



# Making fun of data

DEFT 153 launched the Data Discovery Centre (DDC) in January, based in the iCentrum in Birmingham, as a permanent scalable service to bring collaborative data analysis to life and target real-world problems. Delegates at Traffex will have the chance to see the DDC team in action and get a feel for its collaborative agile method of working. Dominic Browne spoke to two of its key architects to find out more

**D**ata holds a special fear for some people – like a ventriloquist dummy, it is inanimate but with some uncanny sign of life flickering within, and just

perhaps a mind of its own. Some people complain they have too little data, others too much. In either case people are obsessed by it and while surrounded by this growth of numbers darkening their view, they can't see the beautiful wood they are standing in.

Help is at hand. At Traffex you can meet two people who will help you find your own path through the forest. Their message is clear – forget the data, what is the problem you need to solve, what is the change you want to see? They are already working with Transport for West Midlands, among others and are in talks with Tier One contractors.

Anyone who has spent time on the transport conference scene in the last few years will know former Mouchel designer Teresa Jolley and former head of digital transformation at the Department for Transport (DfT), Sir Nic Cary. Fast talking and full of energy, they bound around exhibition floors throwing people and ideas together,

like unusually polite chefs whipping up a banquet and taking requests.

Ms Jolley is creative director for DEFT 153, which she launched in 2013 with Pupul Chatterjee, and now also for the DDC. Sir Nic is its head of agile delivery.

## How does the DDC work?

**Nic Cary:** The core offer is about solving challenges. We provide the foundation, the data tools, our expertise, but we are there to help our partners by creating a space for them to solve their problems. They bring their own magic with them and the magic happens because they are in the room.

Rather than simply go to people with a single challenge we are offering membership. Try it once and become a member and you have this capability all year round. You will invariably stand a 90% chance of at least saving the cost of your membership on just one project. It will also mean your team gets better at understanding how to collaborate, at working with data, at taking an outcomes approach, which is aligned to what the public sector is now seeking.

We have adopted agile delivery as our

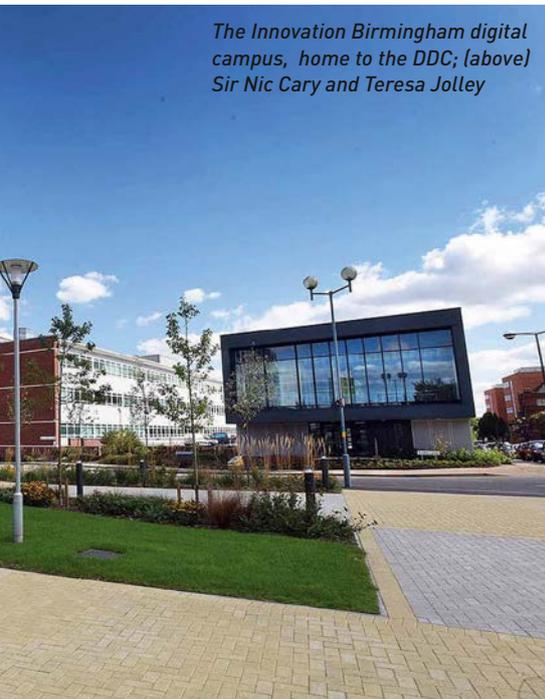


core methodology because it is highly collaborative. We know in construction and allied industries such as transport planning things have become very siloed. People tend to work in isolation and as a result they can miss something and that costs them money. So the idea is by putting people in a room together they collaborate.

If we were to work in a PRINCE 2 way, in traditional so-called waterfall project management, we would have a requirement specification we would spend ages working that up and agreeing it. With this model we discover together; we go on a journey together. It's more egalitarian. It means everyone is given a voice. My role is to facilitate and to co-ordinate. Leadership is anathema in agile delivery. People attack



The Innovation Birmingham digital campus, home to the DDC; (above) Sir Nic Cary and Teresa Jolley



agile because they say: 'It's uncertain what the outcomes are going to be'. Not at all. It's very disciplined we box time. We divide time into 'sprints'. We don't extend a sprint. You agree how long it is and what you are going to achieve.

**So it is outcomes-based?**

**Teresa Jolley:** That's right. It can work with a collective group of organisations that come with a challenge, or one organisation that has a specific issue. And together we find out how to connect that with a challenge we know another organisation has.

It is true we use data but principally it's about how we help our partners figure out how they need to change the way they currently work on projects, how they can use

data better, how they can locate data. So we can and will work with some of those data sets but at the moment it is very much about working with clients on their journey. Even in fact just helping them articulate what the challenges are.

