Hype Cycle for Digital Advertising, 2023

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> The technologies and data available to advertisers are undergoing disruption, forcing chief marketing officers to adapt. Use this Hype Cycle to assess advertising technology investments that can support marketing in a world increasingly impacted by artificial intelligence tools and applications.

Strategic Planning Assumption(s)

Analysis

What You Need to Know

Gartner's Hype Cycle for Digital Advertising offers a dynamic view of advertising technology advancements so that chief marketing officers can assess the viability of emerging and scaling technologies. In 2023, technologies on the Hype Cycle have unilaterally moved forward due to applications of generative AI (GenAI) for marketing. However, due to its unpredictability in live situations, almost half of the technologies on the cycle are approaching or landing in the trough this year.

The hype of GenAI is causing vendors to increase their investment in the technology and explore how it can improve the performance of their offerings in 2023 and 2024. As such, many CMOs and their teams plan to invest along a complementary timeline to take advantage of these developments. A cohort of early adopters, representing 14% of Gartner's 2023 Marketing Technology Survey respondents, are already investing in GenAI, and a further 63% plan to invest in GenAI within the next 24 months. [1]

CMOs must act now to establish investment criteria, usage guidelines and ethical considerations even as GenAI transforms advertising technology from the inside out. Best practices consist of establishing a cross-functional governance structure, evaluating impact on core business performance and team productivity, and an iterative planning process. This may require both internal (e.g., IT and Finance) and external partners (e.g., agencies and other managed services) to stay ahead of the curve.
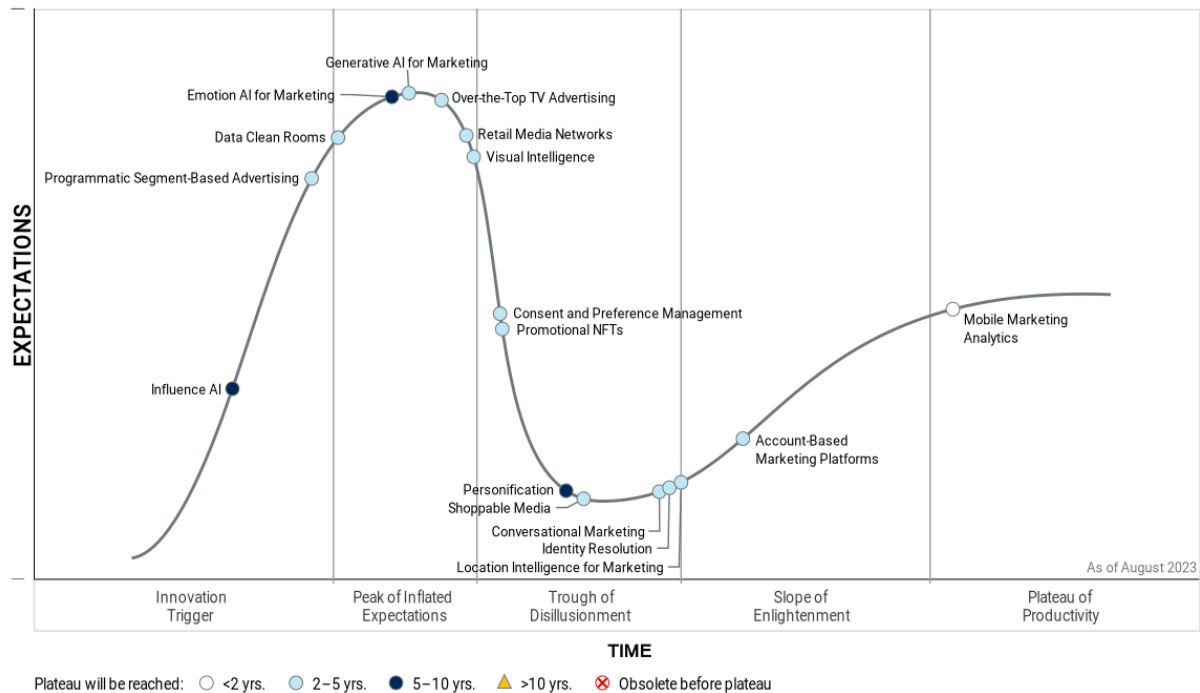
The Hype Cycle

Due to the advancement of GenAI, more technologies have moved from the Innovation Trigger to live between the peak and trough:

- There is a demand for channels and technology that can connect advertising directly to consumer actions and sales fueled by the need to demonstrate the value of advertising. While some technologies are heading into the trough due to spectacular implosions (Promotional NFTs), many are working through a shifting landscape of regulations and consumer concerns. In response, vendors are working on and offering suites of products in data collaboration, such as data clean rooms and identity resolution, for new targeting and measurement models. CMOs must evaluate their existing tech stacks judiciously and focus on new acquisitions to enhance capabilities versus add complexity (see Maturity Model for Managing Marketing Technology).

- Generative AI for marketing is poised to impact every facet of marketing, from strategy to measurement. It is powering a new generation of tools for marketers to deal with challenges from the accelerated fragmentation of digital media, the demise of third-party cookies and fewer customer data points due to platform changes and new privacy regulations and more. CMOs are assembling a roster of partners and technologies, both internal and external, to help evaluate how to plan, adopt and reinvest in advertising programs with these new tools.

- The evolution from an assumed quid pro quo to an explicit consent-driven media and advertising economy continues. Traditional methods for targeting customers are on a (delayed) deprecation timeline by one last holdout, Google, which intends to disable cookies in Chrome by the end of 2024. In the meantime, the open web ecosystem of independent marketing technology providers and digital media publishers continues to innovate advertising offerings using GenAI and other tools. However, CMOs must scrutinize current channel and data investments to ensure that they add value beyond creating unnecessary complexity (see Maverick Research: The Disappearing Business Case for Customer Data).

Figure 1: Hype Cycle for Digital Advertising, 2023

Hype Cycle for Digital Advertising, 2023

The Priority Matrix

Generative AI for Marketing continues to advance on its own and drive significant updates to many technologies included in the Hype Cycle in 2023. While obvious functions around content generation and conversational marketing can be implemented today, CMOs must keep an eye on its transformational potential in applications like visual intelligence and automation within account-based marketing platforms.

The fallout from changes to collecting and activating consumer data, such as Apple's App Tracking Transparency, Google's Privacy Sandbox initiative and new tools like synthetic data, led to a flurry of advancements in data collaboration tools. Data collaboration tools, like data clean rooms, consent and preference management platforms, and identity resolution, continue to advance despite walking the tightrope between consumer sentiment and authoritative regulation. Both consumers and regulators remain on high alert for the misuse of personal data.

Other technologies, like conversational marketing, location intelligence for marketing, and account-based marketing are proving their worth by nearing or moving onto the Slope of Enlightenment. Retail media networks and over-the-top TV advertising's position near the peak attracted both attention and investment dollars. However, they are quickly heading toward the trough as consumer saturation leads to slower growth in available impressions despite higher demand from advertisers. As channels, they have a faster maturity curve and are expected to be at mainstream adoption within five years. More transformative profiles like personification, emotion AI for marketing and influence AI are still five to 10 years until reaching their full potential for advertisers.

Table 1: Priority Matrix for Digital Advertising, 2023
(Enlarged table in Appendix)

Benefit	Years to Mainstream Adoption			
↓	Less Than 2 Years ↓	2 - 5 Years ↓	5 - 10 Years ↓	More Than 10 Years ↓
Transformational		Generative AI for Marketing	Emotion AI for Marketing Influence AI	
High	Mobile Marketing Analytics	Account-Based Marketing Platforms Data Clean Rooms Identity Resolution Over-the-Top TV Advertising Programmatic Segment-Based Advertising	Personification	
Moderate		Consent and Preference Management Conversational Marketing Location Intelligence for Marketing Promotional NFTs Retail Media Networks Shoppable Media Visual Intelligence		
Low				

Source: Gartner (August 2023)

Off the Hype Cycle

- **Artificial Intelligence (AI) for Marketing:** The impact of Generative AI has sharpened the lens on AI applications for marketing to its individual use cases versus a general innovation profile for AI. As a result, AI for Marketing has been removed from the Hype Cycle in favor of more specific applications, including but not limited to GenAI, Personification, Influence AI and Emotion AI for Marketing.

- **Influence Engineering:** Influence engineering is replaced by Influence AI. As the applications for AI continue to expand into the automation of digital experiences, clarifying the name to AI more accurately indicates the type of engineering being applied, as many of these tasks are completed by machines versus people. AI takes the techniques of behavioral science and guide users' choices at scale throughout digital experiences.

Influence AI

Analysis By: Andrew Frank

Benefit Rating: Transformational

Market Penetration: Less than 1% of target audience

Maturity: Embryonic

Definition:

Influence AI is the production of models designed to automate elements of digital experience that guide user choices at scale by learning and applying techniques of behavioral science. Influence AI replaces the previous innovation profile called "Influence Engineering."

Why This Is Important

Generative AI (GenAI) has shattered preconceptions about the communication limits of AI in general. Marketers are moving beyond efficiency and savings toward more effective uses of content to influence behavior, which we refer to as Influence AI. Mastering these techniques offers disproportionate control over market-shaping consumer choices but carries substantial risks and needs for ethical governance.

Business Impact

Organizations are adapting the foundational models of genAI to marketing's commercial goals by adding data and analytics to nudge customer choices with relevant content and experiences that guide decisions. Emotion AI, content intelligence and federated learning models are powering new approaches to promotion, pricing, customer experience and product design with positive and negative implications.

Drivers

- **Proof of AI's persuasive abilities.** Independent research has clearly demonstrated that AI can learn and model persuasive techniques that exploit cognitive biases in human decision making.

- **Acceleration of general AI development.** Although many have called for a pause, there's no sign that AI developers will slow down as competition and investment build behind the latest technology bonanza.

- **Marketing's lead.** Marketing, with its dependence on communication and content to influence behavior, is the first target and adopter of GenAI products in most organizations.

- **Evolving consumer expectations.** Chatbots and digital people are trending, replacing legacy search prompts in search engines and advancing personalization techniques with more empathic inferences.

- **Adoption pressures.** The public deployment of ChatGPT and other GenAI applications has brought awareness of AI's uncanny abilities to millions globally, putting adoption pressure on organizations.

- **Awareness of risks.** Misuse of AI to produce deepfakes and other toxic content that attacks organizational reputations has become a boardroom concern.

- **ESG pressure.** As corporations face increasing demands to address environmental and societal impacts, success often depends on nudging consumers toward more sustainable and ethically sourced product choices and away from misinformation. The success of investments in more sustainable, healthier products and more equitable business practices is highly dependent on modifications in consumer behavior which can be reinforced with effective nudges by Influence AI.

