
>
> *— Pat Sheridan, CEO, Modus Create*

OPEN SOURCE VS. CLOSED DOORS

In 2021, Microsoft mentioned that it had learned a lot from its increased engagement with the open source world, adding that open source is now the "accepted model" for collaboration between companies. It further added that the world could learn a lot from the remote-first and digital-first mindset of the open source realm.

The open source model decentralizes innovation and allows anyone in the organization to work on cutting-edge technologies. We've employed these principles in our own innovation center: Modus Labs. It provides a platform for consultants to deepen their skills in open source technologies and make contributions back to the community, like the Ionic-Vue integration.

Strategy and innovation shouldn't be confused. There is value in centralizing strategy, but innovation thrives when everyone is empowered and encouraged. Innovation must start with the product-market fit, but it doesn't have to be confined to the product. For example, the finance team automating reports or the HR team streamlining admin requests are all examples of innovations that help organizations evolve and serve customers better.

> **" Traditionally, businesses believed that developing a competitive edge required trade secrets and black-box operating models. The open-source revolution has turned this approach on its head, and leaders must adapt fast.**
>
> *— Jay Garcia, Chief Scientist, Modus Create* **"**

Focus on product maturity and throughput to align your innovation center with the organization's priorities.

Executives must centralize strategy but decentralize tactics to encourage innovation throughout their organization.
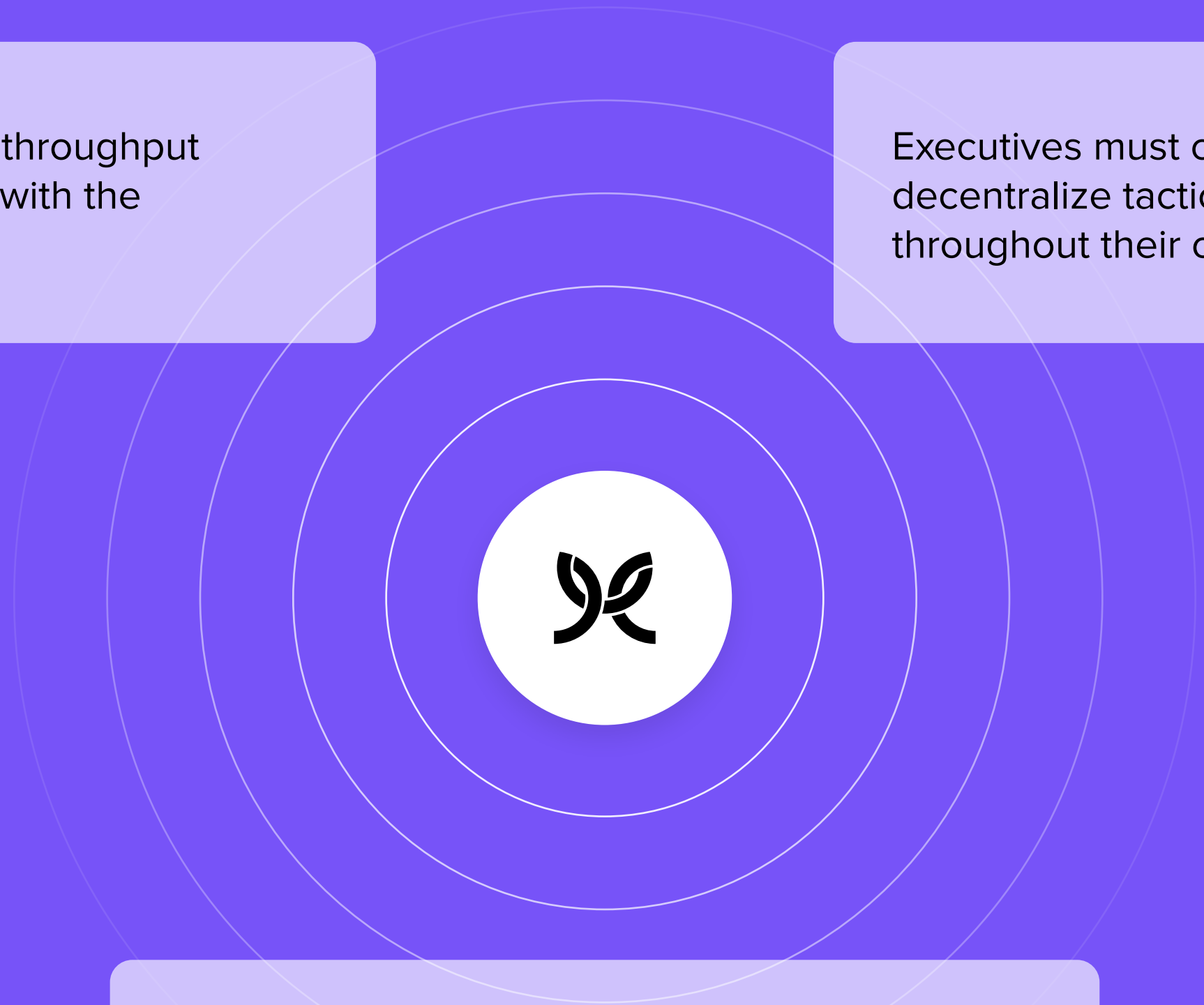
Never forget, or let your employees forget, the purpose of innovation is to solve problems for your customers. It's important to maintain this clear link to company mission and ROI.

EXECUTIVE TAKEAWAYS

4. CONFIDENCE EXCEEDS PREPARATION

Implementing digital initiatives can be notoriously difficult. According to both McKinsey and BCG, only 30% of digital transformations are successful. Such odds of success might hint at a timid executive sentiment, but the opposite seems true.

Executive confidence in completing planned initiatives is higher than their preparedness. (Ex. 8)

+ **51%** of executives say that their organization has a clear plan and goals for digital transformation initiatives in the next two years.

+ **56%** feel that they are currently equipped with the resources, team, and budget to implement digital initiatives.

+ **66%** feel confident that their company can successfully complete digital initiatives.

DIgital initiatives often rely on cross-functional collaboration and aligned priorities. In cultures that are prone to departmental silos, executives often struggle to understand the full scope of their digital projects. They often underestimate the time, resources, and effort required to complete digital initiatives, leading to misplaced confidence levels.

49% of executives don't have a clear plan or goal for their digital initiatives.

