

STUDY GUIDE



INTELLIGENT CAMPAIGNS



STANDARDIZED KNOWLEDGE



STUDY GUIDE

DIGITAL AD OPERATIONS



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91% would recommend IAB Digital Media Sales Certification to a colleague in advertising media sales

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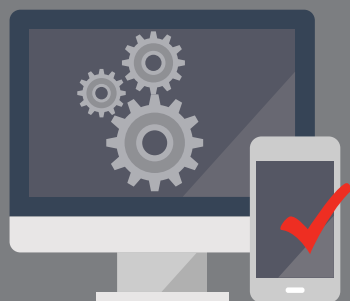
*Source IAB Certification Sales Certification Survey Jan 2016

AGENCIES AND MEDIA BUYERS**

84% prefer to work with a media sales person who understands analytics, campaign management and performance metrics in digital media

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**Source IAB Certification Agency Survey Dec 2014



300+ LEADING DIGITAL COMPANIES HAVE COMMITTED THEIR TEAMS TO THE PROGRAM INCLUDING

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The New York Times

Time Warner Cable Media
That's how.

YAHOO!



Table of Contents

INTRODUCTION	3
ABOUT THE EXAM	4
EXAM FORMAT	4
SCORING	4
EXAM CONTENT	4
EXAM BLUEPRINT	6
SPECIALIZED KNOWLEDGE	8
SPECIALIZED KNOWLEDGE	8
SKILLS, ABILITIES AND ATTRIBUTES	11
TOOLS, EQUIPMENT AND RESOURCES	12
EXECUTING CAMPAIGN LAUNCH	15
ALIGN CAMPAIGN GOALS WITH EXECUTION STRATEGY	15
CHECK INVENTORY AND AVAILABILITY	17
ENSURE TRACKING TAGS ARE IN PLACE	18
ENTER ORDER DETAILS	20
PERFORM ASSET INTAKE	20
REVIEW AND ALIGN ASSETS WITH THE MEDIA PLAN	21
IMPLEMENT CREATIVE ASSETS	22
PERFORM QA AND PRE-LAUNCH TESTING	23
VERIFY SUCCESSFUL LAUNCH	23
SAMPLE QUESTIONS: EXECUTING CAMPAIGN LAUNCH	24
MANAGING A LIVE CAMPAIGN	25
MANAGE CLIENT EXPECTATIONS	25
MONITOR CAMPAIGN PERFORMANCE AND DELIVERY	25
TROUBLESHOOT LIVE ISSUES	25
PROVIDE CAMPAIGN REPORTING	26
INVESTIGATE DISCREPANCY	26
MANAGE CLIENT COMMUNICATIONS	27
RECOMMEND ADJUSTMENTS TO THE CAMPAIGN	27
OPTIMIZE CAMPAIGN	28
MANAGE CAMPAIGN REVISIONS	28
RESPOND TO MALICIOUS ACTIVITY	28
RECONCILE MONTHLY BILLING	29
PERFORM POST-CAMPAIGN REPORTING ACTIVITIES	29
SAMPLE QUESTIONS FOR MANAGING LIVE CAMPAIGNS	31
SUPPORTING AD OPERATIONS INITIATIVES	33
UNDERSTAND INDUSTRY ECOSYSTEM AND TERMINOLOGY	33



IAB DIGITAL AD OPERATIONS CERTIFICATION

ASSIST WITH ONBOARDING NEW PARTNERS	34
ASSIST WITH QA OF NEW AD PRODUCTS	35
DOCUMENT BUGS, WORKAROUNDS, AND ENHANCEMENT REQUIREMENTS	35
PROVIDE INTERNAL AND EXTERNAL OPERATIONAL FEEDBACK	36
CONTRIBUTE TO PRODUCT OR FEATURE STRATEGY	36
CONTRIBUTE TO CASE STUDIES	37
REPORTING ON SUCCESS METRICS	37
SAMPLE QUESTIONS FOR SUPPORTING AD OPERATIONS INITIATIVES	38
MANAGING INCIDENTS	39
PERFORM INITIAL DIAGNOSTICS	39
IDENTIFY INCIDENT SEVERITY	39
COMMUNICATE EXPECTATIONS, UPDATES, AND RESOLUTIONS TO INTERNAL AND EXTERNAL CLIENTS	39
ADVISE ON BUSINESS IMPACT AND INCIDENT RESOLUTIONS	39
CREATE AND SUPPLY POST-MORTEMs	40
SAMPLE QUESTIONS FOR MANAGING INCIDENTS	41
APPENDIX A: MEDIA MATH CHEAT SHEET	42
APPENDIX B: SAMPLE QUESTION ANSWER KEY	43



Introduction

The IAB Digital Ad Operations Certification (DAOC) is the highest industry credential for digital ad operations professionals. Individuals who earn the certification have demonstrated their knowledge and competency in the area of digital ad operations, and are dedicated to upholding high standards of ethical and professional practice in the industry. Individuals meeting eligibility requirements must pass a multiple-choice exam in order to qualify for certification and earn the DAOC designation.

The purpose of this study guide is to improve candidates' preparedness for taking the DAOC exam. It contains useful information about exam and question format, requisite specialized knowledge, and specific content areas that will be tested. Spread throughout the guide are 20 sample exam questions (with a detailed answer guide in Appendix B) to acquaint candidates with question style and identify priority topics to review as they prepare for the exam. The study guide also provides links to areas on the web which might provide useful in refreshing candidates' familiarity with specific knowledge, capabilities, and skills that may appear on the exam.

The IAB staff has also developed a candidate handbook in order to describe all aspects of the certification process and assist candidates in preparation for the exam. The handbook contains an overview of exam content, eligibility criteria, information on registering for the exam, guidelines for taking the exam, relevant policies and requirements, and links to the application and other relevant information. The candidate handbook can be downloaded from the IAB Digital Ad Operations page of the certification website, at <http://www.iab.com/iab-ad-ops-certification-overview/>.



About the Exam

Exam Format

The IAB Digital Ad Operations certification (DAOC) exam consists of 100 multiple-choice questions. Eighty questions are scored, and 20 are pre-tested for statistical purposes, but not scored. You are scored only on the 80 exam questions and only correct answers are counted. You will not receive feedback on the pre-tested questions.

You will have two hours to take the exam. This two hours includes five minutes to agree to the nondisclosure agreement for the DAOC examination. Thereafter, you will have 1 hour and 55 minutes to answer all 100 questions. You are permitted to take a restroom break; however your break time counts in the 1 hour and 55 minutes allotted to test.

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.

Scoring

The passing point—or the score you need to achieve in order to pass—was also determined utilizing valid psychometric procedures. The exam was built to be scored 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 operations professional. The IAB follows best practices in all of its test development activities and has a high degree of confidence that only those who meet the competency requirements 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, since the exam was developed for diagnostic, rather than comparative, purposes. 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.

