Want to win in the metaverse? Think internal first

How technology, media and telecommunications (TMT) companies can navigate the metaverse with confidence

A global survey of TMT executives

KPMG International
kpmg.com
Contents

Introduction 3
Survey highlights 4
What do TMT companies stand to gain from the metaverse? 5
Excitement — with more than a touch of caution 16
Bridging the gap between potential and realization 21
Conclusion 27
About the survey 28
Introduction

When it comes to the metaverse, excitement and expectations expressed by technology, media and telecommunications (TMT) leaders are not — so far — matched by action.

KPMG International commissioned Forrester Consulting to conduct a new global survey of 767 TMT executives. Six out of ten believe the metaverse will have a huge impact on consumers and businesses, yet only a third say their companies feel adequately prepared with platforms for designing metaverse experiences and related operational processes. Even more surprisingly, although a majority expect the metaverse to have a positive impact on customer satisfaction and engagement, less than half report interest from their clients in conducting business meetings in the metaverse.

The metaverse may be in a nascent stage, but, as the past few decades have shown, new technologies can evolve quickly and leave laggards in their wake. Yet, our research shows that a majority say their companies are investing less than 5 percent of the total technology budget on the metaverse. Even more alarmingly, only 34 percent see building a business case as an important next step for better enabling their metaverse strategy. Interestingly, TMT leaders see the greatest value to be gained from using the metaverse for branding, marketing and customer experiences, yet also acknowledge that early uses are likely to be for internal activities like onboarding, education and collaboration. As we discuss later in this paper, there is a strong incentive for investing in the metaverse to benefit internal initiatives such as boost employee retention.

As a blend of physical and digital/virtual, the capabilities of the metaverse appear limitless. In a recent interview with KPMG, Matthew Ball, CEO of Epyllion, and venture partner at Makers Fund, said “...we should really think of the metaverse as a “synchronous,” “real-time” and “3D” version of the internet,” which shifts experiences from static and individual to shared and collaborative. But, like any new technology, the speed of adoption of the various uses is unpredictable. Some areas may gain traction swiftly, others may fade away, and other new and unimagined uses may emerge. For TMT companies, this poses the classic investment dilemma: where and how much to invest, to avoid being blindsided by a metaverse pioneer, but also to help minimize the chance of ploughing funds into projects that become redundant. There’s a price for investing heavily in an unknown future, which explains the relatively low investment for many companies in our survey. But, there also is a price for doing nothing and the survey identifies plenty of gaps that could leave metaverse laggards trailing their more ambitious competitors as the metaverse market evolves and matures. We hope that the insights from this report help TMT companies better understand their peers’ attitudes and plans for the metaverse, and provide helpful insights on how to gain a competitive edge with this fast-growing new technology.

Mark Gibson
Partner, TMT Global and US Leader
KPMG in the US
Survey highlights

In late 2022, KPMG International commissioned Forrester Consulting to carry out a global survey of TMT executives from technology, media and telecommunications. Seven hundred and sixty-seven global strategy decision-makers, at companies with US$250M+ in annual revenue, participated in the survey. Respondents were either vice presidents in charge of one or several large departments (83 percent) or C-level such as CEO, CMO (17 percent). Respondents came from 13 different countries across five continents.

TMT executives see value in the metaverse across the business, including revenue and profits, customer experience and loyalty, and employee experience and retention.

TMT leaders appear to be excited and cautious in equal measure, which may explain why few are investing more than 5 percent of their total technology budget on the metaverse.

However, when asked about their companies’ investments in the metaverse for the future compared to today, the story was different. Eighty-four percent said they plan to increase or maintain investments in five to 10 years from now and an astonishing 92 percent said they plan to increase or maintain investments in two to four years from now.

A majority of TMT companies feel unprepared for the metaverse in terms of the technology infrastructure and the necessary skills.

And only a third (34 percent) see building a business case as an important next step for better enabling their metaverse strategy.

Want to win in the metaverse? Think internal first.
What do TMT companies stand to gain from the metaverse?
There’s plenty of excitement around the potential of the metaverse — but where can organizations gain the greatest benefit?

Hopes are high that the metaverse can add value to TMT companies. And there’s a belief that, by successfully leveraging the metaverse, businesses can boost their bottom lines. Respondents see the greatest expected benefits as increased revenue and profit margins, lower operating expenses, and a shift from costly bricks and mortar operations to virtual point of sale transactions. They also hope that interacting via the metaverse can improve the customer experience and enhance their brands.

From your perspective, what would success with the metaverse look like for your company?

