



Champions:



Participants:



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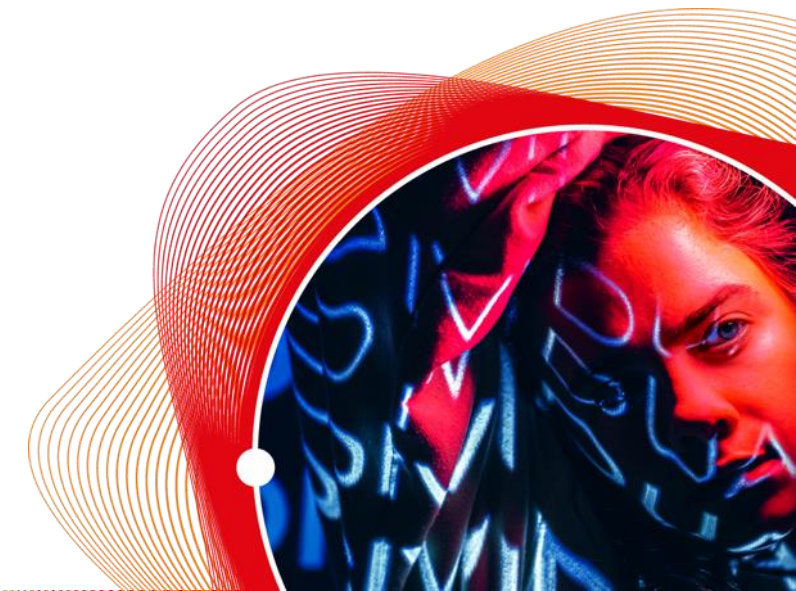
Associate sponsors:



Media partner:



| 365

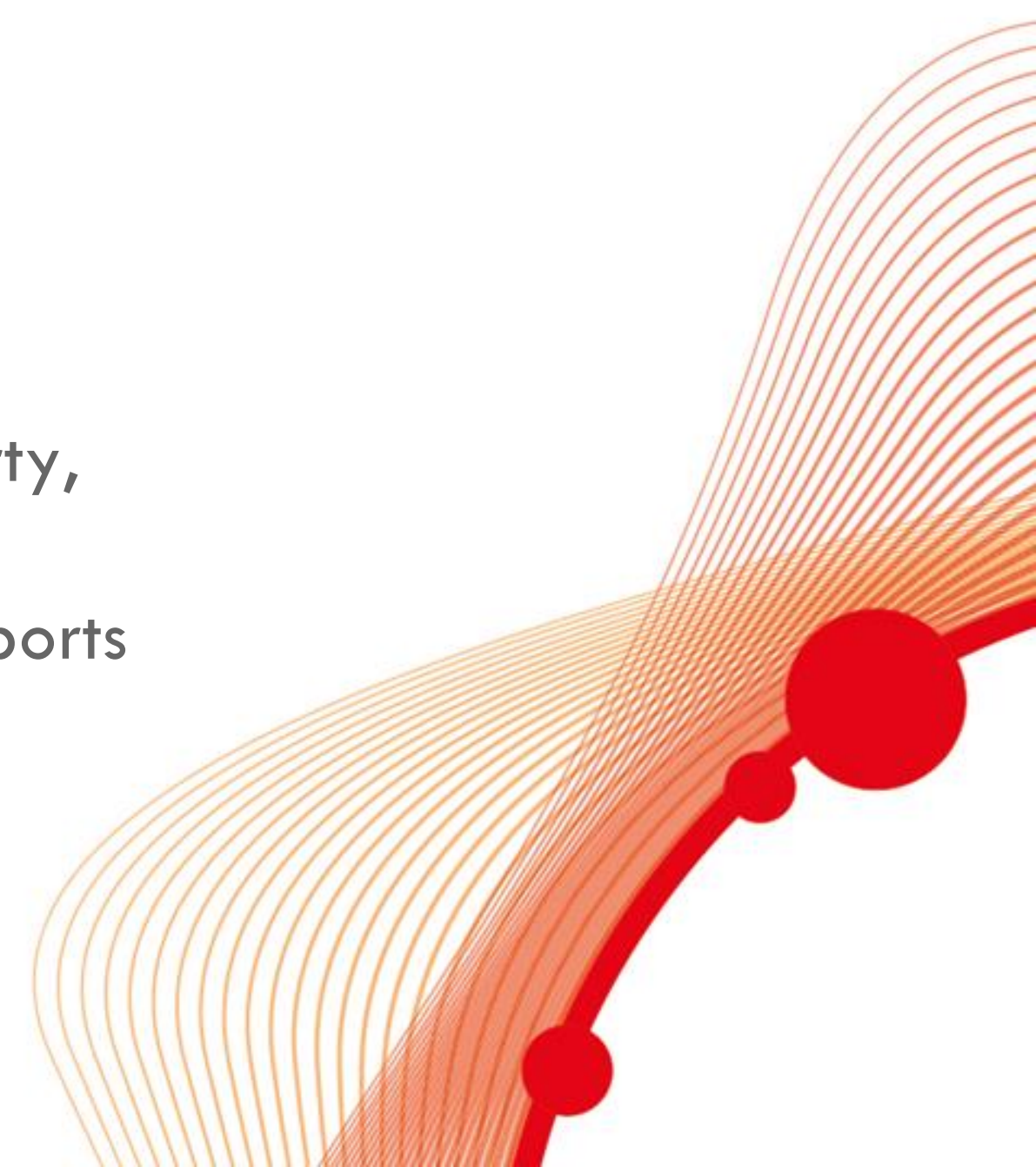


Aspirations

Live, interactive sports streaming delivers additional revenue / ROI / market share through personalizing viewer engagement.

