THE YEAR OF CHANGE IN DIGITAL MARKETING
MMA x BCG Survey

March 2022
As I pored over the findings in this report, I could not help think of the tagline from the movie, Jaws II: “Just when you thought it was safe to go back in the water.” I could not escape the fact that just when we marketers were starting to be more personalized with consumers, provide a better customer experience, and just be all-around consumer respectful (after decades of not so much), we’ve started to lose our ability to execute. And of all times for this to happen what with all the more personalize-able connection channels today (e.g., mobile, CTV, etc.)

Internet browsers’ and mobile platforms’ decision to reduce apps-owners, publishers, tech platforms, and marketers’ connectivity and “keeping state” (the defined initial value of cookies), we’re losing the ability to be better. This reduces our ability to do better when it comes to attribution (which is in part about protecting marketers’ companies’ shareholder value via the greater efficiency of marketing investment) or the personalization of consumer experience delivery (which also gets at the heart of shareholder value for any company that provides a utility, entertainment or information/news service to consumers digitally.)

According to MMA’s research, only 12% of marketers feel fully prepared for upcoming changes, and senior management is mainly concerned about tech durability and democratization (e.g., what is the day after and how do we build for a more durable future.)

The state of the state is unclear. And the actions to take to get a positive outcome are equally unclear for marketers.

This report is typical of MMA’s goal to provide clarity through facts and science (or at least validated frameworks) to the most complicated issues facing marketing-driven or marketing-supported companies today. These results are from a year-long investigation into the companies providing identity solutions via MMA’s Great Identifier Solutions Debates (much of which is already out of date by now) and hence why we are providing updated frameworks for decision making.

The only constant is change.

Thank so much to Lauren Weiner and the entire BCG team, the ten or so providers, MMA’s Global, North American, and Media & Data Board for their support, and MMA’s Marketing Attribution Think Tank of analytics experts.

Our struggle as marketers to best serve consumers continues.

GREG STUART
CEO
MMA Global, Inc.
BCG and MMA partnered to understand shifts in the digital marketing landscape as a result of the upcoming deprecation of 3rd party cookies, recent iOS tracking limitations, & ongoing regulatory changes.

Research involved a survey with 150 marketers across industries.

Source: BCG MMA Identity Marketer Survey (2021) N=150
Summary of findings

The burning platform: The coming deprecation of 3rd party cookies and recent changes to app tracking & regulations have most marketers expecting significant impact to their business and feeling unprepared to address it.

- **Lack of understanding and readiness**: 50% of marketers believe that their CMO does not fully understand implications of changing privacy regulations with only 12% of marketers feel fully prepared for upcoming changes.
- **Significant impact on marketing spend**: Marketers expect at minimum 22% reduction in marketing ROI due to cookies deprecation; and have so far seen on average a 17% reduction in ROI due to ATT rollout, with the highest reduction (33%) seen in DTC/retail.
- **Shift to Walled Gardens**: As a result of upcoming 3p cookie deprecation, 40% more respondents expect to increase spend in Search and Social than in Programmatic (Display/Video) – making Google and FB an even larger share of media mix.
- **Emergence of identity solutions**: Shift to new identifiers is happening but slowly: 50% of marketers still expect to rely on cookie-based solutions in the next two years, but 90% are testing at least one new identity solution.

What marketers can do: Leading marketers are addressing these shifts by investing in their 1p data infrastructure, evolving their tech stack and measurement approaches, and creating new privacy/data teams.

- **Investing in 1p data**: Companies grew their 1P data asset by 31% last year on average, and hope to grow 34% YoY looking forward with "well prepared" companies growing 1p at an 80% faster clip than "less prepared companies.
- **Investing new technologies**: While ~60% of marketers have invested in DMPs, majority expect future investments to be in marketing clouds and customer data platforms; affordability, compliance, and ability to track cross-platform & -device most important criteria.
- **Investing in new multi-pronged approach to measurement**: 60% of "well prepared" marketers expect to integrate multiple forms of measurement (rather than one silver bullet) and 50% expect to increase use of incrementality testing.
- **Investing in data/privacy teams**: "Well prepared" companies have invested almost twice as many FTE to preparing for changes, 36% vs. 20% - and only 45% of marketers believe their organization is sufficiently prepared with the "test and learn" mindset that will be needed.

Source: BCG MMA Identity Marketer Survey (2021) N=150
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The burning platform

- Lack of understanding and readiness
- Impact on marketing spend
- Shift to walled gardens
- Emergence of identity solutions

Investing in 1P data
- Investing in new technologies
- Investing in new measurement
- Investing in data/privacy teams
Marketers unprepared for upcoming changes due to anti-tracking measures and increased regulations

2 big drivers of change

- Anti-tracking measures
- Increased regulations

Leading to substantial concern for marketers

- 60% believe cookie deprecation will negatively impact ROI of audience targeting
- 50% believe CMO doesn't fully understand implications of regulatory & tracking changes
- 88% do not feel fully prepared and believe further investment needed

Source: BCG MMA Identity Marketer Survey (2021) N=150
Marketers saw a 17% reduction in media performance due to ATT, expecting a 22% reduction in ROI due to cookie deprecation

