Introduction
Explore NBCUniversal’s latest perspectives and insights into the Tech industry. This report provides an overview of recent marketplace dynamics, our prediction of key future trends impacting the industry, and strategic recommendations for Tech brands and marketers as they navigate what’s next.

Our Approach
At NBCUniversal, we have a legacy of working with a diverse range of Tech partners to build their brands. This report has been created based on NBCU’s:
• Ongoing Industry Evaluation
• Conversations with Tech Advertisers and Agencies
• Continual Marketplace Analysis
• Examination of Consumer Attitudes towards the Tech Industry
NBCUniversal
Has a Unique Perspective

In 2022, NBCU worked with:

95+ Tech Industry Advertisers

- Consumer Electronics
- Software / SaaS / Cloud
- Streaming Platforms
- Internet Apps & Websites
- Connected Fitness Equipment
- Social Platforms
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2022 Landscape
Overview of Key Tech Marketplace Dynamics
After decades of sustained growth, The Tech Bubble Burst in 2022 thanks to the post-pandemic snapback and market conditions.
Tech Brands Re-Assess Strategy & Priorities in 2022

Earnings Fluctuations & Adjusted Growth
Due to macroeconomic factors, volatile quarterly earnings incited concerns over poor results & relief during rebounds, but still resulted in cost-cutting, slowed hiring, & reduced ad spend.

Chip Shortage Impacts Supply & Demand
With chip shortages likely continuing until 2024, new product plans were adjusted conservatively as supply bottlenecked against high demand. Meanwhile, new US chip production legislation will take several years to materialize.

Big Tech Gets Bigger
Big tech doubled down on expansion business lines, such as healthcare & payments, resulting in new advertising priorities & creating deeper competition with start-ups & other industries.

Demands for Social Responsibility
Big tech faced calls for greater responsibility around data privacy, particularly regarding its role in societal issues like gun accessibility & implications of the SCOTUS Dobbs decision. Consequently, tech needs to rebuild consumer trust.
BRANDS ACROSS TECH SUB-CATEGORIES ARE Navigating Newly Unstable Terrain

**Consumer Electronics**
Following a late pandemic boom, sales slowed in response to inflation, recession fears, & supply chain disruption, resulting in excess inventory likely to be discounted by retailers

-10%
Decrease in electronics & appliance sales in July 2022 vs. July 2021

**Software/SaaS/Cloud**
The big three cloud providers (Google, Amazon, Microsoft) continued dominating the subcategory thanks to economies of scale, brand, & pricing, while others struggled

63%
of Q2 2022 global cloud spending led by Google, Amazon, & Microsoft combined

**Social Platforms**
With stocks & revenue struggling, platforms opened more revenue streams, prioritized video, & competed with TikTok to capture more market share

45+ mins
Average daily time spent on TikTok by U.S. adults in 2022, the most of any social platform

**Web3**
After the recent web3 hype, the 2022 crypto crash attracted skepticism & caution, leading to calls for more security, infrastructure, & consumer value

43%
of adults are neutral if the metaverse will be a net positive for society vs. 30% agree & 25% disagree

Tech Forward-Looking Trends

Key Trends We Expect to Influence Tech Marketing & Media Strategies
Looking Ahead
Key Tech Trends We Expect to Influence Marketing & Media Strategies

- Marketing Must Drive Business Outcomes
- Reimagined Design for Immersive Experiences
- Social’s Evolution to Entertainment
- Tech’s Growing Dominance in Entertainment
- Tension in Web3: Decentralization vs. Dominance
Marketing Must Drive Business Outcomes

Coming out of the tech downturn, brands will be more efficient with ad spend for sustained & measurable growth

Facing budget cuts, brands must consolidate resources & identify priorities to grow long-term & will mandate robust measurement.

While startups will prioritize lower funnel impact to drive revenue, big tech will focus on rebuilding brand trust & mass awareness for new products.