- **Reactions to data loss.** Pressure is mounting on marketing organizations to deliver better results while losing key data sources such as browser cookies and device IDs. This is driving greater dependence on advanced analytics and content strategy to make up for loss of data.

Obstacles

- **Immaturity and danger.** Approaches to leveraging GenAI with other technologies like emotion AI are still experimental and high-risk.The potential for AI to exploit people's vulnerabilities to encourage bad choices or reinforce destructive behaviors or biases — even if this was not the intention of designers — creates poorly understood moral risks.

- **Popular backlash.** Developers and the press have raised alarms about the many dangers of AI development moving too fast, leading many organizations to take a cautious approach. High-profile blunders, such as accidental leaks of proprietary information, also signal caution. Reactions to perceived manipulative technology have been especially harsh.

- **Legal ambiguities.** Proposed regulations with nebulous scope create new legal hazards for companies contemplating use of AI for influence. The impact of new regulations on providers is also unknown.

- **Lack of skills.** Sourcing expertise needed for advanced applications of AI in marketing remains challenging.

User Recommendations

- Identify an ethicist role in the organization that reports directly to the board before experimenting with Influence AI. Work with them on articulation of guidelines and principles.

- Establish or locate a governance structure within your organization where opportunities for influence AI are best investigated. Discover use cases and debate the goals and extent of potential commitments. Solicit cross-functional representation.

- Recruit user test groups from within and outside your organization for research and experimental projects, or seek providers for such projects. Be transparent about goals and technologies. Assume such research requires informed consent and privacy controls.

- Motivate staff to learn the basics of prompt engineering and other skills needed to build and test GenAI applications. Develop a sense of scope as projects costs and complexity vary widely.

- Build a knowledge center and include assessment of competitors' and platform providers' activities. Play defense as well as offense.

Gartner Recommended Reading

Predicts 2023: AI, Social Toxicity and Disappearing Customers Forge the Future of Marketing

Use Generative AI to Enhance Content and Customer Experience

Board Brief on Generative AI

Beyond the Hype: The Impact of Generative AI on Marketing

Programmatic Segment-Based Advertising

Analysis By: Eric Schmitt

Benefit Rating: High

Market Penetration: 1% to 5% of target audience

Maturity: Emerging

Definition:

Programmatic segment-based advertising (PSBA) allows advertisers to target and measure digital ad campaigns using IDs that represent defined clusters of users rather than individuals. It covers a number of specific technologies that aim to replace the accuracy and accountability lost to the demise of cookies, while preserving privacy and consistency with current programmatic practices — particularly real-time bidding on targeted inventory.

Why This Is Important

The privacy-led disruption of digital ad targeting and measurement leaves many publishers short of sustainable revenue and threatens the viability of free internet content. Cookie and device ID loss drives ad revenue to the concentrated core of big tech platforms that can still offer scalable targeting with opaque private IDs and data. A level playing field requires scalable new methods of targeting and accountability that satisfy privacy concerns. Segment-based protocols address this need.

Business Impact

New programmatic segmentation tactics aim to enhance the digital media market by:

- Improving the efficiency and effectiveness of digital advertising with meaningful signals that reduce waste due to poor ad targeting and measurement.

- Distributing the monetization of data assets more equitably across the publisher ecosystem and eliminating intermediaries.

- Enabling privacy-preserving tactics that empower consumers while delivering relevant marketing communications and ad-supported content.

Drivers

- Publishers and advertisers face dire challenges to their digital advertising businesses and are eager to find ways to preserve their mutually beneficial revenue/value exchange.

- Ad tech platforms and their industry associations have accelerated their embrace of segment-based ID schemes. Specifically, since 2020: the IAB Tech lab released a Seller-Defined Audiences specification to allow publishers to develop and scale segmented first-party datasets; and the Digital Advertising Alliance launched a certification process for Addressable Media Identifiers that provides neutral oversight of IDs. Meanwhile, Google began origin trials of its FLEDGE API, subsequently rebranding it Protected Audience API as well as announcing Topics API cohort-based Chrome solutions. Microsoft issued a PARAKEET proposal that also features cohorts. Akamai built a Data Activation Platform on top of prebid to submit cohort IDs to an ad tech bidstream andAdobe introduced Segment Match to enable segment-level data matching and targeting among its Experience Platform users.

- In addition to ad tech dynamics, first-party data collection and data clean rooms are driving adoption of privacy-compliant data collaboration among advertisers and publishers (including large retailers with data-enhanced media networks).

- Advancements in AI are improving the predictive accuracy of segmentation and contextual analysis, raising hopes that segment-based targeting can deliver results as good or better than user-level targeting.

- On their own, segment IDs contain no personal data. This makes them less vulnerable to regulatory scrutiny when shared than distributed ID systems like UID2 and RampID that are based on hashed email addresses or other personally identifiable data.

Obstacles

- Even though segment IDs are not personal data on their own, when combined with other data they can become personally attached and are thus neither fully free from privacy scrutiny nor benign in their potential for abuse.

- Since segment definitions can be private, there's no straightforward way to prevent the formation of segments based on sensitive data or to assure that such data won't be used to the detriment of segment members.

- The benefits and risks of segment ID data traffic in open bidstreams are poorly understood. Benefits depend on private implementation details. These will vary among providers, whose incentives to maximize ad yields may bias algorithms that are shielded from privacy-policy scrutiny. Beyond a potential failure to protect privacy, risks include new forms of fraud and dynamics that further advantage platforms and walled gardens.

- Cookie replacement technology faces a collective action problem that disincentivizes participation ahead of critical mass.

User Recommendations

- Work with agencies and internal data science groups to model the potential impact of PSBA techniques and segmentation-level optimization in general. Document and test key assumptions and economic scenarios.

- Organize pilots with preferred publishing and retail partners to test PSBA approaches such as seller-defined audiences on in-market advertising campaigns. Use standard cookie-based optimization while it's still available as a baseline for comparison.

- Support Prebid and related open-source standards and solutions as a hedge against market concentration, but don't overlook walled-garden offerings.

- Continue to work with tech providers on postcookie strategies for ad targeting and measurement, including those based on pure contextual elements. Insist that vendors document data privacy and leakage mitigation practices.

- Examine the role of data collaboration technologies such as clean rooms to enable custom strategies on the buy and sell side.

Sample Vendors

Adobe; Akamai; Blueshift; Criteo; Google; Microsoft; Mozilla

Gartner Recommended Reading

Apple Upsets the Digital Advertising Cart

Google to Drop Cookies, but Still Hold the Cards

3 Scenarios for Privacy's Impact on Targeted Advertising

Choose Your Google Analytics 4 Path Now

How Digital Marketing Leaders Can Prepare Martech for First-Party Marketing

Data Clean Rooms

Analysis By: Eric Schmitt

Benefit Rating: High

Market Penetration: 5% to 20% of target audience

Maturity: Emerging

Definition:

A data clean room is a secure, isolated platform that links anonymized marketing and advertising data from multiple parties. For advertisers, data clean rooms are distinguished from other data sharing methods by the inclusion of detailed advertising impression data, with privacy-safe restrictions on outputting user-level results.

Why This Is Important

Data clean rooms offer a postcookie upgrade to advertising capabilities by allowing marketers to rebalance privacy with new data access and utilization policies that are fit for a consent-driven advertising world.

Business Impact

At scale, the opportunity to access ad impression and interaction data presents digital marketing leaders with the potential to get more from advertising spend, via both analytic and operational applications. Examples include data governance, audience segmentation for advertising activation, campaign measurement, data enrichment and time-series analysis.

Drivers

■ **Data deprecation:** The shift to consent-based data usage and associated limits on the use of cookie and device ID data create an opportunity for new approaches to data-driven advertising and measurement.

■ **Data append and enrich:** Clean rooms can enrich first-party customer and prospect profiles with additional data attributes or elements. These attributes may be sourced from the clean-room provider or third-party data sources, or developed/derived via statistical modeling and processing.

- **Execution:** Clean rooms offer a pathway for addressable and look-alike targeting in the data-rich environments of retailers and publishers, without the need for those parties to expose any data.

- **Reach/frequency:** On an anonymized basis, clean rooms can measure how many and which people were contacted, and how many times over the duration of the campaign. This sets the stage for target audience penetration analysis, unique unduplicated reach and refined campaign activation.

- **Campaign performance:** Clean rooms enable marketers to link ad impression data to sales and engagement data. This can feed campaign performance measurement analysis and attribution, reports and dashboards. Clean rooms can also inform media planning, financial and management reporting, and business forecasting.

- **Projections and forecasts:** The ability to stack data for ongoing, time-series analysis has strong appeal for many marketing leaders. This can create data views for use in advertising and sales projections and forecasts.

Obstacles

- **Privacy risks:** As with any sensitive data processing, breaches or circumvention of privacy controls (e.g., via iterative queries) could result in reidentification — and therefore liability.

- **Disruption distractions:** Although cookie and device ID data gaps may boost clean rooms in the long run, in the near term many advertisers are likely to focus on immediate operational adjustments to media plans.

- **Regulatory uncertainty:** Key enforcement questions related to U.S. state laws remain unresolved, even as a patchwork raft of new regulations moves through legislatures. Firms may be hesitant to make bets on privacy-sensitive data processing without more governance clarity.

- **Scarce talent:** The pool of big data processing and analytics talent available to advertisers is limited. Talent shortages combined with procurement inexperience can add costs and delays.

- **Cost:** Complex database investments like clean rooms incur substantial financial technology costs.

User Recommendations

- Define clean-room goals. The menu includes reach/frequency measurement, campaign performance analysis, projections and forecasts, governance, and campaign segmentation.

- Explore the landscape of clean-room providers. Brands with heavy paid media investments in Google or Amazon should start by looking at these vendors' clean-room offerings. Independent and agency solutions are a better fit for cross-media applications; examples include Acxiom, Epsilon, Habu and InfoSum.

- Embrace agile principles during clean-room development. Wrangling and massaging data — especially new, high-volume sources — often takes longer than planned and requires multiple iterations.

- Apply good governance and privacy by design. Despite technical safeguards such as aggregate reporting outputs with minimum cell sizes, risks like reidentification exist. Mitigate risks with documented use cases and detailed data flow diagrams that cover processing and storage — and by building up internal data skills like SQL and BigQuery.

