



GAIN A COMPETITIVE EDGE



UNDERSTANDING
OF MEDIA ECOSYSTEM

STUDY GUIDE

DIGITAL MARKETING & MEDIA FOUNDATIONS



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INTRODUCTION

Individuals working in Digital Advertising, work closely with advertisers and agencies throughout the life of an advertising campaign. From forecasting inventory and reviewing insertion orders, to trafficking campaigns and monitoring delivery, a professional working in digital advertising can take on many roles such as: proposal entry, quality assurance, logging traffic, pulling campaign reports, monitoring campaign performance, and providing optimization recommendations.

This IAB Digital Marketing & Media Foundations Certification (DMMFC) is an entry-level industry credential for professionals new to the digital advertising industry. Individuals who earn the certification have demonstrated their knowledge and competency of digital advertising with capabilities in digital ad operations, sales, marketing, media planning, and data analytics. Individuals meeting eligibility requirements must pass a multiple-choice exam to qualify for certification and earn the DMMFC designation.

The purpose of this study guide is to improve candidates' preparedness for taking the DMMFC exam. It contains useful information about exam and question format, requisite core digital media knowledge, and specialized content areas that candidates will be tested on. The study guide also includes useful links and resources to assist candidates with additional areas of specialized knowledge, capabilities, and skills that may appear on the exam.

PART ONE: ABOUT THE EXAM

A. EXAM FORMAT

The IAB Digital Marketing & Media Foundations Certification (DMMFC) exam consists of 100 multiple choice questions. Eighty of those questions will be scored, while twenty are pre-tested for statistical purposes and will not be scored. You are scored only on the eighty exam questions and only correct answers are counted. You will not receive feedback on the pre-tested questions.

Your appointment at the testing lab will be for two hours. This two hours includes five minutes to agree to the nondisclosure agreement for the DMMFC examination. Thereafter, you will have one hour and fifty-five minutes to take the exam. Restroom breaks are permitted but count towards the one hour and fifty-five-minute allotment.

It is the policy of the IAB to develop examinations utilizing a psychometrically valid process. The examination was developed by subject-matter experts under the guidance of psychometricians (experts in measurement and test development) and is designed to measure the knowledge, skills, and abilities required to perform competently as a person working in digital ad operations.

B. SCORING

The passing point, or the score you need to achieve to pass the certification, was also determined utilizing valid psychometric procedures. The exam is built on a pass/fail basis, to assess whether an individual possesses a minimum level of knowledge, capabilities, and skills deemed necessary to successfully perform the job of a digital ad professional. The IAB follows best practices in all its test development activities and has a high degree of confidence that only those who meet the competency requirements will pass the examination.

Candidates will receive their score report at the test center, which will designate their pass/fail status. Detailed raw and/or percentage scores will not be provided. Successful candidates will be notified that they have passed and will be provided instructions for completing the certification process. Candidates who fail will receive an assessment of their overall performance on each content area of the exam. This information is provided so candidates can see their areas of greatest weakness, and prepare themselves to retake the exam.

C. EXAM CONTENT

Successful and knowledgeable individuals working in digital advertising should have a fundamental understanding of these six areas covered in the exam:

- A. Comprehend Digital Advertising Ecosystem.** Understanding the ecosystem of the digital advertising industry is integral to the success of a digital advertising professional. Ad professionals can identify traditional marketing models like the consumer journey, and how these models can be applied to digital

advertising. They also understand the digital landscape, have knowledge in digital advertising formats, platforms, tools and technologies; and can calculate media mathematics while applying industry standards at policies in their work.

- B. Gather Pre-Campaign Information.** Successful digital ad professionals can identify and conduct the necessary steps before an advertising campaign can begin. They can determine campaign timelines, forecast available inventory, and generate insertion order (IOs). Additional steps include: conducting kick-off calls addressing campaign-related details, collecting necessary assets, and aligning them to the media plan.
- C. Executing the Campaign.** Ensuring a smooth launch requires end-to-end operations management that starts well before a campaign goes live. A successful digital ad professional must be detail-oriented and can juggle many tasks. They can organize creative assets, book the campaign according to the IO, generate, implement, and conduct quality assurance testing in preparation for campaign launch.
- D. Monitoring the Live Campaign.** Digital media offers greater opportunity for engagement, interactivity, targetability, measurability, and ad hoc optimization than traditional media. To ensure optimal performance, digital ad professionals perform ongoing quality assurance (QA) and optimization reviews for each live campaign throughout its lifecycle. They monitor campaign delivery, identify areas of optimization, execute campaign changes, and conduct post-campaign reporting activities.
- E. Identifying Troubleshooting.** Successful digital ad professionals understand and identify that problems can arise during a campaign. They have a solid understanding of the QA process and can troubleshoot creatives, campaign delivery, and data discrepancies while escalating any necessary details. They can identify fraudulent activity when necessary and troubleshoot targeting details.
- F. Campaign Reporting and Analysis.** Campaign reporting and analysis is fundamental to any ad campaign. Successful advertising professionals can identify campaign report type, analyze the data against benchmarks, and provide recommendations to improve performance. They summarize the campaign and highlight any success metrics with recommendations for future campaigns.

The following exam blueprint lists the content areas to be tested, as well as their approximate weighting in the DMMFC exam.

D. EXAM BLUEPRINT

Content Areas		Weight
A	Comprehend Digital Advertising Ecosystem	27.5%
1	Explain Traditional Marketing Models	
2	Describe the Media Value Chain	
3	Describe Digital Advertising Formats	
4	Differentiate Digital Advertising Platforms	
5	Define Key Digital Advertising Tools and Technologies	
6	Calculate Media Mathematics	
7	Adhere to Compliance Standards/Policies	
B	Gather Pre-Campaign Information	20.0%
1	Determine a Campaign Timeline	
2	Forecast Inventory	
3	Generate an IO (Agency Side)	
4	Validate IO Completeness	
5	Conduct Kick-Off Call	
6	Collect Potential Assets	
7	Align Creative Assets with Media Plan	
C	Executing the Campaign	12.5%
1	Create Traffic Sheet (Agency Side)	
2	Book Campaign in Ad Server (Publisher Side)	
3	Generate Tags (Agency or Vendor Side)	
4	QA Tags	
5	Implement Tags	
6	Confirm Campaign Launch	
D	Monitoring the Live Campaign	13.8%
1	Check Campaign Delivery and Pacing	
2	Optimize Within Contract Parameters	
3	Propose Optimization Changes	
4	Execute Campaign Modifications	
5	Perform Billing and Reconciliations Activities	
E	Identifying Troubleshooting	15.0%
1	Troubleshoot Creative	
2	Troubleshoot Tags	
3	Troubleshoot Delivery	
4	Troubleshoot Discrepancies	
5	Troubleshoot Fraudulent and/or Malicious Behavior	
6	Troubleshoot Targeting	
F	Campaign Reporting and Analysis	11.3%
1	Generate and Schedule Reports	
2	Provide Benchmarks for Success	
3	Conduct Post-Campaign Analysis	

PART TWO: CONTENT AREA

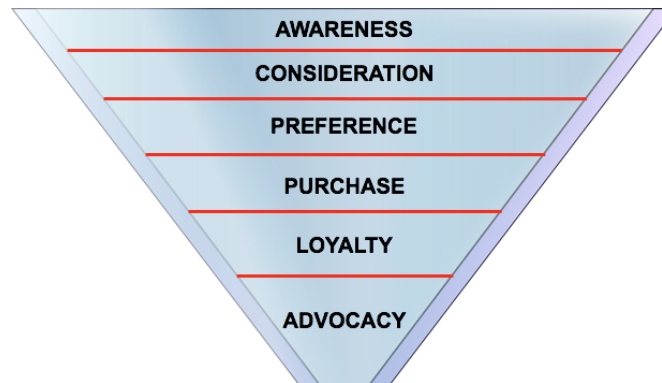
A. COMPREHEND DIGITAL ADVERTISING ECOSYSTEM

The digital advertising ecosystem is very complex and continues to evolve. This section provides candidates with the foundational knowledge of the various parts within the digital advertising industry.

1. EXPLAIN TRADITIONAL MARKETING MODELS

The traditional consumer buying funnel, also known as the consumer purchase path, has been used as a marketing model for years. This model describes the decision-making process a person goes through prior to making a purchase. Look at the following consumer funnel and their descriptions for each stage of the funnel to understand a consumer's path to purchase.

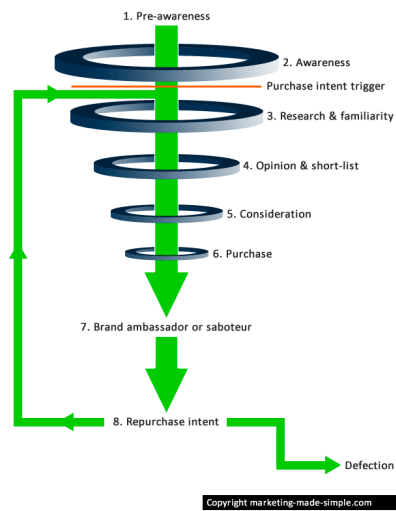
Exhibit 1. The Traditional Consumer Buying Funnel



- **Awareness:** The moment a consumer first learns about a product/services and/or the advertiser's brand
- **Consideration:** Occurs when the consumer learns details about the product/services
- **Preference:** The stage when the consumer compares the brand or product/services to the competition, while identifying the one that appeals most to their needs
- **Purchase:** The moment the consumer comes to a decision to buy that product or service
- **Loyalty:** The consumer's decision to continue purchasing that product or service
- **Advocacy:** Occurs when the consumer loves a product or brand so much, they promote it to their friends, family, and/or social network

As advertising has evolved, so has the consumer purchase path or the consumer decision journey. Consumers interact with many different touchpoints causing them to jump from one phase of their decision-making process to another, no longer following the funnel. The following consumer decision journey illustrates a newer take in the decision-making process.

Exhibit 2. Evolution of the Consumer Decision Journey



Source: Marketing Made Simple – Purchase Funnel
marketing-made-simple.com/purchase-funnel

Suppose a consumer has had exposure to a video ad for a new brand of sunglasses, putting him in the awareness stage. A week later a friend of his posts a picture on Facebook wearing that brand of sunglasses. He sees how good they look and makes the decision to buy a pair for himself. He had a purchase intent trigger that moved him from awareness to the purchase stage. This evolution requires advertisers and brands to think about their goals more holistically, accounting for other forms of media (e.g., user-generated), as opposed to the traditional campaign-focused strategies.

Candidates will need to identify the different media types: paid, owned, earned, and shared.

- Paid media is when a brand pays to advertise a campaign (e.g., Nike runs display and video campaigns to promote their new Air Jordans).
- Owned media is when a brand owns some form of internal content such as an internal blog or social media (e.g., BMW’s Facebook page, Target’s internal blog where they publish content).
- Earned media is when the consumer becomes the channel by endorsing the brand in some way (e.g., Kendall Kardashian posts a new shake she’s been drinking for her fast, Cristiano Ronaldo tweeting his favorite restaurant).

Shared media is the combination of two of the three different types of media. The following are some examples of those shared combinations:

- Paid + Owned can be considered promoted brand content (e.g., Audi publishes a blog and highlights their newest vehicle as one of the top-ranking vehicles in the 2018 safety report).
- Paid + Earned is essentially when a customer is ‘sponsored’ or paid to promote something about the brand (e.g., Sony PlayStation pays/incentivizes a top gaming influencer on Instagram to post a picture of their new Sony gaming console).

- Owned + Earned is when a brand asks for some sort of share or promotion from their consumers without any incentive (e.g., Southwest Airlines posts a video on their Facebook page promoting their summer flight prices, and asks their followers to share the post).

