THE AD QUALITY CONUNDRUM

HOW TO DELIVER THE HIGHEST STANDARDS IN VIEWABILITY, BRAND SAFETY & FRAUD PREVENTION

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CONVERSANT ®

INTRODUCTION

Establishing and maintaining the highest level of ad quality standards is certainly a hot topic in today's digital advertising ecosystem – from developing and adhering to ad viewability guidelines to brand safety concerns and combatting ad fraud.

Unfortunately, the industry seems to be addressing only parts of the issue, rather than responding to an overarching need for comprehensive ad quality guidelines.

At Conversant, our focus is simple – consistently delivering high quality ads in the appropriate environment on behalf of our clients. As a partner to more than 5,000 clients and agencies, we have a responsibility to ensure that our clients get the best possible value from their advertising investments. And since many of the programs we employ are measured by incremental return on ad spend (ROAS), it's in our best interest to get ad quality right — every time.

As a leader in digital, we see over 80 billion digital interactions per day across display, mobile and video, connecting more than 190 million consumers to brands. Our massive scale and reach not only gives us a unique perspective, but it also inspires us to lead by example in delivering on the promise of the highest ad quality standards.

In this paper, we'll outline how Conversant's holistic approach to ad quality is benefiting our clients and leading the industry forward.

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CONVERSANT'S HOLISTIC APPROACH

Since 1998, Conversant has been at the forefront of combatting ad quality problems for our clients, and across the digital advertising industry. We recognize the trust that advertisers place in us and work diligently to be worthy of that trust. As such, we tackle the challenges surrounding ad quality and protect our clients through a variety of processes and technologies to reduce the threat.

From the beginning, we recognized that delivering true ad quality is impossible unless all of the issues facing it are fully acknowledged and addressed. Which is why, rather than developing discrete programs against just one component of ad quality, we created a holistic approach to tackle all of the challenges surrounding it. For example, the same platform that detects and protects against ad fraud is also used to ensure maximum viewability rates for our clients.

We firmly believe that in order to deliver what our clients really want – the highest possible ad quality standards for maximum performance of their advertising spend – the entire spectrum must be considered.

Conversant has **zero tolerance for fraud**. We understand there are many ways that fraudsters can infiltrate the digital universe, so we've developed a multilayered defense for our services and our clients. In addition, much of the advertising we field is evaluated based upon strict measurement of the incremental sales impact that it drives. Any impression delivered to a non-human naturally limits our ability to deliver incremental sales. With a focus on real incremental sales lift as the key metric, we have an even greater interest in combatting ad fraud than companies who focus on surrogate metrics like clicks.

WHAT IS AD QUALITY?

When an advertiser buys media in a digital environment, they expect:

○ Real people are viewing the ads

○ Media appears within brand appropriate content

○ Impressions are viewable

When each of these criteria is met, the ad is considered "high quality."