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**How do you market this proposal and what projects do you tend to work on?**

**TJ:** The DDC is equipped with all your needs. When someone comes to me with a particular issue or project, I enjoy joining the dots with them helping them connect with others who are working on another part to the same puzzle. A lot of that process is quite intuitive.

When we are looking at whether we can help someone, we look at three elements. If there are business benefits shared back to a private organisation, if it solves a priority challenge from the public sector perspective and if there are aspects helping improve social value in some way. If it can deliver on these we go for it.

I have been lucky enough to find and be inspired by people who are aligned to this broader mission to make change happen.

**NC:** We have one partner that approached us and wanted to improve the performance of passenger information in their region. They were very attracted by the fact that

we said: 'We are not going to do this to you we are going to do this with you.' They have never done one of these agile discovery things before and were worried they were unprepared. I said you can waste a lot of energy being prepared and then our minds become locked.

The idea of the DDC is we approach in a much more open-minded way and we ask very simple questions at the beginning because that unfetters people and it gets them thinking – why do we do it like that?

We recognise we are starting something new but we are confident it will attract traction. If you look at big public sector construction contracts, they are becoming more outcomes-based. Highways England is moving to a model where there is a funding bank that sits at the middle of the scheme and everyone gets their fair share of the overall pot. Highways England is focused on finding the best outcome. That sends a very strong message to the whole marketplace. You will be working together to solve problems collectively rather than playing the blame game. We are very much pointed at this cultural change that is happening.

**Throughout each project you try to bring in relevant organisations to help inform and collaborate on solutions. What if you can't get all the people you might need for a certain outcome in the room?**

**NC:** It's not mandatory to participate. We usually work with clients who have a certain sway in the market place and what usually happens is people feel keen to be included. If we are unable to work with an organisation, we will still work around that by sharing our findings and checking they are comfortable. Organisations are usually only too delighted to have been thought of and it's not a



The DDC will be showcasing its work at Traffex, as it did in 2017

hierarchical system so everyone gets a lot out of it.

**What level in an organisation is this taking place?**

**NC:** The top level provides the permission but it's actually the people who really have the expertise that we work with. I have a good example from the DfT, where I started with the hypothesis: 'I don't believe that the DfT knows where its data is.'

We did a data discovery – and we found there are certain siloes in the DfT that know where the data is unquestionably but they are not necessarily aware of other bits of data that might give a better lens on the problem they are trying to solve. The people who really don't know anything about data, and who need the most help, are the policy people.

So we developed a search engine. You say 'I need to know about x'. And the search engine would say here are various baskets of stuff that you could use. Then we attached an expert to that data. So the policy person had a means of getting the right data and an expert who could help guide them through that.

**Following on from the success of your data hacks and discoveries at Traffex 2017, you are back again this year, with a full feature area. Tell us what you have in store.**

**TJ:** There is work on one specific project – Junction 6 of the M42, where the NEC is. It is a bit of a red flag junction for the

region for many reasons. It is very busy, it is the main access for the NEC, the airport, Jaguar Land Rover. Highways England is going to be doing upgrades to it, HS2 has a tunnel going underneath it. There's loads happening.

The finer details of the data discovery are still being worked through but there is strong interest in getting the right information to travellers. Across the West Midlands there is a strong push to use information to make the customer experience easier and to help them manage different modes and options.

**NC:** We know that Highways England wants this to be a great success. The whole region wants this to be a great success. And Highways England can make a great junction design but you cannot solve the congestion problem with just a great junction design. What we offer is the opportunity to look more broadly to solve the problem.

One thing Highways England and local authorities suffer from is they don't know what is happening on each other's networks. For Highways England to really understand how to give its customers a better journey, it might need to help customers with information before they get on to their network.

We offer a neutral third party space where those collaborations can take place and we hope because it is quite a creative

environment it will foster exciting ideas, and a more innovative approach.

**What does the future hold?**

**TJ:** Part of the reason behind the launch in January is to submit for the Innovate UK Women in Innovation awards.

We used that question process to consider what our plan would be. We planned to do an alpha phase, where we are now – January to April – with the showcase at Traffex to share with the market. Then a beta development from May to December, where we ramp up doing more challenges and building in our ways of working. Then we would be ready for a three-year full scale demonstrator launch from January 2020.

Really it is about delivering a meaningful change in the way stuff happens.

Ms Jolley was shortlisted for the Women in Innovation award but missed out. However, in a fitting testimony to the DDC's ethos, Prof Peter Head FIHT, one of the assessors for the prize, has since been in contact and is eager to work with them. Mr Head led Arup's global planning business until 2011 when he founded Resilience Brokers, which develops and tests open source systems modelling tools for city regions and explores how shared data can help reduce overall investment cost and realise more sustainable and resilient outcomes for communities across the world. So another journey of discovery begins. ➔