

The logo graphic for 2IMMERSE consists of several overlapping, semi-transparent shapes. At the top is a large orange-outlined rectangle containing a grey grid pattern. Below it are smaller shapes in blue, red, and purple, some with grid patterns and some with solid colors. The text '2IMMERSE' is positioned below these shapes, with the '2' being significantly larger than the other characters.

2IMMERSE

Authoring and Testing Shared Multi-Device Experiences of Theatre across Connected Homes: Lessons from the 2-IMMERSE *Theatre at Home* Service Trial

Maxine Glancy, Phil Stenton, Doug Williams
November 2017

"This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement 687655

2IMMERSE overview

The end

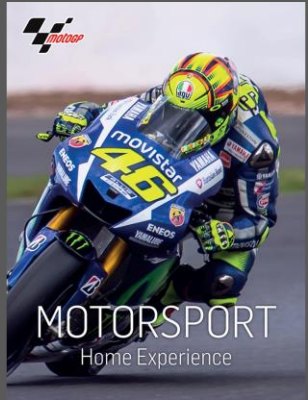
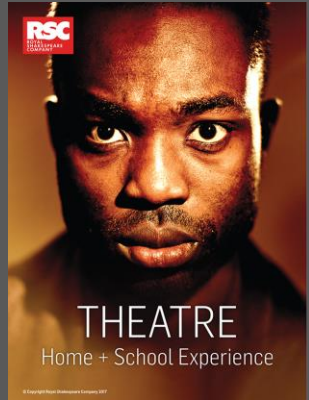
Enable and inspire content owners and TV service providers to create synchronised multi-screen experiences that are flexible, interactive and customisable.

Foundations

- 1. Multi-screen Presentation** - Content can be seamlessly presented across multiple devices including TVs, Tablets and Smartphones.
- 2. Object Based Media** - Content remains as discrete media 'objects' which can be flexibly presented across available display devices at the point of consumption.
- 3. Flexible Media Curation** - Producers, Broadcasters and the Audience can control how the content is presented and consumed.

The means

- **Platform:** An extensible standards-based platform for multi-screen video experiences with a reference design.
- **Tools:** Tools supporting the authoring and delivery of customisable multi-screen experiences.
- **Inspiration:** Compelling examples based on full scale trials of live events across Theatre and Sport.



"This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement 687655



Theatre...it's not just about the show.

The performance



Question

Can multiple screens, an object based approach to broadcasting and a flexible approach to content curation improve the presentation of filmed theatre in people's homes?

The experience



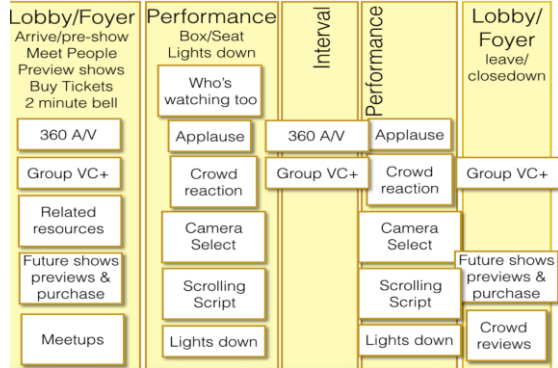
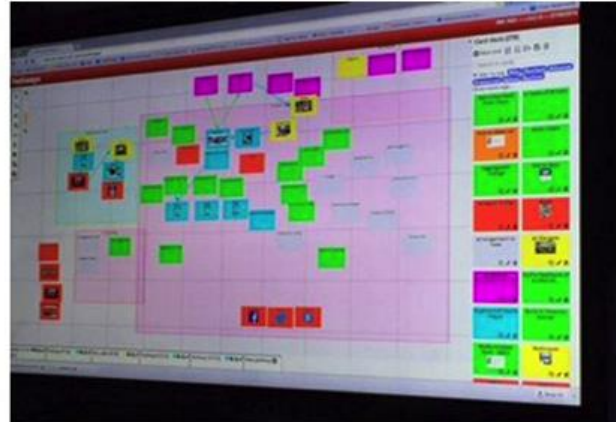
Process

- Develop the ideas
- Capture the content and build the platform
- Conduct the trial
- Evaluate

"This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement 687655

Develop the ideas

Ideas for the Theatre At Home use case were developed following literature surveys, which picked up on the role of social rituals, through analysis of what 'going to the theatre' usually involves and through workshops



We identified that 'going to the theatre' could be broken down into 5 phases and decided to reflect that in our Theatre At Home Prototype to retain some of the ritualistic aspects of the experience. We also made some decisions about the features that it would be good to support during each of these phases.

