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Introduction
Welcome to the latest Programmatic Handbook by the IAB. In the last few years programmatic trading has enjoyed a meteoric rise in the digital ad serving space and this handbook serves to define what it represents and what the future may hold for it.

A concise definition of programmatic trading is - the use of automation to do more, faster and to learn as you go. While this may sound like the original design brief for Skynet from the Terminator series of films, it has clear parallels to the way in which we live our everyday lives.

In 1981 the Nobel Prize in Physiology or Medicine was awarded to David H. Hubel and Torsten Wiesel with Roger W. Sperry for their work in determining how input signals were interpreted by the human brain; one of the founding pieces of research in our understanding of the complex algorithms that define human behaviour. Just as the brain extracts relevant learnings from external stimuli and data at speeds we cannot even consciously register, so too can the variety of automated systems within the programmatic space make smarter, faster decisions on being in the right place at the right time.

We’ve brought together some of the smartest digital minds to contribute to this handbook, representative of the work that goes on at the IAB to make sense of the phenomenon that is programmatic. Our on-going efforts through the Display Trading Council aim to extract the signals from the noise and keep up with the pace of innovation.

The machines are already here, they’re only going to get smarter and faster, and I for one welcome them.

By David Frew
Digital Programmes Manager, IAB UK
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Size of the Market
How much of the UK display market is traded programmatically and how is this growing over time? These are good questions and, until recently, we weren’t able to answer these questions effectively. Through the IAB/PwC Digital Adspend Study we knew that the digital display market was worth £1.9 billion in 2013 (across both desktop and mobile), but we had no visibility on how that inventory was traded; how much was sold by sales teams, how much was sold through networks and how much went through emerging programmatic technologies.

By Tim Elkington
Research and Strategy Director, IAB UK
This is where the IAB’s research project – Media Owner Sales Techniques (MOST) comes into play. The project was carried out by MTM (using a combination of interviews and a small survey with industry experts and data submissions from both the buy and sell sides) on behalf of the IAB and aimed to answer key questions around how display advertising is traded in the UK.

In order to measure programmatic advertising we had to agree on a definition and after consultation with the industry the research project used the following to define programmatic trading:

“Programmatic trading is the use of automated systems and processes to buy and sell inventory. This includes, but is not limited to, trading that uses real time bidding auctions.”

After defining the market, the next step was to create a framework that enabled the measurement of a quickly growing sector within which there were multiple variables. The segmentation below allowed MTM to use a simple system to establish the relative sizes of the main techniques used to sell digital inventory.
Direct Channel

Direct Sales
Inventory bought at fixed prices directly from media owners through in-house or external sales teams, using insertion orders and manual processes to book and run the campaign.

Programmatic direct and private marketplaces
Inventory bought from a particular media owner using automated processes, where a direct relationship exists between the buyer & media owner in the form of agreed deal terms (e.g. exclusive access and price floors).

Indirect Channel

Networks
Inventory bought at fixed prices from a third-party offering packages which aggregate supply across multiple media owners.

Open RTB exchanges
Inventory bought on an impression-by-impression basis in real-time through an open, unreserved auction.

Traditional Technique Programmatic

Size the Market
Results

The results of MTM’s work showed that, by value, 51% of the market was traded through Direct Sales, 22% through Networks, 15% through Programmatic direct and private marketplaces and 13% through Open RTB exchanges. This gives a total of 28% traded programmatically in 2013 (Programmatic direct + Open RTB Exchanges).

The study broke the £1.9 billion digital display market down into three areas – desktop display, desktop video and mobile display and video and there were significant differences in the extent to which programmatic is used in these different market areas. For example the online video market is relatively traditional with 59% traded through Direct sales and 25% through networks and only 16% programmatically (2% Programmatic direct and 14% Open RTB Exchanges). At the other end of the spectrum, mobile is relatively advanced in terms of programmatic trading with 37% traded using new techniques (23% Programmatic direct and 14% Open RTB Exchanges).

Some of the differences between these areas are explained by simple supply and demand – for example the demand for premium video inventory exceeds the supply and consequently media owners in that space are able to maximise yield by using direct techniques rather than deploying new programmatic technology.
Future Developments

MTM also forecasted the development of the market and predict that c.46% of the market will be traded programmatically in 2014. They also looked at the major drivers and barriers in terms of more long term development. The main drivers of the market were very practical with “Greater understanding of programmatic advertising amongst brands and advertisers” and “Growing experience and understanding of how best to use programmatic” being seen as the two things that would most help drive the market. On the flip side it was “Concerns about brand safety” and “Concerns about data leakage and lack of transparency” that were seen as the major barriers to the growth of the programmatic market.

The way that these drivers and barriers play out will determine the long term development of the market with MTM predicting that between 60% and 75% of the display market will be traded programmatically by 2017.

Summary

This is a ground breaking piece of research – the first time that a ‘bottom-up’ study using direct data submissions has been attempted globally and gives us a unique view of the structure of the display market in the UK. The results reveal that programmatic trading is here to stay – it’s currently 28% of the market, is predicted to be 46% by 2014 and as much as 75% by 2017.
The programmatic ecosystem is huge and fragmented. Size and scale within the market is difficult to quantify, perhaps one of the reasons why this IAB study is the first of its kind. Due to the number of technology vendors, agencies and publishers in the industry, scaling up research of this kind will always be a challenge. Forecasts and predictions are even more challenging, but collaborating with industry veterans will help with this process.
Consumer

Historically, programmatic and RTB were thought of as tools only for performance campaigns and early adopters were advertisers with a direct response focus. Today’s marketing strategies focus on the consumer. Advertisers are now experimenting with sophisticated and clever ad formats that fit with programmatic, embracing the benefits that a larger and more targeted audience can bring.

One of the main contributors to the rise of programmatic is product innovation. Development of data and new ad formats that lend well to programmatic methods, such as native advertising within social media and TV synching, are opening up online display avenues that were formerly unavailable to brands.

Mobile and video

Mobile is the fastest growing programmatic area, and new technologies are well adapted to targeting audiences on tablets and smartphones. Predictions say that by 2019 there will be 5.9 billion smartphone users in the world. The fact that mobile programmatic sales are still only at 37% of the market shows us that there is still huge potential for further growth in this area.

Video could also take more of a programmatic share, however one of the key concerns for advertisers is viewability. If tech companies can overcome this, as many are doing now, then programmatic’s ability to connect brands to consumers in a multi-device world will continue to drive growth.

Education

The Exchange Lab has been around since the beginning of programmatic advertising so we’re not surprised by its growth and forecast escalation rates. However, from speaking to advertisers who have become aware of the benefits of programmatic, we know there is confusion about how best to take advantage.

There is a lack of understanding amongst marketers, who have been baffled by buzzwords, industry clichés and acronyms. Educating marketers is key to the adoption of programmatic in the advertising marketplace. As programmatic providers we need to communicate the virtues of this new market in simple terms. This is the main challenge in ensuring the UK programmatic market continues to grow and delivers against advertisers’ marketing objectives.