POC Objectives:

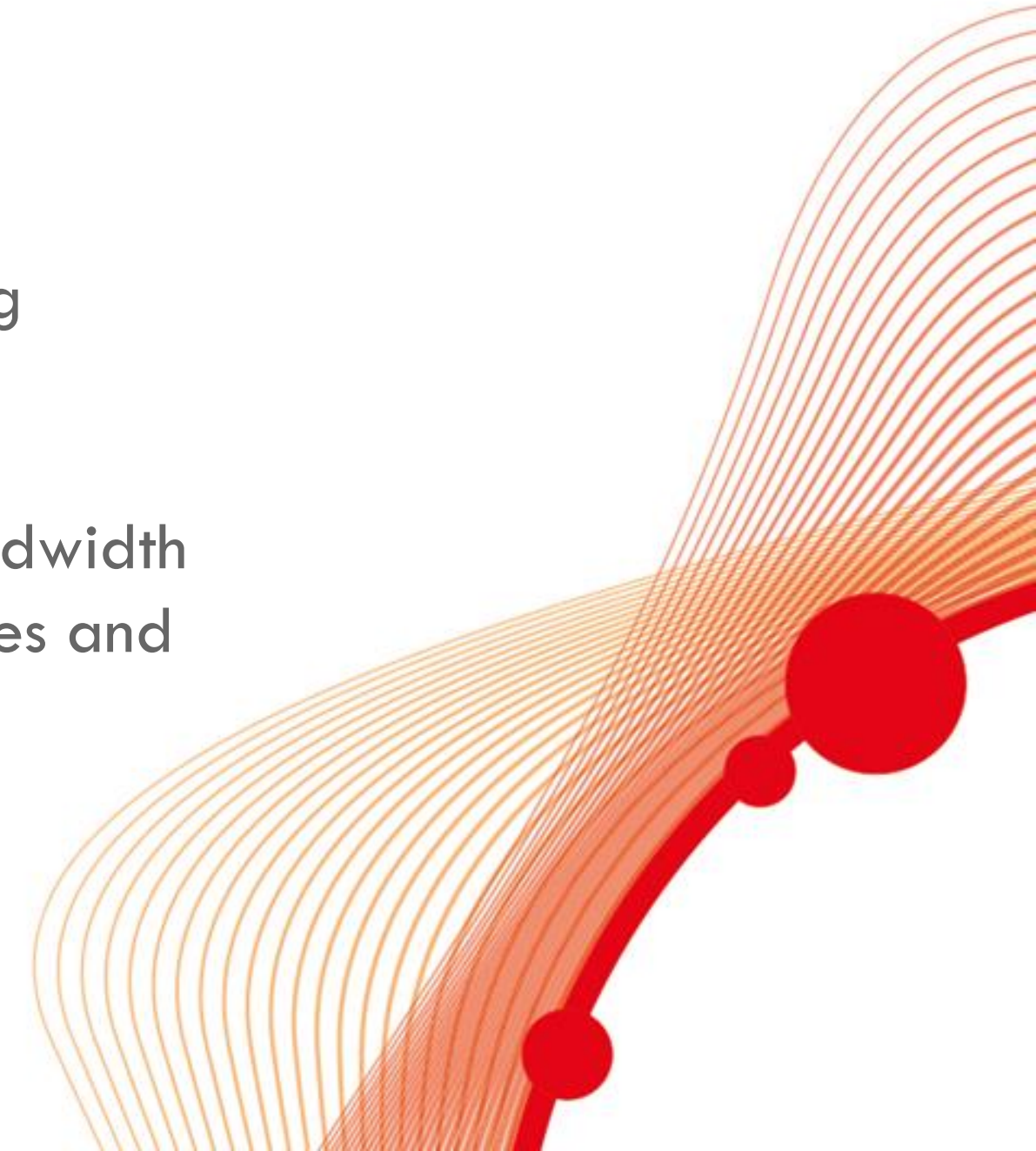
- Create next generation interactive use cases like betting, watch party, fan wall, multi-view, gamification that can be monetized.
- Enable new revenue streams for content providers with expensive sports league licenses
- Be technically innovative leveraging each partner's strengths