EXHIBIT 8: CONFIDENCE AND PREPAREDNESS MISMATCH

51%

Have a clear plan
or goal

56%

Are equipped
with the required
resources

66%

Feel confident to
successfully complete
digital initiatives
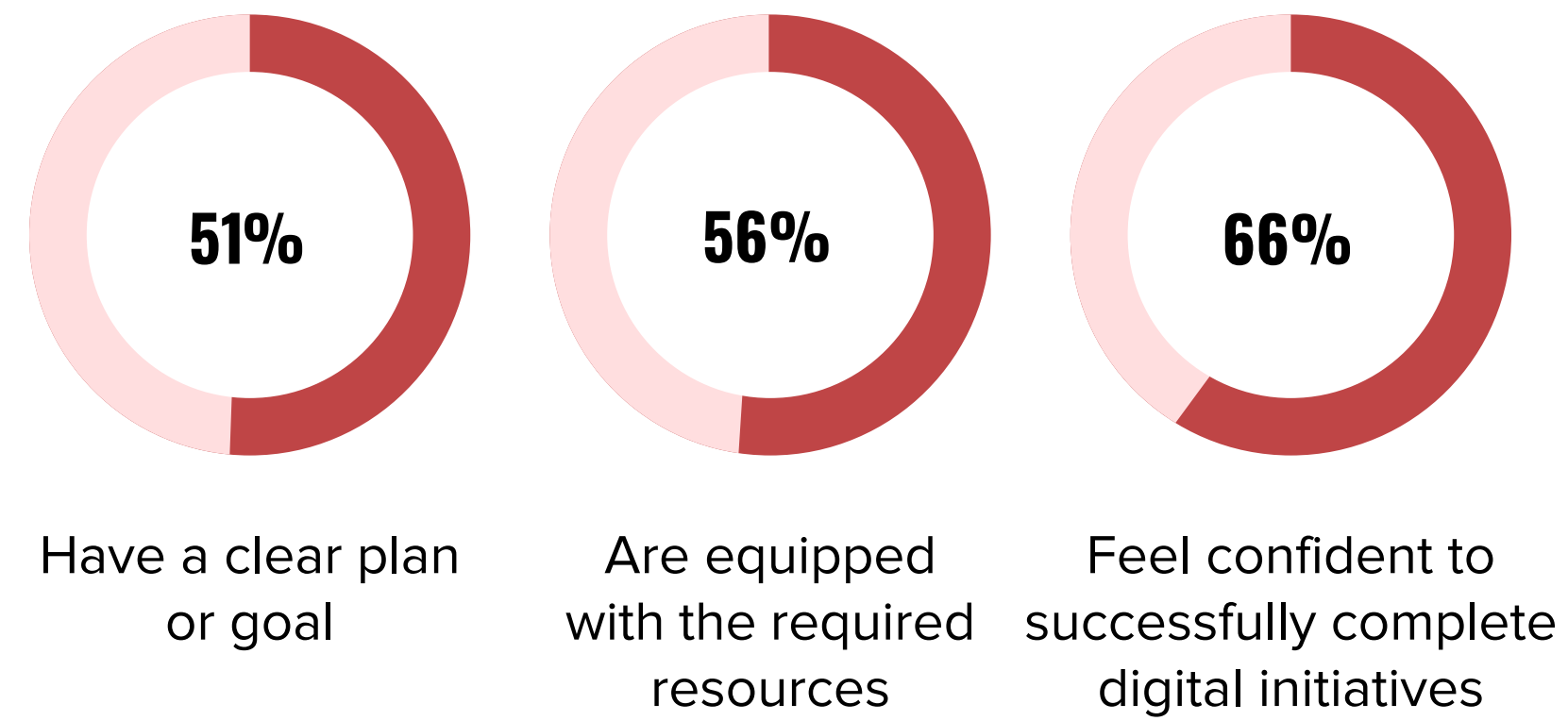
A report by [Dimension Data](#) states that customer experience operations of 54% of organizations are managed in silos. This hinders the ability of executives to align multiple departments on user-centric digital initiatives.

When all teams understand the pain points of the customers, it becomes easier for executives to align business plans, technology, and product roadmaps. This helps them make more informed decisions and maintain reasonable expectations.

AMBIGUITY IN SPENDING

Earlier, we discussed how large enterprises are not only spending more on digital initiatives but also have a higher digital appetite. (Ex. 5) However, large enterprises also have a higher degree of ambiguity in their planned digital spending than medium and smaller companies. (Ex. 9)

So, while 22% of large enterprises plan to spend over $10 million on digital initiatives in 2022, 39% weren't yet aware of their total planned digital spending for the year at the time of our survey.

There is also widespread disparity across industries concerning digital spending. (Ex. 10) The finance industry has the highest percentage of companies planning to spend over $1 million in 2022 on digital initiatives (31%).

> " **Most projects that move the needle are cross-functional initiatives. To avoid silos, every business unit should understand the business of its customers, not just sales and marketing.**
>
> *— Pat Sheridan, CEO, Modus Create* "

EXHIBIT 9: PLANNED DIGITAL SPENDING FOR 2022 (BY ORGANIZATION SIZE)

Large: 22% | 16% | 21% | 39% | 2%

Medium: 6% | 16% | 52% | 18% | 8%

Small: 2% | 64% | 11% | 23%

- ● $10 MM+
- ● $1 MM < 10 MM
- ● < $1 MM
- ● Don't know
- ● Not applicable
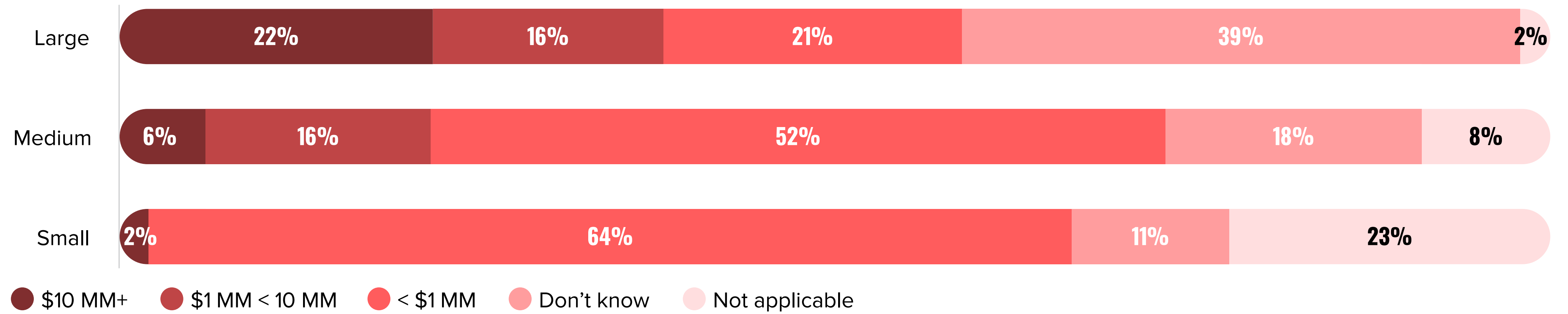
EXHIBIT 10: PLANNED DIGITAL SPENDING FOR 2022 (BY INDUSTRY)

