



RETHINKING LOCAL TV ADVERTISING WITH ATSC 3.0

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RETHINKING LOCAL TV ADVERTISING WITH ATSC 3.0

Executive Summary

The advertising community is becoming aware of the potential of Next Generation TV using the ATSC 3.0 standard. But so far, much of the discussion has been quite high-level. In this report we begin to dig a little deeper into what broadcasters, ad-tech, marketers and agencies are expecting to see, and how this new paradigm can drive value and revenue growth to the sector.

This report is a joint initiative of the National Association of Broadcasters (NAB) and BIA Advisory Services.

Introduction – Skip Pizzi, NAB



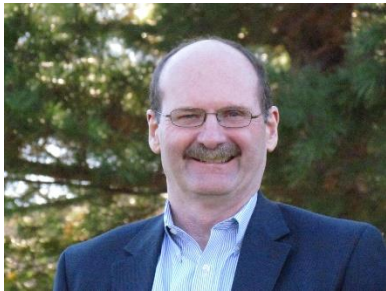
Much of the coverage around ATSC 3.0 (also known as Next Gen TV) focuses on technology, test beds, “model markets” and the promised benefits of Next Gen TV for audiences, advertisers and broadcasters. Beneath the headlines and talking points, the discussion gets a bit thin on specifics about how we need to be rethinking advertising use cases. Next Gen TV provides important new tools and processes for broadcasters and ad buyers to create new kinds of value propositions and audience experiences in local television advertising.

In this report, we do a deep dive into Next Gen TV advertising from the buy-side perspective, something we really don’t see much of. To get a sense of what’s already in place and where we need to go next as an industry, we’ve invited Rick Ducey, managing director, BIA Advisory Services; Sarah Foss, senior vice president of Strategic Initiatives, Freewheel Advertisers and George Leon, chief strategy officer, Hawthorne, a Los Angeles-based agency, to share their thinking in a group discussion that we presented here in a format edited for clarity.

Next Gen TV is becoming a force in the marketplace. The Federal Communications Commission (FCC) is accepting applications for broadcasters that want to get on the air with ATSC 3.0 on a voluntary, market-by-market basis. Several television groups are building out the technical infrastructure for the ATSC 3.0 platform, announcing that in 2020 they will launch Next Gen TV in at least 40 markets.

Broadcasters are moving beyond the technology buildout and into the business buildout at this point. They are also analyzing different business cases to help visualize what their returns on investment might look like. Since the local television industry’s revenue largely comes from advertising, that is the focus of this report.

ATSC 3.0 is a Powerful New Ad Platform – Rick Ducey, BIA



Rick Ducey is managing director at BIA Advisory Services.

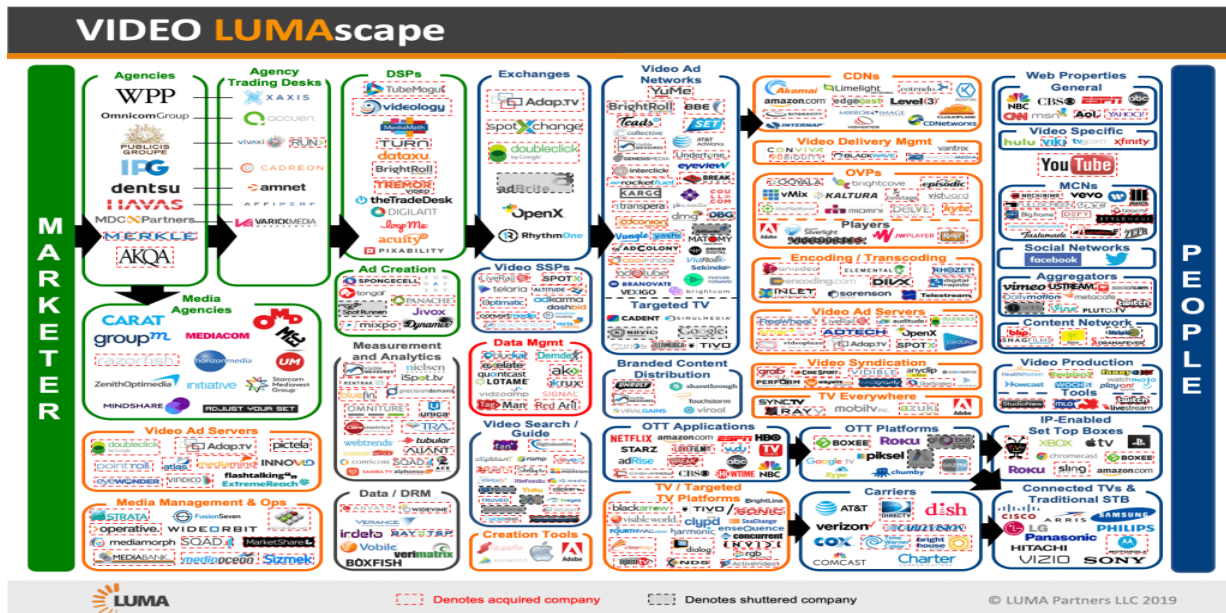
We encourage people to think about ATSC 3.0 as more than a digital or internet technology play. That's just table stakes these days. The technology community has done a fantastic job getting ATSC 3.0 to where it is today from a tech perspective and these important efforts continue. But the baton now passes to business executives in who must now lead the Next Gen TV evolution in the marketplace. As these initiatives begin to scale, we expect to see Next Gen TV become a much bigger story with more clearly defined business models and growth directions.

Next Gen TV's rollout is not like earlier television transitions to color, stereo or even digital (i.e., ATSC 1.0). Next Gen TV fundamentally resets some of the historical assumptions about what local television stations can or cannot do. Next Gen TV is a fundamentally new marketplace channel that interoperates with internet-connected devices and apps and operates equally well in mobile and fixed location settings with a full range of Next Gen TV capable devices. "Capable" in this context doesn't necessarily mean a device *equipped* with an ATSC 3.0 receiver.

