

# artsdepot: 65+ digital memberships

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## Research & Development Report

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## Digital R&D Fund for the Arts

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# Executive Summary

## Background

This report shares the journey of three partners' experiment with digital technology to address societal challenges linked to ageing and social isolation. In recent years artsdepot has seen enormous changes to its business model driven by the advance of digital communication tools, rapidly increasing use of social media, and changing consumer behaviours. The project team felt that digital innovation was typically aimed at the young but wondered if there was greater potential to increase attendance and sales while also addressing social isolation through creating digital innovations with older people.

A range of partners worked on the project:

- artsdepot (arts partner and project lead) is a multi-art form venue based in North Finchley welcoming 130,000 audience members annually
- DigiLab (research partner) is an R&D laboratory based at London College of Communication, University of the Arts London
- Ingelby (tech partner) is a digital agency specialising in app building and mobile app development, as well as mobile website design, e-commerce development, customised CRM systems and creative digital media.

This project aimed to explore digital technologies that could help create increased levels of arts attendance among older people by identifying barriers and designing digital solutions. artsdepot felt that by enabling increased arts attendance and therefore facilitating opportunities to socialise, they might help establish new friendships while providing enriching creative experiences.

Additionally, the team felt there was an additional benefit in terms of demonstrating an economic model for engaging older audiences. Having learnt in the application phase that two thirds of older people have more disposable income than any other age group, artsdepot felt that if it could

address other barriers to attendance, it could also improve ticket sales and build a case for increased focus on older audiences.



*Figure 1: This image captures a focus group involving those aged 65+ at artsdepot. Discussion at this point focused on the relationship of the artsdepot app to its website*

Source: University of the Arts London

## The project

The R&D project set out to achieve the following:

- 1 Hold stakeholder interviews and a comparative literature review, leading to a questionnaire that aimed to reach 1,000 older people across three sites.
- 2 Create a digital membership tool that drew on research findings delivered by three workshops.

- 3 Test the tool with older people iteratively and conduct focus group sessions before launching to market.

The outputs created were:

- Reports – four reports were created by the research partner which informed each step of the R&D process. The reports detailed findings from stakeholder interviews, the comparative review, the questionnaire and app testing
- Product – artsdepot has a new app in development due to launch in autumn 2015. The app is currently available on Android but needs further development to be market ready and wide promotion
- New social activity programme – Engaging the Ageing has been funded by the City Bridge Trust and targets those aged 75+ potentially facing financial, health and transportation challenges. The grant enables artsdepot to employ a coordinator, provide subsidised/free transportation and tickets, improve access support in the venue, and run a series of events and projects engaging the 75+ age group in its creative programme.

## Results

The project reached attendees, non-attendees and stakeholders across three multi-arts venues and from sectors outside arts and culture, in addition to **volunteers and carers**. The 'results' from the project can be viewed in three ways: research findings leading to learning dissemination; app (still in testing phase); a funded participation project.

Stakeholders in the focus groups and questionnaire were already pre-empting the direction of the platform and incorporating a membership scheme where this was possible within new or existing digital platforms. These findings are explored in full in the results section.

## Insights

- Whether developing technology for older people or adding content to an existing website, it is very easy for jargon to creep in. It's always

worth asking: does the general public understand what that means?  
Can it be explained in an easier way?

- You can't rely on your customers to let you know if part of your website/app isn't working. It's wise to review user journeys every six months as a general health check to ensure everything is in order.

Lessons with regards to online payment:

- When relying on third parties you lose control of part of the customer journey. For example, the PayPal loading icon is small and cannot be increased as it is supplied by PayPal
- The effort customers are willing to make is directly proportional to the gain, so while it may be worth completing an online transaction to purchase a ticket, doing the same for a refreshment may not be
- Logins and passwords are a huge barrier to payment for older people.

With regard to delivery of the project, the following lessons were learnt:

- A project is going to be run upfront. The arts partner would have benefited from attending a training session for the workshop and to agree best working practices
- In hindsight, artsdepot should have developed one section of the app at a time, to allow unsuccessful ideas to fall by the wayside earlier. This way of working is easier when working with an in-house tech development team
- It is not uncommon for technology projects to take longer than expected but it is rare for them to be grant funded; organisations need to flex timelines in negotiation with the developer
- Tendering for technology development: the usual way for a technology project to be awarded is through a tendering process. An enormous amount can be learnt by the commissioning organisation

through this process, from new perspectives on the brief, to questions to address prospective companies.

In terms of impact on the arts centre's business, the following lessons were learnt:

- Involve wider departments early in any digital development process. Customer-facing teams can spot pitfalls in delivery which technologists or marketing teams may be unaware of, and can save developers from working on ideas with limited potential
- Use trials with smaller numbers of users to build confidence among customer-facing teams about the service; use this as a test period to fine-tune the digital product
- Get buy-in from across the venue team; use whole team meetings to share updates and process; share the product in its earliest stages and garner feedback; use the wider in-house team to test the product; make sure relevant teams are involved in planning rollout
- Establish feedback channels between customer-facing and marketing teams. Technology has to evolve – this can only happen through feedback from the people using it
- Arts venues considering the app may need to invest additional time and money to ensure success.

## Future

The wealth of information garnered during the focus groups led to artsdepot meeting with Ingelby to re-negotiate timeframes for delivering the app. The project was due to be completed in June 2015 but one month would not be enough to make changes, test, feedback, amend and rollout. While basic bugs could be fixed within the timeframe, all partners felt it would be a missed opportunity to launch the app without taking into account feedback from focus groups.

The remaining development will happen outside of this project, with the aim of launching the app officially in autumn 2015.



The research team has been able to take the results to many different audiences, from regional through to European levels (six events altogether). Dr Amanda Windle has subsequently become a member of the EU consortium (funded by the EU Commission), **Voice for Culture 'Audience Development via Digital Means'**, in June 2015. This was an opportunity to bring the UK digital R&D project on audience development to the attention of EU policymakers and Creative Europe, the new European Union programme for the cultural and creative sectors.

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In recent years artsdepot has seen enormous changes to its business model driven by the advance of digital communication tools, rapidly increasing use of social media, and changing consumer behaviours

## Introduction

This report shares the journey of three partners' experiment with digital technology to address societal challenges linked to ageing and social isolation. Responding to an opportunity to secure investment from the Digital R&D Fund for the Arts, artsdepot (a multi-art form north-London venue) approached DigiLab at London College of Communication, University of the Arts London (UAL), and technologists Ingelby to embark on a significant R&D project.

In recent years artsdepot has seen enormous changes to its business model driven by the advance of digital communication tools, rapidly increasing use of social media, and changing consumer behaviours. The project team felt that digital innovation was typically aimed at the young but wondered if there was greater potential to increase attendance and sales while also addressing social isolation, through creating digital innovations for older people.

In particular, staff at artsdepot had seen at first-hand how older people would stop attending after the loss of a partner or friend they normally came with, or perhaps as the result of changes to health, income or personal circumstances.

The team knew that older people weren't using digital devices and social media websites in the same way as younger ones, and felt that learning why could inform a solution. Hence, the research partner set about conducting a questionnaire reaching close to 1,000 older people across three sites in the UK, in partnership with the Brewery Arts Centre in the Lake District and Warwick Arts Centre. In addition, 30 interviews with older people were undertaken to gather detailed contributions to the research, and to provide app testing for the development of a new digital tool.

artsdepot began with an idea of a digital solution they might develop, adopting certain event attendance methods from Facebook that could be acceptable to older people. If resistance to social media among older audiences could be understood, it might be able to develop something sensitive that would encourage higher levels of attendance. The arts partner also felt food and beverages were an important part of the 'evening out' package and wanted to look at how to improve customer experience around

journey information, access to catering, easy-to-use digital ticketing, and the opportunity to feed back on their experience.

Over the past year the three partners have co-designed with an older audience a digital solution (app) that will sit easily within artsdepot's marketing mix, providing solutions to some of the challenges faced by older audiences but also impacting all audiences to ensure the app has a long term sustainable future. By creating an app that connects to Spektrix ticketing software, the team aims to make the technology easily adoptable by other venues across the UK.

Older people have greatly informed the development and design process of the app, but it became apparent that the team's technical ambition was greater than the available technical budget.

However, artsdepot will be an early adopter of an app that does more than mimic its website. As artsdepot already has a responsive website, development had to do something additional and complementary to this service to provide a meaningful outcome.

To fulfil the original schedule, the team registered the app on an Android platform in December 2014 and at the same time applied to be placed in the App Store. The research partner continued testing with older people and key stakeholders in the months that followed to ensure the app is market ready. It is now scheduled for public launch in autumn 2015.

The following report describes the journey and outcomes of the research (abridged), the development of the app, challenges faced along the way (including those still faced), and the many positive outcomes that have already resulted from the project, as well as those anticipated this autumn and beyond.

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An increasingly ageing population is a key challenge for multi-arts venues, which typically provide a range of community engagement activities

## The context



*Figure 2: A diverse audience of all ages awaits the morning matinee performance of Macbeth by TaraArts at artsdepot in March 2015*

Source (University of the Arts London)

An increasingly ageing population is a key challenge for multi-arts venues, which typically provide a range of community engagement activities. The percentage of the total population aged over 85 in the UK is predicted to double in the next 20 years, and nearly treble in the next 30 (ONS, 2013). The ageing profile of audiences will affect the activities and events offered by these venues, which will need to develop new approaches.

There are many numbers used to define 'old'. For instance, Audiences London considers old age as starting at 60 (2009), but health and wellbeing also influence individuals' perceptions of themselves as old. Retirement age also differs widely. The research conducted for this project focused on the age group 65+ to take into consideration the financial pressures on older audiences and the rising UK retirement age.

By starting with a working definition around 'ageing' and 'becoming old', the team kept in mind what they called the 'ageing paradox'. Although

becoming older can be a less restrictive condition today than it once was, potentially offering more time and resources, ageing can also bring greater isolation.

There are studies that encourage an 'age-inclusive approach' (Bowling et al., 2009 and Marvel, 2014), which advocate a shift in thinking around ageing through participation (Bernard et al., 2013). In this study, age-inclusivity means that a digital R&D project should support older audiences' specific digital requirements and needs, and involve participation. Multi-arts venues are in a position to join, extend and facilitate existing participatory activities with organisations like Age UK, to address some of the challenges of old age in an era of limited public resources.

As Susan Davidson in her Evidence Review (2014) for Age UK points out, social isolation can create a risk of loneliness among older people. In a recent study by Independent Age, it is estimated that loneliness in England affects the lives of 700,000 men and 1.1million women over 50. Social isolation and loneliness are interlinked but are not necessarily the same thing, since some people choose and are content with a more isolated lifestyle.

According to the Fourth Source in 2012, just 4% of Facebook users were 65 years and older. In the same year, BeEvolve noted that 1.5% of Twitter users were 65 years+. Hence older people are far less likely to use social media. At the same time, however, the 65+ age group was the fastest growing in terms of adopting digital technologies – something our research supported.

## The partners

A range of partners worked on the project:

- artsdepot (arts partner and project lead) is a multi-art form venue based in North Finchley that welcomes 130,000 audience members annually
- DigiLab (research partner) is an R&D laboratory based at London College of Communication, University of the Arts

- Ingelby (tech partner), is a digital agency specialising in app building and development, as well as mobile website design, e-commerce development, customised CRM systems and creative digital media
- There were two other multi-art form venue partners that contributed both rural and urban audience data to the project – Brewery Arts Centre (BAC), Kendal, and Warwick Arts Centre (WAC)
- Additional support in the form of mentoring was provided by Age UK and Soapbox Tate (a forum to discuss life and art beyond the age of 60).

## The opportunity

Public investment in social care and the arts is shrinking but the need for services to support older people is growing, while the appetite for high quality arts remains unchanged:

*‘Between January 2014 and December 2014, 77 per cent of adults had attended or participated in the arts at least once in the previous year, a similar rate to 2005/06.’*

*Department for Culture, Media & Sports, Taking Part – Statistical Release*

*‘While the current fragility of the world economy makes this an exceedingly difficult time to find the funding necessary to make life **better for current pensioners and tomorrow’s** generation of older people, the changes needed are about more than just money. Equally lacking, says Age UK, is a positive approach to ageing backed by a coherent and joined-up vision of a society in which older people are able to fully participate, avoiding life-limiting disability and isolation.’*

*Challenges of an Ageing Population, Age UK report April 2013*

This project aimed to explore digital technologies that could help create increased levels of arts attendance among older people, by designing digital solutions to barriers. artsdepot felt that by enabling increased arts attendance and facilitating opportunities to socialise, they might help create new friendships and provide enriching creative experiences.



The project aimed at achieving a wide range of potential outcomes based on developing a technology that facilitated attendance and engagement. Other potential benefits included increased mobility for older people, engagement in workshops and events that helped build self-esteem and self-confidence, and skills development that might filter through to other areas of their lives.