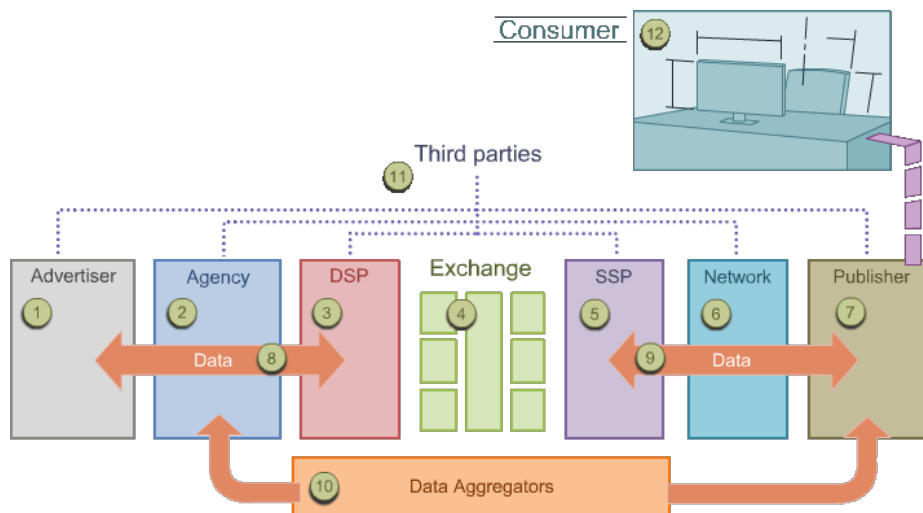
2. DESCRIBE THE MEDIA VALUE CHAIN

Candidates will need to understand the media buying process and the roles and responsibilities of the players in the media value chain. A value chain refers to the different types of organizations and their processes that deliver a product or service within an industry. Candidates must be able to demonstrate how the different elements of the digital media value chain (digital media ecosystem) work together.

The ecosystem depicted below, have evolved into what is now the programmatic digital media value chain, or ecosystem. Programmatic buying and selling is an automated way to buy and sell digital ads and has transformed the buying and selling of advertising within the industry. The automation makes it easier to launch and run ad campaigns than traditional campaign methods, with approximately 20% of all digital advertising being sold by one machine talking to another machine. Review the latest information on programmatic, here: iab.com/programmatic.

Historically, programmatic was associated with unsold/remnant inventory, or inventory that has not been purchased by an advertiser. It has evolved significantly over the past several years driving organizational shifts and adding new players to the game. Visit the link below the illustration, for an interactive and informative version of the following ecosystem that connects the brand to the consumer, with the advertiser (buy-side) on the left and the publisher (sell-side) on the right.

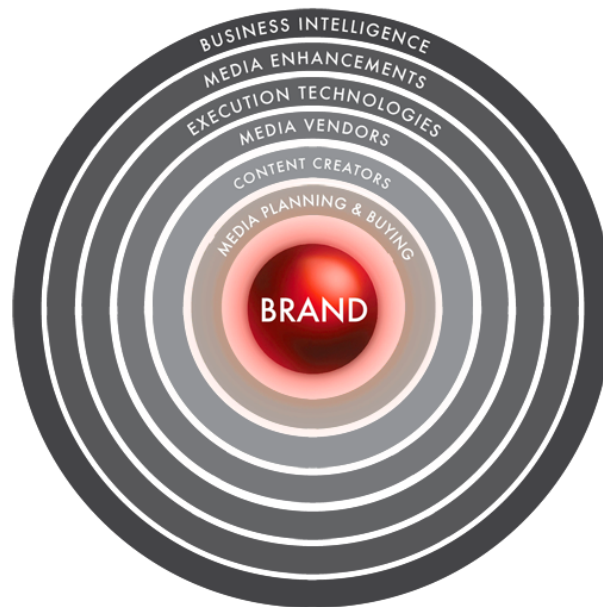
Exhibit 3. High-Level View of the Digital Media Value Chain



Source: IAB Advertising Ecosystem
data.iab.com/ecosystem.html

The following IAB illustration provides a more detailed overview of the digital media value chain. Review this in concert with the ecosystem above and familiarize yourself with the individual players in the IAB Arena.

Exhibit 4. Digital Media Value Chain – IAB Arena



Source: IAB Arena
iab.net/iabarena

The IAB Arena identifies how the different parts of the digital advertising ecosystem work together to create and execute advertisements, with brands at the core. Visit the IAB Arena link, for an interactive illustration and interactive video for definitions of the various parts. Be sure you understand how the elements work together, can define the role and value of each part, and are able to demonstrate how the various elements of the value chain work together.

- **Brands:** Keepers of the value system that inform and enrich the products and services that people buy. They are the initiators and at the core of digital ad campaigns. All human and technological activity in digital advertising is in service to those brands and emanates from them (e.g., McDonald's, Nordstrom, AT&T, Sony).
- **Media Planning & Buying:** Where the choices about what channels and platforms, brands place their advertising within, are made.
 - **Agencies:** A company that provides advertising and marketing services to brand marketers and offer a range of services from creative to media, or a combination; can be independent or held (e.g., *Mindshare* (WPP), *OMD* (Omnicom), *Leo Burnett* (Publicis)).
 - **In-House:** Employed by the brand, but similar functions as an agency.
 - **Media Management System:** Tools for media buyers to manage campaigns and brands.
- **Content Creators:** Encompass the types of content marketers place their ad within, to reach consumers.

- **Publishers:** Entity that creates and owns content; could be anything that has ad inventory – includes websites, blogs, and apps (e.g., WSJ, NYT, Weather.com, BuzzFeed, ESPN).
- **Social:** Sites that focus on communication between groups of approved individuals who are typically part of an ever-expanding social circle.
- **User-Generated:** Any type of content (text, images, audio, or video) that is created by non-professionals.
- **Brand Content:** Content that is created and disseminated by brands.
- **Portals:** Destination sites that provide search, email, and owned or aggregated content (e.g., Google, AOL, Yahoo!, Bing).

- **Media Vendors:** Organizations who sell and re-sell advertising inventory.
 - **Publishers:** Entities that professionally produce digital media content (text, images, audio, video); in this category, including ad-supported sites.
 - **Ad Exchanges:** A sales channel between buyers, publishers/networks, aggregating inventory via a platform that facilitates automated auction-based pricing and real-time bidding (RTB), e.g.:
 - Display: DoubleClick, RightMedia, OpenX, Facebook Exchange
 - Video: AdapTV, SpotXchange
 - Mobile: MoPub, Appnexus
 - **DSPs (Demand-Side Platforms):** Tech interface that provides centralized and aggregated programmatic media buying from multiple sources including publishers, ad exchanges, and ad networks (e.g., Turn, MediaMath, AppNexus, DataXu, TheTrade Desk).
 - **SSPs (Supply-Side Platforms):** Tech used by publishers to programmatically sell inventory, optimize pricing/yield, and audience for a pool of potential advertisers (e.g., AppNexus, AdMeld, Pubmatic, Rubicon Project).
 - **ATDs (Agency Trading Desks):** Centralized management platform, specializing in programmatic audience buying. Used by agencies and owned at the holding company level; trading desks are layered on top of DSP(s) (e.g., Xaxis (WPP), Vivaki/Audience on Demand or “AoD” (Publicis), Accuen (Omnicom), Cadreon/Magna (IPG), Varick (MDC), Affiperf (Havas)).
 - **Ad Networks:** Provide an outsourced sales capability for publishers and a means to aggregate inventory and audience from numerous sources in a single buying opportunity for media buyers. Includes technologies to enhance buys including unique targeting capabilities, creative generation, and optimization (e.g., (1 Display) Collective, Undertone; (2 Mobile) MillennialMedia, AdMob, TapJoy, JumpTap; (3 Video) Videology, Tremor, BrightRoll, YuMe).

- **Execution Technologies:** Technology to simplify processes such as distributing the ads to various media outlets, tracking their specific placements, optimizing them based on performance, and reporting back the actual counts of ads delivered.
 - **Ad Servers:** Technology that hosts, serves, and reports on ad campaigns (e.g., DoubleClick, Atlas, Pointroll).
 - **Site Serve:** The original source of the inventory serving (delivering) the ad.

- **Media Enhancements:** Technologies designed to enrich the creative or more precisely target specific audiences that those ads reach. There are many data signals that can contribute to better performing ad

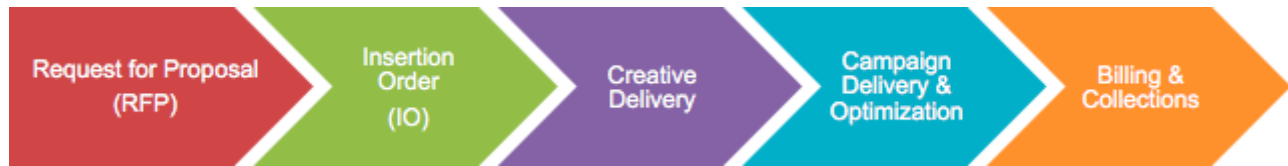
effectiveness in digital media.

- **DMPs (Data Management Platforms):** Technology platform and digital warehouse designed for the storage and processing of 1st and 3rd party data to integrate and implement the data throughout the ad campaign's buying and execution process.
 - **Data Suppliers:** Companies that provide cookie pools, audience profiles, and other technology to target desired audiences (e.g., Quantcast, BlueKai).
 - **Creative Optimization:** Technology that enables marketers/agencies to control and manage creative assets, integrating with the ad server to automatically serve the best-performing creative.
 - **Rich Media:** Ad creative and ad serving providers offering advertisers the ability to run creative that viewers can interact with (e.g., Pointroll, Medialets, Spongecell, Celtra).
 - **Verification/Privacy:** 3rd party companies that provide buyers the capability to monitor campaigns to verify ads appear in the desired environment, protecting them from fraudulent activity and/or wasted dollars (e.g., Moat, DoubleVerify, IntegralAds, comScore).
 - **Tag Management:** Technology that interacts with an ad server to help buyers and sellers consolidate tags to speed up the delivery of the ad.
- **Business Intelligence:** Macro systems that enable each stakeholder in the digital ad ecosystem to more effectively manage their businesses.
 - **Media Attribution:** A level of reporting on media buys where systems help the marketer understand a true, holistic picture of exposure to an entire chain of media that results in the ultimate outcome, a conversion or sale (e.g., ONE Attribution, Visual IQ).
 - **Marketing Reporting & Analytics:** Companies that provide the ability to track ad campaigns and measure success metrics (such as brand lift) and ROI. These companies are typically geared to the needs of the advertiser/agency (e.g., Dynamic Logic, Nielsen, Vizu).
 - **Site Measurement & Analytics:** 3rd party resource used by publishers to determine how to better develop and optimize content to grow and ensure greater engagement with their audiences (e.g., QuantCast, Google Analytics).
 - **Research Providers:** Companies that provide consumer behavior information and industry benchmarks (e.g., Nielsen, comScore, Forrester, eMarketer).

As you review each content area in the study guide, try to understand which side of the ecosystem those tasks fall under and how an ad professional in that role might work with the other parts of the chain.

Regardless of where a digital advertising professional works within the digital advertising ecosystem, it is necessary for him or her to possess a broad base of knowledge about all steps in the workflow. Effective digital ad professionals within this chain typically share a common set of skills, abilities, attitudes, and resources to do their jobs. Be sure to familiarize yourself with this holistic view of the interactive advertising supply chain and make note of the best practices in each step.