Exam Content

Successful and knowledgeable individuals working in digital ad operations should have a fundamental understanding of these seven areas covered in the exam:



1. **Executing Campaign Launch.** Ensuring a successful launch requires end-to-end operations management that starts well before a campaign goes live. In the planning stages, a digital ad operations professional helps to identify execution strategies to meet client campaign goals, and checks inventory availability against the desired targeting criteria. As the campaign moves toward implementation, the role of the digital ad operations professionals involved in the campaign launch include: ensuring necessary tracking tags are in place, entering order details into the ad serving platform, performing asset intake (either creative files or ad tags), reviewing and aligning assets with the media plan and implementing creative assets such that they will properly deliver on corresponding placements / line items, and performing Ad QA and pre-launch testing. Once tags "go live," the ad ops professional will also take steps to verify a successful launch.
2. **Managing Live Campaigns.** To ensure optimal performance, a digital ad operations professional performs ongoing quality assurance and optimization reviews for each live campaign throughout its life-cycle. Actions include managing client expectations, monitoring campaign performance and delivery, flagging and troubleshooting live issues, and providing campaign reporting. These operations support discrepancy investigations, media plan modification, and campaign wrap-up activities. A digital ad operations professional is also responsible for client communications related to recommending adjustments to the campaign, make campaign optimization changes, managing campaign revisions, responding to malicious (fraudulent) activity, as well as tasks related to reconciling monthly billing and providing post-campaign reporting.
3. **Supporting Ad Operations Initiatives.** A digital ad operations professional is often asked to consider and incorporate emerging technologies, and to do this they must have a strong understanding of the industry ecosystem and terminology. A successful ad operations person must assist in the onboarding of new partners and the QA of new ad products. This includes identifying and documenting product bugs and workarounds, submitting enhancement requests, and providing internal and external operational feedback. She evaluates success metrics, contributes to product or feature strategy, and contributes to case studies when asked.
4. **Managing Incidents.** Despite the best pre-launch planning and troubleshooting, unanticipated campaign delivery and reporting problems do sometimes arise, and it is the digital ad operations professional's job to manage them. After performing initial diagnostics and identifying the severity of an incident, a digital ad operations person will communicate expectations, updates, and resolutions to internal and external clients. She will also advise on business impact and resolutions, and create and supply a post-mortem analysis of the incident to all relevant parties.



Exam Blueprint

The exam blueprint lists the content areas to be tested, as well as their approximate percentage weight of importance on the overall exam.

Digital Ad Operations Certification Exam Blueprint

Duties and Tasks	Weight %
Executing Campaign Launch:	33%
Align Campaign Goals with Execution Strategy	3%
Check Inventory and Availability	3%
Ensure Tracking Tags are in Place	4%
Enter Order Details	4%
Perform Asset Intake	5%
Review and Align Assets with the Media Plan	3%
Implement Creative Assets	5%
Perform QA and Pre-Launch Testing	5%
Verify Successful Launch	3%
Managing Live Campaign:	38%
Manage Client Expectations	3%
Monitor Campaign Performance and Delivery	4%
Troubleshoot Live Issues	6%
Provide Campaign Reporting	3%
Investigate Discrepancy	4%
Manage Client Communications	1%
Recommend Adjustments to the Campaign	3%
Optimize Campaign	4%
Manage Campaign Revisions	4%
Respond to Malicious Activity	1%
Reconcile Monthly Billing	3%
Perform Post-Campaign Reporting Activities	4%
Supporting Ad Operations Initiatives:	19%
Understand Industry Ecosystem and Terminology	5%
Assist with Onboarding New Partners	1%
Assist with QA of New Ad Products	3%
Document Bugs, Workarounds, and Enhancement Requirements	3%
Provide Internal and External Operational Feedback	1%
Contribute to Product or Feature Strategy	3%
Contribute to Case Studies	1%
Reporting on Success Metrics	3%



IAB DIGITAL AD OPERATIONS CERTIFICATION

Managing Incidents:	11%
Perform Initial Diagnostics	4%
Identify Incident Severity	3%
Communicate Expectations, Updates, and Resolutions to Internal and External Clients	1%
Advise on Business Impact and Incident Resolutions	1%
Create and Supply Post-Mortems	3%

In this study guide, a topic overview and sample questions are provided for each area listed above, along with links to relevant IAB and industry resources, whenever possible.



Specialized Knowledge

Specialized Knowledge

The certification exam presumes that candidates can define and understand what is meant by the industry topics and terminology detailed here. To get started reviewing the terms below, check out the information available in the IAB Wiki:

<https://wiki.iab.com/index.php/Category:Glossary>

Specialized Knowledge Required of Digital Ad Operations

Specialized Knowledge	
A/B testing	Ad blocker technology
Ad formats	Ad platforms
Ad request structure	Ad server capabilities
Ad server planning systems	Ad servers
Ad specification exception process	Ad tech stack (e.g., OMS, ad server)
Ad unit sizes and specs	Ad units
Adoption process	Advertiser and agency details
Advertiser's available assets	Advertiser's data strategy
Advertiser's expectations	Advertiser's IT turnaround times
Advertiser's site limitations or restrictions	Agency advertiser's expectations
Agency tags	Asset receipt process
Attribution models	Audience attributes
Audience targeting (demo, geo, etc.)	Basic tag structures (e.g., iFrame, JavaScript, image)
Billing details	Brand benchmarks
Buffering	Bug reporting and tracking systems
Business and client impacts	Business and marketing goals
Business ethics	Business impact analysis
Business KPIs	Business models
Business priorities	Business sensitivity
Cache-buster	Campaign goals (e.g., direct response, branding, reach)
Campaign KPIs	Campaign performance
Campaign placements	Campaign prioritization
Campaign restrictions (e.g., blocked categories)	Campaign timeline
Campaign volume (number of impressions, clicks, etc.)	Certification statuses
Changes in advertiser's marketing strategy	Changes to the inventory
Client preferences (how do clients prefer meetings, who to contact, etc.)	Client relationships
Client SLAs	Client tiers
Client's preferred vendor partnerships	CMS
Common contractual terms	Communication channels
Competitive landscape	Competitive separation



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Specialized Knowledge	
Competitor offerings	Compliance rules
Content monetization strategies (e.g., native)	Contractual obligations
Conversion windows	Cost models
Creative approval process	Creative asset requirements
Creative management within an active campaign	Creative QA process
Creative scheduling	Creative sequencing
Creative specifications	Creative specs
Creative strategy	Current process
Current product	Current sunset strategies
Data integrations points	Data structures
Dayparting	Deal IDs
Debugging processes	Debugging tools
Delivery attribution model	Digital ecosystem
Discrepancy investigation processes	Dispute resolution
Documentation needs	End-point technical stack
Escalation processes	Existing bugs and limitations
Expected outcomes	Experiment process
External client notification process	Feature enhancement process
Feedback loop	Finance approvals
Flighting (campaign start and end dates)	Forecasting methodologies
Forecasting systems	Frequency cap goals
General inventory prioritization	Growth opportunities
Historical performance for clients	How media is bought and sold
How the ad call is made	How to debug page source
How to obtain screenshots	How to read an IO
How to review ad request	How to use bulk upload tools
How to use developer tools (e.g., Charles, Firebug)	How to use the internal and external knowledge base
HTML (basic)	HTTP (e.g., how to request response cookies)
Impact assessment protocols	Industry trends
Initial campaign setup	Integration limitations
Naming conventions	New product development process
Non-guaranteed remnant strategies	Numbers of placements and ad units
OBA	Operational deployment processes
Operational impacts	Operations surrounding product
Optimization techniques	Optimization technologies
Order management systems	Organizational impacts
Overall business strategies	Overarching client goals
Pacing	Packaging
Page views and impressions	Partner expectations
Partnership status	Placements
Platform (mobile, online, etc.)	Points of contact