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased revenue</td>
<td>61%</td>
</tr>
<tr>
<td>Higher profit margins/decreased operating expenses/shift from bricks and mortar to virtual point of sale</td>
<td>55%</td>
</tr>
<tr>
<td>Being seen as a leading brand at the forefront of metaverse technology</td>
<td>47%</td>
</tr>
<tr>
<td>Higher customer satisfaction/interaction with our company and products/services</td>
<td>45%</td>
</tr>
<tr>
<td>Employees using the metaverse to support customers</td>
<td>35%</td>
</tr>
<tr>
<td>Customers using our metaverse environments to engage with our company outside of making a purchase</td>
<td>34%</td>
</tr>
<tr>
<td>Employees using the metaverse to support internal processes</td>
<td>34%</td>
</tr>
<tr>
<td>Connecting our products/services into the broader metaverse environment</td>
<td>32%</td>
</tr>
<tr>
<td>Hosting our own metaverse environment that customers can use to buy our products/services</td>
<td>31%</td>
</tr>
<tr>
<td>Selling new digital products/services via the metaverse</td>
<td>29%</td>
</tr>
</tbody>
</table>

Base: 767 Global strategy decision-makers at companies with $250M+ in annual revenue

Source: A commissioned study conducted by Forrester Consulting on behalf of KPMG, December 2022
Consequently, they expect around 40 percent of their organization's metaverse investment to be directed towards marketing and branding, and approximately 25 percent towards customer-related use cases. Just over half of companies surveyed (53 percent) are already starting to make investments in metaverse staffing and resources, either creating new projects and teams or ramping up resources for existing metaverse initiatives.

**To your best estimate, what percentage of your company’s metaverse investments are, or will be, allocated to the following categories of use cases?**

<table>
<thead>
<tr>
<th>Category</th>
<th>Present to 1 year from now</th>
<th>2 to 4 years from now</th>
<th>5+ years from now</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing, sales, or branding use cases</td>
<td>37.7</td>
<td>39.3</td>
<td>38.6</td>
</tr>
<tr>
<td>Customer-facing use cases</td>
<td>27.8</td>
<td>25.1</td>
<td>25.0</td>
</tr>
<tr>
<td>Internal operational and back-office use cases</td>
<td>19.8</td>
<td>20.6</td>
<td>20.9</td>
</tr>
<tr>
<td>Internal workforce and talent management use cases</td>
<td>14.6</td>
<td>15.0</td>
<td>15.5</td>
</tr>
</tbody>
</table>

Base: 452 Global strategy decision-makers at companies with $250M+ in annual revenue

Source: A commissioned study conducted by Forrester Consulting on behalf of KPMG, December 2022
Most of the respondents say their companies already use many of the tools that will support the metaverse — or at least plan to do so in the not-too-distant future — such as augmented reality (AR), virtual reality (VR), decentralized platforms, and digital twins. Of the three TMT subsectors, technology is the most likely to use these innovations.

TMT leaders have plans to implement virtual environment tools (AR, VR, digital twins) to support the metaverse

Thinking about the tools and technology that could potentially support the metaverse, which technologies is your company already using or planning to use?

<table>
<thead>
<tr>
<th>Tool Type</th>
<th>Currently Using</th>
<th>Planning to Use</th>
<th>Not Planning to Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Augmented reality (AR)</td>
<td>40%</td>
<td>57%</td>
<td>3%</td>
</tr>
<tr>
<td>Virtual/mixed reality (VR)</td>
<td>43%</td>
<td>48%</td>
<td>9%</td>
</tr>
<tr>
<td>Decentralized platforms</td>
<td>40%</td>
<td>47%</td>
<td>13%</td>
</tr>
<tr>
<td>Virtual environment tools (e.g., digital twins)</td>
<td>40%</td>
<td>49%</td>
<td>11%</td>
</tr>
<tr>
<td>Blockchain (also known as distributed ledger technology)</td>
<td>40%</td>
<td>49%</td>
<td>11%</td>
</tr>
<tr>
<td>Cryptocurrency</td>
<td>18%</td>
<td>34%</td>
<td>52%</td>
</tr>
<tr>
<td>NFTs</td>
<td>21%</td>
<td>26%</td>
<td>53%</td>
</tr>
</tbody>
</table>

Base: 767 Global strategy decision-makers at companies with $250M+ in annual revenue
Source: A commissioned study conducted by Forrester Consulting on behalf of KPMG, December 2022
Almost two-thirds (64 percent) anticipate conducting at least some business meetings in the metaverse within the next decade. But, discussions with clients may tell a different story.