5x Phases & features

"This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement 687655



Capture the content



Illuminations

The media we used in these closed trial was used with permission from the Royal Shakespeare company.

John Wyver, from Illuminations who are a partner in 2Immerse, enables the production of this content for the RSC.



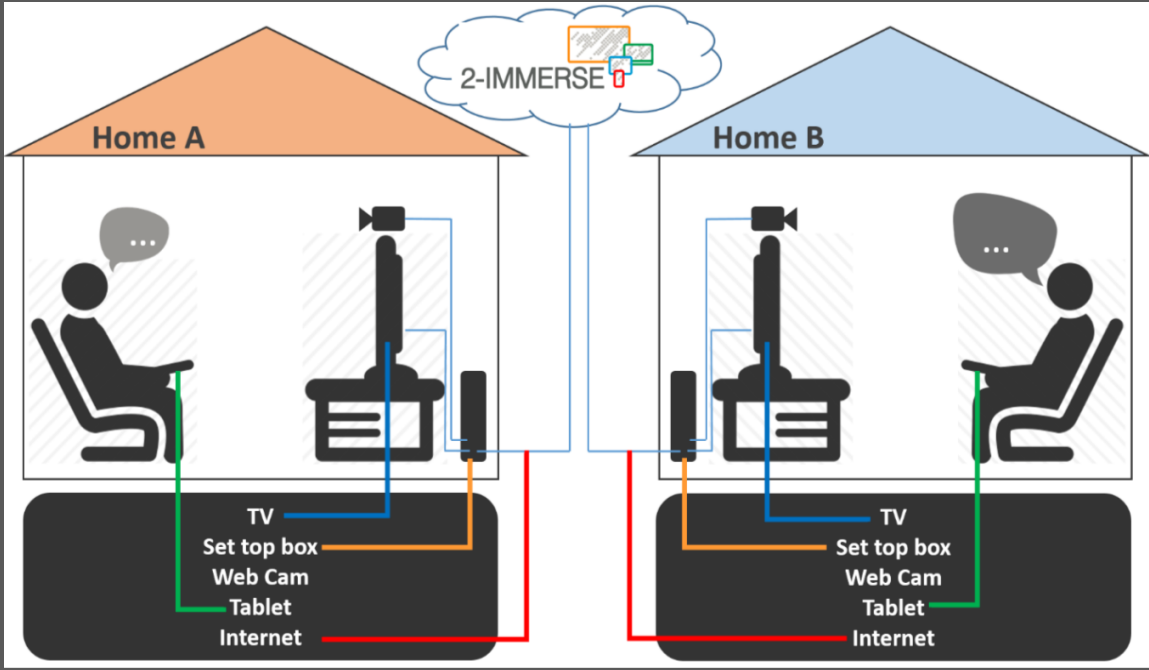
“This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement 687655



Build the platform

The set-up we used in the trials is shown by this schematic. In general there were at least two people in each trial household.

A video of the experience can be seen at the link below the diagram.



A video demonstrating the experience is at this YouTube link
<https://www.youtube.com/watch?v=SDnS9mow4V4>

“This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement 687655



Develop the trial

Participants

- 2 households per trial
 - with 1-3 people present at each household.
- 12 pairs of households watching Shakespeare's Hamlet
 - 3+ hours (!)

Pre-trial online survey

- Use of technology
- Experience of theatre.

Post trial online questionnaire

- User perceptions about the overall experience
 - the play, time passing, emotional responses and comparisons with a visit to the theatre, distributed attention between the screens.

