A BEHIND THE SCENES LOOK AT TELEFÓNICA’S EVOLVING BIG DATA EXTERNAL MONETISATION MODEL

In this never before told full story behind Telefónica’s external monetisation journey, Jason McGee-Abe, Editor of PEX Network, speaks to Lorraine Stone, UK Country Director, Telefónica Dynamic Insights, about the origins of its Big Data Smarts Steps programme. Looking at how the telecommunications giant has adapted its proposition to become more flexible and bespoke, whilst enhancing the value of its data to multiple sectors.

Smart Steps, which provides insights based on the behaviour of crowds to help companies make informed business decisions, was launched in October 2012 as the first product of Telefónica Dynamic Insights. In the first 18 months, the focus was spent understanding the data, creating the platform and trying to focus on a retail solution looking at granular insights.

“We’ve secured some big brand names in our portfolio,” explains Lorraine, but the customer model has constantly evolved.

The original vision was centered around an insight capability predominantly focused on retailers and Telefónica wanted to link the mobile network with what they knew about the locations of crowds to determine movements and profiles of crowds. The insights could help retailers to tailor local offerings for existing stores, and determine the best locations and most appropriate formats for new stores.

“We’ve never told our in-depth story like this before: looking at the history, lessons learnt and the challenges faced on our Big Data journey.” Lorraine Stone
Lorraine is one of the speakers at the upcoming Big Data Monetisation summit in June and is discussing the various ways companies can benefit from external monetisation of Big Data.

The creation of Telefónica Dynamic Insights, a new global business unit aimed at delivering revenue from Big Data, was the first public announcement of a European operator actively engaging in a Big Data initiative that goes beyond in-house processes.

It marked a turning point for the industry by publicly announcing the launch and its plans to unlock the potential of customer data.

Lorraine has agreed to share Telefónica’s Smart Steps story with us stating: “We’ve never told our in-depth story like this before: looking at the history, lessons learnt and the challenges faced on our Big Data journey.”

Jason McGee-Abe: The initial Smart Steps focus was on retailers but that aim has evolved over time. Why did the journey take a different route?

Lorraine Stone: In order to provide retailers with insight to review their performance and in delivering the product, we needed a real specification and platform capability. Looking at the anonymisation of the data and working through the quality, the key thing retailers wanted to achieve was the location of crowds. We had a number of success stories, for example with Morrisons.

However, it became apparent that whilst the original vision was to provide retailers with a self-service look-up tool, and a lot of that capability was put into play, the key challenge in delivering that solution was actually helping retailers understand the granularity of the data.

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JMA: So the granularity of the data meant the product was inconsistent?

LS: The way that cellular networks are built, the density of the cells can vary massively by location. So in one area, like London, you’ll have a massively dense cell network: more people and coverage.

However, in rural areas there is less density. When trying to give a geographical output it’s very hard to keep that consistency. The reality was that whilst it gained traction with a number of clients the macro level data limited the number of use cases and therefore the size of market. We were able to sell the product to some clients, looking to use the data to find out, for example, where they should create new stores; things that required a more macro picture of a crowd. We were good at high level geographical fits, but we couldn’t tell a retailer what was happening exactly outside their store.

JMA: How long after launch did the realisation that the model had to change occur?

LS: We needed to think again about the capability that we have and where the capabilities actually match the market.

The pivot point came when we said to ourselves: “Can the macro data and the product as it stands ever be a big enough business?” We decided that unless we could find a more repeatable capability, and in the absence of providing the precision piece for retailers, we should change our approach.

One of the things that we had discovered using our product development and data science capability was that we could create a very good picture of a journey. Trying to place hundreds of thousands of people in a specific location was quite a hard thing to do, but because we understand a unique mobile identifier, we can effectively create a breadcrumb trail of events to understand the journey and the journeys over time that the identifier might take.

JMA: So by creating these journey breadcrumbs, how did the Telefónica model evolve?