Background Challenges

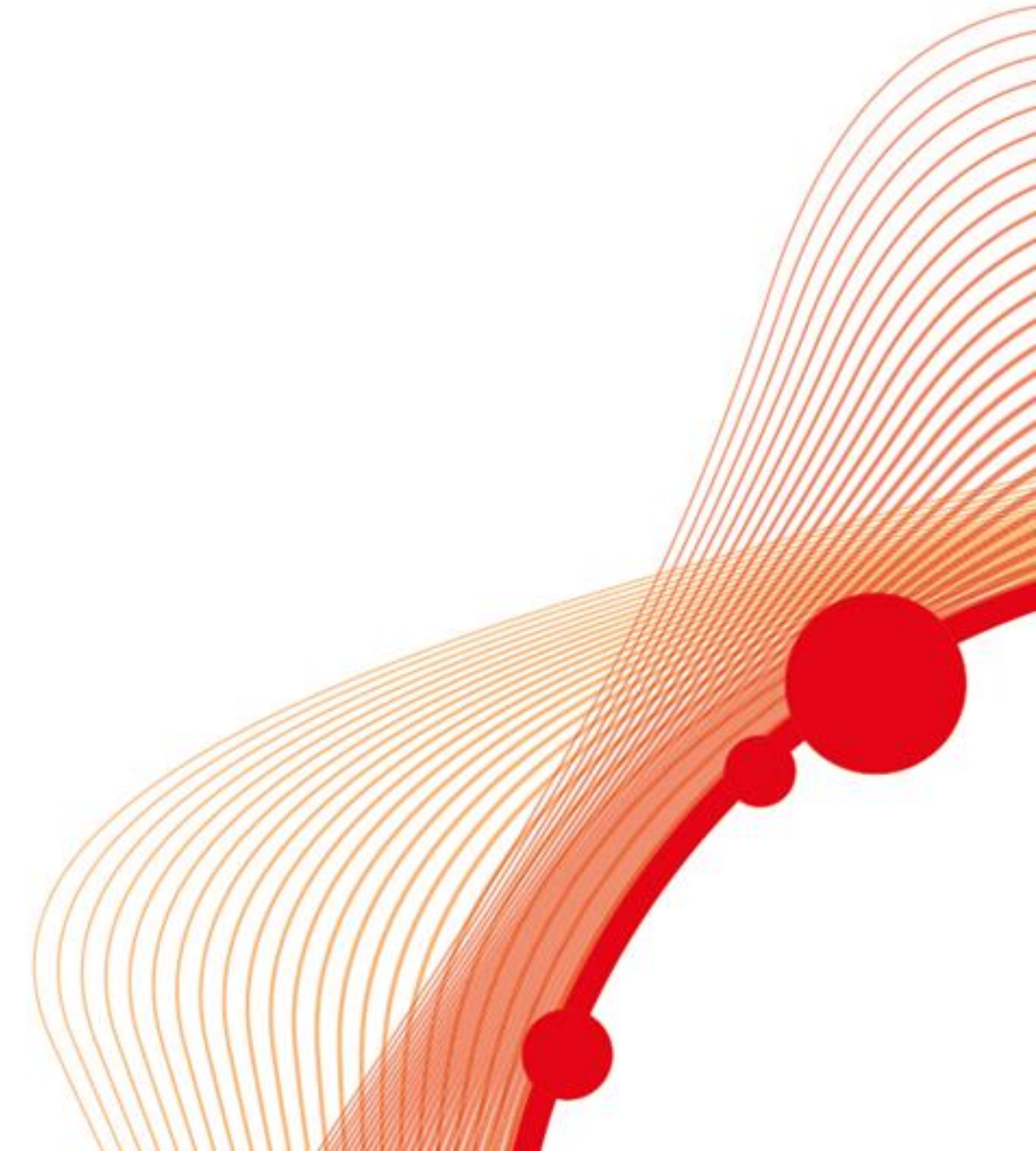
Current streaming technology limitations don't allow for live interactivity due to latency and scalability problems

- real-time **video sync is difficult** with multiple angles
- hardware encoders are **not optimized** for **real-time encode** + streaming
- traditional protocols (HLS, DASH, CMAF, LL-HS) **lack ultra low latency**
- second tier leagues + women sports **lack large budgets**
- **cellular networks** in arenas don't provide consistent performance + bandwidth
- need a **future interactive environment** for AR, XR, etc. for mobile devices and headsets
- **dynamic overlays** are **difficult to implement** and not available on mobile



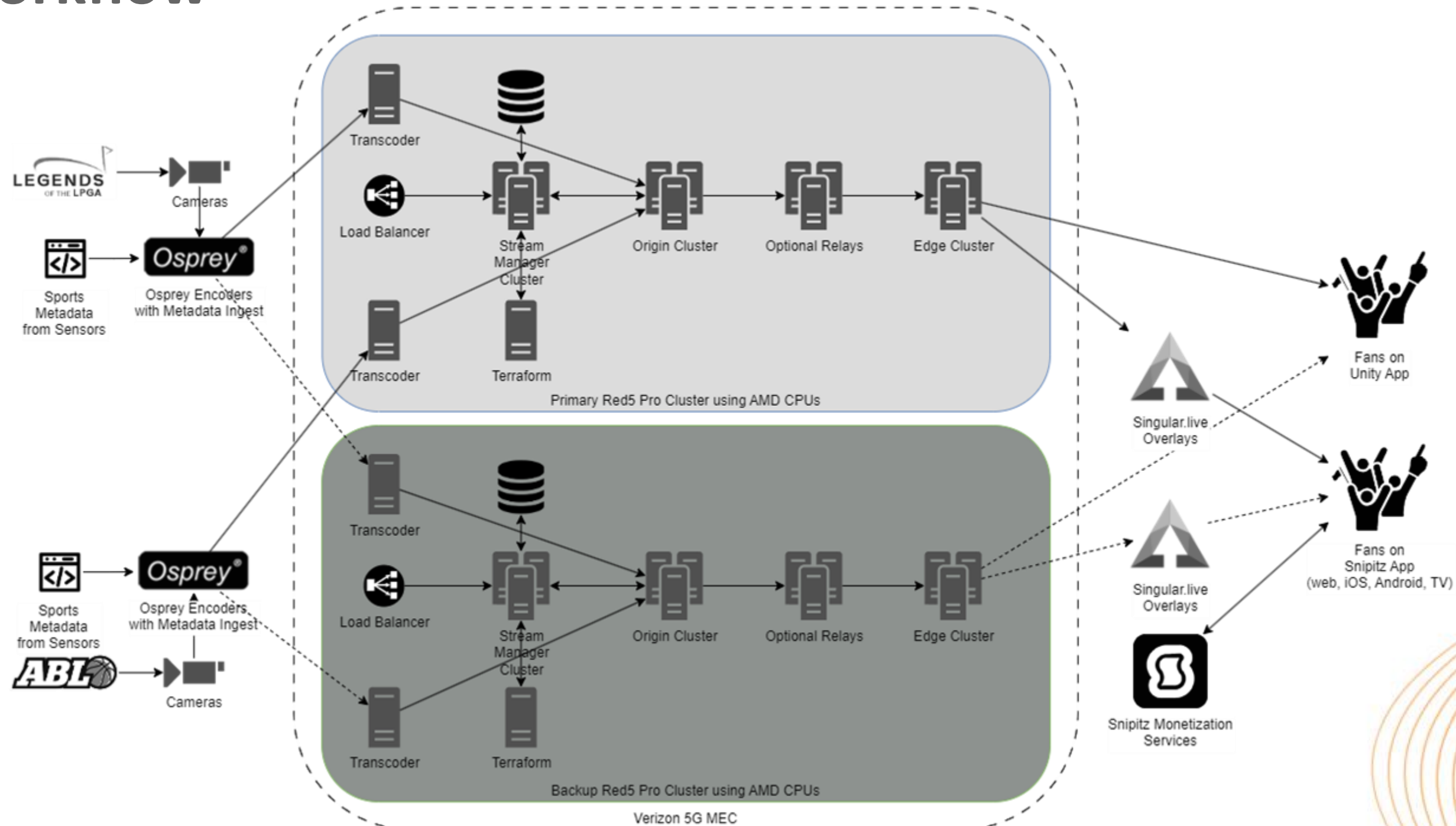
The Solution

Live Synced and Real-time for in-venue and at home





Workflow





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Solved Together

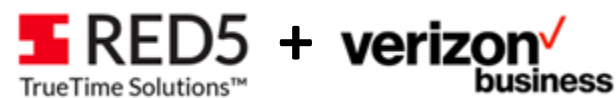
Proposed workflow requires new high-performance hardware + software