HUMAN REQUESTED
IMPRESSION

CONVERSANT
AD QUALITY

VIEWABLE
TO THE PERSON

APPROPRIATE
ENVIRONMENT
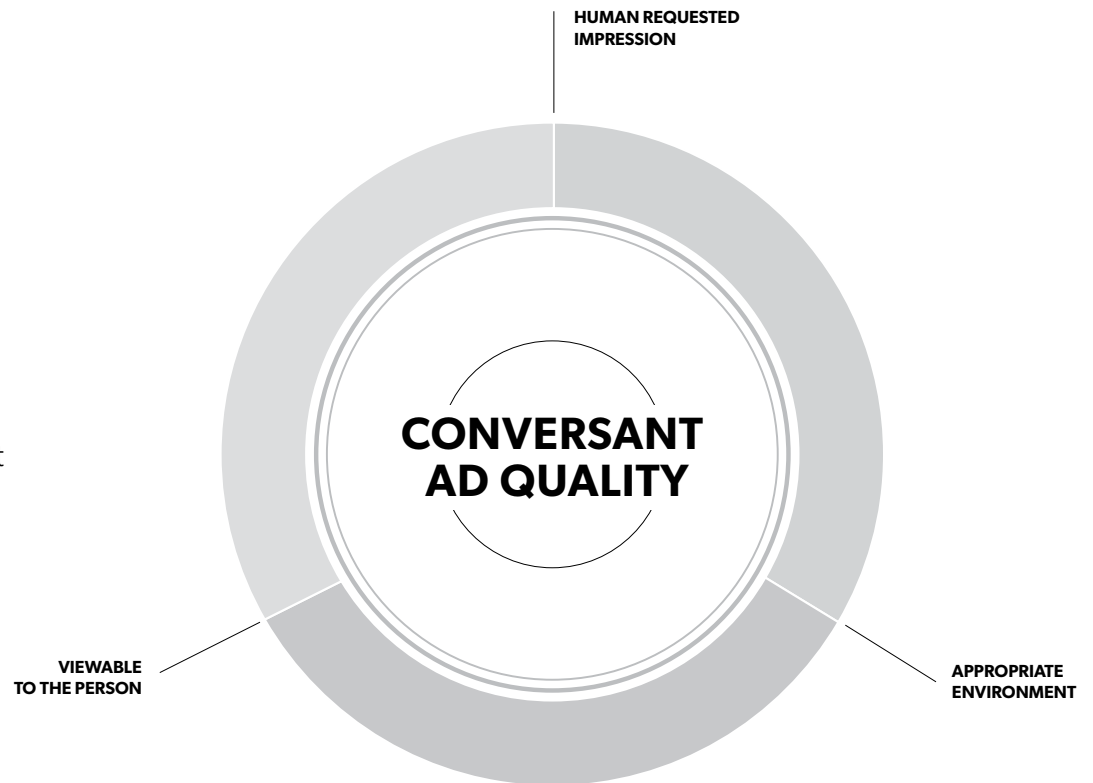
THREE KEY COMPONENTS
# OF AD QUALITY

VIEWABILITY

Impressions visible to a person when they view content online.

A non-viewable ad is an impression that simply did not appear in the live viewing area of the consumer's screen as they browsed online. The ad may have been placed further down the web page below the live screen area or the ad may appear too far left or right on a page to be seen in the user's screen size. The ad may appear in the viewing area of most PC screens, but not for mobile screens. In addition, some ads may be loaded in a background tab of a multi-tabbed browser or the ad may fail to load before the user navigates to another web page.

BRAND SAFETY

The practice that ensures ads will not appear on pages that contain inappropriate content.
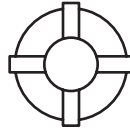
Most people think of brand safety as it relates to advertising not appearing on "adult content" sites, though there are many types of potentially non-brand-safe environments — it all depends on the brand. For example, an R-rated action film might have different standards than a baby products company. Whatever your brand, the expectation is that your ad will only appear among content you find acceptable.

AD FRAUD

Impressions not seen by a person.

Fraudulent ad traffic generated by non-human "bots" can have a negative impact on brand engagement metrics that are driven by real humans. Ad fraud ultimately dilutes the value of publisher inventory and can affect the overall integrity of the digital media ecosystem.

THE IMPACT OF POOR AD QUALITY

Poor ad quality, fueled by non-viewable ads, brand safety violations and bot-driven traffic, can have a major impact on brand advertising. Bots cannot positively impact the brand advertised or influence the desired consumer interaction for the program, so it represents hundreds of thousands of wasted advertising dollars.

Similarly, ads that run on pages that don't reflect the content standards of a brand can also have a negative impact on brand equity, elevate advertiser mistrust and steal potential revenue from publishers that do not meet brand standards.

Our commitment to maintaining a positive brand experience for the user is supported and reinforced by our unmatched ability to identify the user, along with their specific brand attributes, to construct and deliver the most relevant brand advertising experience for them.

AD QUALITY ISSUES:
VIEWABILITY

VIEWABILITY FOR MOBILE, DISPLAY & VIDEO

Just to recap, viewability is when an ad is visible to a person while they are consuming digital content online. A comScore study across hundreds of campaigns and billions of impressions found that more than half of digital display impressions were non-viewable. While the study is from 2013, ongoing tracking of this issue indicates the ratio of viewable to non-viewable inventory is similar today.

