MEDIA MARKETS EVOLVED

Unlock the Power of Ad Futures Trading

This guide provides brands, agencies and investors with the key facts you need to know about ad futures trading, its power and how to evolve now.

By Carolina Abenante & Mark Grinbaum Founders of NYIAX

©2021

The ad market is among the last to evolve to futures. We're not reinventing the wheel; we're driving it forward.

In 2020, the explosive spread of the Coronavirus had a major impact on all markets. In the advertising market, more than $50 billion in spending vanished before our eyes.Overnight, brands, agencies, and technology partners faced intense pressure to do more for less.

"While digital transformation had been significantly maturing in the ad markets for a decade, the pressure of the pandemic poured fuel on the fire, accelerating change like never before." — Vin Paolozzi, Chief Investment Officer, Kinesso, IPG

Commodities Markets Mitigate Risk and Unlock Future Asset Value

Commodities markets have existed for millennia as a means to exchange goods and raw materials. In the 16th century, Dutch traders began to pioneer new financial products such as futures and options in order to trade more efficiently, mitigate risk , and develop new profit models by unlocking future asset value.

Futures contract value prop: mitigate market price volatility by selling future commodities at a fixed price today, with a firm obligation of asset delivery at the contract's end date.

How Is Futures Trading Relevant to the Ad Market? Upfront Advertising is a Less Sophisticated Predecessor.

Futures trading has a clear parallel with the advertising upfronts, and to some extent the direct buying process. In both instances, buyers and sellers lock in an expectation of price for a forecasted volume of inventory needed for a campaign at a future date. These models provide price protection against the roughly equivalent spot market price of RTB. But the lack of purchase obligation (especially with digital direct buys) limits risk mitigation capabilities while denying the advertising marketplace the benefits of trading.

An advertising futures trading market is also a win for transparency and compliance. Currently, only half of the advertising spend reaches publishers, and 15 percent of that total spend cannot be traced, according to an ISBA study of the programmatic supply chain conducted by PwC. As a result, advertisers waste countless hours collecting data only to find that one-third of supply chain costs are ultimately unattributable due to a lack of transparency. The ISBA report called for contract reform, but ultimately, contract reform can only work in conjunction with market reform.

Futures markets facilitate price discovery by understanding the underlying information necessary to value a commodity. As a result, the marketplace is more transparent because relevant data points like price, commodity type, delivery date, etc. are made equally available to all stakeholders. In turn, that information can feed an automated process, reducing the cost, time, and headache of compliance after a campaign has run. In this way, an advertising futures trading market pays for itself.

It Feels Risky. What Should I Know?

Risk & Obligation

When commodity creators list their assets on a spot market, they are at the mercy of supply and demand at the moment they go to market. The challenge is that commodities take time to produce. That creates an inherent risk for sellers, who must predict a future price before creating the commodity. Obligation contracts provide the seller with enough details to determine whether the commodity is worth creating, and what their likely return on investment will be once the contract is fulfilled.

Commodity buyers also have risk. One risk is a matter of price and scarcity. If everyone is looking for the same commodity at the same time, the price will continue to increase as availability decreases. By entering into a futures contract with an obligation, the risk of an unknown price and lack of availability is removed, but secondary risks of overpaying and excess supply are introduced. To combat these secondary risks, the function of re-trading (selling a position prior to delivery) and options contracts exist. Not only do these mitigate risk, they create new revenue opportunities for buyers.

Digital publishers continue to see increased competition as new forms of similar content are created. As a result, the risk of decreased prices requires quality publishers to differentiate by producing more unique and engaging content. By understanding buyer interest in advance, and identifying a price point, publishers can decide to invest in the creation of specific content to meet the needs of a contract that will yield known revenue. But the obligation of delivery also allows the contract itself to be leveraged in different ways. For example: a seller can take a loan against the contract, providing the capital to generate the commodity they're obligated to fulfill at the contract's end.

Buyers, whether they're advertisers, agencies, DSPs, or technology vendors, can lock in price and availability in order to help them plan. They can also leverage a purchased future's contract to give other buyers an opportunity to buy a portion of the contract, the entire contract, or even a non-obligated option for a portion of the contract.

Scarcity, Value, and Price Fluctuation

On a spot market, shifts in supply or demand for a commodity—whether sudden or seasonal—cause prices to fluctuate. A futures market benefits both buyers and sellers, but in different ways.

