

A background image of ice hockey players in action, wearing red and blue jerseys, holding hockey sticks, and wearing helmets. The image is overlaid with large, semi-transparent blue and purple geometric shapes. The text is in white, bold, sans-serif font.

DIGITALLY ENHANCED DASHERBOARDS

Improving audience targeting
and boosting revenue through
virtual signage.

dataPOWA[®]
An **ixup** Group Company

A new era for sports partnerships

There have never been more creative ways for brands to connect with audiences through sport, but in an increasingly competitive and fast-moving entertainment landscape, how can brands [cut through the noise and make the necessary impact?](#)

This is the challenge sports rights owners and their partnering brands currently face - and it's not going away any time soon. Research in North America has found that just [53% of Generation Z](#) (those born between the mid-1990s and early 2010s) identify as sports fans, [compared to 63% of all adults](#).

Separate data reveals that the Gen Zers and Millennials who are interested in sport consume an eclectic range: 6.3 different sports on average. These fans are increasingly [avoiding in-venue attendance and traditional broadcasts](#) to stream from home. They also turn to [social media to keep up with the latest news](#) and expect rights owners and sponsors to deliver original content tailored for those channels.

It all adds up to a fractured sporting landscape in which [attention is difficult to gain](#), and recall of traditional forms of advertising is reducing. So what can be done to turn the tide, retain attention and help brands make the impact they're looking for?



Technology holds the answer and, during the 22/23 season, [the NHL has experimented with a new form of virtual advertising](#) designed to help brands connect with audiences.

Welcome to the era of Digitally Enhanced Dasherboards (DEDs).

What you need to know

01

DEDs swap physical ads with virtual ones

Digitally Enhanced Dasherboards (DEDs) are virtual replacements that change the perimeter advertising seen in-venue for broadcast. A fan watching at the stadium sees Brand A and a viewer watching at home sees Brand B.

02

They offer greater targeting options

By replacing ads for broadcast, the technology allows rightsowners and the league to show a New York-based brand to Islanders fans and a Washington-based company to Capitals supporters.

03

They're clearer than static dasherboards

DataPOWA analysis of a handful of Play-Off match-ups shows that DED creative provides brands with greater clarity and delivers a better level of quality than the existing static dasherboards.

04

Simplicity is key to strong creative

DEDs offer a rich canvas for creativity, but simplicity is paramount. Subtle use of animation helps creative stand out without distracting from the on-ice action.

05

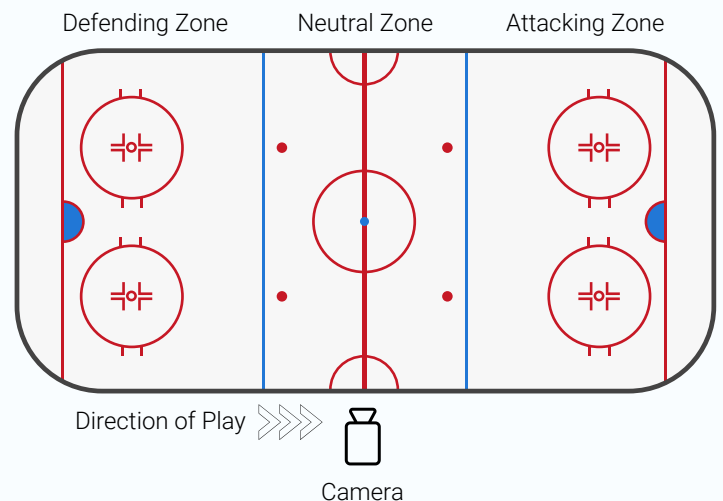
Virtual signage is here to stay

Early research shows that DEDs have had a hugely successful first season, and similar technology is already in use in other sports: Major League Baseball started its own tests with virtual signage in May.

What are DEDs?

Every rink in the NHL has advertising hoardings (called dasherboards) that run around the perimeter of the playing surface. Until this season, these assets were static boards that are physically attached to the edges of the ice.

Those static dasherboards remain in place and visible for anyone in the venue, but [AI-powered technology is now being used to virtually replace them for viewers watching at home](#). Only one camera at each venue - the core 'Centre Ice' camera - is equipped with the tech, so whenever the coverage cuts to a different angle (for example, during replays and close-ups) the virtual signage can't be seen.



Let's take a look at an example from Game 3 of the Las Vegas Golden Knights' and Edmonton Oilers' Stanley Cup Play-Off game. Image 1 shows the action captured through the 'Centre Ice' camera. As you can see, [the US grocery store Safeway is visible to the right of the Oilers' goal as the Knights score](#).



Seconds later, the coverage changes to a camera that doesn't use the DED technology, and [here you see different branding: for hair salon Great Clips and Esso](#) (Image 2). This is the same branding visible to fans in the stadium because the camera being used isn't DED-enabled and so isn't digitally inserting the Safeway signage.



Why are DEDs being used?

Ice hockey rinks provide a limited canvas to support advertising efforts so teams don't have much space to offer their commercial partners. The space that is available is cut in half for broadcast as the 'Centre Ice' camera always faces forward (turning to follow the action) in the middle of the playing area and so doesn't capture any of the signage on its side of the rink.