Emerging Tech
Startups experienced slowed growth in both funding & IPOs, therefore requiring prioritization of profitability over scale

-23%  -46%  -58%

Global Startup Funding in Q2, Biggest Decrease in a Decade¹
Global IPO Volume in H1 YoY²
Global IPO Proceeds in H1 YoY²

Big Tech
Despite market dominance, major players also faced pressures to reduce costs & increase efficiency²

“Tech companies hit the brakes as slowdown looms”
Axios

“Google CEO says he hopes to make the company 20% more efficient, hints at potential cuts”
CNBC

“As the economy stalls, big tech companies prepare for tougher time”

“Microsoft poised to sit out TV’s upfront market”

Sources: 1. Bloomberg 2. EY 3. Headlines Hyperlinked
Gen Z Consumer Trends

- 95% of Gen Z have used some form of visual communication when messaging friends
- 2/3 of Gen Z use visual communication to create a more personal connection
- 60% of Gen Z say AR experiences feel more personal

In our studies... 40% of young people when they’re looking for a place for lunch, they don’t go to Google Maps or Search. They go to TikTok or Instagram.

PRABHAKAR RAGHAVAN
Senior VP

Neighborhood Vibe
New Google Maps feature spotlighting the most popular local spots

Sources: 1. Q2 2022 Earnings Reports 2. Snapchat 3. TechCrunch

Reimagined Design for Immersive Experiences

Gen Z prefers visually rich platforms for information & connection, requiring brands to re-envision traditional tools.

As tech innovates UX design to meet evolving consumer preferences & stay relevant, the category has announced a slew of new immersive projects.

Brands will need to widely promote & monetize these to achieve the mass adoption & steady revenue they’ve historically enjoyed via traditional products.

Sources: 1. Q2 2022 Earnings Reports 2. Snapchat 3. TechCrunch
Social’s Evolution to Entertainment

As social platforms compete for consumer attention, they’re evolving from social interaction to entertainment destinations.

Give video-first platform popularity, social platforms are updating algorithms to “discovery engines” of uninterrupted videos.

As a result, platforms compete with a wider range of entertainment offerings & need to demonstrate their evolving identity, relevance, & value.

Now, there’s a market gap for community-driven platforms, ushering in specialized social networks (e.g. BeReal & Discord).

### Evolving Models & Behaviors

- **56%**
  
of all social network time will be spent watching video by 2040 vs. 40% in 2020

- **#1**
  
Black & Hispanic adults aged 18-24 use TikTok the most frequently over other social platforms.

- **2x**
  
of Facebook & Instagram content will be served by AI (vs. social networks) by end of 2023, from 15% to 30%

- **20M+**
  
BeReal app downloads, most popular free app on Apple US App store

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**Sources:**
1. eMarketer
2. Mintel
3. TechCrunch
4. Quartz
5. Adam Mosseri
6. The New Yorker

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**We are an entertainment platform.**

**BLAKE CHANDLEE**
President Of Global Business

**TikTok**

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**If you look at what people share on Instagram, that’s shifting more & more to videos.**

**ADAM MOSSERI**
CEO

**Instagram**
Tech’s Growing Dominance in Entertainment

Thanks to the rise of streaming & tech’s search for diversification, big tech grows its share of the end-to-end entertainment experience: devices, software, content production, distribution & data.

With tech brands now streaming live sports & extending further into gaming, they need to **differentiate their value as new entertainment options in the market**, especially to early adopters & multiculturals.

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**2022 Big Tech Advertising Spend Share**

- Entertainment Ad Spend: 30%
- All Other Business Ad Spend: 70%

- +17% vs. 2021
- +8% vs. 2020

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**2022 Tech Investment in Entertainment**

<table>
<thead>
<tr>
<th>Company</th>
<th>Investment Details</th>
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<tbody>
<tr>
<td><strong>Prime Video</strong></td>
<td>$8.5B Acquisition Cost for MGM Studios³</td>
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<tr>
<td><strong>Apple TV+</strong></td>
<td>$85M Streaming Cost for 2022-23 MLB Live Games⁵</td>
</tr>
<tr>
<td><strong>Microsoft</strong></td>
<td>$68.7B Acquisition Cost for Activision Blizzard⁷</td>
</tr>
<tr>
<td><strong>Google</strong></td>
<td>$1B Streaming Cost for 2022 NFL Thursday Night Football⁴</td>
</tr>
<tr>
<td><strong>Netflix</strong></td>
<td>$2.5B Streaming Cost for 10-Years MLS Live Games⁶</td>
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18 month
Development of new YouTube Streaming Video Marketplace, launching Fall 2022⁸
**Tension in Web3: Decentralization vs. Dominance**

While the promise of web3 rests in its inherent decentralization, both big tech & emerging brands are racing for market leadership.