Exhibit 5. Interactive Advertising Supply Chain



Source: IAB Interactive Advertising Workflow Best Practices
iab.com/wp-content/uploads/2015/09/Workflow_Best_Practices.pdf

There are many different careers that a digital advertising professional can pursue, but each plays an important part, working closely with advertisers and agencies throughout the life of a digital ad campaign. Digital ad professionals might also assist many internal teams and their functions such as, Ad Sales, Ad Ops, Marketing, and Product teams. Below are a few of the many departments that a candidate might work in. Note: Roles and duties may vary by organization:

- **Ad Sales:** This publisher-side team is responsible for selling ad space to advertisers/agencies looking to buy inventory for their brands. Tasks such as forecasting inventory and generating contracts, this team is involved pre-sale and may stay on as a stakeholder post-sale to ensure campaign success.
- **Marketing:** This group develops the strategy to market the product and can partner closely with sales organizations.
- **Ad Buying:** This advertiser or agency-side team is responsible for purchasing advertising space. An agency buys ads on behalf of an advertiser or brand, whereas an advertiser can work directly with the publisher to purchase digital ad campaigns.
- **Ad Operations (Ad Ops):** This team is heavily involved with the advertiser post-sale, and as the name states, manages all aspects related to the operations of ad campaigns. They ensure a smooth and successful launch of the advertiser's campaign and budget. The roles and tasks that fall under ad operations typically require a technical skillset. Some of those roles include: ad ops manager, campaign manager, ad trafficker, etc.
- **Account Management:** The post-sales team that is the point person to the client (agency/advertiser) that knows the campaign details inside and out. Tasks can include: coordinating meetings, project managing, campaign set-up, and analyzing and optimizing campaign delivery.

3. DESCRIBE DIGITAL ADVERTISING FORMATS

Digital media incorporates many different digital advertising formats. Some of those include:

- Search: SEM, SEO, and contextual search
- Display
- Video
- Social
- Audio
- Overlay

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Candidates should be able to identify and differentiate the different formats as well as explain the measurability of digital advertising on the various media formats: impressions, clicks, and conversions. Detailed measurement guidelines specific to different digital ad formats can be found here: iab.com/guidelines/iab-measurement-guidelines.

Review the following resources for more information on the different types of digital advertising formats. When researching the various formats, be sure to understand the best uses of each:

- Search: Google: How Search Works: google.com/search/howsearchworks/
 - Google Dynamic Search Ads: support.google.com/adwords/answer/2471185?hl=en&ref_topic=3119126
 - Google shopping ads: support.google.com/adwords/answer/2454022?hl=en&ref_topic=6275320
- Display & Mobile Advertising Creative Format Guidelines: <https://www.iab.com/newadportfolio/>
- Video: iab.com/guidelines/digital-video/
- Social: iab.com/news/how-to-make-sense-of-the-evolving-paid-social-media-world/ and Social Media Image Size Guide: sproutsocial.com/insights/social-media-image-sizes-guide and be sure to check out the social media image sizes list in an always-up-to-date Google Doc hyperlink.
- Audio: iab.com/guidelines/digital-audio-ad-serving-template/ IAB's Digital Audio Ad Serving Template (pg. 16-17): iab.com/wp-content/uploads/2015/12/DAAST_1.1-3.pdf

4. DIFFERENTIATE DIGITAL ADVERTISING PLATFORMS

An ad format is the way in which the code is used to display an ad to a consumer, and the advertising platform is the hardware the consumer sees that ad from (e.g., laptop, mobile/tablet, gaming consoles, TV). Candidates should have knowledge of the most commonly used media platforms (digital and traditional) that consumers may be exposed to, how consumers use the different platforms, and be able to describe the relationship between platforms and ad formats. Note: The specs and guidelines (above) associated with a specific digital advertising format will often be tailored for use across the various platforms. Ad professionals should also be able to explain the value proposition and measurability of each platform.

Traditional Media Platforms:

- Print
- TV
- Radio
- Out-of-Home (OOH) aka Billboards

Digital Media Platforms:

- Desktop/Laptop
- Mobile/Tablet
- Connected/Interactive television
- Digital audio device

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- Gaming device
- Digital out-of-home (DOOH) aka digital billboards

When thinking about advertising across the various platforms, keep in mind that ad formats and their content can be similar and different in each environment. For example, video can be found on all the devices listed above, but their form, function, and capabilities will change. Look at some benefits of these platforms and formats can have:

- Desktop/Laptop: Reach, creative, immediacy, targeting, trackable, and direct response
- Mobile/Tablet: Location awareness, direct response, more personal, on-the-go users, trackable
- Audio: Location awareness, reach, engagement, targeting, trackable
- Video: Reach, creative, emotional connection, younger demo, trackable
- Connected/Interactive Television:
- Digital Out-of-Home (DOOH)

Reference the following IAB Platform Status Reports for more on the various types of media formats and platforms:

- Digital **Video** Advertising Overview: iab.com/wp-content/uploads/2015/09/dv-report-v3.pdf and IAB's Video Player-Ad Interface (VRAID): iab.com/guidelines/digital-video-player-ad-interface-definition-vpaid-2-0/
- Audio: iab.com/wp-content/uploads/2015/09/IABDigitalAudioPSR11.pdf and the benefits of audio: iab.com/news/digital-audio-should-be-part-of-every-marketers-media-mix/
- **Game** Advertising: iab.com/wp-content/uploads/2015/03/IAB-Games-PSR-Update_0913.pdf
- Interactive Television Advertising Overview: iab.com/wp-content/uploads/2015/09/iTVCommitteeWhitePaperv7.pdf
- Mobile phone: iab.com/guidelines/mobile-phone-creative-guidelines and IAB's Mobile Rich Media Ad Interface (MRAID): iab.com/guidelines/mobile-rich-media-ad-interface-definitions-mraid/
- Desktop-based viewability measurement requirements: iab.com/wp-content/uploads/2015/06/MRC-Viewable-Ad-Impression-Measurement-Guideline.pdf

5. DEFINE KEY DIGITAL ADVERTISING TOOLS AND TECHNOLOGIES

In this section, digital ad professionals will need to describe digital advertising tools and technologies for booking, trafficking, and campaign implementation. Candidates should also be familiar with their definitions and purpose of those tools. Review the following examples:

Booking Tools:

- Proposal Management Systems: A software used to write and track proposals
- CRMs (Customer Relationship Management Systems): Platforms to manage and analyze customers throughout the life of their campaigns
- DSPs (Demand-Side Platforms): Technology used for programmatic media buying

Trafficking Tools:

- Buy-Side Ad Servers: Agency-side tool used to house and track the advertiser's ads

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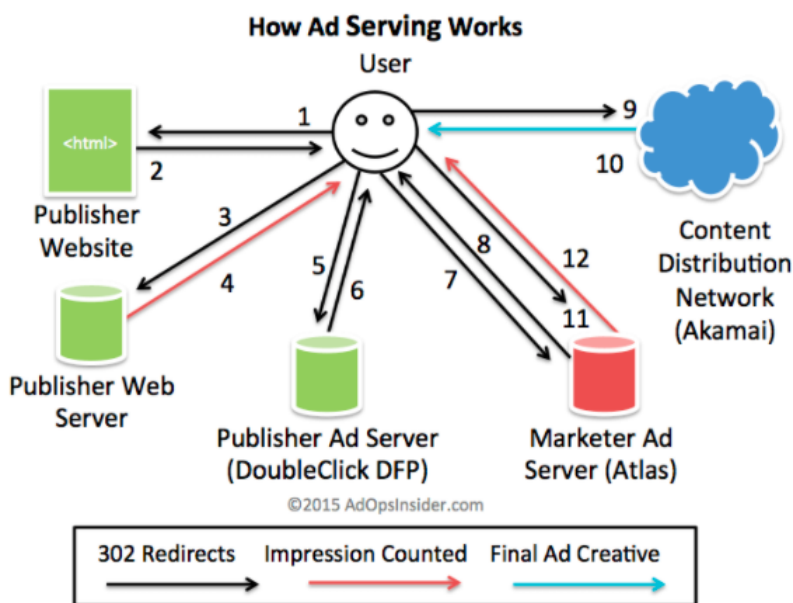
- Sell-Side Ad Servers: Publisher-side tool used by inventory vendors to deliver, track, and optimize digital ad campaigns
- Audience Segmentation: Used for targeting and forecasting in the pre-sale stage of the campaign

Implementation Tools:

- Verification Systems: Ensures that ads run in a safe and desired environment
- Site Analytics: Tool used for audience measurement
- Creative Technology: Rich media vendors
- Measurement Tools: Advanced reporting tools for campaign performance

Candidates also need to understand the digital media ad serving process as it goes from sell-side to buy-side. Visit the AdOpsInsider link below, for a deeper explanation of that serving process illustrated below.

Exhibit 6. Ad Serving Process



Source: AdOpsInsider

adopsinsider.com/ad-serving/how-does-ad-serving-work/

6. CALCULATE MEDIA MATHEMATICS

In addition to managing daily tasks, a digital media professional should know how to use both a calculator and spreadsheet software to perform media mathematics. Handheld calculators will not be permitted into the computer-based testing labs where you will take your certification exam, however, an electronic calculator will be provided on the computer you will use there.

Successful digital ad professionals should have knowledge of media mathematics and must be able to calculate the pricing and performance of digital advertising campaigns. Knowledge of media mathematics is useful for a

digital ad professional when checking campaign reporting, thus requires the know-how for spreadsheet software (i.e., Excel, Google Sheets). This knowledge is essential in setting up campaigns in an ad server, reviewing insertion orders, and solving any pricing discrepancies that can occur. Review the following article for more on calculating media math: en.titaninteractif.com/2014/02/17/calculating-media-math.

Exhibit 7. Media Math Pricing and Performance Formulas

<p>CPM (Cost-per-Thousand) = $(\text{Cost} \div \text{Imps}) \times 1000$ $\text{Cost} = \text{CPM} \times (\text{Imps} \div 1000)$ $\text{Imps} = (\text{Cost} \div \text{CPM}) \times 1000$</p> <p>eCPM = $(\text{Total Cost} \div \text{Served Imps}) \times 1000$</p> <p>CPC (Cost-per-Click) = $\text{Cost} \div \text{Clicks}$ $\text{Cost} = \text{Clicks} \times \text{CPC}$ $\text{Imps} = \text{Cost} \div \text{CPC}$</p> <p>CTR (Click-Through Rate) % = $(\text{Clicks} \div \text{Imps}) \times 100$ $\text{Clicks} = \text{Imps} \times (\text{CTR} \div 100)$ $\text{Imps} = \text{Clicks} \div (\text{CTR} \div 100)$</p>	<p>CPA (Cost-per-Action) = $\text{Cost} \div \text{Actions}$ $\text{Cost} = \text{Actions} \times \text{CPA}$ $\text{Actions} = \text{Cost} \div \text{CPA}$</p> <p>VIDEO ONLY: CPCV (Cost-per-Completed View) = $\text{Cost} \div \text{Completed Views}$</p> <p>MOBILE APP ONLY: CPI (Cost-per-Install) = $\text{Cost} \div \text{Number of Installs}$</p>
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<p>Cost = Total cost for the campaign Impressions (Imps) = Total number of impressions Revenue (Rev) = Total revenue earned from the campaign Leads/Actions/Sales/Conversions = Total number of each</p>

An example for calculating CPM: an advertiser would like to run a campaign for \$14,000 and serve 5,000,000 impressions. The CPM = \$2.80.

7. ADHERE TO COMPLIANCE STANDARDS/POLICIES

Digital ad professionals must understand and adhere to industry privacy standards and policies as well as regulatory (e.g., Pharma, alcohol, children) and non-regulatory (self-regulatory) (e.g., IAB, MRC (Media Rating Council)) compliance standards and policies within the industry.