Commercial success is reliant on maximising the space that is available and visible to the at-home viewer. The opportunity for doing this is limited with static dasherboards, which can only be sold once: if, for example, Betway occupies that space it does so for however long the deal lasts and no other partner can occupy it while Betway does.

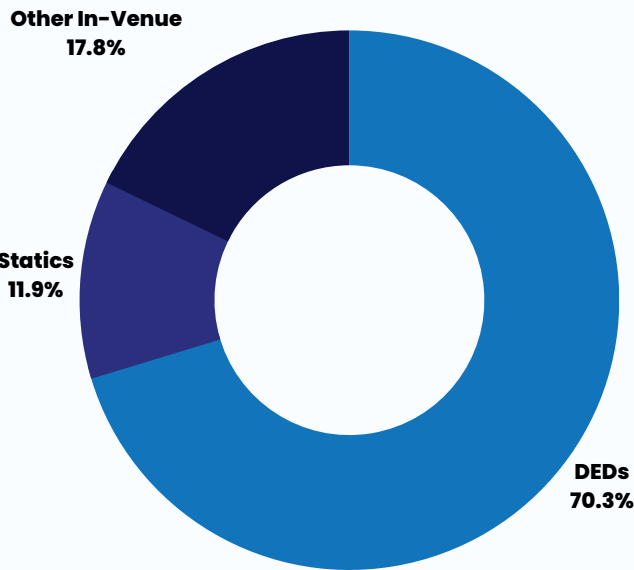
DEDs make it possible to sell that same space multiple times during the same game. This means that Betway could occupy it for 30 seconds, before being replaced by another brand who would then subsequently be replaced themselves.



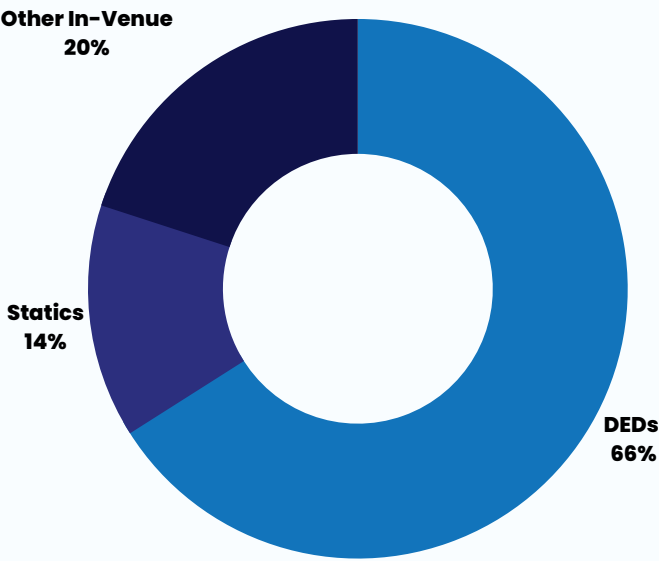
Images 1, 2 and 3: Examples of Betway, DEX Imaging and Germania Insurance DEDs from randomly-selected Stanley Cup Play-Off matches.

The result is that teams can [expand their partner base and increase revenue](#), so it's little surprise that DEDs have been ubiquitous during broadcast. Our analysis of one randomly-selected regular season game shows that the tech was visible for [66% of the coverage](#), with the First Period generating the highest level of exposure.

