

CultureHive Case Studies: Arts Data Impact

Background and Project Partners

The Arts Data Impact (ADI) project was a collaborative project between The Audience Agency, three arts organisations, University of Ulster and Magic Lantern. ADI addressed how data-driven insight can best support arts organisations and have an impact on organisational change. This was delivered via consultancy and the employment of two data scientists-in-residence who developed software tool prototypes for the arts partners. The main objectives of the project were to:

- Test data driven decision making in arts organisations
- Generate insight into new business and organisational models as a result of data driven decision making
- Facilitate a step change in the sector towards a more open and transparent sharing of data for the benefit of the entire sector

Arts partners: The Barbican, National Theatre, English National Opera and The Audience Agency were uniquely placed to initiate this project, poised at a point of major CRM development, and able to contribute thinking and experimentation, as well as large and robust data-sets. The arts partners hosted the Data Scientist in Residence for six months, test drove proto-types and played a leadership role in the sector.

Technology Partner: Magic Lantern Productions provided the technical strategy and worked with digital agency We Heart Digital to develop and build the tools for the arts partners in collaboration with the Data Scientists in Residence. Led by Anthony Lilley, author of Counting What Counts, it is a long-established and leading digital media company.

Research Partner: Professor Paul Moore was the Principal Investigator for the ADI project. Co-author of Counting What Counts, he is Head of the Schools of Arts and Computing at the University of Ulster and recognised as a leading exponent of ethnographic methodologies in the arts space. His research is focused on both the creative industries and the ways in which theory and practice can be brought together in training and education.

Outcome: The project has resulted in prototype tools that contextualise how data can be used to enhance business decisions. The tools provide intuitive push button reports that deliver

insights about each organisations' data. It was not a long or arduous process to gain something real from using the tools. The idea was not to replace people's decisions with data but to support decisions within a data informed culture. The project's success has been less on what those decisions actually were but on the narrative around those decisions, i.e. how the data has been used internally to develop understanding, tell stories and drive cultural change. While the tools represent the technical success of the project it is each organisation's story about their experiences on the project, with the Data Scientists and their responding internal shifts in behaviour around data that is the real success.

The Barbican

The Barbican exists to inspire people to discover and love the arts. It innovates with outstanding artists and performers to create an international programme that crosses art forms, investing in the artists of today and tomorrow.

A world-class arts and learning organisation, the Barbican pushes the boundaries of all major art forms including dance, film, music, theatre and visual arts. The architecturally renowned centre opened in 1982 and comprises a concert hall, two theatres, three cinemas, two art galleries, foyers and public spaces, a library, a glasshouse conservatory, conference facilities and three restaurants.

Its outstanding programme, stunning spaces and unique location at the heart of the Barbican Estate have made it an internationally recognised venue. Set within an urban landscape acknowledged as one of the most significant architectural achievements of the 20th century, it is one of London's best examples of Brutalist architecture.

Over 1.8 million people pass through its doors every year alongside hundreds of artists and performers from across the globe.

The Barbican has been exemplary in taking a customer-centric approach and is a sector leader in sophisticated CRM - currently it is reviewing and integrating systems in pursuit of offering the ultimate customer experience.

Why did The Barbican want to be involved in the ADI project?

The Barbican was excited by the prospect of big data and what that could mean for the organisation. Staff were aware that they did not use their data to its full potential as a major decision making tool, were keen to learn from other organisations in the sector and wanted to move to a more forward planning approach. They also wanted help to understand the many levels of data that they either kept themselves or had access to.

What role does data play in The Barbican?

There are many different datasets within the Barbican - both complex and simple. Data is routinely used in certain situations e.g. monitoring success of particular events and marketing campaigns.

What was the Barbican's perception of data? How has it changed?

At the start they were acutely aware that they should be doing more with their data and address how best to use it. The R&D question phase evoked a range of responses from many different departments across the organisation and getting that level of engagement around the topic has been very useful for them.

What kinds of data does The Barbican have?

Their tool accesses Enta (Barbican database) and retrieves details of the current members who meet conditions specified by the user in a set of filters. Due to the size of the Barbican's database, analysis had to be limited to a sample of bookers only. Analysis was also restricted to bookings not older than three years.

What kinds of questions were The Barbican interested in exploring as part of the ADI project?

The Barbican was interested in a software tool which provides quick access to members and potential members based on their demographics/booking behaviour/arts preferences and membership expiry date. The software was developed with the following question in mind: Which indicators are relevant to the arts sector in identifying prospective members?

How did these relate to their overall strategic/business goals?

The Barbican has a strategic imperative to increase income for the organisation. Membership is a major income stream for the organisation and stretching targets have been set for the next three years. Using data to create indicators to identify existing and prospective members and donors is valuable to the Barbican long term as they can then develop campaigns that deepen engagement and generate additional income.

What was it like having a Data Scientist in Residence embedded at the organisation?

Having the data scientists in residence at The Barbican was a very positive experience; the organisation likened it to having a dedicated in-house resource, while Professor Moore provided

expert understanding. An immediate follow up action is to invite Professor Moore back to The Barbican to talk to a much wider group of people.

What kind of impact did their presence have on their way of working/organisational culture?

The impact of the project has helped the Barbican to highlight the importance of data right across the organisation and start a bigger conversation so that it is not just held in one area. Bringing individuals within departments into conversations to enable them to think more about what it can mean for their area of work has been a useful outcome.

What did the Barbican learn about its data and the way that it could be used?

Their Support Predictor tool looks at current and prospective Barbican member behaviours. It provides quick access to members and potential members based on their booking behaviour and art form preferences at the Barbican and across London. It enables targeted marketing campaigns for current, new and renewing members and streamlines multiple manual processes with an easy-to-use approach to its design. It makes use of Enta, the Barbican's ticketing system, and Audience Finder (an aggregate database of arts organisations' box office systems from across the UK). After looking at a variety of possible predictors of membership it was found that the strongest predictive power lies in booking histories at the Barbican and, to a lesser extent, at other organisations within the London Performing Arts cluster. Also Audience Spectrum segments, which are recorded in Audience Finder, proved to be good predictors.

Did the process undertaken change how data is viewed in the organisation?

A key impact has been the open and honest conversations that have taken place with other arts organisations and with staff internally at the Barbican to work through ideas and questions event before consideration of what such a tool might do. This increased knowledge has led the organisation to understand the value of big data and what it can do for them.

What is the longer-term impact of the Data Scientist and of the ADI project more generally?

One of the reasons the tool has been named Support Predictor is that in the future they would like to be able to include additional information that could be used to identify individuals who would like to forge an even closer relationship with the Barbican.

What can other arts organisations learn from their experience?

The Barbican found it very useful to have conversation with peer organisations about their use of data. But they also found it great to have access to Professor Paul Moore, who brought much wider experience and huge expertise to us - it's worth talking to people involved who have a wider view on data than just arts organisations. Also, by involving more people internally, a much richer picture emerged of what data they had already in-house or could access externally to inform decision-making. You will realise that you are probably using data more than you think already.

What words of wisdom would you offer other arts organisations who are wanting to make better decisions with their data?

Don't be scared by the term data - it means information, not just numbers. And one thing that all the organisations learned during this process is that data is not objective - it can be made to tell lots of different stories! Have a think whether you are using data just for rear-view purposes, and experiment with using it for future decision-making. Try experimenting with a pilot project.