Self-regulation is set by organizations within an industry mandated to do so. The digital advertising industry is self-regulated with governing guidelines set by companies like the IAB and followed by the businesses within the industry.

Regulations are set by the government and failure to follow these laws can result in federal punishment.

*Note: US Federal Regulation questions will **not** be on the DMMFC exam but it is important to be aware of these laws. Read more about them at the Federal Trade Commission site: ftc.gov.*

Digital Media Advertising Privacy Standards include the following policies:

- Consumers should be provided meaningful notice about the information collected and used for interactive advertising
- Consumers should be informed of their choices regarding interactive advertising and empowered to

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exercise those choices

- Businesses should implement appropriate information security practices and procedures
- Businesses should be responsive and accountable to consumers
- Companies should educate consumers about the benefits of interactive advertising

Review the following resources from the IAB site to help prepare for this section of the exam:

- Self-Regulatory Program for Online Behavioral Advertising Factsheet: iab.com/wp-content/uploads/2015/06/OBA_OneSheet_Final.pdf.
- All IAB members agree to adhere to industry-accepted, non-regulatory Compliance Programs that can be found on the IAB site: iab.com/guidelines/iab-tech-lab-launches-technology-compliance-program.
- Another cross-industry self-regulatory program for online behavioral advertising is also a reference by the Digital Advertising Alliance (DAA): aboutads.info.

EXAM DETAILS – CONENT AREA A:

Knowledge, skills, and capabilities related to “Comprehending Digital Advertising Ecosystem” will comprise of 22 questions (27.5%) of the 100 graded items on the IAB Digital Marketing & Media Foundations Certification Exam.

B. GATHER PRE-CAMPAIGN INFORMATION

Once ad inventory availability is confirmed, the trafficking process begins. This is the process of technically setting up the ad campaign on one or more ad serving systems for targeting, delivering, and tracking campaign details according to the IO specifications. This section will walk you through the preparation and collection of campaign assets for launching digital advertising campaigns.

1. DETERMINE A CAMPAIGN TIMELINE

The first step towards executing a successful campaign involves campaign review and planning. For example, if the advertiser’s goal is to drive online sales, the digital advertising professional may select a direct-response performance metric, driven by sales revenue or order volume. If they wish to pursue a brand-focused campaign, performance metrics could be measured by a brand effectiveness study.

First, the agency will need to review campaign expectations in detail and identify all parties involved, including external vendors. Next, campaign goals will need to be defined based on the advertiser’s business model, needs, and objectives to ensure the KPIs have been selected to complement the stated campaign goals along the marketing funnel.

There are many factors to consider when determining a timeline. From brand expectations, to stakeholder and technical implementation timelines, all aspects should be considered with the internal production timeline. For example, if the campaign requires 3rd party vendors, and customization, the ad professional will need to account for extra time to meet those additional needs. Regardless of the timeline, all aspects must be communicated

clearly, setting the proper expectations with all internal and external stakeholders.

There are many steps involved in campaign execution and understanding those steps will help with this process. Reference IAB's Interactive Advertising Workflow Best Practices (page 5-13) for key steps in the process: iab.com/wp-content/uploads/2015/09/Workflow_Best_Practices.pdf.

2. FORECAST INVENTORY

Ad inventory forecasting refers to the process of being able to estimate available ad views for a future period, across different targeting criteria. Publishers that provide reliable forecasts, gain trust with their advertiser/agency customers and avoid potential problems (e.g., over-delivery, under-delivery). Knowledge of internal business rules, toolsets, and processes is important to the success of this step.

Ad inventory forecasting tools out there that use algorithms that consider criteria such as:

- Inventory volume/traffic trends
- Seasonal trends
- Historical campaign performance (if available)
- Competitive separation
 - Competitive separation refers to the condition on some ad campaigns that ads do not appear within certain proximity of other ads for competing products or advertisers, or other ads from which separation is desired by the advertiser. These separation parameters should be clearly specified as part of the terms of the campaign.
- Campaign restrictions
- Desired targeting criteria

Availability reporting will need to be pulled and compared to the RFP (Request for Proposal). Targeting capabilities can include basic targeting and audience targeting.

- Targeting capabilities
 - Day-Parting: Time of day/view hour
 - Geo-Targeting: User's geographic location
 - Contextual: Based on site criteria
 - Device: User's device type
- Audience Targeting
 - Demographic: User's age, gender, income, or demographic characteristics
 - Behavioral: User's web browsing history
 - Look-a-Like Modeling: Technique seeking to increase campaign reach by targeting audiences similar to a smaller audience based on attributes they have in common
 - Retargeting: User's prior exposure to an advertiser's site, product, or ad campaign

If inventory needs cannot be met, the publisher must be provided with alternative solutions. In addition to targeting criteria, knowledge of site architecture, organizational services, and factors that can affect the forecast are necessary for this step.

Ad packages are often comprised of a standard unit or combined with other standard units. Accurate forecasting allows publishers to estimate how much unsold inventory might flow to a 3rd party partner in each month.

Managing inventory is important for all parties along the digital advertising value chain or ecosystem to take part in. Digital advertising inventory is abundant, and both sellers and buyers need methods for ensuring that their potential ad impressions are forecasted, selected, and valued appropriately and accurately.

- DSPs use inventory management systems to identify ways of packaging and pricing ads to maximize revenue from their inventory portfolio
- SSPs use these tools to identify targeted inventory at the least expensive price

3. GENERATE AN IO (AGENCY SIDE)

Once a publisher and agency have agreed upon a desired campaign, their digital ad ops department typically manages the operations of its launch. At this point, the agency will need to generate the insertion order (IO) before the campaign can begin.

The IO is the binding agreement of advertising spend between all parties in a digital advertising campaign and will always be accompanied by IAB's industry-standard Terms and Conditions (Ts&Cs), which all parties will be required to sign upon agreement. Find out more about IAB's Standard Terms and Conditions here:

iab.com/guidelines/standard-terms-conditions-internet-advertising-media-buys-one-year-less.

When generating the IO, the details from the media plan will need to be entered into the agency's internal IO building system (can vary by organization), outlining the details of the campaign and both signing parties. The information in these fields typically include:

- Flight dates
- Campaign name or description
- Number of impressions
- Cost type (e.g., CPM, CPA, CPC)
- Cost per unit
- Targeting or creative requirements
- Overall cost
- Information about the two companies

Authorized internal and external signatures are required to move forward. Upon receipt of the countersigned IO, the publisher will officially begin the necessary steps towards campaign execution. Reference IAB's Interactive Advertising Workflow Best Practices (pg 5-13) for key steps in the process: iab.com/wp-content/uploads/2015/09/Workflow_Best_Practices.pdf.



Exhibit 8. Sample Electronic Insertion Order

Source: AADSM Insertion Order
aadsm.org/PDFs/AdvertisingInsertionForm.pdf

Exhibit 9. Sample Excel Insertion Order

Line Item Name	Dimensions	CPM	Impressions / SOV	Total
ATF Leaderboard	728x90	\$10	5,000,000	\$50,000.00
Medium Rectangle	300x250	\$10	10,000,000	\$100,000.00
Total			15,000,000	\$200,000.00

Source: MonetizePros Insertion Order
monetizepros.com/encyclopedia/insertion-order-io

4. VALIDATE IO COMPLETENESS

At this point, the publisher validates the details in the IO and begins thinking about campaign execution. This requires a solid understanding of: the media plan, IO and Terms and Conditions (Ts&Cs), organizational structure (who is authorized to sign the IO), industry terms, and pricing math (i.e., CPM, CPC). Once validation is complete, the publisher signs and sends the IO back to the agency. The campaign is now ready to be kicked

off.

Exhibit 10. Validating Fields in an Insertion Order



Insertion Order

Site: HealthFitness.com
 Run Dates: 10/1/2015 - 12/31/2016
 Terms: Net 30

Client: Ambrosia Consumables
 Primary Contact: R.U.Serious, Health Accts., My Agency
 Email: r.serious@myagency.com

Campaign Details

Line Item Name	Dimensions	CPM	Impressions / SOV	Total
ATF Leaderboard	728x90	\$10	5,000,000	\$50,000.00
Medium Rectangle	300x250	\$15	10,000,000	\$150,000.00
Total			15,000,000	\$200,000.00

Agreed by:

Authorized Signature
 Signature: HealthFitness.com

July 1, 2018
 Date

Signature: Advertiser / Agency

Date

5. CONDUCT KICK-OFF CALL

Kick-off calls ensure that all parties are on the same page with campaign goals and expectations. The audience for each call will vary by organization, but should include all internal and external stakeholders involved in the campaign details. The publisher-side ad ops team typically hosts or attends the call, as technical details will be discussed.

Steps to Prepare for a Kick-Off Call:

- Create an agenda for the call
 - Determine an appropriate amount of time to cover everything. Organizations typically have an idea how long kick-off calls can take depending on the type of campaign. For example, campaigns with lots of different targeting requirements or unique customizations may require more time.
- Determine all attendees/participating parties
 - This includes parties involved in the campaign from both sides (i.e., sales rep, campaign manager, marketing, analytics) and can vary by organization. Never meet with a team alone. At the very least, invite the sales rep or your manager to the call.
- Coordinate the kick-off call by finding a time and date that works for all necessary parties and be sure to allow for enough time
 - Include the agenda and IO as best practice and send out any applicable information and/or documentation prior to the call.

During the Kick-Off Call:

- Take notes
- Discuss details including:
 - Asset information (e.g., ad formats, creatives, tags)
 - Timeline expectations
 - Launch dates
 - Campaign goals

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- Campaign and brand guidelines/restrictions
- Site tagging
- Site capabilities and limitations
 - This is a good time to discuss site specifications (and send as a follow-up). Site specs outline what the website can support for how to optimize an advertisement for the website. Sample client spec sheet: web-redesign.com/downloads/06_client-specsheet.pdf.
- Limitations or concerns
- Recommend best practices
- Set reporting and delivery expectations
- Recap key takeaways and action items at the end of the call including follow-ups

After the Kick-Off Call:

- Send a follow-up email with a recap/summary of the call and include:
 - Timelines
 - Expectations
 - Action items
- *Ongoing check-in calls may occur, depending on the organization and details/size of the campaign*

A kick-off checklist can be helpful and common in many organizations. Smaller organizations may not have one available, but ad professionals should consider creating one as a best practice to prepare and cover all necessary information and steps. Review the following article tips to leading conference calls: entrepreneur.com/article/243382.

6. COLLECT POTENTIAL ASSETS

The process of collecting creative assets can fall on various digital advertising professionals, but mostly falls to the trafficker or ad ops professional on the agency-side. These assets are the files that act as the building blocks of a piece of creative (single advertisement). One creative can consist of multiple assets, depending on how it is designed and configured. Review the following resources for more on creatives and an introduction to creatives: <https://wiki.appnexus.com/display/industry/Creatives>.

Once creative assets have been obtained, they will need to be tested according to the QA (quality assurance) process. An industry best practice, QA, is an ongoing process and essential in safeguarding a smooth and successful campaign launch. *Learn more about the importance of QA in section C4 of this guide.*

Using the insertion order requirements, the digital ad professional will need to build creative strategy that considers the number of ads to be created, their formats, sizes, creative assets, file types, inclusion of rich media, and trafficking needs of specific assets and/or tags. It is important that the media buyer and seller are working on the same set of creative specifications.

The creative strategy determines which party (buyer, seller, or 3rd party vendor) will retain trafficking control over the creative assets themselves (which may involve creative delivery and/or creative intake). This strategy

also determines which parties will traffic redirect tags that “call” the creative assets from the appropriate partner’s server, tracking its delivery and measuring performance along the way.