Industry	< $1 MM	$1 MM < 10 MM	$10 MM+
Research/Engineering/IT	52%	18%	8%
Finance/Accounting	40%	24%	7%
Manufacturing	51%	10%	8%
Construction	47%	13%	7%
Real estate/Maintenance	54%	7%	1%
Personal care/Health care	47%	7%	7%
Wholesale/Retail trade	46%	9%	3%
Media/Arts/Entertainment	43%	9%	3%

- ● $10 MM+
- ● $1 MM < 10 MM
- ● < $1 MM
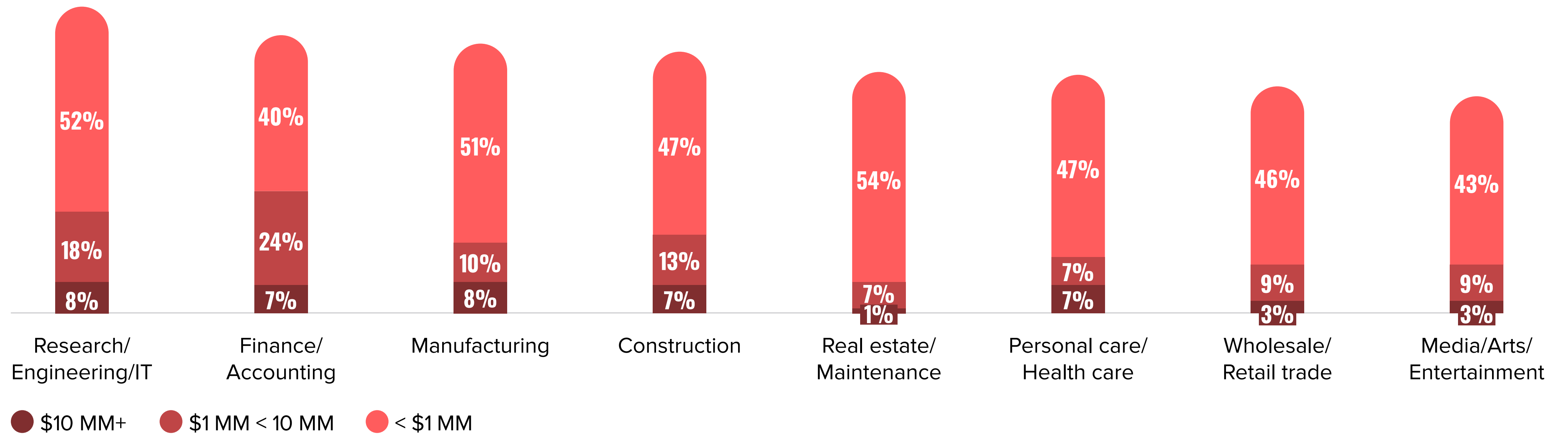
Planning a fixed digital budget is challenging due to several reasons:

+ Business requirements change rapidly in IT. An Agile product development process can only work with an Agile financing infrastructure. A [survey by Bain](#) revealed that 95% of organizations don't have flexible budgeting for large-scale Agile teams.
+ Digital initiatives involve multiple departments and their costs are often distributed across multiple shared resources.
+ Digital budgets are often confused with routine operational IT spending such as servers or existing software development teams.

If businesses can reduce operational costs with higher efficiency, they don't need a new budget for innovation. Often the budget for digital initiatives can be redeemed within the same financial year.

> **"** **Developer experience is how easy you make it for developers to contribute. Are you issuing high-end laptops, using modern tooling, automating processes, and giving your engineers heads-down time to focus on creative work?**
>
> *— Pat Sheridan, CEO, Modus Create* **"**