The team also felt there was potential for demonstrating an economic model for engaging older audiences. Having learnt in the application phase that two thirds of older people have more disposable income than any other age group, artsdepot felt if it could address additional barriers to attendance, such as by improving ticket sales and increasing focus on older audiences. At the time of application, **Spektrix (artsdepot's ticketing system)** supported more than 120 UK venues – even a small growth in revenues brought about by this project might make a significant financial and social contribution among older people. artsdepot also felt that the project had significant potential to influence how arts venues interacted with their audiences and programmed work, both in terms of **'product' and participatory activities**.

The three partners approached the project looking for solutions to national barriers to arts attendance, which it could then share with the wider arts and culture sector. Each partner brought a bespoke set of skills and methods.

The research partner aimed to employ an agile approach to ethics. Fabian Neuhaus and Timothy Webmoor (2012) refer to **'agile ethics'** in relation to social media and mass data collection, such as when collating data from a Twitter feed. The term may be less well known to arts and technology partners because research on agile ethics is published in an academic journal:

'An agile ethics makes the counterintuitive move to increased openness and transparency; to expose ourselves equally with those wrapped up in our projects. If we generate, study or deploy potentially personal information in our research, then our level of privacy ought to match that of the individuals involved in the project.' (2012, 20)

Basically, if an R&D report like this one refers to age as a ballpark figure, then all those mentioned in the project (i.e. project team and stakeholders) will be noted in a similar way, to show parity.

This is only one way to make sure that age doesn't become purely an older person's issue addressed by an ageless team. In this respect the entire team, including recruiters, spanned the late teens to late 50s, and key stakeholders ranged from late 20s to late 70s. There are many other areas where we could show parity, such as disability, but to include these in the report was contested (i.e. is it necessary?).

With research data growing, the research partner feels there is an increasing need to make this necessary in R&D report writing for future generations, so that they can understand some of the debates around age in relation to data collection enabled *through* and *for* digital technology development. This also extends Simon Roberts' (2010) discussion of 'cohort data' as a problematic (referring to large groups of older people segmented by age) in policy report writing. Retired people in their late 70s are particularly likely to be 'othered and abstracted' in reports about age, a problem exacerbated by the fact that most R&D is undertaken by those aged 25–45 years.

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What are the exemplar user journeys of re-engagement in the arts specific to the 65+ age group in relation to social media?

## The Project



*Figure 3: Participants engaging in debate during the focus group while verifying each other's findings by trying out tasks on their tablets or mobile phones*

Source (University of the Arts London)

The R&D process involved:

- 1 Stakeholder interviews and a comparative literature review resulting in a questionnaire that aimed to reach 1,000 older people across three sites.
- 2 Development of a digital membership tool based on research findings from three workshops.
- 3 Testing the tool with older people iteratively and conducting focus group sessions before launching to market.

The team wanted to understand how the digital shift was impacting the lives of older people, not just in terms of digital device usage and social media trends but in relation to how they were choosing to spend their time, attend new events and manage health and income. Stimulated by a series of

questions (designed by the research partner), the team would create personas (i.e. older audience attendees), a proto-persona (i.e. a persona detailing the role of the person supporting the app for the next three years), and journeys that would inform a new digital tool to support attendance.

artsdepot wanted to create a tool, initially conceived as a digital membership that would improve relationships between older audiences and venues by responding to their needs. They imagined something that would facilitate social attendance, which developed into an 'Invite a Friend' function through research findings. The team also wanted to learn more about how older audiences' engagement with digital tools might impact creative programming, participation and marketing decisions.

The project team was supported by a wider network of advisors and stakeholders, who were consulted beyond team meetings. The team held a series of planning sessions to determine the scope of the R&D and began planning a process by which the digital tool would be developed, tested and launched.

## Key questions

The R&D began with 15 stakeholder interviews, including programmers, arts marketing and venue staff, older people themselves and agencies interested in marketing to or supporting older people.

A number of key research questions were developed by the team around the following areas:

- Ascertaining the current landscape: what stimulates our target group to re-engage in the arts in a social way, by active and/or participatory means? Specifically, what are their creative interests and boundaries, and their responses to services targeted at the pensioner age group?
- Understanding socialisation and routes to re-engagement: what are the exemplar user journeys of re-engagement in the arts specific to the 65+ age group in relation to social media?
- Assessing the digital baseline: how is 'social media' utilised (or not) by our target group, and what are the key likes and dislikes of digital

technology and their digital platforms and devices (interactive TV, mobile, desktop and tablet etc.)?

- Identifying and applying digital gratifications: what are the key usability needs and desires required to develop a digital tool to extend and augment arts audience engagement?
- Overcoming barriers to participation: how are social, economic and geographic (rural and urban) barriers to participation overcome by (a) arts marketing and (b) through creating self-reliance and ownership of digital content?
- Utilising arts and digital champions in a silver service membership tool: how can identifying and enrolling arts/digital champions extend audience engagement and develop better/enhanced arts marketing that takes the differences of the 65+ age group into consideration?

## Timelines

The following timeline shows the development of the project:

- 15 stakeholder interviews (March 2014)
- Comparative review of digital directions and tools recommended by stakeholders (April 2014)
- 945 questionnaires (June – August 2014)
- 30 interviews with 27 older people (July – October 2014)
- 3 co-design workshops (July 2014)
- Round 1 of prototyping in north London only with older people (August 2015)
- Semi-structured interviews with older attendees and non-attendees in north London, South Lakeland and Warwickshire (August 2014)

- Round 2 of app prototyping in South Lakeland and Warwickshire with older people (November 2014)
- Round 3 of app prototyping in Warwickshire only with older people (January 2015)
- Rounds 2 and 3 of prototyping by BAC and WAC marketing directors respectively, as well as by Age UK's London-based research manager and two locally based north London Age UK coordinators and planners (November and January 2015)
- Marketing strategy begins (November 2014)
- Submitted app to Android and Apple Store (December 2015)
- Debugging phase (January 2015)
- Participant testing and focus-group evaluation with 9 older people following an event at artsdepot with 1 artsdepot observer (May 2015)
- Testing and focus group evaluation with 8 artsdepot stakeholders (May 2015)
- Snapshot evaluation of app analytics, downloads and ticketing sales (May 2015).

## App development and tech challenges

The broadness of the brief coupled with a desire to deliver an innovative new digital solution made this project incredibly ambitious. Ingelby, the tech partner, often supports businesses to develop solutions that respond to their unique challenges, but is more familiar with the role of delivering to a client brief than acting as a partner from inception.

Working alongside the arts and research partners, Ingelby often had to be a voice of restraint, mindful of the limitations of budget, available knowledge and the legal and business framework that digital solutions operate within. The team began with a brief greater than we had the potential to deliver on, and as the project progressed we found our technical ambitions were

hampered by the practicalities of what was achievable and logical within the business setting of the test site and of similar venues.

Through a number of project team meetings the brief evolved, drawing on R&D findings. We learnt from the research that a high proportion of 65+ audiences were using tablets (44.8%), and a significant proportion were using smartphones (36.2%); also that the number using social media had grown significantly, with 37% signed up to Facebook. Earlier research had suggested 4% of 65+ audiences were using Facebook (Fourth Source, 2012). **artsdepot's 65+ audiences said their two preferred sources of information on arts and culture events were emails (73.4%) and the internet (58.4%).** However, the data and interviews with older people revealed that take-up of digital technologies varied significantly at different ages, and while the 65+ group were rapidly adopting digital technology this was less so with the 75+ age group.

### App testing with older people

App testing was initially considered as a separate phase to the interviews, but given the extensive time taken to garner the questionnaire results and curate the content it was decided to combine the two and stagger the app testing into phases, which allowed the designer and developers to start work ahead of schedule. There were several opportunities to conduct app testing and for the researchers and tech team to work agile.

Each stage tested with a small number of people:

Date of iteration	Number of people engaged
Round 1 app testing (1-to-1) North London, August 2014	6 (AD) older people
Round 2 app testing (1-to-1) South Lakeland, October 2014	4 (BAC) older people 1 stakeholder from BAC 2 stakeholders from Age UK
Round 3 app testing (1-to-1), Warwickshire, November 2014	5 (WAC) older people 1 stakeholder from WAC
Round 3 app testing (1-to-1), Warwickshire, January 2014	7 (WAC) older people
Focus Group 1 north London, May 2015	9 older people



Date of iteration	Number of people engaged
Focus Group 2 north London, May 2015	7 artsdepot stakeholders

*Table 1: app testing schedule*

App testing took place in August, October and January 2014–15. Testing using App Cooker (prototyping app software for use on touch devices) was relatively easy, but further testing with Test Flight (software enabling Beta testing before release to App Store) caused problems in handover, and the opportunity to test with a more generically designed app was a challenge.

There were more bugs and physical glitches to contend with than expected in the focus group phase, which was conducted after debugging was scheduled to finish in May 2015. One of two focus groups was conducted with artsdepot staff to ensure sustainability beyond the end of the project.

The number of older people interviewed during the project was 27, with three of these interviewed twice. Follow-on interviews were with two low-to-non-attenders (Rohan and Judith) and one that was less familiar with touch devices (Kenneth). The research partner ran two help clinics in the run-up (over three afternoons) to the focus group for those that did not own, have access to, or knew how to use, an iPad. The sessions were attended by three people, while a further two asked for online support. A further 15 stakeholders were interviewed at the start of the project and seven artsdepot employees were engaged in a focus group towards the end. There were nine older people in the older focus group.

When testing the app with older audience members and artsdepot staff, 25 were already registered users of Google Analytics. A total of 2,560 screen views were made over the course of the focus group's use of the app.

**One of the team's** original areas of interest was to facilitate re-engagement enhanced by digital R&D. Interestingly, in Warwickshire and South Lakeland there were virtually no reports of respondents making new acquaintances online, and less than 2.1% in north London.

One point that emerged from the research was that older people were interested in clear (literally, in terms of visible appearance, but also plain English) information that could support their visit. That may be information about travel or parking, and a quick and easy digital journey.

The tech brief was developed with recognition that it would not be able to solve all the challenges raised by the research.

Following a review of the research and a number of project team planning sessions, Ingelby recommended a venue app that would add additional access features not currently available on the website. After several scoping sessions, Ingelby advised to build in HTML 5 rather than Native Build, to ensure the app would work successfully on Android, iOS and also as a widget on the artsdepot website. Building in HTML 5 allowed the team to have a single code base for all the platforms, reducing build costs and simplifying the mechanisms of future updates.

The app would enable older people to invite their friends to productions, ensure a smooth and supportive journey to the venue, and enable them to use the app in-venue, e.g. to order refreshments. Additionally, audiences using the app would be able to book tickets and access other key services available on artsdepot's website. Finally, and importantly, they could feedback on the show, venue and experience while in the venue, enabling staff to respond quickly to customer complaints and comments. Ingelby also designed the app to use GeoFencing (software that uses GPS or radio frequency to define geographic boundaries) so that artsdepot could detect whether the person/device was inside or nearby. This would enable artsdepot to welcome a prospective audience member with a notification, or perhaps promote something through push notifications.

The following months included detailed development work on each of these areas of functionality. In December 2014, the app was registered with an Android platform and submitted to the Appstore for consideration. Early in 2015 continued app testing demonstrated significant flaws, which the team are still working through. Unfortunately, Apple rejected the app because **they didn't feel GeoFencing was suitable for this type of application, as the app's primary purpose was not to send offers and notifications.** If the app was solely for sending promotions via GeoFencing it might have been acceptable, but as it was, Ingelby was obliged to remove this function.

Another build challenge was pulling data from different platforms and marrying this together, to provide an intuitive informative app. Ingelby took **information from artsdepot's website** on event details, and the ticket booking information from the ticketing system Spektrix. However, they then realised that some of the elements intended for the app would need a

considerable level of buy-in and collaboration from Spektrix. For instance, during app testing there were requests for the 'Invite a Friend' function to reserve seats for a fixed time period and send notices to a friend's list. It became clear that this functionality would require buy-in from Spektrix and sectoral dialogue around reservations policy. Though Spektrix was supportive of the project they only react to significant market demand to evolve their product. As our idea was untested and in reality in need of further development and investment, Spektrix preferred to focus on other priorities.

Another significant challenge was the functionality around 'Your Ticket': the team wanted to offer a place where visitors could store an e-ticket and then use it to access the theatre. Ingelby came across a major stumbling block in venue scanners, which is that they are currently unable to read barcodes on Android and iPhones. As such, £1,500 of contingency was agreed to create software that would isolate and enlarge the codes, to make the scanning software work and legitimise this part of the app.

Through ongoing market research, artsdepot's visitor services manager spoke to three out of the five Spektrix venues that currently use ticket scanning. The consensus was that it caused extra queuing to enter the auditorium, especially for performances with allocated seating, and was time consuming when admitting groups, as each ticket's barcode had to be scanned individually. Also the API feed from Spektrix did not display the seat number, making it difficult to show people to their seats. As a result of these technical challenges, the team removed the 'My Ticket' part of the app but anticipate being able to reintroduce this functionality in future years.

The team settled for a function that would enable a ticket buyer to send a notification to their contacts that they were either interested in attending or had purchased tickets, noting their seat numbers. For the latter to be possible, we needed Spektrix to collaborate on evolving their software and its ability to communicate with our app. Spektrix again felt they had more pressing priorities and were not prepared to invest in this area of tech development.