Video sync and server-side mixing over WebRTC



Live 720p encoding per frame at 60 fps



WebRTC streaming at scale in 5G MEC



5G provides consistent performance and bandwidth



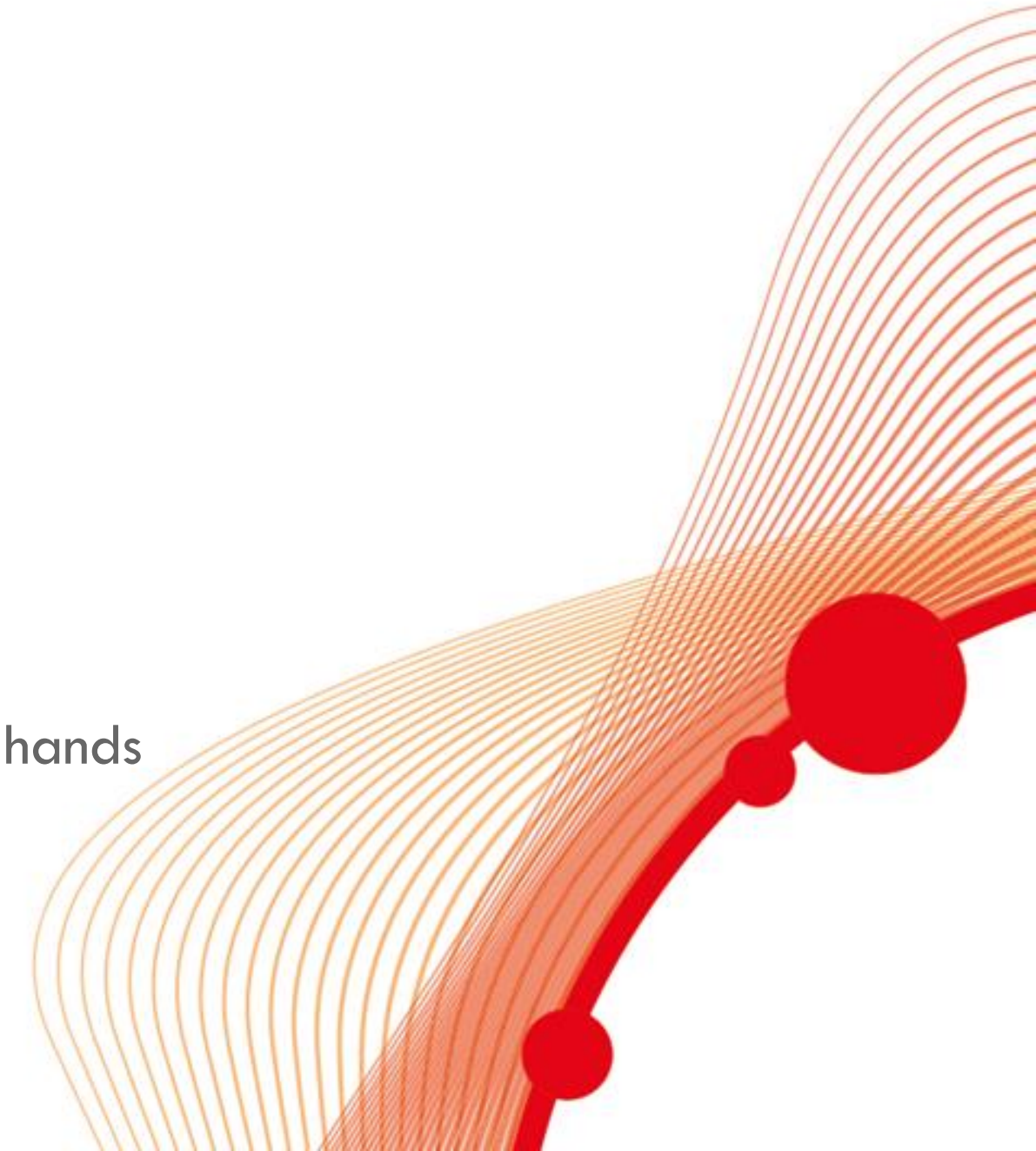
Combines streaming tech to put interactivity in the fans hands



Game engine adds XR capabilities

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Dynamic overlays add interactivity