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Post-mortem process	Pricing models
Specialized Knowledge	
Private marketplaces	Product availability
Product backlogs	Product capabilities
Product catalog	Product delivery timelines
Product dependencies	Product offerings (e.g., what value is the product)
Product or technology expected behaviors or	Product roadmaps
Product timelines	Profit and loss goals and metrics
Programmatic concepts and players	Programmatic troubleshooting
Programmatic vendor management	Project lifecycle
Project management processes	Project timelines
Publisher or vendor certification statuses	QA processes
Rate cards	Real time bidding (RTB)
Relationship between ad formats and device	Reporting data analysis
Reporting expectations	Reporting metrics
Reporting refresh cycles	Reporting requirements and cadence
Reporting systems	Reporting time zone
Reservation calendar	Reservation management practices or rules
Reserved inventory versus booked inventory	Resource allocation
Retargeting goals	Risk analysis
Roadblocks	Rollback process
Rotation percentages or weights	Sales pipeline
Sales team assignments	Scalability
Script interpretation (e.g., css, javascript, html)	Seasonality
Site structure and inventory	Site tagging structures
Site tags	Site updates
SLAs	SOPs
Special client relationships (e.g., preferred rates, discounts)	Sponsorship areas
Sponsorships	Stakeholders or key contributors
Success indicators	Supportability
System up and down times	Tag management systems (e.g., Bright Tag, Google Tag)
Tag structure management (e.g., serve macros)	Tagging capabilities
Tagging formats	Tags and the platforms in which they are serving
Targeted audience for training	Targeting capabilities (e.g., audience, inventory)
Targeting options	Technical capabilities
Technical integrations	Technical jargon
Technical stack	Testing processes
The platforms on which the technology will be served	The testing environment
The user experience	Third party ad servers
Third party tag functionality	Ticketing systems
Tracking capabilities across devices	Tracking expectations
Tracking formats (e.g., image pixel, JavaScript pixel)	Traffic fluctuations (e.g., world events, sporting events,



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Trafficking process	Training needs
Triage process	Troubleshooting processes
Specialized Knowledge	
Turnaround times	Types of programmatic campaigns (e.g., direct, remnant)
Types of research vendors	Update schedules or creative schedules
User best practices as they relate to operating new technology	User experience best practices
Variances in reporting capabilities	Vendor capabilities (creative or delivery experience)
Vendor expectations	Vendor ramp-up times
Vendor relationships	Vendor requirements
Verification incident reporting (e.g., double verify)	Web debugging tools and techniques
Web technologies (e.g., html, javascript, iframe)	Yield management techniques

Skills, Abilities and Attributes

The DAOC exam has been written for individuals who possess the skills, abilities and attributes listed below.

Skills, Abilities and Attributes Required of Digital Ad Operations

Skills, Abilities, and Attributes	
Ability to advocate for operations	Ability to anticipate problems and issues
Ability to communicate clearly	Ability to communicate in a timely manner
Ability to communicate technical information to non-technical individuals	Ability to deliver difficult messages
Ability to evaluate assets	Ability to make quick assessments
Ability to manage up and/or down	Ability to multitask
Ability to perform root-cause analysis	Ability to resolve conflicts
Ability to work in a team	Ability to work independently
Ability to work under pressure	Account reconciliation skills
Accountability	Accurate
Adaptable	Analytical
Articulate	Assertiveness
Basic business acumen	Client-service oriented
Coachable	Collaboration skills
Communication skills	Consultative
Creative design awareness	Creative thinking skills
Critical thinking skills	Customer service focused
Data management skills	Data presentation skills
Decision making skills	Detail-oriented
Discretionary	Documentation skills
Empathetic	Ethical



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Flexible	Forecasting skills
Front-end web skills	Goal-oriented
Independent	Innovative
Skills, Abilities and Attributes	
Inquisitive	Insightful
Integrity	Intuitive
Investigative skills	Leadership skills
Logical	Mathematics skills
Negotiation skills	Objective
Open-minded	Organization skills
Patient	Positive attitude
Prioritization skills	Proactive
Problem solving skills	Process improvement skills
Process-oriented	Project management skills
Punctual	QA skills
Reliable	Research skills
Script- or code-literate	Self-directed
Sense of ownership	Sense of urgency
Solutions-oriented	Tech savvy
Technical writing skills	Time management skills
Transparent	Troubleshooting skills
Visualization skills	Willingness to learn

Tools, Equipment and Resources

Successful DAOC candidates should have a working knowledge of the following resources tools, equipment and resources. Note that the exam is software-agnostic, and you will not be tested on the inner-workings of a particular technology. However, you should be familiar with the general purpose of these resources, and familiarity with how they are used.

Tools, Equipment, and	
Account team	Ad platform access
Ad server	Ad server
Ad server	Ad server
Ad server documentation	Ad server reporting
Advertiser UIs	Advertiser's site
Analytics team	APIs
Auditing tools	Beta test partner
Blacklist and whitelist	Blacklist and whitelist
Bug tracking tool (e.g., Jira)	Bulk upload tools (e.g., Mediaocean)
Business development team	Business development team
Business requirements document	Calculator
Calculator	Calendar



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Calendar	Calendar
Campaign checklist	Campaign QA template
Campaign reporting	Client contacts
Client contacts	Client SLA
Collaboration tools	Computer
Creative configuration templates	Creative optimization tools
Creative testing tools	CRM systems (e.g., salesforce)
Data management tools	Devices (e.g., tablets, phones)
Devices (e.g., tablets, phones)	Diagnostics checklist
Email	Escalation teams
Escalation teams	Escalation teams
Escalation template	External notification system
External support team	Finance team
Forecasting systems	Forecasting systems
FTP access	FTP access
Historical resource and cost reports	Incident report
Internal knowledge base	Inventory management system
Inventory numbers	Inventory reports
Invoicing systems	IO
IT security	Knowledge base platform (e.g., confluence)
Legal team	Log files
Log files	Managerial support
Marketing services team	Marketing team
Media plan	Media plan
Media team	Monitoring systems
Order management system	Page load performance tools
Performance dashboards	Points of contact
Post-mortem template	Presentation software
Presentation software	Process efficiency tools (internal and external)
Product documentation or catalog	Product documentation or catalog
Product roadmaps	Product team
Product team	Project management system
Project plan	Proxy server
Publisher test or demo pages (e.g., screenshot)	QA tools
Rate cards	Remote meeting tools
Reporting dashboards	Reporting dashboards
Reporting UIs	RFP
Sales team	Sales team
Sales team	Screenshot software
Screenshot software	Screenshot tools
SDKs	Site analytics tools
Site monitoring tools	SLAs
SMEs	SOPs
SOPs	SOW
Sponsorship calendar	Sponsorship calendar



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Spreadsheet software	Spreadsheet software
Spreadsheet software	SWOT analysis
Tag management systems (e.g., Bright Tag,	Tag management systems (e.g., Bright Tag, Google Tag
Tag QA tools	Tech stack
Tech team	Tech team
Technical writer	Technology team
Technology team	Terms and conditions
Test devices	Test devices
Test environments	Test environments
Testing environment (e.g., mobile, video,	Third party reconciliation tools (e.g., Adjuster, C360)
Ticketing system (e.g., Jira)	Ticketing systems
Vendor contacts	Vendor contacts
Vendor documentation	Vendor management team
Vendor rate cards	Vendor UIs
Vendor UIs	Verification and research reporting
Verification services (e.g., mediatrust, MOAT,	Verification services (e.g., mediatrust, MOAT, IAS)
Verification services (e.g., mediatrust, MOAT,	Web debugging tools (e.g., Charles, Fiddler, HTTP
Web debugging tools (e.g., Charles, Fiddler, HTTP	Web debugging tools (e.g., Charles, Fiddler, HTTP
Web debugging tools (e.g., Charles, Fiddler, HTTP	Web monitoring tools



Executing Campaign Launch

Align Campaign Goals with Execution Strategy

The first step toward executing a successful campaign launch involves campaign review and planning. The digital ad ops professional will review the RFP, insertion order or media plan provided, and identify the appropriate campaign execution strategy, based on the campaign goals, the specified advertising platforms, formats, and units defined.