- If the advertiser/agency hosts the tags, they maintain the flexibility to manage the creative assets on their end, provides them with more information about their campaign, thus providing them with added control.
- If the publisher hosts the tags, the advertiser loses the flexibility of managing the creative. If tags have problems (break), the publisher can manage the assets and fix them on their end as they have full control. However, when the agency-side hosts, the publisher might be required to send the tags back to the agency which can lead to campaign down-time.

Read the following introduction to ad tags: digitaladvertising-101.com/blog/digital-101-understanding-ad-tags#.WUg0vhPytTZ and make note of one of the main benefits for advertisers trafficking their own ad tags.

The use of tags affects marketers differently than it affects advertisers and publishers. Read the following articles for more on 3rd party tags:

- 3rd party tag implementation: adgear.atlassian.net/wiki/pages/viewpage.action?pageId=20643870
- Trafficking 3rd Party Creatives by DoubleClick (Google): support.google.com/dfp_premium/answer/1746123?hl=en&visit_id=1-636326526630329398-1852865771&rd=1

Candidates should also have a solid understanding of tracking tags. Tracking tags, often implemented as pixels (transparent “.gifs”), are placed on a site or ad creative to track user events. It is best practice for tracking tags to be in place by the time the campaign is ready to go live such as conversion and retargeting tags, while impression, click, and interaction tracking tags can be implemented during the trafficking process.

It is important that all parties be aware of site specification for executing the campaign. Review the following resource for Google’s Collect site specs article for an example: support.google.com/richmedia/answer/2417553.

7. ALIGN CREATIVE ASSETS WITH MEDIA PLAN

After the creative assets have been collected and tested, it is time to align them with the media plan. Media plans stem from the RFP that’s sent to the publisher to complete. When the publisher completes the proposal, the agency can then create the media plan.

Ad professionals should have knowledge of media plans and how they play into the digital advertising environment. Performance-based media plans will show customer engagement, where fixed media plans show flat rates and impression goals.

This step is often the job of the media planner on the agency-side, but still a good practice for anyone setting up

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the campaign to QA the site specs and assets to the media plan. The line items in the media plan identify customer engagement and whether the advertiser’s goals are being met. Compare the creative assets to ensure that the following details match the media plan details: placement sizing, weighting percentages, sequencing, additional metrics (e.g., audience, spend), A/B testing or creative rotation requirements, and any unique tagging strategies. Finally, make any necessary updates to the media plan as needed.

Read the following article to find out how programmatic has changed media planning and buying for the industry: exchangewire.com/blog/2015/11/12/how-programmatic-has-changed-media-planning/.

EXAM DETAILS – CONENT AREA B:

Knowledge, skills, and capabilities related to “Gather Pre-Campaign Information” will comprise of 16 questions (20.0%) of the 100 graded items on the IAB Digital Marketing & Media Foundations Certification Exam.

C. EXECUTING THE CAMPAIGN

1. CREATE TRAFFIC SHEET (AGENCY SIDE)

The first step in the process to campaign execution is to create a traffic sheet. Traffic sheets are typically campaign-based spreadsheets containing essential creative details organized by individual placement.

Attention-to-detail is key during this step due to the number variables involved. When creating the traffic sheet, the agency-side ad professional determines which placements to include, the ad(s) associated with those placements, creatives and click-through (landing page) URLs, and start and end dates. It is imperative that the trafficker test and confirm functionality of all click-through URLs. The traffic sheet can also include: advertiser and campaign details as well as creative instructions or notes to successfully launch the campaign and should be a direct extension of what has been detailed on the media plan and IO.

Once the trafficker has completed and verified that everything is correct, they typically send the traffic sheet to their internal trafficking team. Review the following traffic sheet example.

Exhibit 11. Sample Traffic Sheet

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- **Site:** The representation in your ad server of a website, part of a website, or group of websites from which an advertiser or agency has purchased ad space.
- **Package:** The grouping of placements that share scheduling and pricing information and are associated with the same site:
 - A package can be used for any group of placements. Reporting will show the sum of impressions served to all placements within the package.
 - A roadblock is typically a group of placements on one webpage. In most cases, a roadblock arrangement is meant to ensure that only one campaign is displayed at any given time on that webpage. The grouping of placements prevents other campaigns from being served.
- **Placement:** The complete description of an area within a website where ads will be served, including pricing information and information on the dimensions of the creative. Ads must be assigned to placements before they can run.
- **Creative:** The media package that is delivered to consumers to convey the advertiser's message at the placement level. Each creative generally consists of at least one asset, such as an image file. These creatives can also contain other information, such as a name for the creative. Rich media creative assets can include flash, HTML, and other file types and typically include a backup image file that can be delivered to browsers that are unable to load the rich media content.

Within the ad server, an advertiser can have multiple campaigns, each of which can have multiple sites, which can then have multiple packages and so on.

To book a campaign, the ad professional should have a strong attention-to-detail by ad professionals and knowledge of reading and identifying the structure of an IO, ad servers, and inventory and targeting capabilities.

First, they will need to create the campaign structure and include any/all goals. At this point they will create individual line items, essentially replicating the details in the IO. Pricing or rate information, start and end dates, and any additional requirements (e.g., frequency, weighting) will also be added into the ad server at this time. Targeting can be included at the campaign level but will likely be at the site, package, or placement level.

Once all details have been confirmed and double-checked, the ad professional can book the campaign, or set it "live" for launch. This means that the campaign will start running based on the start date in the ad server. It is common for ad professionals to setup a campaign and leave them inactive until all necessary assets have been loaded.

When the order is opened, the buy-side ad ops professional implements conversion tags on the advertiser's site to measure post-view and post-click conversions that occur because of the campaign. Conversion tracking involves pixel-sized tags that are used to measure desired actions that follow a visitor's arrival on a page because of viewing or clicking on an ad. These actions can include views or clicks to an online purchase page, a registration or sign-up page, or another key page the marketers wish to promote. Conversions are recorded when the user either views or clicks an ad and is redirected to (visit) the advertiser's site where the conversion tag (web beacon) is implemented. A conversion is when a user performs a specific action (defined by the advertiser), because of a piece of advertising they were exposed to. That conversion is tracked by a conversion pixel (web beacon), implemented on the advertiser's site.

A conversion is attributed to the media when the desired action is taken within the specified window of time set by the marketer. For example, if a visitor views the ad, then clicks on it, and is redirected to the advertiser's site and completes a desired behavior (e.g., completing a registration form where a tag has been implemented for tracking), a conversion will be recorded. Depending on the rules, goals, and negotiated terms of a campaign, a conversion may also be recorded when a visitor views an ad, does NOT click on it, but then later visits the advertiser's site to complete a desired behavior. This is called a view-through conversion. The negotiated period through which post-click and view-through behavior is counted as a conversion (i.e., the conversion window), varies dramatically across industry, company, and marketing goals.

3. GENERATE TAGS (AGENCY OR VENDOR SIDE)

Successful tag generation requires a deep understanding of ad servers, tag types/capabilities, site specifications, and industry standards and guidelines. Review the following resources for a high-level overview of ad tags. Understand how to identify tags, their components, and how to break them apart which is useful for troubleshooting tags. Knowledge of tags is necessary for ad professionals and crucial for the success of a campaign.

- AppNexus – Ad Tags: wiki.appnexus.com/display/industry/Ad+Tags
- AdOpsInsider – What are Ad Tags: adopsinsider.com/ad-ops-basics/what-are-ad-tags
- AdOpsWorld – Types of Tags: adopsworld.com/adtraffic.php#tags

Due to the ever-growing complexities and the nature of digital campaigns, most ad ops teams do not build tags and code from scratch. Using a 3rd party tag system or a digital campaign management system allows you to easily build and tailor the tags to your company's needs. Tags can be generated based on the types of reports you think you will be pulling, the complexity of an ad campaign, or choose to associate them with pricing.

Review these instructions for generating tags through a 3rd party tag creator:

support.google.com/dfp_premium/answer/177207?hl=en.

To execute a campaign, you must have access to 3rd party pixels and ensure that click trackers (if applicable) are in place for the data count towards campaign objectives. It is imperative to create tags that best match your campaign initiative and placement. Suppose you have a CPC campaign for your mobile placement, you will want to enlist a click tracker with your creative that is adapted to work with an iPhone. Review the following article for an overview of the various tags: support.google.com/dcm/partner/answer/2826636?hl=en.

Knowledge of 1st and 3rd party data is crucial in generating tags. The tags that are connected to these parties help create the data which will be used for analyzing campaign performance.

- 1st party tags and data is generated by you regardless of the position in the value chain. 1st party tags are ideal for asset control and data management. If you work for an agency, that agency might be considered a "3rd party" from the publisher's perspective.
- 3rd party tags and data typically come from larger companies or data organizations that focus on broader research for advertisers/publishers. In addition, 3rd party tags are often used for demographic, behavioral, and contextual targeting.

Find out more about 1st and 3rd parties tags here: taginspector.com/wp/evolution-of-marketing-tags/.

Read the following article about 3rd party tags from AdGear, an ad server technology and service company. While you may not use AdGear for tag implementation, pay attention to 3rd party tags, their components, and how they are implemented in an ad server: adgear.atlassian.net/wiki/pages/viewpage.action?pageId=20643870.

To generate the tags, the agency/vendor will need to review and verify the traffic sheet's accuracy, implement the serving strategy, upload the creative assets, and assign them to creative placements. The tags will then need to be tested. After passing the QA test, they will need to be sent to the publisher.

Knowledge of web debugging tools can assist with troubleshooting needs by tracing ad requests, viewing the responses returned from those requests, and identifying where gaps and problems emerge. The following are examples of web debugging tools used for performing initial diagnostics:

- Google Chrome DevTools: developer.chrome.com/devtools
- Fiddler: telerik.com/fiddler/web-debugging
- Charles: charlesproxy.com

4. QA TAGS

The quality assurance (QA) process for tags is an ongoing and necessary step, as tags are made up of code which can break. Read this article to learn more about the importance of QA in digital advertising: clickz.com/the-importance-of-qa/60150.

The tags will need to be tested locally to verify creative messaging and click-through URL functionality. In addition to local testing, creating a publisher-side test page is a good practice. Test pages check the functionality of a tag and confirm proper implementation. Many 3rd party vendors can provide test pages while some publishers will use internally-created test pages. The following article by DoubleClick for Publishers (DFP) is a great example of a publisher-side ad server with the capability of creating test pages: support.google.com/dfp_premium/answer/3531775?hl=en.

Typical steps in tag QA include:

- Create the test page
- Implement the tag onto the test page
- Ensure that the creative and message load
- If required, take a screenshot of the creative after it has loaded
- Test functionality by clicking on the creative to confirm that the correct landing page is associated to that creative
- Test the tag multiple times and across different browsers is
- For action-based campaigns, complete a test conversion (some sort of end purchase or sign-up)
- Confirm data collection from the impressions, clicks, and conversion

A QA checklist can help ensure that all steps be followed. Checklists can vary by organization, but review the following example: info.operative.com/hs-fs/hub/257502/file-1522936391-pdf/OPSQA.pdf

Regardless of the exact role or department of a digital ad professional, it is useful to know their internal QA process and find out what QA tools they use. These tools can help pinpoint issues with creatives and tags. Review the following article for a list of common tools ad traffickers might use for QA testing: adtagmacros.com/2014/09/every-ad-trafficker-should-have-tools-for-advertising-qa-testing.html.

5. IMPLEMENT TAGS

After receiving the tags and conducting quality assurance testing, the publisher trafficker will be required to implement the tags into the ad server along with any other creative components.

The following is a list of common steps for implementing tags into any ad server.