Expansion means there is great opportunity for brands to innovate. As an industry, we need to help them take full advantage.
Viewability
Was my advert seen and what impact did it have? These are relatively straightforward and basic questions that every marketer should be asking and have effective measures to determine across all media. For the last 20 years digital has evolved to become the most accountable medium, helping to deliver unparalleled levels of data, insight and effectiveness measurement. And more recently the rise of programmatic buying has finally created the potential to intelligently deliver the right ad to the right person at the right time.

By Steve Chester
Director of Data and Industry Programmes, IAB UK
However despite these advances, comparison of digital media effectiveness with other forms of media still remains challenging, in part due to different approaches to measurement. It is this continued challenge that has spurred the digital industry to gather together from all sides to resolve and improve its planning, buying and measurement.

Viewable impressions (or viewability) is the first stage in addressing this. Over the last three years, the IAB, other trade bodies and leading stakeholders from across the industry have actively been assessing and extensively testing the viability of a broad industry standard via the Making Measurement Make Sense (3MS) initiative and Media Ratings Council (MRC) in the US. Similarly in the UK, the IAB formed the Viewable Impressions Cross-Industry Working Group, comprising of representatives across the online advertising industry, to review the findings, results and recommendations from these groups.

In April 2014, the IAB in collaboration with other industry trade bodies issued the first viewability guidelines to the market for standard display ads, paving the way for those parties wanting to trade on viewability to do so consistently. The standards state that 50 per cent of pixels must be in the viewable portion of an internet browser for a minimum of one continuous second to qualify as a viewable display impression for a standard display ad. For larger canvas formats (at or in excess of 242,500 pixels) such as the IAB Rising Stars ad formats, given their substantial size, the guidelines state that 30 per cent of pixels must be in the view for a minimum of one continuous second to qualify as viewable.

It should be noted that these are baseline standards to be used as a reference point to facilitate consistency, and thus trade across the market. It is not mandated that these guidelines are used in each and every circumstance. If buyers and sellers wish to and can agree to trade using different viewability metrics, then they should feel free to do so.

Although much progress has been made, some work remains to be completed. Standards for video and mobile have not yet been determined in the UK, but are expected later in 2014 and beyond respectively. Of particular importance over the next few months is the reduction of discrepancies between competing providers of viewability measurement, which in some cases has been found to be substantial. During its testing of viewability providers in the US, the MRC uncovered five key (non-human error) reasons for these discrepancies. Recommendations have been made to accredited providers to align the way that they measure or report measurement, which if implemented, should significantly diminish these discrepancies.

* ABC, agenda21, Alenty, AOL, Association of Online Publishers (AOP), comScore, FT, Google, Guardian, InSkin Media, Integral Ad Science, Incorporated Society for British Advertisers (ISBA), Institute of Practitioners in Advertising (IPA), Internet Advertising Bureau (IAB), Meethics, Microsoft, News UK, Nielsen, OMD, Quantcast, Sizmek, Telegraph, The7stars, Tremor Video, TripAdvisor, TubeMogul, Vibrant Media, Vindico, Unanimis and Yahoo.
In 2013 a UK specific viewability testing framework, similar to the MRC’s, was designed by ABC and endorsed by the Joint Industry Committee for Web Standards (JICWEBS), to test the capability of providers to measure viewability - www.jicwebs.org/agreed-principles/viewability-product-principles

Further to the drive to reduce discrepancies, these principles are being amended (expected by end of 2014) to ensure that the MRC’s recommendations to reduce discrepancies are included in the certification process. Moving forward, those wishing to be accredited will need to make the relevant changes to their reporting and/or platforms to receive UK accreditation.

So how will viewable impressions affect pricing? At this stage it is still too early to tell since trading on viewability is currently inconsistent across the market. Publishers have and continue to face a considerable body of work and investment to test partners to measure viewability of their properties, establish the impact on yield management and inventory forecasting, and review site architecture in relation to ad placements. What is certain however is shifting towards viewable impressions could unearth the true brand effectiveness of digital advertising, given that past digital effectiveness studies have taken into account viewed and non-viewed ads, when compared to other forms of media. Could this result in pricing for digital advertising increasing in future?

In summary, moving to viewable impressions offers the valuable prospect of guaranteed impacts for advertisers, who in 2013 spent £1.9bn on digital display. As with any significant methodology change, the new standards will require a settling in period, but they will deliver important benefits for marketers and publishers. Harnessing the unique strength of online, brand advertisers will enjoy greater accountability, whilst allowing publishers to maximise the value of their inventory.

For more information regarding viewability, please refer to the viewable impressions section of the IAB site at www.iabuk.net/viewability
Leveraging Viewability for Programmatic

The identification of viewable impressions has the potential to change the currency of online advertising by introducing an important new dynamic for both buyers and sellers to manage. The first step of this revolution is to establish accurate measurement data for buyers and sellers, which is something many vendors are now able to do. The second step is to actually trade on viewable impressions.
As yet, the majority of ad servers are not ready to manage viewable impressions, so some manual steps are still required. For instance, if a buyer wants to buy 10 million viewable impressions on a website with a viewability rate of 50%, the buyer would need to book double to ensure 10 million are seen. Some advertisers already buy viewable impressions this way, and while this is statistically sound, the process is slow and doesn’t guarantee viewability objectives will be achieved.

A better integration of ad viewability into programmatic platforms is needed to help the market adopt this new currency. The predominant RTB model relies on CPM, which at first glance seems to be incompatible with trading on viewable impressions. However, the fact that RTB works on a per impression basis gives both buyer and seller granular control over campaign viewability. When the target number of viewable impressions is reached, buyers can stop bidding because they did not commit to buying a given number of served impressions.

As programmatic viewability becomes a reality, we will see how the quality of a campaign’s reach and performance will improve.

For brand campaigns, viewability can be used in two ways:
- **Viewable impressions can be set as the goal of the campaign**
- **Viewability ratio can be used as a quality indicator of the campaign**

For direct response campaigns, viewable impressions can be used to increase clicks and conversions. This can be achieved in several ways, such as:
- **Development of new attribution models based on post-view conversions (many conversions happen post-non-viewable impressions)**
- **Ability to purchase impressions that are very unlikely to be viewable at a lower price**

For instance, paying £0.9 CPM for a site with 90% viewable impressions or £0.1 CPM for a site with 10% viewable impressions are equivalent to £1 VCPM for both sites. In other words, non-viewable ads are not purchased. Only viewable impressions can influence the behavior of people, which is what campaign performance is all about.