- Buyers can plan for seasonal fluctuations and invest accordingly
- Sellers benefit from the stability that comes from being able to project sales.

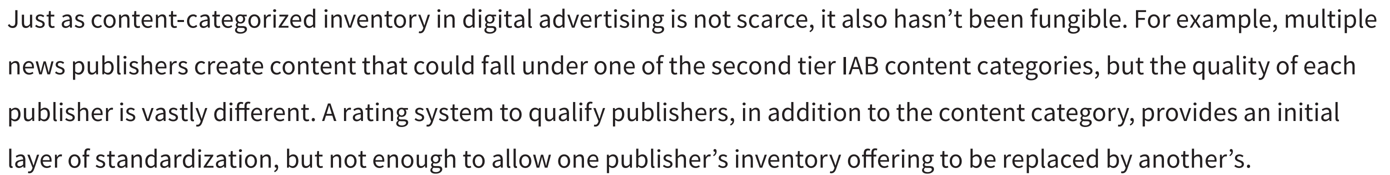
Data from the spot market informs the futures market, and vice versa, empowering buyers and sellers to make informed decisions around pricing and buying/selling behaviors for both markets. Put simply, spot and futures markets function together to manage scarcity, regardless of whether that scarcity comes from the supply-side or demand-side.

In digital advertising markets, scarcity is very difficult to manage because publishers produce content and space at a staggering volume. As a result, even when publishers take measures to increase quality, the lack of scarcity devalues inventory. In contrast, OTT and long-form video have high production costs that restrict creation. That scarcity is why both linear TV and OTT continue to garner such high CPMs and sell the majority of space through upfront deals. Unfortunately, these upfront buys do not have an ability to be resold, in part because of the contract structure, and partly because the asset being bought/sold isn't "fungible," meaning advertisers prefer specific linear TV and OTT inventory, as opposed to any inventory of that type.

Fungibility & Industry Standards

For a commodity to be consistently traded and re-traded (sold prior to delivery) each unit of the commodity must be similar enough that one could be replaced with another, without any concern of quality or material change. This is called "fungibility," and it's key for long-term planning because it gives sellers the certainty they need to create inventory, while providing buyers the flexibility to sell out of positions, prior to delivery, as demand fluctuates.

To enforce fungibility, exchanges define the requirements for each commodity and establish industry standards that are adhered to by all market participants. As a result, all parties to the contract, regardless of whether there is an obligation to deliver, understand the makeup of the commodity and can thus re-trade it, in whole or in part, over and over again.



Just as content-categorized inventory in digital advertising is not scarce, it also hasn't been fungible. For example, multiple news publishers create content that could fall under one of the second tier IAB content categories, but the quality of each publisher is vastly different. A rating system to qualify publishers, in addition to the content category, provides an initial layer of standardization, but not enough to allow one publisher's inventory offering to be replaced by another's.

One solution is to drill down into the specifics of every conceivable attribute utilized in the delivery of a campaign:

- Targeting details, such as age, gender, household income, and location.
- Ad serving details such as media type, creative type, ad unit size, and more.
- Delivery details such as pacing, priority, viewability thresholds, and third-party verification services.
- And of course, the list goes on, and on, and on...

Implementing such a complete standard provides the most robust model for a future contract, where customization and controls during the contract process are most important. But the benefits extend beyond the contract process to include the downstream activities of delivery verification and accounting.

A recent DoubleVerify study found that half of all publishers face delayed payments because of manual reconciliation processes. In turn, 73 percent of publishers cited those same manual processes as the reason for delayed performance reporting, while 80 percent of publishers say too much time spent processing data limits their ability to optimize inventory performance. In fact, one out of every three publishers cite the difficulty of synchronizing buyers and sellers as the number one challenge that undermines campaigns from start to finish.

...73% of publishers cited those same manual processes as the reason for delayed performance reporting, while 80% of publishers say too much time spent processing data limits their ability to optimize inventory performance...

Automating manual operations functions can save time and money for both buyers and sellers. To free account managers from routine, manual work, all of the contract details can be encoded in such a way that automated systems can link delivery data to the contract, perform reconciliation against the contract, and perform the necessary accounting functions of contract settlement. Over time, this evolution will lead to greater trust in the ecosystem and spark a virtuous cycle that will bring more dollars into the space.