**Do you anticipate your company will be conducting at least some business meetings in the metaverse within the next decade?**

- **34%** No
- **64%** Yes

**Have your clients expressed an openness to conducting at least some business meetings in the metaverse?**

- **52%** Have not discussed with clients yet
- **27%** No
- **21%** Yes

Base: 767 Global strategy decision-makers at companies with $250M+ in annual revenue

Source: A commissioned study conducted by Forrester Consulting on behalf of KPMG, December 2022
## Top expected metaverse use cases by subsector

As this figure shows, the three subsectors within TMT have varying responses when it comes to value placed on metaverse use cases:

### Technology:
- **60%** digital twins for infrastructure planning and deployment
- **53%** IoT with metaverse experiences
- **49%** custom metaverse experiences for customers
- **46%** digital twins for ongoing infrastructure maintenance

Base: 262 Global strategy decision makers at technology companies with $250M+ in annual revenue

### Media:
- **56%** metaverse based multiplayer gaming
- **50%** 3D social networks
- **48%** virtual concerts
- **45%** immersive sports and gaming experiences

Base: 249 Global strategy decision makers at media companies with $250M+ in annual revenue

### Telecommunications:
- **63%** deliver custom metaverse experiences for customers
- **54%** digital twins for network planning and deployment
- **41%** metaverse AR for field service technicians

Base: 256 Global strategy decision makers at telecommunications companies with $250M+ in annual revenue

Source: A commissioned study conducted by Forrester Consulting on behalf of KPMG, December 2022
Internal use of the metaverse — an overlooked opportunity?

There are high hopes for the metaverse as a medium for branding and customer experience, but these use cases are some years away, as consumer and business appetite has yet to grow to a significant level. This explains why relatively fewer respondents from the technology and telecommunications subsectors say their companies are ready to enable use of the metaverse to drive better customer experiences and solutions.

Tech leaders view internal metaverse use cases as being the closest to reality, but still likely 4+ years out

Of the metaverse use cases identified, how long do you think it will reasonably take to enable them for your company? (Only technology company answers and internal use cases shown.)*

Employee training and onboarding

<table>
<thead>
<tr>
<th>Present to 3 years out</th>
<th>4 to 9 years out</th>
<th>10+ years out</th>
</tr>
</thead>
<tbody>
<tr>
<td>27%</td>
<td>42%</td>
<td>29%</td>
</tr>
</tbody>
</table>

Internet of things with metaverse experiences

<table>
<thead>
<tr>
<th>Present to 3 years out</th>
<th>4 to 9 years out</th>
<th>10+ years out</th>
</tr>
</thead>
<tbody>
<tr>
<td>19%</td>
<td>42%</td>
<td>37%</td>
</tr>
</tbody>
</table>

Employee collaboration

<table>
<thead>
<tr>
<th>Present to 3 years out</th>
<th>4 to 9 years out</th>
<th>10+ years out</th>
</tr>
</thead>
<tbody>
<tr>
<td>18%</td>
<td>48%</td>
<td>35%</td>
</tr>
</tbody>
</table>

Digital twins for infrastructure planning and deployment

<table>
<thead>
<tr>
<th>Present to 3 years out</th>
<th>4 to 9 years out</th>
<th>10+ years out</th>
</tr>
</thead>
<tbody>
<tr>
<td>17%</td>
<td>39%</td>
<td>43%</td>
</tr>
</tbody>
</table>

Digital twins for ongoing infrastructure maintenance

<table>
<thead>
<tr>
<th>Present to 3 years out</th>
<th>4 to 9 years out</th>
<th>10+ years out</th>
</tr>
</thead>
<tbody>
<tr>
<td>15%</td>
<td>49%</td>
<td>36%</td>
</tr>
</tbody>
</table>

*Present to 3 years out: 27%, 4 to 9 years out: 42%, 10+ years out: 29%

Source: A commissioned study conducted by Forrester Consulting on behalf of KPMG, December 2022
Instead, the most popular current use cases are internal activities like employee training and onboarding — with employee collaboration also ranking highly. Across the survey, 56 percent recognize the promise of engagement via the metaverse for improving hiring and recruiting, and 51 percent say it could improve employee productivity. But so far, these words are not backed up with deeds, with only about one-third of anticipated metaverse investments set to be directed to internal activities and processes.

**What potential benefits/outcomes of engaging in the metaverse would make your company most likely to invest/engage?**

- **74%** Improved customer experience (including B2B, B2C, or B2B2C)
- **60%** Improved customer engagement (including B2B, B2C, or B2B2C)
- **60%** Product and service innovation
- **56%** More competitive hiring and recruiting
- **54%** Revenue/monetization opportunities
- **51%** Improved employee productivity
- **44%** Improved employee experience
- **42%** Keeping up or staying ahead of competition (i.e., being perceived as a leader in the metaverse space)
- **40%** Internal business process improvements
- **39%** Offering solutions that allow our customers to provide metaverse solutions to their customers

*Base: 767 Global strategy decision-makers at companies with $250M+ in annual revenue
Source: A commissioned study conducted by Forrester Consulting on behalf of KPMG, December 2022*
Which begs the question: Why aren’t organizations placing more resources into internal uses? Testing the metaverse with employees is likely to be far less costly and lower risk, and can act as pilot projects for scaling up to a wider, external audience. There’s also a high potential upside in terms of ROI on outcomes such as higher employee retention — which has become a critical strategic objective for many companies — and other similar enterprise applications.