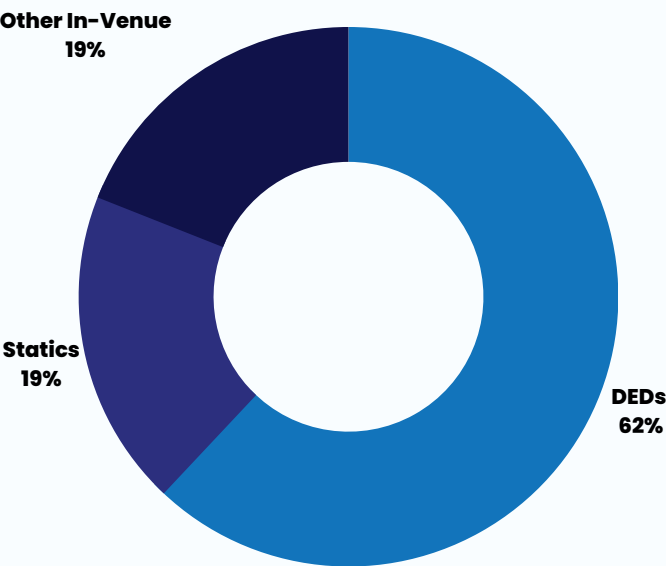
1st Period



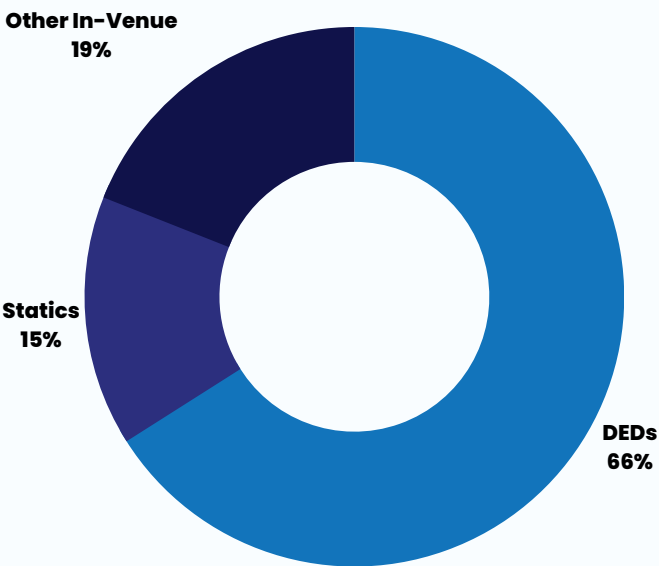
2nd Period



3rd Period



Total Match



What makes DEDs different from other digital signage?

Rotating Static, LED boards and other forms of digital signage have been used in other sports for many years - and to great success. They perform a similar function to DEDs, allowing multiple brands to share the same space by occupying it at different times during an event, but there are a couple of major differences.

The first is that an [ad delivered via the DED technology is a uniquely digital asset that doesn't physically exist](#). Only viewers watching on TV or through streaming see it.

The second - and most important - is [audience targeting](#). NHL games are televised by different broadcasters to the home and away teams' bases. For example, when the New York Islanders visit the Carolina Hurricanes, Islanders fans tune into the MSG Network, while Canes supporters watch on Bally Sports.

In previous seasons, when only static dashboards were available, the brands on the boards were seen by all supporters, regardless of location. [This created potential conflicts for advertisers](#) if, for example, the Canes partner with one automotive company and the Islanders one of their competitors.

[DEDs eradicate this problem](#) by allowing the Islanders to replace the Canes' dashboards with their own promos, just for viewers watching on MSG. Meanwhile, Canes fans watching through Bally see promos from Canes partners.



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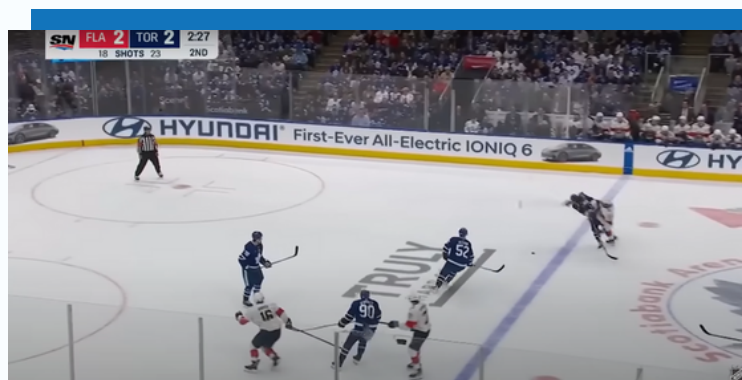
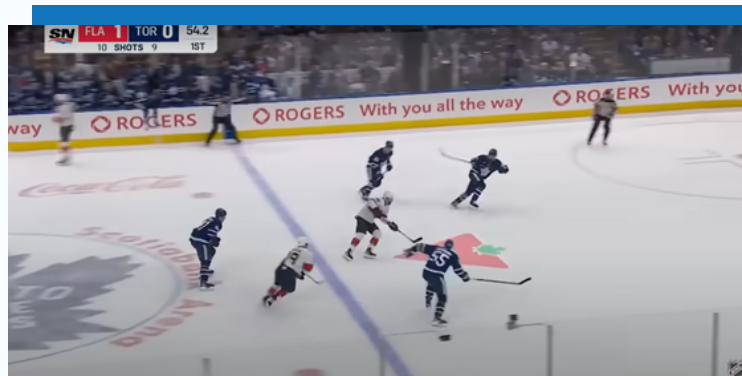
As a result, both teams' partners gain crucial visibility and are assured of audience relevance without the risk of competitors being visible too.

The same functionality also allows teams and brands to [adapt to local legislation](#). For example, sports betting is legal in Washington but not California. So, when the Capitals visit the San Jose Sharks, a sportsbook company based in Washington can advertise to fans in their area without delivering the same ad to Sharks fans in San Jose.

Elsewhere, as reported by Sports Business Journal, a major benefit has been felt by Canadian sponsors. Before DEDs, Canadian fans watching through the country's national broadcaster Rogers Communications only saw dashboards intended for American viewers, wasting exposure and revenue opportunities across the board.

DEDs have allowed Canadian partners, such as Scotiabank and Tim Hortons, to buy up slots for Rogers' broadcasts, and presented the league with new opportunities for region-specific partnerships. For example, the NHL now has a Canadian auto sponsorship with Hyundai to complement the US-focused one it has with Honda.

Without DEDs, such versatility simply isn't possible and the revenue it unlocks would remain unrealised.



Images 1, 2 and 3: Examples of Canadian advertising seen during Florida Panthers @ Toronto Maple Leafs, Stanley Cup Play-Offs, Round 2, Game 1. 2nd May 2023.