Viewable impressions will prevail in the programmatic market because buyers and sellers now have a defined currency with which to trade that will improve the performance of online campaigns.
3
Privacy
Privacy is one of the most significant challenges in the digital era. Data-driven advertising models are at the forefront of this and, as a result, are increasingly under the spotlight of policy-makers and regulators. The growing tide of data collection, use and exchange – regardless of how it is traded – raises privacy concerns that the industry must address if its true potential is to be realised for all. Consumer trust is essential.
EU industry solution to provide greater consumer transparency and control.

Industry-wide solutions are already in place that aim to address privacy concerns: notably the European initiative to give people greater transparency and control over behavioural or interest-based advertising (see Box A). Whilst the principles of this initiative are technology-neutral, discussions are on-going to ensure that it maintains pace with the fast-moving ad market, as well as to meet the needs of the global consumer. For example, work is underway to adapt the mobile environment to ensure people have a consistent experience regardless of the device that they are using. Many businesses across EU markets support this initiative and continue to invest in ways to give consumers more information and control.

The EU initiative is a ‘must’ for ad businesses and those that show leadership now will benefit commercially in the longer run. Privacy-enhancing solutions should be integrated into products to provide consumers with greater choice and control and marketers should ensure that their ad technology partners are involved in this initiative.

A - EU behavioural advertising industry initiative

In 2011 the EU digital advertising sector published good practice aimed at giving consumers greater transparency and control over the data collected and used in behavioural or interest-based advertising. The EU initiative is aligned with the US and Canada, developing a global approach for both businesses and consumers. At the heart of this work is an icon that appears in or around the ads on websites, as well as on web pages themselves. When a consumer clicks on the icon he or she will be able to find out more about the information collected and used for this purpose. The icon will also link to ways for consumers to manage their interests, such as via privacy dashboards or ad preference managers. It will also link to a pan-European website now available in 26 different EU languages – www.youronlinechoices.eu – with helpful advice, tips to help protect privacy and a control page where ads aimed at your preferences, based upon previous browsing history, can be turned off. The EU initiative is backed up by robust compliance and enforcement. This includes a new pan-European trust seal to demonstrate compliance to ad chain partners. The initiative has strong political support, including from the UK Government.

Further information is available at www.edaa.eu
Legislation striking the right balance

The risk of restrictive legislation is also a reason for businesses to demonstrate leadership in privacy. Legislators and policy-makers need to recognise not only the global nature of data, but also the balance between advertising - funding content and services - and safeguarding consumer privacy. Law makers are shaping rules that govern data businesses without necessarily understanding how they work and how they may benefit the digital economy. The experience of the so-called EU ‘cookie’ law, more formally known as the revised EU ePrivacy Directive 2009 – changing the ‘notice and opt out’ approach to processing cookies (NB: it applies to all device technologies being used to process data, not just cookies) to one based upon ‘consent’ – is a warning to us all. Businesses need legal and therefore commercial clarity.

For further details on the law and how the EU behavioural advertising initiative fits in see: [www.iabuk.net/eu-eprivacy](http://www.iabuk.net/eu-eprivacy)
However, attempts by law-makers to regulate data will not go away. In fact, the European institutions have – for over two years now – been debating the reform of existing data protection law. The proposals (see Box B) risk creating a stricter regime for advertising data, particularly for third party businesses. For example, in broadening the scope of personal information (i.e., bringing more advertising data into the ‘regulatory net’) and requiring explicit consent for its processing. The potential outcome would render many of today’s advertising business models unworkable (particularly third party ones) and, at worst, illegal.

It would deprive publishers and small businesses with much needed revenue, as well as compromising the development of future ad business models. The legislation is expected to be agreed in 2015 and the IAB, across Europe, continues to advocate for a more proportionate approach. IAB UK members can read the latest on the reforms at: www.iabu.net/ec-data-protection-reforms

B - Europe’s data protection reforms

The European Commission (EC) published reforms to the existing EU data protection legal framework in January 2012. These reforms will replace existing laws, such as the UK Data Protection Act 1998. The aim of the proposals is to revise existing laws in light of technological development and the significant increase in the exchange of data over the last few years. It also aims to streamline rules across all EU markets to make it less burdensome to do business across the region. As currently drafted the proposals would have a significant impact upon digital advertising businesses, as well as the broader UK digital economy, by introducing a more stringent data protection regime across all EU markets, stricter conditions and heavier fines for breaches. In particular the proposal:

- Makes no distinction between personal information that you might share with your electricity supplier (i.e., your name, your address, your bank details), and data that might be unique to a device but that does not directly identify an individual – such as the collection of a history of web surfing linked to a ‘cookie’ for advertising purposes, which does not reveal an individual’s real-world identity. The result is a proposal that brings far more data into the ‘regulatory net’.

- Includes a requirement to obtain explicit consent for processing personal data, placing additional burdens on businesses and making some advertising businesses (particularly third party ones) unworkable. This approach would also disrupt the online experience for users who could face constant, intrusive ‘tick box’ consent screens and pop-ups. This ‘consent-fatigue’ would actually lead to lower standards of consumer protection than more sophisticated forms of transparency.

The reforms are not likely to be agreed until 2015 at the earliest and will therefore not come into force until 2017 at the earliest. The IAB is hopeful of a more proportionate approach to advertising data. More details can be found at: www.iabuk.net/eudataprotection
Action to take

The IAB, and others, are working to ensure the proposed EU data protection reforms meet the balance between the need for advertising data and safeguarding consumer privacy. However, there is important action that businesses can take now:

1. **Ad tech or intermediary businesses should sign up and comply with the EU initiative on behavioural or interest-based advertising** - The IAB has lots of information on its site about this, as does the European Interactive Digital Advertising Alliance (EDAA) – [www.edaa.eu](http://www.edaa.eu). Advertisers should ensure their ad partners are doing this.

2. **Understand obligations under the revised ePrivacy Directive** – see the IAB factsheet: [www.iabuk.net/eu-eprivacy](http://www.iabuk.net/eu-eprivacy). Whilst not a full legal compliance tool in itself, complying with the EU initiative on behavioural or interest-based advertising is an essential part of this.

3. **Get familiar with the EU proposals to reform data protection law** - The new legislation will be important for all advertising businesses. The IAB provides regular briefings to its members on this and you can read the latest version at [www.iabuk.net/ec-data-protection-reforms](http://www.iabuk.net/ec-data-protection-reforms)
Brand Safety
Digital provides advertisers with a huge range of benefits, not least fantastic reach. But just as in offline media, the risk that brands might in some instances be served in placements that are out of keeping with their marketing strategy or the ethos and values of their brand is a source of concern in a real-time advertising environment. Of course it’s the prerogative of brands to demand a brand safe environment to advertise in – particularly when placement against some extreme types of content could lead to significant reputational damage. However, inevitably when we talk about brand safety online as an industry, we’re talking about a pretty broad spectrum of issues, because different brands will undoubtedly have differing interpretations of what constitutes unsuitable or inappropriate placement.
In order to address this concern and to empower advertisers in their buying decisions, the digital advertising industry has sought to provide a greater degree of transparency, accountability and control in the display trading process. This is achieved through a set of industry-wide Good Practice Principles, published by the Digital Trading Standards Group (DTSG) in December of 2013. In order to allow for the broad spectrum of legal content out there, rather than being overly prescriptive about what constitutes good or bad placement, these principles provide advertisers with the flexibility to determine this for themselves in their trading agreements. Further, on instruction, their trading partners will uphold the wishes of the advertiser through the use of pre-agreed appropriate or inappropriate schedules, or through the use of Independently-certified Content Verification (CV) tools. In so doing there is little in the way of wriggle room for inaccurate interpretation of the advertiser’s requirements.