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Achievements

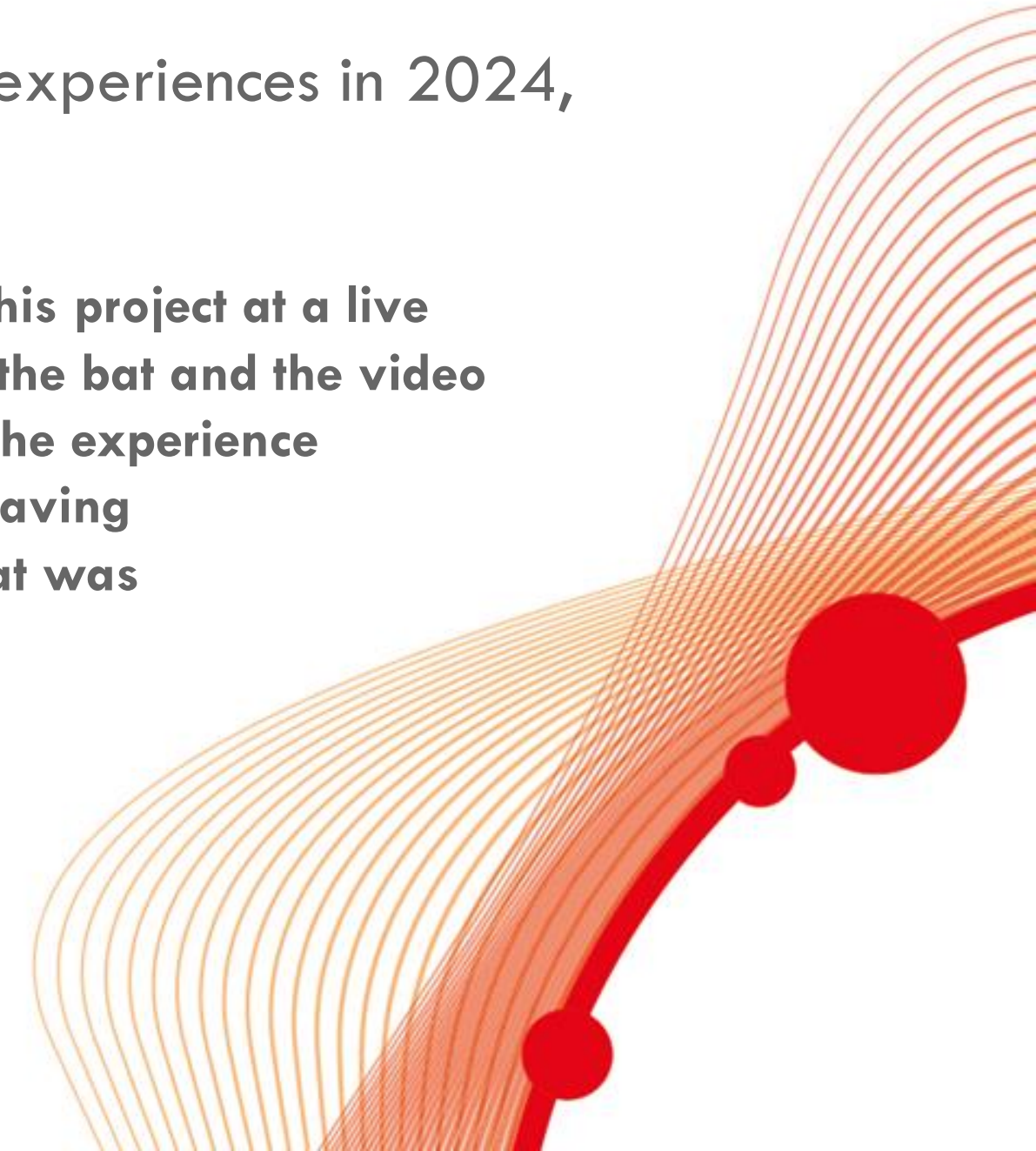
Successfully tested at professional venues, both large and small scale for at home and in-venue.

Worked with our partners to deliver a POC, which will evolve into live fan experiences in 2024, both in-venue and the home.



“I had firsthand experience with this project at a live professional event. The crack of the bat and the video on my phone perfectly synced. The experience was completely seamless, and having multiple views right from my seat was a game changer.”

Brandon Costa, SVG





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The Future

Through interactive streaming, find new, innovative ways to personalize and monetize sports / branded media content.

Launch productions with major US Sports League in 2024

Video

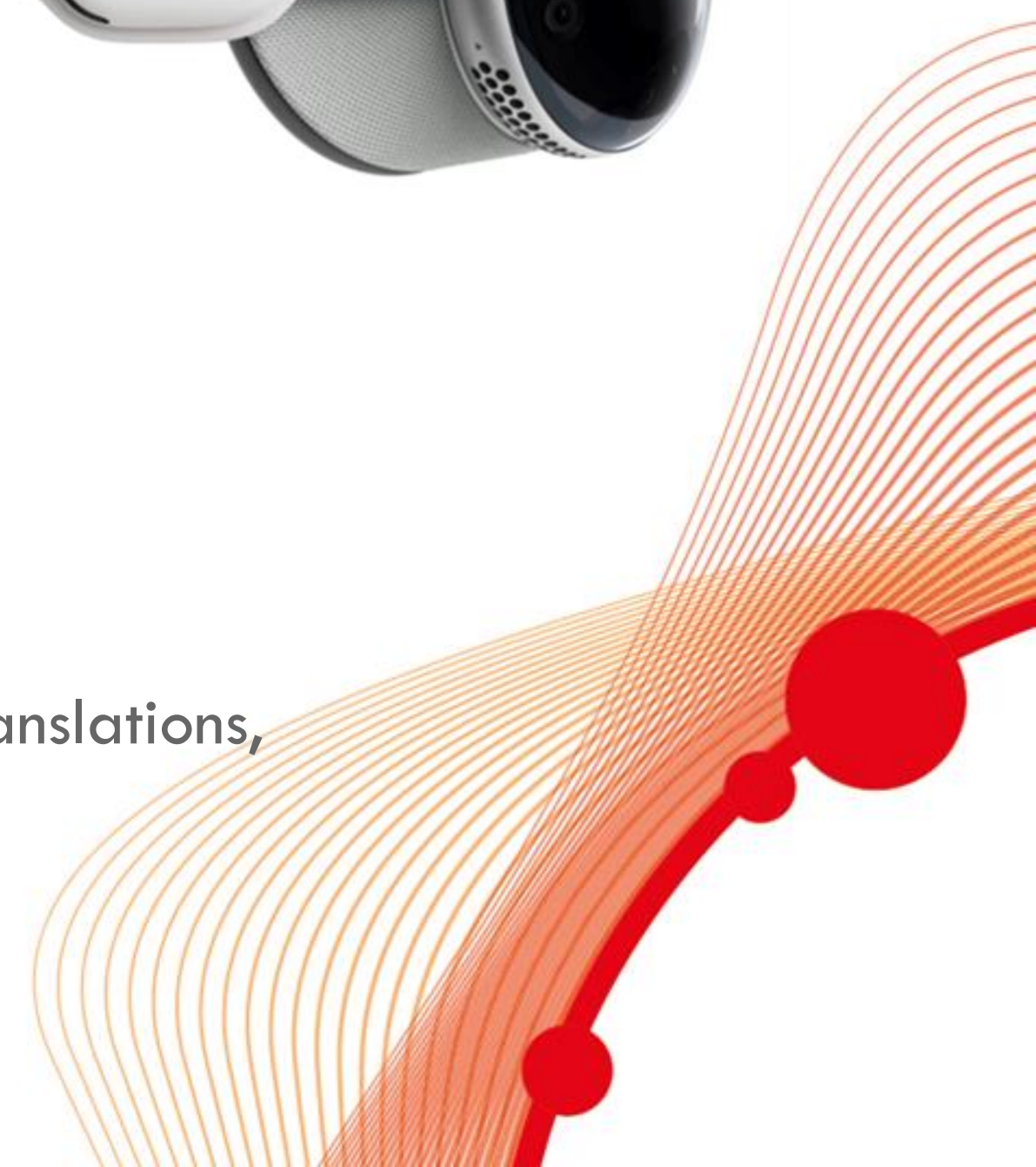
AR, VR, 3D video, live overlays, sync KLV data