LS: By mapping journeys with a great deal of precision and if you can assess the routes that groups of people take and analyse factors like speed, you can identify different modes of transport and whether people travel by road or rail.

So we took that capability and went to train operating companies pitching that we could identify groups of passengers in volume that were travelling on the rails. When we went to see the operators, an initial challenge was trying to understand where the value of the data was for them. Train companies often bid for a franchise of a particular route and at that time the East Coast line was up for bids. We spoke to a number of different companies to see if our passenger data, either by road or air, was useful to them and it was. We ended up supporting three different train operating companies bidding for the East Coast Franchise.

So supporting these train operators became something that we could repeat and resell and it showed us there was commercial value in the data beyond the retail space.
JMA: What other sources of commercial value have you found whilst evolving your Big Data product?

LS: Our next natural step was thinking: “If there was value in the data from a rail perspective, we should look at other forms of transport and assess whether there’s additional value.” We started looking at the road infrastructure public sector markets to see how we could apply the data. In the public sector they build transport models to understand the volume and flows of traffic to determine the level of investment in new road infrastructure, junctions and roundabouts etc.

Those transport models are generally created from road-side surveys, which are very small samples, and left for a five-year period. Deploying cameras has also been another option to count traffic, but those deployments: (a) take time as they need permissions, but are (b) also an expensive option.

We approached these firms pitching our data: the volume of cars on a particular stretch of road at a particular time of day, with added information of the origin and destination of those vehicles.

JMA: How did you directly approach these firms? Were there third party introductions or did you recruit new roles to coincide with specific sectors?

LS: We approached the market through transport consultancies because they build the transport models. A number of those consultants were happy to work with us, to proof of concept, which we have now turned into a commercial proposition. We have a range of transport consultancies that work with us for DfT or Local Authority models.

This was a big step in our journey in terms of proving another use-case, level of capability, and area of commercial value. We use a proof of concept approach with clients, the clients pay for that proof of concept, as we need them to buy-in to the fact that there’s commercial value of input for them as
well as us proving the data. Once we’ve proven that concept and done that enough times and validated the data in other forms, we then feel confident that we have a solution to create real commercial value and repeat it within the sector and then go more broadly out.

**JMA: How will Telefónica expand its horizons further?**

**LS:** Where that brings us to now is that we have a strong existing foothold in the transport/public sector/infrastructure/passenger services market. There are airline and construction companies and other infrastructure firms that would have a need for the same kind of mobile data. So we’re growing that sector out.

The capabilities that we’ve developed within transport we’re now applying to out-of-home media for the measurement of digital media. We’re also testing some of those capabilities in other markets.

We’ve also come back to look at different technologies that may allow us to generate precision in the retail sector. We’re not there yet but we believe that there are different technologies that will allow us to generate the level of precision to allow retailers real insight.

**JMA: What was the key lesson learnt at this stage?**

**LS:** The key lesson was we had to adapt and change our model, which is clear when looking at the main difference from where our original goal was to where we are today. We started off having identified and designed a very specific product and wanted to take it to market, in a very traditional product management way.

It took a really big decision to say: “Stop, there must be another way to do this” and then to pivot our business. To be bold enough to look at other markets and try and create success in those markets. We turned the model on its head and instead of trying to take that product to market, we’ll talk to clients to see what they want and in turn provide a managed service and analytics layer that we can deliver a bespoke solution back to the client. So we’ve gone from really trying to have an off-the-shelf solution that does everything and it can be a self-serve solution to a managed services consultancy-type model.

**JMA: That surely helps to establish more long-term relationships and partnerships?**

**LS:** It works very well on behalf of the client as we’re much more about understanding what questions the client will ask of the data and how to deliver the value back. We discovered that delivering that value back and understanding the client’s problems is actually more valuable then it is to generate an output data, which can effectively become commoditised.