DIGITAL SKILLS GAP

44% of organizations aren't equipped with resources, team, and budget to implement their digital initiatives. (Ex. 8)
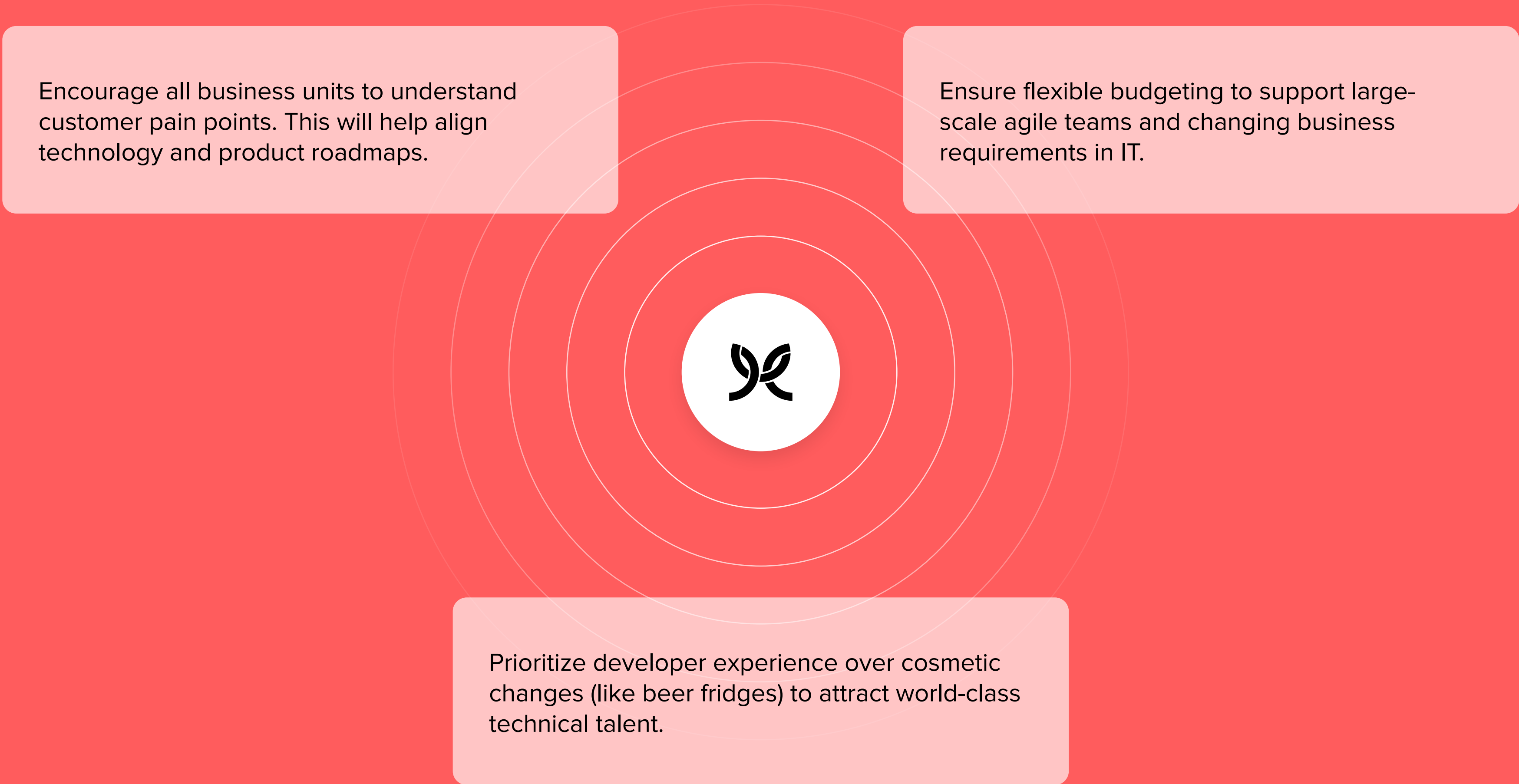
With the growing prominence of digital commerce, mobile technologies, and other IT initiatives, technology leaders have a seat at the topmost leadership level, giving a strategic voice to developer experience and the importance of allocating more resources to digital initiatives. However, bridging the skills gap in personnel is a much more complex problem.

The key ingredient to the success of any digital initiative is the ability to not just attract but retain developers. Unfortunately, this is where traditional enterprises often struggle as their culture isn't optimized for software development.

Culture is often confused with employee engagement and interior design. So, developer experience is restricted to cosmetic changes such as startup-like offices, casual dress codes, and occasional hackathons.

With the normalization of remote work, skilled engineers have the opportunity to work with companies from all around the world, making it difficult for enterprises to attract and retain them.

Therefore, to bridge the gap between preparedness and confidence and successfully complete digital initiatives, enterprises must prioritize developer experience.

Encourage all business units to understand customer pain points. This will help align technology and product roadmaps.

Ensure flexible budgeting to support large-scale agile teams and changing business requirements in IT.

Prioritize developer experience over cosmetic changes (like beer fridges) to attract world-class technical talent.

EXECUTIVE TAKEAWAYS
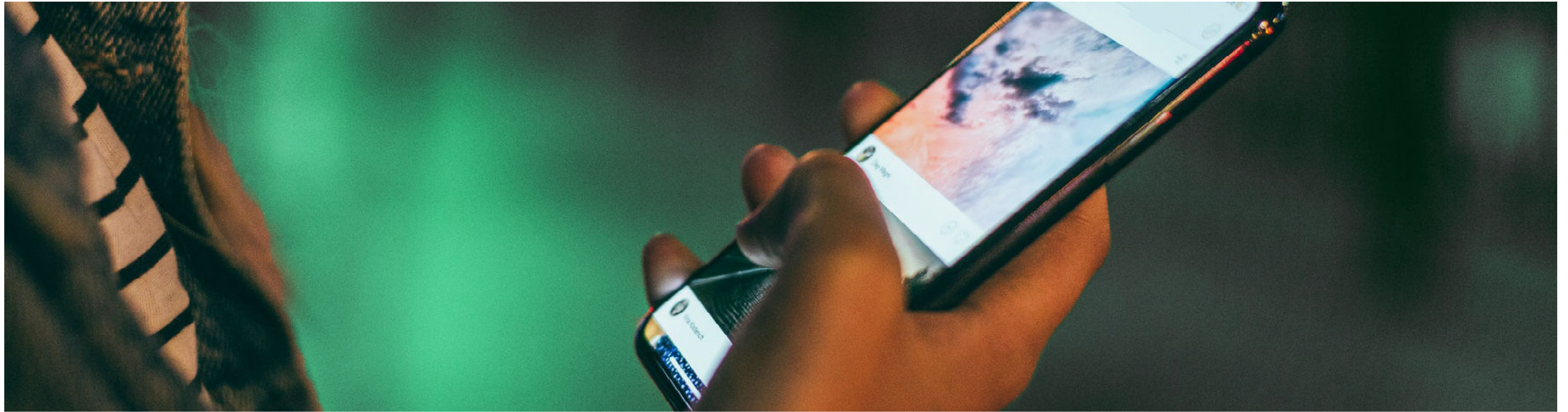
5. MODERNIZATION BEYOND LEGACY TECH

According to a report by F5, 2021 witnessed a 133% increase in application modernization projects. There are no signs of slowing down in 2022.

41% of large enterprises will invest in IT modernization in 2022, making it the most popular planned digital initiative for organizations with annual revenue of over $500 million. (Ex. 11)

When radical innovations were rare, businesses could afford to treat application modernization as a sporadic reaction to change. A decade ago, most organizations modernized only when they were compelled to, for example, when an older version of Java or PHP was sunsetted. However, today's organizations don't wait for the threat of obsolescence to modernize.

41%
of large enterprises will modernize their apps in 2022.