The 'Invite a Friend' function has the potential to be adopted across the wider arts sector, working in a similar way to a Facebook Invite/Share but offering a more personalised approach to inviting friends to attend an arts event. Despite being developed for the app, artsdepot is likely to replicate this functionality on our website if it proves successful. A challenge the team

is currently grappling with is that 'Invite a Friend'-generated emails currently find themselves in the junk/spam mailbox of intended recipients. Ingelby is in the process of registering SMTP details, which should mean emails reach their intended destination.

Another function of the app that needs further testing is the ability to place refreshment orders from a device rather than waiting in queue, which can become very long during busy intervals. In theory, this should speed up service for all customers, as app orders will limit choice and avoid sometimes lengthy dialogue with customers about what they would like. In practice, the first test run has raised concern about the impact on customer experience for those not using the app, and needs to be tested during busy intervals. Finally, though an ordering and payment system has been set up, there is a fault, which Ingelby is working to fix to ensure all orders are received and printed. In our test, orders failed to appear on the docket printer now installed in the bar.

The public launch date has been rescheduled to autumn 2015, which will enable us to develop the app to a point of market readiness and ensure it has the best chance of success.

## The social challenge

It became apparent to us through the process of reviewing the research data and considering digital solutions that our project could only partly address the growing challenge of accessibility. Many respondents reported challenges around income, travel and health, with 4.6% reporting an income of less than £499 per month, and 17.6% incomes of less than £999 per month.

As such, in addition to developing a digitally inclusive solution, artsdepot designed a physical access programme to respond to the participative challenges of some older people. The features of that programme will be set out in the Results section.

## Risks

There were a number of risks throughout the project:

- Financial: when using an agile approach to development it is difficult to predict the form of the final product, as development costs were

estimated at around £40k. Ingelby is used to working with commercial clients where extra budget can be found if there is a need. In this project, budgets were agreed upfront. The scope of the project and resulting software has to some extent been limited by available resources

- Human resources: there was a risk that the human resource required to maintain and generate content for the app on a day-to-day basis would make the product unsustainable. The marketing team at artsdepot is typical of similar-sized organisations comprising just three members of staff. The team already manages a responsive website and is already stretched by meeting the demands of a diverse programme. Consequently, as far as possible, **API feeds from artsdepot's website** were used to auto-populate the app. The research partner created a proto-persona (see Tools and Guidance, p. 67), which was workshopped at the moment of choosing a digital direction so as to discuss the pragmatics of sustaining the app within artsdepot's in-house team
- Digital engagement of the 65+ age group: a concern expressed in our application was whether the target group would be interested in the type of digital tool we were considering. Following advice from the Nesta team, we were encouraged to increase the scope of our research, expanding the questionnaire from a target of 100 to 1,000 people and working across multiple sites, and raising interviews from 24 to 35 all in all (which resulted in 42 interviews in total). In addition to questionnaires, the research partner worked with a number of community groups supporting older people and garnered wide-reaching R&D that informed every area of our project. The research clearly pointed to rapidly advancing the participative use of digital technologies but also provided very detailed responses to the functionality of our app, informing its design at every stage of development
- Not re-inventing the wheel: artsdepot launched a new responsive website early in 2014. There was a risk the app might replicate the website, confusing customers and not adding value. As such, the project team worked to develop new features currently unavailable on

artsdepot's website, to ensure these are given equal real estate on the home screen of the app

- Partnership working: in addition to ensuring effective working relationships within the project team, external partners were also crucial in the team's ability to deliver successfully on objectives. As described within tech challenges (p. 23), while Spektrix were supportive of the project, their reluctance to engage in changes to their product ultimately reduced the scope of what the team could achieve.

## Roles, responsibilities and the partnership

- Tim Burley (late 30s) is the development director of artsdepot – lead applicant responsible for steering the project team as well as liaising with all partners and stakeholders from research phase to final digital output and impact
- Zahida Din (early 40s) is head of marketing and sales at artsdepot – key stakeholder and expert at box office and audience marketing, also responsible for managing customer data and the final rollout campaign. Zahida is continuing market testing and product development through to launch
- Dr Amanda Windle (late 30s) directs DigiLab across the media and design schools at LCC (London College of Communication, University of the Arts London) – principal research lead responsible for research management, design, analysis and resolution, including app testing (and analytics), interviews, questionnaires, UX workshops, focus groups, report writing and leading on the impact and ethics of the research
- Dr Thomas Giagkoglou (late 30s) is course leader and senior lecturer in media communications/associate researcher at DigiLab, research co-investigator responsible for managing the administration and analysis of research questionnaires and supporting transitions between qualitative and quantitative research
- Ollie Lane (early 30s) is managing director of Ingelby and provides industry experience to clients, with specialist advice for bespoke digital solutions – principal design and technology development lead, making

key decisions to suit the business needs of artsdepot and their existing brand while translating research findings into a digital solution

- Eng Wei Chua (late 30s) is digital director of Ingelby, responsible for providing expertise and tailoring digital results, solutions and advice to clients – co-investigator of digital development, responsible for managing the effective rollout of a proposed digital solution and debugging
- Up to six alumni from the University of the Arts, and volunteers known to the three arts venues, helped to recruit and garner the questionnaire sample across all three locations. Their training was provided by the research team with co-ordination by artsdepot (for both north London and Warwickshire) and BAC for South Lakeland
- Additionally, Dr Marcus Green (late 20s), research manager at Age UK, mentored the project team. Marcus leads Age UK's programme of social, economic and evaluation research.

All members of the project team contributed to setting the agenda for R&D and subsequently the brief for product development.

The partners continue to work collaboratively. At this stage of the project the research partner focuses on dissemination and impact with Age UK and Soapbox Tate, while artsdepot and Ingelby focus on product development and launch.

## Outputs

- Reports: four reports were created by the research partner, informing each step of the R&D process. The reports detailed findings from stakeholder interviews, comparative review, the questionnaire and app testing
- Product: artsdepot has a new app in development due to launch in autumn 2015. The app is currently available on Android but needs further development to be market ready and promoted widely
- New social activity programme: Engaging the Aging has been funded by the City Bridge Trust, targeting those aged 75+ who may have

financial, health and transportation challenges. The grant enables artsdepot to employ a coordinator, provide subsidised/free transport and tickets, improve access support in the venue, and run a series of events and projects engaging the 75+ age group in its creative programme.

Further outputs are anticipated involving learning dissemination once the app is truly market ready and has been widely promoted. At that time, artsdepot will write an editorial for *Arts Professional* and the AMA Conference about programming and engaging older audiences, as well as the process of developing a venue app. The lead researcher is in negotiation with an academic publisher for a book to disseminate the lengthier research findings to a wider arts and academic audience in 2017.

## Resources

Partner	Expenditure	Totals
artsdepot	Brief setting £1,000 Onsite and offsite R&D support for AD and WAC £1,894 Project workshops £2,775 Marketing launch and rollout £4,000 Focus group function support incl. event tickets & lunch £1,515 Press & PR £2,450 IT & tech £8,203 Project team £11,250 Wider staff team £4,050	£37,137
Ingelby	Consultancy/learning programme £9,625 Tech development £26,000 Additional fee for bar code Isolation £1,500 Front end web £2,000 Travel/ expenses £4,739	£43,864
UAL	Interviews, comparative review report, card sorting, videos £6,000 Questionnaire results £8,500 Interim report writing £1,000 Interviews, prototype, app testing and analytics £10,100 Focus groups £1,000 Project meetings £3,000	£37,000



Partner	Expenditure	Totals
	Travel £1,000 Research management £4,000 Postcard printing & photography £600 Contingency £1,800	
WAC	Onsite R&D support costs	£2,000
BAC	On and offsite R&D support costs	£2,500
All partners	Total spend	£122,501
	Less Nesta grant	£117,600
	Balance met by arts & tech partner	£4,901

*Table 2: Resources and budget for the project*

“

The research phase reached close to 1,000 people, which then guided the product development team

## Results

The project reached attendees, non-attendees and stakeholders across three multi-arts venues and from other sectors other than the arts and culture sector, in addition to volunteers and carers. The following personas were created as representative of the individuals engaged through the research phase, which reached close to 1,000 people and guided the product development team.

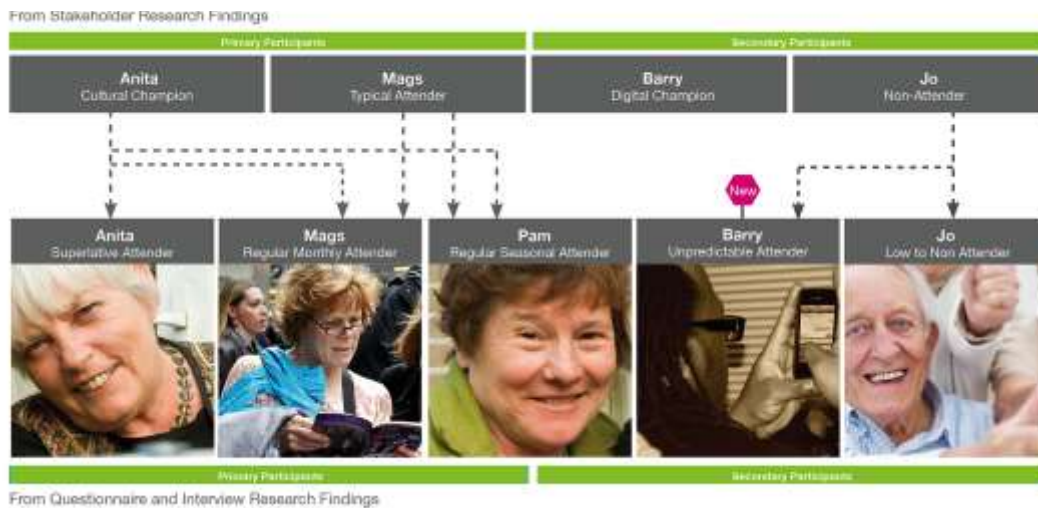


Figure 4: Five personas created from stakeholder perceptions and revised through the R&D process

Source (University of the Arts London)

When asked, 'Can you describe why it may be important to be involved in digital R&D?', participants aged 65+ responded:

'Designers are often too close to projects to see everything clearly – people who use their designs bring a different perspective.'

'Because face-to-face unhurried discussion lets me bring up the small practical matters involved in using the app.'

'I think it is important to be involved in a digital R&D session [...] because it enables people like me to try out and give their opinions and experiences of the products being developed.'



*Figure 5: Capital Exchange Event hosted at UAL London College of Communication, which enabled insights to be shared with the general public. From left to right: Tim Burley, artsdepot, Marcus Green, Age UK, Michèle Fuirer, Soapbox Tate, Thomas Giagkoglou, DigiLab, Amanda Windle, DigiLab, Sarah Johnson, The Guardian.*

Source (University of the Arts London)

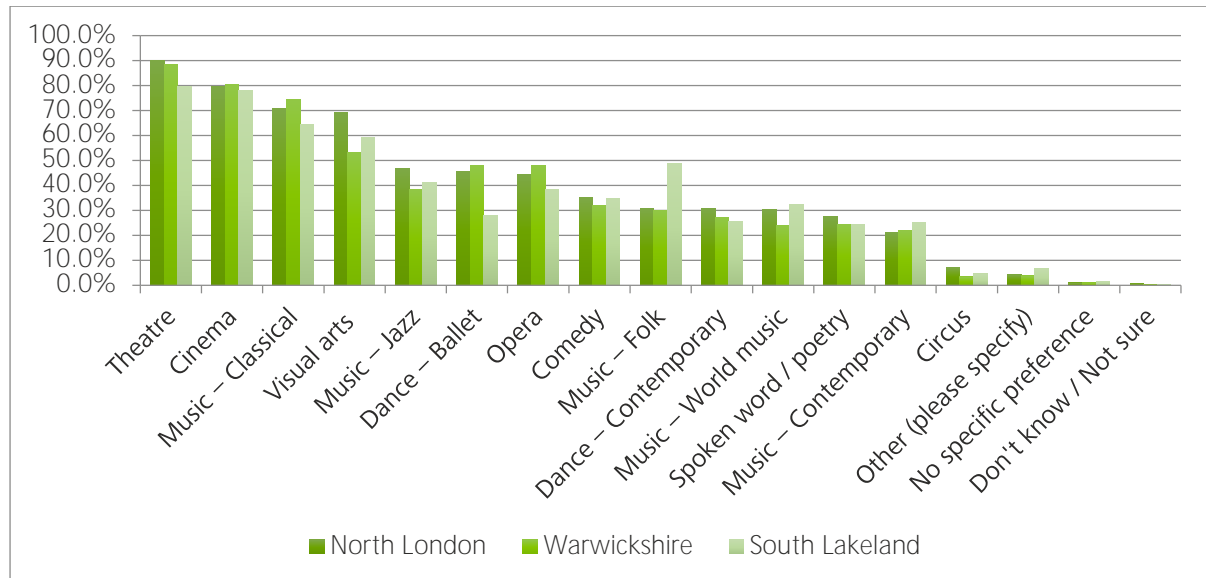
The 'results' from the project can be viewed in three ways: the research findings leading to learning dissemination; the app (still in testing phase); and a funded participation project inspired by this research.