Sample Vendors

Acxiom; Amazon; Epsilon; Experian; Google; Habu; InfoSum; Merkle

Gartner Recommended Reading

3 Scenarios for Privacy's Impact on Targeted Advertising

Google to Drop Cookies, but Still Hold the Cards

Apple Upsets the Digital Advertising Cart

How Digital Marketing Leaders Can Prepare Martech for First-Party Marketing

Emotion AI for Marketing

Analysis By: Nicole Greene

Benefit Rating: Transformational

Market Penetration: 1% to 5% of target audience

Maturity: Emerging

Definition:

Emotion artificial intelligence (AI) technologies analyze the emotional state of a user (via computer vision, audio/voice input, sensors and/or software logic) to tailor creative messaging and engagement with digital people and chatbots. Emotion AI can initiate responses by performing specific, personalized actions to fit the mood of the customer based on body language, tone and other inputs.

Why This Is Important

Emotion AI is considered transformational because it turns human behavioral attributes into data that impacts how humans react to marketing. Machines can detect sentiment in many different contexts. Insights from deep learning, computer vision (CV) and audio-based systems are driving new use cases that enhance the customer experience. This includes testing and refining content, tailoring digital experiences and guiding customer choices when combined with broader influence AI techniques.

Business Impact

Emotion AI tailors engagement with digital people and chatbots based on body language, voice analysis and natural language processing. CV and signal analysis have been used for years to support neuromarketing research to test reactions to products and ads. This is moving out of labs and into commercial availability. Combined with content operations and automation, marketers can make fewer versions of creative, then segment and assemble content experiences to generate a desired response.

Drivers

- Emotion AI is experiencing a renewed focus due to its impact when combined with other AI techniques. Marketing is driving enterprise AI use cases where these insights can support better customer experiences and drive consumer decisions, across purchase, ownership and loyalty.

- Emotions are key drivers across the customer journey. Emotion AI provides an essential tool for optimizing experiences at each stage by grouping target audiences and eliciting desired responses.

- Technology that optimizes customer experience based on emotions will have a major commercial impact on a brand, especially in service and D2C scenarios.

- Market research and neuromarketing tools leverage emotion detection in various user scenarios, including focus groups and product testing. These capabilities are now being leveraged in consumer-facing applications, where mobile phones and wearable devices can supply inputs from consenting panelists to broaden the impact of emotion AI.

- The rapid adoption of digital people, virtual assistants and chatbots is propelling the impact of emotion AI on consumers. Personalized and tailored experience requires emotion detection and empathic responses to build credibility and trust. This "emotional capability" is an important element in enhancing the communication and interaction between users and personal assistant robots (PAR).

- Emotion AI requires explicit consent, and then predicts the responses of target audiences, supporting model-based methods of targeting and measuring media investment. As privacy restrictions tighten and consumers opt-out of brand messages, this approach to predicting response will become more important for creative development and distribution.

Obstacles

- Privacy concerns are the main obstacle to rapid adoption in the enterprise. This is especially a concern in real-live situations (vs. lab/research environments) for both consumer-facing (e.g., monitoring emotions in a retail environment via cameras) and employee-facing situations. Research environments like product testing have the advantage that the emotion AI is used for this specific purpose and the user (product tester) is fully aware that their emotions are being captured to improve usability or other features.

- Bias may be present. When using facial expression analysis, models are likely to be retrained in different geographies to get the system to detect the different nuances present due to different cultural backgrounds.

- There is variation across modalities. Certain emotions can be better detected with one technology mode than with another. For instance, "irony" can be detected using voice-based analysis while this is close to impossible to detect with facial expression analysis.

User Recommendations

- Focus on proven use cases within your industry. As the market rapidly matures, most vendors have experience in customer insights or testing and fine-tuning, rather than applying this technology to the entire customer experience. Many vendors focus on two or three use cases in specific industries and are working to develop APIs with larger vendors.

- Technology is moving faster than regulations and governance. Expect legal scrutiny for emotion AI. Tracking and processing human emotion, even with consent, remains a gray area. Work with legal to measure this risk.

- Appoint a chief data privacy or ethics officer to oversee data collection and use. The outputs from emotion AI have the potential to transform your business operations and cross-functional applications should be scrutinized.

- Use proofs of concept (POCs) to apply emotion AI to your customer analytics and behavioral profiling efforts, and work with vendors on change management in order to avoid user backlash due to sensitive data being collected.

Sample Vendors

Behavioral Signals; BRANDthro; Cogito; DAVI; Intelligent Voice; kama.ai; MorphCast; Soul Machines; Superceed; Uniphore

Gartner Recommended Reading

Elevate Your Influence Goals With Emotion AI

Emerging Tech: Computer Vision, Voice Analysis and CGI Evolve Into Emotionally Intelligent Virtual Beings

Competitive Landscape: Emotion AI Technologies

How to Responsibly Use ChatGPT (and Other LLM Applications) in Your Business Interactions

Predicts 2023: AI, Social Toxicity and Disappearing Customers Forge the Future of Marketing

Generative AI for Marketing

Analysis By: Nicole Greene

Benefit Rating: Transformational

Market Penetration: 5% to 20% of target audience

Maturity: Emerging

Definition:

Generative AI technologies can generate new derived versions of content, strategies, designs and methods by learning from large repositories of original source content. Generative AI has profound business impacts, including on content discovery, creation, authenticity and regulations; automation of human work; and customer and employee experiences.

Why This Is Important

Generative AI (GenAI) adoption is accelerating. Proven marketing use cases include creative development, customer experience enhancement and the generation of synthetic data. Persona-specific content fuels personalization. Most industries are aggressively experimenting with GenAI, supported by rapid adoption from martech, enterprise applications and tools. Governments are evaluating the impact and preparing to introduce regulations.

Business Impact

GenAI will support the creation of new things, automating the development and assembly of digital experience to influence user choices at scale. Most technology products and services will incorporate GenAI capabilities in the next 12 months, leading to their democratization. When used for nefarious purposes, it will also become a security and societal threat with unforeseen consequences. Responsible AI, trust and security will be necessary for safe exploitation of GenAI.

Drivers

- Currently, ChatGPT is the most hyped application. It relies on generative AI foundation models.

- New foundation models and their new versions, sizes and capabilities are rapidly coming to market. Generative AI models keep making an impact on language, images, molecular design and computer code generation. They can combine concepts, attributes and styles, creating original images, video and art from a text description or translating audio to different voices and languages.

- GenAI reaches creative work in marketing, design, and content. Content creation and improvement in text, images, video, language translation, sound enabled copywriting, highlight reels and visual effects. GenAI can generate within the same modality (picture to picture) or across modalities (text to picture).

- Ads can be autonomously optimized by assembling content artifacts into combinations to support personalization based on response triggers. Chatbots are impacting SEO and SEM behaviors.

- Industry applications include digital commerce where human likenesses can be generated for modeling. Images can be altered for different poses, aging and other features, and customers can virtually try on makeup and outfits. GenAI helps innovate product development and experiences through digital twins.

- Interest in digital people, avatars and virtual influencers to engage customers on social media and in the metaverse, and to provide customer support. Computer vision (CV) can be used to capture, process and analyze real-world images and videos to allow machines to extract meaningful and contextual information from the physical world.

- Synthetic data draws enterprises' attention by helping to augment scarce data, mitigate bias or preserve data privacy.

- GenAI will disrupt software coding. Combined with other techniques it can automate up to 70% of the programmers' work, freeing scarce IT resources for digital experience optimizations requested by business teams.

Obstacles

■ Democratization of GenAI thrusts new ethical and societal concerns into the spotlight. Government regulations may hinder GenAI research rather than encouraging development of risk mitigation technologies and guardrails.

■ Regrettably, GenAI can be used for deepfakes, fraud, malware, disinformation and instigation of social unrest. Full and accurate detection of generated content will remain challenging for years and may not be completely reliable.

■ Current implementations can be found in fragmented and specialized technology offerings that increase the marketing team's overhead to assemble and adopt a combination of tools rather than a single solution.

■ Computer resources needed for training large data models are high and not affordable to most enterprises. It is possible to exploit them, but not develop their own models, which will lead to more powerful models and productization.

■ Potential to occasionally generate unintended, biased, defective or even accidentally offensive artifacts require human oversight for deployments.

User Recommendations

■ Identify initial use cases that enhance your martech capabilities or improve customer experience with GenAI by relying on purchased capabilities or partnering with specialists. Consult vendor roadmaps to avoid developing similar solutions in-house.

■ Examine and quantify the advantages and limitations of GenAI and use it to improve existing processes. GenAI breakthroughs require skills, funds and caution, and a balancing of technical capabilities with ethical factors. Beware of subpar offerings that exploit the current hype.

■ Use synthetic data to accelerate the development cycle and lessen regulatory concerns.

■ Prepare to mitigate the impact of deepfakes. Algorithmic detection and authenticating content provenance are evolving to meet this need. Work with legal, security and fraud experts.

■ Budget and plan for people resources to sample and review GenAI output to detect and prevent dissemination of inevitable mishaps. Employ composite AI approaches to combine GenAI with other AI techniques.

Sample Vendors

Adobe; Amazon; Anthropic; Google; Grammarly; Hugging Face; Huma.AI; Microsoft; OpenAI; Schrödinger

Gartner Recommended Reading

Use Generative AI to Enhance Content and Customer Experience

Podcast: Who's Afraid of Generative AI? — With Nicole Greene

Quick Answer: How Can Influence AI Improve My Customer's Digital Experience?

Predicts 2023: AI, Social Toxicity and Disappearing Customers Forge the Future of Marketing

Infographic: Impact Map of Generative AI

Over-the-Top TV Advertising

Analysis By: Eric Schmitt

Benefit Rating: High

Market Penetration: More than 50% of target audience

Maturity: Early mainstream

Definition:

Over-the-top (OTT) television or video refers to on-demand or live programming streamed to any device over the internet. Connected TV (CTV) refers to OTT viewing that occurs on a TV set, streaming through the native TV interface or via a TV-connected device from a company like Amazon, Apple, Google or Roku. Streaming video advertising on OTT is one segment of the broader advanced TV ad market.

Why This Is Important

For decades, broadcast and cable TV advertising was the cornerstone of many paid media plans. Now, the TV landscape is far more fragmented as various ad sellers and intermediaries vie for reach, attention and control of data. Digital marketing leaders must sort through a messy landscape of ad-supported on-demand TV services, networks, studios, cable, satellite, broadcast and device manufacturers, and digital ad tech providers.

Business Impact

Collectively, OTT advertising has achieved scale that commands the attention of national advertisers. It offers ad buyers the opportunity to offset the declining reach of cable and broadcast, and the possibility of tapping more sophisticated targeting and measurement tactics. For many digital marketing leaders responsible for advertising budgets, the question at hand is not if, but rather how and how much, to invest in OTT media buys.