A capable device here just means a device that either does have an ATSC 3.0 tuner or otherwise *connects* to a Next Gen TV receiver. These connector devices will have ATSC 3.0 tuners with media gateway devices that can connect smartphones, tablets, CTVs, desktops, game consoles or even connected cars to Next Gen TV services via Wi-Fi, Bluetooth or some other near field communication technology. With one ATSC 3.0 tuner in a car and 4G or 5G connectivity with in-car Wi-Fi, an entirely new set of possibilities emerges for information, entertainment and advertising use cases for Next Gen TV.

In Figure 1, we demonstrate the complexity of the video advertising ecosystem. For the most part, all these ecosystem players are connected by technology systems comprising internet and data architectures. With the advancement into Next Gen TV, local stations gain two distinguishing characteristics. First, local television becomes an internet-native ad platform. Second, Next Gen TV gives broadcasters an easier, but not easy, path to getting their own first-party audience data. Together, these two factors can accelerate revenue in the future if several other things come into play.

FIGURE 1. THE VIDEO ADVERTISING ECOSYSTEM



In Table 1, we compare today's (i.e., ATSC 1.0) local television benefit for ad buyers to Next Gen TV, over-the-top (OTT) and addressable multichannel video programming distributor (MVPD). Clearly, the current digital broadcast standard comes up lacking in several critical categories relative to the competition video ad platforms. Next Gen TV provides the basis for bringing local TV to parity or better, particularly with its full market coverage at maturity (i.e., full two market-facing adoption of Next Gen TV devices by industry and consumers).

Table 1 summarizes where Next Gen TV provides significant enhancements that aren't possible with the current TV standard. This includes creating the mechanisms for interactivity, addressability, dynamic ad insertion, attribution and first-party data. These benefits, while technologically feasible, cannot be delivered without forming new business terms, conditions and partnerships. Though turning the red X's into green check marks will add substantial value to local television advertising, it's not a trivial goal.

Local TV stations offer full market reach, premium video privacy, brand safe and fraud-free ad inventory. In Table 1, we see how Next Gen TV in the second column can expand on those core value propositions for advertisers.

TABLE 1. NEXT GEN TV BENEFITS TO AD BUYERS VS OTHER VIDEO AD PLATFORMS

Benefit	Local TV	NextGen TV	OTT	Addressable MVDP
Full Market Reach	✓	✓	✗	✗
Premium Video	✓	✓	✓	✓
Interactive	✗	✓	✓	✓
Addressable	✗	✓	✓	✓
Dynamic Ad Insertion	✗	✓	✓	✓
Mobile	✗	✓	✓	✓
Attribution	✗	✓	✓	✓
First-Party Data	✗	✓	✓	✓
Privacy	✓	✗	✗	✗
Brand Safe	✓	✓	✗	✓
Fraud	✓	✓	✗	✓

Source: BIA Advisory Services, October 2019

Next Gen TV fills in the blanks where the current digital TV standard falls short for advertising use cases. For example, Next Gen TV can combine first-party data and dynamic ad insertion (DAI) to do two things that provide significant enhancements for both audiences and advertisers.

First, local television stations have options for obtaining and use audience data to know who saw which commercial messages. This means frequency capping can be implemented and that improves the audience experience and adds value to advertisers seeking to maximize their reach and frequency campaign goals. Seeing the same commercial too many times is something neither audiences nor advertisers want. So capping commercials to a certain number of views is a win-win. When Next Gen TV user apps are the audience interface for connected TVs and other internet-connected devices, local broadcasters can build a closed-loop marketing proposition. This can be done in OTT and addressable MVPD but has not been done with the current digital television standard.

Second, not only can we cap frequency of ads delivered, we can change the creative by dynamically inserting new creative to viewers who’ve already been served the frequency cap levels as determined in ad campaign plans.

We looked at all the different data opportunities that broadcasters have. You can download a [free report](#) (see Figure 2) from the NAB PILOT website. The in-depth report looks at these different topics and potential business models and other implications of broadcasters having first-party data, including the ability to do audience analytics, addressability and targeting cross-platform audiences using identify and device mapping.

FIGURE 2. ATSC 3.0 DATA LANDSCAPE FOR BROADCASTERS



Highlights of six ATSC 3.0 data-driven business models for local TV broadcasters

1. First-Party Audience Data
2. Audience Analytics and Insights
3. Addressability and Personalized Content Targeting
4. TV and Multi-Touch, Cross-Platform Attribution
5. Data Delivery and Content Distribution Networks (CDNs)
6. Public Service, Alert, and Warning Systems

Download free report & database prepared by BIA:
<https://nabpilot.org/atsc-3-0-data-landscape-firms/>



Next Gen TV Creates New Connections – Sarah Foss, FreeWheel



Sarah Foss is senior vice president, Strategic Initiatives, Freewheel Advertisers.

Freewheel is a Comcast company that provides comprehensive ad platforms for publishers, advertisers and media buyers. We're one of the only software technology companies that has the buy and the sell side as clients. We're powered by premium video content, robust data and advanced technology because we believe that the way marketers and publishers want to connect with viewers has to change because we are confident that that's going to be transactions across all screens.

What Rick Ducey covered is the perfect setup, because I think our definitions of local TV, Next Gen TV and addressable MVPD are at the epicenter of what we do at Freewheel. This becomes very important to how advertisers and agencies look at how to spend, how they're going to be putting their money against those campaigns to find those eyeballs or those impressions or those audiences in the future.

We love local TV. Freewheel Advertisers is the nation's largest tech provider for independent, national, regional and local advertisers. We serve 1,200 agencies across the country. We feel comfortable talking about the Next Gen TV opportunity because it's what our advertising agencies are talking about. When we look at local and regional television, where ATSC 3.0 fits is part of the go-forward design for advertising.

What folks are trying to understand is this incredibly chaotic changing ecosystem called advanced advertising and the Lumascope chart Rick showed in Figure 1. It's one of my favorite charts because it shows that a traditionally simple model of connecting an advertiser or an agency to a broadcaster or to a consumer used to be a pretty linear path and it no longer is. Technology can be overwhelming if you're trying to figure it all out and serve the advertising community.

The opportunity from our perspective with ATSC 3.0 is how we can connect what agencies and marketers are expecting for reaching those new consumers, getting them across all the platforms. We want to enable technology so a local broadcaster can offer more advertising impact than they have been able to do in the past.