Average reduction in social media performance after ATT rollout
Reduction in media performance (%)

<table>
<thead>
<tr>
<th>Category</th>
<th>Reduction in media performance (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail</td>
<td>33%</td>
</tr>
<tr>
<td>Tech / tech products</td>
<td>19%</td>
</tr>
<tr>
<td>CPG</td>
<td>17%</td>
</tr>
<tr>
<td>Financial services</td>
<td>16%</td>
</tr>
<tr>
<td>Durables</td>
<td>15%</td>
</tr>
<tr>
<td>Healthcare products</td>
<td>13%</td>
</tr>
</tbody>
</table>

Expected minimum impact to ROI of cookie deprecation
Minimum impact of cookie deprecation on ROI (%)

<table>
<thead>
<tr>
<th>Category</th>
<th>Minimum impact of cookie deprecation on ROI (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthcare products</td>
<td>27%</td>
</tr>
<tr>
<td>Tech / tech products</td>
<td>26%</td>
</tr>
<tr>
<td>Retail</td>
<td>23%</td>
</tr>
<tr>
<td>Durables</td>
<td>18%</td>
</tr>
<tr>
<td>CPG</td>
<td>16%</td>
</tr>
<tr>
<td>Financial services</td>
<td>15%</td>
</tr>
</tbody>
</table>

Source: BCG MMA Identity Marketer Survey (2021) N=150

Question: You said, you have seen a reduction in media performance as a result of the rollout of ATT by Apple this year. What is your estimate of the negative impact for social media? Note: Accounts for those who marked "no reduction."

Question: Please estimate how this impact on your ability to carry out each use case might affect your media effectiveness and your overall return on marketing investment.
With cookies depreciating, marketers are concerned with reaching the right customers with the right messages

Expectations on which use cases will be most impacted

<table>
<thead>
<tr>
<th>Use Case</th>
<th>Completely disrupt</th>
<th>Serious negative impact</th>
<th>Expected reduction in ROI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audience targeting using 3rd party data</td>
<td>13%</td>
<td>28%</td>
<td>-21%</td>
</tr>
<tr>
<td>Personalization of consumer experience across channels</td>
<td>11%</td>
<td>22%</td>
<td>-16%</td>
</tr>
<tr>
<td>Brand safety and verification of media spend</td>
<td>9%</td>
<td>23%</td>
<td>-16%</td>
</tr>
<tr>
<td>Audience targeting using 1st party data</td>
<td>10%</td>
<td>21%</td>
<td>-15%</td>
</tr>
<tr>
<td>Attribution and measurement of media spend</td>
<td>5%</td>
<td>22%</td>
<td>-14%</td>
</tr>
<tr>
<td>Planning optimization of media spend</td>
<td>8%</td>
<td>11%</td>
<td>-16%</td>
</tr>
</tbody>
</table>

Note: Not additive. Average of those who believe there will be negative impact.

Question: If 3rd party cookies are fully deprecated, how do you expect that will impact your ability to do...?
Question: Please estimate how this impact on your ability to carry out each use case might affect your media effectiveness and your overall return on marketing investment.

Source: BCG MMA Identity Marketer Survey (2021) N=150
Expected shift in channels given cookie deprecation

% of respondents

- Social: -16%
- Search: -12%
- Display (Programmatic): -13%
- Video (Programmatic): -13% and 10%
- Direct channels: -12%
- Connected TV & Video: -13%
- Display (Direct): -21%
- Linear TV: -21%

Question: Do you expect to shift media spend across channels due to the deprecation and restriction of cookies and other identifiers? How do you expect to shift that spend for each of the following channels?

Note: Not showing those selecting “Keep as is.”

1 39% expect to increase in directly bought video and 37% expect to increase in CTV (number shown is average of 38%)

Source: BCG MMA Identity Marketer Survey (2021) N=150

Shift to walled gardens

At least 40% more respondents expecting to increase spend in Search & Social vs. Programmatic
Shift to new identifiers is happening

50%
Still expect to use cookies in next 2 years

Most leveraged identity solutions next 2 years
% of respondents

- 51% Cookie based solutions
- 49% Hashed email based solutions
- 48% Cohort-based solutions (aggregate level)
- 45% Publisher ID based solutions
- 44% Contextual solutions (not personally identifiable)
- 38% Finger-printing based solutions

Google (FloC/privacy sandbox)
- 63% Using/testing today
- 17% Considering testing in future
- 80% None of the above

Unified ID 2.0
- 34% Using/testing today
- 28% Considering testing in future
- 62% None of the above

Epsilon Core ID
- 33% Using/testing today
- 27% Considering testing in future
- 60% None of the above

ID5 Universal ID
- 27% Using/testing today
- 28% Considering testing in future
- 55% None of the above

LiveRamp ATS
- 32% Using/testing today
- 18% Considering testing in future
- 50% None of the above

Neustar Fabrick
- 27% Using/testing today
- 22% Considering testing in future
- 49% None of the above

Merkle’s Merkury
- 23% Using/testing today
- 23% Considering testing in future
- 46% None of the above