Drivers

- **Growth in reach and ad-supported viewing**: In Gartner's 2023 Consumer Omnibus Survey, 90% of U.S. adults 18+ said they had used at least one streaming service over the past six months. Those who did said they watched on average 17 hours a week of streaming services: Nine hours with ads and eight that were ad-free. Ad-supported streaming services include the free version of YouTube, used by 43% of respondents.

- **New services and new developments**: Dozens of new OTT streaming video services have been launched, developed and in some cases acquired over the last three years. Services come from long-standing TV brands as well as new names. Competition further intensified when Netflix and Disney launched ad-supported streaming options following paid subscriber slowdowns (see Ad-Supported Netflix and Disney+ Plans Intrigue Cost-Conscious Consumers).

- **Unique advertising capabilities and growing inventory levels**: An increasing pool of inventory is available via ad tech demand-side platforms (DSPs) that are adapting programmatic features to OTT. These include audience targeting, dynamic insertion, adaptive ad loads, premium bundling via private marketplaces (PMPs), innovative formats like shoppable media and measurement data availability.

- **Integration with linear TV ad sales and measurement**: Programmers and distributors are readily bundling OTT impressions with linear TV ad buys. Independent and interoperable linear-plus-streaming measurement approaches could emerge to create a more level playing field, but they don't look imminent.

Obstacles

- **Fragmentation:** The adolescent streaming TV ad market remains crowded and fragmented. For OTT to realize its ad potential, sellers must provide scale, simplicity, standards and interoperability. But for the foreseeable future, buyers must muddle through a variety of ad placements, buying methods and available data for audience targeting and measurement.

- **Privacy and fraud uncertainty:** Some OTT advertising is purchased programmatically, a media buying approach that faces increasing limitations on advertising data use — and persistent fraud concerns.

- **Incumbent interests:** Traditional TV programmers and distributors are financially motivated by carriage revenue fees paid to TV networks by cable, satellite and telco distributors, as well as established linear TV ad sales models. This creates structural impediments to the availability of OTT ad inventory via third parties.

User Recommendations

- Adopt an integrated philosophy by orchestrating streaming OTT and CTV ad buys with linear TV and other video advertising options.

- Pull OTT budget from the TV and digital media lines, and align team incentives to minimize friction between camps.

- Use caution when buying streaming TV ads via programmatic resellers. Be mindful of limited access to premium inventory, fraud and data limitations around targeting and measurement.

- Expect a patchwork set of imperfect metrics — an inherent vulnerability of OTT ad buying today. Make the best of limited measurement by focusing campaign learning agendas on practical questions that directional data can answer.

Sample Vendors

Amazon; Apple; Comcast; Disney; Fox; Google; Netflix; Paramount Global; Roku; Warner Bros. Discovery

Gartner Recommended Reading

Ad-Supported Netflix and Disney+ Plans Intrigue Cost-Conscious Consumers

Modernize Your TV Advertising

Retail Media Networks

Analysis By: Mike Froggatt

Benefit Rating: Moderate

Market Penetration: 20% to 50% of target audience

Maturity: Early mainstream

Definition:

Retail media networks aggregate consumer traffic on digital commerce sites, apps and in-store screens to sell ad space to brands seeking favorable positioning near the final point of purchase. As retailers' media offerings mature, it will become an essential channel for digital marketing leaders selling products online.

Why This Is Important

As digital commerce growth continues to outpace in-store retail sales growth in the U.S., retailers are taking advantage of first-party transaction and behavioral data to capture performance ad spend from brands selling online. However, retailers have a difficult road ahead of them. Many are new to the ad sales space, leading to advertiser frustration, and the majority of ad spend is still captured by major walled gardens like Google, Facebook and Amazon.

Business Impact

Retail media networks provide advertisers with media opportunities to reach shoppers close to the point of purchase, whether in-store or online. This closed ad-to-purchase loop provides clear measurement and optimization opportunities for advertisers and their seller partners. In addition, the productization of retailer first-party data can help to correctly identify in-market shoppers both on and off retail sites, with privacy safe methods of data sharing and targeting like data clean rooms.

Drivers

- Online sales remain significantly elevated compared to prepandemic levels and continue to outpace the growth of total retail. Brands selling through retailers invest in performance marketing tactics, like retail media, to drive sales and return on advertising spend both online and in-store.

- Inspired by Amazon's striking success with media, big box retailers and other digital commerce players with significant (or niche) traffic of online shoppers are patterning their offerings as fast followers. They are incorporating self-serve and agency-focused media and measurement capabilities within their offerings.

- Third-party cookie deprecation is driving indirect consumer brands to seek new sources of ad targeting and measurement data from channel partners closer to the point of sale, including digital and physical touchpoints. Advertisers can capitalize on this shift through RMNs.

- Concerns over walled garden power provide brands and merchants with incentives to explore media alternatives even when they can't find a match for the giants' scale and efficiency.

- Sensing opportunity, software and ad tech vendors have invested in developing and/or acquiring the tech to build or offer out-of-the-box white-labeled media platforms for retailers. Many of these tech vendors offer media buying capabilities, i.e., demand side platforms, and are partnering with retailers to package and sell aggregated retail media inventory directly to agencies and brands.

- New applications of retail best practices on consumers' mobile devices, ranging from loyalty apps, mobile in-store self-scanning and check-out apps with contactless payments, offer novel targeted media opportunities for both brand and performance marketing.

- The proliferation of digital screens in physical retail locations create additional media and branding opportunities for advertisers that carry products in-store.

- This market is propelled by digital and omnichannel retailers launching proprietary networks including but not limited to Amazon Advertising, Walmart Connect, Instacart Ads, Roundel by Target, Kroger Precision Marketing, Home Depot Retail Media+, and Ulta's UB Media.

Obstacles

- The largest retailers have significant head starts in retail media networks. This market is especially vulnerable to strong network effects that amplify first-mover advantages.

- Digital marketing leaders love the immediate return on investment of retail media, but audience scale and driving continued sales remain key issues for all but the largest retailers globally.

- Much like the early days of digital advertising, fragmentation among retailers is leading to time consuming manual buying processes and inconsistent measurement. As a result, many retail media networks, especially those without self-service buying interfaces, focus on advertisers with significant marketing budgets.

- Evolving privacy standards and tracking capabilities limit the data that retailers can collect, share and use for ad targeting and measurement.

- Brands typically divide marketing budgets and tasks between brand, performance and shopper marketing (e.g., trade) promotion teams, which can all be important within retail media. This leads to conflicts over who is responsible for managing relationships and budget for retail media.

User Recommendations

- Focus on retail media networks, data strategies and tools (e.g., consent and preference management, data clean rooms, and identity resolution) that can optimize targeting precision and reach by combining first-party data with supply and buying partners.

- Prioritize features like networkwide frequency control and ad suppression when audiences convert. Regularly double check the shopping experience of retailers with media networks and take note of details like ad visibility, competitive separation and contextual relevance.

- Determine ownership of retail media after evaluating internal skills for performance marketing, agency specializations and budgets across the various teams that interface with retail partners, and establishing a cross-functional advisory group to monitor and apply changes as necessary.

Visual Intelligence

Analysis By: Greg Carlucci

Benefit Rating: Moderate

Market Penetration: 5% to 20% of target audience

Maturity: Adolescent

Definition:

Visual intelligence helps customers find products with relevant visual attributes using real-world images, video and text. Expanding on visual search capabilities, this helps customers identify a specific product, provides related content or detailed information, or otherwise triggers engagement. Solutions analyze catalogs to understand taxonomy and product attributes in addition to visual features using technologies like computer vision, natural language processing and machine learning.

Why This Is Important

Visual intelligence helps ease the path to purchase, driving consumers from awareness to conversion in an instant by presenting products with relevant visual attributes. Visual intelligence also unites elements of real time (such as livestreaming, synchronous or simultaneous experiences) and real place (curbside, drive-by, location tracking or location monitoring) into a seamless customer experience by reinforcing the connection between digital and physical engagement.

Business Impact

Consumers expect personalized search tools to help find relevant products and information faster. Visual intelligence empowers consumers to take control of their hybrid shopping experiences through VR and AR tailored recommendations via "try-on" and "shop the look" online. Personalized search results drive conversion by catering to tailored individual needs instead of generic results. Search data collected provides opportunities to learn more about your consumers and identify postsale support.

Drivers

- Visual search generates detailed visual feature analysis for products to provide more relevant results than text-only product descriptions. This is important in verticals such as fashion, beauty and home improvement, where presenting the right results of visually similar and complementary products greatly improves conversion.

- Volatility within the privacy landscape fosters an environment where user-initiated visual intelligence can thrive. Apple's focus on consumer privacy protection combined with Google's planned deprecation of third-party cookies in 2024 leads to an uncertain digital media landscape.

- Images integrated into the website search function allow consumers to find products or related information faster and recommend search results based on most frequently visited pages.

- Consumer shift to hybrid shopping experiences increases the importance of mobile optimized sites and seamless navigation between product display pages, ratings and reviews, discounts and other pertinent product information to drive conversion.

- Understanding where and when consumers are starting their searches with pictures can enhance journey analytics and customer profiles. This requires users to opt-in to share their location. For example, Instagram uses location tags to enable visual intelligence efforts that support business location discovery and travel.

- The growing availability of search alternatives through AI like ChatGPT will advance visual intelligence functionality on platforms such as Google, Bing, Pinterest and Snapchat, requiring organizations to implement reactive strategies to cater search strategy to newly adopted consumer preferences.

Obstacles

- Platforms vary in features and adoption. Marketers face a steep learning curve to understand how the technology works on owned channels with vendors and on platforms like Meta to develop the right use cases for each channel.

- Vendors have different capabilities for tag management, search, merchandising and configuration tools, and have different expertise for verticals.

- Investment in extensive product imagery and text-based product descriptions is necessary to inform visual intelligence.

- The machine learning underlying the technology must be trained on a specific product domain to support digital commerce and to reflect results based on customer search queries and relevant location to improve accuracy and avoid negative search experiences.

- Walled gardens like Meta provide lower-cost visual search aids and advertising placements but lack the data collection capabilities owned channel tools like VR can provide.

User Recommendations

- Investigate vendor capabilities across metadata management, search relevance, visual product finders and configuration options. Assess personalization, product recommendations, and integration features with product information management (PIM) technology.

- Make the necessary investments in structured data for products and services, and build advanced metadata tagging processes into workflows.

- Ensure privacy statements and disclosures for apps and websites are updated with clear descriptions of how visual intelligence data is used to leverage personal data.