Audio

influencers in sports, personalized color commentary, real time language translations, in-venue music experience

Monetization

betting, advertising, watch parties





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Appendix





Many fans, especially younger ones, are multi-tasking while watching sports at home

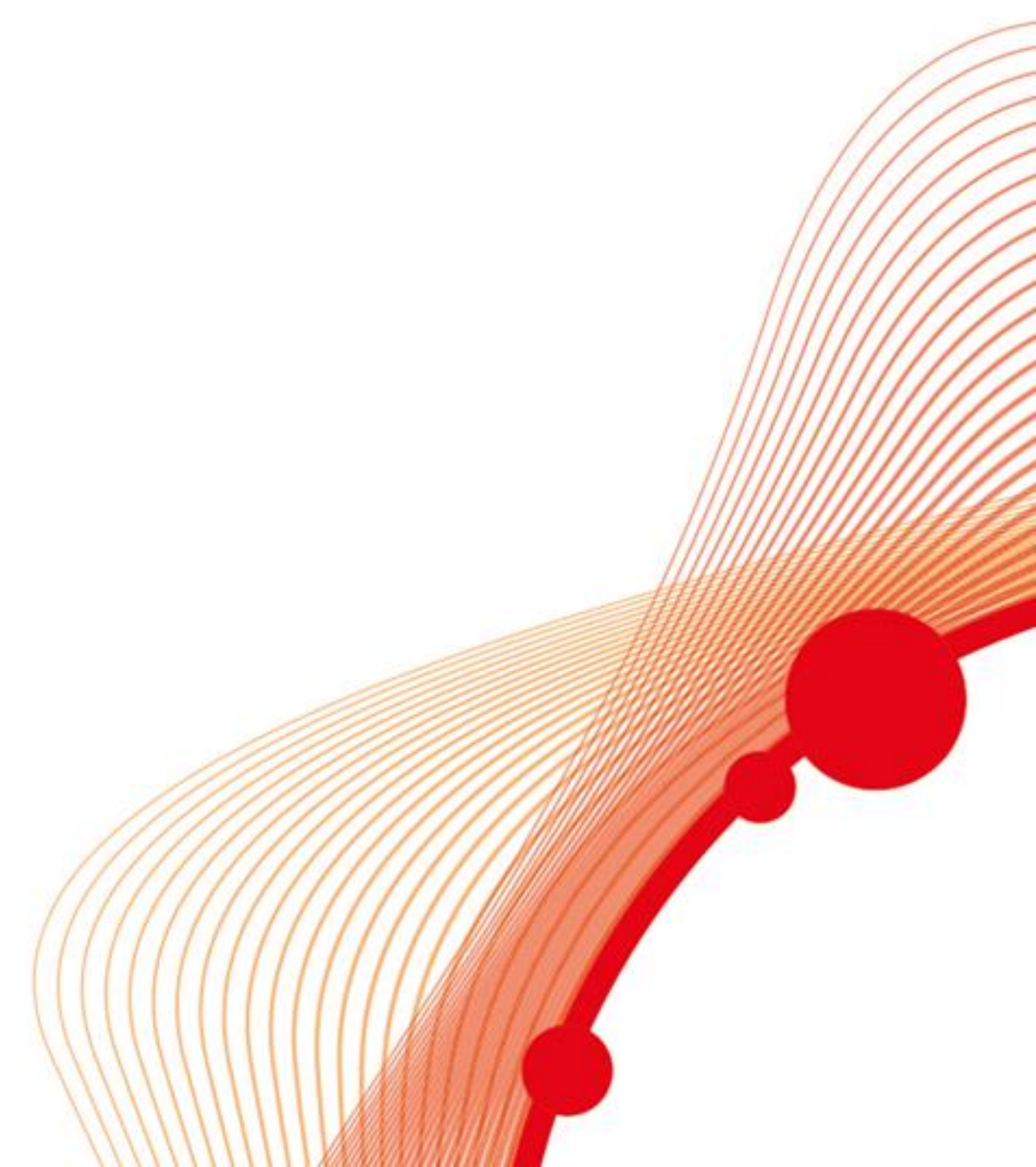
Percentage of sports fans who do the following activities while watching live sporting events from home

