ARUP

'Total architecture': powering Arup's extraordinary vision for innovation and collaboration



Since 1946, Arup has pushed the boundaries of what design and engineering can achieve. The firm has helped create multiple iconic structures the world over, from the Sydney Opera House to the London Eye, Beijing National Stadium, the Pompidou Centre in Paris, as well as the breathtaking Marina Bay Sands and Jewel Changi Airport in Singapore.

'Total architecture': Arup's vision for greatness

The company was born of founder Sir Ove Arup's conviction that a more collaborative and open-minded approach to engineering would lead to work of greater quality and enduring relevance. This unique approach is outlined in the "Key Speech" given by Sir Ove in 1970, consisting of 6 aims and values that guide every facet of the company's operations to date. The "Key Speech" is also mandatory reading for every new employee joining the company.

One of the foundational principles laid out in the "Key Speech" is that of 'Total architecture' – a holistic approach to design that emphasizes expertise, innovation and collaboration. 'Total architecture,' put simply, means bringing everyone together to benefit from their experience and insights. It also means continuous improvement and an openness to new people and ideas.

VIDEO STACK



Enterprise Video Platform

Microsoft Teams and Stream



Video Experience Platform **Hive Optimization**



Analytics **Hive Analytics**



Event Operations **Hive Operations**

COMPANY

Arup

HEADQUARTERS

London, UK

INDUSTRY

Engineering

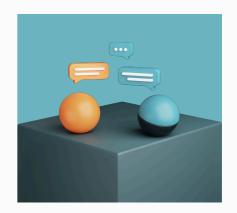
EMPLOYEES

16,000

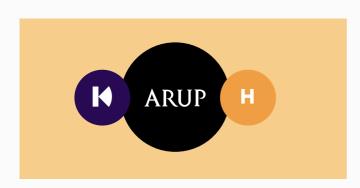
Collaborative spirit with people at its heart

Working life at Arup is not about titles or strict hierarchies – rather, the focus here is on listening to one another to create and learn, which manifests as the company's exceptionally collaborative spirit.

To facilitate such collaboration and uphold the values bequeathed by its ingenious founder, Arup continuously invests in that which makes the firm so special: its **people**, the designers and engineers of every type of built environment, and advisors to businesses in every sector.



Hive & Kinly join forces to power Arup's ambitious vision



Among a multitude of initiatives carried out by Arup to foster its unique work environment is that of investing heavily into enabling its people to work better together, making collaboration smooth regardless of where in the world employees are located.

As early as 2015, Arup engaged Kinly, a global video conferencing and audio-visual workplace technology specialist, to facilitate video communication.

The partnership first started as an effort on behalf of leadership to improve workflows, make it easy for employees to schedule and join meetings, and ultimately contribute to a more collaborative working environment where innovative and inspiring ideas can flow unhindered.

As part of the undertaking, Kinly managed and supported a Cisco estate of 450 meeting rooms with video endpoints, implementing solutions such as Pexip to connect video conferencing technologies from Cisco and Microsoft, bringing the two platforms together.

To further improve workflows, Simon Watson, who has been heavily involved with the engagement since the very beginning, relied on his vast industry expertise to recommend and implement solutions best suited to the client's needs.



As a trusted advisor to some of the world's most admired companies, our goal is to create smart, innovative and more efficient ways of working for our clients. It's been truly inspiring to follow Arup on their collaboration enablement journey and achieve their desired outcomes.

Simon Watson,

Business Development Cloud Video Services -UK&I, Kinly



Simon and the Kinly team engaged software solutions, one of those Synergy SKY, to simplify scheduling, joining meeting rooms, booking meetings through Outlook, and using physical hardware.

Simon's expert analysis of the customer's needs also prompted him to recommend video experience solutions developed by Hive Streaming

Hive Streaming enables seamless video communication across the enterprise

A valued partner to Kinly, Hive Streaming empowers some of the world's most admired brands to boost employee engagement and build strong company culture through seamless video communication.

With Hive, customers are able to reliably deliver video to any audience size in the highest quality and analyze the outcomes and trends of their video communication to be able to measure and increase its impact.