With traditional & new players viewing web3 as the next digital frontier, all will compete for share, affinity & trust amongst consumers.

Importantly, they will need to **build experiences that consumers truly want/need** & demonstrate this effectively in marketing. While 44% of consumers believe the metaverse is “futuristic,” only 21% believe it is “useful.”

### Emerging Tech

<table>
<thead>
<tr>
<th>Growth Rate</th>
<th>Description</th>
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<tbody>
<tr>
<td>🔄 5x</td>
<td>Growth rate of web3 apps added to app stores in 2022 vs 2021.²</td>
</tr>
<tr>
<td>⬆️ +89%</td>
<td>Growth in web3 capital invested in May 2022 vs. May 2021.²</td>
</tr>
<tr>
<td>🔄 +1160%</td>
<td>Growth in web3 funding in Q1 2021 at $9.5B vs. Q1 2019.³</td>
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### Big Tech

- “Big Tech Seeks Its Next Fortune in the Metaverse” - *WSJ*
- “The Metaverse Sets Off a Battle Between Tech Giants Google, Apple, Microsoft and Meta to Build Virtual and Augmented Reality Headsets” - *Forbes*
- “Zuckerberg says Meta and Apple are in ‘very deep, philosophical competition’ to build the metaverse” - *TheVerge*
- “Microsoft vs. Meta: Who’s got the upper hand in the metaverse?” - *FastCompany*

Marketing Must Drive Business Outcomes
Coming out of the tech downturn, brands will be more efficient with ad spend for sustained growth & impact

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Gen Z prefers visually rich platforms for information & connection, requiring brands to re-envision traditional tools

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NBCU Tech
Strategic Considerations

Key Considerations for Driving Growth for Tech Brands
## Tech Strategic Considerations: A Full Funnel Approach

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<tr>
<td><strong>01.</strong></td>
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<td><strong>04.</strong></td>
<td><strong>05.</strong></td>
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<tr>
<td>Build Mass Awareness Via Cultural Connection</td>
<td>Engage Multicultural Audiences for Growth</td>
<td>Leverage Lower Funnel Ad Solutions</td>
<td>Drive Brand Love &amp; Perception with Credibility</td>
<td>Lead &amp; Innovate in Web3</td>
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- **Align major product releases & promotion with mass reach content, influential talent, & cultural moments**
- **Leverage audience data & targeting to drive growth with audiences primed for tech products**
- **As supply chain & macroeconomic factors recover, enhance sales efforts with commercial innovation solutions**
- **Capitalize high impact storytelling to build brand trust, affinity & credibility with viewers**
- **Test, learn, & innovate ahead of the curve with an integrated marketing approach in this emerging space**
Tech Strategic Considerations: A Full Funnel Approach

01. Build Mass Awareness Via Cultural Connection
   - **Why:** Leverage live premiere moments with built-in mass appeal to catapult awareness & relevance for upcoming launches
   - **Good For:** Awareness | Mass Reach | Affinity | Consideration | Brand Perception | Ad Recall

02. Engage Multicultural Audiences for Growth
   - **Why:** These demos are highly desirable targets for collective spending power, accelerated adoption, & affinity for innovation
   - **Good For:** Targeted Reach | Incremental Reach | Conversion | Trial | Purchase Intent

03. Leverage Lower Funnel Ad Solutions
   - **Why:** Increase conversion & consumer action with innovative ad solutions designed for engagement & purchase
   - **Good For:** Purchase Intent | Conversion | Trial | Engagement | Attribution | CRM/Lead Generation

04. Drive Brand Love & Perception with Credibility
   - **Why:** Combat category perception challenges by demonstrating your commitment to & impact on consumer passion points & causes
   - **Good For:** Perception | Awareness | Affinity | Consideration | Advocacy | Familiarity

05. Lead & Innovate in Web3
   - **Why:** Tech brands are uniquely qualified to build compelling & safe web3 innovation as the public learns about this growing space
   - **Good For:** Innovation | Trust | Awareness | Brand Perception | Engagement
01. **Build Mass Awareness Via Cultural Connection**