41%	IT modernization, like resolving technical debt or cloud migration
40%	Improving cybersecurity posture
29%	Launching new customer-facing applications or features
28%	Transforming or digitizing processes for stakeholders
27%	Reskilling/training employees (e.g. in Agile, low code apps)
21%	Implementing AI or RPA technologies
19%	Customer capture and retention in digital channels
18%	Solving customer pain points with design thinking
17%	Creating an internal Innovation Hub or Lab

REASONS BEHIND APPLICATION MODERNIZATION

There are several reasons why organizations are investing aggressively in application modernization:

Paying off technical debt: Stripe's The Developer Coefficient revealed that engineers spend 33% of their time dealing with technical debt. By modernizing their application, organizations can reduce technical debt and put measures in place to acquire less of it in the future.

Better user experience: User sensibilities and expectations evolve at a rapid speed. What might have been considered intuitive UX even three years ago might look dated today. Therefore, modernizing your app for better UX isn't a one-time project. It involves creating an architecture that allows for rapid UX iterations. According to a Forrester report, every $1 invested in UI/UX design generates $100.

Building cross-platform expertise: Building cross-platform capabilities is a popular reason to modernize applications as it significantly reduces future development costs. Namely, the cost and complexity of maintaining the app.

Omnichannel customer experience: Creating such omnichannel experiences requires a sophisticated framework that lets you create workflows using data from CMS, CRM, different ad channels, etc. This can often spark an application modernization project in organizations.

Faster development with CI/CD: In a 2020 GitLab survey, the percentage of respondents who had largely or even completely automated their SDLC was 8%. In the 2021 edition of the report, this has jumped to over 50%, largely due to the widespread adoption of CI/CD.

> **Today's organizations are modernizing their applications in a more proactive way. They are not just modernizing because they have to, but because they want to.**
>
> *— Sarah McCasland, VP of Consulting Operations, Modus Create*
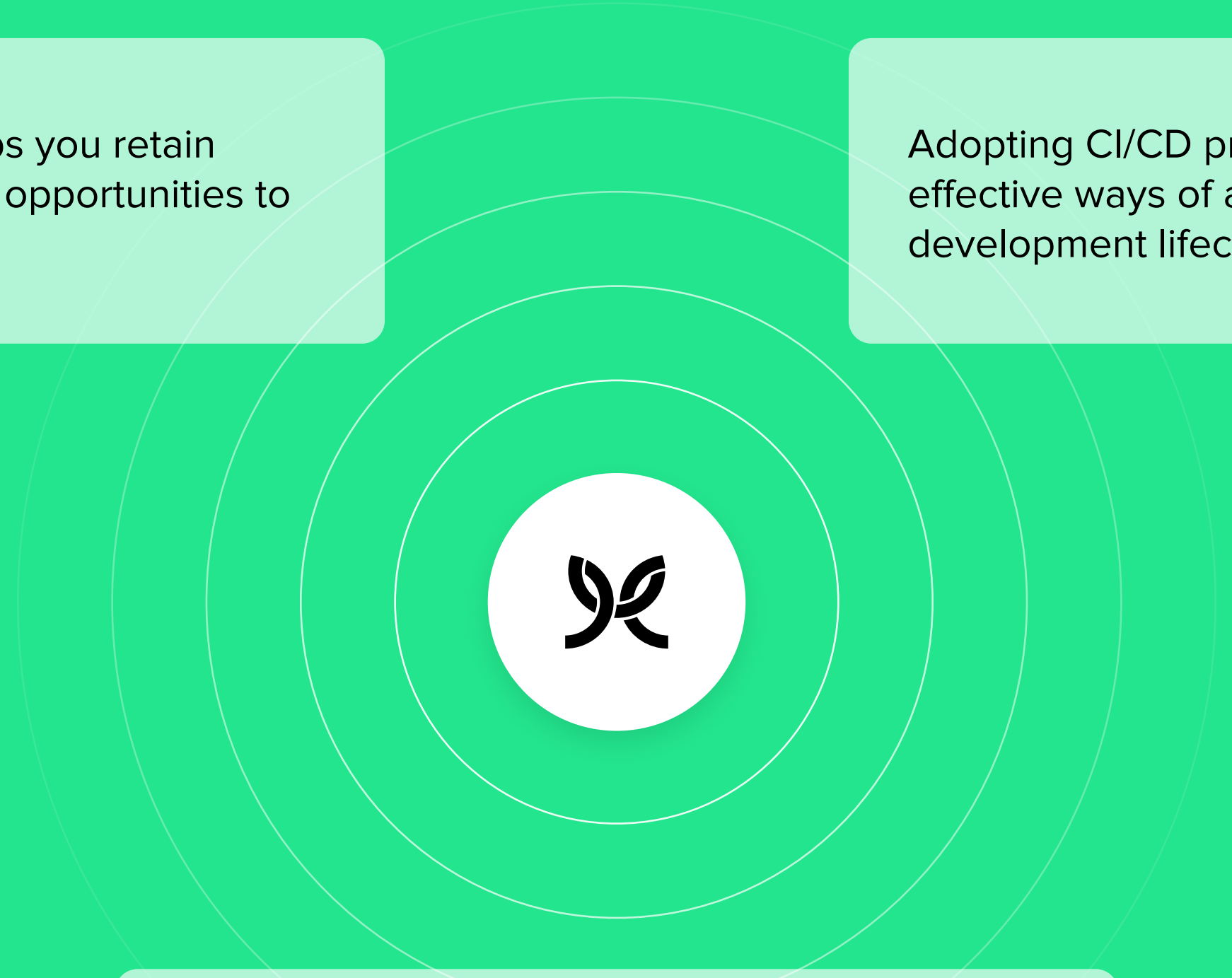
WHAT DEVELOPERS WANT

There is another compelling reason behind increasing application modernization initiatives — talent acquisition and retention.

Great developers are artists, and exploring new technologies helps with their overall job satisfaction. Hired's State of Software Engineers report stated that most software engineers' primary motivation for learning a new programming language or framework is simply because they enjoy it.

Stack Overflow conducted a comprehensive survey of 65,000 software developers from 186 countries to answer one question: What do software developers want? They found out that the chance to experiment with new technologies topped the list with a 51% response.

It's hard to hire engineers for obsolete frameworks. It's even harder to retain skilled engineers if they don't get an opportunity to explore new technologies. Application modernization allows you to attract technical talent that further accelerates the entire modernization process.

Application modernization helps you retain technical talent by giving them opportunities to hone their craft.

Adopting CI/CD practices is one of the most effective ways of automating your software development lifecycle.