At FreeWheel, the first thing we like to do is talk about is connecting expectations (Figure 3). Connecting the expectations of advertisers for things like smarter targeting, reduced waste, transactional parity and in-market validation is something technology helps to enable. And that's all about how are you going to get that? What is that value add that you now have that ensures you can monetize your investment not only in ATSC 3.0, but frankly secure your position as a really robust offering and inventory across all of those different channels because ATSC 3.0 enables smarter targeting, you can now reach niche audiences, the cord cutters and the cord nevers.

FIGURE 3. CONNECTING EXPECTATIONS WITH POSSIBILITIES



If you are an advertising agency, that's important. That's almost essential because the millennial and Generation Z segments see cord cutting as a way to save money because they have access to premium content more cost-effectively. We truly believe local broadcasters are going to be able to offer these options over-the-air for free with the new Next Gen TV technology.

ATSC 3.0 broadcasting means you now have access to a targetable audience beyond the traditional television audience that advertisers want with the kinds of connections FreeWheel empowers. Which leads into another point that technology enables: reduced waste. What does that mean?

We don't want any more as advertisers or agencies to buy campaigns that solely provide maximum reach and frequency. We want to be able to do hyper local targeting to give advertisers the ability to get directly to the audience in the intended location that I want to at the time. ATSC 3.0 enables you to offer inventory on the mobile device. In the car, as you're going from one zip code to another zip code. An agency and an advertiser want that audience and they want to be able to follow the audience on that device.

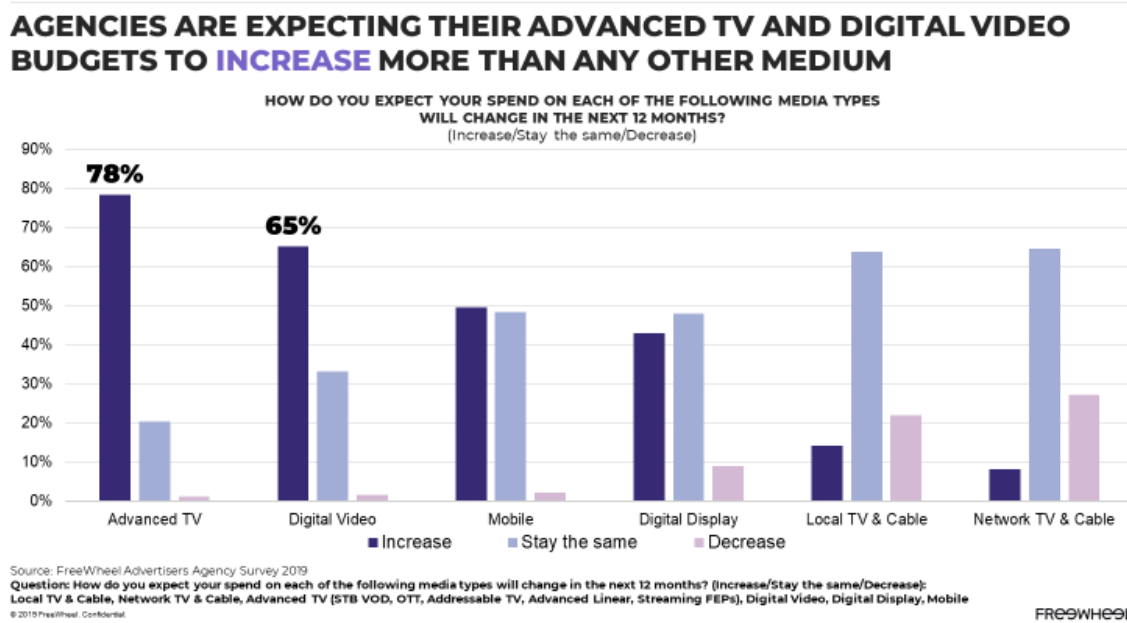
That's where the concept of transactional parity becomes really important as well, because an advertiser now looks and says, but if I'm buying on a website and I still want access to premium video or viewers of my local call letter station, how do I do that with just impressions? We've got to go beyond the traditional television spot ad inventory. ATSC 3.0 is a technology that enables the business to move forward into offering that cross-platform currency holistically across the various ways to watch the 6 p.m. news. The news that now is streamed at a kid's soccer game, the news that is watched later than 6 p.m., because I'm now doing it on-demand or the news that is streamed by a business traveler who is

even outside the zip code. These things are ways that advertisers want to get to your viewers and we believe you can offer that type of package.

The last but not least factor is the in-market validation. Rick mentioned some of the things that are important to avoid ad fraud. This technology enables us as a broadcast community to provide a different level of visibility into how the local viewer can see the ad across multiple screens because we want to get to that audience. We want to do so when they are watching on whichever device and being able to measure that increases your ability to charge a premium cost per mille (CPM) for the full audience across all those devices.

This technology enablement matters because with the 1,200 agencies that are my current clients across the country, we know where 78 percent are going to spend money: in Advanced TV (see Figure 4). They want access to those cord cutters. They want access to hyper local targeting. An important statistic is in the next 12 months, where are they putting more money? We would consider ATSC 3.0 to be part of that Advanced TV category. Buyers are going to put more money there.

FIGURE 4. AGENCIES SHIFTING AD BUDGETS TO ADVANCED TV, DIGITAL



Broadcasters can shift the discussion with advertisers powerfully by changing the messaging from, “Yeah, I’ve got this *new technology*” to “Hey, I’m offering this set of *new value-added services*.” ATSC 3.0 broadcasters can start delivering audience impressions based on hyper local targeted in a third-party measured environment. You’re going to get some of that pot of money that buyers otherwise will keep shifting towards digital buckets. With our agencies, we’re not only excited about the growth opportunities, but seeing a resurgence of local broadcast in this advanced TV space and really taking back some competitive share.