Align major product releases & promotion with mass reach content, influential talent, & cultural moments

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**Alignment with IP**
Align your brand with NBCU’s premium, brand-safe, passion point content via sponsorship & integration opportunities

**Premier Live Events**
Tap into the breakthrough moments & events that shape today’s cultural conversation

**Live Sports**
Utilize the power, passion, & wide reach of live sports for branded integration & product storytelling

**Talent Room**
Leverage NBCU’s influencer hub connecting brands with relevant & compelling talent to authentically amplify storytelling
02.
Engage Multicultural Audiences For Growth

Leverage audience data & targeting to drive growth with audiences primed for tech products

Brands can bring their audiences to match to NBCU IDs or partner to develop custom audiences

NBCU can create new custom audiences by combining a variety of data including our own, brand data, and 3rd-party data

Audiences can be further expanded through lookalike modeling

AdSmart provides seamless connection to NBCU inventory for audience activation
03. Leverage Lower Funnel Ad Solutions

As supply chain & macroeconomic factors recover, enhance sales efforts with commercial innovation solutions

**Prompt Action with Commercial Innovation**

- Seamlessly blend advertising & content to better encourage consumer interaction & action towards your products/services
- Other formats include to Shop Drop, Countdown Clock, PIP, Pause Ads, In-Scene Ads etc.

**Drive Leads & Action via Apple News Ad Formats**

- Tap-to capabilities can drive users to site, app download, deep link within app, email, chat, map, wallet, etc.

**Activate the Full Funnel to Target Consumers**

- Create seamless shopping experiences for consumers to purchase priority products
- Commerce opportunities include experiential, social commerce, ShopabbleTV, & Interactive web

*Note: Activation feasibility would require further discussion*
04. Drive Brand Love & Perception with Credibility

Capitalized high impact storytelling to build brand trust, affinity & credibility with viewers

**Educate Audiences Via Branded Content**

- Communicate your brand’s efforts, position, & meaningful impact on key issues such as social justice, data transparency, sustainability, etc.
- Partner with NBCU to tell your story via branded content that breaks through the noise

**Align with Issue-Oriented Programming**

- Deploy brand messaging & marketing around issue-oriented programming to build positive association & brand love

**Programming Examples**

- Morning Shows
- Finance & Business News
- Multicultural Audiences

**Drive Impact With Moments That Matter**

- Celebrate, elevate & impact cultural communities & moments year-round to advance critical conversations that audiences are rallying around

**Platform Examples**

- Hispanic Heritage
- PRIDE Is Universal
- Stronger Together: AAPI Heritage
- HERstory: The Next Chapter
05. Lead & Innovate in Web3

Demonstrate your brand’s innovative leadership & technology expertise by unlocking new immersive experiences for fans

Use NBCU’s One Platform to promote web3 activations

• Take advantage of NBCU’s mass reach to promote your brand’s web3 innovations
• Drive desired engagement with tech-savvy consumers with NBCU’s advanced targeting & data solutions

Bored Ape Yacht Club NFTs
The Tonight Show with Jimmy Fallon

Leverage NBCU IP for co-branded experiences

• Utilize NBCU IP to co-create meaningful & valuable activations for audiences to experience fandom in new mediums
• Co-create NFTs & web3 activations that support shared social impact initiatives

#StopAAPIHate NFT Launch
Saturday Night Live

Provide tech solutions for NBCU web3 programming

• Launch unique & authentic storytelling by deploying your brand’s technical products to power & support NBCU web3 experiences
• Build B2B & B2C trust by demonstrating your tech’s capabilities & empowering new fan opportunities

Shopping Bazaar in the Metaverse
Bravocon

Note: Activation feasibility would require further discussion
NBCU Relevant Materials

Example Tech Industry Partnerships
Category Content & Strategies

Fueling the Cultural Conversation: Premier Live Events

Using Context to Take Planning from Great to Amazing

Blending of Worlds: Rise of a Global Culture

A Marketer’s Guide to the Metaverse

Tech Case Studies

Cisco Technology + U.S. Open

AdSmart Global Addressable + Online Cycling App

AdSmart + Smart Home

AdSmart + Headphone Client