BritePool
- 23% Using/testing today
- 23% Considering testing in future
- 46% None of the above

None of the above
- 9%

...with a variety of options being tested

91%
Are testing at least one new identity solution

Source: BCG MMA Identity Marketer Survey (2021) N=150
Contents

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What marketers can do

- Investing in 1P data
- Investing in new technologies
- Investing in new measurement
- Investing in data/privacy teams
Investment needed to prepare for regulatory changes

Question: What specifically do you think could make your organization even more prepared for continued regulatory and tracking changes? Please rank the following statements in terms of their importance to help you prepare for those changes:

1. Invest in 1st & 2p party data
   - Evaluate reliance on 3rd party data in marketing program
   - Develop new value exchanges to capture customer data
   - Unify customer data & build out Customer360 records
   - Evaluate reliance on 3rd party data in marketing program
   - Develop new value exchanges to capture customer data
   - Unify customer data & build out Customer360 records
   - 46% - 50%¹

2. Invest in durable technology
   - Acknowledge uncertain future of cookie reliant tech
   - Test into new ID solutions and evaluate ability to deliver
   - Assess current slate of AdTech vendors for durability
   - 56%

3. Invest in Measurement
   - Use tests to validate accuracy of measurement
   - Revisit lift studies, incrementality tests, and MMM Integrate multiple systems of measurement
   - 49%

4. Invest in privacy / data teams
   - Assess market position and data gaps
   - Invest greater FTE into preparation & compliance
   - Greater C-level alignment on priorities and investments
   - 43% - 49%²

Source: BCG MMA Identity Marketer Survey (2021) N=150

¹ 46% for investing in 1p data, 50% for investing in data partnerships
² 43% for data governance improvements, 49% for c-level alignment
Rise of 1p data continuing and further accelerating

Companies continuing to invest in growing 1P data...

<table>
<thead>
<tr>
<th>Source: BCG MMA Identity Marketer Survey (2021) N=150</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question: What is your estimated year-over-year growth rate (from a year ago to current) of (PII) personally identifiable data records (e.g., email addresses)?</td>
</tr>
<tr>
<td>Question: What is your targeted year-over-year growth rate (from today to a year from now) of (PII) personally identifiable data records (e.g., email addresses)?</td>
</tr>
</tbody>
</table>

- **Past growth rate of PII (2021)**: 31%
- **Targeted growth rate of PII (2022)**: 34%

...with variations by preparedness and size

- **Well prepared**
  - Past growth rate (2021): 43%
  - Targeted growth rate (2022): 47%
- **Less prepared**
  - Past growth rate (2021): 24%
  - Targeted growth rate (2022): 26%
- **Greater than $1B**
  - Past growth rate (2021): 36%
  - Targeted growth rate (2022): 38%
- **Less than $1B**
  - Past growth rate (2021): 23%
  - Targeted growth rate (2022): 28%

Smaller companies hoping to catch up in 1P data
- Well prepared growing 1P data ~2x

Investing in 1p data
Data-rich companies are growing first party faster than data poor companies, with data regulated growing slowest

**Past vs. future growth of 1P data**

<table>
<thead>
<tr>
<th>Industry Type</th>
<th>Past Growth Rate (2021)</th>
<th>Targeted Growth Rate (2022)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Data rich&quot; industries</td>
<td>35%</td>
<td>+13%</td>
</tr>
<tr>
<td></td>
<td>40%</td>
<td></td>
</tr>
<tr>
<td>&quot;Data poor&quot; industries</td>
<td>29%</td>
<td>+3%</td>
</tr>
<tr>
<td></td>
<td>29%</td>
<td></td>
</tr>
<tr>
<td>Highly regulated industries</td>
<td>22%</td>
<td>+11%</td>
</tr>
<tr>
<td></td>
<td>24%</td>
<td></td>
</tr>
</tbody>
</table>

**Size of current 1P data asset**

- >200M: 21%
- 50-200M: 26%
- 10-50M: 20%
- 1M-10M: 16%
- <1M: 17%

**Examples**

- Retail, Tech, Media, Telecom, Travel
- CPG, Luxury, Healthcare products
- Financial services, Healthcare services

**Source**: BCG MMA Identity Marketer Survey (2021) N=150

**Question**: What is your estimated year-over-year growth rate (from a year ago to current) of (PII) personally identifiable data records (e.g., email addresses)?

**Question**: What is your targeted year-over-year growth rate (from today to a year from now) of (PII) personally identifiable data records (e.g., email addresses)?

**Question**: What is your estimate of the current number of PII (e.g., personally identifiable data records like email addresses) that your company has in its database, in North America? Please include both customers and prospective customers, and only count multiple pieces of data that are tied to the same person as one record.
Marketers have invested heavily in various AdTech and MarTech solutions

Ranking of past investments

- Data management platform: 58%
- Consent management platform: 54%
- Marketing clouds: 54%
- Multi-touch attribution: 51%
- 3rd party audience data: 49%
- Identity resolution solutions: 45%
- Customer data platform: 39%

Future investments

- Marketing clouds: 63%
- Customer data platform: 59%
- Data management platform: 55%
- Identity resolution solutions: 53%
- Consent management platform: 49%
- 3rd party audience data: 49%
- Multi-touch attribution: 46%

Question: Which of the following AdTech/MarTech solutions has your company invested in in the past?