When we’ve established that a market exists and know the use cases within that market have repeatable capabilities, we’ll industrialise those capabilities. You might even say we “productised” those capabilities so that we can make them more repeatable and scalable, which helps with our focus on taking additional cost out.
JMA: What’s the secret behind Telefónica’s success in monetising data?

LS: There is a view within Telefónica that if you want something to be successful it requires focus. As a telecommunications company whose rationale it is to provide communication services and connectivity to its clients, if you’re going to move into monetising data then you (a) need the focus to do that, but (b) you need to bring in appropriate skills, building in capability that perhaps didn’t exist before. You also need to ensure that data is used responsibly and in a transparent manner. For platforms like Smart Steps we’ve made sure that privacy and data protection measures were included from the start and by design ensuring that data remains completely anonymous and aggregated. These sorts of measures are absolutely vital when doing anything with data.

“*It’s about turning the interesting into useable and actionable insights that have value.*”

Having that focus and having the correct level of skills lends itself to setting up the distinct capabilities. We work very closely on the sales model with O2 Enterprise in the UK, they have existing clients and client relationships, which gives us the platform to speak to them about innovative initiatives like Smart Steps.

At Telefónica we can open a lot of doors, but quite often you can look at the data and you can show clients the journey and the outputs, which are interesting, but from a commercial perspective, it’s about turning the interesting into useable and actionable insights that have value.

Our model roadmap is about approach, validating a market, determining whether it is repeatable, and then rolling it out across the Telefónica footprint.

JMA: How has Telefónica changed internally?

LS: Originally when we were doing the product piece, we had a lot of IT and development people and the team had grown to around 85 people at its peak. But when we pivoted our strategy, after 18 months, we made a very conscious decision to downsize. For us, it wasn’t about using IT and technology to create systematic products of output it was now about using commercial innovation, the use cases and the capability that we had. We took the team right down to 35, but we’ve now built up to around 55-60 globally.

Not only have we pulled together a leadership team, but we’ve recruited data scientists, analysts, and people who used to be transport modelers within the transport sector to support us, for example.

“*If you want something to be successful it requires focus.*”
JMA: How is Telefónica targeting real-time data into its monetising capabilities in the future?

LS: We think that there is a perfect place for real-time data. If you look at the anonymised and aggregated data that we use today, we have 18 months-worth of stored data, updated regularly, within our platform that we’ve used to create the attributes. All of that helps us to show retrospectively what happened in history: the volume of crowds, the volume of journeys over time, but it’s all related to the past. In a lot of industries that’s great and appropriate as they make retrospective analysis in order to look at their future. But there are operational use cases that could benefit from real-time data, such as digital signage on motorways and being able to re-route traffic when congestion applies, allowing people to truly understanding real-time congestion on their grids.

From a Smart Cities perspective, a theoretical application could be if you know the crowd volume of a particular location at a certain time, you could make a decision about the level of street lights in that area. Digital advertising could have huge potential; being able to change the message on a billboard to reflect the audience that is currently in the vicinity could be of huge interest.

We believe there are real future use cases and applications for real-time, but this is a continuous journey. Within Telefónica, not only will there be new types of data, there’ll also be other new data sets which will allow us to create valuable attributes which will allow us to create the next steps of the journey.

JMA: How is Telefónica preparing to roll out the proposition worldwide?

LS: The overall aim is to roll the capabilities across the entire Telefónica footprint and to deal with the in-country demand that each respective country has. We’ll take the lessons learnt from the UK market and replicate those internationally, providing the same capabilities in a repeatable way but obviously adapting where needed to reflect local considerations. We’ve already launched in Spain and Brazil. We are planning to roll out across the Latin America footprint.

JMA: Are you looking to work with other telcos when a client operates across multiple footprints?

LS: As yet we haven’t established a multinational model for it. There’s no reason that we can’t collaborate with other telcos in the same way we collaboratively work with them in international roaming. Who knows what the future might hold.

Lorraine will be speaking on June 10th, 2015, at the Big Data Monetisation in Telecoms Summit

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