Aside from the subjective, there are content-based debates for which the digital advertising industry is increasingly called on to play an active role in. For example, while it is commonly recognised that digital advertising revenues play a vital role in supporting the creative industries, it has been identified that some of these revenues may be supporting sites under investigation for copyright infringement. As a result where ad revenues support illegal or inappropriate content, and where household name advertisers are seen to be placed against this content, policy makers are raising concerns. As such this is fast becoming one of the most pressing public policy issues facing the digital advertising industry.

To address this, the IAB has worked in partnership with rights holder associations, the City of London Police’s dedicated Police IP Crime Unit (PIPCU) and other ad industry associations to make available data about sites currently under investigation for copyright infringement. This data, known as the Infringing Website List (or IWL), can be requested by advertisers as part of trading agreements to minimise the risk of brand placement on these sites. The IWL is available to all who are involved in the buying, selling and facilitation of display advertising, and is held by PIPCU.
The IAB’s top tips for keeping brand safe online:

1. **Familiarise yourself with the Digital Trading Standards Group.**

   Sign up to industry good practice, and work with those who also adhere to this good practice. You can learn more about the DTSG, the Good Practice Principles and the companies involved in this scheme on the JICWEBS website: [www.jicwebs.org](http://www.jicwebs.org)

2. **Work with an Independently Verified Content Verification (CV) tool.**

   Understanding what your CV tool does is really important to making sure you’re getting the service that you want. To make it clear and transparent ABC have verified five tools that are currently operating in the UK. See more here: [www.abc.org.uk/Products-Services/Brand-Safety/Content-Verification-CV](http://www.abc.org.uk/Products-Services/Brand-Safety/Content-Verification-CV)

3. **Use the PIPCU Infringing Website List (IWL) in your trading.**

   And if you’re an advertiser point to this in your trading contracts. To gain access to the IWL contact PIPCU: [pipcuwl@city-of-london.pnn.police.uk](mailto:pipcuwl@city-of-london.pnn.police.uk)
The Importance of Brand Safety

Brand safety has come a long way from the first verification tools that were introduced to the market in 2008. Back then, brand safety was a simple report that told an advertiser if it was unfortunate enough to have appeared next to undesirable and inappropriate content. Today, brand safety technology not only informs what is happening, it can also proactively protect brands from appearing where they do not want to appear by using blocking techniques.
The advancement of programmatic trading has heralded a further development in brand safety; data and technology. Today, the information that Integral Ad Science sees and collects across the internet is housed within all of the market leading DSPs, and this data can be used by advertisers to proactively target desirable inventory and not waste time and money bidding on inappropriate inventory. This is a huge step-change in the way that brand safety tactics and technologies can be employed.

Now advertisers can customise their own brand safety tolerances across seven different categories; ranging from adult content and violence to illegal downloads, ensuring that every brand and campaign has the right settings to maximise reach in the right areas, whilst maintaining brand integrity.

Why is brand safety important?

Our own industry snapshot gives a good indication of the online media landscape. Brand safety still affects between 4% and 7% of ad impressions. This might seem a small percentage in the grand scheme of things, but as all brand managers know, even one advert on the wrong page can create incalculable loss for the brand, especially in this age of mass social media and sharing.

Brand safety technology can’t offer a 100% guarantee. There will always be a new page that requires categorisation or a page that has been changed and needs re-scoring. What brand safety technology can do is mitigate the risk, say from 10.1% on networks to 0.01% risk. It’s a trade-off. Networks and exchanges bring the benefits of increased reach and lower CPMs, however, if the brand is totally risk adverse, you need to ask yourself if it has the right buying strategy to support its conservative approach.

What about the future? As well as seeing brand safety technology roll out across online video and mobile in-app advertising in the next 6 months, we will quickly see the debate evolve beyond simple content verification and towards a broader conversation around overall quality. Viewability and fraud detection will be added to the brand safety mix as advertisers demand better quality return for their digital spend. All of these quality metrics will inform planning and optimization decisions in the near future.
Programmatic Reserve
Programmatic reserve is a natural extension of the tremendous success both publishers and advertisers experienced with programmatic trading in the open RTB markets. Seeking to gain the efficiencies of automated trading, buyers and sellers are calling for solutions that enable them to trade premium inventory among select partners, with strong controls to ensure premium revenues and brand safety, while preventing channel conflict.
Programmatic reserve seeks to push programmatic marketing beyond trading inventory perceived as “low-value” or “remnant.” It is a hybrid of direct deals and programmatic trading, where terms are pre-negotiated and contracts are signed, but campaigns are executed programmatically, meaning the advertiser still purchases inventory one impression at a time.

### Buying models or transaction types

Since direct deals are often customised, both publishers and advertisers realised they needed flexible buying models for programmatic reserve deals. While the ad exchanges have different names for these buying models, the IAB has grouped them into three buckets: automated guaranteed, unreserved fixed-rate and invitation-only auctions.

Buying models are differentiated by how the price is set (fixed or auction) as well as how inventory is transacted (one to one, one to few, or one to all).

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<tr>
<th>Buying Model</th>
<th>Description</th>
<th>Other Names</th>
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| Automated Guaranteed         | These transactions involve reserved inventory that’s sold at a pre-negotiated fixed price, and occur between one buyer and one seller. Automated Guaranteed campaigns are essentially direct deals that are executed programmatically, meaning inventory is purchased one impression at a time. | Programmatic Guaranteed  
Programmatic Premium  
Programmatic Direct  
Programmatic Reserve |
| Unreserved Fix Rate          | These transactions involve unreserved inventory sold at a pre-negotiated fixed rate. These transaction occur between one buyer and one seller. This buying model is chosen when advertisers are looking for a specific type of user for a campaign, such as a particular demographic. This model gives the buyer first dibs on desired impressions, and the fixed price helps publishers protect their yield. | Preferred Deals  
Private Access  
Right of First Refusal |
| Invitation-Only Auctions     | These transactions involve unreserved inventory sold at auction based prices (i.e. the buyer that bids the most wins). Typically, invitation - only transactions involved one seller and a handful of buyers. This buying model is often chosen when advertisers want to selectively purchase premium inventory and publishers want to place limits on who may access inventory. | Private Marketplaces  
Private Exchanges  
Private Auctions  
Closed Auctions  
Private Access |
Prioritisation in the ad server
At any given time, publishers have hundreds of direct and programmatic reserve campaigns running simultaneously. When impressions become available, the publisher’s ad server must decide how to prioritise all active programmatic reserve and direct-deal campaigns.