The term “digital media” encompasses several digital advertising formats, including:

- Search advertising formats
- Display advertising
- Rich media
- Video
- Social
- Audio

Depending upon the nature, size, and organizational structure within a given company, digital ad operations professionals might be responsible for managing campaigns within just one, a few, or even all of these digital advertising formats simultaneously. A strong awareness of standard ad formats and executional requirements for displaying ads on different platforms and devices can be extremely helpful. The following resources housed within the IAB website can help you understand ad formats and delivery mechanisms that may appear on the exam:

[IAB Display Advertising Guidelines](#)

[IAB Video Advertising Guidelines](#)

[IAB Mobile Advertising Guidelines](#)

The digital ad operations professional should review and comprehend the client’s desired audience targeting criteria, campaign timeline (including flighting dates and dayparting), exclusivity requests, and performance KPIs, in order to identify a feasible execution strategy for fulfilling the client’s requests and delivering the campaign in the ad server.

Publishers and advertisers typically maintain their own ad servers, as depicted in the diagram below. For a detailed, step-by-step explanation of the ad serving process, you can visit this article on AdOpsInsider.com: <http://www.adopsinsider.com/ad-serving/how-does-ad-serving-work/>



<diagram>

Publisher-side ad servers enable sellers to centrally run on-demand reports capturing overall site performance, across several different clients over a period of time. Likewise, marketer-side ad servers allow buyers to centrally generate on-demand reports for their entire campaign, without having to aggregate separate reports among all of their publisher partners. They also allow advertisers to centrally update the creative portfolio for an entire digital campaign without having to negotiate asset switches with individual sites where their ad is running. The agency-side ad server is known as the count-of-record.

The execution strategy will determine which party – the seller, the buyer, or potentially a third-party vendor – will retain trafficking control over the creative assets themselves (which may involve creative delivery and/or creative intake), and 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 (which involves tag delivery and/or tag intake.)

The execution strategy will also define the campaign workflows that both the agency and publisher operations teams will participate in. It is important for all parties to have a shared understanding of their specific responsibilities, deliverables, and expectations for a given campaign. An overview of operational efficiency best practices for campaign workflows for campaigns sold via insertion order can be found on the IAB website at http://www.iab.com/wp-content/uploads/2015/09/Workflow_Best_Practices.pdf

Concepts to Review:

Ad Formats	Ad Serving	Agency / Advertiser Expectations	How Media is Bought and Sold
<ul style="list-style-type: none">• IAB Ad Portfolio• Relationship between ad formats and device capabilities (e.g. Digital platforms/devices (mobile, desktop, etc.)• Common ad formats• High impact sponsorships and rich media ad formats	<ul style="list-style-type: none">• IAB Ad Serving Standards / Guidelines (V-Suite, etc)• Targeting options/ capabilities (e.g. audience, geo, inventory)	<ul style="list-style-type: none">• Audience attributes• Audience targeting (demo, etc.)• Client business and marketing goals• Campaign goals (e.g., direct response, branding, reach)• Campaign KPIs• Campaign timeline• Flighting (campaign start and end dates)	<ul style="list-style-type: none">• Pricing / Cost models• Insertion Orders



Check Inventory and Availability

At this point, all client goals will be entered into an inventory forecasting system – either an ad server or a stand-alone inventory analytics platform – by the supply-side digital ad operations team, in order to check inventory and availability for a specific campaign.

Ad inventory forecasting refers to the process of being able to estimate available ad views for a future period, across different targeting criteria. Reliable ad inventory forecasting enables sellers to offer clients accurate impressions delivery (avoiding overbooking or underselling) and anticipate future remnant inventory.

Ad inventory forecasting tools use algorithms that consider several criteria, including:

- General traffic trends of the site(s)
- Seasonal trends
- Desired targeting criteria
- Historical campaign performance
- The client's need for competitive separation

It is estimated that today, 60 – 70% of all digital advertising in the United States is sold programmatically – that is, by one machine talking to another machine. It is important to understand how the programmatic ecosystem, and be familiar with the pieces of the programmatic ad tech stack (SSPs, DSPs, Exchanges, etc.)

For detailed information on today's programmatic ecosystem, visit

<http://www.iab.com/guidelines/programmatic-rtb/>

As programmatic grows, ad operations teams are being asked to take on more intense yield management responsibilities. Publisher-side ad ops professionals may be asked to implement publisher site tags, and/or need to tackle inventory forecasting and yield management across channels – direct sales and programmatic -- in order to maximize revenue.

IAB's recommendations for implementation site tags can be found here:

<https://www.iab.com/guidelines/iab-site-tagging-best-practices-2/>

If you're working on a supply-side digital ad operations team, you'll want to be able to execute general forecast reporting as well as work with the programmatic team to forecast inventory for audience segments, understanding the relationships between direct sell thru rate, programmatic optimization, off-platform inventory, and revenue. You may also be called upon to provide sales and account management with forecasting for high impact executions and custom content, and you'll need to stay aware of seasonal fluctuations in inventory. Finally,



depending on your organization, you may even need to learn how to manage the inventory reservation process for syndication / distribution partners.

Note: If you're not executing any of these tasks currently, don't worry! This just means you should plan to spend extra time researching the terms and processes listed in this section.

Concepts to review:

Forecasting

- Forecasting systems, methodologies
- Campaign volume (number of impressions, clicks)
- Campaign restrictions (e.g., blocked categories)
- Reservation calendar, reservation management
- Scalability
- Seasonality
- Traffic fluctuations (e.g. world events, sporting events, deaths)
- Frequency cap goals
- Competitive separation
- Sales pipeline

Programmatic

- Deal IDs
- Private Marketplaces
- Programmatic concepts/players
- Programmatic vendor management
- Real time bidding (RTB)
- Types of programmatic transactions
- Ad tech stack

Inventory Management

- Ad Server planning systems
- Campaign prioritization
- Inventory Packaging
- Partner expectations
- Reserved inventory vs. Booked inventory
- Site structure and inventory
- Site tags
- Site updates

Yield Management

- Inventory prioritization
- Non-guaranteed remnant strategies
- Overall business strategies / profit and loss metrics
- Yield management techniques

Ensure Tracking Tags are in Place

The term “tracking tag” is used in digital ad operations to refer to a number of different tracking pixel types, including:

- Conversion tags
- Retargeting tags
- Impression tracking tags



- Click tracking tags
- Tracking tags for capturing specific creative metrics or user interactions (quartiles, completions, rich media interactions, etc.)

Tracking tags are typically implemented as “pixels” - transparent .gifs placed on a site or ad creative to track user events; However, the term “tracking tag” is even sometimes used to refer to survey tags that execute a brand survey via javascript.

All tracking tags should be in place by the time a campaign goes live, but some tag types need to be implemented sooner than others. Conversion tags and retargeting tags should be implemented well in advance of campaign setup; while impression, click and interaction tracking tags, as well as survey tags and other ad verification third party tags are typically implemented during the creative trafficking process. In this section of the study guide, we will focus in particular on conversion tracking tags.

In the event that the campaign is associated to advertiser conversion data, it is important that conversion tracking tags to collect this data are implemented in advance of campaign trafficking.

A conversion occurs when a user exposed to an advertising campaign performs the specific action that the advertiser has defined as the campaign goal, as a result of campaign exposure. Conversions are tracked by conversion pixels, a specific type of web beacon typically implemented on the advertiser site, that is triggered to indicate that a user has successfully completed a specific action such as a purchase or registration. This user action is considered a conversion.

Attribution is the science of connecting an ad event – either a view or a click - to a consumer conversion. The conversion is attributed to specific ads and media placements based on a combination of the ‘look-back’ windows defined, and attribution model in effect.

The IAB has published information regarding digital attribution models – the measurement to the value of each digital marketing contact that contributed to a desired outcome – to allow marketers to more clearly understand what’s working and what’s not.