Post trial online questionnaire (Survey Monkey)

- The feature set: utility and ease of use
- Rituals
 - the users' reaction to the mirroring of real world in the multi-screen experience
- Value of "Shared"
 - Value ascribed to the experience being shared;

Logs from the use of the platform (Elastic Stack/Kibana)

- Feature use: frequency, when?, 'issues'

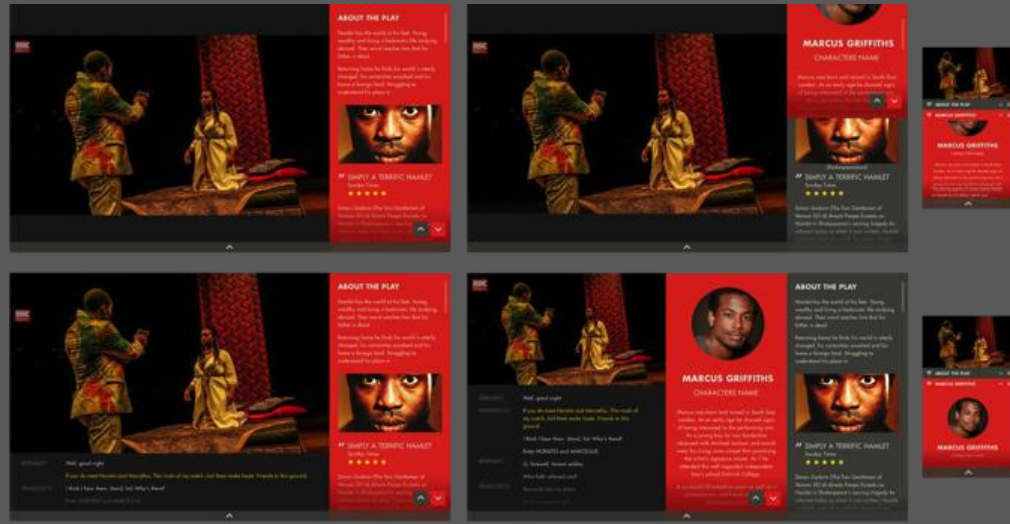
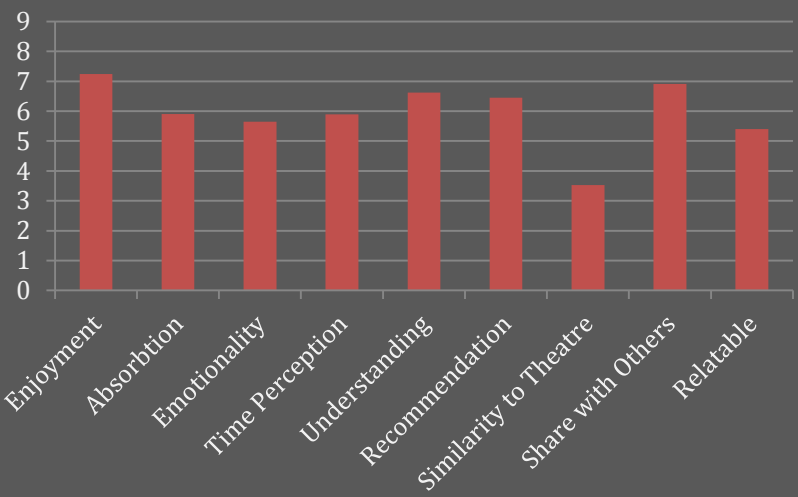
Semi structured phone interview.

- Emergent themes from survey: Look and feel, Engagement, Rituals, Applause, Phasing,
- Mediation and curation of components and content, Manual vs automation, Social rules.