Of the programmatic reserve transactions, Automated Guaranteed deals have top priority and are equal to direct deals. Unreserved Fixed Rate, and Invitation-only Auctions are prioritised based on the monetisation opportunities they represent, although publishers may opt to give select buyers priority access in first-look deals.

Tracking programmatic reserve campaigns
Programmatic reserve campaigns are tracked via Deal IDs, which uniquely identify an arrangement for exchanging digital inventory agreed to beforehand between a buyer and a seller. The presence of a Deal ID in a bid request enables the seller to recognise it as one originating from a demand source with which it has pre-negotiated arrangement and treat it according to the contract terms.

Will programmatic reserve become a significant trend?
A joint OpenX/Digiday survey, titled Programmatic + Premium, verified that both publishers and buyers are already committed to programmatic trading and that programmatic trading of premium inventory has significant appeal to both the buy and sell sides of the digital advertising ecosystem.

The research revealed that more than 70% of the advertisers and publishers surveyed are currently trading programmatically and predict double-digit revenue growth this coming year.

Of those buyers already trading programmatically, 77% plan to buy additional inventory in the coming year. Both publishers and advertisers understand the benefits of programmatic trading and how it can be used for premium inventory with 18% of surveyed advertisers already buying premium inventory exclusively while only 3% of their publisher counterparts are exclusively selling it. In fact, many publishers believe that programmatic trading provides solutions to the common inefficiencies found in the traditional direct sales process, including: replacing the insertion order workflow, billing and reconciliation, optimisation and trafficking.

Summary
Programmatic reserve merges the best of two worlds: the exclusive nature of direct deals with the efficiency of programmatic trading. The model provides the price controls publishers need to protect their premium inventory in the real-time markets. Although buying models differ by name, these are the three transaction types that offer both publishers and advertisers tremendous flexibility for trading premium inventory programmatically.
Rise of Brand
Over the past 18 months there has been a dramatic shift in the amount of brand pounds being spent in digital. According to the IAB/ PwC UK Digital Adspend Study 2013, brand budgets online have almost doubled over the past 5 years. In 2009, 10% of total online spend was attributed to brand advertising rising to 17% in 2013. Budgets are not being transferred from TV to digital, in fact TV budgets continue to increase. The shift is coming from within the digital channel itself.
Why is this?

Ultimately a shift has taken place in the mind-set of brand marketers. The focus has shifted from buying publisher placements in the hope of reaching your audience, to audience guarantee buys. This is not only a first in digital, but in advertising. Marketers realise that the importance of digital buys does not rest on content alone but with the consumer. It’s the who, not the where.

Even with advanced data segments and targeting, marketers today are only reaching about half of their target audiences, not because they are not available, but because when accuracy of this audience targeting is measured it is proving to not be as accurate as one might hope. According to a study by Nielsen (OCR Norms (zone 4), over 60% of online ads are delivered outside the brand advertiser’s target audience.

Finding the best placement is more difficult given the growing complexity of devices, formats and content modules.

As investment in digital brand grows, brands must evolve their understanding of the digital KPI, especially in relation to offline media channels where the majority of branding budgets are spent.

Therefore brand campaign success in the RTA space must consider these challenges by incorporating 4 key elements of success:

1. Reaching your true target audience.
2. Discovering the right opportunity to generate that moment of influence.
3. Creating that moment of impact in a brand safe environment.
4. Driving real results that echo client-led ROI principles.

The brand formats that are now available are also instrumental in the adoption of programmatic brand. Significant volumes of rich media placements are now available through programmatic channels using the IAB Rising Stars standardised placements. The improved interaction rates and proven enhancement to brand recollection are compelling when coupled with scalability, targeting effectiveness and precise KPI measurement.
Another key reason for the rise in brand spend is simplicity and insight. No longer do brand marketers have to wait until the end of a brand campaign to analyse its effectiveness. This insight is given in real-time, and more importantly optimised in real-time. Through programmatic advertising it is possible to see the impact of a brand campaign on brand consideration. This insight is acted upon in real-time.

**Measuring Effectiveness**

In order to measure effectiveness of programmatic brand activity, another shift in mindset also needs to take place; that of measurement. Marketers need to focus on brand KPIs and look at the uplift in brand consideration, not clicks. As far back as 2011, Nielsen’s Beyond Clicks and Impressions Study demonstrated that there is no correlation between clicks and brand metrics or offline sales. And yet still brand marketers are clinging to the click-through-rate as a measurement of success.

When it comes to targeting, brand marketers will continue to focus on specific audience groups. Historically the ability to deliver to these groups has relied on the audience analysis of individual publishers and/or the quality of third party data segmentation. Nielsen Online Campaign Ratings and Comscore Validated Campaign Essentials individual analysis has shown the relative inaccuracy of these approaches. The programmatic space has enabled those with the ability to ingest and utilise big data to improve upon this situation using advanced algorithmic approaches to building audiences that match with measurement by these 3rd parties.

**Conclusion**

The creative brain will continue to be a key KPI in programmatic branding activity. It is most critical here that we ensure that we do not lose the human touch. The evolution that we are witnessing in digital advertising will create an expectation in the future for other brand channels. Measurement and accuracy will be needed in TV, radio and other brand engaging media. Ultimately, the digital evolution will be transferred to traditional channels, resulting in the expansion of the digital footprint.

Rocket Fuel data showing there is no correlation between campaign CTR and conversion lift
Choosing Your Partners
If you’re considering programmatic for the first time - or extending it deeper into your marketing strategies - you’ll find no shortage of vendors offering programmatic services. The best way to plan your entry is to ask specific questions on how programmatic marketing can benefit your organisation and advance your company goals. There are several points to cover so this chapter is split into four key categories to help you choose the right partner for your business.

By Martin Brown
Managing Director UK & Nordics, DataXu
The Ability to Engage the Entire Customer Journey

The new customer journey is increasingly digital and occurring across a set of devices and touch points new to many marketers. But technology is making it easier to measure and market along that journey. The real-time markets offer large volumes of display, rich media, video, mobile, tablet and social media inventory so you can execute cross-channel programmatic campaigns at scale.

Channel silos make no sense in this programmatic era and dictating how much to spend in each channel, regardless of performance, hinders campaign ROI. Your customers don’t stick to one channel, and your advertising shouldn’t either. Omni-channel programmatic platforms have the added benefit of “normalising” disparate data so you can determine the best allocation of spend by channel.