What are the possibilities in other sports?

The specific requirements of hockey, and American sport as a whole, make it a perfect match for DEDs, but the technology has wide-ranging applications across other sports as well.

Teams with vast global fanbases could offer [additional, more targeted match-day exposure to country-specific sponsors](#). For example, a Japanese leisurewear brand who are Manchester United's exclusive clothing brand in the country could digitally replace existing Old Trafford signage on match days with creative seen only on Japanese broadcasts.

Events with cross-country appeal, such as the Champions League Final, could [package up DED coverage for specific countries](#), with English brands appearing on the English broadcasting partner's coverage, French brands on the French coverage, US brands on the US coverage and so on.

Finally, fast-paced or highly technical sports such as F1, where ads can't be rotated mid-race and physical signage can impact the performance of the cars, can develop [expansive ranges of commercial deals](#) without having to worry about finding space or impacting performance.

The biggest sports are now truly global phenomena and DEDs have offered an insight into the future where the commercial side of the industry can be truly global too.

How have DEDs performed during the season?

The introduction of DEDs has proved a huge success. YouGov data provided by the league shows that [the equivalent of one minute per period of DED exposure delivers a 56% lift in unaided brand recall](#) relative to placement on the statics.

The research also found that brands experienced [a 24% lift in category-aided recall](#) and a [31% lift in prompted brand recognition](#).

One of the key drivers behind this success is [the technology's enhanced clarity](#).

While static boards sometimes blur as the camera moves from end-to-end, creative on DEDs is crystal clear no matter how quick the on-ice action.

To further understand the increased visibility and quality of DEDs compared to traditional dashboards, we analysed Dallas Stars' and Buffalo Sabres' regular season game on Friday 10th March.

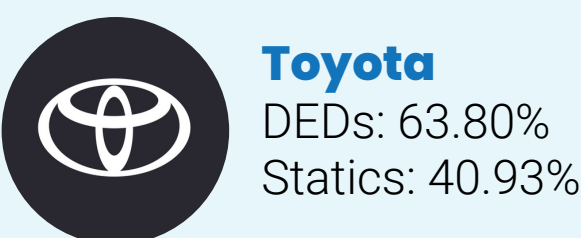
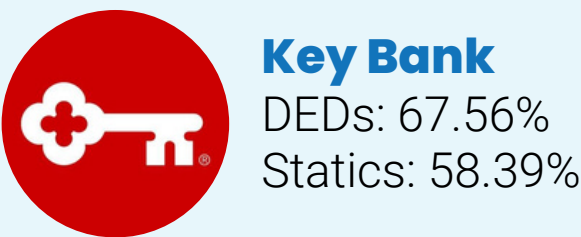
The data on the following page represents Clarity Scores and Quality Scores for statics and DEDs across the mentioned match-up. Clarity Score takes into account how clear and visible brand logos were across the course of the game. Quality Score also takes clarity into account, but factors in creative size, centrality, share of voice and exposure as well to provide an overall indicator of the quality of exposure.



The equivalent of one minute per period of DED exposure delivers a 56% lift in unaided brand recall relative to placement on the statics.

DEDs drive higher clarity scores

DED v Static clarity scores for specific brands



DataPOWA's estimated average clarity scores for Enterprise, Geico, Key Bank and Toyota DEDs and static dashboards during Dallas Stars @ Buffalo Sabres on Friday 10th March 2023.