Unfortunately, the very large number of attributes creates difficulties if parties try to bundle contracts together, or re-trade a contract to another buyer. This is because the large number of potential attribute combinations results in unique contracts, which while useful for the primary buyer and seller, are likely too narrow in focus or different from the desired attribute set of another buyer. If the commodity cannot be easily re-traded, even if it is standardized, the secondary risk factors of overpaying and excess inventory result in limited benefits for buyers to utilize contracts with obligations.

A way to overcome the problem of the large number of unique attribute combinations is to utilize a more concise taxonomy that still meets the needs of digital advertising buyers and sellers by separating delivery attributes from the contract. That reduces the number of unique combinations, while increasing fungibility and the likelihood of re-trading. But separating delivery while still maintaining a content category taxonomy does not generate scarcity.

How to Generate Scarcity: Audience Segment Commoditization

Because publisher content and ad units are relatively easy to generate, inventory is plentiful. But audiences, especially qualified audiences, are much more scarce. By defining digital advertising commodities based on audience segments, regardless of the publisher or the content, the issues related to a lack of scarcity and fungibility are greatly reduced.

Audience based buying is primarily performed in the RTB spot market. Existing custom audience segments based on seed data and look-a-like targeting groups do not lend themselves to obligation contracts between agencies and individual publishers because it's difficult to project which sites a given segment will visit in the future. But it's important to recognize that every user held within a custom audience segment most likely also falls into a standardized audience segment assembled by an existing segment provider.

If a standardized audience segment is traded as a futures contract, and the match is identified between the standardized segment and the custom segment, then the benefits of futures grows exponentially. It's even possible for buyers to de-risk price on scarce inventory, while adding the ability to leverage the contract for further risk reduction and trading possibilities.

RTB as a means for contract obligation fulfillment

Utilizing the existing RTB infrastructure for delivery against futures and options contracts is beneficial in multiple ways.

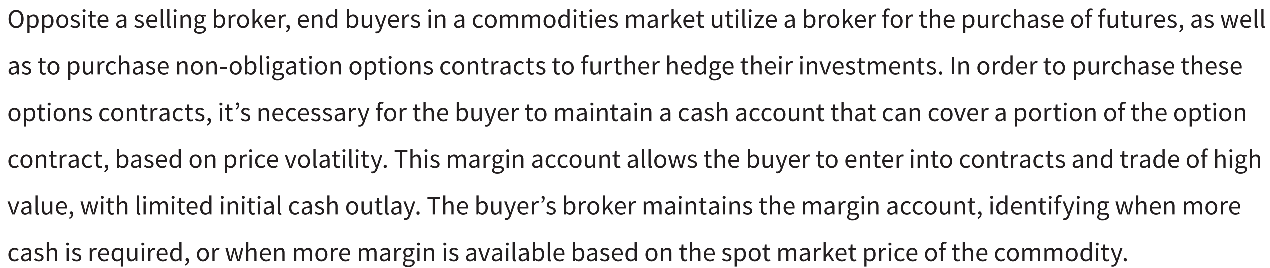
- Trust: Using an existing and well tested delivery model speed adoption, accelerating the benefits that forwards and futures can bring to the industry.
- Adaptability: Since the identity solutions necessary to allow RTB to function are, and will continue to be, linked to standardized audience segments in some form, any changes or developments in regard to delivery methods (including a complete overhaul in response to cookie-less environments) would have little to no effect on the audience-segment futures and options market.
- Liquidity: Connecting a futures and options market with RTB delivery provides the instant liquidity of a spot market. This allows sellers to fulfill inventory obligations by meeting a specific audience segment commodity at the market rate, if they're unable to generate the now-standardized inventory themselves. This also provides further protections for buyers by reducing the risk of under-delivery.

RTB Services and Commodities Market Participants

Publishers, Supply Side Platforms (SSPs), Demand Side Platforms (DSPs), agencies, and brands, each have a function and an opportunity within a futures and options market. Just as banks raise capital to issue loans and consumers depend on the stable and continuous supply of mortgages to purchase and sell homes, publishers and brands have their obvious place. But the roles of commodities brokers such as SSPs, DSPs, and agencies, while not as obvious, are just as important.

A bank could list its planned mortgage portfolio volume on the market, but then it would be obligated to perform buying at market rates should they fail to deliver in full. This activity not only takes away from their primary activity of lending, it also requires capital to cover any required spot market buys. That's why banks work with financial intermediaries to generate and maintain the futures contracts, as well as options on futures contracts.