Question: How do you envision your investments in these AdTech / MarTech solutions to change as a result of regulatory and tracking changes? Selected “Start new investment,” “Significantly increase investment” or “Increase investment”
“More prepared” believe marketers underleveraging use of modelled conversions and incrementality testing

Expected changes to measurement approach by preparedness
% of respondents saying they will increase following forms of measurement

Highest share of respondents see integration of measurement as the biggest area of increased focus

Integration across multiple forms of measurement
- Well prepared: 60%
- Less prepared: 53%

Use of survey based measurement
- Well prepared: 56%
- Less prepared: 41%

Use of modelled conversions
- Well prepared: 54%
- Less prepared: 36%

Use of view through conversions
- Well prepared: 52%
- Less prepared: 41%

Use of sales lift or incrementality tests
- Well prepared: 50%
- Less prepared: 35%

Use of MMM (media mix modeling)
- Well prepared: 44%
- Less prepared: 48%

Use of MTA (multi-touch attribution)
- Well prepared: 44%
- Less prepared: 40%

Question: How do you expect your organization to change its approach to measuring the impact of Paid Media investments as a result of regulatory and tracking changes? How will your use of each of the following measurement tools change?

Source: BCG MMA Identity Marketer Survey (2021) N=150
Companies that consider themselves "very well prepared" are investing more FTE toward compliance & preparation for upcoming regulatory and tracking.

### Average % of marketing employees focused on compliance

<table>
<thead>
<tr>
<th>Overall</th>
<th>Well prepared</th>
<th>Less prepared</th>
</tr>
</thead>
<tbody>
<tr>
<td>35%</td>
<td>42%</td>
<td>28%</td>
</tr>
</tbody>
</table>

### Average % of marketing employees focused on preparation

<table>
<thead>
<tr>
<th>Overall</th>
<th>Well prepared</th>
<th>Less prepared</th>
</tr>
</thead>
<tbody>
<tr>
<td>28%</td>
<td>36%</td>
<td>20%</td>
</tr>
</tbody>
</table>

### Average # of total marketing employees

<table>
<thead>
<tr>
<th>Overall</th>
<th>Well prepared</th>
<th>Less prepared</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,475</td>
<td>2,035</td>
<td>1,180</td>
</tr>
</tbody>
</table>

**Question:** Approximately how many full-time employees are focused on ensuring that your company remains compliant with shifting data privacy regulations?

*Source: BCG MMA Identity Marketer Survey (2021) N=150*
Appendix
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The burning platform

- Lack of understanding and readiness
- Impact on marketing spend
- Shift to walled gardens
- Emergence of identity solutions

What marketers can do

- Investing in 1P data
- Investing in new technologies
- Investing in new measurement
- Investing in data/privacy teams
Marketers expect at least 22% reduction in marketing effectiveness due to cookie deprecation

Expected minimum impact to ROI of cookie deprecation

*Question: Please estimate how this impact on your ability to carry out each use case might affect your media effectiveness and your overall return on marketing investment.*

Source: BCG MMA Identity Marketer Survey (2021) N=150
Today, players using less identity solutions expect twice the negative impact to ROI for audience targeting and personalization.

Expected negative impact to ROI given cookie deprecation

<table>
<thead>
<tr>
<th>Use Case</th>
<th>Currently using 2 or more identity solutions</th>
<th>Currently using 1 or no identity solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audience targeting using 3rd party data</td>
<td>8%</td>
<td>16%</td>
</tr>
<tr>
<td>Planning and optimization of media spend</td>
<td>9%</td>
<td>10%</td>
</tr>
<tr>
<td>Personalization of consumer experiences across channels</td>
<td>6%</td>
<td>12%</td>
</tr>
<tr>
<td>Brand safety/verification of media spend</td>
<td>7%</td>
<td>11%</td>
</tr>
<tr>
<td>Audience targeting using 1st party data</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>Attribution and measurement of media spend</td>
<td>7%</td>
<td>10%</td>
</tr>
</tbody>
</table>

Question: You indicated that the deprecation and restriction of cookies and other identifiers will impact your ability to do the following use cases. Please estimate how this impact on your ability to carry out each use case might affect your media effectiveness and your overall return on marketing investment.

Source: BCG MMA Identity Marketer Survey (2021) N=150
The “less prepared” for cookie deprecation expect more negative impact to ROI

Expected negative impact on ROI by preparedness

<table>
<thead>
<tr>
<th>Use Case</th>
<th>Less prepared</th>
<th>Well prepared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audience targeting using 3rd party data</td>
<td>14%</td>
<td>10%</td>
</tr>
<tr>
<td>Planning and optimization of media spend</td>
<td>10%</td>
<td>8%</td>
</tr>
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<td>8%</td>
</tr>
<tr>
<td>Audience targeting using 1st party data</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>Attribution and measurement of media spend</td>
<td>9%</td>
<td>8%</td>
</tr>
</tbody>
</table>

*Question:* You indicated that the deprecation and restriction of cookies and other identifiers will impact your ability to do the following use cases. Please estimate how this impact on your ability to carry out each use case might affect your media effectiveness and your overall return on marketing investment.