## Research and learning dissemination

Findings from the project research have been disseminated in a number of ways. Some of the learning around 'understanding loneliness' was published in a book created by Cultures of Resilience at University of the Arts London. Results have also been disseminated and discussed as a part of the Soapbox Tate debating initiative with Amanda Windle and Michèle Fuirer. Both artsdepot and the DigiLab researchers, along with journalist Sarah Johnson from the *Guardian* and Marcus Green from Age UK, held a panel event as part of Cultural Capital Exchange London, in October, to the wider public. Amanda Windle spoke at a local political event at Friern Barnet Library organised by one of artsdepot's 65+ volunteers, alongside the MP for Barnet and Andrew Cowan, founder of Care and Caring, a residential care home in north London.

Some of our research findings and contextual data follow:

Programming feedback: the genres older audiences were interested in, by order of preference, were theatre, cinema, classical music and visual arts. For artsdepot, this feedback suggests they should reintroduce classical music to their programme.



*Table 3: In the questionnaire we asked:  
What types of arts and culture events are  
you interested in? (Tick all that apply)*

Source (University of the Arts London)

In his early-60s, Fred from South Lakeland requires care 24/7, inputs text with his head rather than a keyboard and uses an infrared controller to operate media equipment from a computer with a headset.<sup>1</sup> Fred attends comedy, music and theatre events weekly. Over a two-month period Fred attended three performances in the South Lakeland area across two venues.

'Programming tends to be very "safe". [...] Could use a little more adventurous programming.'

'Prefer them in date order rather than Brewery's current system of a page for each genre.'

<sup>1</sup> Fred did not test the app on a tablet or smartphone but gave comments on the original wireframes which were compiled in a Word document. These were part of reasonable adjustments made by the research partner.



Figure 6: Image shows a participant engaging with the 'Invite a Friend' button on the app, using a tablet device to engage and share booking information

Source (University of the Arts London)

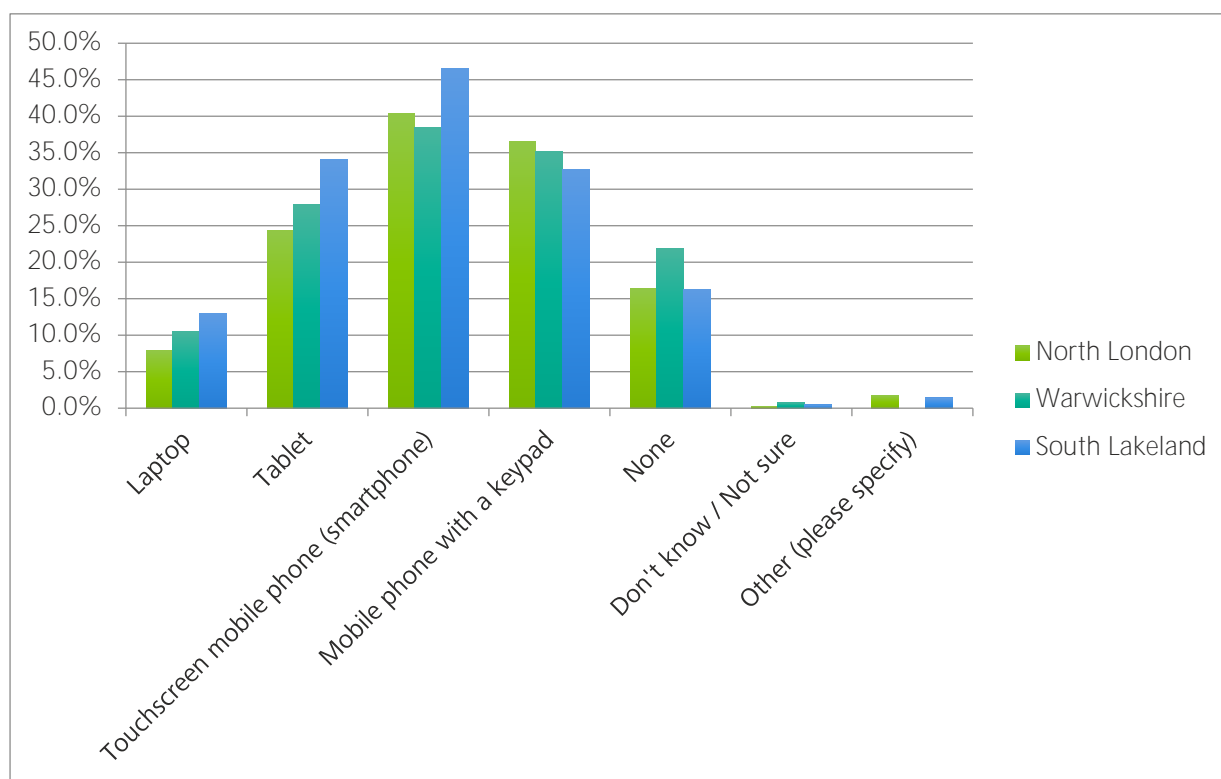


Table 4: Which of the following digital media devices do you use when you are out and about? (Tick all that apply)

Source (University of the Arts London)

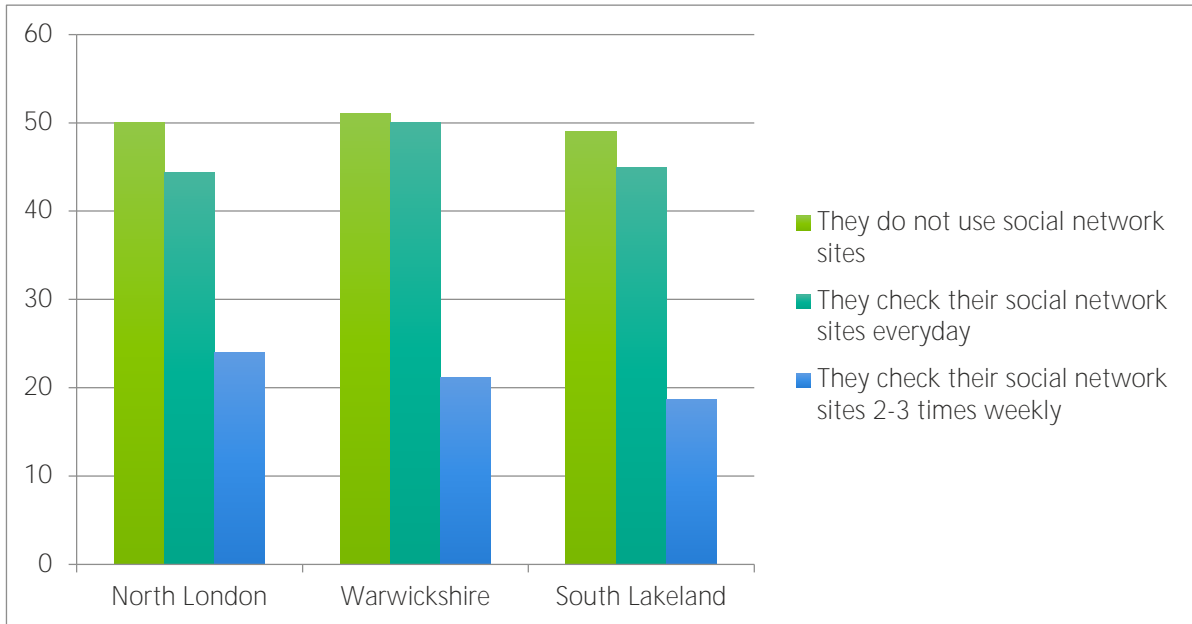


Table 5: There is still a high proportion of older people not using social media, while those that do check their social media daily

Source (University of the Arts London)

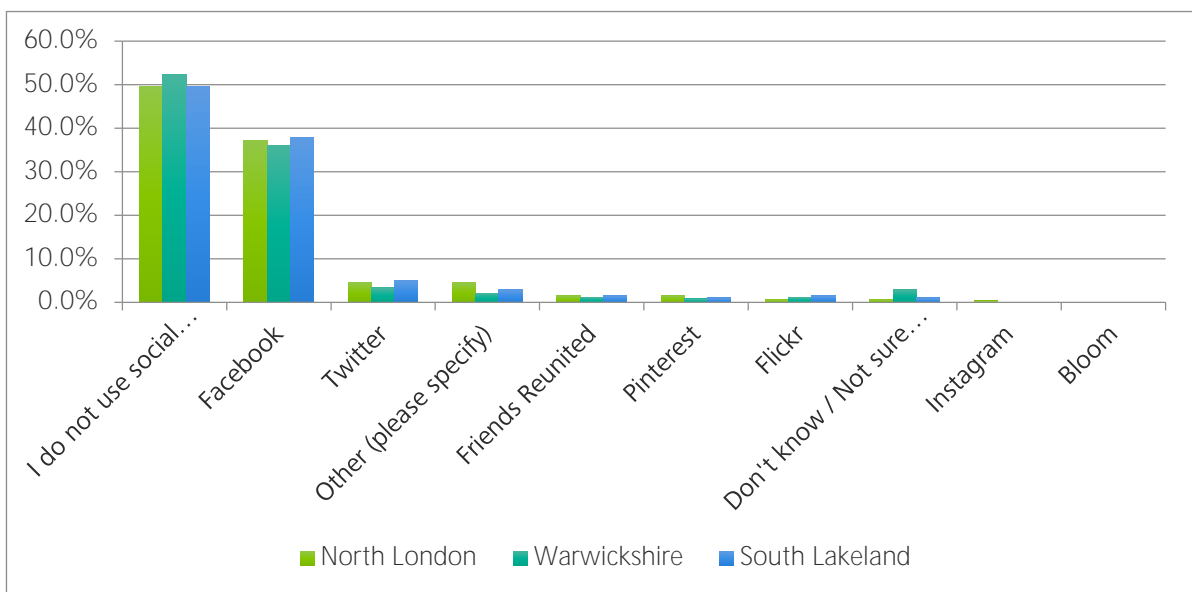
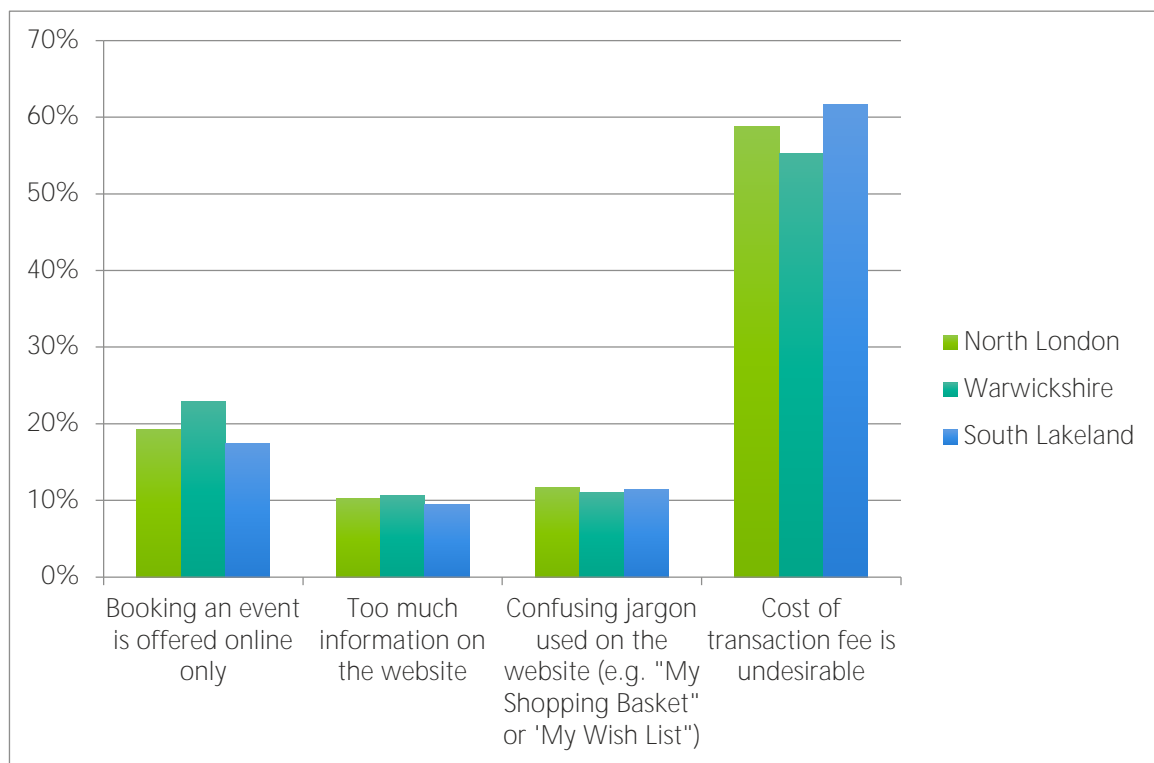