Hive helps enterprises utilize their existing network investments by partnering with industry leaders, meaning that the Hive solution came already integrated with – and was seamlessly added to – Arup's existing video communication platforms of choice: Microsoft Stream and Teams Live Event

(Skype for Business at an earlier stage).

Deploying the Hive Video Experience Platform enabled granular viewer and stream analytics (via Hive Analytics), allowing Arup's IT team to pinpoint streaming issues and perform troubleshooting as needed, ensuring that all employees can benefit from a viewing experience of the highest quality possible. This was further heightened by Hive's Optimization solution, which helps viewers build up an extended buffer via patented CDN pre-fetching technology, protecting them from quality problems that can arise if the network suddenly becomes congested. Finally, Hive Operations was used to ensure live video event success through pre-event Silent Testing.

Sweeping adoption of Microsoft Teams & Stream during the pandemic

Arup has always had a clear purpose – to shape a better world. In early 2020, Arup once again began doing brave and inventive work and making a positive impact on people's lives.

The ability to communicate and collaborate has been a key priority for Arup even before the dramatic events of 2020. But with Covid-19 sweeping across the globe, video communication became the only viable way to not just keep company culture alive, but bolster the foundational principles and values the company was built upon.

This crisis has driven Arup to apply their expertise in radical new ways, using data, technology and modelling to help clients and society adapt. Arup's leadership understood that achieving the company's sustainable development goals would require

greater collaboration between employees, clients and communities. It will require digital transformation and a commitment to new ideas.



To facilitate continuous collaboration throughout the pandemic, Arup went all in on video communication in 2020. exceeding their estimated viewership numbers by 10 times, facilitated by a quick adoption of Microsoft Teams across the enterprise. The amount of video consumed far exceeded expectations, indicating that the company was not only incredibly successful at adapting to the overnight transition to remote working, but that communicating clearly with the entire workforce is among leadership's most urgent priorities, evidenced by heavy and sustained internal usage of Microsoft Teams Live Event & Stream.



Arup's commitment to clients and employees, during and after the pandemic

Arup's focus lies far beyond inside the enterprise: the firm has developed a comprehensive return-to-workplace methodology, one that takes clients beyond immediate needs and prepares them for more resilient operations in a changing world. Arup can help assess existing locations and environments, establish the risks, and transition to a safe and productive workplace.

To help clients ensure safety as employees begin to return back to the office, Arup helps manage occupancy with their Space Explorer solution. It models human behavior, identifies interaction points and allows clients to plan a workplace that meets social distancing guidelines, which is invaluable as organizations attempt to return to normal levels of occupancy and productivity.

In addition to Space Explorer, Arup's Neuron building intelligence system offers Al-powered thermal imaging for temperature screening. This means that clients can carry out real-time mass screening and

manage the health and safety of both employees and visitors.

Most importantly still, Arup will continue to invest in its people, and making sure that every facet of the company's operations is built on the lasting legacy of its ingenious founder, Sir Ove Arup.

To make it easier and more intuitive for employees to communicate and collaborate, Arup has once again engaged Kinly to facilitate a large-scale swap of 400 Cisco meeting rooms for 400 Microsoft Teams rooms. Microsoft Teams has been the enterprise video platform of choice for Arup throughout 2020, which means employees will soon be able to benefit from navigating the same interface they have grown accustomed to through using Microsoft Teams.



The value of Hive towards the business and live video events is immense. Our leadership can now reliably deliver messages to the entire workforce, which has never been more important than during the pandemic. It's a joy and a privilege to enable Arup's incredibly talented workforce to collaborate and find imaginative solutions to the world's toughest engineering challenges every single day.

Chris Ellen, Unified Communications Service Leader - Arup

What Arup has successfully managed to achieve in 2020:

- Reached yearly viewership estimate already in May 2020, great exceeding expectations
- 10+ events with 2000+ viewers, ~279 Live events with 100+ viewers
- Avg QoE 87% Excellent for the largest events, meaning buffering has been minimal
- Largest event of 2020: Microsoft Teams, 90% QoE excellent, with an audience of 4,086
- Facilitate highest possible quality for video communication in China



214,000

Total viewership in 2020

86%

Excellent QoE

279

Live events with 100+ viewers