curtain. One of their missions is to be much more transparent, to get people to go to them to have a content-rich experience and to curate that.
They've created a Google maps interface so that people can find the nearest venue close to them: they want to develop that further so that you get different content depending on where you are looking from, and also target the dates – which vary slightly mainly because of time differences – to the right people depending on location. The UK content would be different, as people in the UK do have a different relationship with the National (i.e. they could get to the National to see work in the theatre, or they could see them on tour).

In terms of getting people to think about the National site as a place for content and engagement, they are looking at two-way broadcasting and interactivity. Through the internet – and eventually on mobile devices – they want to get people to engage more: this is happening to a certain extent on Facebook (they have a separate NT Live Facebook page) – a relatively small number but an actively engaged number which they are sure they can increase.

Feedback shows that people want programmes: they do this in some cinemas but the logistics are hard, sending out stock and so on. If you look on the NT Live website, you can see that they have started offering digital programmes – their first really digital commercial enterprise on the site – which are the same price as their traditional programmes, but offer a lot of extra digital content, so you get a podcast of Nick Hytner's platform talk on *Hamlet*, and a behind the scenes pre-show video. This has just started to grow after positive responses: it's a downloadable flash file with a text-only version that can be printed out and taken to the cinema. This has made them think about digital publications. They want to work out how to curate digital content, as it is not inexpensive and takes a lot of time, so they need to get it right. So they are wondering about having a quarterly publication, which might be things that have been uploaded in the previous month, but presented in a different way.

## Hasan Bakhshi, Director, Creative Industries, NESTA
## *Satisfaction guaranteed? Measuring satisfaction, attitudes and perceptions*

Understanding the impact that our digital initiatives have on audiences involves a lot more than just measuring online behaviour (as valuable as that may be). In this session, Hasan explored how to measure how satisfied people are with the experience they have with our organisations via digital media. It drew upon some key findings of an in-depth research study conducted by NESTA on the NT Live pilots, including the impact this project has had on developing new audiences and changing public perception of the arts.

He kicked off with a quote from Nick Starr at NESTA's Advancing the Arts seminar:

*"Those of us who have grown up working in the arts are good at developing hunch and instinct. We are not so good at developing a series of tools, a kind of rigour of analysing things and then proceeding stepwise through where the analysis takes you, to a hypothesis which you then go back and re-examine and test if you possibly*

*can. Particularly in the theatre, this wonderful thing, however good the show is, however terrible it is, it will be over."*

He wanted to illustrate why he thinks analysis plays a central role in the strategic development of arts and cultural organisations, and look at the actual research they did with NT Live, and what the implications are generally for arts organisations.

**The motivation for the research**

Those following creative industry policy over the years know that the language of innovation crept in in the late 90s, in particular the idea that the focus of government policy towards the creative industries should be about supporting innovation. A NESTA document by Will Hutton, Philippe Schneider and Hasan called *Staying Ahead* set out the main drivers for the creative industries and made the point that the UK's strength in the creative industries might make the rest of the UK more innovative. The government responded with a strategy for the creative industries, *Creative Britain*, which was dotted with the word innovation. And the paper from the European Commission, *Unlocking the potential of cultural and creative industries*, also features the word innovation over and over.

Innovation as a concept has also crept into the cultural policy discourse, most obviously the Arts Council Public Value Inquiry, and Sir Brian MacMaster published the report *Supporting Excellence in the Arts*. Two quotes from that report are indicative of the types of things being said about innovation:

*"Those who fund the arts and those in receipt of funding have a duty to continuously encourage innovation."*

*"The boards of cultural organisations, and I include museums and galleries in my understanding of this, are – or should be – the guardians of innovation and risk-taking."*

In this thirty-one page document, the word innovation appears thirty-nine times. However, people don't really know what the word innovation means in this context: defining that was one of the things that they wanted to achieve with the research they did. Hasan works for an innovation agency, his background is in innovation studies and the economics of growth, so he wanted to tease out what the scholarly work on innovation said for the cultural sector. The answer is, it doesn't say much.

**The key questions**

Going back to Nick Starr's quote, they started the collaboration with the National Theatre with five very clear research questions, returning to them repeatedly throughout the five year project, during which they also did a case study with Tate.

- What is the demand from audiences for innovative work (and what does innovative work mean)?
- How can cultural institutions use new digital technologies to reach new audiences?

- How can these technologies help them deepen their relationship with audiences?
- What novel methods can cultural institutions use to value what they do (particularly important in a system where public money is a significant contributor)?
- Do these avenues for innovation lead to the development of new financial and business models?

The ambition was to say something that was meaningful across art forms, acknowledging that there were significant differences between companies and art forms.