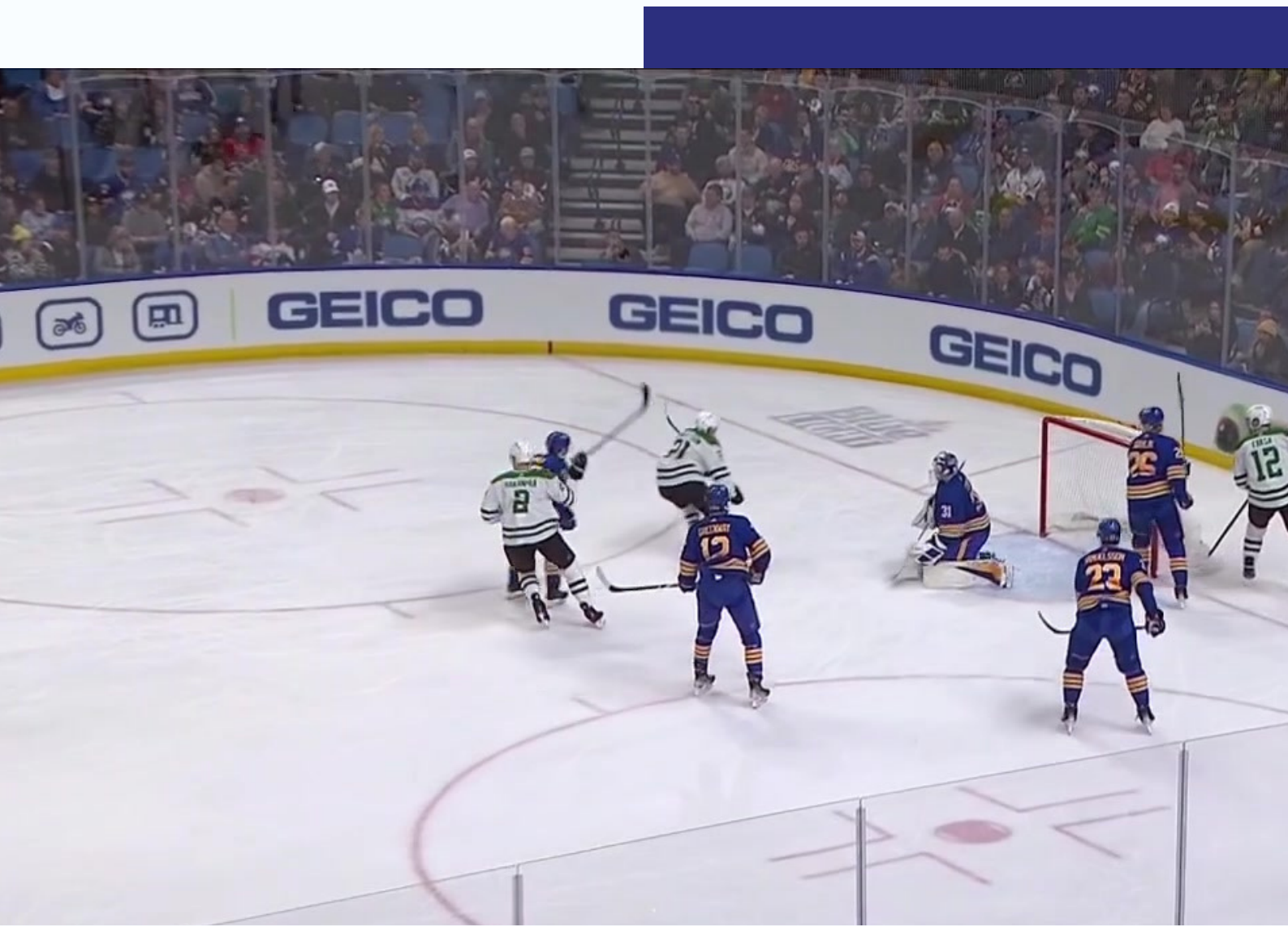
DED v Static clarity and quality scores across an entire match



DataPOWA's estimated average clarity and quality scores for all static boards and DEDs seen during Dallas Stars @ Buffalo Sabres on Friday 10th March 2023.

Insights and Recommendations

DEDs are undoubtedly a success, but their performance also rests heavily on how brands use them. Here are a few recommendations from DataPOWA on how advertisers can make the most of this exciting technology.

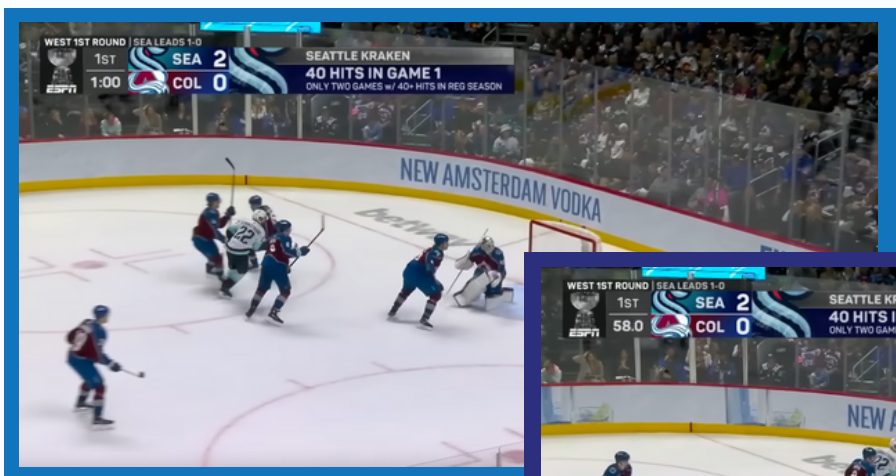


Embrace subtlety in animation

Animated creative is a big part of what makes DEDs stand out. Such activations aren't unusual in sport, but in the compact world of the NHL, where the viewer is focused on a small puck moving rapidly around a small playing surface, [big, bold, heavily animated creative can be distracting](#). Subtlety makes a major difference and New Amsterdam Vodka, SAP and Discover were among the brands to find the right balance. They used their boards to [carefully animate product shots, logos and messaging](#), therefore drawing audience attention without being overly distracting.