IAB Attribution Primer:

<http://www.iab.com/wp-content/uploads/2015/04/AttributionPrimer1.pdf>

A Forrester Research report Digital Attribution Comes Of Age, commissioned by the IAB:

<http://www.iab.com/wp-content/uploads/2015/08/DigitalAttributionComesOfAge.pdf>



Concepts to Review:

Tracking Tag Functionality

- Basic tag structures (e.g., iFrame, JavaScript, image)
- HTML (basic)
- HTTP (e.g., how to request response cookies)
- Internet mechanics
- Macro insertion and functionality
- Tag structure management (e.g., server macros)
- Tagging capabilities
- Tagging formats
- Tracking formats (e.g., image pixel, JavaScript pixel)

Advertiser Site Tags (Conversion Tags)

- Advertiser's data strategy
- Advertiser's IT turnaround times
- Advertiser's site limitations or restrictions
- Attribution models
- Conversion windows
- Retargeting goals

Tag Management

- Data integrations points
- Data structures
- Tag management systems (e.g., Bright Tag, Google Tag Management, Tealium)
- Tags and the platforms in which they are serving
- Tracking expectations

Enter Order Details

Once ad inventory availability is confirmed and the campaign placements have been booked, the trafficking process begins. This is the process of technically setting up the ad campaign details in the order management and / or ad serving system so that the campaign can be targeted, delivered, and tracked according to IO specifications.

Concepts to Review:

Campaign Details / Setup Requirements

- How to read an IO
- Campaign placements
- Media plan details
- Naming conventions
- Reporting expectations
- Contractual obligations

Systems / Processes

- Order management systems (OMS)
- Initial campaign setup
- How to use bulk upload tools

Perform Asset Intake

Now it is time to start focusing on the creative assets. Assets are the files that act as the building blocks of a piece of creative (a single advertisement). One creative can consist of multiple assets, depending on how it is designed and configured. Depending on the execution



strategy, the ad ops team member may be working with assets or ad serving tags to implement the campaign in their ad serving platform.

Once you obtain the creative assets from the creative shop, you'll want to verify assets meet specifications, upload them to your ad server, and ensure creatives with multiple files are assembled in the ad server correctly, as needed.

Concepts to Review:

Creative Asset Types

- Ad unit sizes and specs
- Agency tags
- Third party tag functionality
- Third party ad servers
- Tags and the platforms in which they are serving

Creative Requirements

- Adv. Creative specifications
- Publisher creative specs

Asset Intake / Ad QA Processes

- Asset receipt process
- Creative approval process
- Creative QA process
- SLAs
- Trafficking process
- Ad specification exception process

Review and Align Assets with the Media Plan

Based on the plan details provided, the digital ad operations professional builds a creative strategy that takes into consideration any percentage weighting, time-based ad delivery, sequencing, A/B testing or other creative rotation requirements outlined on the plan. This step also includes identifying any unique tagging strategies required to pair tracking tags – pixels intended to collect data on ad impressions, clicks, additional engagement metrics, and so – with creative assets or placements.

Concepts to Review:

Campaign Trafficking Instructions

- Ad units
- Creative scheduling
- Creative sequencing
- Creative strategy
- Media plan details
- Numbers of placements and ad units
- Placement details
- Rotation percentages or weights
- Dayparting
- A/B testing



IAB DIGITAL AD OPERATIONS CERTIFICATION

Further, you should be comfortable describing digital advertising targeting and tracking capabilities, as they relate to campaign trafficking requirements:

<u>Context relevance</u> <ul style="list-style-type: none"> Channel (content category) Site Site section Site page Keyword /Contextual 	<u>Geography</u> <ul style="list-style-type: none"> Nation State DMA Zip Code Location (mobile) 	<u>Demographics</u> <ul style="list-style-type: none"> Gender Age Education Household Income 	<u>Interest-Based</u> <ul style="list-style-type: none"> Behavioral targeting Re-targeting Social Activity Lifestyle (audience) Purchase-based Registered account info
<u>Technical Criteria</u> <ul style="list-style-type: none"> Bandwidth Browser Browser language Operating System / Device / ISP User domain / subdomain 	<u>Date & Time</u> <ul style="list-style-type: none"> Day of week Time of day 	<u>Campaign Criteria</u> <ul style="list-style-type: none"> Start & end date Frequency capping Time capping 	<u>Data obtained through</u> <ul style="list-style-type: none"> Anonymous Tracking Cookies IP Address Registration info GPS Location (mobile) Device IDs (mobile) Offline data

Implement Creative Assets

Implementing the creative assets includes binding the creative (and other assets or files) with the destination URL(s) (or click-through URLs), and any other 3rd party tracking tags required, and then assigning these ads to their designated placements in the ad serving platform.

At this time the supply-side ad ops professional also implements competitive separation, if desired by the client. This ensures that a given advertiser's ad does not show up adjacent to one of its competitors (or a particular company / category) on a given page or placement.



Concepts to Review:

How to Implement Ad Tags, Creative Assets and Tracking Tags in Ad Serving Systems

- Landing page URLs
- Cache-busting
- Tag formats
- Tag structures (server macros)

Perform QA and Pre-Launch Testing

When all the pieces are in place according to campaign specifications, the ad ops professional exports the ad tags and runs a QA on their functionality (ad displays and clicks through appropriately.) This is known as performing pre-launch testing, which is a final precaution before the campaign is activated.

Concepts to Review:

Pre-Launch Testing Methods & Resources

- QA processes
- Testing environments
- Web technologies (e.g., html, javascript, iframe)

Verify Successful Launch

The ad ops person then sets the campaign live and verifies a successful launch, by checking that the ad is running properly and that both of the ad server systems are calling the view and click portions of the ad for counting and reporting purposes.

Concepts to Review:

- How to obtain screenshots
- Reporting expectations



Sample Questions: Executing Campaign Launch

Correct answers for these sample questions may be found in Appendix B.

Question 1

When implementing a conversion tag on a client/advertiser's site, what QA action can be performed to ensure proper tag function?

- A. pull an impression report by placement
- B. use a web debugging tool to confirm tag is firing
- C. take a screenshot of the page where the tag is placed
- D. update call-to-action in the creative across all the advertiser's campaigns

Question 2

An agency wants to run an expandable. Which of the following assets is necessary for the publisher?

- A. .jpg
- B. IXI tag
- C. click tag
- D. script tag

Question 3

When/where is an in-stream creative displayed?

- A. after in-line text
- B. prior to page re-direct
- C. in between video content
- D. adjacent to a publisher player

Question 4

If you have one million impressions to deliver between three creatives, and creative A needs to deliver twice as many impressions as B and C should deliver individually, what weighting rotation should be implemented?

- A. A – 25; B – 25; C – 25
- B. A – 40; B – 30; C – 30
- C. A – 50; B – 25; C – 25
- D. A – 100; B – 25; C – 25

Question 5

What two items are needed for the agency to verify a campaign has launched properly?

- A. screenshots and reporting
- B. confirmation email and traffic sheet
- C. IO and traffic sheet
- D. media plan and reporting



Managing a Live Campaign

Manage Client Expectations

Once a digital campaign goes live, ad operations professionals need to actively manage client expectations as to how well it is performing.

Concepts to Review:

- Building Client Relationships
- Understanding Client KPI Expectations
- Understanding Insertion Order commitments
- Relating Client Expectations to Reports Provided

Monitor Campaign Performance and Delivery

Monitoring campaign performance and delivery requires accessing third-party reporting systems, generating the appropriate reports, and continuously assessing campaign performance against stated KPIs. Frequent campaign reviews allow ad operations professionals to identify any performance problems early.