Data-regulated players expect more negative impact to ROI

Expected negative impact on ROI by data quality

<table>
<thead>
<tr>
<th>Use Case</th>
<th>Rich(er) in data</th>
<th>Poor(er) in data</th>
<th>Data regulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audience targeting using 3rd party data</td>
<td></td>
<td></td>
<td>14%</td>
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<td>Planning and optimization of media spend</td>
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Source: BCG MMA Identity Marketer Survey (2021) N=150
60% of marketers have seen reduction in media performance after ATT feature introduced in iOS

Reduction in media performance after ATT rollout

<table>
<thead>
<tr>
<th>Overall</th>
<th>By seniority</th>
<th>By data quality</th>
<th>By focus on identity</th>
</tr>
</thead>
<tbody>
<tr>
<td>60%</td>
<td>70%</td>
<td>63%</td>
<td>75%</td>
</tr>
<tr>
<td>33%</td>
<td>25%</td>
<td>30%</td>
<td>22%</td>
</tr>
<tr>
<td>7%</td>
<td>8%</td>
<td>7%</td>
<td>10%</td>
</tr>
</tbody>
</table>

Overall: 60% of marketers have seen a reduction in media performance after ATT rollout.

By seniority:
- Senior Mgmt.: 70% of marketers have seen a reduction in media performance.
- Middle Mgmt.: 52% of marketers have seen a reduction in media performance.

By data quality:
- Rich(er) in data: 63% of marketers have seen a reduction in media performance.
- Poor(er) in data: 63% of marketers have seen a reduction in media performance.
- Data regulated: 40% of marketers have seen a reduction in media performance.

By focus on identity:
- Currently using 2 or more identity solutions: 75% of marketers have seen a reduction in media performance.
- Currently using 1 or no identity solutions: 51% of marketers have seen a reduction in media performance.

Question: Since Apple introduced its new App Tracking Transparency (ATT) feature in iOS 14.5 earlier this year, have you seen a reduction in media performance in any channels?

Source: BCG MMA Identity Marketer Survey (2021) N=150
Marketers saw a 17% reduction in social media performance after ATT rollout

Average reduction in media performance after ATT rollout (social media)
*Average reduction in performance, weighted including those who saw no reduction...*

<table>
<thead>
<tr>
<th>Overall</th>
<th>By preparedness</th>
<th>By data quality</th>
<th>By focus on identity</th>
</tr>
</thead>
<tbody>
<tr>
<td>17%</td>
<td>25%</td>
<td></td>
<td>27%</td>
</tr>
<tr>
<td></td>
<td>13%</td>
<td>20%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>14%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>12%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10%</td>
</tr>
</tbody>
</table>

**Overall**

**By preparedness**
- Well prepared: 25%
- Less prepared: 13%

**By data quality**
- Rich(er) in data: 20%
- Poor(er) in data: 14%
- Data regulated: 12%

**By focus on identity**
- Currently using 2 or more identity solutions: 27%
- Currently using 1 or no identity solutions: 10%

**Question:** You said, you have seen a reduction in media performance as a result of the rollout of ATT by Apple this year. What is your estimate of the negative impact for social media?

**Note:** Accounts for those who marked “no reduction.”

Source: BCG MMA Identity Marketer Survey (2021) N=150
Marketers are concerned with the ability to accurately reach target audiences

<table>
<thead>
<tr>
<th>Qualities of an identifier</th>
<th>Expected to be negatively impacted by cookie deprecation</th>
<th>% of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accuracy Accredited/qualified</td>
<td></td>
<td>65%</td>
</tr>
<tr>
<td>Scale Regions/devices/users</td>
<td></td>
<td>55%</td>
</tr>
<tr>
<td>Consent and Control To consumers</td>
<td></td>
<td>50%</td>
</tr>
<tr>
<td>Transparency To advertisers/buyers</td>
<td></td>
<td>47%</td>
</tr>
<tr>
<td>Compliance and Durability Aligns to regulations (incl. Across regions)</td>
<td></td>
<td>42%</td>
</tr>
<tr>
<td>Democratization Activatable open/walled sites</td>
<td></td>
<td>34%</td>
</tr>
</tbody>
</table>

Question: What functionality do you expect to be negatively impacted in these use cases due to the deprecation and restriction of cookies and other identifiers?