Table 6: Facebook is the most prevalently

*used social media site but most older people do not use social media at all*

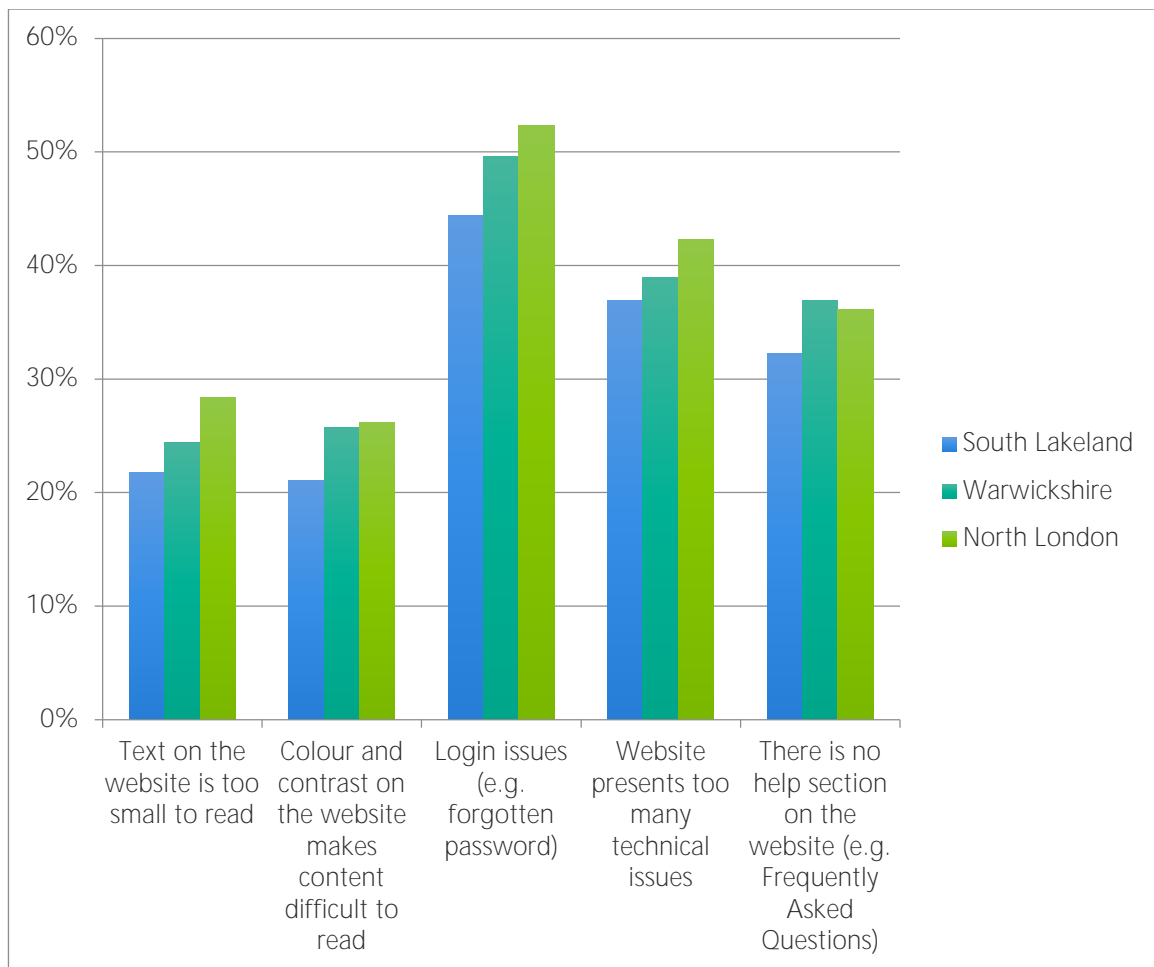
Source (University of the Arts London)



*Table 7: The most important digital barriers to booking online for those of 65+ are shown above*

Source (University of the Arts London)





*Table 8: Login issues by percentage that act as barriers to booking arts and culture events online for all field sites*

Source (University of the Arts London)

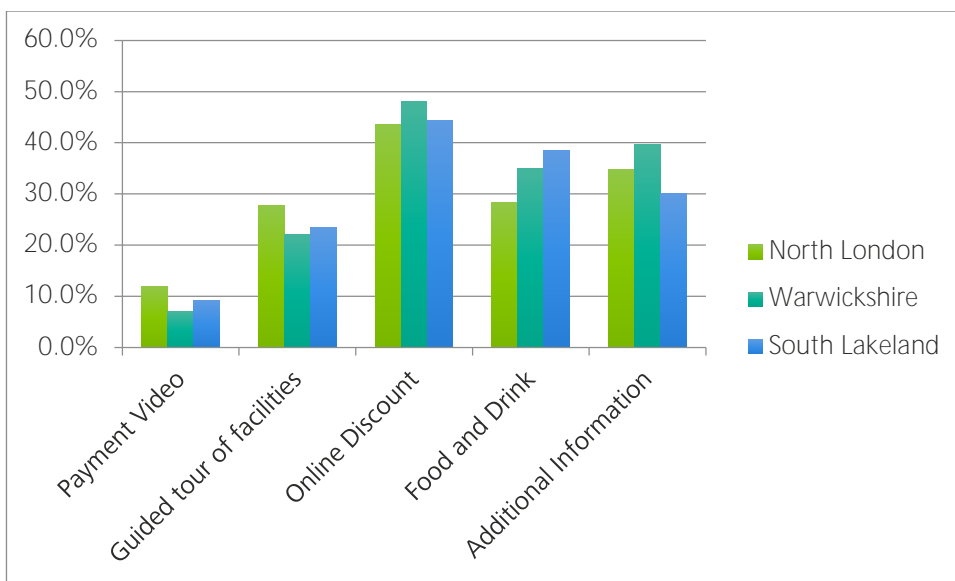


Table 9: Online discounts were by far the most agreeable benefit for attending a multi-arts event

Source (University of the Arts London)

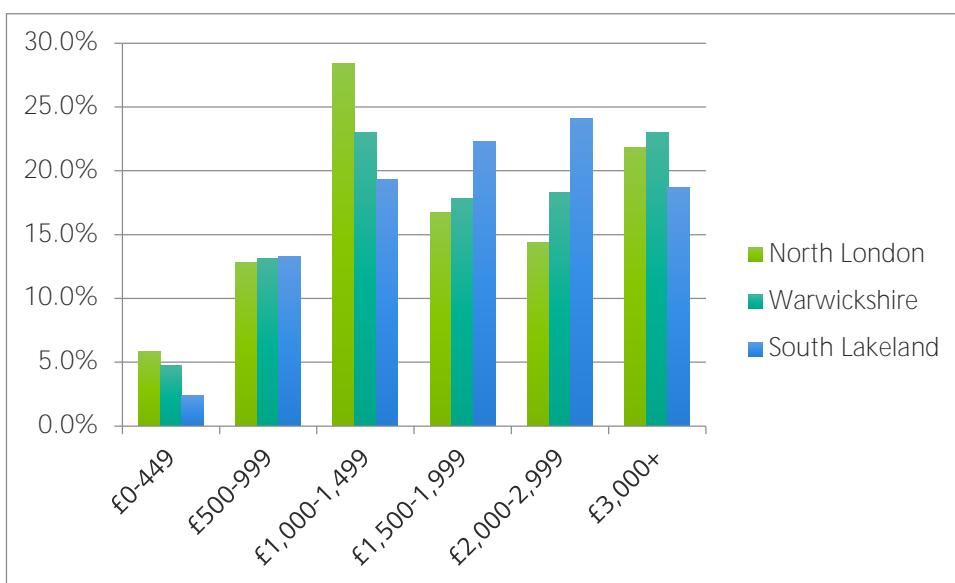


Table 10: Income of older people across all three field sites

Source (University of the Arts London)

‘A pound off is not enough. I’m on a state pension of less than £10,000 per year, which inhibits how you spend your money.’  
Linda, 65–69, monthly attender

Linda is in her early-60s, lives in north London and is a monthly attender of

arts and culture events who has an income of less than £10k per year. The over 65s who live in the capital aren't necessarily the wealthiest in the UK but they do value and invest in cultural capital.

Transport was raised by a number of respondents as one of their key challenges to arts participation.

Kenneth, in his early 70s, lives in north London and attends fortnightly (theatre events). Here are some of his transport requirements:

'I'd like to know the nearest station, bus route, nearest parking, if it's disabled friendly, and the length of the production so that if you have to book a cab you know what time you will be done.'

In her early 70s, Judith lives in north London, has a longstanding illness and attends free and open-air events though rarely attends other events anymore:

'Parking for disabled blue badge attenders is important.'

Out of four venue barriers suggested in the questionnaire, 'time of event' was the most significant (out of: time of event, location inconvenient, unfamiliar to me, venue facilities) regardless of UK location. An older person noted that driving/travelling in the dark was a concern when living in a rural area. Seasonal variations also showed patterns of disengagement.

Joe is in his late 60s and attends events in and around Warwickshire, borrowing his wife's laptop to book fortnightly:

'For our age group it becomes easier to say "I can't be bothered", or "It's dark and cold, let's stay in." Most of the time we still try and make ourselves book tickets in advance because if we don't it's so easy to think we won't go.'

In response to these findings artsdepot has increased the number of matinees in its autumn 2015 season. The majority of these are from the theatre genre (cited in the research as the most popular). The venue programmer is also looking into the possibility of hosting classical music.

## Choosing the right direction and placement of a membership scheme

The following table shows how the stakeholders were already pre-empting the direction of the platform to be developed and where a membership scheme could be incorporated within new or existing digital platforms for a multi-arts venue. The direction of the platform to be developed and where, if at all, a membership scheme could be incorporated within a new or existing digital platform/s for a multi-arts venue, was considered in a workshop at the end of phase 1 attended by all team members.

	Developing an app	Improve the existing website	Develop a booking system	Create a social network
Who?	artsdepot in-house team	Needed by 70+ years volunteer	Marketing teams and box office	Press and marketing teams
What?	For mobile and tablet devices	To improve current responsiveness of website, i.e. ticketing pane	To improve booking a seat in terms of access requirements of older people	To create an online community of members
Why?	All stakeholders showed how they book online via a desktop computer and not on touch devices	<ul style="list-style-type: none"> <li>• Remove the default in booking seats from two seats back to one</li> <li>• <b>Improve booking transaction (fees)</b></li> <li>• Create a 'friendly circle' by enabling screen chat as a direct link to box office with screen sharing capabilities</li> <li>• Reduce logo to consolidate top menu to minimise screen redundancy</li> <li>• Reduce the clickathon by consolidating the right-hand side menu and make it dynamic with no need to keep repeatedly pressing 'apply' button</li> <li>• Eliminate use of jargon and symbols that do no more than give embellishment and cause</li> </ul>	<ul style="list-style-type: none"> <li>• Remove the default in booking seats from two seats back to one</li> <li>• <b>Improve booking transaction</b></li> <li>• Create a friendly circle by enabling screen chat direct on linking booking to box office with sharing screen capabilities</li> <li>• <b>Build your own cart and</b></li> </ul>	<ul style="list-style-type: none"> <li>• Saga Zone community has been disbanded in favour of a Facebook system</li> <li>• <b>Effective data from Facebook?</b></li> </ul>

	Developing an app	Improve the existing website	Develop a booking system	Create a social network
		confusion like the use of >> <ul style="list-style-type: none"> <li>• Consider implementing a 'wizard' system to help memory recall</li> <li>• Make tick box for T&amp;Cs bigger so as to select it easily</li> <li>• Replace grey text with stronger colour, although the site passes a colour test it was an issue identified early on</li> <li>• Reduce cross-selling with modal windows to reduce the times the journey is disrupted</li> <li>• Do not hide text in images</li> <li>• Make carousels explicit for older people new to booking online</li> <li>• Emphasise search box at top of menu</li> </ul>	checkout without Spektrix - OR- <ul style="list-style-type: none"> <li>• Recommend changes to Spektrix</li> <li>• Develop a chat screen</li> </ul>	

*Table 11: Iterative improvements to the website and app*

Stakeholder research also helped compile a task model for booking online that enabled the user to look at the digital journey before getting to the venue. The model shows the tasks performed, the drop-off points experienced, and points where feedback or help would be sought from box office staff via email, phone or by visiting the venue itself.<sup>2</sup>

<sup>2</sup> No filming was made of any person entering their personal details, such as card payments. Therefore, there is no research of individual banking systems' checks and measures.



In phase one of the research, stakeholders from our multi-arts venues shared their practices and some of their constraints. Each venue was unique in its checks and measures:

Karen, marketing director in her early 50s, is from an arts and culture venue.

'As I said, 37% of our bookings come online at the moment and the rest is split, sort of equally, between phone and counter [box office].'

In comparison with the ferry cruise liner sector, Justin, in his early 40s, is even more detailed:

'I think about a year [...] or 18 months ago, about 20% of our website visits came from a tablet and it's now approaching about 40%.'

The crux of the problem with analysing online data is how for a marketing team converts this into sales, as Justin outlines below:

'Online sales can be difficult because unless [...] people actually make a purchase through the site, or they go on to purchase something they can only have found out about through the site, it is quite difficult to judge the impact of the site on what they are doing, so for us, because our online booking is such a small portion of our business, it is actually quite hard to make a business case to invest more money in the site because we don't actually know the impact it's having versus having a better site or not having a site at all. So it can be quite [...] hard to justify unless you are actually making a reasonable load of sales through the website.'