Local Market Data-Driven Planning – George Leon, Hawthorne



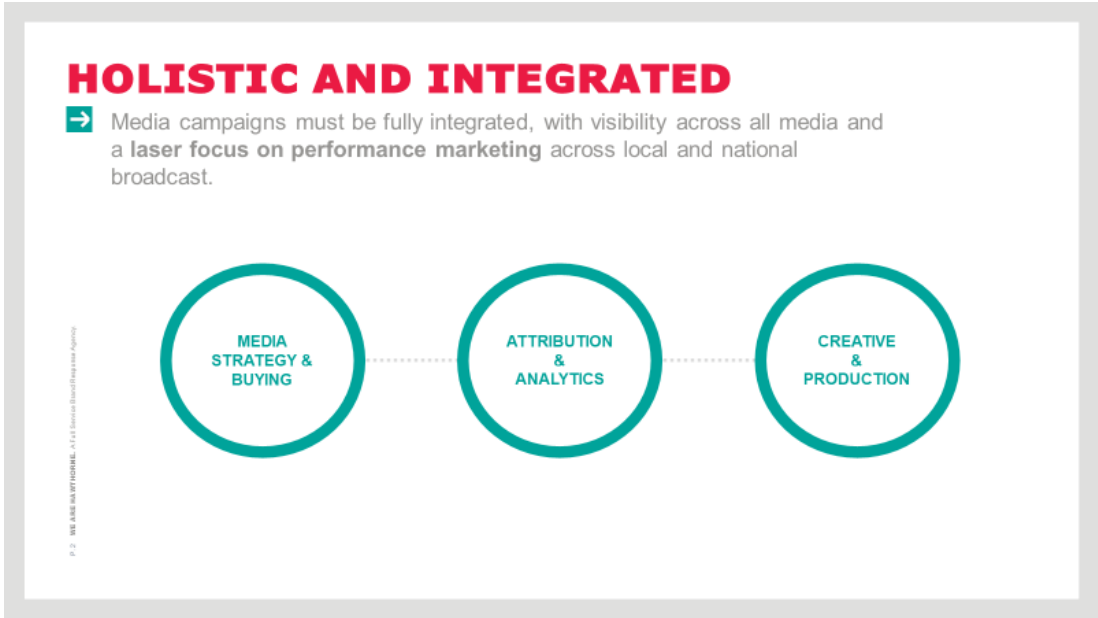
George Leon is chief strategy officer, Hawthorne.

Hawthorne is a 30-year old agency. Our anchor has been accountability and looking at data to inform our creative decisions or creative development, as well as our media executions and our planning and optimization. We’re moving forward in a more data-centric environment. As broadcast stations adopt ATSC 3.0, we see that as extremely encouraging because one of the things that we’ve utilized for our clients over the past decades or so, but more and so in particularly the last 10 years, is the ability to take data, to target the target messaging, to target to a specific demographic, to target responsiveness towards our campaigns. Next Gen TV is a platform we see as something local television can use to deliver on these capabilities.

Just as Sarah Foss noted, Hawthorne is one of those agencies gravitating more and more towards digital video as well as connected devices. We’re looking at these specific channels because we get the ability to target consumers with a specific message with frequency caps. As Rick Ducey explained previously, it’s so that we’re delivering a message that is not going to create fatigue with viewers, but also in the manner in which we’re going to be able to target in local markets more so than we have in the past.

At Hawthorne, when we look at campaigns, we look at every individual channel. For much of the past decade, we’ve focused a lot on national cable. We focused on broadcast networks and we’re moving into that connected TV integration as well because of the data – the targeting – that’s part of programming we can pursue for our brands.

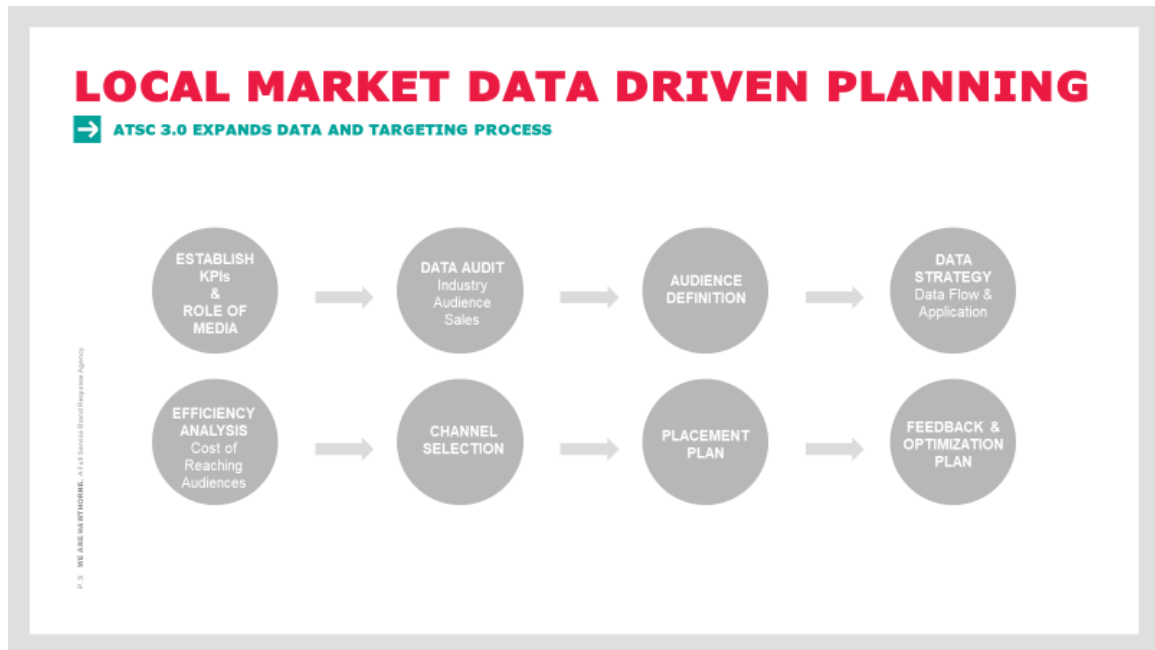
FIGURE 5. INTEGRATING CAMPAIGN STRATEGIES ACROSS PLATFORMS



Source: Hawthorne, August 2019

What we're seeing now is a migration to also take that same performance marketing across local markets and across local stations. Whereas before, as Sarah has indicated, we looked at reach, audience and impressions in that market as the principal drivers of success, now we're looking a bit further into what exactly is the messaging that resonates to a specific audience or that resonates to a target demographic and within programming.