"This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement 687655

Responses – Overall Experience

Scoring 0 to 9

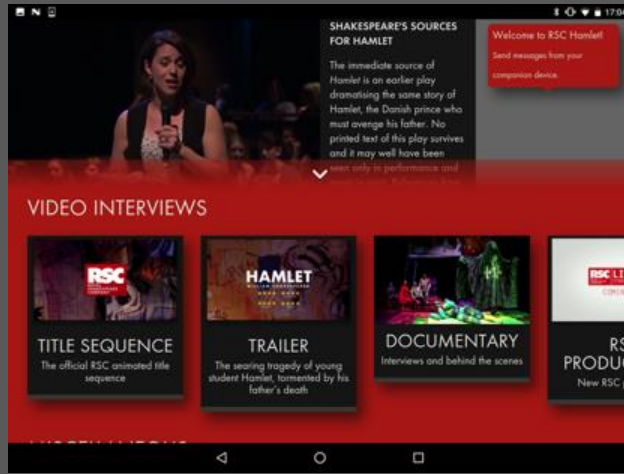


It's not clear what a score of 6 (or whatever) really means. We use these bar charts to note differences rather than to make absolute assertions absolute utility. We are not surprised our triallists thought it was 'not like theatre' and pleased they enjoyed it and are pleased they would like share the experience with others.

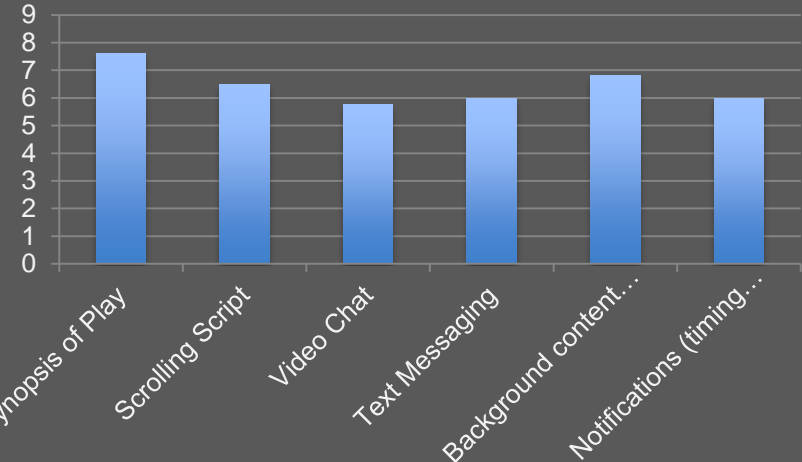
"This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement 687655



Responses – Feature specific



Feature utility, average scores scored 0 to 9



The play

- Present the performance on the largest communal screen (the TV).
- Option to use overlays for information (rather than using separate windows)
- Option to move auxiliary content to companion screens.

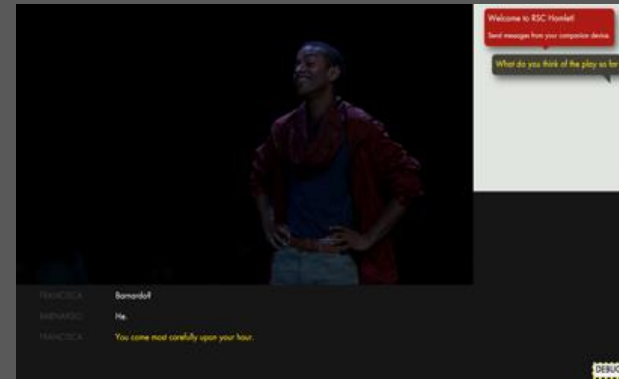
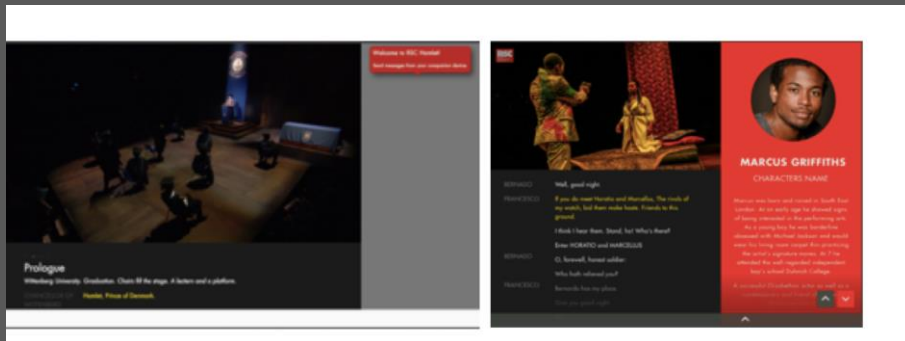
Once again we look more at relative scores than absolute scores. It seems the scene synopses were the most valued feature

Background Information Features

- Laid out in a way that familiar (rows & columns).
- More video content would be better, it would make the content more distinct and valuable compared with a written programme.
- Scene by scene synopsis was valued.