- Align investment in visual search with voice, image and text to support a long-term merchandising and digital experience vision. Ensure that customer experience features are in place for faster relevant outcomes.

- Quantify visual search opportunities by channel. If applicable seek out partnerships with major aggregator platforms to increase visibility in searches supported by product imagery and text-based product descriptions

Sample Vendors

Amazon Web Services; Clarifai; Google; Kibo; Microsoft; Open.Ai; Pinterest; Snapchat; Syte; Yext

Gartner Recommended Reading

Toolkit: Develop a Winning Digital Commerce Strategy

Keep Pace With Consumers' Evolving Digital and Hybrid Shopping Habits

Optimize Website Content for SEO

Data Interactive Tool: Digital IQ Channel Benchmarks, Mobile Marketing

Drive Agility and Scale for the Future With Content Operations

Sliding into the Trough

Consent and Preference Management

Analysis By: Tia Smart

Benefit Rating: Moderate

Market Penetration: 20% to 50% of target audience

Maturity: Early mainstream

Definition:

Consent and preference management platforms consolidate end-user choices regarding how their personal data should be handled. Choices are synchronized across legacy, active and incoming repositories, both on-premises and in the cloud. The intent is to extend visibility and control to digital visitors, allowing them to determine and change how much of their data to expose, to whom and for what purpose. This also empowers marketers to respect customers' choices with a minimum of manual overhead.

Why This Is Important

Protections for personal data collected digitally continue to expand across the globe as more countries and U.S. states consider legislation similar to or stronger than GDPR, CCPA, CPRA and CPA. Technologies and organizations must quickly adapt to the global transformation. Consent and preference management platforms (CPMPs) empower organizations to comply with new laws, preserve and extend essential capabilities, and demonstrate to customers and stakeholders that they care about privacy.

Business Impact

- As new legislation is introduced worldwide, organizations must use CPMPs to demonstrate to consumers that they value their privacy and are in compliance to avoid costly violations and consumer mistrust.

- Protecting your organization from compliance violations while maintaining the ability to utilize customer data for business purposes can be technically and operationally challenging. CPMPs help to address these issues.

Drivers

- **New laws and variations in legislation.** With additional countries and regions seeking to implement their own consumer privacy laws, tracking laws in each country and region is a tedious but integral task to ensure compliance. CPMPs address specific requirements, such as auditing websites, enforcing consent choices and making data available for subject rights requests.

- **Reliance on first-party data.** The shift to an increased dependence on first-party data instead of third-party cookies forces organizations to reevaluate the enterprise's data structure. Managing consent and preference choices throughout the ever-convoluted enterprisewide structures takes time, and some CPMPs try to solve this. CPMPs' importance is ever more apparent in countries like the U.S., where implicit consent is still allowed in most states. Organizations need to take a state-by-state approach or risk messing up direct marketing opportunities available to them.

- **Societal norms and consumer expectations.** Consumers now expect to have control over their personal data as well as transparency from organizations on how it is used. However, consent flow banners and dialogues can significantly downgrade user experience, driving the need for better design solutions enabled by certain CPMPs.

Obstacles

- **Ever-changing global laws and best practices.** With regions and countries implementing their own data privacy legislations, organizations must adapt to each one to remain in compliance. CPMPs tend to oversell their ability to make managing consent options simple, often downplaying the complexity of managing an organization's internal and external databases.

- **Lack of UX design support.** Forcing too many privacy choices on consumers degrades UX and leads to high opt-out and abandonment rates. Yet, having too few choices limits the ability to tailor experiences. To strike the right balance requires cross-functional, collaborative activities across the organization.

- **Complex technology architectures.** Digital transformation acceleration efforts propelled organizations to rethink how technology solutions work together and how data flows throughout the ecosystem. Adopters need to factor in the number of connections — both native and customized (e.g., APIs, ETL) — that are needed to effectively use a CPMP.

User Recommendations

- Prioritize consent management policies and initiatives as a critical priority for all functions. Establish a cross-functional customer data and privacy council to review and update policies and processes for the enterprise to follow.

- Avoid "dark patterns" or deceptive language for consent dialogues that attempt to influence users' choices (see the FTC's Press Release).

- Use a "telescoping" approach to disclosures and preference dialogues that allow users to go as deep as they choose into specific details. Offer consistent, easy access to preference settings that can be viewed and changed on demand to ensure that you are undertaking a privacy-by-default approach.

- Compare and assess CPMP offerings against your organization's highest-priority data privacy protection and integration requirements and internal costs.

- Develop a CPMP where the market cannot effectively connect and integrate with legacy internal tools.

- Take a modular approach to adoption and avoid excessively broad project scopes. Anticipate sufficient time to resolve unforeseen complications in these projects.

Sample Vendors

BigID; Didomi; Ketch; OneTrust; PossibleNOW; Syrenis; TrustArc

Gartner Recommended Reading

Market Guide for Consent and Preference Management

Market Guide for Consent and Preference Management for Marketers

Promotional NFTs

Analysis By: Andrew Frank

Benefit Rating: Moderate

Market Penetration: 1% to 5% of target audience

Maturity: Emerging

Definition:

Non-fungible tokens (NFTs) are blockchain-based digital assets that represent unique artifacts. They can be bought, sold and traded in digital markets. Consumer brands create (or "mint") NFTs to promote products and generate revenue. They can act as club memberships, loyalty cards or digital products themselves, adorning owners' avatars with logos and branded artwork.

Why This Is Important

The popular NFT trading market crashed in 2022, driven down by a collapse of cryptocurrency values, the end of NFTs' novelty and some high-profile fraud incidents. Although the NFT fad has now been eclipsed by other technology trends, marketers may still find value in using them for memberships, subscriptions, collectibles and loyalty rewards programs.

Business Impact

Hype has faded, and businesses have yet to realize significant long-term value from applications of NFTs. However, NFTs still embody many of the promises of Web3 favorable to brands:

- Dilution of data and media power concentrated in big tech platforms through a decentralized data and commerce model.

- Security and privacy features that mitigate challenges with current consent models for data collection.

- Value creation through earned media connections and direct revenue for digital merchandise.

Drivers

- NFTs remain a relatively low-cost way to establish a secure, persistent relationship with customers and fans and to build communities.

- NFTs offer controlled access to user data that can replace some of the losses from cookie and device ID deprecation. They also hold promise for longer-term identity innovation solutions.

- NFT events, games and contests offer incentives for users to join loyalty programs and participate in promotional activities such as posting on social media.

- NFTs offer opportunities for brands to establish new digital business models and communities based on their scarcity, programmability and social features.

- NFT-based rewards currency is more secure than traditional points and coupon issues that are vulnerable to fraud.

Obstacles

- Unlike core cryptocurrency systems, NFTs have proven vulnerable to fraud, forgery, vandalism and pyramid schemes.

- NFTs are only accessible to a sliver of the general population, which remains unfamiliar or dismissive of the phenomenon as a bubble or bygone fad.

- The collapse of the market damaged NFTs' reputation and financially harmed or scared off many early enthusiasts and brands that now hold a toxic view of the space.

- Multiple UX challenges inhibit NFTs' ability to expand beyond the current audience of crypto wallet users.

- NFT-based activity can't match the engagement of popular social media platforms and streams.

- Blockchain's environmental impact continues to draw criticism.

- NFT minting adds a new point solution to an already-complex martech environment.

- Despite offering some privacy benefits, blockchain's immutable nature also presents privacy hurdles. Data stored on a blockchain ledger can't be erased, defying regulations requiring that organizations delete personal data on demand.

User Recommendations

- Investigate the value that promotional NFTs can add to loyalty programs. They can engage new audiences and communities with new products and content channels. Weigh the benefits against potential sustainability objections or other negative reactions.

- Isolate the value of NFTs from the cryptocurrency of their blockchains to address volatility concerns. Promotional NFTs need not require crypto payments or represent assets to establish ownership.

- Remember that, even as NFTs descend into the Trough of Disillusionment, once issued they will persist indefinitely as unalterable tokens on the chain. Consider how their longevity might play out for your brand.

Sample Vendors

Autograph; Dapper Labs; Daz 3D; Flow; Kaleido; OneOf; OpenSea; Pinata; Salesforce; Vayner3

Personification

Analysis By: Andrew Frank

Benefit Rating: High

Market Penetration: 5% to 20% of target audience

Maturity: Emerging

Definition:

Personification allows marketers to deliver targeted digital experiences to individuals based on their inferred membership in a characteristic customer segment without collection or processing of personal data.

Why This Is Important

Digital advertisers' and publishers' continuing struggle with privacy-related compromises in efficiency and accountability is eroding the economic foundations of open web content. Personification techniques are needed to resolve long-standing tensions between privacy and relevance in advertising, and restore diversity and transparency to the media market.

Business Impact

Ad targeting and measurement approaches based on coarse topic-level interest and demographic segmentation have not caught on with marketers. More sophisticated approaches based on persona modeling aim to restore balance and competition among publishers and tech providers. This will lead to a healthier media economy, greater choice, control and accountability for marketers, and better experiences for consumers.

Drivers

- The expansion of privacy laws and platform restrictions has led to a crisis of confidence among marketers in their ability to measure and optimize outbound communications.

- The cost of compliance with an expanding patchwork of varying privacy laws escalates the urgency for a global privacy-safe solution to targeting and measurement.

- Cookie alternatives from Google, the Interactive Advertising Bureau (IAB), and others are adopting variations on the personification theme to balance privacy with effectiveness.

- Technical advances such as federated learning, data clean-room collaboration and privacy-enhancing computation hold promise for personification improvements.

- Businesses with extensive first-party data such as retail, travel and telecommunications are under pressure to find ways to monetize their data without running afoul of privacy regulations or consumer expectations.

- Privacy regulators would like to rein in big tech providers without causing economic damage.

- Platforms and tech providers are actively pursuing personification solutions they hope will take regulatory pressure off their martech and advertising businesses and improve their privacy reputations.

- Productivity gains from generative AI are driving vendors and marketers toward visions of personalized content that require effective targeting to optimize.

Obstacles

- The technical challenges of personification are significant. Profiling and segment inferencing can compromise privacy and consensus is lacking on how much protection or precision is "good enough."

- Inertia in the current media ecosystem impedes deep shifts in technology.

- Regional fragmentation besets topics in privacy law. Issues of consent and legitimate interest draw conflicting interpretations of legal and ethical boundaries.

- Concerns beyond privacy include bias and exploitation that may emerge as unintended side-effects of opaque segmentation schemes.

- Transparency and control are hard to reconcile with personification techniques. Black box machine learning algorithms conflict with laws requiring explainability.