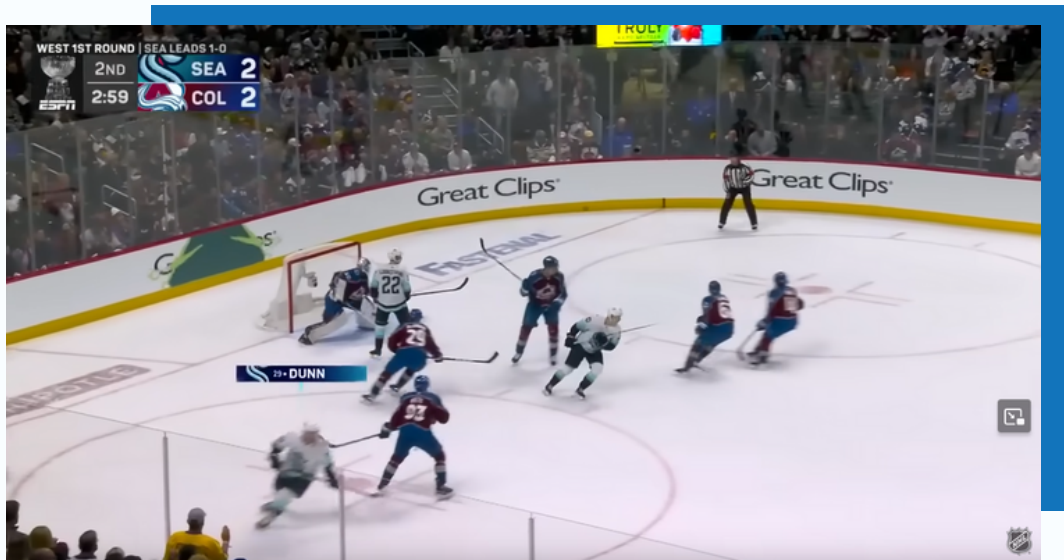
DED creative for Discover sees the brand's core messaging animate in, helping draw attention to it without distracting from the on-ice action.



Product shots animate up from the bottom of the DED for New Amsterdam Vodka's creative, again subtly drawing attention to the ad without frustrating the watching audience.

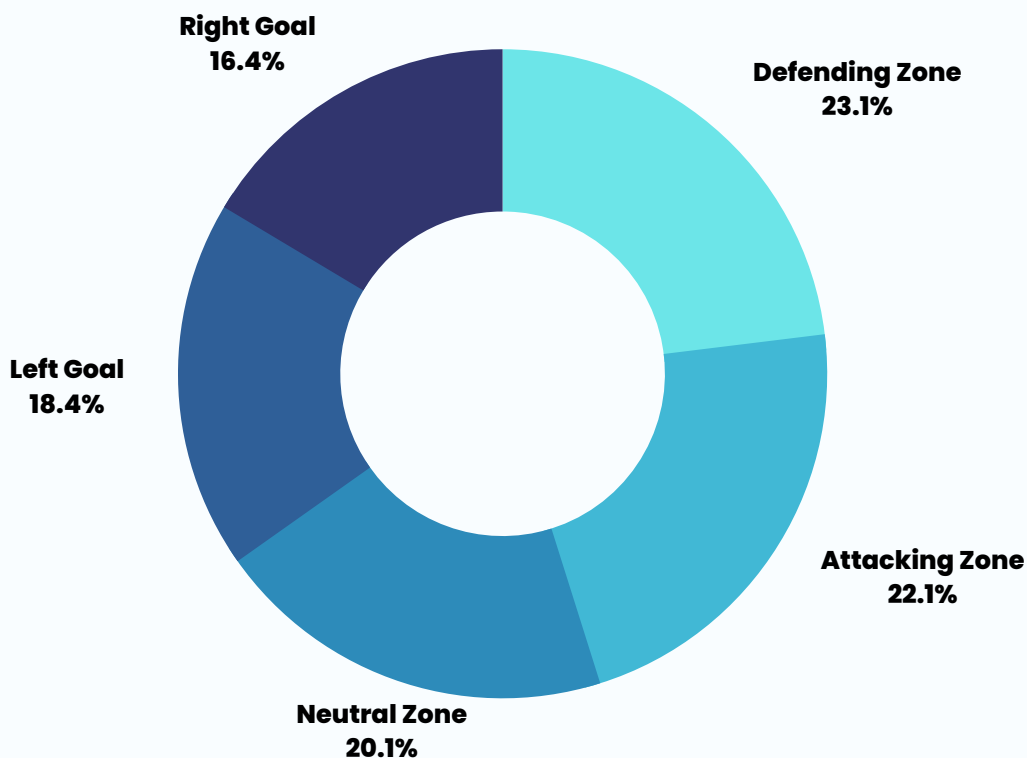


Perhaps the strongest example came from hair salon Great Clips, whose activation used green to contrast with the white of the background and ice, and a [slow, fun animation to engage the audience and reveal the key message](#): a hashtag reading #ShowYourFlow.



Size and placement matter

The beauty of these creatives is that they work regardless of placement or size, but in some cases these factors make a major impact. When we analysed a randomly-selected regular season game, we discovered that [the three zones in the centre of the ice \(Attack Zone, Neutral Zone, and Defence Zone\)](#) [were on screen more regularly](#) than the left and right end zones.