Waiting for the threat of obsolescence to modernize your apps will put you on the back foot. Market leaders modernize to deliver exceptional user experiences.

EXECUTIVE TAKEAWAYS

6. CORPORATIZATION OF AGILE

Originally used exclusively for software development, Agile methodologies have been embraced by most American organizations, including the federal government. According to Deloitte, 80% of federal IT projects follow Agile methodologies.

The fact that even the federal government, which is traditionally seen as a slow-moving monolith, has warmed up to Agile speaks highly of its mainstream appeal.

57% of large organizations have adopted an Agile framework for implementing digital initiatives (Ex. 12). This is much higher than the average Agile adoption rate in the survey (43%).

Interestingly, these results are consistent with the 15th State of Agile Report by digital.ai, which mentions that 52% of executives state that either a majority or all of their company's teams have adopted Agile methodologies.

THE IRONY OF AGILE

The irony of Agile is that it's not supposed to be a prescribed orthodoxy. Methodologies like SAFe are a very waterfall way of doing Agile. Agile was intended as a radical idea to empower creatives. Unfortunately, it has succumbed to jargon, doctrines, and theater over time.

57% of large organizations have adopted an Agile framework for implementing digital initiatives.

> **"To know how agile you are, ask your developers how many hours they spend in meetings each day. If they're not spending six hours a day doing deep work, you could lose them to a company with a modern developer experience.**
>
> *— Pat Sheridan, CEO, Modus Create*

EXHIBIT 12: HAS YOUR ORGANIZATION ADOPTED AN AGILE FRAMEWORK FOR IMPLEMENTING DIGITAL INITIATIVES? (LARGE ORGANIZATIONS)

43%
No

57%
Yes
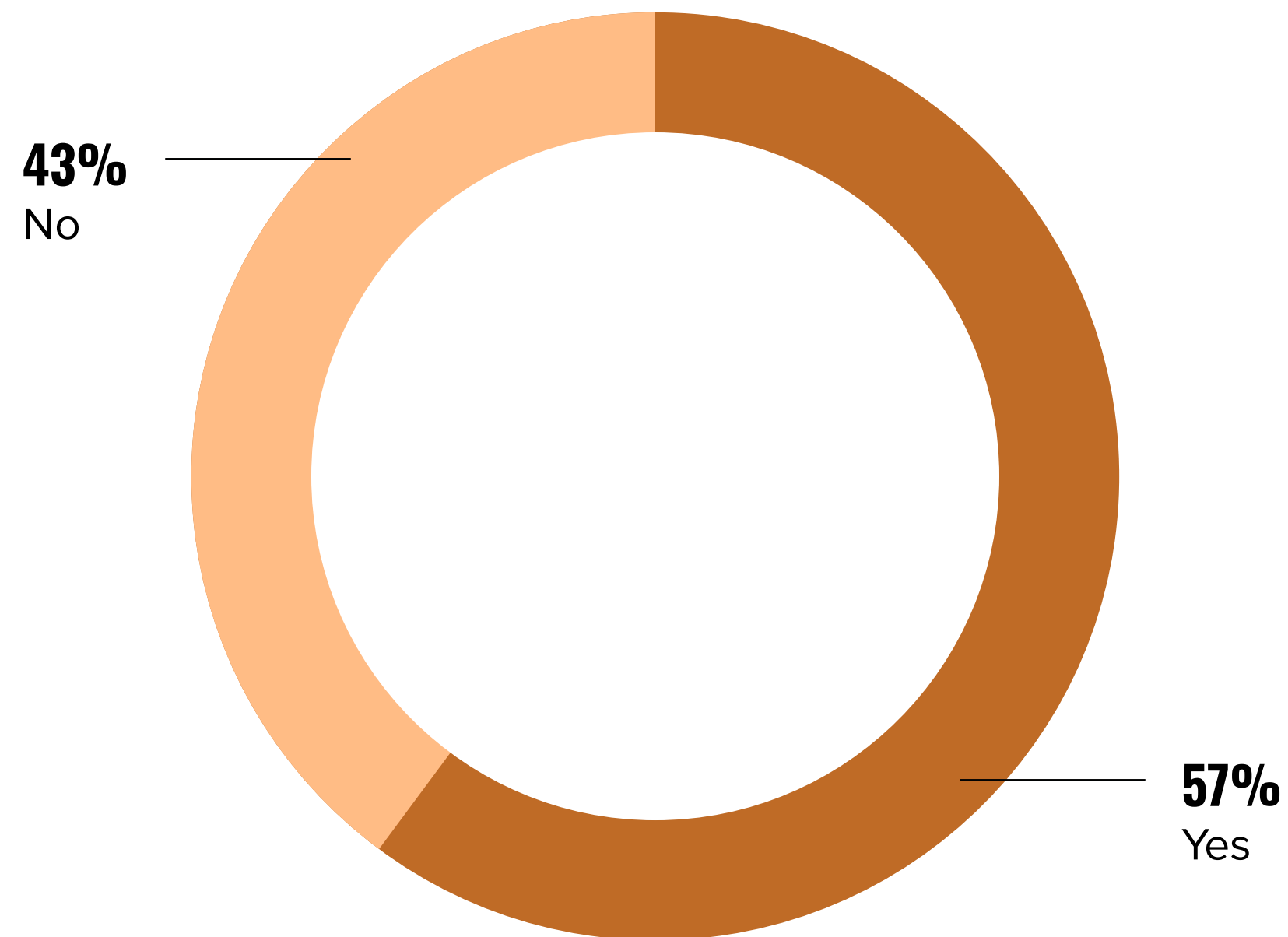
Agile and scrum are often used interchangeably, which is incorrect. Agile is a mindset, while scrum is one of several frameworks to embrace it.

To prevent superficial Agile adoption, it's more effective for organizations to start from automation instead of ceremony. For example, automating deployment and integration with DevOps is a much more substantial step in the direction of being Agile than introducing design thinking without automation.

A great metric for executives on an Agile journey is learnings per quarter. Whether it's UX or security attack surface, if learnings per quarter are low, it's an indication of stagnation.

3 KEYS TO SUCCESSFUL AGILE ADOPTION

Agile adoption isn't always smooth sailing for organizations despite its widespread success. Leaders must focus on three critical areas to ensure a successful Agile transformation — *Expectation, Commitment, and Automation*.