While ensuring a high level of viewability may seem like a simple task, it's quite the opposite due to inconsistent measurement standards and emerging technologies. According to the Media Ratings Council (MRC), "it is unreasonable for advertisers, agencies and publishers implementing viewable impressions as measurement currency to expect to observe viewable rates of 100%."

VIEWABILITY GUARANTEES

Guaranteeing viewability is a hot topic in the industry with quite a bit of confusion surrounding it. Whether an ad is actually viewable depends on a number of factors, that we'll outline in the next few pages. Some of these are environmental factors, making it impossible to provide a 100% guarantee that an ad will be viewed before buying the impression. In other words, getting a 100% guarantee on viewability is a matter of applying an appropriate business model versus relying on a different measurement approach.

46%
VIEWABLE

54%
NON-VIEWABLE
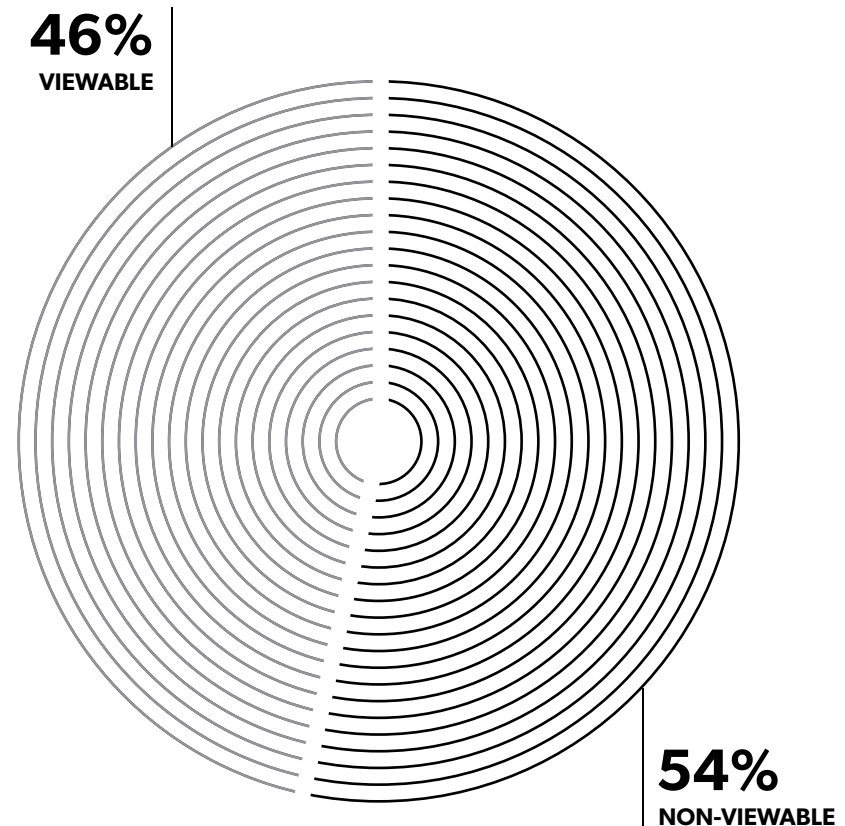
WHY VIEWABILITY IS DIFFICULT TO DELIVER

○ **FLUID FORMATS**
The format of digital media is not confined to what is visible on a screen at any given time. Web pages tend to be longer and wider than can be displayed on most digital screens.

○ **NON-HUMAN TRAFFIC**
Some online traffic isn't actually driven by a person. Rather, it is caused by bots. Naturally, advertisers have no interest in serving ads to bots.

○ **PUBLISHER LABELS**
Publishers sometimes label their ad units inconsistently or incorrectly. For example, a leader board ad unit may not necessarily be viewable in all cases. We recommend relying on a proven viewability solution versus the publisher's metadata.

○ **USER BEHAVIOR**
Unlike television, with digital the consumer can scroll down a page to expose content and ads, spending as much or as little time on a page as they wish. That flexibility makes it very difficult to predict whether an ad will be viewable with 100% certainty, especially ads that do not load within the dimensions of the opening screen.