Concepts to Review:

- Campaign Pacing
- Campaign metrics / KPI performance
- Delivery attribution model
- Page views and impressions

Troubleshoot Live Issues

It is important to troubleshoot live issues before they become escalated discrepancies. This typically involves the use of an HTTP proxy or web debugger tool. Web debugging tools are used to trace ad requests, view the responses returned from those requests, and identify where gaps and problems emerge. Examples of common web debugging tools to be used for performing initial issue diagnostics include:

Fiddler: <http://www.telerik.com/fiddler>

Charles: <https://www.charlesproxy.com/>

Google Chrome DevTools: <https://developer.chrome.com/devtools>

Firefox Web Developer Tool Bar



Concepts to Review

Tools and Technical Know-How

- Buffering
- Debugging tools
- How the ad call is made
- How to debug page source
- How to review ad request
- How to use developer tools (e.g., Charles, Firebug)
- HTML (basic)
- HTTP (e.g., how to request response cookies)
- JavaScript (basic)
- Log files
- Web debugging tools and techniques
- Web technologies (e.g., html, javascript, iframe)

Troubleshooting Processes

- Client tiers
- Debugging processes
- Escalation processes
- Programmatic troubleshooting
- Triage process
- Troubleshooting processes

Provide Campaign Reporting

Campaign performance reports are also helpful client communication tools during a digital media campaign. Individuals working in digital ad operations provide campaign reporting to their clients to ensure that the seller and buyer are viewing similar results in their respective ad servers.

Note: The DAOC Exam does not attempt to assess process-related knowledge associated with pulling reports from specific third-party ad servers.

Concepts to Review:

- Reporting expectations
- Reporting metrics
- Reporting refresh cycles
- Reporting requirements and cadence
- Reporting systems
- Reporting time zone

Investigate Discrepancy

Each party has an independent set of reports that can be used to audit the other, and ad ops departments are often called upon to investigate discrepancies that arise between them. This



investigation process may involve a familiarity with caching issues, log files, filtration, counting rules and even system attribution models.

Over the years, the IAB has developed and updated guidelines for ad campaign impression measurement - see <http://www.iab.com/guidelines/iab-measurement-guidelines/> - that address auditing and the handling of discrepancies.

The IAB has also published documents related to counting rules and click measurement - see <http://www.iab.com/wp-content/uploads/2015/06/click-measurement-guidelines2009.pdf>.

Concepts to Review:

- Cache-buster
- Common contractual terms
- Discrepancy investigation processes
- Dispute resolution
- Reporting time zone
- Variances in reporting capabilities

Manage Client Communications

Through the lifecycle of a campaign, ad operations professionals manage client communications related to performance results, optimization opportunities, and discrepancy resolution. It is important that for these professionals to maintain strong relationships with their clients and understand their communication preferences.

Concepts to Review:

- Advertiser and agency details
- Client preferences (how do clients prefer meetings, who to contact, etc.)
- Client relationships
- Communication channels
- Points of contact
- Stakeholders or key contributors
- External client notification process

Recommend Adjustments to the Campaign

Ongoing performance reviews also enable ad operations people to identify opportunities to optimize the campaign. In order to recommend campaign adjustments, you'll need to develop, monitor and analyze performance through campaign dashboards and readouts.



For example, it may be helpful to update the campaign targeting criteria or flighting schedule to accommodate unexpected changes in inventory availability, or favor one campaign placement over another to meet performance goals.

Ad operations team members should learn to perform campaign optimization analysis to make sure advertisers are meeting their performance goals, delivering on lead volume and maximizing advertiser performance and publisher revenue. This will help the publisher enhance the ability to increase client upsell, cross-sell, and renewal.

Concept to Review: Optimization Techniques

Optimize Campaign

Once new optimization opportunities are approved by the seller/buyer team, the ad ops professional will optimize the campaign, either manually or with the help of a third-party optimization technology.

Concept to Review: Optimization Technologies

Manage Campaign Revisions

Sometimes, individuals working in ad operations may be asked to modify the media plan in order to reflect the reality of mid-campaign tweaks and results.

Concepts to Review:

- Changes in advertiser's marketing strategy
- Changes to the inventory
- Creative management within an active campaign
- Turnaround times
- Update schedules or creative schedules

Respond to Malicious Activity

Sometimes, performance anomalies and discrepancies occur as a result of malicious behavior. Those working in digital ad ops must define monitoring or alerting requirements in order to identify such issues as early as possible. They should also carry out ongoing security checks and proactively monitor fraudulent activity.



Ad verification tools can help identify such issues. Information about verification systems may be found under the Ad Verification Guidelines at: <http://www.iab.com/wp-content/uploads/2015/06/Ad-Verification-Guideline-for-the-Conduct-of.pdf>.

In addition, publishers may wish to use SafeFrame technology for their ad serving, a managed API-enabled iframe that opens a direct line of communication between the publisher page content and the iframe-contained external content, such as ads. This communication allows for secure data collection and rich interaction within the iframe, while protecting the publisher's page from undetected changes that might otherwise damage page integrity. More information is available at <http://www.iab.com/guidelines/safeframe/>.

Concepts to Review:

- Measurement and verification systems (e.g., MOAT, double-verify)
- Verification incident reporting (e.g., double verify)

Reconcile Monthly Billing

Ad operations professionals need to know how to reconcile all campaign reports with third party data for final monthly billing.

The IAB Campaign Workflow Best Practices document includes best practices for reconciling monthly billing:

http://www.iab.com/wp-content/uploads/2015/09/Workflow_Best_Practices.pdf

Concepts to Review:

- Billing details
- Common contractual terms
- Invoicing details
- Invoicing reports
- Make-good process
- Rate cards
- SOPs
- Special client relationships (e.g., preferred rates, discounts)
- Finance approvals
- Contractual obligations

Perform Post-Campaign Reporting Activities



Toward the end of the campaign, ad operations people will perform campaign wrap-up activities, which typically requires them to perform an analytic overview of the entire campaign more thoroughly than is done while it is running.

Concepts to Review:

- Reporting data analysis
- Reporting metrics
- Historical performance for clients
- Brand benchmarks



Sample Questions for Managing Live Campaigns

Correct answers for these sample questions may be found in Appendix B.

Question 1

If a creative is appearing correctly in an ad server preview, but not on the publisher's page, what should the agency request FIRST?

- A. reporting
- B. screenshots
- C. creative assets
- D. a live test page

Question 2

What are the two MOST COMMON metrics included in a campaign delivery report?

- A. eCPM and total spend
- B. interactions and clicks
- C. impressions and clicks
- D. rollovers and completion rate

Question 3

A placement is reporting 2MM impressions on the publisher side, but 1.2MM on the vendor side. What is the percentage discrepancy?

- A. 8.0%
- B. 37.5%
- C. 40.0%
- D. 60.0%

Question 4

An agency reports that they are seeing click bot activity on a CPM campaign. What should be the publisher's FIRST step?

- A. pause the ad
- B. pull a detailed click report
- C. verify the ad clicks through
- D. preview the creative



Question 5

What metrics can be provided to a client looking to compare the number of users who viewed and/or clicked on their ads, in comparison to the number who printed a coupon?