Key 1: Expectation

Agile methodologies don't offer a silver bullet to solve all your product-related problems. Just because a team is Agile, doesn't mean that a change in requirements will have no bearing on the expected outcome.

Instead, Agile methodologies help reveal areas of improvement throughout the product development process. When teams address those problems with the same commitment, they can unlock the benefits of being Agile.

Key 2: Commitment

Successful Agile adoption requires complete buy-in from the team, especially stakeholders. The chances of successful Agile adoption skyrocket when it has a top-down mandate. If stakeholders aren't convinced, they can pull the plug on Agile projects at the first instance of failure.

The best way to evoke commitment is to start slowly and not force company-wide change at once. It helps to run small experiments and 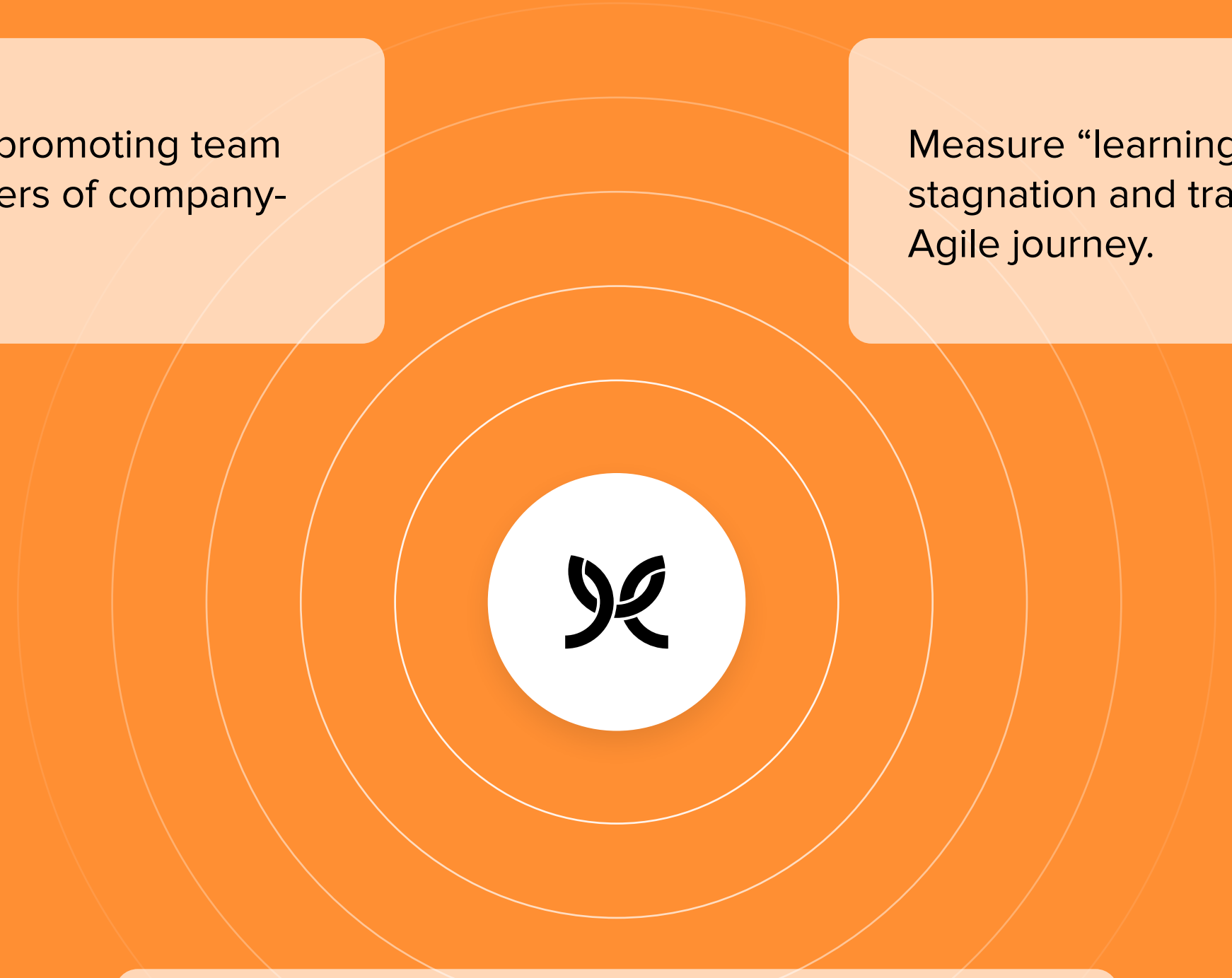give a taste of the wins. For example, a marketing team can start by running a specific project such as website development in an Agile way. Once they notice improvements, they can roll it out to all other areas of their work.

Key 3: Automation

Automation is at the heart of successful Agile projects as it allows teams to react in real-time to changing requirements. Using manual QA or manually deploying software, and not leveraging cutting edge technologies such as CI and CD, would make it almost impossible for teams to fully experience the benefits of going Agile.

> " **One of the greatest threats to Agile adoption is the expectation that being Agile will solve all your engineering problems without affecting cost or quality.** "
>
> — *Jay Garcia, Chief Scientist, Modus Create*

> " **You can fake Agile but you can't fake automation. A process is either automated or not automated.** "
>
> — *Pat Sheridan, CEO, Modus Create*

Starting at a smaller scale and promoting team wins helps convince stakeholders of company-wide Agile transformation.

Measure "learnings per quarter" to prevent stagnation and track the progress of your Agile journey.

Start with automating your SDLC (for instance, project management or DevOps pipelines) to begin your journey towards a successful Agile transformation.

EXECUTIVE TAKEAWAYS

TRENDING TECH TO WATCH

Disruption is often pictured as a wave that either tosses companies out of existence or carries them to new heights.

But a better analogy for disruption today is a perennial storm. Organizations don't just have to contend with one defining technology. We are in an age where landmark technologies are brewing together, each with a tremendous potential to affect most industries worldwide. As we look ahead to 2022, it's worth briefly discussing a few such examples.

WEB3

The internet started as a decentralized medium for creators to share their work. Web 2.0, with the rise of social media, moved the power away from creators to platforms, which have eventually risen to become some of the world's biggest companies. With blockchain-based decentralized applications (dApps), Web 3.0 hopes to shift the balance once again in favor of content creators.