- Alternatives to personification, such as contextual targeting and consent-based identifiers, have gained followings. More far-reaching concepts, such as decentralized ledger-based identity schemes, could make current approaches obsolete before they reach maturity.

User Recommendations

- Focus data and analytic resources on customer segmentation strategies using experimental design and machine learning to refine persona definitions emphasizing consented, nonpersonal and synthetic data.

- Study or appoint someone to study, report on and engage with Google's Privacy Sandbox and similar privacy-preserving persona targeting initiatives.

- Reevaluate personalization strategies and designs to minimize personal data requirements while maximizing opportunities for needs discovery, contextual relevance and persona-based creative impact.

- Engage IT and partners in investigating data collaboration innovations enabled by federated learning and other collaborative modeling technologies.

- Deploy segment recognition and decisioning algorithms in client applications and ad units where their inferences can remain private and reported anonymously.

Sample Vendors

Adobe; Analytic Partners; Epsilon; Google; LiveRamp; TransUnion

Gartner Recommended Reading

3 Scenarios for Privacy's Impact on Targeted Advertising

Emerging Technologies: When and How to Use Synthetic Data

Shoppable Media

Analysis By: Matt Moorut

Benefit Rating: Moderate

Market Penetration: 5% to 20% of target audience

Maturity: Adolescent

Definition:

Shoppable media refers to prerecorded interactive images, videos and other media formats, which enable an online path to purchase when a user clicks an object that is showcasing merchandise. Object examples include a "shop" button overlaid on an image or video displaying products. Various digital shoppable media formats are available and viewable via both mobile and desktop, with notable momentum visible in social media apps.

Why This Is Important

Customers expect to shop and buy when and how they want, seeking a seamless purchase experience. Shoppable media is a merchandising technique that empowers brands to close the gap between product inspiration and direct purchases, reducing friction in a customer's current context. For example, if consumers are interested in purchasing a dress featured in a streamed TV show, they could click or tap on it directly through the video rather than switching to a retailer app or website.

Business Impact

Shoppable media provides a bridge between promotional content and commerce, often reducing the number of steps required for customers to make a purchase. By streamlining purchase journeys, shoppable media can increase direct-to-customer engagements, provide near-real-time insight on campaign performance, reduce drop-outs, and increase revenue. It can also provide further impact on business operations and technology, as these require change to support the commerce channel.

Drivers

- Consumer preference for online shopping continues to grow. According to the 2022 Gartner Consumer Values and Lifestyle Surveys, 24% of U.S. consumers said they prefer making all clothing, shoes and accessory purchases they can online.

- Major retailers and media companies are investing in shoppable media to expand customer reach and monetize the traffic. For instance, in mid-2022, Walmart partnered with Roku to enable TV streamers to purchase featured products fulfilled by the retailer directly on their streaming platform. An example of shoppable media innovation can be seen from NBCUniversal, which is partnering with KERV Interactive to leverage AI to surface relevant products within its "Must ShopTV" product. This is being used on its streaming service, Peacock.

- The shoppable media market is maturing, as multiple digital commerce technology providers fill different use cases. For instance, PriceSpider and Shoppable offer where-to-buy and universal check-out technology, respectively, while Amplience and Bazaarvoice (Curalate) help brands manage shoppable content in social media.

- Sales in the U.S. still lag behind China. This encourages analysts to forecast strong growth in shoppable media, as best practices from Taobao Live flow through to large, international players.

Obstacles

- **Low consumer adoption:** Social commerce is still nascent in North America and Europe relative to China. Low consumer adoption of social commerce means that marketers prioritize other investments.

- **Margin erosion:** Seller fees or commissions paid to platforms providing direct check-out experiences can pressure profit margins. Brands that sell high-margin products are in a better position to offset those fees. Those with low margins may find more profit by using media to drive traffic to brand-owned product landing pages and check-out experiences.

- **Lack of control of surroundings:** The placement of media on third-party platforms, such as TikTok, exposes brands to more risk from surrounding assets, such as objectionable or inflammatory content.

- **Limited use cases:** Shoppable media is better suited for impulse purchases than high-consideration goods. As such, beauty, fashion, housewares and consumer packaged goods brands can benefit more than other industries.

User Recommendations

- Pilot content formats and platforms that provide a more engaging view of products than traditional digital storefronts. Options include shoppable ads, social media posts, video streaming platforms and enriched content assets.

- Partner with customer experience leaders to assess the impact of broadening the range of commerce channels to the brand experience. Work with finance and sales teams to assess the potential impact to margin performance, given the rising costs of execution.

- Establish what execution resources are necessary for a seamless commerce execution, using shoppable media formats.

- Assess the overlap of your target audience with captive audiences on streaming services to ascertain campaign objectives and sales targets.

Sample Vendors

Bazaarvoice; ChannelSight; Firework; KERV Interactive; NBCUniversal; PriceSpider; Roku; SmartCommerce; talkshoplive

Gartner Recommended Reading

Design Social Commerce Features That Convince Consumers to Buy

Decode the Social Commerce Ecosystem to Execute Effectively

Infographic: 7 Key Trends in Digital Commerce

Digital Commerce Maturity Model for Marketing

Understand How Shoppers Use Digital Tools to Combat Higher Prices

Conversational Marketing

Analysis By: Lacretia Marsh

Benefit Rating: Moderate

Market Penetration: 5% to 20% of target audience

Maturity: Adolescent

Definition:

Conversational marketing tech enables companies to host digital, human-like engagements with customers at scale. The tech employs AI bots and automation to design session-based interactions in the form of natural dialogue. Conversations occur across various channels; primarily chat, SMS, email and voice. Integrations across the revenue tech stack facilitate personalized interactions. Digital marketing leaders can improve performance across the customer journey by humanizing audience interaction with conversational marketing tech.

Why This Is Important

Conversational marketing technologies enable interactions between companies and customers that mimic human dialogue for the vendor at scale. They employ session-based, cross-channel exchanges in the form of natural language dialogue, using a blend of text and audio. Digital marketing leaders use conversational marketing tools to improve performance across the customer journey by humanizing their digital interactions with audiences.

Business Impact

Digital marketing leaders use conversational marketing to improve engagement, increase conversion and increase seller capacity. The technology reduces friction for customers in key moments and provides companies with buyer-preferred digital methods of engaging in dialogue with customers at scale (e.g., chat, SMS, email). Configurable AI and automation flows enable marketers to scale two-way dialogues in historically human-based channels for both B2C and B2B companies.

Drivers

- As growth in digital buying accelerates, conversational marketing creates a faster method for companies to have natural, nongeneric conversations with buyers.

- Conversational marketing tech lowers reliance on sales for scaled lead follow-up and relieves seller capacity for pipeline management.

- As marketers rely on digital marketing channels to reach buyers, they need to leverage a multimodal mix of channels to improve key interactions by engaging buyers in two-way dialogues that are contextually relevant. Examples include bots to catch routine queries or proactively suggest new options, and intelligent routing across channels to escalate more nuanced dialogues to human agents. Interactions can include links, images, offers of appointment times and other choices that would be impractical with voice-only options.

- Use of conversational marketing continues to play an important role in the digital marketing mix with AI used to further drive growth. Within Gartner's 2023 Multichannel Marketing Survey, respondents using 11 or more channels (31% of respondents) were able to drive more growth through new experiences such as AI to manage complexity and achieve greater operational efficiency. Twenty-four percent of these respondents leveraged AI to deliver seamless customer engagement.

- Customer demand for personalized service is rising. According to the 2022 Gartner Customer Service and Support State of the Customer Survey, 71% of B2C customers and 86% of B2B customers expect companies to be well-informed about their personal information during a service interaction.

- The much-anticipated phaseout of third-party cookies is forcing more brands to innovate in order to develop direct relationships with customers.

- Conversational approaches eliminate the time and effort spent on creating personalization in multichannel marketing workflows, enabling brands to improve immediacy and channel integration.

Obstacles

- The buying landscape is continuing to move from a more controlled point of interaction to one with multiple uncontrolled variables as buyers place higher value on third-party interactions.

- Training AI bots and designing conversation flows requires marketing-led cross-functional collaboration (i.e., sales, customer service, product, support, etc.). The absence of partnership can inhibit marketers from realizing the full value of conversational marketing, especially in B2B environments.

- As data assets grow, ethical adoption demands compliance, privacy, and trust functions at the enterprise level, to align with customer preferences and comply with nascent regulations.

- Conversational marketing opportunities are accompanied by risks just like any AI tools. Underlying AI should be reviewed and monitored regularly to avoid harmful side effects, such as bias or messaging that is misleading or objectionable.

User Recommendations

- Strengthen the potential for improved sales through testing to determine incremental impact on acquisition, conversion and retention. Start by using conversational marketing to scale interactive customer experiences for scheduling appointments or delivering concierge services with a human touch.

- Use customer experience teams to focus on session replays and user experience to determine whether conversational marketing can resolve customer frustrations.

- Categorize interactions to create datasets that can be leveraged alongside generative AI. Work with legal, risk management, IT and ethics leaders to control how information is used and assess future risks.

- Increase the scalability of efforts by leveraging agile processes and proofs of concept which build empathy into user stories and embed ethical principles into the AI design. Frequently test before and during implementation to uncover any potential for unintended and harmful side effects.

Sample Vendors

Attentive; Conversica; Drift; Exceed.ai; Intercom; Podium; Qualified; Salesforce; Sembly AI

Gartner Recommended Reading

Quick Answer: How to Use AI-Powered Virtual Assistants to Save Sellers Time on Administrative Tasks

Improve Customer Experience With Intent Analytics

Navigate Your Path to Journey Orchestration With Martech Usage Insights

Digital Commerce Maturity Model for Marketing

How to Develop Your Mobile Marketing Maturity

Identity Resolution

Analysis By: Tia Smart

Benefit Rating: High

Market Penetration: More than 50% of target audience

Maturity: Mature mainstream

Definition:

Identity resolution (IDR) is the process of locating and matching customer identity records across multiple datasets derived from customer interactions with the brand across multiple touchpoints. IDR providers use match keys — deterministic or probabilistic — to identify when two records refer to the same individual or household. Marketers use IDR to analyze and deduplicate multisource datasets and to target, run and measure direct marketing and advertising campaigns.

Why This Is Important

Privacy obstacles are forcing more marketers to reevaluate their data collection and management strategies. Linking fragmented records of individual customer interactions across channels and devices remains a significant challenge to resolve. This, in turn, results in disconnected customer experiences and communications across marketing, sales and service touchpoints. Marketers' dependence on IDR solutions continues to rise for effective targeting and personalized messaging use cases.