The war for talent in TMT (and other sectors) is a consistent challenge, with a recent KPMG survey of TMT professionals revealing that 38 percent of workers say they intend to look for a job with another company within the next year.¹ As we discuss elsewhere in this survey, metaverse skills are in short supply and anything that can enhance hiring and retention could be vital to remain competitive. The metaverse can offer a rich, immersive space for experiencing company culture and generating enthusiasm among younger candidates in particular.

Employee retention due to improved experiences via the metaverse

When asked what incremental improvement of employee retention would be needed to consider metaverse investments a success, the most common response from TMT leaders was three to four percent. Exploring this further, we looked at how this level of improvement could impact a company’s costs — and the subsequent ROI. Consider this scenario for a company.

¹ https://advisory.kpmg/us/articles/2022/american-worker-survey.html
## Example of retention improvement impact

<table>
<thead>
<tr>
<th>US$1B</th>
<th>20,000</th>
<th>Average salary of US$50,000 per employee</th>
</tr>
</thead>
<tbody>
<tr>
<td>in annual revenues</td>
<td>employees</td>
<td></td>
</tr>
</tbody>
</table>

Employee turnover rate of 25% would yield savings of US$30 million

Staff replacement could total US$187 million per year based on an average cost of nine months’ employee salary per departure

A 4% improvement in turnover rate (to become 21%) could yield savings of US$30 million

ROI could be as high as 500%*

*Assumes company spends 10% of revenue (US$100 million) on IT and 5% of IT budget (US$5 million) on the metaverse.
Key takeaway: Begin your metaverse journey at home

Your own organization offers a wealth of opportunities to pilot metaverse initiatives and develop capabilities for the long term — at lower cost and risk than trialing with customers. Gaining efficiencies such as increased employee retention can bring financial benefits and speed up organizational learning of how to harness the metaverse. Beginning at home means hiring and developing metaverse talent — while also seeking hidden capabilities in your own and your partners’ organizations. For instance, you probably have a cohort of workers who already game or use the metaverse in other ways: they offer a rich source of understanding and technical skills.

Until the metaverse enjoys mass adoption, start to develop your capabilities, knowledge, and readiness internally. In addition to improving employee retention and communications, you can gain valuable experience early and should be better positioned to compete when the time is right. Remember, the internet started out as an internal communication system for the US government. It was, in part, cultivating what the internet could be — as an enterprise application — paving the way for a technology that now touches our lives in every way."

Anna Scally
Partner and TMT Leader
KPMG in Ireland
Excitement — with more than a touch of caution
At such an early stage in its development, the potential of the metaverse presents something of an unknown to the TMT sector. Almost six out of ten leaders (59 percent) taking part in our global survey feel the metaverse will have a huge impact on consumers and businesses. However, a similar proportion also acknowledges that, despite its rich promise, it still needs further refinement and development. Despite the undoubted excitement over what the metaverse could bring, there remains a degree of skepticism, with 27 percent of respondents believing it to be “an unattainable pipe dream” and 20 percent describing it as “a fad that will never live up to its hype”.

Which explains why almost half say their companies are either “watching and waiting” or assessing long-term business value before making major investments.

Leaders see a promising future in the metaverse for both consumers and businesses, but the concept needs further refinement

Which options align with your opinion on the metaverse? (Select all that apply.)

- 59% It’s going to have a huge impact on consumers and businesses both individually and combined.
- 59% It has promise but needs further development/refinement.
- 30% It’s the future of human interaction.
- 27% It’s an unattainable pipe dream.
- 20% It’s a fad that will never live up to the hype.

Base: 767 Global strategy decision-makers at companies with $250M+ in annual revenue

Source: A commissioned study conducted by Forrester Consulting on behalf of KPMG, December 2022

What is your company’s approach to the metaverse? (Select one.)

- 20% Watching and waiting.
- 27% Assessing long-term business value before making major investments.
- 28% Creating new projects and teams for early adopter advantage.
- 25% Ramping up resources, or planning to ramp up, for existing initiatives already focused on the metaverse.