○ **BROWSER LOAD TIMES**
The speed at which a browser can download a page is controlled by available bandwidth — wireless vs. wired — and can have a significant impact on ad viewability and measurement. Sometimes an otherwise viewable ad placement simply doesn't have time to load before a user moves on.

WHY VIEWABILITY IS DIFFICULT TO DELIVER (CONT'D)

○ iFRAMES CHALLENGE

The challenge with iFrames, specifically ones that come from a different domain delivering ads, is that the viewable impression code within the iFrame is not able to access the publisher page due to the "Same Origin Policy."

○ SAMPLE-BASED MEASUREMENT

Various vendors that calculate viewability do so by assessing a sample of impressions. While a strong sampling approach can drive reasonably accurate figures, the measure will not be exact. Another factor to consider is that viewability code must be implemented and tested across all browser types and code versions for complete coverage.

○ PRE-VERSUS POST-VIEW MEASUREMENT

A media company must make the decision to deliver an ad before it is viewed, based on the probability that it will be viewable in the user's browser. Because of the variables identified above, that decision isn't an exact science. Viewability measurement is done post-impression, meaning that any circumstances outlined above can cause an ad to be non-viewable.

○ VARIABLE SCREENS

There is a remarkable range of screen sizes on digital devices, from 30-inch monitors to small smartphone screens. What's visible on different screen sizes can vary widely.

The top banner is viewable on both screens shown here, but the skyscraper ad becomes non-viewable due to the size of the laptop screen.

While 100% viewability may not be possible, **it makes sense to work with a partner that is trying to address this challenge in a comprehensive way.** Vendors in the comScore study showed viewability rates ranging from less than 10% to more than 90%.

AD QUALITY ISSUES:
BRAND SAFETY

Most advertisers want to ensure that their messages appear on sites with brand appropriate content. As previously mentioned, while brands have different standards for safety, it's very difficult to define the scale of this issue, other than to say that brand safety is a common concern for some classes of media and vendors.

Our tools and technology can pre-determine whether a contextual environment will be a difficult one in which to control brand safety.

Our contextual classification technology, that we acquired via SET, uses a combination of computer vision and text-based analysis to identify brand unsafe content. By maintaining an index of unsafe web pages, we can automate blocking these pages at impression time. By analyzing the content on every individual page seen, we can provide brand safety controls at greater granularity than our competitors who only identify unsafe content at the domain level.

AD QUALITY ISSUES:
AD FRAUD

While estimates vary as to the exact proportion of bot-driven impressions from fake clicks or app downloads for points, virtually all sources identify it as a significant amount of total web traffic with no long-term usage or value. One of the largest studies was conducted and published in December 2014 by the Association of National Advertisers (ANA) and online fraud detection firm, White Ops. According to the numbers, 11% of display and 23% of video impressions were bot-driven.

The Internet Advertising Bureau (IAB) estimates that nearly 36% of online traffic is fake. Whatever the actual percentage, it's clear that ad fraud represents a significant risk to the effectiveness of digital advertising.

The ANA study and our own research demonstrate that much of the ad fraud occurs when sites purchase traffic from third parties. Sites enter into such agreements for the purpose of increasing their ad views, which helps them fulfill ad contracts and drive increased revenue. Purchasing traffic is a common online practice in which site content is publicized in other web venues. Users click the sponsored messages and are redirected to the site that wants more views. Many traffic providers are legitimate, but some have used networks of bot-infected computers to drive up impressions.

Avoiding ad fraud seems to be nearly impossible at this stage in Internet development, but it *can* be done. A prime example is Conversant's proprietary transaction-based audience identification technology that filters out ad fraud because we focus on the individual versus cookies or devices.