Customer Journey
- Engages buyers on every device

Cross Media Plan
- Applies decisioning to RTB, private exchange & direct buys

Transparency
- Offers clear view into price, tactics, placement

Expertise
- Services team educates, help execute & innovate
Activating your Data across the entire Media Plan

Programmatic marketing has expanded from its origins of remnant inventory sold on an impression-by-impression basis. Today, private exchanges give pre-approved brands the right to bid on select cuts of premium publisher inventory. Moreover, programmatic has expanded into adding algorithmic decisioning to guaranteed ‘direct’ deals.

Many premium publishers are embracing programmatic as a way to monetise unsold inventory, so you can find brand-safe inventory in open ad exchanges. Platforms should offer buyer controls to let you define quality, and only purchase inventory that meets your criteria.

Path Analysis

Customers follow different paths to conversion, using different channels, and/or being influenced by different creative pieces.

Activating your Data across the entire Media Plan

In some ways, programmatic is adding complexity to the ecosystem, but the fundamentals of advertising remain the same: to reach and engage consumers in meaningful and relevant ways. Each type of media buying offers unique benefits, but one advantage of doing all under one roof is that your data is more useful when aggregated. Your programmatic partner should be able to execute not just your open exchange buys, but also your private exchange and guaranteed buys.
Choosing Your Partners

Transparency

Programmatic offers the promise of transparency but unless you know what to ask for, you aren’t guaranteed to get it. Transparency breaks down into four types:

- **Price transparency** - Get a clear understanding of the price and quantity of what your vendors are buying (impressions, data etc). You can then determine what percent of your budget becomes working media.

- **Tactical transparency** - Know which campaign tactics, such as retargeting or prospecting, are spending, performing and scaling. Marketers should not just know that their campaign is performing, but why it’s performing.

- **Management transparency** - Request confirmation that the campaign setup and targeting requirements are being met. True programmatic platforms will have a user interface they can show.

- **Media transparency** - Find out where your digital ads are being served and who is engaging with them. Ask your partner for full domain or site-level reporting that includes impression, click and action counts.

A good partner will offer them all.
Choosing Your Partners

Finding Programmatic Expertise

Recent IAB Europe research revealed that 25% of European marketers are still unaware of programmatic marketing. The need for more market education is clear and therefore technology vendors are often relied on as the experts, the trusted advisors.

When evaluating vendors, select a partner that has the support, training and service that you need to succeed. The importance of having local support – in your time zone – shouldn’t be overlooked. This is especially critical for those marketers looking to bring programmatic in-house. Ask your partner about the training they provide if you want to move from a managed service to a self-serve model.

The Need to Innovate

Programmatic marketing is not even ten years old and has undergone dramatic changes. In such a fast moving industry, brands and vendors can work together to create unique solutions that drive the whole industry forward. It’s not just about what partners can do today but what they can build tomorrow. As a final check, make sure your technology partner is investing in the future. You can even ask them how much they’re spending on R&D.

Look for integrated programmatic platforms that run across all the various channels, ad formats, devices and modes of buying. The right technology partnership can radically transform your business. Good luck!
8

Insights Not Data
Programmatic technology is only as good as the data it consumes. Solid insights start with a healthy diet of the right kind of connected data.

Marketers must make sure they are feeding their tech a balanced data diet in order to get the best results. Business intelligence, such as connected CRM capabilities, will help them make the most of their valuable data assets.
Realising the full potential of programmatic relies upon having a 360-degree view of the customer - understanding customers’ needs and anticipating their wants in order to best engage with them across every channel. Marketers need to use multiple data sources to build up a more detailed picture about current and new customers.
Feeding your tech a balanced data diet

To begin, let’s consider the types of data available: first-party data, third-party data and real-time data.

Of these, the most valuable is a brand’s own first-party data, which often takes the form of customer relationship management (CRM) data. This is information from diverse sources: from past-purchase history and onsite behavioural data to loyalty programme participation - ideal for accessing shoppers found in the lower purchase funnel, on the verge of conversion, or those who have made a purchase in the past.

Third-party data supplies elements useful in composing a picture of prospective audiences or when seeking to create ‘lookalikes’ of existing customers. Third-party data boosts reach campaigns, which supply the funnel with new traffic allowing advertisers to enjoy an influx of new customers.

While the previous data types utilise historical customer behaviour, real-time data informs advertisers about the instantaneous actions of customers, such as whether or not they have exhibited an intent to purchase, this enables advertisers to react in real-time, delivering the right message at the most relevant time.

When we combine third-party data with real-time and first party CRM assets, we gain a connected and actionable perspective of the customer. This provides a unique way to differentiate customer experiences across different platforms.

This approach also helps us drive loyalty, a fundamental part of the full purchase funnel approach.
Personalisation driven by real-time insights

The personalised approach uses selective targeting strategies, which leverage all the available data sources, in order for brands to communicate on a one-to-one level with each of their customers.

Continuous data analysis makes it possible to build a sustainable strategy that continues to grow revenues, rather than stagnating after the low-hanging fruit is reached. Insights – produced out of this rich and perfect blend of all data sources – make it possible to continuously drive campaign performance. Advertisers can gauge performance with marketing attribution modelling or a/b measurement techniques to understand incremental impact and return on marketing investment.

Insight-based strategies begin by connecting data, such as bringing together attitudinal data and purchase and point of sale behaviour in order to understand whether the customer is receiving the right advertising. Identifying gaps can inform insight, as it can point to unfulfilled customer needs or, highlight a desire for more information or communication.

So how can marketers turn data into insights to achieve maximum campaign performance?

A case study from the UK

A recent campaign for a UK shoe retailer applied data-driven tactics to reach its diverse group of online shoppers with targeted and tailored messaging. Employing programmatic technologies for buying, pricing and messaging improved revenues by 94% compared with results generated by an incumbent strategy. In this customer-centric approach, the retailer defined specific strategies for each customer segment, setting different investment targets and messaging mechanisms for each.

This campaign - run over a five-week test period and compared against campaigns from incumbent programmatic partners - delivered 16% more conversions from existing customers as well as 100% more visits from new-to-site users, including an increase in first-time visitors converting into purchasing customers.
The following examples illustrate how this retailer created tailored strategies for three distinct customer segments:

1. **NEW CUSTOMERS**: Segment new customers based on data learned from their device – for example, tablet users tend to have a higher overall CLV (customer lifetime value), so these customers require higher investment over those browsing on any other non-tablet mobile device.

2. **EXISTING CUSTOMERS**: Adjust the bid prices submitted for advertising targeted at existing customers based on the time lapsed since previous purchase.

3. **LOYALTY**: Implement specialised retargeting campaigns for recent buyers, to encourage complementary purchases within a given timeframe.

Each segment represents a different value (programmatic price) for the advertiser, and thus, a different level of investment via real-time bidding (programmatic buying). Ultimately, the advertising delivered should be tailored to the customer’s interaction with the purchase funnel, with dynamic creative optimisation (programmatic messaging) being used to display the relevant message or product recommendation instantly.