Base: 767 Global strategy decision-makers at companies with $250M+ in annual revenue

Source: A commissioned study conducted by Forrester Consulting on behalf of KPMG, December 2022
The majority of TMT executives taking part in our survey feel that the metaverse is several years from becoming a thriving commercial ecosystem. Of the three subsectors, respondents from technology are relatively the most optimistic, but even then, around 40–50 percent don’t expect the commercial use cases to mature for 4–9 years. Between 30–40 percent believe they won’t be in use in their company for 10 years or more.

## Tech leaders view internal metaverse use cases as being the closest to reality, but still likely 4+ years out

Of the metaverse use cases identified in the previous question, how long do you think it will reasonably take to enable them for your company? (Only technology company respondents’ answers shown.)*

<table>
<thead>
<tr>
<th>Use Case</th>
<th>Present to 3 years out</th>
<th>4 to 9 years out</th>
<th>10+ years out</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee training and onboarding</td>
<td>27%</td>
<td>42%</td>
<td>29%</td>
</tr>
<tr>
<td>Internet of things with metaverse experiences</td>
<td>19%</td>
<td>42%</td>
<td>37%</td>
</tr>
<tr>
<td>Employee collaboration</td>
<td>18%</td>
<td>48%</td>
<td>35%</td>
</tr>
<tr>
<td>Digital twins for infrastructure planning and deployment</td>
<td>17%</td>
<td>39%</td>
<td>43%</td>
</tr>
<tr>
<td>Digital twins for ongoing infrastructure maintenance</td>
<td>15%</td>
<td>49%</td>
<td>36%</td>
</tr>
<tr>
<td>Custom digital twin solutions for customers</td>
<td>14%</td>
<td>55%</td>
<td>31%</td>
</tr>
<tr>
<td>Metaverse-based augmented reality for field service technicians</td>
<td>11%</td>
<td>42%</td>
<td>47%</td>
</tr>
<tr>
<td>Custom metaverse experiences for customers</td>
<td>9%</td>
<td>51%</td>
<td>38%</td>
</tr>
<tr>
<td>AI solutions for use in the metaverse</td>
<td>9%</td>
<td>49%</td>
<td>40%</td>
</tr>
<tr>
<td>Smart city digital twins for customers</td>
<td>8%</td>
<td>48%</td>
<td>43%</td>
</tr>
</tbody>
</table>

Base: Variable Global strategy decision-makers at companies with $250M+ in annual revenue. *Variable for each row

Source: A commissioned study conducted by Forrester Consulting on behalf of KPMG, December 2022.
**Modest but committed investments**

TMT companies are hesitant about spending too much money, too soon, on the metaverse. Seven out of ten respondents say their companies are investing less than 5 percent of their 2023 technology budget in the metaverse, and more than a quarter (27 percent) have zero funds committed.

And investments are not forecasted to grow significantly in the next few years, with only a fifth anticipating a rise of more than 10 percent. On a more encouraging note, few of the respondents expect to reduce their metaverse financing despite the possible challenging economic conditions.

It seems that many in the TMT sector want to see evidence of greater metaverse usage before making significant investments, with 60 percent responding that they’re waiting for higher customer demand before putting more resources into this area. This echoes the findings from another KPMG multi-industry survey, *Shaping your strategy for Web3 and the metaverse*, where respondents say the biggest challenge to deploy or build Web3 technologies is identifying early use cases and/or applications.²

**Key takeaway: Take a bold approach to investment**

If you’re confident that the metaverse will be a game-changer for your business, consider how you can invest wisely, balancing risk with reward.

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### What do you believe are the macro-level preconditions that must be met for making the metaverse successful?

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Precondition</th>
</tr>
</thead>
<tbody>
<tr>
<td>60%</td>
<td>Increased customer demand</td>
</tr>
<tr>
<td>53%</td>
<td>Increased availability of development professionals with skill sets for building out metaverse experiences</td>
</tr>
<tr>
<td>51%</td>
<td>Increased trust in the industry for digital/online experiences</td>
</tr>
<tr>
<td>48%</td>
<td>Improved affordability of metaverse-enabling technology/hardware</td>
</tr>
<tr>
<td>38%</td>
<td>Mass availability/accessibility of metaverse enabling technology/hardware</td>
</tr>
<tr>
<td>37%</td>
<td>More concrete examples of the utility/usefulness of the metaverse</td>
</tr>
<tr>
<td>36%</td>
<td>Simplified user experiences for engaging in the metaverse</td>
</tr>
<tr>
<td>35%</td>
<td>Greater emphasis (and investment) from business leaders</td>
</tr>
</tbody>
</table>

Base: 767 Global strategy decision-makers at companies with $250M+ in annual revenue

Source: A commissioned study conducted by Forrester Consulting on behalf of KPMG, December 2022

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### Companies must first establish a solid business case for moving into the metaverse, factoring in their risk appetite. By quantifying and communicating the upside — and the risks of not moving fast — metaverse champions can entice the rest of the organization. With many companies holding back on investment until customer demand increases, a bold but costed plan can bring first-mover advantage and avoid the need to play catch-up.