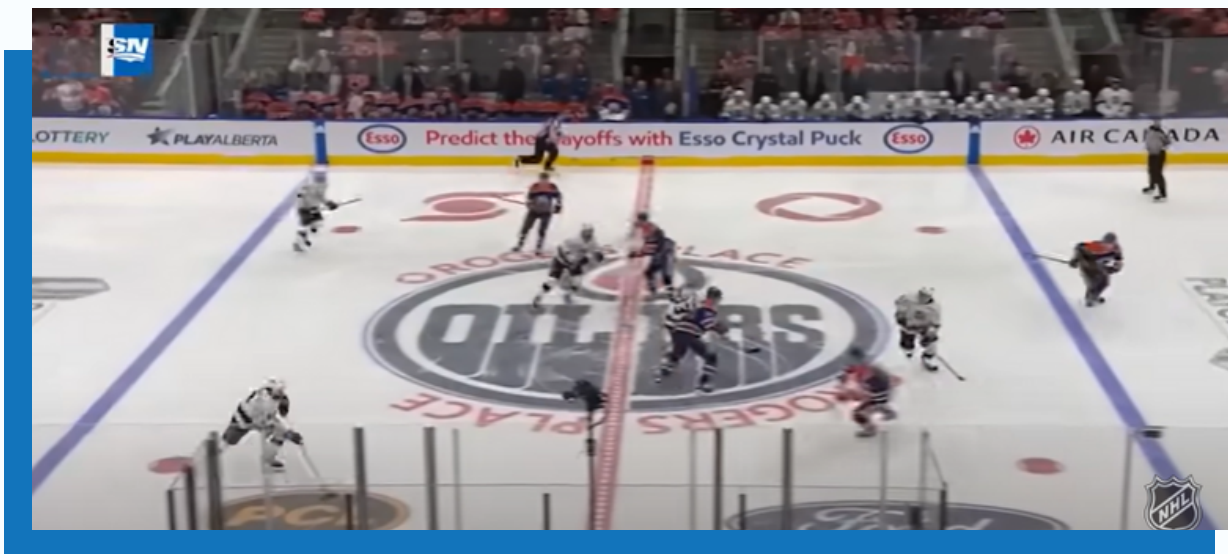


When weighing up the value of this visibility, it's important to understand that not all exposure is equal. [Audience attention is just as vital](#), and while DEDs in the centre ice are on screen longer, play in that area lacks goal-mouth action. This means that fan attention while play is in those areas may be less focused than it is when play is in the goal areas and ad recall may be lower.

That said, the prominence of [centre ice DEDs](#) makes placement in those areas perfect for [more complicated messaging](#) where the length and clarity of exposure are of paramount importance - as Esso's activation during the Kings/Oilers tie on April 19th proves.

The brand's 'Crystal Puck Contest' allows fans to win tickets to next year's Stanley Cup Play-Offs by predicting this year's scores. Effective communication of such a specific campaign is vital and Esso found both success and failure.

At the start of the second period, with attention high and viewers thinking about what may or may not happen during the rest of the game, the creative took centre stage. Placement and timing were perfect, and the large canvas of DEDs provided enough space for a call-to-action to be placed, acknowledged by fans, and followed up on.



Later in the game, however, the brand used DEDs to convey the same message, but in a less opportune space (an end zone) and at a smaller size. With the camera moving rapidly there was simply no time for viewers to acknowledge or action the messaging, so the impact of the placement was lost.



Use interactivity carefully

The use of URLs and other connected messaging, for example those using QR codes, is also problematic.

Canadian manufacturing equipment company Heavy Metal bought up space at the Kings/Oilers tie to promote career opportunities. As you can see, the company's logo is bold enough to stand out and draw attention to the ad, and the sharpness of the DEDs makes everything clear when the footage is paused. But [in a fast-paced match, with the camera moving rapidly, the length of the email address makes it difficult to see](#), leaving even those quick enough to notice it frustrated by their inability to take action.

Interactive features such as QR codes provide more value, being both easier to spot and use, but again care must be taken. [Placement in areas where the camera is more likely to be still](#) (such as centre ice at the start of a period) is ideal, and [the view should be unencumbered](#). An example from the MLB this season shows that even something as small as a net can obscure a QR code so much that it becomes unusable.



Heavy Metal's messaging can be clearly seen when the footage is paused, but the call-to-action and email address lose impact in the fast-paced environment of a hockey game.

Major League Baseball is better suited to QR codes, but the net covering it makes the code almost impossible to scan and therefore useless for both the brand and the audience.



Keep it simple

Sometimes [the most direct approach is best](#) and impact can be gained through a simple message. KitKat provided an excellent example during the Panthers/Maple Leafs Play-Off match-up on 2nd May.

Promoting its new 'Pops' product, the brand used the ball shape of the product and the extended width of the DED functionality to cleverly play on their popular 'Have a break' slogan. [The large-scale lettering and unusual nature of the messaging helped it stand out](#) and deliver the necessary impact.

Jersey Mike's sandwiches have been similarly successful. [Their 'a sub above' messaging was seen on DEDs throughout the season](#), with another ('if it ain't freshly sliced, it ain't Jersey Mike's') appearing during the play-offs.

[Both creatives were marked by their simplicity](#): a brief, playful message delivered in black text on a white background with a bold logo to its left. Neither it nor the KitKat activation distract from the play, but they make a strong impression on the viewer.