FIGURE 6. ATSC 3.0 EXPANDS DATA AND TARGETING PROCESS



Source: Hawthorne, August 2019

That's one of the significant positives that we see from this new ad channel, Next Gen TV. Now we're going to be able to take that same planning that we've utilized for other channels into the local television market space. And that is significant because we're seeing a significant surge in campaigns that are looking for that type of local market targeting.

We're looking for campaigns in the medical, insurance and financial categories that specifically are looking for this type of categorization as well as targeting. Our expectation is that with ATSC 3.0, we're going to take that same data driven planning that we extend to digital as well as to national cable, addressable and the like. We want to be looking at the role of media, looking at the audience delivery behind the definition and looking at data and how it flows—and the application behind it. For us, this is important because one of the things that Sarah pointed out is managing waste. Next Gen TV provides an ability to target into a market based on that demographic and based on that target demo for that brand.

Finding efficiency is important. It's not just about reach, but it's also about the responsiveness to those specific demographics and those consumers for our brands to maximize that response. We're looking at this now as a data driven plan that now includes broadcast stations and particularly those in the ATSC 3.0 environment.

This is going to help increase that utilization of local television as a channel into our placements and our plans, because now we're getting to see and experience more data that is going to inform our

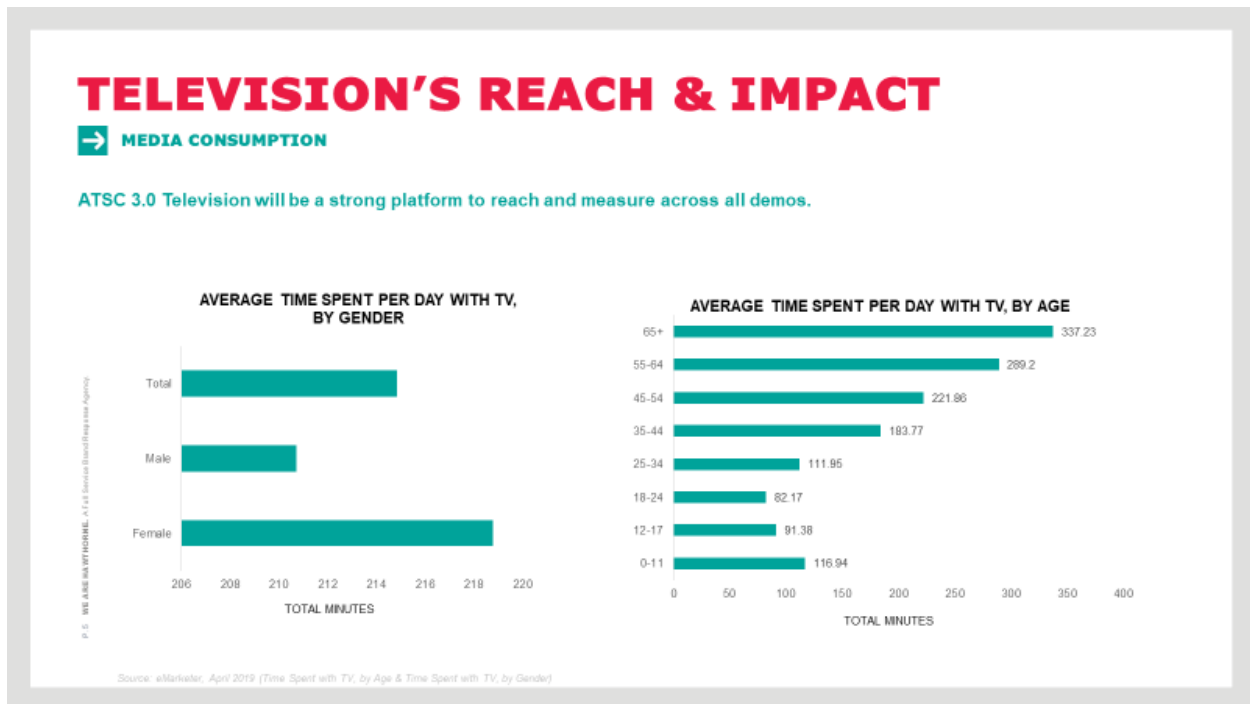
campaigns and more importantly, optimize and be able to build that loyalty to our to our brands. This is a composite. It's what you're seeing on screen. It's just how we define our planning.

As Rick Ducey pointed out, it's like all of the aspects that ATSC 3.0 is going to be able to deliver on, maybe not just yet, but in the future, it's that ability to target, that ability to be able to put some frequency caps and be able to extend the reach into something that is more tangible and measurable, that is significant to us as an agency and to our brands who rely on us.

From that responsiveness and that targeting, extending from creative all the way through media executions, one of the things to emphasize is the importance of looking at this audience identification because we've seen that it's very fragmented.

We're not just looking at targeting seniors or Gen Xers, we're also looking at millennials and the ability to have that data. That accessibility to ATSC 3.0 is going to be significant for us to understand those audiences in the local market and for incremental planning in the local space. From the perspectives of audiences we're seeing, there's still a significant amount of television watching.

FIGURE 7. ATSC 3.0 WILL BE A STRONG PLATFORM TO REACH AND MEASURE ACROSS ALL DEMOS



Source: Hawthorne, August 2019

We also have the composite of the average time spent watching across different television platforms (see Figure 7). When you're looking at time spent per day, one of the things that is significant is whether this is time spent on a linear TV or connected TV. This is also a space where we're seeing a lot of convergence of both channels for consumers. It's an "and," not an "or." What we're seeing here is that for every length of time that is being spent watching linear TV, there is an increasing number of hours that's also being spent on digital video content as well as connected TV devices.

So for us, it's the ability to have local stations using ATSC 3.0 being able to target and enforce frequency caps so that we're not fatiguing the audience as much with the advertising we do with some local market stations. You see that repetitiveness can very easily fatigue and you go from a good reach to a bad reach.