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² [https://www.kpmg.us/growth-strategy/shaping-strategy-web3-metaverse.html](https://www.kpmg.us/growth-strategy/shaping-strategy-web3-metaverse.html)

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**Anu Puvvada**

Managing Director and Enterprise Innovation Leader

KPMG in the US
Ahead of, behind, or missing the curve?

In the early days of the internet, no-one could have predicted how rapidly e-commerce, e-publishing or e-learning would take off, which highlights the difficulty in predicting technology adoption. In recent decades, adoption curves have accelerated as laggards have discovered to their detriment. Waiting for increased customer demand may seem a pragmatic approach to an unproven new technology, but the TMT sector needs to be wary of what Clayton M. Christensen called “The Innovator’s Dilemma.”

Christensen warned against framing new, immature and disruptive technologies against current standards and values, where customer feedback may be unreliable. Even the most forward-thinking TMT company risks missing out on new waves of innovation, because they’re hamstrung by traditional practices not relevant to the future. The answer, according to the author, is to know when to listen less to existing customers, and be prepared to invest in smaller markets at lower margins, as they could carry the promise of potentially larger, longer-term, mass-market breakthroughs. The alternative is to wait too long, and be leapfrogged by newer, bolder competitors.

Meanwhile, Terrance Strom, VP at Vuforia Business Strategy, PTC, told KPMG that companies should look at an “…inflection point for the XR (extended reality) industry in the next 3 years to move beyond a very fast-growing market to a rocket ship.”

Waiting for a critical mass of consumers and business workers to own VR/AR devices and headsets, for instance, may appear a sensible strategy. A recent KPMG study Go boldly, not blindly into the metaverse, found that approximately 70 percent of consumers do not currently own a VR device — but also concluded that this situation could change quickly, not least among remote workers needing to enter immersive, interactive workspaces and training.

VR and AR are not, however, the metaverse: they are components that enable one to engage with the metaverse in a more immersive way. It is also possible to interact with the metaverse via a mobile device, tablet, or laptop. Technologies like VR/AR should be viewed as indicators of adoption and market maturity. This helps to explain why keeping a tab on competitor activity is another priority, 45 percent of executives participating in the KPMG study Shaping your strategy for Web3 and the metaverse, say they are very influenced by competitors’ decisions, and make sure they don’t fall behind, even if they don’t ultimately use the technology.

Key takeaway: Think big, start small, move fast

Be nimble and closely monitor the progress of the metaverse. According to the Forrester survey, firms that have ‘high metaverse readiness’ have ambitious expectations, but also expect to invest 2x as much as their competitors. In the near term, much of these investments are likely to be channeled into innovation labs and centers of excellence, with an emphasis on incremental learning rather than large-scale execution.

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5 https://advisory.kpmg/us/articles/2022/consumer-pulse-metaverse.html
6 https://www.kpmg.us/growth-strategy/shaping-strategy-web3-metaverse.html

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Bridging the gap between potential and realization
Technology adoption curves are notoriously unpredictable, but doing nothing is, predictably, not the best option.

Precise adoption timescales for metaverse products and services may be uncertain, but many survey respondents say their companies are underprepared. Respondents express lowest levels of readiness in platforms, operational alignment and content (digitizing assets into 3D metaverse formats). The biggest barriers to investing in and embracing the metaverse are lack of technology to support experiences, high cost of development, and a dearth of appropriate employee skills. A significant proportion (40 percent) say lack of proven use cases with reported ROI is holding them back from further investment.

Proper technology and skillsets are primary barriers to fostering more committed metaverse adoption/planning

What are the primary barriers your company faces in more fully investing in and embracing a metaverse strategy?

- **51%** Lack of proper technology to support metaverse experiences
- **50%** High cost to develop metaverse experiences
- **49%** Lack of employee skills
- **46%** IT/cybersecurity concerns
- **40%** Lack of successful use cases that demonstrate value/ROI

Base: 767 Global strategy decision-makers at companies with $250M+ in annual revenue

Source: A commissioned study conducted by Forrester Consulting on behalf of KPMG, December 2022
In response to these challenges, two-thirds or more of respondents agree that hiring IT, developer, creative and M&A talent is a big priority. Consequently, 55 percent are trying to recruit new staff with the right expertise, and 51 percent are investing in foundational IT infrastructure to support their metaverse ambitions.