This is reflected in feedback from Karen:

'Recently, we did our first Facebook advertisement to promote the Facebook page as a test, and we did it over a 12-day period and got 700 new 'likes', which was [...], on the face of it, fantastic. It's great to get those likes but you've then got to ask, does that convert to sales or is it people who are just liking the site. So digitally it's good because we've got more people but [...] there's no point in getting 700 people who are not going to then, you know [...]

Yes, it is really because there's no cross-fertilisation of data there – you could have all the people who've liked you on Facebook and then cross-reference them with people who've booked tickets, which would be superb, but it's just not a possibility.'

Early research also showed that dynamic pricing was used across venues, where appropriate. Constantly changing prices were reported in the 65+ interviews as a challenge when booking online.

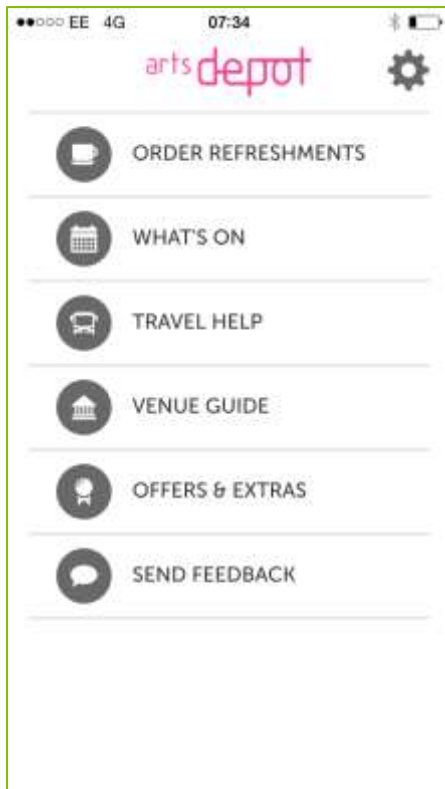
Our research looked at attendance patterns to unpick the way in which this may be affecting programming. Stephanie, head of programming for a multi-art form venue who is in her late 30s, noted:

'The frequency of attendance is a bit more sporadic and ad hoc because of the nature of programming. So somebody might see themselves as a regular attender of our venue but come once a year.'

## The app

The app currently has six areas of functionality, and within ticket purchasing the team has also added the ability to invite a friend either pre or post ticket purchase. Two areas of functionality have been discarded and we are still testing and developing the app pending full launch in autumn 2015. The following pages provide narrative reports on different areas of functionality.





*Figure 9: Key functionality shown in early wireframe*

Source: Ingelby

### Order refreshments

This area of the app is designed to enable audiences to place orders with the café/bar, speeding up serve time by reducing customer dialogue with catering staff.

This section was developed in response to research showing that older people want visits to the theatre to be comfortable and dislike having to queue for drinks. During app testing, John in his late 60s, and Rohan in his mid-80s, respectively, made the following comments. Both attend fortnightly though Rohan tends not to attend at the moment due to ill health.

‘That’s not a bad idea. I cannot stand queuing for food, ever, it’s demeaning, we’re a rich-enough country to not have people queue for food.’

‘I don’t want my time wasted in a queue for coffee. [...] I pay by debit card and pay contactless. I carry very little cash.’

This functionality requires the app to communicate with a docket printer on the café counter and supply order information as well as the customer's name. It also needs to generate an order number which links to an accounting spreadsheet. Payment is via PayPal, which requires a further integration.

Payment was a major issue with regard to the queue-jumping system. Though payment can be made by debit card, or by PayPal (which adds another login barrier), there was also a desire to pay by cash or by contactless payment. In reality, this could mean queuing, as well as finding the time to use the app. This is explored further in the Insights section.

artsdepot's café, like many in the sector, is sometimes staffed by one person. There are concerns about the logistics of juggling the demands of a queue with incoming orders from the docket printer. This function will be used by staff internally ahead of the app rollout in the autumn. The delivery process will be reviewed and refined on a weekly basis. Investment in front-of-house signage is required to identify clearly where customers collect their products.

Theatres usually offer drinks by pre-order, which customers are used to seeing. Although pop-up messages have been built into the system, there is a risk customers will ignore these and place an order, assuming it will be delivered when they attend the event. This area of the app will need close monitoring.

The 65+ focus group was keen to explore this area of the app, although some felt they were unlikely to use it. Reasons included: disliking the PayPal payment system, too much effort for a low value item, and desire for human contact. **It's important to note:**

- The app was developed for, and will be used by, audiences of any age. In effect, each customer's mobile device acts as a payment terminal. Regardless of which age is purchasing refreshments, this will ultimately reduce queuing at the counter, making it easier for those who prefer a personal experience to be served by a member of staff
- Focus group testing took place during a quiet day at artsdepot and the café was able to serve the group immediately. Priorities may change when faced with a long queue

- The refreshment ordering process worked for a short time while being tested in-house but stopped working during focus groups. Audiences attempting to purchase were taken through the journey and payment was taken (confirmed by PayPal) but the printer did not generate a docket. This requires further investigation and will be tested in situ with artsdepot and Ingelby
- Feedback from older people and the in-house team at artsdepot highlighted that the order of the sections needs to be changed, with this section appearing below 'What's on'.

### 'What's on'

Though 'Invite a Friend' is the key piece of development to encourage social interaction, it is somewhat hidden within the app compared with the other functions. There was extensive debate about how 'Invite a Friend' would be positioned between artsdepot and Ingelby. After working through a user journey, it became clear audiences were unlikely to invite a friend if they hadn't first decided which event to attend. Once a person has selected an event they are then taken to an event listing screen, at which point they can choose between 'Invite a Friend' and 'Book Now' to proceed.

The 'What's on' section links to artsdepot's CMS, accessing show data that uses API feeds provided by artsdepot's web developers (Tincan). It also links to the Spektrix ticketing system.

Members of the 65+ focus group commented that they had not come across this feature on other theatre websites, but the overall response was that it was an interesting concept and a tool they would consider using. Kenneth is in his early 70s and attends fortnightly:

'It could be useful. A friend went to the studios last night and said it was the best thing they have ever seen and suggested we should see it... Certain friends know what we like...'

- There was uncertainty about whether contacts would be stored and could be used again in future, and whether the invitation implied the tickets had been reserved. 'Invite a Friend' functionality is new to the

market and the user journey will be revisited ahead of rollout to ensure there is sufficient contextual help

- At the moment the feature requires selection of the performance time and date ahead of inviting a friend, which can result in the recipient thinking the event is only on for one day. Improvements will enable people to invite friends to a run or select a specific date, or ensure that full dates of the run are displayed
- During app testing the majority of invitations were either not received or landed in junk folders. In addition, if a person clicks 'Reply' rather than using the buttons, the reply is sent to an artsdepot generic email. Ingelby is in the process of registering SMTP details, which should mean emails reach their intended destination.

Once development on 'Invite a Friend' is complete and tested it is likely it will also appear on artsdepot's website, making the function accessible on desktops too.

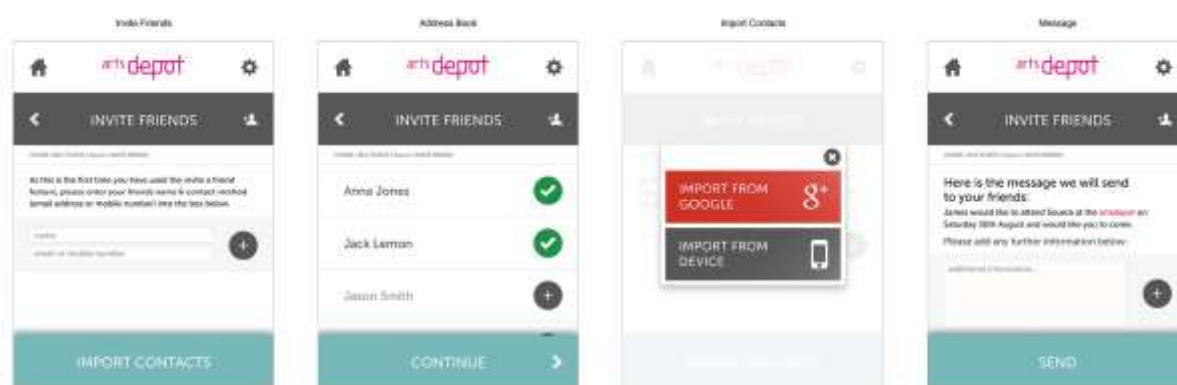


Figure 10: 'Invite a Friend' app functionality showing prototype screens tested using AppCooker with older people

Source (Ingelby)

The following app testers commented on the functionality shown in Figure 10 above.

John is in his late 60s and attends fortnightly:

'That's clever. [...] Hang on, once I've texted my wife for the first time, would her name be up here the second time I do it?'

Judith is in her late 60s and hasn't attended an event for several years:

'Is this intended for a day or two ahead? It wouldn't work on the day. Someone like me needs advance notice and to steal myself away from crowds in and around the venue. The longer I have to think about it seems to be the secret to getting to events and enjoying it, which quells the negative fears around phobias, so it would be a useful facility to have. I do that quite a lot for friends, things I've spotted on the radio, interesting things I've seen.'

William is in his early 60s and attends seasonally:

'It is unclear – am I sending this to my son for him to look at or am I inviting him and buying his tickets?'

### Travel help

This section of the app connects to external software providing audiences with real-time information about local transport, directions to the venue and a taxi booking service.

The questionnaire results showed that transport considerations were perceived to be the biggest barrier to attending. Kenneth (early 70s, quoted earlier) attends fortnightly and has the following transport requirements:

'Travel instructions – I'd like to know nearest station, bus route, nearest parking, if it's disabled friendly. I'd also like to know the length of the production so that if you have to book a cab you know what time you will be done.'

The app therefore had an extensive transport functionality built in, including live timetables and taxi booking.

The focus group with experience of going regularly to and from the venue produced the most detailed feedback for this section of the app and felt that live travel information was a valuable addition.

## Venue guide

The field research with the 65+ group found that while venues are providing hearing loops, wheelchair access and other facilities, it is often the gap between venue facilities (theatre seat) and transport (car park) that can cause the most problems for older people.

The venue guide contains information about opening hours, contact details, accessibility, amenities and facilities (including where they are located), but is a content-heavy section rather than an interactive feature.

The 65+ audience gave useful feedback on how the content could be changed to make it more relevant to them, such as putting greater emphasis on disability access. **This information is pulled from artsdepot's website CMS**, so any changes will automatically appear on both platforms.

## Offers and extras

Research with the 65+ group found a demand for offers and discounts, as a tool for engagement in the arts, and the offers section was developed as a result. However, artsdepot uses offers as a tool for generating new audiences rather than discounting tickets to existing customers, and the marketing team had reservations about offering discounted tickets through the app because of the impact this could have on brand and perceived value. For app testing, the section was used to display value-added experiences such as directors' talks and workshops.

## Sending feedback

A mechanism for communication with the venue was developed to improve dialogue with visitors, which received a positive response from focus groups who understood its benefits. To avoid confusion, the title of this section will be changed to 'Let Us Know' or 'Talk to Us', based on the stakeholder focus group. Some of the in-house team thought the section was for feeding back on the app.

We will also change the customer journey so audiences have the option either to provide anonymous feedback or receive a response. Focus groups highlighted that some forms of feedback do not require a response, e.g. letting the venue know you enjoyed a visit, though some people may feel more comfortable about reporting issues anonymously.

### Ticket holding/scanning

An early ambition for the app was that it would have a digital ticket wallet to enable scanned entry. We felt that, if successful, this would have wider sectoral impact; all venues felt that it was only a matter of time before digital entry becomes the norm. As such, the first version of the app included theatre entry by smartphone (resulting from isolated bar codes and a Spektrix ticketing-system scanner for iPhones and Android) and e-ticket storage.

However, **artsdepot's** visitor services manager spoke to three out of the five Spektrix venues that currently use ticket scanning. The consensus was that it caused extra queuing to enter the auditorium, especially for performances with allocated seating, and was time consuming when admitting groups as **each ticket's barcode had to be scanned individually**. There were also issues with the API feed available from Spektrix, which did not display the seat number on the e-ticket, making it difficult for ushers to show people to their seats.

As a result of the technical challenges to rolling out ticket scanning in venue development this section was paused. As mobile ticketing technology improves there may be a case for re-introducing this feature in the future.

### App testing and analytics

The research partner conducted app testing on a prototype at artsdepot in August 2014, then at all three fieldsites in October 2014, and then again at WAC in January 2015. The research partner subsequently formed a focus group of older people in March 2015. Zahida Din (artsdepot) was an observer to the process.