The ability to be able to target is going to help maximize the value of that reach and be able to develop targeting and the right measurement for this new channel. We're excited about the opportunity to continue to see that expansion and seek to bring that data – that consumer segmentation – into not just our creative, but also our media executions.

Group Discussion

Skip Pizzi: I want to first pick up on a theme that all of you seem to have mentioned in one form or another: ATSC 3.0 as a technology is not something you can think of in isolation from business aspects to see its full implications. Certainly, this is true from the advertiser perspective and how Next Gen TV will be just one piece of a larger advanced television strategy. The advertising point of view should very much inform the broadcaster side and influence what kinds of business decisions get made. We hope ATSC 3.0 becomes one in a suite of services that a given broadcaster offers, including websites, streaming video, mobile apps and other kinds of digital services. ATSC 3.0 has implications for how local television stations work with MVPDs in terms of not just carriage but data and advanced services. Local television operators must manage the balance of keeping their existing service vital while moving forward even with Next Gen TV. It's a piece of a larger package.

Rick, you started talking about this. Can you expand on that idea of how Next Gen TV fits into the broader picture?

Rick Ducey: Sure. I think we're adopting an optimistic frame of reference here, which is encouraging. It's great to hear someone like George talk about Next Gen TV as an incremental planning channel that's going to bring an attractive value proposition for the buy side.

I'll just pick on George's point for a moment on transactional parity. Buyers want to follow the audience and deliver targeted impressions into the audience segments they're prioritizing in their campaign strategies. Optimize the schedule and monetize the audience as best you can. There's a whole value chain that goes with that from content promotion to engaging the audience to showing delivery and performance against that target. Broadcasters to go to the buy side with Next Gen TV and say hey, we're bringing you an incremental planning channel that can deliver targeted and measurable video impressions that offer reach, frequency capping and outcomes, we had transactional parity.

Next Gen TV is its own thing, but I think it's most powerfully understood as a new ad channel that complements the best of linear television and add digital's targetability in one platform for buyers.

At BIA, we work to translate these concepts into business opportunities and quantify these with revenue estimates. In our local ad forecast, we're seeing a lot of buyer momentum out of traditional and linear media into digital ad channels. We just heard George say that they're spending more in digital. Agencies are putting more of their spend into digital for their clients, to target local audiences. We're seeing digital spending at about \$60 billion in 2019. That's about four out of ten dollars that the George's of the world, if you will, are spending in media targeting local audiences. By 2023, digital spending will increase to half of all spending targeting local audiences. That's \$23 billion more spending digital bringing the total to \$83 billion.

Our overall forecast for local TV advertising revenue growth shows modest upsides particularly in even years with political. The medium is holding its own at the local level but certainly not enjoying the growth of digital as important as the auto category is to local TV.

George called out a couple of categories, but let's pick out a category like auto. This category is significant as a percentage of the revenue budgets for local TV stations. Auto will spend significantly

more money in local between 2019 and 2023, over \$2 billion more. What's interesting is that 100 percent of that growth in auto category is going to be in digital.

For local TV stations to get a piece of the incremental auto spend, they're going to need that incremental ad channel that we're saying could be Next Gen TV. This could be a significant new platform in the mix. If so, we'll be reevaluating our forecast and perhaps giving some growth back to local television. We'll see.

Skip Pizzi: Some good forecast numbers there. We'll see how that plays out. Obviously, research is already being done. Sarah, we know that advertisers want scale. They always do, particularly in the broadcast model. So, where are we on the transition timeline? How much scale do you think is really going to be sufficient before Next Gen TV can prove to be an attractive alternative for buyers?

Sarah Foss: I think that's an interesting way of framing the question. I also love this concept of incremental channel. ATSC 3.0 pilots are going on now and since we know which markets are going to light up first, I think the timeline is now. If the local broadcast station who has Next Gen TV as part of their overall offering with their traditional schedule over the air, with their web channels, with whatever sponsorships and event marketing – these are all ways that an advertiser and a marketer looks to a local TV station. Buyers say, get me to your viewers, get me to the consumers in this community who are trusting you with all their content. So, frankly, the sooner a broadcaster can create that single view buyers can use get to the consumers in my market multiple ways across multiple platforms, the better.

This means you're going to get baby boomers or working adults in my early hour newscast wherever they are. But you're going to pick up the millennials, the cord cutters when they're streaming on a subway ride sometime after the live broadcast.

I think I think the time is now. It's about how you package and how you present to the agencies and the advertisers a simple way that you can actually have a single campaign reach all of those audiences across all of the different platforms you have, because we can look at national scale.

In Advanced TV, they've already started training the advertising community to know which audiences or which programming content skews a certain way. We should look at what a broadcaster could do by saying, "But I can get to those audiences, too." Broadcasters can be offering weather programming on mobile apps at the same time they've got early morning news, and that could be one campaign. I think that's attractive.

But you do have to be able to offer it holistically. Make sure that you have the metrics George talked about. You've got to be able to have a data strategy within your broadcast station that ensures that.

The Georges of the world get the data. There is that need to show that you absolutely can validate and verify and measure that you've delivered across multiple platforms. The audience that you sold is what they bought.

Skip Pizzi: That's an interesting way to look at it, and it leads to another question: Some say programmatic advertising inventory in the digital world became greatly commoditized and reduced CPMs for digital publishers. Do you think that offering targeted advertising would end up becoming a long-term benefit for broadcasters? Once the TV inventory is offered on targeted basis by programmatic exchanges in a private or public marketplace, it's likely that buyers won't buy direct at the same rate and

a premium CPM will dissipate into remnant inventory. Why would broadcast targeted advertising then be different than digital targeted advertising? And why would profitable broadcasters want to start competing with declining digital publishers?

Are we chasing our tails there or would we be going into a new a whole new animal? Would we be creating this hybrid environment that maybe gets the best of both worlds? Or is it just kind of an envy where we'd be trying to duplicate something that may already be declining – and by the time we get there, perhaps fallen even further? George?

George Leon: On the question of programmatic advertising, this is one of the reasons why we find Next Gen TV to be very encouraging. It's because we have seen an expansion in programmatic television and using tech for audience targeting in certain campaigns – using programming quality or specific target demographics.