Programmatic technology, real time data, connected CRM assets and machine learning will become essential tools of digital marketing, enabling the programmatic champions of tomorrow, to deliver superior customer engagement and long-term brand loyalty.
9

Attribution
“Half the money I spend on advertising is wasted; the trouble is I don’t know which half.” These were the words of John Wanamaker back in the 19th century, indicating that in the advertising industry attributing credit for sales to advertising has always been a significant challenge.
The route customers take from discovery of a product to purchase defines their path to conversion. This route may include many phases, including product research, and during each phase there is exposure to online advertising. Additionally, consumers typically follow different paths – which may not always seem logical. This makes it very difficult for advertisers to know what influenced consumers to engage with their particular brand.

Digital advertising has introduced new challenges and new opportunities in marketing attribution. Every touchpoint along a consumer’s path is measurable, allowing advertisers to identify the tactics that drive results, allocate budgets more effectively, and scale their best performing campaigns. However, not all attribution models provide the right incentives or measure the metrics that matter, leading to inefficient marketing optimisation.

Outlined in this chapter are various attribution methodologies commonly used in the industry.
First Touch
This gives full credit to the first click or view in the conversion funnel. Although this takes into consideration all upper funnel activity, due to the arbitrary nature of the time window, it can be difficult to measure exactly the influence an ad had on a conversion.

Last Touch
This gives full credit to the last click or view before the conversion. This can be problematic with more than one display partner on plan as they will serve impressions and fight for the last touch in an attempt to win the conversion. This can result in suboptimal budget reallocation. Today, many advertisers are still using last touch attribution, and while this may be beneficial for some tactics such as retargeting, it does not emphasise or measure the true value of prospecting, a tactic that provides new or incremental customers to a business.

Multi touch
More than one or all touchpoints in a conversion path get either an equal value or fractional weight. A multi-touch approach can help move beyond the limitations of last touch, but it typically requires additional investment to manage data collection and analysis.
**Linear**

Gives equal credit to all the touchpoints on the path to conversion. This approach recognises the value of upper funnel marketing efforts. The challenge is its complexity and the fact that it tends to reward high-volume, low-quality clicks or touches. Conversion paths with many touchpoints must allocate credit to each touch, even if they are not driving conversions.

**Time Decay**

Gives very little credit to the first touch; instead increases the level of reward the closer the touchpoint is to the conversion. While it makes sense intuitively to give more credit towards the conversion, this approach still dramatically favours retargeting and drives suboptimal budget reallocation.

**Position-Based Models**

Position-based models are frequently used. A typical example would be giving 40% of the credit to first touch, 40% to last touch, and taking the rest and dividing it equally among every touchpoint in between.
Media channels such as display, search, affiliate and social work together to drive sales and revenue; however, it is not best practice to arbitrarily assign a single attribution solution to work across all channels without considering the goal in hand and the mechanics of the channels. To truly measure the value of the entire path to conversion, including both prospecting and retargeting, it is important for advertisers to recognise the significance of the first time a consumer visits their website (first site visit) on their journey to a conversion. The first site visit represents a signal of intent and the moment where prospecting ends and retargeting begins, thereby providing a true separation of these tactics. Measuring how many consumers were reached with display ads before they visited a particular website and how many of these users then visited and ultimately converted shows the incremental nature of a brand’s prospecting efforts. Commonly, the conversion itself is the primary goal, closely followed by a desire to attract new customers. In this case, site visits can be a powerful second signal to measure, over and above the conversion.

Split funnel attribution (SFA) is a methodology for display campaigns, where credit is divided between upper and lower funnel activities. This balances prospecting and retargeting efforts and can be used to enhance all the multi-channel attribution models outlined above. It allows advertisers to optimise their campaigns by purposefully distributing the weight for upper (awareness and consideration) and lower funnel (intent and conversion) tactics connected to a conversion. This methodology has been pioneered by Quantcast, and many brands and agencies have implemented SFA and gained deeper insight into their campaign performance.

Although attribution presents a challenge for advertisers, implementing the right strategy provides an opportunity to significantly improve the performance of digital marketing campaigns. There are several approaches to choose from, and each has its benefits and challenges. As more digital advertisers utilise more channels and tactics in their strategy to reach consumers and grow sales, it’s important to understand the growing relationship between those channels and what works best for a particular brand.
Mobile
The shift to mobile devices by consumers is now well accepted and many key web publishers are experiencing a ‘crossover’ moment - the point at which their users and visits on mobile surpass those on desktop devices. Whilst the pace of mobile advertising innovation and adoption has lagged behind the shift in users, mobile is fast becoming an integral part of advertiser budgets and the proliferation of programmatic technologies has both simplified and complicated the growth of mobile spend.

By Mick Loizou
Senior Manager Mobile & Video Solutions EMEA, Yahoo
Some of this complexity is driven by the multitude of technology platforms and fragmentation of the ecosystem – advertisers will use a specialist DSP for mobile and a ‘traditional’ DSP for desktop. However, simplification is underway thanks to two drivers - native advertising units and a required single view of the customer. Each of these are powering the growth in mobile programmatic and pushing the industry to a point where putting mobile in a silo and treating it differently to desktop is unnecessary and potentially detrimental longer term.

**Going Native - Programmatic ad assembly and automated multi-screen**

Scale in mobile is being driven by the migration of social media to a mobile first channel and native advertising in the social feed is one way to reach vast audiences. However, mobile eyeballs are more than just the social stream and advertisers want to diversify the portfolio of native units beyond social media and this will likely be done programmatically. At first glance, there is seemingly an obstacle - native advertising is by virtue non-standard. There is not a one-size fits all model for every site or app yet the individual components required to build a native unit are more standardized than they would first appear: images and snippets of text. These units can be combined and assembled programmatically by a publisher in any number of combinations to blend seamlessly into the environment creating more efficiency across devices and creating a model where the advertiser no longer has to silo his campaign. We have done this for years in Search, arguably the first ‘native ad’.
Large publishers are already offering self-serve access into their native marketplaces and advertisers can already re-purpose the units created on one for the other. Furthermore, API access points for advertisers are accelerating the ease of bookings across the native ecosystem. On the publisher side, tools are being created so that publishers can simply inject customizable native units on their properties by rendering the standardized text and image units in unique ways.

As advertisers adopt native they should think about the following:

- How can I reach audiences across screens? Can I unify the targeting I do on display banners with the targeting I do on native?
- Are personalization algorithms increasing my relevance for the user?

Likewise, a publisher should think about the depth of demand which the technology partner can provide:

- Does the partner provide access to brand-based demand, direct response demand and search demand?
- Which technology partner can also apply data on all screens to increase relevance for the end-consumer?

Typical components of a native ad:

- Thumbnail Image
- Large Image
- Advertiser Name
- Title/Headline
- Description

Whether an in-stream ad on social media, a sponsored search ad, a recommendation link or a content tile, at least two of the five assets provided by the advertiser are assembled into an advertising unit.
Data consolidation and the drive to produce a single customer view.