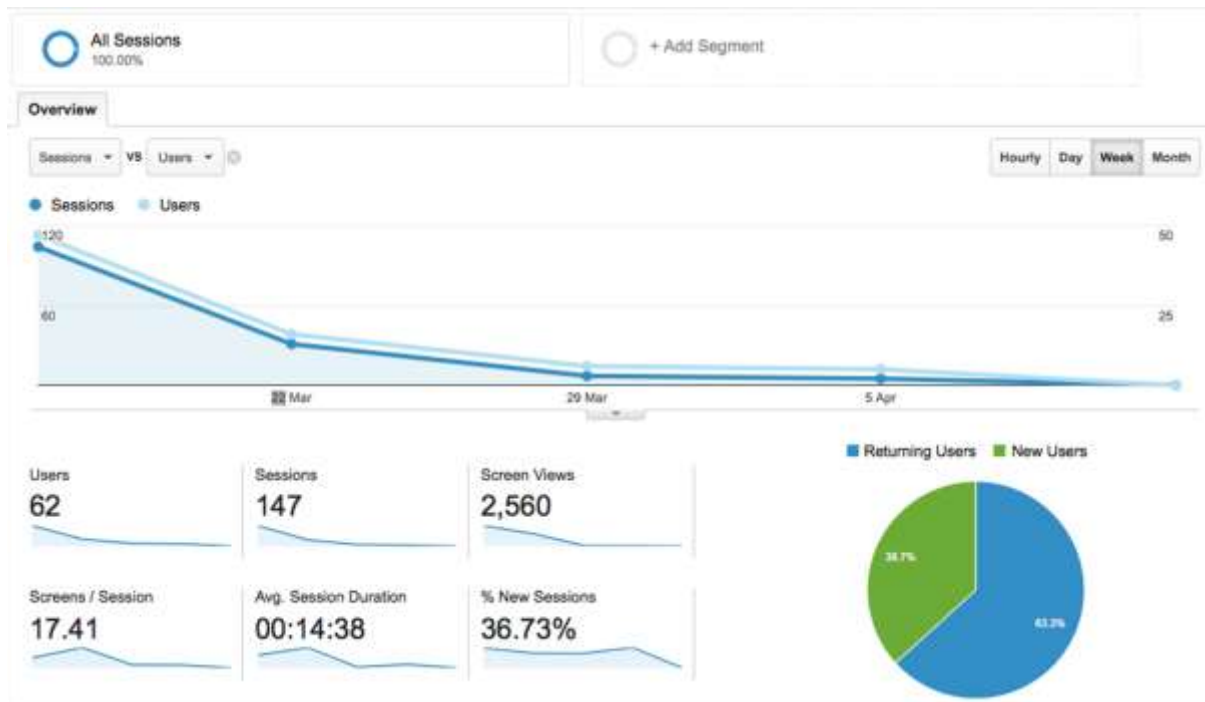
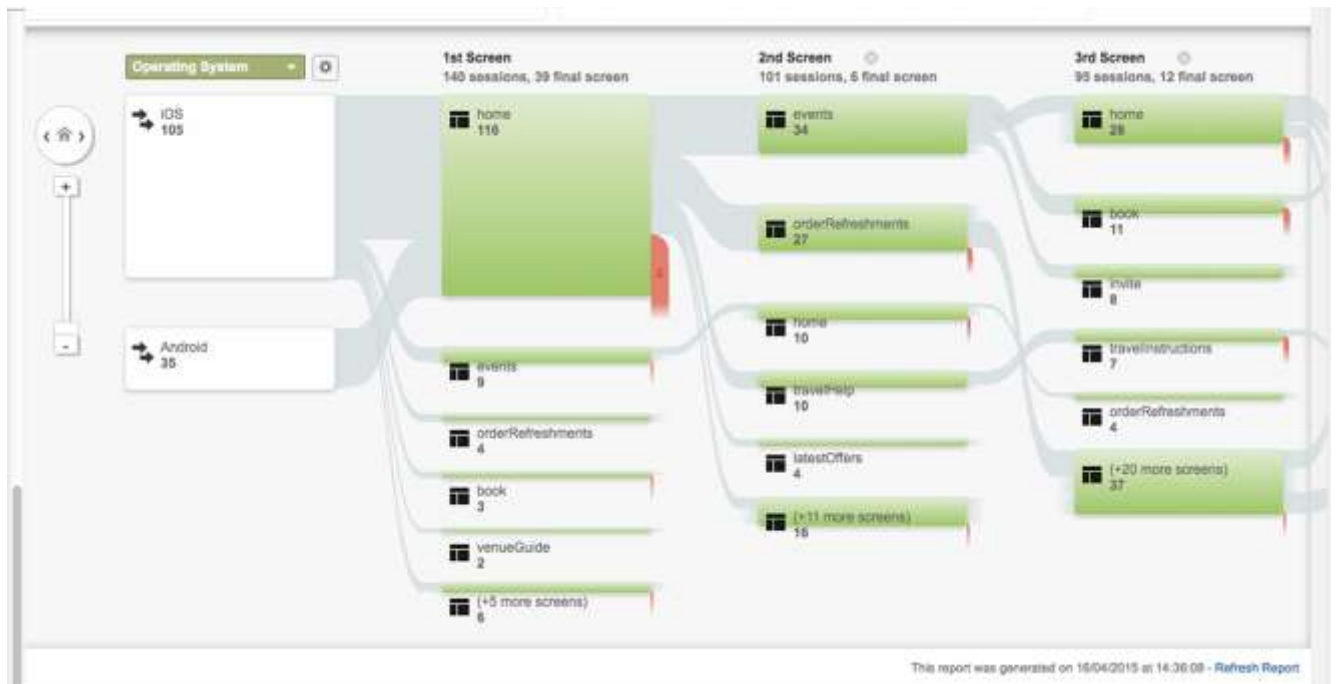


Figure 11: The Google Analytics from the left-hand side (15–22 March) coincides with app testing, which took place Wednesday 18 March–Friday 20 March 2015

Source (artsdepot)





*Figure 12: Google Analytics behaviour shows that those visiting to book do move onto the 'Invite a Friend' functionality. However, to order a refreshment seems to be another way of accessing the app while side-stepping booking and the 'Invite a Friend' function*

Source (artsdepot)

## Engaging the Ageing project

This project was developed after reflection on the limitations of our digital solutions to reach some of the 75+ age group, who we discovered were unlikely to attend because of financial and health reasons. To ensure we achieve our goal of extending access to socially isolated older people, we have secured a three-year grant from the City Bridge Trust for the following programme.

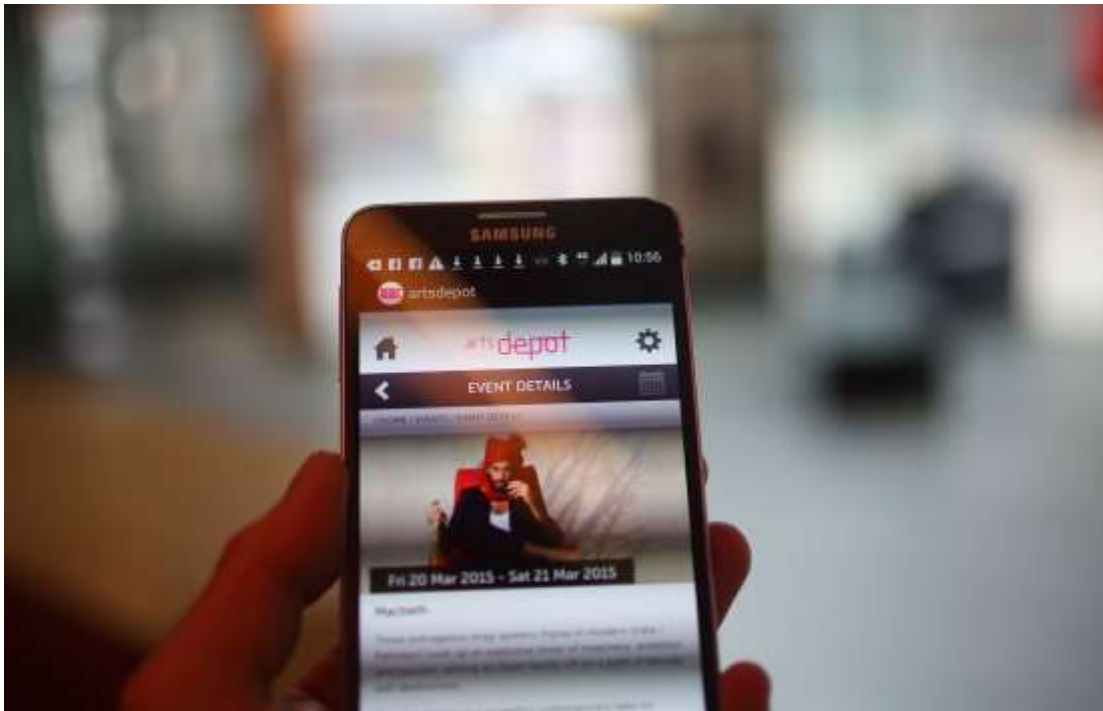
The project will enable artsdepot to appoint a community champion, with a budget for facilitated transport, to establish an events programme targeted at older people, and to provide free or heavily subsidised tickets to shows.

The questionnaire research of the Digital R&D Fund showed that there are potentially 322 cultural champions and a further 770 digital champions (i.e.

can make an online booking), or 290 who use Facebook, or 33 who use Twitter. There is therefore no shortage of champions to help peer-to-peer engagement at any of the three field sites.

The budget from City Bridge Trust will also enable artsdepot to bolster front-of-house support, enabling us to grow a matinee economy. There are great efficiencies in this model – most theatre companies will charge a much smaller fee for the second performance in a day than the first as **they don't** have to factor transport and overnight accommodation into the costs. Consequently, we are able to provide subsidised tickets, enriching experiences for older people and hopefully achieving a greater net gain for the venue and visiting company. We will be testing this model over the next three years and reporting to the sector on whether we are able to develop a sustainable growth pattern.

## Insights



*Figure 13: The date for Macbeth is positioned on top of the image on a black background but was often missed by older people during testing*

Source (University of the Arts London)

WC3 tests verify if a website is accessible, giving ratings like AA or AAA for accessibility. In 2010 Simon Roberts noted that ‘adherence to accessibility standards such as W3 for websites is therefore important but widely disregarded’. (Roberts 2010, 10) WC3 requirements are not a substitute for hands-on testing with older people. In this project, WC3 tests were decisive at the start of the project as an assessment tool, but hands-on testing became more relevant as the project progressed.

Through app testing, the research partner relayed that complying with WC3 alone is not enough to ensure digital technology is accessible for older people, particularly for those who are digital novices and have sight and dexterity challenges. In addition, there are three kinds of jargon arts attendees may find confusing: (a) digital jargon, i.e. ‘cookies’ and what to do with them; (b) arts jargon, i.e. ‘genre’, and even ‘online booking’; (c) banking jargon, i.e. what is the difference between a booking fee and a

transaction fee? Encountering this terminology during the booking process may explain some of the drop-off in digital booking.

An outcome from this was that artsdepot reviewed the language on its website and the app to ensure plain English was used wherever possible. Most of the content on the app is pulled directly from the website, so one affects the other.

Lessons learnt:

- Whether developing technology for older people or adding content to an existing website, it is very easy for jargon to creep in. It's always worth asking: does the general public understand what that means? Can it be explained in an easier way?
- You can't rely on your customers to let you know if part of your website/app isn't working the way it should. It's wise to review user journeys every six months, as a general health check to ensure everything is in order.

## The payment challenge

The idea of being able to avoid queues by ordering refreshments via an app received mixed feedback from older people, so after carefully considering this it was decided to develop it as a business model challenge by providing a seamless service experience. The facility to order and pay for refreshments from the artsdepot café via the app was therefore developed to provide a service that joined up ticketing with café sales. This is a unique business model, which differs from trying to conflate box office and bar/café into one service.

However, payment was a major issue during app testing. Though payment can be made by debit card, or by PayPal (which adds another login barrier), there was also a desire to pay by cash or by contactless payment. artsdepot café has only one cash register and allowing app customers to jump the queue would result in a poor customer service for those waiting in line.