I'll just point out one example using morning and evening news with programmatic. Many national campaigns traditionally have not gone into the local market space but are now looking at specific markets.

This thought process and the necessary data validation behind it look at the potential of building an integrated plan within a local market that both supports and complements a national plan. This is where we see Next Gen TV being able to elevate from a planning perspective and adding that incremental channel. It's a new audience being brought in. Particularly, this allows agencies access to viewers in some markets that don't even get anywhere near 75 or 80 percent of national cable penetration. It's like this ability to go into this local market space is very valuable to them from a consumer segmentation and targeting perspective.

And then during certain periods of the year it's auto and retail dominating the local space. There are other times of the year where national advertisers can go into these local markets and really find that data to target a consumer and be able to integrate into other programmatic television channels or even some geo-targeted local digital campaigns.

It really is about making sure that you have your message being delivered across all channels because this audience is being fragmented significantly. And then to Sarah's comments earlier, it really needs to happen now because we are seeing that continuing growth of smart TVs and other TVs that already have a connected device. I want to make sure that we're capitalizing on the ability to take programmatic as well as Next Gen TV and other platforms to continue to grow our brands by targeting using data and tech, not just for creative messaging, but also media optimization.

Rick Ducey: Let me develop a couple of other dimensions to this discussion on programmatic and how it may have helped to commoditize some types of ad inventory. I encourage people to think through a bit more of the digital experience with programmatic and how it may or may not apply to television.

Indeed, the experience with display advertising and digital channels did show programmatic and real time bidding could drive down pricing. But that goes probably to the quality and supply of the inventory and its poor performance in some cases. Broadcast television inventory has very different characteristics in terms of supply, demand, premium content environments and more transparency than digital display that make it much more compelling than website banner ads.

In any case, it will be a while before programmatic trading happens at scale in broadcast television. Some building blocks are still in place and this will be helpful for Next Gen TV.

One area that is evolving in local television selling is automation, automated workflow to buy and sell inventory. On the linear side, broadcasters are working towards that with things like the TV Interface Protocols (TIP) initiative and so on.

A second area is data-driven audience targeting. Buyers like George want to use more data for better audience targeting in television platforms. If you do programmatic using some sort of data element for targeting and probably performance, that certainly increases the value of the inventory.

A third element is optimizing that inventory from both buy- and sell-side perspectives. How much am I getting for it? How much am I paying for it? What results do I get? These questions are important for both buyers and sellers. On the sell side it's about yield management and revenue maximization. On the buy side it's about media optimization and performance.

And just because local television will be going into programmatic exchanges, that doesn't necessarily mean real time bidding (RTB) in an open market with no price floors that can drive toward commodity pricing levels. There can be controls put into place.

In fact, you can do an automated, private transaction using programmatic channels. You just have a buyer and seller do a private transaction over a programmatic platform using data and workflow automation. You're probably not going to see the six o'clock news for a \$3 CPM. Anybody who's done buying on eBay kind of has that experience. Yes, I'd love to buy that new bass fishing boat for \$20, but it's not going to happen.

You know that local television inventory is never going to get commoditized like that. Part of the question went to programmatic and transforming the inventory into commodity pricing. That's just not the likely case for television. When we talk about the opportunity for broadcasters looking forward, it's premium pricing. They can be private transactions over programmatic channels, and it can be a chance to really optimize or monetize that inventory. In theory, the advertisers are willing to pay more because they know what they're getting with audience targeting.

Sarah Foss: The last point of the question was essentially, "Why compete?" Why actually take the great margins that local broadcast stations and groups still have?

George talked about the here and now and the fact that we already are using smart TV as Advanced TV. Basically, this is what Next Gen TV can do. We know advertisers, agencies and consumers are there. Rick just added another point, which is we're not going to commoditize premium digital video content, which, frankly, we believe is what's still going to be offered by broadcasters over Next Gen TV. This is where FreeWheel has a lot of statistics and research behind it. And the competition is there because there are other entrants now, not just cable and broadcast, but a lot of these smart TVs and connected TVs that George referenced as well as OTT players.

Frankly, I believe the question is not just about why compete against things we know. It's about the fact that the new generations no longer look at television as a single definition of sitting in front of a box called a TV and watching in real time. The definition of television is watching content wherever I want to watch it and using it as a ubiquitous term.

I believe it's about actually not just survival in the space, but thriving in this space because Next Gen TV, coupled with current television channels and your digital and all the other ways that you connect with your viewers and your market.

You have the full package. And as soon as you can go to your agencies and advertisers and show them that you can measure that, then they are going to make sure that you get the right CPM and you won't have to commoditize it because you're getting them what they want. And that is ubiquitous access in multiple different platforms to the viewers that you have in your local market.

I think it's maybe that's why the three of us are quite bullish because it's something that can be offered today, even as ATSC 3.0 rolls out. It's about shifting the mindset and offering data driven access to your audience.

Skip Pizzi: And then the fact that Next Gen TV also allows potentially live local mobile reception plays into to that idea of watching it where and whenever you want to.

Now, on to revenue sharing, which we haven't really talked about much yet. Some broadcasters say they don't need multiple adtech vendors to serve ads. Digital adtech vendors have aggressive business models for their customers. Some feel that the major vendors will be gatekeepers for the targeted ad insertion we're talking about and any similar content-replacement techniques. Are these adtech vendors needed for the Next Gen TV ecosystem to work or to find its full potential? And what percentage of revenue do you think adtech vendors and others, such as the TV makers and MVPDs, would want from broadcasters who offer targeted advertising using ATSC 3.0?

George Leon: For revenue sharing we have to look at it from an advertising agency perspective. We want scalability and we want to look at it from the perspective of how quickly we can get into the marketplace. Adtech supports more targeted messaging and to a targeted consumer. I'm not so sure how the stations will monetize this. From our perspective, for the audience segment we're looking at with connected devices, is that the right CPM pricing based on responsiveness? It's how much data can we get for that pricing as well. You know, some will say that maybe utilizing a programmatic platform to treat this would be a bit too expensive. But it's the data *quality* that is what drives the pricing. And we would want to see that type of data also being utilized in sync by local stations, as well as in the connected devices.