Business Impact

IDR is present across both martech and adtech solutions, and impacts critical customer-facing operations. Marketing, sales and service need to consolidate and connect customer identities across touchpoints to meet key goals such as revenue growth, personalization and retention. IDR applications provide external confirmation of the accuracy of data values or relationships, without which critical data management, customer insight, ad targeting, campaign execution and measurement use cases would fail.

Drivers

- Consumers are increasingly using multiple devices to engage with brands, from mobile devices and computers to connected TVs and smart speakers. This cements the importance of customer identity resolution across devices despite the end of third-party cookies. Device graph datasets that help companies link individuals and households across devices remain important to marketers seeking to deliver connected and personalized customer interactions.

- Organizations acknowledge that customer data privacy protection is important and costly — both in terms of reputation and legal damages — if found out of compliance. For some large advertisers, privacy risk has increased the appeal of data clean rooms that provide a secure way to exchange first-party datasets without exposing personal data. Many IDR providers offer data clean room environments as part of their identity solutions.

- Cookie and mobile ad ID deprecation has induced and inspired entrepreneurs and investors to develop new approaches to IDR that attempt to balance privacy and customer intelligence in innovative ways.

- Many CDP and marketing cloud providers are partnering with IDR providers to provide a coordinated offering for companies, advancing the overall presence of IDR solutions in the market.

Obstacles

- In Europe, GDPR puts strong restrictions on personal data processing. In California, CCPA restricts the sale of personal data. New legislation continues to be introduced across countries and regions (e.g., CPA) that scrutinizes IDR practices because consumers never had the choice to opt-in. The variance and updates to legislation are often interpreted as covering a broad class of IDR practices.

- Tech giants continue to erect barriers to certain IDR use cases and have joined privacy advocates in taking a public stance against multisite identity tracking. Limitations that these companies have placed include restricting data usage across their owned solutions and via their browsers and operating systems. Third-party cookie deprecation plans and the adoption of Apple's App Tracking Transparency frameworks are eliminating marketers' accustomed method of tracking users' activities.

- Emerging segment-based alternatives, such as contextual targeting and Google Topics, provide targetable segments while keeping customer data anonymized.

User Recommendations

- Think about IDR in first-, second- and third-party data sources. Create marketing data flow architectures for each use case. Build the foundation that allows marketers to effectively request necessary customer data found across the organization.

- Collaborate closely with your IT, data analytics and legal counterparts when investing in customer IDR technologies. View these functions as partners in accomplishing marketing's objectives while complying with customer data privacy expectations and relevant regulations.

- Conduct scenario-planning exercises to determine the technology and data investments needed to limit reliance on third-party cookies for digital advertising and customer engagement. Anticipate increases in marketing and advertising spend on data clean rooms, walled gardens and retailer media networks due to third-party cookie deprecation.

- Assess your enterprise's plans to invest in new martech and adtech purchases. As vendors add IDR capabilities to existing solutions, identify how your current investments (e.g., CDPs, EDWs) currently link customer data to build a roadmap that matches your IDR plans.

Sample Vendors

Acxiom; Epsilon; Experian; LiveRamp; Merkle; The Trade Desk; TransUnion

Gartner Recommended Reading

Power Up Your Customer Data Technology Stack

Google to Drop Cookies, but Still Hold the Cards

3 Scenarios for Privacy's Impact on Targeted Advertising

Maverick Research: Weaponizing Privacy

Location Intelligence for Marketing

Analysis By: Mike Froggatt

Benefit Rating: Moderate

Market Penetration: 20% to 50% of target audience

Maturity: Early mainstream

Definition:

Location intelligence for marketing enables digital marketing leaders to manage and make correct information about the physical locations under their control available to search engines, app publishers, review sites and other social media.

Why This Is Important

The need to be discoverable via online search and identify customers near a physical store, office or outlet location is crucial. Opted-in location intelligence from consumers enables marketers to recommend their nearest physical points of presence and updated information of those locations via search, mobile apps and ads. Businesses can augment customer profiles with relevant (and consented) location information.

Business Impact

Location intelligence promises benefits to marketers: specifically understanding consumers to link their online and offline experiences. But, privacy regulation and cookie and device-identifier constraints limit how location data can be collected and applied. So while real-time location data tracking has upsides, such as for serving real-time advertising, the need to use data brokers and regulatory hurdles means it is also a risky proposition.

Drivers

- Consumers appreciate the convenience of location technologies and the usage of their location data in specific contexts.

- Consumers continue to demand updated information on the availability of products at specific locations such as stores, restaurants, service provider offices and government offices as economic headwinds and rising inflation force more deal-seeking behaviors.

- Martech investments made in AI/ML technologies and applied against optimizing CX and customer journeys can enrich customer profiles with permitted consented use of location data.

Obstacles

- Major changes by platform providers will hamper the use of location information, location history and real-time location data. Mobile device OS and browser providers — e.g., Apple with its iOS ATT and defaulting to incognito mode in Firefox/Safari — are curtailing or eliminating consumer data in the data flows between different apps and browsers. Marketers and advertisers have depended on this data for a decade.

- Browser and operating system data tracking changes are having a big impact on the sharing and tracking of consumers' data across apps, and are trending against sharing by default.

- Due to emerging regulatory hurdles and geographic differences in the classification of data, there is no global one-size-fits-all for marketers to identify the most useful and least risky location data to augment customer profiles.

User Recommendations

- Design specific consent-based opt-ins for location tracking and gathering location history, and activate collected data in relevant ways that customers expect and value. Ensure that your location data collection is covered within your consent and preference management platform and remains up-to-date.

- Develop simple language descriptions of how you would use location histories to deliver a better customer experience. Show compliance with applicable local, state and national regulations.

- Generate interest and support for investing in location intelligence tools by educating your peers in other business units on the benefits of having correct and timely information about your company's physical locations available to search and social platforms.

- Generate profitable mobile engagements to enrich your first-party customer profiles by embracing an agile, fit-for-purpose approach to the collection, storage and use of location intelligence. Prioritize tools and partners that feature geographic-specific rules for compliance with local regulations and consumer preferences by state and/or region.

Sample Vendors

Qlik; SOCi; Uberall; Yext

Gartner Recommended Reading

Market Trend: Location-Based Service Vendors Driving New Growth for TSPs

Architecting for Location

Climbing the Slope

Account-Based Marketing Platforms

Analysis By: Ray Pun, Julian Poulter, Christy Ferguson, Jenifer Silverstein, Jeff Goldberg

Benefit Rating: High

Market Penetration: 20% to 50% of target audience

Maturity: Early mainstream

Definition:

Account-based marketing (ABM) platforms are software that enables B2B marketing and sales teams to run ABM programs at scale, including account selection, planning, engagement and reporting. Platforms enable the creation of target account lists by unifying first- and third-party data. In addition, platforms may engage audiences by activating channels such as display advertising, social advertising, email and sales engagement, using a mix of native capabilities and integrations.

Why This Is Important

As B2B companies scale and optimize their ABM programs, ABM platforms become increasingly necessary. The data and predictive modeling capabilities improve account selection, while campaign orchestration and activation across channels can broaden reach and engagement. Account-level reporting saves time and improves visibility, and sales alerts/intelligence increase sales alignment. Although ABM capabilities exist elsewhere, few ABM programs operate at scale without an ABM platform.

Business Impact

ABM has quickly become a key go-to-market model for many B2B companies, starting with the tech sector, and expanding to other industries, including business services, manufacturing and financial services. The adoption of ABM to reach net new and existing customers at scale has continued to grow rapidly. This is partly because ABM platforms can provide account insights that enable better decision making, improve engagement across accounts and demonstrate ABM ROI more easily.

Drivers

- Gartner client interest for ABM programs and technology to scale these efforts remains high. According to the 2023 Gartner Technology Marketing Benchmarks Survey, 63% of all technology marketers with $100 million or more in annual revenue have a marketing budget dedicated to ABM technologies. When successful, ABM programs deliver significant lift across key marketing and sales metrics including pipeline value.

- In 2021 and into 2022, ABM vendors invested (and continue to invest) heavily in capabilities for integrations, intent data, campaign orchestration and activation across channels, improved reporting and sales insights, AI-driven modeling, visualization, and user experience. The new functionality (through both acquisition and organic development) has improved customer success and increased buy-in and adoption from users outside of marketing, such as SDRs and account executives. As a result, Gartner estimates the ABM software market grew at 30% during 2022 due to strong growth from existing vendors and the entrance of new platforms. In addition, Gartner forecasts a CAGR of 24.5% until 2026.

- The entrance of new vendors and the increased functionality from many platforms have provided more viable choices in the ABM platform market. Marketers can use platforms with a comprehensive set of capabilities for native engagement channels, or vendors that support a "best of breed" approach by integrating with adjacent tools in the martech stack.

- The average ABM platform customer retention rate reported by vendors in this category is below the technology industry target of 90%. Gartner observes a fair amount of switching from vendor to vendor during subscription renewal periods. This is expected for a market category that is on the Slope of Enlightenment and the growing maturity of buyers who make purchase decisions based on past experience with ABM platform providers. But the market continues to remain on track for a steady progression through the Hype Cycle.

Obstacles

- Geographic adoption remains heavily tilted toward companies headquartered in North America and Western Europe. ABM platform vendors continue to invest in GTM programs that are tailored for specific regions and countries. However, most platforms only offer a user experience in English.

- The top vertical industry for ABM platform adoption is technology providers. To boost adoption outside of this market segment, some vendors have tailored GTM programs for specific industries such as financial services and manufacturing.

- Poor alignment between sales and marketing teams such as the lack of account plans and shared KPIs can hinder adoption.

- The ultimate size of the market and the time to plateau remain dependent on adoption across more geographies and vertical industries beyond high tech. In addition, the expected convergence between ABM platforms and B2B marketing automation is dependent on the pace of product innovation and merger and acquisition activity in 2023 and beyond.

User Recommendations

- Ensure that business leaders are aligned and fully committed to the ABM program including use cases, program objectives and metrics. This helps in preparing an operating model to implement and use the ABM platform and increases the odds of success.

- Use proofs of concept to evaluate and validate the vendor's intent data quality, and how the capability addresses the specific markets and buying teams that you target across vertical and geographic segments.

- Request product roadmaps and martech stack integration details from vendors during the selection process, as the platforms are rapidly evolving.

- Ask vendors to explain how their audience targeting is or will be affected by the deprecation of third-party cookies in web browsers as well as regional and local privacy regulations.