Source: BCG MMA Identity Marketer Survey (2021) N=150
Senior management around twice as concerned as middle management about tech durability and democratization

<table>
<thead>
<tr>
<th>Qualities of an identifier</th>
<th>Expected to be negatively impacted by cookie deprecation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Accuracy</strong></td>
<td><strong>Senior mgmt.</strong> 60% <strong>Middle mgmt.</strong> 70%</td>
</tr>
<tr>
<td>Accredited/qualified</td>
<td></td>
</tr>
<tr>
<td><strong>Scale</strong></td>
<td><strong>Senior mgmt.</strong> 61% <strong>Middle mgmt.</strong> 51%</td>
</tr>
<tr>
<td>Regions/devices/users</td>
<td></td>
</tr>
<tr>
<td><strong>Consent and Control</strong></td>
<td><strong>Senior mgmt.</strong> 60% <strong>Middle mgmt.</strong> 42%</td>
</tr>
<tr>
<td>To consumers</td>
<td></td>
</tr>
<tr>
<td><strong>Tech durability</strong></td>
<td><strong>Senior mgmt.</strong> 58% <strong>Middle mgmt.</strong> 29%</td>
</tr>
<tr>
<td>Ability to deliver future use cases</td>
<td></td>
</tr>
<tr>
<td><strong>Transparency</strong></td>
<td><strong>Senior mgmt.</strong> 49% <strong>Middle mgmt.</strong> 46%</td>
</tr>
<tr>
<td>To advertisers/buyers</td>
<td></td>
</tr>
<tr>
<td><strong>Democratization</strong></td>
<td><strong>Senior mgmt.</strong> 45% <strong>Middle mgmt.</strong> 25%</td>
</tr>
<tr>
<td>Activatable open/walled sites</td>
<td></td>
</tr>
</tbody>
</table>

Question: What functionality do you expect to be negatively impacted in these use cases due to the deprecation and restriction of cookies and other identifiers?

Source: BCG MMA Identity Marketer Survey (2021) N=150
Marketers more concerned with upcoming restrictions are also more bullish on increases in social

Expected shift in channels given cookie deprecation by level of concern

<table>
<thead>
<tr>
<th>Channel</th>
<th>More concerned</th>
<th>Less concerned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social</td>
<td>44%</td>
<td>38%</td>
</tr>
<tr>
<td>Search</td>
<td>35%</td>
<td>44%</td>
</tr>
<tr>
<td>Direct video</td>
<td>22%</td>
<td>32%</td>
</tr>
<tr>
<td>Direct channels</td>
<td>18%</td>
<td>35%</td>
</tr>
</tbody>
</table>

Question: Do you expect to shift media spend across channels due to the deprecation and restriction of cookies and other identifiers? How do you expect to shift that spend for each of the following channels?

Note: Shown average based on those who selected "increase" subtracting those who selected "decrease."

Source: BCG MMA Identity Marketer Survey (2021) N=150
Marketers expect to continue to rely on cookie-based solutions next 2 years

Most leveraged identity solutions next 2 years
% of respondents

<table>
<thead>
<tr>
<th>Identity Solution</th>
<th>Will use a lot (50-70% of relevant ad spend)</th>
<th>Will primarily use (70%+ relevant of ad spend)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cookie based solutions</td>
<td>51%</td>
<td>21%</td>
</tr>
<tr>
<td>Hashed email based solutions</td>
<td>49%</td>
<td>19%</td>
</tr>
<tr>
<td>Cohort-based solutions (aggregate level)</td>
<td>48%</td>
<td>21%</td>
</tr>
<tr>
<td>Publisher ID based solutions</td>
<td>45%</td>
<td>17%</td>
</tr>
<tr>
<td>Contextual solutions (not personally identifiable)</td>
<td>44%</td>
<td>11%</td>
</tr>
<tr>
<td>Finger-printing based solutions</td>
<td>38%</td>
<td>17%</td>
</tr>
</tbody>
</table>

Question: Which of the following types of identity solutions are you most likely to leverage for your digital marketing use cases over the next 2 years?

Source: BCG MMA Identity Marketer Survey (2021) N=150
Google FloC is 2x as popular as any other identity solution today

<table>
<thead>
<tr>
<th>Most popular identity solutions</th>
<th>% of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Google (FloC / privacy sandbox)</td>
<td>63% (80%)</td>
</tr>
<tr>
<td>Unified ID 2.0</td>
<td>34% (62%)</td>
</tr>
<tr>
<td>Epsilon Core ID</td>
<td>33% (60%)</td>
</tr>
<tr>
<td>ID5 Universal ID</td>
<td>27% (55%)</td>
</tr>
<tr>
<td>LiveRamp ATS</td>
<td>32% (50%)</td>
</tr>
<tr>
<td>Neustar Fabrick</td>
<td>27% (49%)</td>
</tr>
<tr>
<td>Merkle’s Merkury</td>
<td>23% (46%)</td>
</tr>
<tr>
<td>BritePool</td>
<td>23% (46%)</td>
</tr>
<tr>
<td>None of the above</td>
<td>9%</td>
</tr>
</tbody>
</table>

Question: Which of the following identifier (or “Identity Solutions”) have you tested or used so far?
Question: Which are you also considering?