THE ANA/WHITE OPS STUDY BY THE NUMBERS

181
Campaigns

36
ANA Member Companies Tagged to Identify Bot Fraud

5.5B
Impressions

3M
Domains Measured

60
Days

ACCORDING TO THE STUDY, BOTS ACCOUNTED FOR:

11%
Display Impressions

23%
Video Impressions

EIGHT STEPS TO ENSURE AD QUALITY

1

ADVANCED PROPRIETARY TOOLS AND TECHNOLOGY DETECT AND ELIMINATE AD QUALITY ISSUES

Conversant processes more than 80 billion interactions and other consumer events across our massive media footprint every day. This provides us with a unique vantage point to detect more ad quality issues and address them before they affect our clients.

Within our ad server and optimization capabilities, we've developed tactics to monitor fraudulent traffic in order to eliminate bad actors. To do so, we employ the following measures:

○ Timing of page loads and ad calls
○ Frequency and timing of page refreshes
○ Open proxy analysis
○ IP address analysis
○ Network agent data collection and analysis

To ensure viewability, Conversant pioneered a technology that uses a second cookie fire that occurs when 50% of a banner is visible. This helps establish accurate measurement and ensures the purchase of only viewable impressions.

For enhanced brand safety, we've also created semantic analysis tools to analyze the text, tags, imagery and tonality of web pages so we can offer only the most brand appropriate sites for our clients.

PROPRIETARY TECHNOLOGY

TRANSACTIONS

INDUSTRY LEADERSHIP

AD QUALITY

CROSS-FUNCTIONAL TEAM

VIDEO & MOBILE TOOLS

EXCLUSIVE RELATIONSHIPS

AD QUALITY INDEX

WHITELISTS & BLACKLISTS

2

ACCESS TO RETAIL SALES DATA IDENTIFIES REAL CONSUMERS VS. SUSPECTED BOTS

Conversant helps drive online and offline sales for more than 4,000 retailers and is a leading partner to 65 of the Internet Retailer Top 100. As such, we can leverage our unique and proprietary access to this retail sales data to identify real consumers versus suspected bots. So, essentially, you're guilty until proven innocent through a pattern of actual transactions.

We have visibility into more than 100 million purchases per day. Within our transactions database, we have 5.3 billion purchases and more than half a trillion dollars of purchased merchandise.

We built and maintain more than 130 million anonymized consumer profiles of real people, verified through anonymized purchase and demographic data. We know these profiles represent real people, and that activity not conducted by these individuals has a much greater likelihood of being fraudulent. We also consider the amount of abnormal transaction or user rhythms to identify potential fraud.

No other company has the amount of direct, first-party data necessary to perform this level of analysis. In fact, most companies don't have access to first-party purchase data at all.

3

DEDICATED CROSS-FUNCTIONAL AD QUALITY TEAM ENSURES WE DELIVER THE BEST POSSIBLE PROGRAMS FOR OUR CLIENTS

Ensuring ad quality is not a part-time job. In fact, you need resources focused on the specific challenges as well as holistic solutions. Conversant's dedicated team consists of members from engineering, product, inventory, QA and delivery who continuously analyze and monitor traffic to ensure the highest possible ad quality.

○ Analysis of every advertiser's program to identify signs of ad fraud and root out problems.

○ Constant assessment of the viewability rates of sites and programs to eliminate placements and partners that cannot meet our quality standards.

○ Partnering proactively with thousands of content sites to ensure they understand the brand safety needs of advertisers to create appropriate, brand enhancing web experiences.

4

SITES SCREENED PRIOR TO NETWORK INTEGRATION AND CONSTANTLY MONITORED FOR BEST PRACTICES

In addition to our extensive programmatic buying operation, Conversant has a proprietary network of websites and apps that some of our clients utilize. In order to be accepted into our network, each site is extensively analyzed by a Conversant QA professional.

However, monitoring does not stop once a site has joined our network. We continuously monitor the quality, format, breadth and depth of content in order to protect advertisers from impressions running in low-quality environments or on sites purpose-built for fraud. Evaluation is done through a proprietary, multi-step process that was developed over 15 years of working with quality site partners.

We apply a unique code to every creative for each site on which it appears so we can quickly spot subcontracted impressions. This helps ensure impressions run on the right site and are delivered to humans.