**What did they mean by innovation?**

These key dimensions capture what policy makers and cultural organisations seem to mean by innovation:

- Innovation in art form development: pushing the frontiers of art
- Innovation in audience reach: audience broadening, deepening, diversifying
- Innovation in value creation: cultural organisations operate mixed economies, motivated by economic and non-economic objectives, so this is about ways in which cultural organisations can create and measure new forms of private and public value
- Innovation in business management and governance: new organisational structures, new business models

**Research methodology**

This had two strands:

1. A fairly traditional econometric analysis of audience demand at the National Theatre's productions across its three stages, 2003-2008, for which the National shared a lot of data.

2. The case study they did with NT Live, a more novel part of the research: what was immediately apparent was that it was a chance to test a number of propositions that cultural organisations more widely wanted answers to. David always talked about the language of innovation, so it was a natural alignment with the original questions. The dataset was large enough to get strong results and collect robust inference. The methodology they chose was a combination of stated preference and revealed preference techniques, attitudinal surveys, critically asking audiences of the same production of the National Theatre and NT Live the same questions. The sample sizes were large, with help from the National recruiting participants, so they were able to control for differences in socio-demographic make up to deduce results with *other things being equal*. The bulk of the work was done around the pilot season, specifically *Phèdre*, 25th June 2009, plus some follow up with *All's well that ends* well to probe the results that were more surprising.
   Hasan's an economist and one technique economists bring to research is reveal preference techniques. A lot can be learnt not just from asking people what they think but observing what they do: if enough structure is put on the

experiment, some pretty tight insights can be inferred. One of the attractions of the NT Live experiment was that it created the choice for some of the public (those who lived within travelling distance of the south bank) between the production at the National Theatre and the NT Live show at their local cinema. So by observing where people at the National were coming from, they could infer whether NT Live was cannibalising or if it was recruiting (there were a number of mechanisms by which the cinema screenings were advertising the theatre). The latter is what turned out to be the case.

**A tour of some of the key results**

The full report and all the data can be downloaded from NESTA's website, so not all the data tables are copied in this report:
http://www.nesta.org.uk/publications/assets/features/culture_of_innovation

The results were split into the key dimensions listed above.

Innovation in art form development
This was measured by looking at the new work that the NT programmes. As one of the UK's premier cultural institutions, the NT has a commitment to contemporary programming. This can be seen very clearly in the data. For example, looking at all the productions between 2003 and 2008, almost 50% are plays by less well-known playwrights post 1995, and 56% were written after 2000. With a large database, they could try to control for the standard determinants for occupancy rates for productions to see what the additional impact was of the type of production. What they found was that other things being equal, there was a trade-off between increased audience numbers and programming new plays, occupancy was 1 to 2 percentage points lower for the more 'innovative' plays – the quotes because what is innovative is a complex judgement to make. When the play was written and how well-known the playwright is correlates to how 'innovative' people consider the work to be.

Innovation in audience reach
One of the things that was maybe most obvious but was documented in the data is that NT Live is broadening the audience base for the National. When they asked cinema and theatre audiences what their cultural consumption habits had been in the previous twelve months, 90% of theatre audiences had been to the National, whereas just over 40% of cinema audience had been – unsurprisingly as a large number of the cinemas were not within normal travelling distance of the National, so they had a unique opportunity to engage with the play through NT Live. So this proves audience broadening.

Interestingly, there was not much evidence of audience diversifying: not a lot of theatre novices were brought into contact with the theatre through the cinema. There wasn't much difference in general theatre going experience between cinema and theatre audiences, although there was a significant number – 5% – of cinema audiences who hadn't engaged with theatre in the last five years.

Taking that further, they asked a set of standard questions about cultural consumption habits: then they classified by the depth of engagement. This showed that there were fewer deep cultural consumers amongst the cinema audience. The most striking difference between the two sets was in terms of income: there were significantly larger numbers of low income individuals amongst the cinema audience. They retested this with the *All's well* audiences and basically got the same result.

Digital broadcast made it possible for the National to draw on established relationships between cinemas and patrons all over the UK. 24% of cinema audiences said that WOM was a primary source, compared to 7.9% of theatre audiences. 35% learnt about the production through the cinema brochure. So there was a sense that the National was able to tap social networks built around cinemas.