**Jersey Mike's
succeeded with a
brief, bold and
playful message**

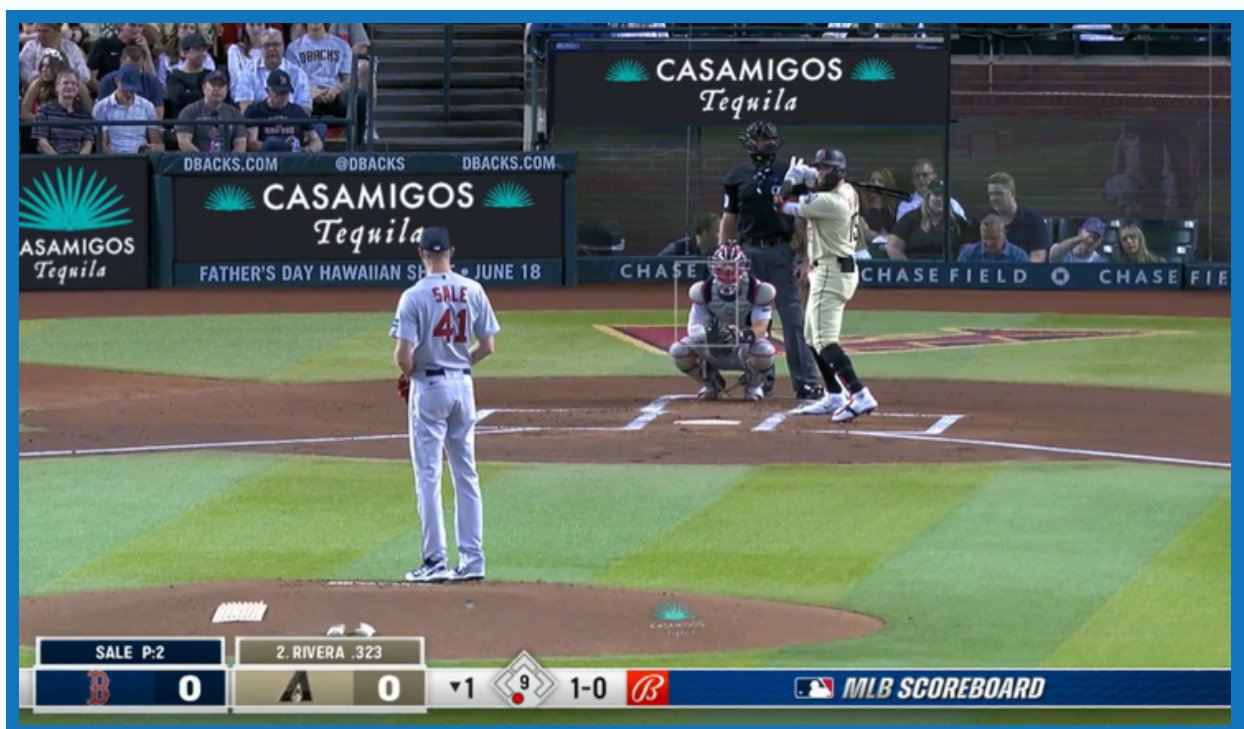
Conclusion

DEDs have enjoyed a [wildly successful first season in the NHL](#), more than justifying the league's heavy investment in them.

As the technology continues to evolve, brands have a major part to play in helping it grow. Light touch activations that make [subtle use of the technology's creative opportunities and flexibility](#) will help fans adapt to its presence, while smart use of its ability to target by location will generate [value for brands and relevance for supporters](#).

Virtual signage is no longer a theoretical nice-to-have, but an active option that can revolutionise rights owners' commercial potential. As the technology develops, we're likely to see more examples of its uses - in fact, Major League Baseball is already trialling its own virtual replacement tech.

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Data featured in this report that isn't attributed to DataPOWA has been collected from the following sources:

- Sports Pro Media: [Study: Gen Z digital natives interested in a greater variety of sport than previous generations](#)
- Morning Consult: [The Sports Industry's Gen Z Problem](#)
- Morning Consult: [Gen Z Keeps Sports Executives Up at Night. Here's What They're Doing About It](#)
- Sports Business Journal: [Digitally enhanced dasherboard ads are solving old problems and unlocking new opportunities for the NHL](#)

Game images taken from YouTube and broadcast coverage.

ABOUT US

About DataPOWA

DataPOWA is a UK-headquartered, wholly-owned business within the IXUP Group (ASX: IXU). It offers specialist data and analytics technologies to the global sports market, helping rights owners, brands, and agencies understand the true value of sponsorship assets and maximise the ROI they generate from partnerships.

About IXUP

IXUP Limited (ASX:IXU) (pronounced 'eyes up') is a pioneering technology company that has developed world-class software facilitating the secure sharing and analysis of sensitive information. Its Secure Data Engine helps organisations maximise information assets that previously couldn't be shared or commercialised due to privacy and compliance considerations.



**TO FIND OUT MORE
ABOUT VIRTUAL
SIGNAGE AND HOW TO
ACCURATELY MEASURE
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