David Lawee, Founder and General Partner at CapitalG, predicts that gaming NFTs can exceed the revenue from in-app game purchases in the new future.

It's important for companies to pay attention to developments in Web3 and figure out if their business model has a role in it.

For example, if your company monetizes content that people create, your model might be threatened.

5G

At present, 60% of the world's 8 billion people use the internet. Imagine the possibility of billions more having access to high-speed 5G internet — a world where unlimited data is as accessible as air.

With significantly higher speed, a 100X increase in network capacity, and a 10X decrease in end-to-end latency, the 5G network would be critical to the success of several emerging technologies such as AI, IoT, autonomous vehicles, AR, and VR.

Qualcomm's 5G Economy study revealed that by 2035, 5G would enable up to $13.1 trillion worth of goods and services. However, it's hard even to fathom the complete economic impact of 5G, which is expected to create entirely new industries.

According to a forecast by GSMA, 5G will account for 21% of all mobile internet connections by 2025. Therefore, 2022 is an important year not just for the 5G rollout but also for businesses to find their place in an era of unprecedented digital connectivity.

ARTIFICIAL INTELLIGENCE

According to a report by PwC, AI could contribute up to $15.7 trillion to the global economy in 2030, more than the current output of China and India combined. This increase in the global economy would be primarily driven by increased productivity and consumption.

Artificial intelligence and machine learning have already permeated various facets of our life - from personalized recommendations and virtual assistants to targeted advertisements and natural language processing. However, we are still barely scratching the surface.

BUSINESS AUTOMATION

Business automation is an umbrella term for deploying any technology at work that frees up employees for higher value work by automating repetitive tasks. Robotic process automation (RPA), business process management (BPM), and workflow automation are a few popular examples.

MarketsandMarkets predicts that the global business process automation market will grow to $19.6 billion by 2026, at a CAGR of 12.2%. As organizations continue to embrace Agile workflows, automation will remain a constant fixture in their list of priorities.

Zapier's State of Business Automation 2021 states that 65% of knowledge workers experienced reduced stress levels due to automation. Both intra-departmental and inter-departmental automation will accelerate in 2022 with the wider adoption of cloud-based SaaS solutions such as Jira, HubSpot, Trello, Salesforce, etc. As a result, APIs and integrations will play a vital role in delivering a cohesive automation experience at the company level.

> **Last five years of digital transformation focused on enabling new channels. Now, these channels have created massive data pipes and intelligence. That's where AI, ML and next-gen software will come in to make sense of data and enable teams to push relevant things back into the hands of the users.**
>
> *— Pat Sheridan, CEO, Modus Create*

CONCLUSION

The success of digital transformation hinges on several moving pieces — developer experience, customer insights, automation, and a culture of innovation. All of these are the charge of the modern executive.

The successful leader defines how all these elements move in concert to evolve and redefine the business. They define the direction for their teams. That alignment sets the stage for cross-functional collaboration, breaking silos that often jeopardize digital initiatives.

Digital transformation doesn't have a finish line as new technologies and channels continually change the game. This is true for both businesses and talent. Therefore, jobs need to be reenvisioned as social contracts that aim to improve the market value of employees during their tenure. Stagnation is retention's worst nightmare.

Shoehorning the old way of working led to the Great Resignation of 2021. Top talent is gravitating towards culture and relevance in tradecraft rather than brand prestige of employers. 2022 is a great opportunity for organizations to attract creative knowledge workers and lay a strong foundation to achieve their digital aspirations.

Every company is a technology company in the digital age. A world with stable power, a connected grid, and microprocessors in every electronic device isn't science fiction anymore. We will see more progress in the next hundred years than the previous thousand. Whether that spells opportunity or disruption for businesses, is a choice that rests with today's executives.

And 2022 is the year to make that choice.

ABOUT MODUS CREATE

Modus Create is a digital transformation consulting firm. We help some of the world's largest organizations shift their business strategy and customer experience to be digital first. Our official partners include leading technology companies like Atlassian and AWS, providing clients unmatched capabilities across the full product development lifecycle.

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REFERENCES

In addition to Modus Create's survey, the following references were quoted in the eBook:

Digital Transformation Trends to Watch for in 2021, Modus Create, 2021

Digital Transformation Spending Worldwide 2017-2025, Kimberly Mlitz , 2021

Global Market Opportunity Analysis and Industry Forecasts, Meticulous Research, 2020

Average Company Lifespan of S&P 500 Companies 1965-2030, D. Clark, 2021

Traditional Company, New Businesses, McKinsey, 2016

Gartner 2021 CIO Agenda, Gartner, 2021

Cybercrime To Cost The World $10.5 Trillion Annually By 2025, Cybercrime Magazine, 2020

Data Breach Report 2021, IBM, 2021

Education Sector Sees 29% Increase in Attacks, CheckPoint Research, 2021

20 Biggest GDPR Fines So Far, Data Privacy Manager, 2021

The Role of Cybersecurity in Mergers and Acquisitions Diligence, Forescout, 2019

Capgemini Consulting and Altimeter Global Report, Capgemini

Why Companies Do "Innovation Theater" Instead of Actual Innovation, HBR, 2019

Open Source is Now the Accepted Model for Cross-Company Collaboration, Venture Beat, 2021

The 'How' of Transformation, McKinsey, 2016

Flipping the Odds of Digital Transformation Success, BCG, 2020

How to Plan and Budget for Agile at Scale, Bain, 2019

The State of Application Strategy in 2021, F5, 2021

The Developer Coefficient, Stripe, 2018

The Six Steps For Justifying Better UX, Forrester, 2016

Fifth Annual Global DevSecOps Survey, GitLab, 2021

State of Software Engineers, Hired, 2021

2020 Developer Survey, Stack Overflow, 2020

Agile by the Numbers, Deloitte

15th State of Agile Report, Digital.ai, 2021

The Biggest Trends For 2022 In Creator Economy And Web3, Forbes, 2021

45 Virtual Reality Statistics That Will Rock the Market, TechJury, 2021

Cell Phone Ownership Grown 29% from 1991-2001, Scarborough Research, 2001

VR and AR market size 2016 to 2024, Thomas Alsop, 2021

Global Artificial Intelligence Study, PwC

Apple is Beginning to Undo Decades of Intel, The Register, 2021

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