We buy much of the media for our clients from companies in the industry Top 10. This helps ensure higher ad quality by focusing resources on media companies that have the technology and resources necessary to deliver a superior product.

5

ROBUST WHITE & BLACKLISTS ENSURE SITES MAINTAIN HIGH AD QUALITY

Certain sites make a (dirty) business of robotic page views. We maintain frequently updated white and blacklists on more than 5,000 programs that indicate who are the "good actors" and "bad actors" to ensure the highest level of ad quality. By actively reviewing the user traffic generated from publisher sites, we look for a pattern of history that justifies to which list a publisher belongs.

Additionally, our vast media footprint and extensive experience has helped to identify known bot publishers so we can avoid conducting business with them. As an example, sites that use confusing or misleading offers to install adware or malware on computers.

We also constantly assess the viewability rates of individual publishers – whether we purchase inventory through direct relationships or exchanges. Sites that deliver problematic viewability rates are eliminated from our programs.

6

AD QUALITY INDEX TECHNOLOGY RATES POTENTIAL INVENTORY ACROSS ALL QUALITY DIMENSIONS

As leaders in the ad quality space, we are developing a unique proprietary technology that will fill the gaps and elevate the level of protection for advertisers.

The development of the Ad Quality Index enables us to proactively measure and rate potential inventory partners against all ad quality measures. Conversant has made major investments to foster even smarter decisions to further improve the overall ad quality we're able to deliver to clients.

A key differentiator here, is that Conversant has the unique capability to optimize this type of data at the user and placement level for all individuals we see. This is vastly superior to other approaches used throughout the industry.

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SUITE OF TOOLS ADDRESSES THE SPECIAL NEEDS OF VIDEO & MOBILE ADVERTISING

Ad quality issues are more prevalent in the video and mobile channel, due to the higher costs of impressions and the potential for bad actors to make money from those impressions. To protect our clients and their investment in video and mobile, we utilize several strategies:

- **Full Transparency at the Video Level:** Conversant's SET technology provides every advertiser with complete transparency into where their ads actually ran, down to the video level. Our dashboard view allows advertisers to see screen shots of placements and get campaign, site and video level data on viewability and brand safety.
- **Precision Site Selection:** SET focuses spend on sites that have been pre-determined to be high-quality environments with a low incidence of fraud and vetted placements that are viewable on most browsers.
- **Predictive Viewability:** Being proactive in detecting problematic impressions is key to reducing the overall incidence of fraud. So, we work to understand a potential impression before it runs to prevent advertiser messages from appearing in non-human ad calls or on players with a low likelihood of being viewed.

Mobile advertising raises some unique ad quality considerations which we address in the following ways:

- **MRAID Standards:** Adoption of standards in the mobile in-app environments allow for more control in viewability measurement.
- **Direct Integration:** Conversant's scale in integration with mobile apps provides an additional layer of brand safety.

While mobile fraud is less prevalent than video fraud, we're very committed to proactively addressing the ad quality challenges with our focus on identifying real users, direct integrations with apps and leveraging our proprietary tools, technology and services.

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WE'RE PART OF THE INDUSTRY MOVEMENT TO DRIVE AD QUALITY IMPROVEMENTS

We understand that addressing ad quality is an essential part of maintaining and growing the digital industry. To improve ad quality awareness and to identify ways in which the industry can address it, we participate in and promote the efforts of leading industry trade associations like the IAB and OPA.

We're working with the IAB Anti-Fraud team to develop solutions to eliminate bad players in the industry. In addition, Conversant believes in the value of transparency and publishes documents like this one to increase awareness and explain the many steps we take to deliver visibility.

Today, ad fraud and its prevention is truly an arms race – one where bad actors are constantly analyzing defenses in order to get around them. We believe that through direct knowledge and information sharing we can all work together to address these major challenges and opportunities.

PARTNERS IN AD QUALITY ASSURANCE

PARTNERS ENHANCE AND PROVIDE ADDITIONAL ASSURANCE REGARDING AD QUALITY PROTECTION

COMSCORE

comScore, Inc. is a global leader in digital measurement and analytics, delivering insights on web, mobile and TV consumer behavior that enable clients to maximize the value of their digital investments. Through its Audience Analytics, Advertising Analytics, and Enterprise Analytics product suites, comScore provides its clients with a variety of on-demand software, real-time analytics and custom solutions to succeed in a multi-platform world.