91% Of marketers use at least 1 identity solution today

Source: BCG MMA Identity Marketer Survey (2021) N=150
Contents

The burning platform

- Lack of understanding and readiness
- Impact on marketing spend
- Shift to walled gardens
- Emergence of identity solutions

What marketers can do

- Investing in 1P data
- Investing in new technologies
- Investing in new measurement
- Investing in data/privacy teams
5 actions to take to prepare for upcoming changes
Marketer playbook for the new digital landscape

1. Invest in and monetize 1st party data
   - Evaluate reliance on 3rd party data in marketing program, incl. in programmatic and walled gardens
   - Develop new value exchanges to capture customer data (e.g., loyalty programs)
   - Unify customer data into singular ID & build out Customer360 data records

2. Evolve your approach to measurement and attribution
   - Use tests to validate accuracy of MTA measurement and modelled conversion approaches
   - Revisit “tried and true” lift studies, incrementality tests, and MMM (media mix modeling)
   - Push for clarity through integrating multiple systems of measurement (vs. a single, silver-bullet)

3. Explore new models of data partnerships
   - Assess market position and data gaps to define partnership requirements
   - Leverage data clean rooms to maximize 1st party and 2nd party data sources (e.g., to append data against existing assets) and connect across activation platforms (e.g., for paid media, email)
   - Evaluate new custom data offerings and services (e.g., from retail media networks and publishers)

4. De-risk tech investments and focus on durability
   - Acknowledge uncertain future of cookie reliant tech (i.e., DMPs, MTAs, retargeting platforms)
   - Test into new ID solutions and evaluate ability to deliver on critical use cases
   - Assess current slate of AdTech vendors for durability, and be wary of new yet potentially unsustainable technology (i.e., fingerprinting technology) and explore new alternatives (e.g., contextual)

5. Take a x-functional C-level approach (CIO+CMO+Legal)
   - Accelerate education for CXOs to set a shared foundation of what’s changing, when, and likely impact
   - Establish cross-functional pod across CIO/CTO, CMO, and Legal org to define strategy and align approach
   - Make set topic at set CXO leadership meetings
Rise of 1p data continuing and further accelerating

Companies continuing to invest in growing 1P data...

...with variations by size, preparedness, and data quality

- Large companies hope to grow 1P data asset at 38%, though smaller companies attempting to catch up, increasing growth rate to 28% next year from 23% this past year

- The most advanced companies that consider themselves "well prepared" are growing their 1P data asset almost twice as quickly as others – 47% vs. 26% YoY

- Data-rich companies hope to grow at 40%, whereas data-poor and heavily regulated companies are targeting growth rates of 29% and 24% respectively

Source: BCG MMA Identity Marketer Survey (2021) N=150
"Well prepared" companies investing more in 1P data; smaller companies trying to catch up to larger ones

Past vs. future growth of 1P data

<table>
<thead>
<tr>
<th>Well prepared</th>
<th>Less prepared</th>
<th>Greater than $1B</th>
<th>Less than $1B</th>
</tr>
</thead>
<tbody>
<tr>
<td>43%</td>
<td>24%</td>
<td>+10%</td>
<td>+4%</td>
</tr>
<tr>
<td>47%</td>
<td>26%</td>
<td>+6%</td>
<td>-21%</td>
</tr>
<tr>
<td>36%</td>
<td>38%</td>
<td>+4%</td>
<td>+21%</td>
</tr>
<tr>
<td>23%</td>
<td>28%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Question: What is your estimated year-over-year growth rate (from a year ago to current) of (PII) personally identifiable data records (e.g., email addresses)?

Question: What is your targeted year-over-year growth rate (from today to a year from now) of (PII) personally identifiable data records (e.g., email addresses)?

Note: For the question, "Overall, given your company’s investments in people, tech, partners, and the acquisition of data, how well prepared do you believe you are for upcoming regulatory (e.g., CCPA, GDPR) and tracking (e.g., 3P cookie deprecation, IDFA) changes?" 52 respondents answered, "very well prepared," whereas 98 respondents answered, "somewhat prepared," "not very prepared," or "entirely unprepared." Those who answered, “very well prepared” are included in the “Well prepared bucket above.”

Source: BCG MMA Identity Marketer Survey (2021) N=150
1P data provides several sources of strategic value

**Increase Media effectiveness**
Target relevant consumers and those with similar profiles ("look alikes") with better ROI and cheaper cost vs 3P data

**Generate product innovation insights**
Understand behavior of consumers, detect early trends & customize products

**Retain and develop high value consumers**
Engage with customers 1-on-1 through CRM programs and drive upsell, engagement & cross-sell

**Reduce dependency on external platforms**
Own the access to key consumer segments; reduce reliance on 3rd party data

**Core value driver** for building 1P data at scale

**Secondary benefit** (e.g., usage data can go beyond traditional insights)

**Tertiary benefit** (but for CPGs challenging to achieve 1 to 1 consumer interaction at scale)

**Long term benefit** (to ensure strong, sustainable, cost effective data foundation)
Marketers expect greater investment in Marketing Clouds and CDPs

Shifts in investments due to regulatory and tracking changes

Question: How do you envision your investments in these AdTech / MarTech solutions to change as a result of regulatory and tracking changes?

Source: BCG MMA Identity Marketer Survey (2021) N=150
"Well prepared" companies have made significantly greater investments, especially in consent management, MTA, and identity resolution.