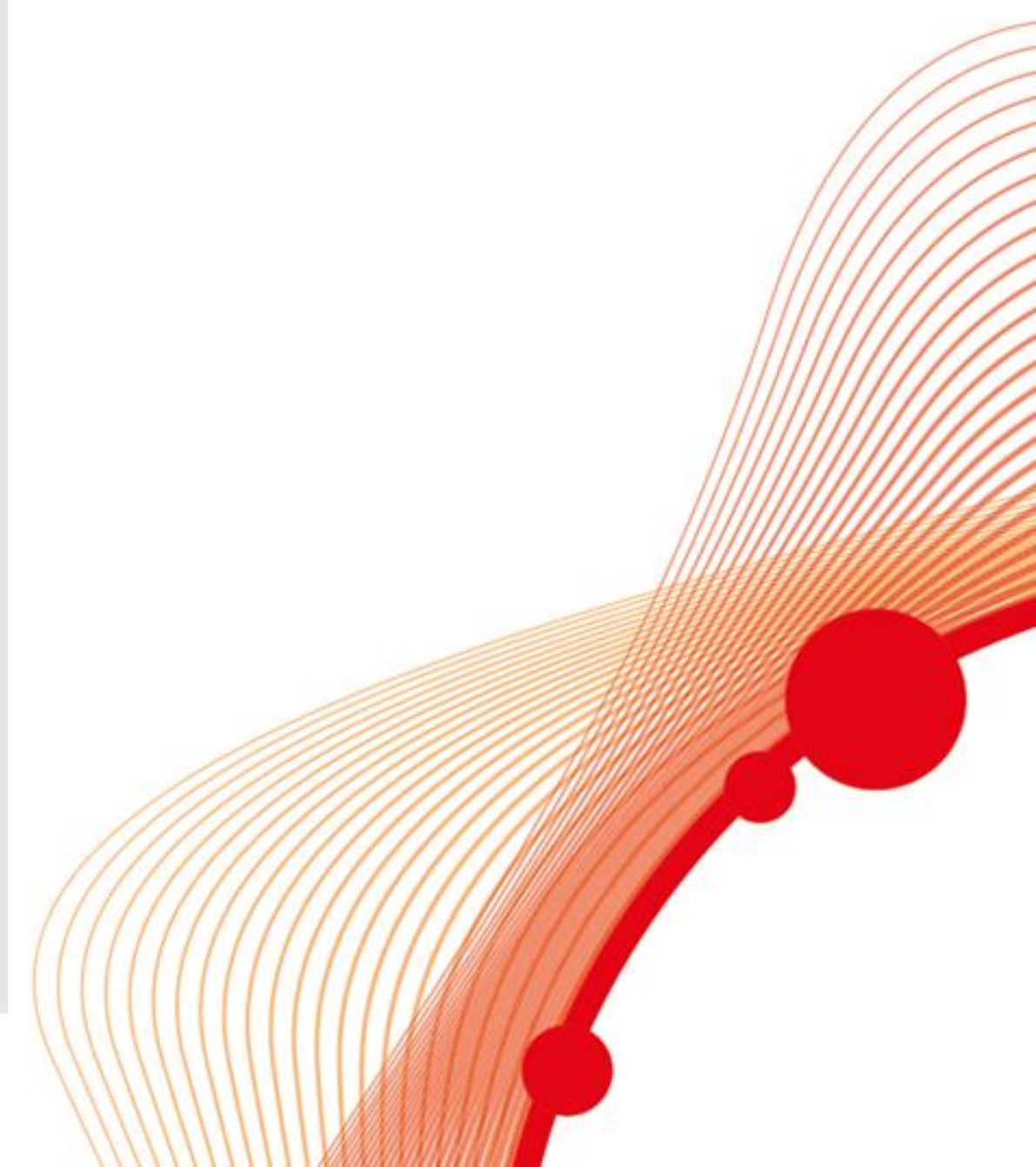
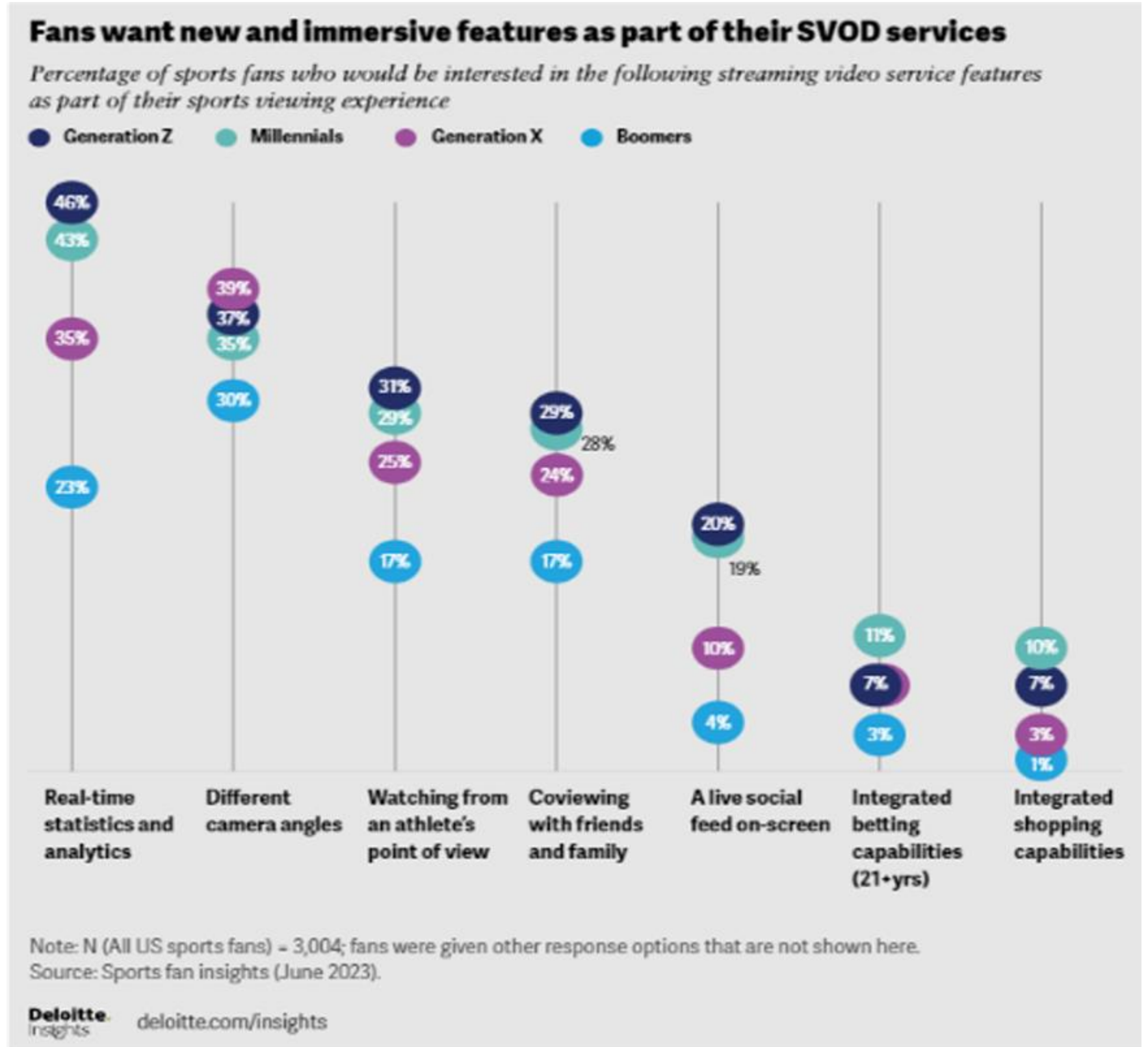
	Total	Generation Z	Millennials	Generation X	Boomers
Look up player or team statistics	44%	51%	49%	49%	34%
Use social media to read comments and opinions from others	36%	51%	46%	39%	18%
Use social media or a messaging service to interact with others	34%	44%	47%	35%	19%
Watch another game on a separate device	22%	21%	30%	23%	15%
Bet on a website or mobile app (21+ yrs)	15%	22%	24%	16%	6%
Play fantasy sports	15%	17%	25%	18%	4%
Purchase sports merchandise or memorabilia	13%	17%	20%	14%	5%
Play a game related to the event	11%	22%	18%	7%	2%