- Confirm receipt of tags
- The agency is typically notified that the publisher has received the necessary assets
- Upload tags into the ad server
- Insert macros (e.g., cache-busters, click-tracking)
 - A cache-buster is an important element to consider. It is a unique piece of code that prevents a browser from reusing an ad that has already been seen and cached, (saved to a temporary memory file within the browser). Having a cache-buster in place is very important for all digital advertising campaigns to help with inventory management and minimize discrepancies. Note: Most tags do not automatically include a cache-buster tag by default. Review the following for more on cache-busters: adopsinsider.com/ad-ops-basics/what-is-a-cache-buster-an.
- Implement any additional tracking (e.g., surveys, ad verification)
 - Ad verification is a service focused on determining appropriate execution of internet advertising campaigns. A process which attempts to verify that one or more attributes of a served online ad have been executed in a manner consistent with the terms specified by the advertiser or agency and agreed to as part of the ad campaign terms. To learn more about ad verification, review at the following IAB guidelines: iab.com/guidelines/ad-verification-guidelines/ and click the 'Download Here' button in the Guidelines for the Conduct of Ad Verification section.
- Preview creative to ensure correct message and proper loading
- Set targeting (e.g., creative rotation, weighting)
- Assign tag creative to line items
- Confirm setup for launch
- The ad professional then sets the campaign in-flight, or officially launches the campaign in the ad server
 - Note: The campaign should begin according to the start date for the campaign (following the ad server's campaign hierarchy). For example, if the ad professional is set to go live on June 1st with a placement or line item within the campaign set to start on May 1st, the individual placements will not start running until the campaign start date of June 1st.

These steps require a strong attention-to-detail and typically call for a set of necessary skills and knowledge for an ad professional to successfully implement tags. Some of those can include: knowledge of ad servers, tags and

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different tag types, targeting, and macros. In addition, ad professionals may be required to have basic coding, computing, and web proxy skills.

6. CONFIRM CAMPAIGN LAUNCH

With the trafficking process and pre-launch testing complete, the ad professional is ready to launch and configure assets. The campaign will need to be set in-flight/live in the ad server and then verified. Verification is completed by checking that the ad is running properly and that both ad server systems are calling the view and click portions of the ad for counting and reporting purposes.

Review the following steps to confirming a successful launch:

- Confirm that the campaign status is set live (turned on in the ad server)
- Try loading the campaign across different browsers and take screenshots
 - There are many screenshot programs available to achieve this step
- Make note of any high impact ads (ads that can increase exposure such as: IAB's Rising Stars ad units, overlays/takeovers, and pre-roll video ads)
- Pull reports to confirm delivery and identify potential delivery issues or discrepancies
 - Check that both ad server systems are calling the view and click portions of the ad
 - Note: Ad server data load times can vary, and reporting exports may not be available until the next day
- Finally, notify all parties of a successful campaign launch

EXAM DETAILS – CONENT AREA C:

Knowledge, skills, and capabilities related to “Executing the Campaign” will comprise of 10 questions (12.5%) of the 100 graded items on the IAB Digital Marketing & Media Foundations Certification Exam.

D. MONITORING THE LIVE CAMPAIGN

In this section, candidates will learn the necessary steps for strategic and analytical operations required to ensure the fulfillment and success of digital advertising campaigns.

1. CHECK CAMPAIGN DELIVERY AND PACING

Initial review can typically be seen at a glance in the dashboard and the first report should be pulled after the campaign has launched, or as soon as a sufficient set of data is available. In addition to the initial report, delivery and pacing should be monitored in an ongoing basis. Pacing and delivery is critical to the success of a campaign along with any other KPIs that have been outlined in the contract. Most ad servers track delivery with the percentage of the campaign goal is expected to deliver. If the campaign is short of its goal, the ad server will try to increase pacing, or manual updates can be made. Ongoing campaign reviews can identify problems early. Pacing is the percentage of total impressions that have delivered at this time, compared to the overall impressions contracted for the campaign and according to the IO.

If pacing for over- or under-delivery is the case, pull detailed campaign reporting (e.g., hourly by day, creative by day, domain reporting) to determine the reason and create a discrepancy report. Analyze the report findings and make corrections to improve delivery. At this point delivery and pacing findings should be communicated to campaign stakeholders.

Reporting time frames and schedules can vary by campaign and organization. Some campaign may require frequent (daily/weekly) pulls while others may call for less (monthly/quarterly reports). Recurring reports can be scheduled and delivered to multiple recipients and should be determined by the parties involved. Frequent campaign reviews can identify problems early, troubleshoot live issues, and avoid escalated discrepancies.

There are several types of reports that may need to be pulled for the campaign. They can range from your (1st party) reports to 3rd party tracking reports. This AdOpsInsider provides instructions to pull daily reporting for some common 3rd party ad servers:

adopsinsider.com/ad-ops-basics/adops-guide-pulling-3rd-party-ad-server-reports-with-daily-breakouts.

2. OPTIMIZE WITHIN CONTRACT PARAMETERS

It is common to have several reports scheduled and delivered each day to identify areas of optimization and detect performance problems early before they become escalated discrepancies. When reviewing these reports, it is important to have knowledge of the advertiser's KPIs, campaign goals, contract parameters, and campaign setup. It is good practice to have the IO and campaign notes on-hand while reviewing reporting. Depending on the organization, ad professionals will collaborate with internal stakeholders to review important updates. Prior to involving other teams, it is the ad professional's job to pull the appropriate reports and gather findings which can include areas of optimization and any problematic issues that may occur.

Areas of optimization can include:

- Frequency cap (fcap) changes
 - For example, a campaign with a 1/24 fcap means that it will only serve one ad per 24-hour period per unique user. Increasing that fcap to 2/24 or 3/24 can increase exposure and delivery but should be done within contract parameters. This option may not work if there are several targeting restrictions to the campaign which can reduce the reach of unique users significantly. Running a unique user report would be a good idea in this case which would require knowledge of various reports and critical thinking skills.
- Targeting updates
 - Removing extra targeting filters can increase delivery.
 - Inventory availability can change unexpectedly and changes to campaign targeting can resolve this issue.
 - Excluding poor performing sites can increase campaign performance.
 - Advertisers can also target a campaign using specific words through platforms such as AdWords and AdSense.
- Campaign priority
 - Ensuring that one campaign run before another can sometimes accommodate the advertiser's

campaign strategy.

- Shifting impressions within a package
 - Suppose a package has 3 placements capped at 350,000 impressions and 2 of those 3 placements are pacing slow. It might be a good idea to give priority or shift impressions to the placement that is performing better.

Once new optimization opportunities are approved by the agency/advertiser, the ad professional can begin optimizing the campaign manually or with the help of a 3rd party optimization technology.

3. PROPOSE OPTIMIZATION CHANGES

There are many decisions to make in determining the best path for the advertiser. Optimizations should always be done in concert with the campaign stakeholders.

Areas of Optimization and Recommendations to Look For:

- Campaign elements that can be turned off
- Shifting budget to better performing inventory
- Recommend
 - New sites (off the white list)
 - Targeting changes
 - Flight date changes (i.e., extending the campaign flight date)

With any type of optimization, it is important that all involved parties sign-off on the changes before executing any campaign modifications. In most instances, if each side is open and communicative, this process will go smoothly as both sides as the publisher and advertiser want the campaign to succeed.

4. EXECUTE CAMPAIGN MODIFICATIONS

In addition to optimization changes, executing campaign modifications can occur such as:

- Internal stakeholders can make requests (e.g., internal site issues, competitive separation, etc.)
- Advertisers and agencies might request campaign modifications that can impact pacing (i.e., additional targeting restrictions)

It is likely that the ad professional to pull additional audience and inventory data to confirm whether the campaign can meet the new requirements. Familiarity of organizational processes are important to the success of the campaign. Whether the request is internal or external, all changes need to be communicated and confirmed with key stakeholders.

5. PERFORM BILLING AND RECONCILIATION ACTIVITIES

Performing billing and reconciliation activities is an important step and involves many departments. The delivery and pacing reports reviewed before, can assist with this step. While exact billing and reconciliation questions are not directly assessed on the IAB exam, discrepancies and make-goods play a part in this process and all details

should be communicated to billing. For more information on make-goods: hashtag-labs.com/make-good-campaign.

Activities can include:

1. Pull final delivery reports as they will be used to create the invoice for payment
 - a. If under-delivery is not caught during the live campaign, determine the need for a make-good and its scale
2. Confirm that rates are correct
3. Compare 1st and 3rd party delivery report (i.e., discrepancy report)
 - a. If discrepancy occurs, be sure to investigate and pull any additional reports as needed
4. Compare delivery against invoice
5. Compare the invoice to the IO
 - a. Billing terms should be referenced from the Ts&Cs during this step

Note: All findings should be communicated with accounting and any campaign stakeholders.

EXAM DETAILS – CONENT AREA D:

Knowledge, skills, and capabilities related to “Monitoring the Live Campaign” will comprise of 11 questions (13.8%) of the 100 graded items on the IAB Digital Marketing & Media Foundations Certification Exam.

E. IDENTIFYING TROUBLESHOOTING

In this section, candidates will learn how to be proactive and conduct investigative testing to avoid problems and maintain success in digital advertising campaigns.

Troubleshooting is to solve a problem by conducting a series of tests with the purpose of identifying the problem and testing various fixes. Conducting ongoing quality assurance and optimization reviews throughout the life of a campaign can help stay ahead of potential issues and ensure optimal performance. Unexpected campaign issues can occur, and it is the job of the ad operations team to manage them. Regardless of the outcome of the investigation, it is important to communicate significant campaign changes and findings to management and key stakeholders.

1. TROUBLESHOOT CREATIVE

Troubleshooting creative involves the brand message as well as creative guidelines. Knowledge of creative types and their behaviors are necessary for this step.

Review the following creative troubleshooting examples:

- Incorrect creative message
 - For example, an athletic brand is running a campaign for a new pair of shoes but the creative shows soccer equipment. This should be communicated immediately to the party responsible for the correct creative message to avoid missing campaign goals. Sending a screenshot in this case is a good practice to getting the issue resolved.

- Click-through URL doesn't work or goes to the incorrect landing page
 - This can include associating the wrong landing page to the creative or breaking the landing page during setup.

Knowledge of site specification requirements and industry standards can help avoid the following examples:

- Lack of borders can portray the ad as part of the site content and send a misleading message. Ad units must be clearly distinguishable from normal webpage content and have clearly defined borders, not be confused with the normal page content.
- Transparent background
 - If a creative has a transparent background as opposed to a solid color, the content may bleed and distort the message. Overlay rich media ads can cause problems if the creative has a transparent background that blends with the part of the site in which it expands to.
- Publishers might require that the advertiser URL be displayed on the actual creative itself
 - If the URL is missing, this can go against the publisher's site requirements so it is in the best interest of the advertiser to get the correct creative over as soon as possible. Knowledge of publisher requirements and site specifications is important in troubleshooting.

2. TROUBLESHOOT TAGS

Troubleshooting tagging also requires ongoing tag QA and optimizations can help avoid escalations. Conduct a repeat of the QA process, investigate any issues, and work to resolve those issues. If the tag was built externally and can't be fixed, it will need to be sent back to be replaced or fixed.

Review the following examples of why one might troubleshoot tags:

- The creative doesn't load in the tag
 - Additional testing will need to be done to understand the reasons. Note: If the tag was built externally and can't be resolved, it will need to be sent back to be replaced or fixed by the advertiser/agency responsible for the tags.
- Incorrect dimensions and file size can cause the tag to not load. Knowledge of site requirements, tag types and their capabilities can help avoid these types of problems.