DOUBLEVERIFY (DV)

DV is the proven market innovator with the technology and insights that assure brand performance and effectiveness for the world's largest advertisers online. DV solutions create value for media buyers and sellers by bringing transparency and accountability to the market, ensuring ad viewability, brand safety, fraud protection, accurate impression delivery and audience quality across campaigns to drive performance. Since 2008, DV has helped hundreds of Fortune 500 companies gain the most value out of their media spend by delivering best-in-class solutions across the digital ecosystem that help build a better industry.

INTEGRAL AD SCIENCE

Detection and prevention of ad quality issues is core to the capabilities of Integral Ad Science (IAS). IAS uses a combination of big data analysis and session-based signals to spot sources and incidences of ad fraud. IAS has also developed its own proprietary tools to assess viewability and brand appropriateness.

MOAT

Moat is a New York-based SaaS analytics company bringing intelligent insight to brand advertisers, agencies, and premium publishers. Offerings include Moat Analytics, an attention measurement platform that provides in-depth analytics, viewability, and performance insights for publishers and advertisers to maximize the value of any ad campaign, and Moat Pro, an ad intelligence platform that allows marketers and publishers across industries to monitor and incorporate real-time trends and activity into their own media and creative decision-making. In June 2014, Moat became the first company to be accredited by the Media Rating Council (MRC) to measure viewable ad impressions in both online display and video.

PEER39 BY SIZMEK

By processing over 100 billion bid requests each day, Peer39 by Sizmek is the largest cookie-free pre-bid targeting solution on the Conversant platform. Using Machine Learning and Natural Language Processing to analyze every page holistically, Peer39's algorithms ensure Conversant buyers have access to the safest, highest quality inventory available - whether desktop or mobile. Peer39 protects marketers and ensures their ads appear in the right environment through Brand Safety, Web Page Quality, Video Player, Ad fraud, Ad Count, Viewability and Contextual Targeting.

CONCLUSION

We view the trust that advertisers place in us as sacred. So, we do our utmost to stay ahead of viewability problems, content safety issues and fraudsters so our clients are assured that their customers are receiving the best brand experience possible - and they're getting the most out of their media investment.

Our commitment to protecting our clients from ad fraud has driven the innovative systems and processes that we've put in place to deliver the highest ad quality possible. Our eight-step holistic approach is unparalleled in the industry. From our advanced proprietary tools and technology - including the Ad Quality Index for inventory - to our cross-functional team support, best practices for network integration and site list monitoring, video and mobile-specific protections and partnerships with industry-leading organizations, we work hard to ensure ad quality is addressed from every angle.

Because we're able to provide our clients with one view of the user across display, video and mobile, we can maintain the highest level of standards for viewability and brand safety, while steering them clear of ad fraud and delivering an enhanced brand experience.

Conversant is not only vested in the best interest of our direct clients and their customers, but we're also committed to improving ad quality for the digital advertising universe as a whole.

ABOUT THE AUTHOR

Raju Malhotra is Senior Vice President, Products for Conversant and is responsible for all global product investments and development. Mr. Malhotra is a leader in the advertising technology industry and has an impressive track record of launching innovative products during the past two decades as a product and engineering executive. He's worked in senior positions at Microsoft, McKinsey and several other companies. He has an MBA from the Wharton School of the University of Pennsylvania and an undergraduate degree in computer engineering from the National Institute of Technology in India.

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ABOUT CONVERSANT

Conversant is the leader in personalized digital marketing. Conversant helps the world's biggest companies grow by creating personalized experiences that deliver higher returns for brands and greater satisfaction for people. We offer a fully integrated personalization platform, personalized media programs and the world's largest affiliate marketing network – all fueled by a deep understanding of what motivates people to engage, connect and buy. Conversant is a division of Epsilon, the global leader in creating customer connections that build brand and business equity.

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