Sample Vendors

6sense; Demandbase; Dun & Bradstreet; Madison Logic; RollWorks; Terminus; Triblio; ZoomInfo

Gartner Recommended Reading

Magic Quadrant for Account-Based Marketing Platforms

Critical Capabilities for Account-Based Marketing Platforms

Tech Marketing Benchmarks Survey 2022: Account-Based Marketing Insights

Use ABM Platforms to Improve Program Performance

Research Roundup: Account-Based Marketing

Mobile Marketing Analytics

Analysis By: Joseph Enever

Benefit Rating: High

Market Penetration: 20% to 50% of target audience

Maturity: Early mainstream

Definition:

Mobile marketing analytics measure the interactions and behaviors of mobile website and application users, enabling digital marketing leaders focused on mobile marketing to optimize mobile experiences. Solutions must be able to identify device attributes (e.g., OS and screen size), use demographics and behaviors to build customer and prospect segments, automate operations such as segmentation, and offer the ability to predict activities that increase effectiveness of mobile marketing activity.

Why This Is Important

The time spent on mobile devices continues at an all-time high, and the wealth of data that this creates to analyze and act on is unsurpassed. The lines between web and mobile analytics are blurring as customer journey orchestration efforts grow, underscoring the importance to invest in the right analytics technology. Mobile marketing analytics is an essential component to the analytics toolkit for any organization undertaking digital transformation.

Business Impact

Digital marketing leaders need to understand mobile marketing channel (e.g., mobile web, app, SMS) performance to optimize investments and curate seamless journeys:

- Mobile marketing analytics spans industries in which organizations manage mobile touchpoints.

- Marketing analytics, product development, digital commerce, app development, IT and marketing are key beneficiaries of the insights mobile marketing analytics can deliver.

Drivers

- Digital marketing leaders continue to prioritize mobile marketing initiatives amid a shifting regulatory and technological landscape to drive multichannel orchestration. Mobile analytics forms a critical component to understanding and optimizing the multichannel behavior between digital and physical touchpoints throughout the entire customer life cycle.

- With consumers' use of mobile showing no signs of abating, digital marketing leaders' need to quantify, optimize and predict behaviors via mobile analytics remains high.

- The evolution of mobile marketing platforms, and their broadening scope of capabilities, drives additional use cases which underpin the need for digital marketing leaders to prioritize mobile analytics (see Market Guide For Mobile Marketing Platforms).

Obstacles

- Apple IDFA deprecation via IOS 14 eroded what has been a primary ID by which marketers recognize an individual. Most leading providers of mobile marketing analytics have diversified approaches to solving this such as first-party data capture, probabilistic identity resolution and the use of data clean rooms (see Apple Upsets the Digital Advertising Cart).

- Mobile marketing analytics as a category is evolving since the capabilities are being further embedded into existing analytics platforms such as Google Analytics. This is being accelerated with the timeline Google set for the end of Universal Analytics data collection: 1 July 2023 for the free version and 1 July 2024 for paid, enterprise instances (UA 360). An upgrade to GA4 will incorporate both web and app behaviors in one interface (see Choose Your Google Analytics 4 Path Now).

- Marketing analytics teams are still struggling to drive decisions, with the proportion of decisions influenced remaining static when compared to 2020 (see Better Data Won't Increase Marketing Analytics' Decision Influence, but CMOs Can).

User Recommendations

- Scrutinize vendors against your business's unique requirements to avoid disappointment. Vendors have specialties — some are focused on mobile games, while others are strong for retail or financial services markets.

- Ensure that data collection practices conform to data-privacy regulations. Privacy can be a barrier to mobile marketing initiatives from the perspective of consumer confidence as well as the marketers' risk appetite versus compliance.

- Address the depth and continuity of insight between your mobile properties. Companies without an app can leverage web analytics tools, and those with an app will need to integrate broader areas of data including app marketing, in-app behavioral trends, in-app purchases and crash analytics.

- Comprehend vendors' approach to the availability of person-level data. Ensure that they provide clarity on their ability to drive confident decisions among changing methodologies built to cope with the loss of cookies and mobile IDs.

Sample Vendors

Adobe; AppsFlyer; Branch.io, Google; Kochava; Localytics; Swrve

Gartner Recommended Reading

Market Guide For Mobile Marketing Platforms

Apple Upsets the Digital Advertising Cart

Better Data Won't Increase Marketing Analytics' Decision Influence, but CMOs Can

Appendixes

See the previous Hype Cycle: Hype Cycle for Digital Advertising, 2022

Hype Cycle Phases, Benefit Ratings and Maturity Levels

Table 2: Hype Cycle Phases

(Enlarged table in Appendix)

Phase ↓	Definition ↓
Innovation Trigger	A breakthrough, public demonstration, product launch or other event generates significant media and industry interest.
Peak of Inflated Expectations	During this phase of overenthusiasm and unrealistic projections, a flurry of well-publicized activity by technology leaders results in some successes, but more failures, as the innovation is pushed to its limits. The only enterprises making money are conference organizers and content publishers.
Trough of Disillusionment	Because the innovation does not live up to its overinflated expectations, it rapidly becomes unfashionable. Media interest wanes, except for a few cautionary tales.
Slope of Enlightenment	Focused experimentation and solid hard work by an increasingly diverse range of organizations lead to a true understanding of the innovation's applicability, risks and benefits. Commercial off-the-shelf methodologies and tools ease the development process.
Plateau of Productivity	The real-world benefits of the innovation are demonstrated and accepted. Tools and methodologies are increasingly stable as they enter their second and third generations. Growing numbers of organizations feel comfortable with the reduced level of risk; the rapid growth phase of adoption begins. Approximately 20% of the technology's target audience has adopted or is adopting the technology as it enters this phase.
Years to Mainstream Adoption	The time required for the innovation to reach the Plateau of Productivity.

Source: Gartner (August 2023)

Table 3: Benefit Ratings

Benefit Rating ↓	Definition ↓
Transformational	Enables new ways of doing business across industries that will result in major shifts in industry dynamics
High	Enables new ways of performing horizontal or vertical processes that will result in significantly increased revenue or cost savings for an enterprise
Moderate	Provides incremental improvements to established processes that will result in increased revenue or cost savings for an enterprise
Low	Slightly improves processes (for example, improved user experience) that will be difficult to translate into increased revenue or cost savings

Source: Gartner (August 2023)

Table 4: Maturity Levels

(Enlarged table in Appendix)

Maturity Levels ↓	Status ↓	Products/Vendors ↓
Embryonic	In labs	None
Emerging	Commercialization by vendors Pilots and deployments by industry leaders	First generation High price Much customization
Adolescent	Maturing technology capabilities and process understanding Uptake beyond early adopters	Second generation Less customization
Early mainstream	Proven technology Vendors, technology and adoption rapidly evolving	Third generation More out-of-box methodologies
Mature mainstream	Robust technology Not much evolution in vendors or technology	Several dominant vendors
Legacy	Not appropriate for new developments Cost of migration constraints replacement	Maintenance revenue focus
Obsolete	Rarely used	Used/resale market only

Source: Gartner (August 2023)

Evidence

[1] **2023 Gartner Marketing Technology Survey.** This survey aimed to investigate the state of technology acquisition, adoption, and use, including best practices for managing the technology stack, specific technologies in use, and the degree of their adoption. It was conducted online from the end of May through June 2023. In total, 405 respondents were surveyed in their native languages across North America (n = 200), Western Europe (n = 173), and the Nordics (n = 32). Qualifying organizations reported enterprisewide annual revenue for fiscal year 2022 of at least $100 million, with 80% of the respondents coming from organizations with $1 billion or more in annual revenue. The respondents came from a variety of industries: financial services (n = 39), insurance (n = 39), manufacturing (n = 41), consumer products (n = 38), retail (n = 39), travel and hospitality (n = 34), healthcare (n = 38), pharmaceuticals (n = 31), media (n = 34), tech products (n = 34), and IT & business services (n = 38). All the respondents were required to be senior decision makers, where the majority of their daily responsibilities mostly aligned with either business- or IT-focused marketing. Sixty-two percent of respondents were aligned to the marketing function, 18% to brand management, 11% to product marketing and management, 9% to customer services, and 2% to IT or other business units.

Disclaimer: The results of this survey do not represent global findings or the market as a whole, but reflect the sentiments of the respondents and companies surveyed.

2023 Gartner CMO Spend and Strategy Survey. The purpose of this survey was to look at top-line marketing budgets and identify how evolving customer journeys, C-suite pressures and cost challenges impact marketing's strategies and spending priorities. The research was conducted online from March through April 2023 among 410 respondents in North America (n = 205) and Western/Northern Europe (n = 205). Respondents were required to be involved in decisions pertaining to setting or influencing marketing strategy and planning, as well as have involvement in aligning marketing budget/resources and/or lead cross-functional programs and strategies with marketing. Eighty percent of the respondents came from organizations with $1 billion or more in annual revenue. The respondents came from a variety of industries: financial services (n = 44), tech products (n = 39), manufacturing (n = 55), consumer products (n = 43), media (n = 41), retail (n = 45), healthcare (n = 34), pharma (n = 38), IT and business services (n = 34), and travel and hospitality (n = 37).

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Document Revision History

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Hype Cycle for Digital Advertising, 2021 - 13 July 2021

Hype Cycle for Digital Advertising, 2020 - 14 July 2020

Recommended by the Authors

Some documents may not be available as part of your current Gartner subscription.

Understanding Gartner's Hype Cycles

The State of Marketing Budget and Strategy in 2023 — Insights From the CMO Spend and Strategy Survey

Ignition Guide to Creating the Annual Marketing Budget

Market Guide for Ad Tech Platforms

Assess the Value and Cost of Generative AI With New Investment Criteria

Maturity Model for Managing Marketing Technology

Table 1: Priority Matrix for Digital Advertising, 2023

Benefit	Years to Mainstream Adoption			
↓	Less Than 2 Years ↓	2 - 5 Years ↓	5 - 10 Years ↓	More Than 10 Years ↓
Transformational		Generative AI for Marketing	Emotion AI for Marketing Influence AI	
High	Mobile Marketing Analytics	Account-Based Marketing Platforms Data Clean Rooms Identity Resolution Over-the-Top TV Advertising Programmatic Segment-Based Advertising	Personification	
Moderate		Consent and Preference Management Conversational Marketing Location Intelligence for Marketing Promotional NFTs Retail Media Networks Shoppable Media Visual Intelligence		
Low				

Benefit	Years to Mainstream Adoption			
↓	Less Than 2 Years ↓	2 - 5 Years ↓	5 - 10 Years ↓	More Than 10 Years ↓

Source: Gartner (August 2023)

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