3. TROUBLESHOOT DELIVERY

Troubleshooting delivery can occur when unanticipated problems arise. Ongoing delivery reviews can avoid missed goals, over-delivery, and make-goods. Troubleshooting delivery can fall into at least two different categories: a campaign that is pacing to deliver but is not fulfilling KPIs or a campaign that may not be delivering at all. The delivery begins with the QA process, investigating any delivery issues, and working to resolve them. From creative and tagging issues, to fraudulent behavior, campaign delivery will most likely be effected.

Examples one might troubleshoot delivery:

- Pacing low or high

- Review the media plan to confirm that the pacing budgets are set correctly in the ad server. If setup correctly, look to other areas that may affect the delivery (e.g., targeting, frequency caps, flight dates). Incorrect setup of the campaign can cause the campaign to end early or the inverse, under-delivery and result in a make-good.
- Although the campaign is running, there is no data in the dashboard
 - This could be a result of broken tracking pixels, so it's important to understand the possible scenarios and come to a resolution as soon as possible.

A large majority of this portion of the DMMFC exam relies on understanding how to calculate under- and over-delivered impressions, reporting surrounding rich media, and analyzing performance of live campaigns. It is recommended to review how pricing calculations for campaigns, and understand how pricing and delivery are intertwined. When a campaign is under-delivering, the budget is not being met. When a campaign is over-delivering, the budget may go over. Review the pricing models again, but this time think about how pricing can be impacted if there is a problem with the campaign. As review, CPA, CPM, and CPC are the three most common pricing models for an advertising campaign. After a campaign has launched, it is critical to know how these pricing models are calculated to ensure accurate billing and invoicing.

4. TROUBLESHOOT DISCREPANCIES

Troubleshooting discrepancies are common to understanding 1st and 3rd party tracking, and methodologies can help with this process. Each party has an independent set of reports that can be used to audit the other, this step involves investigating those discrepancies. If a discrepancy occurs, determine its directionality, origin, and extent, and finally resolve the issue as soon as possible. In addition, it is necessary to have knowledge of the accepted range of discrepancies between ad server reporting. Review the following Google support article for common 3rd party discrepancies: support.google.com/dfp_premium/answer/6160380?hl=en_

Reporting time zones can result in data discrepancies. Suppose your internal (1st party) reporting runs on Pacific Coast time zone, with the reporting day ending at 11:59am PST. And the 3rd party reporting runs on East Coast time, with the day ending at 2:59am PST. That three-hour window can result in a small discrepancy in numbers each day. In addition to time zones and serving methodologies, lack of cache-busters in the 3rd party creatives and creative load times are some of the common reasons discrepancies can occur. Knowledge of industry thresholds is crucial for this step.

Review the following AdOpsInsider article for initial steps for resolving 3rd party discrepancies: adopsinsider.com/online-ad-measurement-tracking/resolving-3rd-party-discrepancies/.

5. TROUBLESHOOT FRAUDULENT AND/OR MALICIOUS BEHAVIOR

Troubleshooting fraudulent behavior can occur during a campaign. It's important to understand and determine what caused the behavior. Recommendations, make-goods, and updates to the black list may be necessary at this stage.

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Some common reasons for fraudulent and/or malicious behavior can include:

- Bots (Robots): Automated scripts used to simulate human activity. Use of ad verification services can ensure that campaign traffic is being delivered to humans.
- Ad stacking: A fraud technique where multiple ads are layered on top of one another in a single placement.
- Pixel stuffing: A technique by which ads are surreptitiously inserted into webpages without getting the proper permission of site owners or paying for those extra ads.

In any case, providing screenshots is a good practice if escalations occur.

6. TROUBLESHOOT TARGETING

Troubleshooting targeting requires ongoing campaign reviews to help catch problems before they escalate. Troubleshooting targeting begins with the QA process, requires the investigation of any delivery issues, and working to resolve them.

As mentioned in the troubleshoot delivery section above, targeting can result in missed delivery goals or over-delivery. The following are some examples one might investigate:

- Incorrect geo-targets
 - Suppose a concert venue is running a campaign for a show at the Greek Theater in Los Angeles, but the geo-targeting is set to every state as opposed to the contracted target of California. The campaign might seem to be pacing according to the impressions, but engagement (click-through and ticket sales) is low with very few clicks and an extremely low number of sales. According to the advertiser's KPIs, the campaign is falling short. Setting the correct targeting location can increase engagement and result in campaign success.
- Demographic targeting
 - A product targeted to people 21 and over would require age restrictions in the campaign of either 18+ or 25+ to avoid escalated issues.
- Too much targeting or too many restrictions
 - Suppose a campaign has the following filters: males 18-24, across twenty zip codes, and targeted to 4 lifestyle segments might have an audience pool of 15,000 users. A small segment like this can result in missed goals, and identifying these issues early on can avoid make-goods.

EXAM DETAILS – CONENT AREA E:

Knowledge, skills, and capabilities related to "Identifying Troubleshooting" will comprise of 12 questions (15.0%) of the 100 graded items on the IAB Digital Marketing & Media Certification Exam.

F. CAMPAIGN REPORTING AND ANALYSIS

In this section, candidates will learn about common reporting uses as well as the conclusion of digital ad campaigns with supportive data and presentations.

1. GENERATE AND SCHEDULE REPORTS

Performance reports are helpful communication tools during and after a digital advertising campaign. The type, cadence, format, and schedule of reports will vary by campaign. The purpose of the report can also vary by the stage of the campaign. Forecasting inventory done before a contractual agreement between both parties, help both the publisher and agency determine if their advertising proposal needs can be met. A delivery report pulled immediately after the campaign has launched, can ensure that everything is working properly and tracking correctly. After the initial report, other reasons for reports may include, monitoring campaign performance, find areas to optimize, and identifying problems (e.g., under-delivery, fraudulent activity, discrepancies). Scheduling a variety of reports can ensure success of digital ad campaigns. And finally, post-campaign reports provide data for the life of the campaign and will be used for billing and reconciliation activities.

Once you determine the purpose of your report, you can identify which details to include:

- Report type (e.g., overall summary, daily breakdown, granular by placement)
- Frequency (e.g., one-time, daily, weekly, monthly)
 - Metrics to include: (e.g., date, campaign name, ad type, placement size)
- Format:
 - Does the reporting tool allow for customizations?
 - Will additional formatting need to be done post-export (i.e., Excel)?

The process for pulling reports will vary by ad server. Publisher ad servers typically enable their teams to centrally run on-demand reports, capturing overall site performance across several different advertisers. Likewise, agency-side ad servers allow their teams to centrally generate on-demand reports for their entire campaign, without having to aggregate separate reports among all their publisher partners.

Any necessary reporting should be provided to key stakeholders to ensure all parties stay up-to-date on campaign delivery. Ongoing campaign reviews can help avoid surprises at the end of the campaign.

In addition to monitoring delivery, troubleshooting, and billing, reports can have other benefits for different teams. Reasons for different types of reports can include:

- Historical trends: Brands may want to understand their year over year growth/loss.
- Brand lift: Sellers can provide reporting that show increased engagement with the advertiser's brand as a result of their campaign.
- Upsell: Campaign managers and sellers may utilize positive results to upsell (e.g., increase in budget, additional campaigns, more ad types, more products).
- Justify spend: Media buyers might need to provide reporting to their managers to justify a bonus.
- Justify promotions: Sellers might provide reporting to their managers to justify a promotion/bonus.

For more best practices regarding campaign reporting and analysis, review the following article: clickz.com/6-best-practices-for-digital-marketing-agency-reporting/44582.

2. PROVIDE BENCHMARKS FOR SUCCESS

If a campaign is focused on brand awareness, and the number of impressions delivered is how the performance is being measured (KPI), then pulling a report to confirm that the campaign delivered in full would be sufficient. However, if the advertiser is focused on a Call-to-Action (CTA) from the user (e.g., how many clicks on a banner led product newsletter sign-ups), then the KPI would be clicks or conversions (number of newsletter sign-ups), rather than meeting impression delivery requirements. It is important to review the IO for campaign goals and KPIs.

Review the following scenarios of testing to achieve the ideal campaign goals:

- Call-to-Action (CTA):
 - Suppose in the following CTA example, the report shows 100,000 served impressions, 26 clicks (low click count), and zero product newsletter signups. Given the low number of clicks, we know that we can improve this campaign's performance. One option would be to increase the campaign to 200,000 impressions in the second week, to increase delivery. If there are only 32 clicks after the second week, we know that doubling the number of impressions delivered did not double the number of clicks. Instead of just throwing more impressions at the campaign to increase clicks in the third week, an alternate solution might include some creative optimizations to entice users to click on the banners more often by asking the agency to provide more dynamic creatives.
- Historical Trends:
 - Suppose a campaign is scheduled to run for the month of December and it is under-delivering at the start of the month. A report for a similar campaign that ran the previous year, delivered an increasing number of impressions as the holiday season approached. Knowing this, it might be a good idea to wait before increasing the delivery right away as the campaign could start to serve more impressions as the month goes on, and ultimately deliver in full. In this case, the best strategy might be to monitor the campaign closely throughout the month or not interfere with the campaign at all.

Whichever optimization method best suits the campaign benchmarks, recommendations should be communicated to all parties involved, before executing any changes. Some changes may not be acceptable to the advertiser, and conversely, advertiser recommendations may not be beneficial to the publisher. The best way to get approval for any campaign changes is to have data and analysis to back up your recommendations. Optimizations may require a bit of trial-and-error, and pulling reports after each campaign change can help in determine if those changes improved campaign performance.

3. CONDUCT POST-CAMPAIGN ANALYSIS

Post-campaign activities begin when campaigns finish. Final delivery reports should be pulled to determine the overall performance of the campaign. The overall summary report should cover the life of the campaign and include data that aligns with the campaign goals. Note: The agency-side post-campaign analysis will require reporting from publishers and vendors. When analyzing the data, be sure to highlight success metrics, identify

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changes made throughout the campaign, and identify the results. For example, a broken tag might show a decrease in sales and other campaign optimizations might emphasize an increase in sales.

In addition to the final report, campaign assets, screenshots, demo links to live creatives, a list of campaign changes, and documentation of the optimization results should be packaged to include in the final analysis. All future recommendations should be provided with the learnings from this campaign and a final presentation might be required.

If the publisher is working with the advertiser directly, the publisher is responsible for collecting data and compiling the report materials to send to the advertiser. Note: Larger advertisers are typically represented by an agency. In that case, it is the agency's responsibility to send all material to the advertiser. Agencies may also work with other vendors to track specific metrics on the campaign (e.g., ad viewability, ad verification). In those cases, the agency will need to confirm all that all 3rd party vendor reporting be packaged with the final reporting from the publisher to send to the advertiser. Complete and detailed reporting results will give the advertiser confidence that their campaign was a success.

Review the "Campaign Delivery & Optimization Stage" (pg 18-22) of IAB's Workflow Best Practices for more information: iab.com/wp-content/uploads/2015/09/Workflow_Best_Practices.pdf.

EXAM DETAILS – CONENT AREA F:

Knowledge, skills, and capabilities related to "Campaign Reporting and Analysis" will comprise of 9 questions (11.3%) of the 100 graded items on the IAB Digital Marketing & Media Foundations Certification Exam.



PART THREE: GLOSSARY

The terminology used in Digital Advertising is unique to the industry and continues to evolve. The following terms and definitions will be useful for studying for the exam and provide you with the foundational knowledge you need to excel in your daily tasks and careers. Visit IAB's published a Glossary of Interactive Terms for more industry terms: wiki.iab.com/index.php/Category:Glossary.

TERMS AND DEFINITIONS

A

ABOVE THE FOLD (ATF):

The part of a website that is in view of a browser without having to scroll down.