Note: N (US sports fans who watched live sporting event from home) = 2,980.

Source: Sports fan insights (June 2023).

Deloitte insights deloitte.com/insights







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Real Time
Interactive
Streaming
Personalises Live
Experiences

Monday 18th September
12:15-13:15

CHRIS ALLEN
CEO
RED5

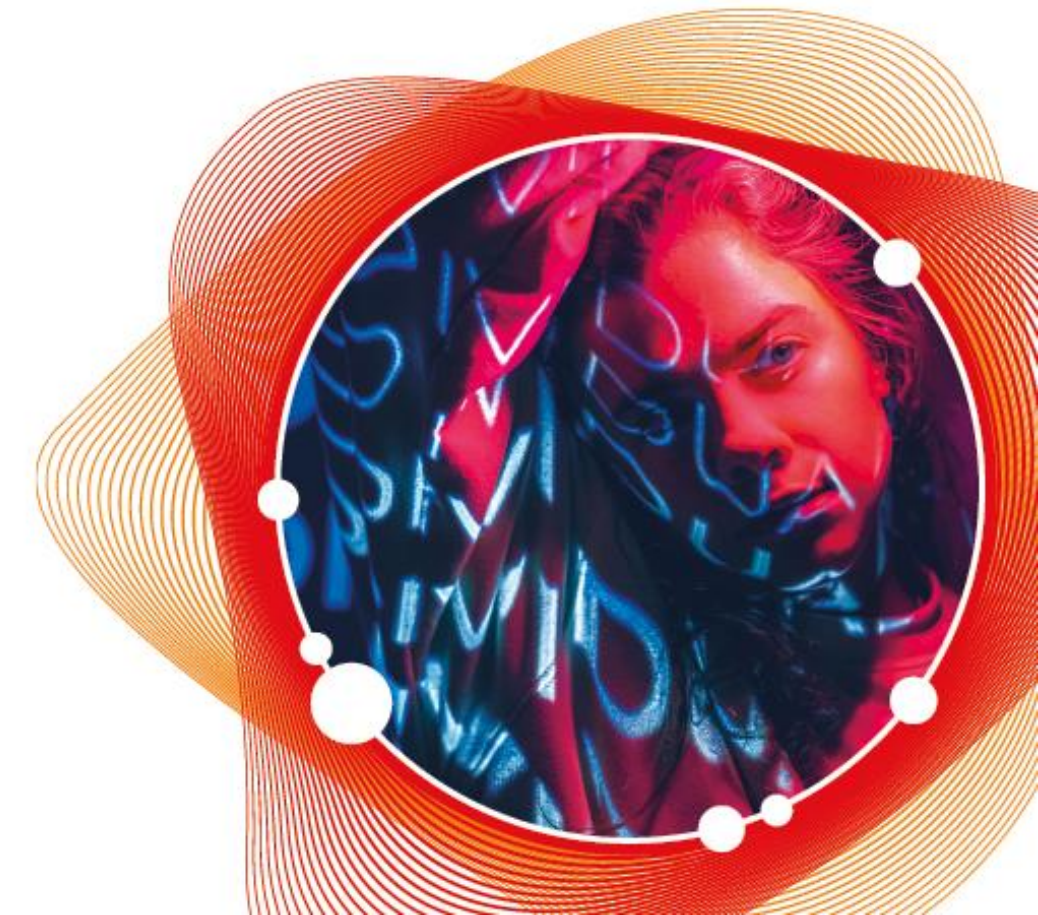
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