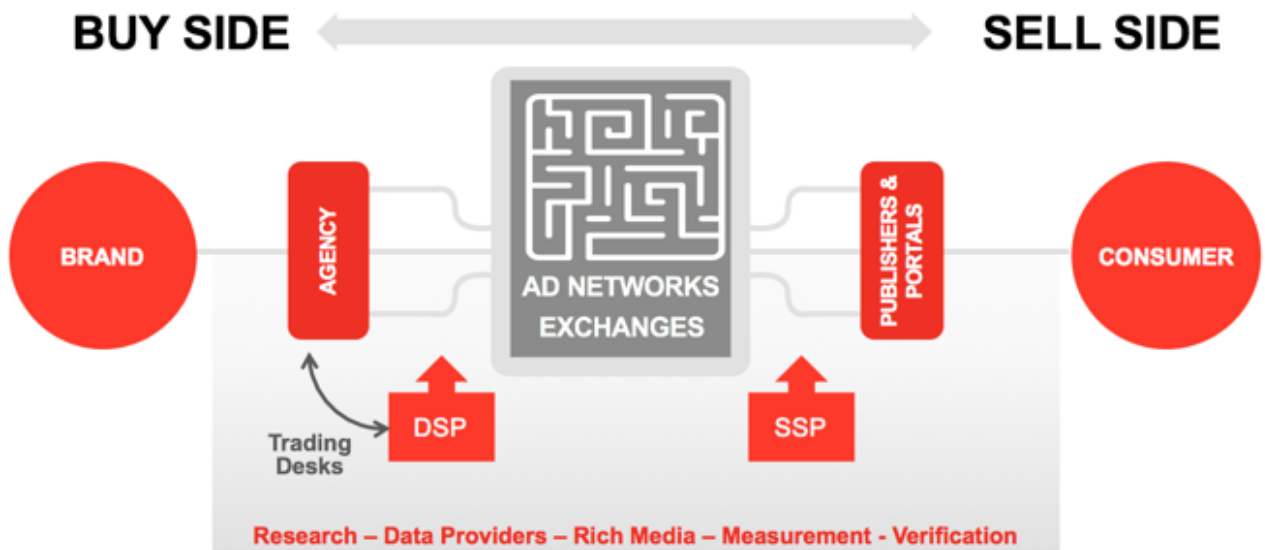
- A. total booked impressions and revenue
- B. total clicks/impressions and conversions on the home page
- C. total conversions on the home page and the print coupon success page
- D total clicks/impressions and conversions on the print coupon success page

Supporting Ad Operations Initiatives

Understand Industry Ecosystem and Terminology

Successful digital ad operations professionals understand ad serving and media buying/selling processes and the roles of players operating within it, such as:

- Media buyers and planners
- Strategy agencies
- Creative ad agencies
- Publishers
- Rich Media providers
- Data providers
- Measurement vendors
- Ad networks
- Trading desks
- Programmatic technologies: Ad Exchanges, DSPs and SSPs





Concepts to Review:

- Business models
- Competitive landscape
- Competitor offerings
- Compliance rules
- Digital ecosystem
- Growth opportunities
- Industry trends
- Overall business strategies
- Technical jargon
- Ad Tech Stack

Assist with Onboarding New Partners

The phrase ‘onboard new partners’ is often abused in our catch-phrase crazy industry. In some cases, it may simply refer to planning, integrating, testing, documenting, implementing, and monitoring ad campaigns for a new advertiser / client, the process for which we have described in detail above.

However, some ad operations program managers and technical leads may be responsible for managing vendor and partner integrations of a more technical nature. Most publishers and ad tech platforms have a list of pre-certified vendors and technologies that can be accepted. Testing and certification for these third-parties is often “owned” by ad ops, and the list of certified vendors / partners is typically published on their company website.

These integrations can be as simple as confirming that the ad server can support tracking tags from a new third-party measurement vendor, to more complex activities like assisting an inventory partner in implementing and testing a proprietary SDK or ad tag integration. You may be expected to take a leadership role by owning the operational workflow for testing, documenting, training, and communication for these integrations. If, at your organization, your role is simply to support new vendor integrations, rather than lead them, you should still be prepared to assist with testing, troubleshooting, building relationships with vendors, and coordinating investigations.

Concepts to Review:

Internal Systems Capabilities / Processes

- Integration limitations
- Technical capabilities
- Technical integrations
- Vendor requirements
- Certification statuses
- Integration statuses

Vendor Management

- Vendor capabilities (creative or delivery experience)
- Vendor expectations
- Vendor ramp-up times
- Vendor relationships
- Publisher or vendor certification statuses



Assist with QA of New Ad Products

In addition to testing new vendors / partners, you may also be asked to test new products to ensure they meet operational requirements, and work with your product team to ensure new products are thoroughly vetted.

“Advertising product offerings” can refer to the packaged ad units and ad unit combinations that appear on a media property’s rate card; or it can refer to advertising platform user interface / products, as well, depending on the company where you work.

Concepts to Review:

- Awareness of current product
- New product development process
- Beta-Testing / QA processes
Business and client impacts
- Adoption process

Document Bugs, Workarounds, and Enhancement Requirements

An ad operations professional should identify, or be made aware of, any existing bugs or limitations to an ad product, and should be very knowledgeable about her company’s escalation path for expediently addressing such problems. Identifying and documenting system / product errors and submitting them to technical support via a central ticketing system will ensure timely resolution, and make it possible for other teams / team members to access details about the problem (avoiding duplicate issue tickets.)

Whenever possible, you should do your best to quickly find a workaround to the problem without interrupting daily campaign trafficking workflows. In these cases, you not only need to document the issue and create a ticket in your internal technical support system, you should also document the workaround for future reference.

When troubleshooting bugs and implementing workarounds, a deep familiarity with your trafficking systems / ad products is essential. What seems like a bug to you may actually be how the product was supposed to function, so become familiar with relevant product documentation that can help you identify what is a bug, and what is a product design flaw. You should learn how to submit a feature enhancement request, if it turns out the bug is, in fact, intended system functionality that resulted in unintended limitations / consequences for a specific client.

Concepts to Review:

- Bug reporting and tracking systems



- Existing bugs and limitations
- Feature enhancement process
- Expected outcomes
- Experiment process
- Documentation Needs
- How to use the internal and external knowledge base

Provide Internal and External Operational Feedback

Ad Operations professionals wear many hats, and should not be shy about providing feedback to internal stakeholders and other teams, sharing an 'on-the-ground' perspective on internal processes and operational effectiveness.

This can include analyzing and interpreting ad product performance or internal processes, identifying areas of improvement, and implementing solutions to improve performance and efficiency; Refining QA processes and tools to ensure the highest quality of campaign management.

Concepts to Review:

- Feedback loop
- Operational deployment processes
- Operational impacts
- Operations surrounding product
- Organizational impacts

Contribute to Product or Feature Strategy

There are many ways in which ad operations team members can contribute directly – and indirectly – on product / feature strategy:

- Analyze advertising performance to optimize ad product experiences
- Define and develop requirements for analytics tools and reporting dashboards
- Collaborate with cross functional groups including Product, Business Development, Engineering and Sales to identify key product opportunities.
- Provide training on new and existing products for other operations teams.

Concepts to Review:

Product Design

- Business priorities
- User experience best practices

Product Adoption

- User best practices as they relate to operating new technology



- Product capabilities
 - Product catalog
- Product offerings (e.g., what value is the product giving)
- Product or technology expected behaviors or
- functionalities
- Product availability (e.g., whether or not something has been sunset)
- Product backlogs
- Product delivery timelines
- Product dependencies
- Product roadmaps
- Product timelines
- Project lifecycle
- Project management processes
- Project timelines

Contribute to Case Studies

Ad operations teams can contribute to ad campaign or product case studies in a number of ways, such as providing screen shots; providing campaign or ad product reporting data, graphs or charts; sharing campaign success stories; client quotes; or providing details into campaign processes relevant to the study results.

Reporting on Success Metrics

It's important to look beyond reporting use cases specific to monitoring campaign pacing / delivery, or identifying and troubleshooting issues. A successful digital ad operations professional should also be able to apply their knowledge of reporting tools and metrics to identify key success indicators – whether that's for a specific advertiser campaign or a new product or process launch – and *visualize* key metrics to communicate out to product, sales, and exec teams.



Sample Questions for Supporting Ad Operations Initiatives

Correct answers for these sample questions may be found in Appendix B.

Question 1

What is a helpful means to proactively evaluate expected behaviors and functionality of a product or technology?

- A. API access
- B. beta testing
- C. CPM calculators
- D. ticketing systems

Question 2

One important step when onboarding a new vendor is to

- A. develop a new product.
- B. identify industry trends.
- C. agree on integration timelines.
- D. discuss client's data warehouse.