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**How important do you expect the following to be in helping your company build and execute on anticipated metaverse use cases? (Very important/Extremely important)**

- **Hiring new IT talent**: 84% (Very important: 46%, Extremely important: 38%)
- **Hiring new developer talent**: 75% (Very important: 44%, Extremely important: 31%)
- **Hiring new creative talent**: 69% (Very important: 36%, Extremely important: 33%)
- **Mergers and acquisitions**: 69% (Very important: 43%, Extremely important: 26%)
- **New, third-party partnerships (i.e., consultancies, service providers, etc.)**: 60% (Very important: 36%, Extremely important: 24%)

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**What steps is your company taking to better enable its metaverse strategy?**

- **Hiring new staff with expertise/skills working with potential metaverse-related technology**: 55%
- **Improving security/privacy for digital experiences**: 39%
- **Learning more about existing metaverse use cases and environments**: 60%
- **Investing in foundational IT infrastructure to support metaverse capabilities**: 51%
- **Investing in metaverse-enabling hardware (i.e., AR/VR, etc.)**: 38%
- **Building a solid business case**: 34%
- **We are not taking any steps at this time to better enable our metaverse strategy**: 11%

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But many are not committing financial and human resources, with 43 percent increasing their overall technology spend to enable more expansion into metaverse activities, 38 percent creating a dedicated metaverse budget category, and only 31 percent appointing a dedicated new leader and group.

How is your company organizing itself internally to pursue metaverse opportunities?

- **43%** Increasing overall technology budgets to enable more expansion into metaverse opportunities
- **38%** Creating a specific budget category for the metaverse
- **31%** Creating a new leader and group dedicated to the metaverse
- **30%** We expect to evolve into a metaverse-first or metaverse-centered company
- **29%** Infusing metaverse strategies and discussions into existing business functions
- **15%** Introducing the topic of the metaverse in business discussions but not proactively pursuing it yet
- **25%** We are not planning to pursue metaverse opportunities at this time

**Base:** 767 Global strategy decision-makers at companies with $250M in annual revenue

**Source:** A commissioned study conducted by Forrester Consulting on behalf of KPMG, December 2022
Lack of strategic clarity is a barrier to progress

Most of the TMT leaders surveyed see the metaverse as a medium-to-long-term investment that will impact many different parts of the business, from digital transformation to product innovation, customer engagement to acquisition of new talent.

But, according to our global survey, only one-third (34 percent) see building a business case as an important next step for better enabling their metaverse strategy. This statistic should concern the sector’s leaders as they consider their next steps in a world where technology adoption curves are accelerating, and new innovations make old brands and products redundant. Some of the earliest (and largest) adopters are spending billions on everything from product development to acquisition of other companies already at the forefront of the metaverse. All the more reason for clarifying objectives and continually refining strategy to stay close to the pulse of this fast-growing ecosystem, and avoid getting left behind.

What steps is your company taking to better enable its metaverse strategy?

When asked “What does success look like?” the respondents say they expect a high return on investment in employee onboarding and training and productivity, operational improvements and brand perception, and customer digital engagement and experience. Clarifying the internal and external metaverse value proposition can help to define investment goals, to drive clear, probable use cases.

By setting and tracking KPIs and metaverse pilot projects (especially internally), TMT companies need to be ready to move fast, scale up investments that build upon early successes — as well as shelve others that are not meeting expectations, acting in classic “fail-fast” fashion. Rus Gant, a futurist who runs the Visualization Research Lab at Harvard, says “The ‘when’ can only be predicted if you as a company are experimenting in a way [where] you can get a little bit higher fidelity on that time frame. Things will become more clear over time, but having a scientific and thoughtful approach to gathering the right data, and making decisions on whether to dive in or not, will help you determine not when the thing hits, but when it’s impactful for your business.”

You indicated that the following is a KPI that you expect to be positively impacted by your company’s innovation and investment in the metaverse. What growth or improvement threshold would you want to see in order to consider your investment a success?

**Employee metrics**
- Employee experience: 8.5%
- Employee productivity: 9.8%
- Employee collaboration: 8.1%

**Company metrics**
- Revenue growth: 13.6%
- Operational improvements: 12%
- Brand perception in the market: 9.2%
- Expanded customer retail channels: 9.9%

**Customer metrics**
- Customer experience: 16.2%
- Customer loyalty: 8.9%
- Customer digital engagement: 5.1%
Key takeaway: Focus on real business and customer value

Don’t let technology drive the conversation — let business value drive it. Be crystal clear about what you hope to achieve, and develop a clear business case that identifies expected impact. Also, be sure to define realistic KPIs early. Revenue, for instance, is more likely to be a 2028 KPI and not a 2023 target.