A publisher, or a publisher group, will have the same choice for an audience futures and options market, with an SSP fulfilling the role of the selling broker. By generating the futures contract for a publisher, the SSP can monitor the contract's delivery and perform any necessary spot market buys from other publishers for the same standardized audience segment. The SSPs can assist the publisher with forecasting inventory volumes and help identify the risk of under-delivery. In return, the publisher enters into flexible contracts that can be leveraged for immediate cash payments. Large publisher groups that have their own SSP functionality can go direct to market.



Opposite a selling broker, end buyers in a commodities market utilize a broker for the purchase of futures, as well as to purchase non-obligation options contracts to further hedge their investments. In order to purchase these options contracts, it's necessary for the buyer to maintain a cash account that can cover a portion of the option contract, based on price volatility. This margin account allows the buyer to enter into contracts and trade of high value, with limited initial cash outlay. The buyer's broker maintains the margin account, identifying when more cash is required, or when more margin is available based on the spot market price of the commodity.

Just as SSPs provide a version of a selling brokers services, DSPs are best suited to act as buying brokers on behalf of agencies or brands. Since DSPs hold the custom targeting segment details of a campaign and can receive the bid requests associated with a specific futures or options contract, tied to a standardized audience segment, they are in the unique position to perform the cross-comparison and identify whether or not a buyer they represent can benefit from the forwards & futures contract.

Since an individual user is likely associated with multiple standardized audience segments, as well as targeted in custom audience segments, the SSP can utilize the existing RTB protocols to identify all potential standardized audience segments for the user, and pass them to the DSPs which hold opposite contract positions. The DSPs in turn can use the existing RTB protocol to cross-compare the user and standardized segments with custom audience segments to determine which of the many future or options contracts would be cost effective and meet campaign targeting requirements, while also providing the most beneficial pricing.

Just as large publisher networks may choose to bypass an SSP due to their own tools, holding companies, or large enough brands with their own bidding capabilities, may choose to forgo a DSP and access the market directly. But for smaller agencies and brands, utilizing a DSP will be the most cost effective method.

Basics of Options Contracts

Options contracts on futures have been around for centuries. Today, most U.S. futures contracts have associated options contracts. It is important to understand that the options contract is a derivative of the underlying futures contract; the option acts as a right to buy or sell a portion of the futures contract, but it does not represent actual ownership until executed. Entering into an option requires the payment of a premium linked to a value of the commodity at the time of the contract, the strike price.

There are two types of options:

- A call option represents an offer to buy the asset at the strike price.
- A put option represents an offer to sell the asset at the strike price.

Since the option is a contract to perform a purchase or sale of the underlying commodity, the holder of the option can choose to either execute the contract, let the contract expire, or re-sell the contract at any time depending on value. This ability allows options to act as an inexpensive form of insurance for risk reduction against price changes and offers new revenue streams to futures contract buyers to offset their obligation costs.

Benefits for the Advertising Industry

Utilizing futures and options, based upon standardized audience segments, brings both financial and operational benefits to the digital advertising industry.

Futures contracts provide sellers with the ability to leverage fully obligated agreements to generate capital for growth, as well as the creation of content. .

Options contracts in conjunction with futures contracts allows buyers and re-sellers the ability to de-risk, and potentially profit from, their agreements. Through de-risking, more money can be shifted into media spend obligations, which continues the cycle of growth.

Operationally, digital advertising is unique in that an already existing delivery solution is in place to allow the rapid adoption of the futures and options market. Additionally, custom targeting segments, and the proprietary methods of creating those segments, can remain hidden behind the purchase of standardized audience segments.

Advertising is the largest global industry without futures and options markets. The lack of obligated contracts, while historically understandable, has limited the ability for market participants to convert projected spend into usable capital at cost effective prices. By utilizing digital advertising's RTB spot market, and network of SSPs and DSPs to ensure future and option contract performance, non-advertising industry participants can begin interacting and trading with traditional digital advertising participants.

As other industries have seen, activity from futures and options markets can spur rapid growth and decrease the cost of capital. That engine is especially advantageous to advertising at this particular moment given the industry-wide need to deploy new privacy-centric audience solutions that will serve as currency for clear value exchanges within a transparent marketplace. Put simply, now is the perfect time for advertising to evolve.

Contact NYIAX at
info@nyiax.com
to learn more about the benefits futures and options can bring to your business.

©2021