

MOS2S

New forms of engagement in entertainment and society



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Traditional media is losing ground to personalised experiences. Children of today, for example, don't even know what it's like to have a set of TV channels with fixed broadcasting timeslots for your favourite shows; they choose what to watch at the time they want. And they even produce thousands of pieces of content on their own each day. This trend in the entertainment business can also be seen in society, where city representatives no longer make decisions on their own. Everybody wants to be involved, or at least can be.

With many different innovations and high-level sensor applications, the MOS2S (Media Orchestration — Sensor to Screen) project took the outdated broadcasting concept to the next level, adding a completely different dimension with features such as instant live broadcasting. The aim of the project was to capture as much sensor data as possible and use this data in various applications in order to eventually enhance the experiences of people.

Impact highlights

- > Thanks to MOS2S, for the first time in the world, a football match in the Johan Crujff ArenA was broadcast in real time with only a 0.3-second delay from the pitch in Amsterdam to a viewing area in South Korea. Combining new Ultra-Wide Vision technology with a super-fast data connection enabled a crowd of South Koreans to experience the live event in an unmatched way.
- > As the first stadium in the world to adopt the innovative technologies developed in the MOS2S project, the Johan Crujff ArenA is boosting its reputation for innovation and opening up a new consultancy market, in turn making the technology accessible to new and existing sports hubs.
- > Since the MOS2S project, Kiswe has been working with multiple sports leagues and entertainment and media companies worldwide, like K-pop group BTS, NBA, Universal Music Group and the Tour of Flanders to name a few. In 2021, Kiswe was named one of the World's Most Innovative Companies by Fast Company and the company has grown by more than 70 FTE worldwide since their participation in the MOS2S project.
- > Game On's video technology has been licensed to 25 European clubs with a revenue of almost EUR 700 thousand for GameOn in 2019 (versus roughly EUR 80 thousand in 2016).
- > The Inmotio Performance Centre is being rolled out for all 18 teams of the Dutch Eredivisie, potentially leading to millions of users following completion.

Project results

To bring engagement to a higher level, 17 partners from four countries came together in MOS2S and have created world-first ways to engage with citizens and audiences of live events. MOS2S was centred around two use-cases: crowdsourced journalism and (sports) entertainment. The project focused on technologies that allow data and media streams to be orchestrated into an all-encompassing experience on various types of end-user devices. The common denominator in MOS2S is the media processing platform, which combines multimedia streams from different domains.

Exploitation

For **e-Democracy**, four components were developed by the MOS2S project in which each partner provided another step of the value chain.

VRT's Babelbox, a mobile interaction booth, has been used in 2019 by reporter and photographer Yassine Atari and Belgian journalist Rudi Vranckx and in multiple media campaigns, in search of the voice of citizens and selected content was used in live debates. In the follow-up ITEA project CityStory, the Babelbox technology has been

upgraded and extended with video-based questionnaires in order to provide users with a more personal and inclusive interaction.

Gerade Software's Online Debate and Online Debate Replay, two tools for editing and broadcasting debates, have been implemented in Türkiye and were eventually sold to an investor.

Hangouts, a video chat system, co-developed by VRT and Kiswe, enabled listeners and absent campaigners to dial in live and bring their story to air from anywhere in the world. The workflow ran completely automatically, saving the editorial team time and manpower and allowing customers Studio Brussel and Sporza to increase listener and viewer interactions.

In the **sports and entertainment domain**, several unique innovations were also developed.

First of all, in September 2018, MOS2S's project leader TNO and a number of partners presented a world first: the match between the Dutch and Peruvian national soccer teams was played live in the Johan Crujff ArenA in Amsterdam, and watched in real life and real time in Daejeon, South Korea, thanks to Ultra-Wide Vision technology.

Furthermore, the Hangouts technology of VRT and Kiswe was used at the Olympic Games in Tokyo 2020 (2021) and the Winter Olympic Games in Beijing 2022 through the novel media format 'Athlete Moment'.

And through an exceptional SME collaboration, Game On and Inmotio have implemented their video and sensor technologies in the Johan Crujff ArenA. Thanks to this, visitors can get much closer to the spectacle, even from a distance. In addition, the technology is interesting for coaches because player movements can be easily analysed for training purposes.

Finally, MOS2S's technology was selected, out of 209 applications from 39 countries, to be demonstrated during the Eurovision Song Contest of 2020, which was unfortunately cancelled afterwards due to COVID-19. Eventually, three finalists were selected to actually implement their solution at the Eurovision Song Contest and two of these three solutions were derived MOS2S.

MOS2S's applications have been tested in a Smart City Playground. The next step is to implement them on a wider scale to further revolutionise the role of citizens in both politics and entertainment.

MOS2S

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PROJECT LEADER

Gjalt Loots, TNO

PROJECT START

October 2016

PROJECT END

Juli 2020

PROJECT WEBSITE

<https://itea4.org/project/mos2s.html>

PARTNERS

Belgium

imec

KISWE

Nokia Bell

VRT

Republic of Korea

ETRI

jdssystem

Moover

Samsung Electronics

The Netherlands

Bosch Security Systems

Game On

Inmotio Object Tracking

Johan Crujff ArenA

Koninklijke KPN

TNO

Türkiye

DIA Yazılım San. ve Tic.

Gerade Software

KoçSistem