“Hype and excitement alone are not a basis for investment in the metaverse. TMT companies must define and quantify objectives like “improved employee experience” or “higher employee retention” in terms of value delivered, to enable them to track and report on progress and allocate resources efficiently.”

Mritunjay Kapur
Managing Director and TMT Leader
KPMG in the EMA region
Conclusion

Defining the “metaverse ready” organization

The ultimate evolution of the metaverse may not be here today, or tomorrow, or even next year, but this technology is poised to have a profound impact on the TMT sector, and all companies need to be attuned to developments and ready to act if opportunities arise that they feel could add value to their business.

Of the companies represented by the 767 TMT executives taking part in the survey, a quarter (25 percent) are categorized as being in a state of “high readiness” as a result of their responses. High-readiness companies are characterized by:

- More likely to anticipate that metaverse investments will have a big impact across their business, including digital transformation, product innovation, customer satisfaction and engagement, talent acquisition, employee experience, and revenue growth
- Investing twice as much on the metaverse as low-readiness companies
- See a higher value in both customer-facing and internal use cases
- More likely to conduct business meetings with clients in the metaverse.

With the majority of TMT companies not prepared for the metaverse, there appear to be tremendous opportunities for those ready to move — and money left on the table for those who don’t.

“The metaverse represents the next generation of the internet. It means that the internet is transforming into a more immersive, decentralized experience that merges physical and digital worlds. This can have huge implications for reshaping the way businesses and consumers engage, transact, socialize and work. The leaders are likely to be those who move quickly past exploratory phases and deploy solutions to train employees, engage customers and extend their brand in the metaverse. People need to understand that the metaverse is the next evolution of the internet, although it is likely to take eight to 10 years to reach its full potential.

To help succeed, companies should think about the metaverse as a long-term plan, and KPMG professionals can help determine the right business case, strategies, tools, and other resources to act quickly and act smart.”

Cliff Justice
Partner and Leader of Enterprise Innovation
KPMG in the US
About the survey

In late 2022, KPMG International commissioned Forrester Consulting to carry out a global survey of TMT executives from technology, media and telecommunications. Seven hundred and sixty-seven global strategy decision-makers, at companies with US$250M+ in annual revenue, participated in the survey. Respondents were either vice presidents in charge of one or several large departments (83 percent) or C-level such as CEO, CMO (17 percent). Respondents came from 13 different countries across five continents.

Firmographics

Location

- US 24%
- Canada 10%
- China 8%
- Germany 8%
- India 8%
- France 8%
- Australia 7%
- Japan 7%
- UK 6%
- UAE 4%
- South Africa 4%
- Ireland 3%
- Singapore 3%

Company Size

- 500 to 999 employees (28%)
- 1,000 to 4,999 employees (12%)
- 5,000 to 19,999 employees (12%)
- 20,000 or more employees (47%)

Industry

- Telecommunications (33%)
- Media and entertainment (33%)
- Technology and/or technology services (including software and electronics) (33%)

Respondent level

- C-level executive (e.g., CEO, CMO) (83%)
- Vice president (in charge of one/several large departments) (17%)

Base: 767 Global strategy decision-makers at companies with $250M+ in annual revenue
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About the survey

**Demographics**

**Annual Revenue**

- 11%: $250M to $499M
- 17%: $500M to $999M
- 39%: $1B to $5B
- 33%: $5B +

**Department/Position**

- 15%: IT
- 15%: Digital/Digital transformation
- 15%: Marketing/Advertising
- 12%: Operations
- 11%: Product- or service-specific line-of-business
- 11%: Strategy and/or innovation
- 11%: Human resources/employee experience
- 10%: Customer experience

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Want to win in the metaverse? Think internal first
How KPMG professionals can help

Consulting
Faced with an increasingly complex and uncertain operating environment, organizations — and the people within them — are under pressure to make decisions better, faster and smarter. Yet, as stakeholder expectations shift, and as technology advances, new ways of working and regulatory change are making it harder for people to make the right decisions. And so, opportunities can be missed. Value lost. And trust eroded. KPMG professionals can help harness constantly evolving technologies that can connect and power businesses forward — building trust and creating and protecting value, while bridging the gap between past and future.

Strategy
KPMG professionals support organizations and executive teams in defining their ambition and developing progressive strategies that embed the agility, customer-centricity and operational excellence needed to thrive in dynamic markets. But, they don’t stop there — they can draw on KPMG firms’ deep functional experience to work with clients through implementation and help deliver targeted results by accelerating momentum, striving to lock down value and and helping to de-risk both decisions and actions. They call this ‘innovation to results.’

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