Perhaps the most intriguing find of the research – the least anticipated one – was that when they asked cinema and theatre audiences how they expected to engage emotionally in the productions, the results showed that across the board theatre audiences were a lot more ambitious in their expectations, but cinema audiences turned out to be more engaged than the theatre audiences. This is worthy of more analysis.

| Reported experience/opinion | Theatre audience | | | Cinema audience | | |
|---|---|---|---|---|---|---|
| | Strongly agree % | Agree % | Total agreeing % | Strongly agree % | Agree % | Total agreeing % |
| I was totally absorbed | 38.0 | 39.2 | 77.2 | 60.6 | 31.5 | 92.1 |
| I felt an emotional response to the play | 27.7 | 45.0 | 72.7 | 46.1 | 42.1 | 88.2 |
| Didn't understand what artists were trying to convey | 1.1 | 3.3 | 4.4 | 1.0 | 2.5 | 3.5 |
| Transported to another world and lost track of time | 12.1 | 35.7 | 47.8 | 23.3 | 39.9 | 63.2 |
| Made me think of new ways of seeing things | 5.4 | 27.3 | 32.7 | 12.4 | 39.2 | 51.6 |
| Seeing in the company of an audience increased enjoyment | 11.2 | 45.2 | 56.4 | 14.2 | 45.6 | 59.8 |
| Did not engage intellectually | 2.7 | 9.1 | 11.8 | 3.3 | 6.0 | 9.3 |
| Wanted to talk about what I'd seen and experienced | 26.3 | 57.0 | 83.3 | 41.5 | 48.4 | 89.9 |
| My creativity was stimulated by the experience | 10.4 | 30.3 | 40.7 | 17.4 | 37.9 | 55.3 |
| I felt a bond with performers | 11.3 | 40.4 | 51.7 | 19.0 | 51.1 | 70.1 |
| Watching on screen would give/gave sense of what live theatre is like | 2.8 | 13.1 | 15.9 | 14.5 | 42.7 | 57.2 |
| Being in cinema very different from seeing play live | 40.2 | 49.3 | 89.5 | 25.3 | 53.9 | 79.2 |
| Experience met expectations | 34.8 | 41.6 | 76.4 | 42.5 | 47.0 | 89.5 |
| Cinema opens new ways of seeing this artform | 18.8 | 55.2 | 74.0 | 63.8 | 32.8 | 96.6 |
| Felt real excitement because knew performance live | - | - | - | 43.6 | 40.7 | 84.3 |

Hasan skipped over some of the other results, but they can all be seen in the NESTA report.

**The field experiment**

This is an underexploited but powerful methodology, and possibly this is the first time a field experiment has been done with an arts organisation. They found that other things being equal, there were more audiences at the National for *Phèdre* from the areas that had cinemas showing the live broadcast. There could be a number of reasons for this, but there is not evidence of cannibalisation, which is a pleasing and important result for the National. Perhaps this is not surprising for such a large company, putting on a large production with a big star. A number of smaller theatres were interested in this result: they've had the technology for some time to take productions to new audiences, but they've been worried about cannibalisation, because if you are not selling more than 30% or 40% of your tickets, you may not wish to give audiences the option of engaging with them in a different way. So this is something that needs examining for the wider sector. Incidentally, Hasan was not expecting a result either way – neither cannibalisation nor a positive effect. But there is statistically very significant evidence that there was as much as 50% higher audiences at the National from areas with participating cinemas, which is consistent with the broadcasts 'marketing' the play at the theatre.

**Lessons for arts and cultural organisations**

- Adopt a research and development approach (an approach used for decades in the public sector, but not recognised so much in the arts, though this was clearly an R&D approach): manage risks through prototypes
- Embrace analytics: 'it's not just what your audiences *say* they want, it's what they *show* you they want…' (illustrated with the field experiment)
- Don't get hung up on science: understanding arts has always been a multi-disciplinary undertaking
- Be open to digital developing the art form itself ('Beyond Live'): a number of people at the National were seeing this as a way just of distributing the live experience, but actually people seem to have had new experiences
- Actively seek out opportunities to learn (which for most organisations means collaboration as most are not the scale of the National)

## Jenni Lloyd, Strategy Director, NixonMcInnes
## *The impact of social media and online community*

Almost every arts organisation has developed some sort of social media presence. But how many of us can really say that we know the impact that this presence is having? Jenni shared insights from her work with Culture24 setting up a social media measurement framework for cultural organisations. NixonMcInnes is a democratically-run consultancy helping large organisations develop better relationships with the people who matter to them**.** Jenni has been integral in making the company become social specialists and leads the team responsible for helping major corporate clients like Channel 4, TUI and Nectar find their feet in the new social realm.

Jenni Lloyd... designer (a background in the web – she built her first website in 1995); geek; tea drinker; mother; strategist. A key thing she wanted to say is that they are a commercial organisation, working with commercial clients, but there are big crossovers and things to learn. She was particularly interested in the conversations that day about measuring engagement. NixonMcInnes is a consultancy that works with lots of different types of clients, usually FTSE 350s (the 350 largest companies listed on the London Stock Exchange) and charities. What