Managing Incidents

Despite the best pre-launch planning and troubleshooting, unanticipated campaign delivery and reporting problems do sometimes arise, and it is the digital ad operations professional's job to manage them. After performing initial diagnostics and identifying the severity of an incident, a digital ad operations person will communicate expectations, updates, and resolutions to internal and external clients; and also advise on business impact and resolutions, and create and supply a post-mortem analysis of the incident to all relevant parties.

Perform Initial Diagnostics

When campaign delivery incidents arise, an ad ops professional follows a standard procedure that begins after she performs initial diagnostics of the situation, with the help of HTTP proxy / web debugging tools.

Identify Incident Severity

An ad ops professional will then identify incident severity, based on the nature of the problem(s) and the results of a business impact analysis.

This will involve following your internal impact assessment protocols, and having a good grasp of the business sensitivity of a particular issue.

The type and severity of an incident determines the priority with which it will be handled, who will handle it, and the expected timing of a resolution.

Communicate Expectations, Updates, and Resolutions to Internal and External Clients

The ad ops professional follows their company's pre-determined escalation procedure and works closely with escalation contacts in order to communicate expectations, updates, and resolutions to internal and external clients.

When it comes to notifying external clients, it is very important to follow any official external client notification process your company may have in place.

Advise on Business Impact and Incident Resolutions

Based on the incident's technical implications and expected outcomes, the ad ops professional will be called upon to advise on business impact and client resolution.

This requires a keen grasp of business and client impacts, and in some cases a formal business impact analysis should be conducted.



Create and Supply Post-Mortems

Finally, once an incident is resolved, an ad operations professional will create and supply post-mortems to share with all relevant parties associated with the campaign. These reports help the client and associated parties understand what went wrong, the remedies implemented to fix it, and the procedures in place to ensure it does not occur again.



Sample Questions for Managing Incidents

Correct answers for these sample questions may be found in Appendix B.

Question 1

An advertiser ran 20MM impressions at \$1.50 CPC and a forecasted CTR of 5%. Due to an incident, no clicks were recorded. How much revenue was impacted?

- A. \$1,000,000
- B. \$1,500,000
- C. \$15,000,000
- D. \$35,000,000

Question 2

A partner has reported an issue with ad refreshing that is producing a discrepancy between ad server impression reports and the vendor's impression reports. They have provided a sample page where the issue can be observed. What is the BEST way to report this issue to the technical team?

- A. ask the vendor to provide a resolution and submit a ticket describing the solution
- B. perform a detailed discrepancy analysis and submit a ticket describing the discrepancy
- C. validate the discrepancy and submit a ticket describing the issue and the steps to reproduce
- D. connect the vendor's tech resource with the engineering team so they can assess and discuss the issue

Question 3

A(n) _____ is commonly used to describe what is performed after a campaign experiences severe issues.

- A. campaign wrap-up
- B. post-mortem
- C. business review
- D. internal audit



Appendix A: Media Math Cheat Sheet

Digital ad operations professionals should know how to define and utilize the most frequently used digital media pricing and performance-based math formulas.

<p>CPM (cost per mille) $CPM = (Cost \div Imps) \times 1000$ $Cost = CPM \times (Imps \div 1000)$ $Imps = (Cost \div CPM) \times 1000$</p> <p>CPC (cost per click) $CPC = Cost \div Clicks$ $Cost = Clicks \times CPC$ $Clicks = Cost \div CPC$</p> <p>CPS (cost per sale) $CPS = Cost \div Sales$ $Cost = Sales \times CPS$ $Sales = Cost \div CPS$</p> <p>CPA (cost per action) $CPA = Cost \div Actions$ $Cost = Actions \times CPA$ $Actions = Cost \div CPA$</p> <p>CPE (cost per engagement) $CPE = Cost \div Engagement$ $Cost = Engagement \times CPE$ $Engagement = Cost \div CPE$</p>	<p>CTR (click through rate) $CTR\% = (Clicks \div Imps) \times 100$ $Clicks = Imps \times (CTR \div 100)$ $Imps = Clicks \div (CTR \div 100)$</p> <p>ER (engagement rate) $ER\% = (Engagement \div Imps) \times 100$ $Engagement = Imps \times ER$</p> <p>eCPM (Effective CPM) $eCPM = (Total Cost \div Total Imps) \times 1000$</p>
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Appendix B: Sample Question Answer Key

Executing Campaign Launch:

Question 1

When implementing a conversion tag on a client/advertiser's site, what QA action can be performed to ensure proper tag function?

- A. pull an impression report by placement
- B. use a web debugging tool to confirm tag is firing**
- C. take a screenshot of the page where the tag is placed
- D. update call-to-action in the creative across all the advertiser's campaigns

Question 2

An agency wants to run an expandable. Which of the following assets is necessary for the publisher?

- A. .jpg
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Question 3

When/where is an in-stream creative displayed?

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- D. adjacent to a publisher player

Question 4

If you have one million impressions to deliver between three creatives, and creative A needs to deliver twice as many impressions as B and C should deliver individually, what weighting rotation should be implemented?

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- C. A – 50; B – 25; C – 25**
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Question 5

What two items are needed for the agency to verify a campaign has launched properly?

- A. screenshots and reporting**
- B. confirmation email and traffic sheet
- C. IO and traffic sheet
- D. media plan and reporting



Managing Live Campaigns:

Question 1

If a creative is appearing correctly in an ad server preview, but not on the publisher's page, what should the agency request FIRST?

- A. reporting
- B. screenshots
- C. creative assets
- D. a live test page**

Question 2

What are the two MOST COMMON metrics included in a campaign delivery report?

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- C. impressions and clicks**
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- A. 8.0%
- B. 37.5%
- C. 40.0%**
- D. 60.0%

Question 4

An agency reports that they are seeing click bot activity on a CPM campaign. What should be the publisher's FIRST step?

- A. pause the ad
- B. pull a detailed click report**
- C. verify the ad clicks through
- D. preview the creative

Question 5

What metrics can be provided to a client looking to compare the number of users who viewed and/or clicked on their ads, in comparison to the number who printed a coupon?

- A. total booked impressions and revenue
- B. total clicks/impressions and conversions on the home page
- C. total conversions on the home page and the print coupon success page
- D total clicks/impressions and conversions on the print coupon success page**



Supporting Ad Operations Initiatives:

Question 1

What is a helpful means to proactively evaluate expected behaviors and functionality of a product or technology?

- A. API access
- B. beta testing**
- C. CPM calculators
- D. ticketing systems

Question 2

One important step when onboarding a new vendor is to

- A. develop a new product.
- B. identify industry trends.
- C. agree on integration timelines.**
- D. discuss client's data warehouse.

Managing Incidents

Question 1

An advertiser ran 20MM impressions at \$1.50 CPC and a forecasted CTR of 5%. Due to an incident, no clicks were recorded. How much revenue was impacted?

- A. \$1,000,000
- B. \$1,500,000**
- C. \$15,000,000
- D. \$35,000,000

Question 2

A partner has reported an issue with ad refreshing that is producing a discrepancy between ad server impression reports and the vendor's impression reports. They have provided a sample page where the issue can be observed. What is the BEST way to report this issue to the technical team?

- A. ask the vendor to provide a resolution and submit a ticket describing the solution
- B. perform a detailed discrepancy analysis and submit a ticket describing the discrepancy
- C. validate the discrepancy and submit a ticket describing the issue and the steps to reproduce**
- D. connect the vendor's tech resource with the engineering team so they can assess and discuss the issue



Question 3

A(n) _____ is commonly used to describe what is performed after a campaign experiences severe issues.

A. campaign wrap-up

B. post-mortem

C. business review

D. internal audit