“This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement 687655

Responses to communication & content features



Scrolling Script Feature

- The scrolling script was appreciated - some suggested that it should be overlaid
- A few found it distracting and wanted an option to switch it off.
- Nearly all participants referenced it.

The scrolling script allowed users to see, as well as hear, the words of Shakespeare. We had different views on it including one comments from a viewer who started off resenting its presence but came to value it later.

Timing notification

The 'bell' count-down notification is pushed to the shared TV screen, informing users '1min,'30 seconds and '5 seconds

- All participants liked the bell, and understood its meaning
- evoked 'sense of anticipation' surrounding a live theatre visit.

We took the positive reaction to the "bell" feature as vindication of our decisions to retain some of the ritualistic features of going to the theatre.

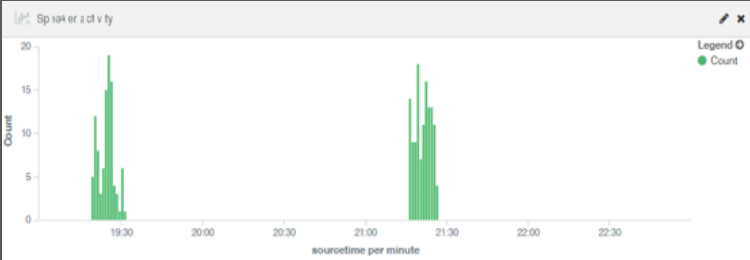
"This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement 687655

Responses to social features



The logs showed that people messaged throughout the play, Video chat was not available during the play only before after and during the interval – this trial data suggest no video chat after the play – it may have been getting late it's a long play!

Example of video chat activity outside the performance phases,



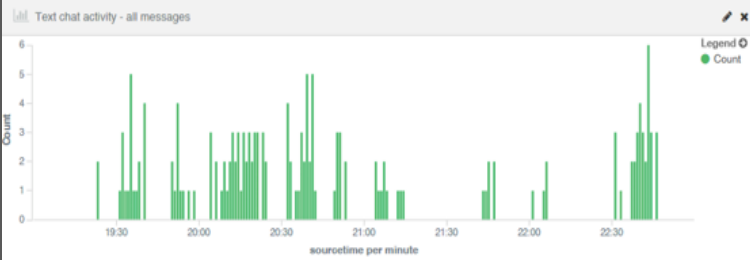
Video-communication, Before and during interval

- used & enjoyed as a vehicle for normal social interaction, to reconnect with family /friends

Text Messaging, displayed on the TV

- Appreciated and used often
- Overlay? or available on another screen

Example of text chat activity, a count of 160 throughout the experience.



“This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement 687655



Achievements and conclusions

Achievements

- 12 paired trials were conducted in people's homes of a multi screen theatre at home experience in which people could watch an as live theatre production and also share the experience using video comms and text chat.

Evaluation

- General assessment was not damning; it was polite without being effusively positive either..
- Communications facilities appreciated
- Respecting rituals appreciated
- Scene synopses most highly rated feature

Technical to do list

- On boarding
- Stability
- Flexibility of layout

These trials were a great milestone for the project. We know we forced some compromises but the findings, both technically and in terms of usability, were invaluable. We are building on these findings for our subsequent trials.

"This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement 687655

Conclusion.



*Probably,
but our solution
'needs more work'*

Question

Can multiple screens, an object based approach to broadcasting and a flexible approach to content curation improve the presentation of filmed theatre in people's homes?

"This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement 687655