The desire for automation is likely to be the catalyst to help drive 3-Screen advertising across mobile, desktop and tablet further but so far the barrier has been a lack of a unified customer view. However, time is being invested in consolidating the disparate user signals on mobile devices into unified device views and then going one step further to develop a unified customer view.

Stage one in this process is for the technologies to bridge the gulf between mobile-web and mobile apps which have different identification methods (see table). This is frequently being done using probabilistic recognition technology which combines data signals from the device’s location, browser and time-zone to statistically form a united view of the device.

<table>
<thead>
<tr>
<th>Tracking Method</th>
<th>Platform</th>
<th>Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDFA</td>
<td>IOS</td>
<td>Mobile Apps</td>
</tr>
<tr>
<td>Google Advertiser ID</td>
<td>Android</td>
<td>Mobile Apps</td>
</tr>
<tr>
<td>Pixels/Cookies</td>
<td>Smartphone, Desktop and Tablets (3rd Party Cookies restricted by default on Safari)</td>
<td>Browsers</td>
</tr>
<tr>
<td>Probabilistic Recognition (Location, Browser &amp; Time Signals)</td>
<td>All Devices</td>
<td>Apps and Browsers</td>
</tr>
<tr>
<td>Logged-In User ID</td>
<td>All Devices</td>
<td>Apps and Browsers</td>
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</tbody>
</table>
Stage two is to make the leap to correlate the user signals across devices. This is far more challenging but publishers with logged-in users across all screens are best positioned to make this leap. These publishers have a long history of associating data points to a logged-in user ID rather than to cookies and as such, have been solving for the device fragmentation challenges from the outset. These same publishers have the opportunity to evolve into tech providers and unlock these capabilities for the wider publisher community.

Unified 3-screen solutions will drive significant upside and an area of focus for marketers should be exploring which technologies will best help to unify spend and unify the insights about their customer bases.
Programmatic Video
Video advertising is the latest beneficiary of the trend towards programmatic trading. In fact 16% of the total desktop online video market (£250m) in 2013 was already traded programmatically, with this share set to grow explosively in the next few years.

By Paul Mears
Ad Exchange Video Lead (Northern & Central Europe), Google
and Robert Curwen
Video Specialist (Northern & Central Europe), Google

Source: MTM / IAB Programmatic Trading Survey 2014
Programmatic marketing in the context of video is no different to any other media channel. The goal is to automate the media buying/selling workflow and enrich advertising decisions with audience data. However, video does indeed have many nuances that set it apart.

**Scarcity of “Premium” Inventory**

The origins of programmatic ‘display’ ads can be traced back to over-supply. Remnant or unsold ad impressions were abundant and traded in ad exchanges. ‘Video’ ad impressions, on the other hand, are scarce. Particularly ad placements around the most ‘premium’ video content (high production values, longer form). To date much of this ‘premium’ video ad inventory has been traded upfront via direct sales or ad networks. However, as with display, many in the industry expect to see wide scale adoption of programmatic direct/private marketplace deals in the future.

- **59%** Direct Sales
- **25%** Programmatic direct
- **14%** Private marketplaces
- **2%** Networks
- **14%** Open RTB exchanges

*Source: MTM Programmatic Advertising Report (Prepared for the IAB UK)*
Futures vs spot markets

The television advertising market requires large upfront investment to support the equally large upfront investment in content made by TV companies. After all, each episode of Game of Thrones costs £3.5m to make! The same principles of upfront direct sales were initially carried through into online video but increasingly we are seeing programmatic software being used to automate the trading workflow between agencies and media owners. This does not necessarily mean trading impressions via Real Time Bidding (RTB). Programmatic software needs to automate all of the trading models from RTB to upfront reservations.

Measurement challenges

1. A common currency

The digital advertising industry’s long-time pursuit of “brand budgets” has often stalled around the ability to measure and verify audiences on a like-for-like basis with offline media. This is particularly pertinent when it comes to online video and the inevitable comparison with TV. To this end, programmatic video buying platforms like Doubleclick Bid Manager, TubeMogul, Adap.tv and Videology have integrated the established Gross Rating Point (GRP) methodologies: Nielsen Online Campaign Ratings (OCR) and Comscore Validated Campaign Essentials (vCE). Thus advertisers are now able to plan towards a common currency.

2. Fraudulent views

Unfortunately, the higher CPMs of online video have attracted some fraudulent activity of late, for example, where schemes aim to create “fake views” via a number of methods. These range from non-human traffic (bots), to hiding the video player outside of page margins or even resizing it to a single pixel. These views are disguised by muting the ad and allowing it to auto-roll. As ever the industry is working hard to build software that detects and blocks this type of activity.

3. Viewability

While viewability has already been covered in this handbook, it is important to also call it out in respect to video. A viewable video impression is defined by the IAB in the US as 50% of the pixels of a video ad, visible within an active browser window, and played for 2 continuous seconds. Two metrics should matter to marketers here:

   (1) the percentage of ads that were measurable

   (2) the percentage of viewable impressions out of the measurable total.
Programmatic video ad formats

One of the advantages of video advertising is the interactive possibilities that digital provides. All of the below formats can already be traded programmatically:

- **In-Stream** - Pre/mid/post-roll advertising within a video player
- **Skippable** - As above but a skippable ad format (popular on YouTube)
- **VPAID** - Interactive In-Stream ads.
- **In-Banner Video** - A video ad served within a display placement i.e. 300x250
- **Overlays** - A display ad that typically appears at the bottom of a video player
The future: Broadcast and linear TV

Programmatically traded video advertising generally runs across online media owners at present, rather than the broadcaster VOD players, who still trade directly in most cases. The broadcasters hold themselves to high regulatory standards, governed by the CAP Code which has so far meant that third party VAST ad-serving has not provided the necessary level of control that the broadcasters require. The IAB and Clearcast are working together to define a system to address this.

When it comes to linear, scheduled TV, Sky’s AdSmart system (the ability to show different advertisements to different households) is one of the biggest innovations in UK television advertising for many years. Despite this, we are still some way from dynamically inserting ads into linear TV, in real-time. Putting aside the economic models of TV advertising for one moment, the infrastructure and technology required to deliver this is substantial and lies with cable, satellite and set-top box providers. It is likely that early forays into dynamic ad insertion will come from Smart TV’s connected to the internet and OTT (over the top) services such as Xbox, Playstation, Apple TV, Chromecast, Roku.

One thing is certain, the world of programmatic trading and TV advertising are on a collision course. The timelines are still uncertain but the opportunities for marketers to turbo-charge their TV buying will have a profound effect on the industry in years to come.
The production of this handbook has been made possible by the Display Trading Council. Its members have produced the majority of the content and sponsored its production.

The council’s mission is to grow the display market by providing clarity and helping the digital industry understand the benefits and strengths of display media trading.

For more information or to participate in the council please contact david@iabuk.net or visit www.iabuk.net/display-trading

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