AD TAGS (aka TAGS):

A piece of software code inserted in a source code within a page where the advertisement will be displayed.

ADVERTISER:

The company paying for advertising of a product, service, or brand.

AD IMPRESSION:

The count of ads served to users in digital advertising.

AD EXCHANGE:

A sales channel between buyers and publishers/networks, aggregating inventory via a platform that facilitates automated auction-based pricing and real-time bidding.

AD NETWORK:

Provide an outsourced sales capability for publishers and a means to aggregate inventory and audience from numerous sources in a single buying opportunity for media buyers. Includes technologies to enhance buys including unique targeting capabilities, creative generation, and optimization.

AD SERVER:

A web server dedicated to the delivery of advertisements. Ad servers can be employed on the publisher or marketer side. This technology specialization enables the tracking and management of advertising related metrics.

AD VERIFICATION:

A process for buyers to monitor campaigns to verify ads appear in the desired environment, protecting them from fraudulent activity and/or wasted dollars.

AGENCY:

A company that provides advertising and marketing services to brand marketers and offer a range of services from creative to media or a combination.

AGENCY TRADING DESK (ATD):

Centralized management platform, used by agencies, specializing in programmatic audience buying.

ATTRIBUTION:

A level of reporting on media buys where systems help the marketer understand a true, holistic picture of exposure to an entire chain of media that results in the ultimate outcome (e.g., a conversion or sale).

AUCTION PRICE FLOOR:

The minimum bid required to purchase a publisher's ad impression in an ad exchange's auction-based environment.

B

BELOW THE FOLD (BTF):

The lower part of a website or the portion where user the user must scroll down to view.

BOUNCE RATE:

A percentage of users that visit a page of a website and leave without taking any other actions or visiting any other pages within that site.

BRANDS:

Keepers of the value system that inform and enrich the products and services that people buy. They are the initiators and at the core of digital ad campaigns.

C

CACHE-BUSTER:

A unique piece of code that prevents a browser from reusing an ad it has already seen to a temporary memory file.

CAMPAIGN:

A set of ad buys from a specific ad network or publisher.

COMPETITIVE SEPARATION:

A condition set by the advertiser that requires their ads not appear within a specified proximity of other ads for certain products or advertisers.

COOKIE:

A small text file created by a website that gets stored on a user's browser/computer when they visit that site. This cookie identifies the user when they return to the site. The cookie can no longer track the user if they clear their cookies in their browser settings.

CPA (COST-PER-ACTION):

The cost of advertising based on a visitor taking some specifically defined action in response to an ad. $CPA = \text{Cost} \div \text{Actions}$

CPC (COST-PER-CLICK):

The cost of advertising based on the number of clicks received. $CPC = \text{Cost} \div \text{Clicks}$

CPCV (COST-PER-COMPLETED VIEW):

The cost of advertising based on the number of videos that run through to completion. Only applies to video impressions. $CPCV = \text{Cost} \div \text{Completed Views}$

CPI (COST-PER-INSTALL):

The cost of advertising based on the number of mobile application installs. Only applies to mobile app. $CPI = \text{Cost} \div \text{Installs}$

CPL (COST-PER-LEAD):

The cost of advertising based on the number of leads received. $CPL = \text{Cost} \div \text{Leads}$

CPM (COST-PER-THOUSAND):

A media term describing the cost to deliver 1,000 impressions. $CPM = (\text{Cost} \div \text{Imps}) \times 1000$

CREATIVE:

An image file or code, containing the brand's advertising message. The creative can be rendered as a display advertisement in the ad serving process.

CTR (CLICK-THROUGH RATE):

The percentage of ad impressions that were clicked on as compared to the entire number of impressions. $CTR\% = (\text{Clicks} \div \text{Imps}) \times 100$

D

DAISY CHAIN (AD CHAIN):

A publisher's serving prioritization of the ad network's ad tags (usually by CPM rate, highest to lowest) where the ad network has the option of serving an ad or 'defaulting' to the next partner in line. This is an older method that is growing obsolete due to the evolution of RTB.

DISCREPANCY:

The difference in reported key metrics (i.e., impressions, clicks, conversions) between the contracted parties' ad servers (e.g., agency and publisher).

DMA (DESIGNATED MARKET AREA):

As defined by Nielsen (Nielsen.com), "DMA regions are the geographic areas in the United States in which local television viewing is measure by The Nielsen Company. The DMA data are essential for any marketer, researcher, or organization seeking to utilize standardized geographic areas within their businesses."

DMP (DATA MANAGEMENT PLATFORM):

Technology platform and digital warehouse designed for the storage and processing of first and 3rd party data to integrate and implement the data throughout the ad campaign buying and execution process.

DSP (DEMAND-SIDE PLATFORM):

Tech interface that provides centralized and aggregated programmatic media buying from multiple sources including publishers, ad exchanges, and ad networks.

E

ECPM (EFFECTIVE COST-PER-THOUSAND):

Also known as effective CPM, shows the cost of ad inventory based on the amount of impressions that were served.

F

FIXED CPM:

A CPM rate that remains constant and is guaranteed for every 1,000 served impressions.

FRAUD:

An intentionally deceptive practice designed to manipulate legitimate ad serving/measurement processes or creating fictitious activity that leads to inflated counts.

FREQUENCY CAP/CAPPING (FCAP):

An established limit to the number of times an ad campaign, tag, or ad size can be shown to an individual user within a specific period.

G

GEO-TARGETING:

A method of targeting with the ability to show specific campaigns/creatives to users based on their geographic location (i.e., user IP, DMA, zip code).

I

IAB (THE INTERACTIVE ADVERTISING BUREAU):

Made up of over 650 leading media and technology companies that are responsible for selling, delivering, and optimizing digital advertising or marketing campaigns. Accounts for 86% of online advertising in the United States. Working with its member companies, IAB develops technical

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standards and best practices and fields critical research on interactive advertising, while also educating brands, agencies, and the wider business community on the importance of digital marketing.

IFRAME:

An HTML document embedded within another HTML document that allows content from another source to appear on a web page.

IN-HOUSE:

Employed by the brand, but similar functions as an agency.

INSERTION ORDER (IO):

Purchase order between a seller (i.e. publisher) of interactive advertising and a buyer (i.e., agency).

K

KPIS (Key Performance Indicators):

Also known as Key Success Indicators (KSI), organizational goals that help define and measure progress.

L

LINE ITEM:

A contractual unit of advertising between a buyer and seller specifying the details of a sale (e.g., site, size, cost, dates, etc.). A line item can refer to that unit of advertising within a platform as well as an insertion order.

M

MAKE-GOOD:

A negotiated settlement (usually in the form of ad impressions or payment) to make up for the inability to meet delivery terms according to the insertion order.

MEDIA COMPANY:

An organization that derives revenue from publishing content via one or more means of distribution, (e.g., print publishing, television, radio, the internet).

MEDIA PLAN:

Document between an advertiser and agency that includes the details and requirements for the advertiser's campaign they are looking to execute.

N

NATIVE ADS:

Advertising that aims to blend into the user's experience with the website mimicking the site's content ad format.

P

PAGEVIEW:

When a user visits a webpage and the page of that site loads.

PASSBACK TAG (DEFAULT TAG):

A tag served when an ad network chooses to pass on the opportunity to capture or serve an ad impression or when there is a lack of assets to serve.

PERFORMANCE METRICS:

The measurement of digital ad campaigns with action-based goals such as click-throughs, leads, sign-ups, downloads, sales, etc.

PORTALS:

Destination sites that provide search, email, and owned or aggregated content.

PRICE FLOOR:

The minimum fixed CPM rate that prevents ad networks from serving ad campaigns that pay below a certain price threshold.

PIXEL (AS A UNIT OF MEASURE):

The smallest unit of measure for graphical elements in digital imagery, used as the standard unit of measure for ad creative (i.e., 300x250 pixels). Pixels may also represent x/y coordinates relevant to a given space, such as the browser window, an application workspace, or the user's computer screen.

PUBLISHERS:

Entity that creates and owns content; could be anything that has ad inventory – includes websites, blogs, and apps.

R

RE-TARGETING PIXEL:

An identifier (cookie) that gets dropped on a user when they are browsing a participating web page to track online behavior and allow for more targeted ads to that user in the future.

REVENUE SHARE MODEL:

A partnership between a buyer and seller where profits from ad serving are split as per the terms of the agreement. These rates are often negotiable depending on the volume a publisher can provide.

RFP (REQUEST FOR PROPOSAL):

A document that a media buyer (i.e., agency) provides to a media vendor (i.e., publisher/ad network/DSP) detailing the buyer's needs regarding a campaign they would like to run. RFPs can include: formats, audience, targeting, pricing, campaign studies, special serving fees, etc.

RICH MEDIA:

Ad creative and ad serving providers offering advertisers the ability to run creative that viewers can interact with.

RISING STARS:

Rising Stars are premium ad units that run from or instead of a standard IAB unit. The specifications of the unit are defined by the IAB to scale out non-standard rich media advertising and normalize the units so they can be sold and served more often. Standard Rising Star units include: billboard, filmstrip, sidekick, slider, portrait, and pushdown.

ROADBLOCK (TAKEOVER):

When an advertising campaign creative is the only brand on a particular page or website, taking over all ad sizes at once.

RUN-OF-SITE (ROS):

The ability to run ads across the entire site without specified pages/locations. This can come at a lower cost to the advertiser/agency.

RTB (REAL-TIME BIDDING):

Indicates a real-time system for either bidding on or buying ad inventory. The initial RTB ecosystems evolved from the efforts of Demand Side Platforms (DSPs) to create a more efficient exchange of inventory. Due to these roots, the RTB ecosystems put significant emphasis on user information (e.g., demographic and/or behavioral data), while discounting the situation information (the publisher and/or context).

S

SHARE OF VOICE (SOV):

Percentage of a publisher's inventory that an ad campaign controls during a campaign.

STANDARD AD UNITS:

A set of ad specifications for standard image or animated in-page ad units that establish a framework for advertising inventory and webpage design (e.g., leaderboard – 728x90).

SSP (SUPPLY-SIDE PLATFORM):

Tech used by publishers to programmatically sell inventory, optimize pricing/yield, and audience for a pool of potential advertisers

T

TERMS & CONDITIONS:

The legal details of the contract accompanying an insertion order. See IAB.com for voluntary guidelines of standard terms & conditions for internet advertising for media buys.

THIRD-PARTY (3RD) AD SERVER:

Independent outsourced companies that specialize in managing, maintaining, serving, tracking, and analyzing the results of online ad campaigns.

TRACKING PIXEL:

Known for its many forms (beacon, web beacon, action tag, redirect, etc.), a tracking pixel is a 1x1 transparent image that provides information about an ad's placement. In many cases, a tracking pixel is used to notify an ad tracking system that either an ad has been served or that a specific webpage has been accessed.

U

UAP (UNIVERSAL AD PACKAGE):

A set of four ad units (728x90, 300x250, 160x600, and 180x150 pixels) offered by UAP-compliant publishers as a 'package' where ads in these four formats are used collectively across the publisher's site, enabling advertisers to reach more of the publisher's audience.

UNIQUE USER:

The first time a user has visited a site. The unique user can be considered unique the next day or next week depending on the audience measurement window.

USER-GENERATED:

Any type of content (text, images, audio, or video) that is created by non-professionals.

V

VIEWABILITY:

A term used to describe whether digital media ever appeared in the space within a webpage that was in-view to the viewer.

IAB's standard viewability thresholds:

- Display = at least 50% of the ad must be in-view for at least 1 second
- Video = at least 50% of the ad must be in-view for at least 2 seconds