Rick Ducey: The pricing is tied to both the value of the premium content in which the ad inventory exists and the value of the audience that can be targeted. Pricing should include the amount of data being accessed by the advertisers and to be able to use it to optimize their campaigns. That adds to the overall price because it adds value to the broadcasters' ad inventory. With a new player in the value chain, the total price goes up, but broadcasters still earn their price, making it a lower overall margin. But it makes sense from a business perspective. And you'd have to expect that the with a more valuable, data-driven strategy, the demand for and value of that spot inventory has to move up going forward. That's a path where broadcasters could get a bigger margin on a bigger sale.

So, there are more players at the table to create the value proposition than traditional TV operators have been used to. One of the reasons why George is encouraged to move into digital is data. As you add more data that costs money and sometimes that's priced on a CPM basis, sometimes as other kind of licensing. In Figure 1 I showed there's a lot of players in the middle that make all of this value

proposition happen to connect marketers and consumers, and they all need to earn a piece of the pie somehow as we go into the heart of the question. I guess I'd encourage framing that perspective like this: Broadcasters are used to earning a certain amount because as Sarah said, it was a simple value chain with relatively fewer players in the mix. Broadcasters were able to enjoy high margins as they move into digital channels. They get frustrated because the margins are low and it's hard to work.

Welcome to today's media marketplace. Basically, that's the world. TV will be competing in a space that probably returns lower margins and probably harder work with more players in the mix. That said, I just talked about \$23 billion dollars of incremental digital ad spend in local markets. Broadcasters may not be competitive for that spending but with Next Gen TV, I think they get much more competitive. I gave the example of the auto category. With more adtech and data in the mix, margins may go down a bit, but overall revenue growth can drive upwards. Protect the margins sure but growing the topline for overall higher gain works as a business strategy as well. Digital is where so much growth is.

If you want to get into the growth game, digital is the place to be. Let's look at the pricing, say on a CPM basis. If a broadcaster sets their value for their core broadcast asset at a certain CPM and wants to optimize the value and monetize it at \$20 CPM. Data charges go on top of that CPM rate. And with the so-called "adtech tax," as people call it, meaning all the tech players in the middle, this adds more, and of course, more cost basis.

This means what eventually goes to George is not a \$20 CPM but a \$25 or \$30 CPM. The broadcasters are still getting their \$20 CPM. Maybe the margin's less overall on that \$30 CPM sale but broadcasters still get the value of what they bring to the deal. They're still getting that core revenue and getting access to more spend in the future that might have gone to digital channels. That might be incremental revenue they wouldn't have otherwise had access to.

Framing this from a business opportunity and topline growth perspective rather than sort of a downer by looking just at margins is a more relevant approach. We have to pay all these people for what they add in the value chain. Figure out what part of the value proposition you really contribute to and go for that – and let other people earn the money that they need to earn – and it's win-win.

Sarah Foss: As an adtech provider, we make money in lots of different ways. But I think I want to piggyback on what Rick said, which is redefine the business, because we used to get high margins. And I'm a local broadcast girl from way back. That's how I got my start in this industry. We used to spend millions of dollars on capital expenditure (CAPEX) to create our broadcast TV stations. That was our plumbing. That was our infrastructure to connect our content to our audience.

In the new world order, a lot of the adtech providers are creating that infrastructure, and we want to have a healthy ecosystem so we can use it. But it reduces the need for you as a broadcast station to consider what is the capital it would take to build out a complete targeted advertising platform to every device in your market.

If you shift the thinking a little bit, too, it's almost like you're moving into an operating expense (OPEX) model, which is a different way of looking at how you have margin. I think more importantly, it's going after George's argument, which is the sooner you can get into the game with the right data to your consumers, the sooner you can actually have access to those dollars that are obviously being spent in advanced and smart TVs.

I think that that really makes a good point about leveraging the existing infrastructure that's been building up over time – and how ATSC 3.0 may be coming along at just the right time for broadcasters to be able to optimize on that.

Skip Pizzi: Will local TV stations offer advertising on their Next Gen TV service as a value add to purchases on their traditional channels to encourage their clients to try out this new advertising or the new offerings as perhaps a transitional strategy?

George Leon: I would love to be able to test that on the transactional basis, and that's how I'd be able to determine that value. If that opportunity is there, I certainly want to be able to capitalize on that, because once we prove that model, I think scalability is going to be significant. And so, yes, give them that opportunity. I would love to see that happen.

Rick Ducey: I hope not. I hope it's not a giveaway by the local television stations.

Next Gen TV is going to roll out on a market by market basis and there'll be a lot of eyes on those markets and how the value exchange is executed there. We're talking about optimizing a new type of inventory on an incremental advertising platform. In those launching Next Gen TV markets, if the early experience is that we essentially give away Next Gen TV inventory and see how it does, we're not going to learn anything.

We need to price that inventory fairly. I'm trying to imagine a conversation that George might have with Facebook or Google saying, can you please give me some promotional inventory for free? We'd like to see how it works. Why should broadcasters participate in that dialogue?

We need to see how that inventory actually prices out at a demand and supply marketplace. It helps you do your planning better and communicate those expectations back to your client. Here's what you need to pay to get to your target audience on this platform. And here are the results you're going to get. And this is all supported by data. I think that's the place we need to be and not like broadcasters did in the early digital days where digital was essentially thrown in for free if you buy the broadcast package. Please don't do that again with Next Gen TV.

Sarah Foss: I totally agree with Rick. I think we go back to why George likes Advanced TV and its data-driven nature and then the targeting that it offers. Even in the initial pilots and launches, I think we're going to have a better sense of how to do that. I don't think we should give that away for free. I do think we should partner with advertisers and agencies who are going to make us much smarter about how to position it, and what exactly is the targeting and the data that is required to actually increase the CPM on that platform – and then even on the traditional stream.

Skip Pizzi: Very well. I think we had a great conversation today. I really appreciate Rick, Sarah and George spending the time and working on so hard on preparing for this and I think it really paid off with a lot of good information. And we'll continue the conversation, I'm sure, over the next few years.

About the Contributors

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