AdTech & MarTech investments to date

<table>
<thead>
<tr>
<th>Solution</th>
<th>Well prepared</th>
<th>Less prepared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data management platform</td>
<td>67%</td>
<td>53%</td>
</tr>
<tr>
<td>Consent management platform</td>
<td>75%</td>
<td>39%</td>
</tr>
<tr>
<td>Marketing clouds</td>
<td>60%</td>
<td>51%</td>
</tr>
<tr>
<td>Multi-touch attribution</td>
<td>56%</td>
<td>30%</td>
</tr>
<tr>
<td>3rd party audience data</td>
<td>65%</td>
<td>48%</td>
</tr>
<tr>
<td>Identity resolution solutions</td>
<td>62%</td>
<td>37%</td>
</tr>
<tr>
<td>Customer data platform</td>
<td>60%</td>
<td>44%</td>
</tr>
</tbody>
</table>

Question: Which of the following AdTech/MarTech solutions has your company invested in in the past?

Source: BCG MMA Identity Marketer Survey (2021) N=150
Companies who do not use at least two identity solutions are more concerned with cookie deprecation, yet also planning to invest

Number of identity solutions used or expected to be used

<table>
<thead>
<tr>
<th></th>
<th>Yes, we will likely use two or more identity solutions</th>
<th>Yes, we already have two identity solutions in the works</th>
<th>Yes, we already have more than two identity solutions in the works</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>85%</td>
<td>46%</td>
<td>17%</td>
</tr>
<tr>
<td></td>
<td>80%</td>
<td>53%</td>
<td>16%</td>
</tr>
<tr>
<td></td>
<td>92%</td>
<td>38%</td>
<td>28%</td>
</tr>
<tr>
<td>More concerned</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>with cookie deprecation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less concerned</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>with cookie deprecation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rich(er) in data</td>
<td>90%</td>
<td>43%</td>
<td>17%</td>
</tr>
<tr>
<td></td>
<td>82%</td>
<td>48%</td>
<td>17%</td>
</tr>
<tr>
<td>Poor(er) in data</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data regulated</td>
<td>80%</td>
<td>50%</td>
<td>20%</td>
</tr>
</tbody>
</table>

Question: Are you planning to use more than one identity solution in random in order to better future-proof your measurement and targeting?

Source: BCG MMA Identity Marketer Survey (2021) N=150
For most, will take at least 6 months to implement new identity solution

Timeline for identity solution implementation

<table>
<thead>
<tr>
<th>Timeline</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 6 months</td>
<td>12%</td>
</tr>
<tr>
<td>6-11 months</td>
<td>55%</td>
</tr>
<tr>
<td>1-2 years</td>
<td>29%</td>
</tr>
</tbody>
</table>

Question: Given that you are in the process of considering an identity solution, what is your predicted timeline for it to be fully implemented and driving value?

Source: BCG MMA Identity Marketer Survey (2021) N=150
Affordability and compliance are table stakes when choosing new ID solutions

Top 5 most essential identifier capabilities and features when choosing ID solutions to invest in

<table>
<thead>
<tr>
<th></th>
<th>Overall</th>
<th>Large companies</th>
<th>Small companies</th>
<th>ID focused (2+ ID solutions)</th>
<th>Less ID foc. (0-1 ID solutions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affordable cost</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Full compliance with all regulations cross-region</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Ability to track cross-device (e.g., web, app, mobile)</td>
<td>3</td>
<td>1</td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Ability to track cross-platform (e.g., Web, FB, Google)</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Transparency on underlying data/identity sources</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Ability to export data internally, e.g., for analytics</td>
<td></td>
<td></td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>High percent of total population covered in ID graph</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Sophisticated consent management/enforcement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global coverage</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability for consumer to manage consent directly</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accreditation from MRC, IAB, or other industry body</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Detailed controls to manage regulations across geographies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Durable and positioned to evolve with future data changes</td>
<td></td>
<td></td>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Clarity on modeling extrapolation and match rates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability to integrate with data clean rooms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Question: Which of the following identifier capabilities and features do you believe are most essential in order to choose which “identity solution” to invest in?

Source: BCG MMA Identity Marketer Survey (2021) N=150
Marketers expect increased integration of multiple forms of measurement

Expected changes in measurement approach (increase)

- Integration across multiple forms of measurement: 55%
- Use of MMM (media mix modeling): 47%
- Use of survey based measurement: 46%
- Use of view through conversions: 45%
- Use of modelled conversions: 42%
- Use of MTA (multi-touch attribution): 41%
- Use of sales lift or incrementality tests: 40%

Source: BCG MMA Identity Marketer Survey (2021) N=150

Question: How do you expect your organization to change its approach to measuring the impact of Paid Media investments as a result of regulatory and tracking changes? How will your use of each of the following measurement tools change?
Organizational culture must also shift to prepare for upcoming changes

% of marketers who responded "entirely accurate" to following questions...

- **45%** My organization has a test and learn mindset when considering new partners and solutions
- **58%** CIO and CMO aligned on the tech investments
- **61%** The CFO of my organization bought in on how marketing drives effectiveness and financial value
- **63%** My organization is agile and able to quickly reassess and pivot strategy

Question: For each of the following statements, please indicate how accurate this is for your current organization.

Source: BCG MMA Identity Marketer Survey (2021) N=150
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