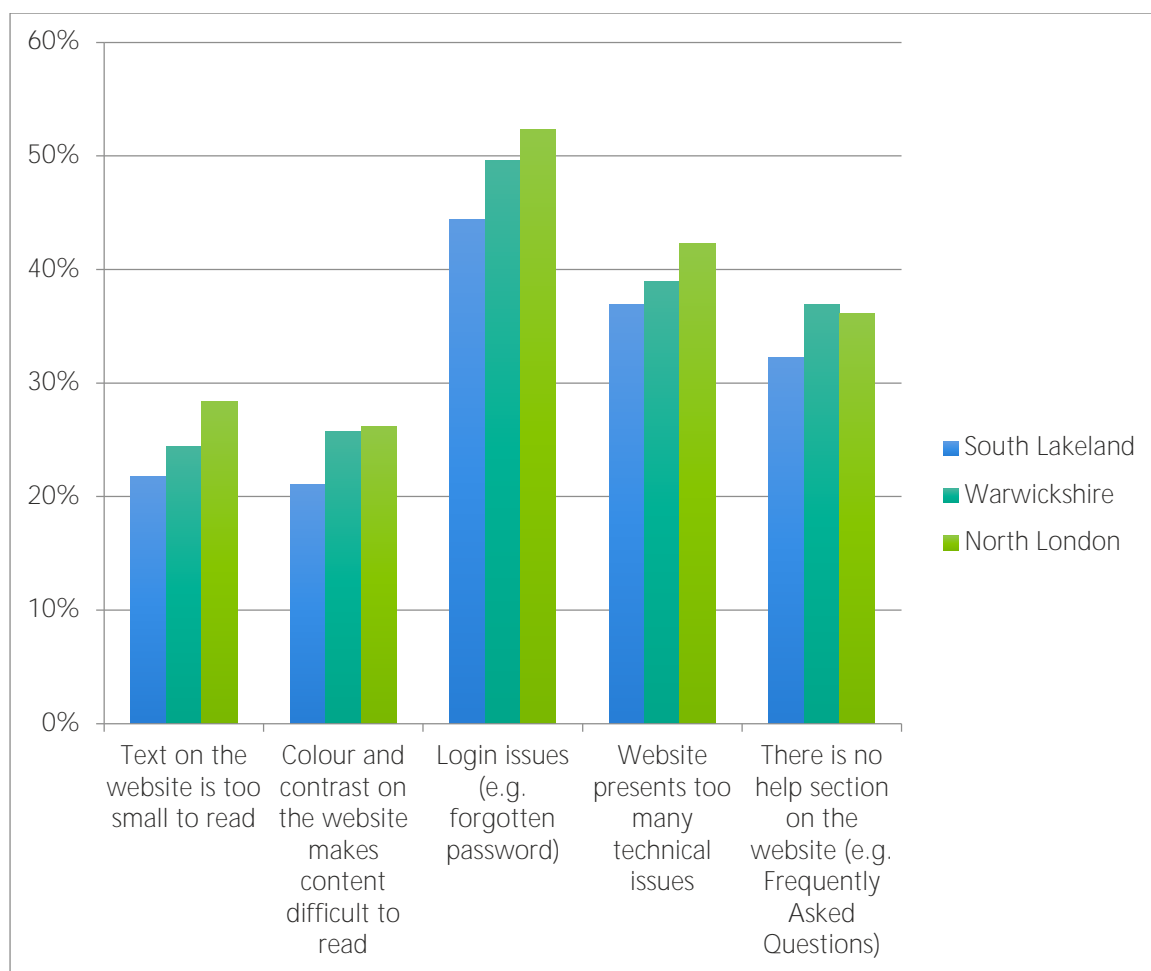
Similarly, ordering on the app and then waiting in line to pay makes the app redundant as a queue-jumping tool. However, it is important to note that the app was tested at a quiet event at artsdepot, during a busy performance

interval with only 20 minutes to visit toilets and get a refreshment – the desire to receive your order may supersede the desire for human contact.

Lessons learnt:

- When relying on third parties you can lose control of part of the customer journey. For example, the 'PayPal' loading icon is small and cannot be increased as it is supplied that size by PayPal
- The effort customers are willing to make is directly proportional to the gain, so while it may be worth completing an online transaction to purchase a ticket, doing the same for a refreshment may not be
- Logins and passwords are a huge barrier to payment. Digital technology in this field is developing fast, and in the not-too-distant future a better alternative to PayPal may emerge, such as using phones to scan credit cards or thumbprint recognition. Mobile payment gateways for Apple will be ready in the UK from July 2015. This will enable people to tap their phone on a piece of hardware to complete a payment transaction. Username and password credentials are not required. This is obviously a new technology and will take time for companies to apply to market.

The table below highlights that login issues are already the biggest barrier to booking online:



*Table 12: Login issues by percentage that act as the greatest barrier to booking an arts and culture event online across all field sites*

Source (University of the Arts London)

## The challenge of delivery

The three core partners came to the project with different management styles and operating practices. The research partner used agile practices and documentation to underpin the R&D journey, compiled in emailed sprint updates and product backlogs. Ingelby started with an agile approach and then moved to a waterfall process in order to scope technical requirements for the app and allocation of resources. **artsdepot's marketing team did not** have any prior experience of agile working and focused on the timelines agreed in the grant.

The bulk of the tech build happened at the tail end of the project, after the final interviews had taken place. There were huge changes between the version presented to the focus group and the one previously tested with older people. As a result, the focus group produced a substantial amount of feedback.<sup>3</sup> Though feedback was invaluable it was a daunting prospect for artsdepot to work through it and present it to the tech partner, with just weeks before the project was due to come to an end.

Lessons learnt:

- It's important to agree on how a project is going to be run upfront. The arts partner would have benefited from jointly attending a training session to agree best working practices for the project. Agreeing to work agile is not enough – there are a number of ways of agile working and unless a project team agrees which they are using beforehand there will be misunderstandings
- In hindsight, artsdepot would have developed one section of the app at a time – working this way allows ideas that **aren't working to fall** by the wayside sooner in the process. This way of working is much easier when an in-house tech development team is involved in the process
- It is not uncommon for technology projects to take longer than expected though it is rare for them to be grant funded, and organisations therefore tend to impose and flex timelines in negotiation with the developer. Just as financial contingencies are built into development budgets, time contingencies should be built into the tech project. Even with best intentions, in **artsdepot's** experience adding 50% to the forecasted timeline is not unreasonable
- Learning through tendering for technology development – the usual way for a technology project to be awarded is through a tendering process, and an enormous amount can be learnt by the commissioning organisation from this process, from new perspectives to the brief to key questions to put to prospective companies. Most

<sup>3</sup> The focus group with older people was collated into a document identifying five new bugs and 10 challenges with the app in its current state, which were tabled in an Excel document. These comments reiterated testing from August, October, November 2014 and January 2015. This feedback was given to the arts partner 24 hours after finishing app testing and focus group events.

arts centres do not have in-house tech development teams and the marketing team's experience is often limited, at most, to launching a new website. The opportunity to learn through the tendering process was lacking as the project team had to be agreed ahead of submitting the grant application.

## Arts centre business impact

Although this project was led by the marketing team at artsdepot it has far-reaching implications throughout the business:

**Programming:** The 'Invite a Friend' feature is only relevant if the venue hosts events to which people want to invite their friends. The programming team have been working to enhance the offer for older people: extra 'theatre' performances and matinees have been added to the programme for autumn 2015.

**Visitor services:** This team manages front-of-house, customer service and ticketing. The visitor services manager led on investigating the impact of ticket scanning on the customer experience and potential issues that could arise, as well as helping to identify the best internal system to route email messages from the feedback function to the visitor services team. The visitor services manager also worked with marketing to ensure that customers receive holding messages, enquiries are forwarded to the relevant team at artsdepot and measures are in place to provide prompt responses.

**Catering:** The catering manager is helping to test the CMS of the app itself (where refreshment items are input). He also identified the items that should be available on the app. As this is a brand-new service, there is a degree of nervousness among the catering team about being able to meet customer demands. artsdepot has budgeted for team training and additional staff to support the process in its early stages.

**Operations:** Restrictions on the venue's WiFi were preventing the app being downloaded. The operations team isolated the issue and increased WiFi capacity, resulting in significant additional costs.

**Finance:** Ingelby worked with artsdepot's finance team to set up PayPal integration, as well as sales spreadsheets for refreshments ordered through the app, and systems to reconcile payments between PayPal and the sales



log. The sales log also acts as a backup to confirm a sale if the docket printer stops working.

Going forward, all these teams will be instrumental in ensuring the project has a successful future.

Lessons learnt:

- Involve wider departments early on in any digital development process. Customer-facing teams can spot pitfalls in delivery that technologists or marketing teams may be unaware of, and can save developers time on developing ideas with limited potential
- Use trials with smaller numbers of users to build confidence in customer-facing teams about the service being delivered. Use this as a test period to fine-tune the digital product
- Get buy-in from across the venue teams; use whole team meetings to share updates and process; share the product in its earliest stages and gather feedback; use the wider in-house team to test the product; make sure relevant teams are involved in planning rollout
- Establish feedback channels between customer-facing teams and marketing teams. Technology has to evolve, which can only happen through feedback from the people using it
- Arts venues considering adopting the app need to be aware that additional investment may be required, in both time and money, to ensure its success. Marketing team time, staff training, WiFi infrastructure improvements and changes to internal processes should all be considered. It is wise to have a contingency in place for unforeseen costs.

## Future

### Development

The wealth of information garnered during the focus groups led to artsdepot meeting with Ingelby to re-negotiate the timeframes for delivering the app. The project was due to be completed in June 2015, but one month would not be enough to make the necessary changes, test, feedback, amend and rollout. Though basic bugs could be fixed within the timeframe, all partners felt it would be a missed opportunity to launch the app without taking into account feedback from the focus groups.

The remaining development will happen outside of the project, with the aim of launching the app officially in autumn 2015.

Ingelby were impressed by the depth of feedback provided by the focus group, and keen to see it translated into genuine improvements to the app.

### Timetable

Dates	Activity
Jul – Sep 15	Development completed. artsdepot and Ingelby take forward feedback from the focus group, and test/review amendments to functionality.
Sep 15	App rolled out to artsdepot staff team to test 'order refreshments'. Public for selected shows encouraged to download app ahead of their visit. Further refinements by Ingelby.
Oct 15	Launched to market; marketing strategy takes effect.
Oct 15 – Mar 16	App evaluated and learning shared with arts sector to generate interest for rollout at other venues.

*Table 13:*

The research team has been able to take the results of this to many different audiences, from regional through to European level (six events altogether). Dr Amanda Windle has subsequently become a member of the EU consortium (funded by the EU Commission), The Voice of Culture: Audience Development via Digital Means, in June 2015. This was an opportunity to bring the UK digital R&D project on audience development to the attention of EU policymakers and Creative Europe. Meanwhile, Windle has been

involved in the Design Policy Network hosted at the Royal College of Art, with policymakers such as the Design Council – this was an opportunity to relay design recommendations to the community at large, including other design, marketing and advertising agencies. Windle also continues to deliver data visualisation workshops and information on the effects of big data and social media to government departments like the Cabinet Office and Business, Innovation and Skills.

Windle is also seeking to extend doctoral opportunities in the areas of digital R&D and audience development, and is working on this further with some of the project partners. Dr Thomas Giagkoglou has been able to enhance his curriculum development in media communications and to find placements for undergraduates in multi-arts networks at EU level.

Both Windle and Giagkoglou will extend their collaboration to publish the results in journals in the near future, which will add to existing publications from 2014.

## Rollout

The following licensing agreement has been agreed with Ingelby, which will enable the app to be adapted and used by other venues in a low-cost model as per our Nesta contract and subsequent partnership agreement. Payment options include:

- £2k upfront fee and £100 per month
- £5k upfront option for a three-year subscription (works out at £600 cheaper over the three years)

### Includes

- Produce a version of the app using the underlying framework already developed for artsdepot
- Basic branding – logos and underlying company colours
- Connect to website platform to feed event data
- Integrate with Spektrix

- Set up and connect the wireless printer technology
- Launch to App stores.

The artsdepot app will be free for the public to download.

## Further Resources

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### Further project information

A digital diary of the journey: [www.amandawindle.com/digital-rd](http://www.amandawindle.com/digital-rd)

### Tools and guidance

Article on how to create ‘proto personas’ in collaborative workshop settings:

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Research partner’s project insight on collaborative agile processes:

Windle, A (2015). ‘Why do agile processes unintentionally become waterfall?’, *Digital Native Magazine*: <http://artsdigitalrnd.org.uk/projects/artsdepot/>

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## Glossary and Abbreviations

App testing	i.e. <b>not</b> 'user-testing'. This document follows the logic that we tested an app rather than app users. The older people involved in the project did more than act as users, they had a stake in <b>the app's</b> development and were therefore digitally engaged in an inclusive process
BAC	Brewery Arts Centre
Card sorting	Card sorting techniques are a convention from psychology research and have also been used in user-experience design research. There is a behavioural and attitudinal dimension to this method, in which stakeholders became immersed. The method helped to gain insights from the <b>stakeholders' experiences and to test general</b> knowledge of social media and digital devices. This is clearly not a conventional process used in the design research for arts venues. Out of 15 interviewees, 12 completed the card sort (one was not part of a pilot process and the other had to leave due to the interview lasting over 60 minutes)
CRM	customer relationship management
GPS	global positioning system
Hotspots	Used here to mean public places and spaces that older people frequent, as well as places where WiFi signal is prevalent
LA classifications	<b>DEFRA's</b> (Department for Environment, Food and Rural Affairs) local authority classifications for rural and urban areas. The three locations chosen are representative of all six of <b>DEFRA's</b> urban and rural UK classifications of Local Authority Districts, Counties and Unitary Authorities (2009)

LCC	London College of Communications, University of the Arts
Older people	Used to describe our ageing cohort. The words 'older' and 'ageing' are used instead of 'old' or 'elderly' (Roberts, 2010)
WAC	Warwick Arts Centre
UAL	University of the Arts London

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Citation: Burley, T, Lane, O, Windle, A, (2015) 'artsdepot: 65+ Digital Membership Scheme Research and Development Report' London: Nesta

[artsdigitalrmd.org.uk](http://artsdigitalrmd.org.uk)

