**Telefónica**

## Challenge
As the explosion of big data continues to transform business, marketers must think creatively about what they can do with data to both monetize information and add value for the consumer.

# 'Jam sessions' democratize data-driven thinking

Telefónica's creative decision-making culture is driving major innovation and better business

"Jam musicians are masters of communication; every aspect of their music hinges on real-time collaboration," says Alfredo López Navarro, Knowledge Manager at Telefónica Germany's Digital Command Center. This metaphor is at the core of Navarro's brainchild – what he calls the JAM Sessions Methodology. It's a guideline for working fluidly with data that aims to promote creativity and bridge the gap between available data and organizational knowledge.

When Telefónica, one of the world's largest multinational telecommunications providers, was recently recognized by Fortune magazine for its innovation, Navarro says, the JAM Methodology exemplified that spirit of evolution. "JAM is a fruit of that tree," he says. "It's capable of incorporating different levels of skills and a wide range of profiles into our data-driven decision-making culture."

Telefónica has implemented the JAM method across a wide swath of the organization, from product development and R&D to market research and marketing. And as a JAM champion and proponent, Navarro's remit is to explore data – and help others to do the same. "I'm very lucky!" he says. "I get to play with data, exploring it from multiple sources and shifting through all incoming data with the goal of discovering insights and turning them into competitive advantages that improve business decisions and sustain operational and financial efficiency."

## Data as a driver of growth and communication
Over the past two decades Telefónica has evolved from its foundations as a traditional telephone company, providing landlines and mobile phone services, to a full-fledged internet giant upon whose services millions across the world rely to navigate the interconnectivity of modern life. As the company prepares to launch mobile 5G networks, the scale of its operations has never been bigger, nor have its challenges.

Today, being a telecommunications company is about much more than providing the physical infrastructure and devices for internet browsing. It encompasses navigation, self-driving vehicles, smart city developments and much more. As ever more of daily life comes to rely on "smart technology," companies like Telefónica, which provides consumers with access to that technology, are at the forefront of the new data revolution. And Navarro's efforts help Telefónica capitalize.

"Communication will explode, because everything is going to be connected to everything else," he says. "In some cases, there are technical barriers as with reliable and low-latency communications which will power brand-new industries and services. Sometimes, as in Internet of Things applications, the ceiling is cultural; for smart cities or smart grids to be fully incorporated into our daily lives, society must change accordingly. Cultural transformation is, by the way, one of the biggest challenges for Industry 4.0. And the JAM Methodology pays special attention to it."

## JAM Sessions provide structural guidance for 'outside the box' thinking
For Navarro and his team, JAM Sessions are all about experimenting with data to generate insights into these new growth opportunities. "These days, as well as in the heads of the experts and professionals, knowledge comes in the form of data," Navarro says. The JAM Sessions Methodology is a process Navarro has devised to stimulate collaboration between professionals with the explicit aim of creating "outside the box" thinking,

## jmp
Statistical Discovery.™ From SAS.

which will lead to strategic marketing and business insights. Like the jam bands he admires, it's about experimenting with a range of tools to find solutions that work; taking creative, collaborative thinking to drive commercial success.

To ensure JAM would catch on, Navarro says he had to find a way to democratize data science so that people from different backgrounds could adopt the methodology in a meaningful way. "Data is said to be the 'new oil' in our age," he says. "But I think that we are in a transition period where some of the new possibilities are still constrained by old ways of thinking."

Though most at Telefónica were already avid users of Excel, Navarro realized that in order to drive a real cultural shift within the organization, they required a new tool; a software package with a more sophisticated analytics back end than Excel, Tableau or SPSS, but also a more user-friendly, interactive interface that wouldn't be daunting for statistics-naïve employees. "I'm always in the scanning mode," Navarro says. "I'm very curious and always want to try new tools and see how they perform." When he first encountered JMP, Navarro recalls, the impression was immediate. "JMP can do everything that SPSS can, and plenty more things too. It's so interactive, so visual." JMP is now fundamental in bringing the insights that drive behavioral change – and with it, better business across Telefónica.

## "You can be an open source minded data scientist and still be in love with JMP."

At the moment, Navarro and his team are working with pricing, looking at market data as well as external figures – including things like weather and macroeconomic data sets – to produce insights about internet usage and costs. For Navarro, data visualization is the most important part of the process. "There is a magic effect in 'touching the data,'" he explains. "Sometimes visualization is enough, but storytelling with data is key.

JMP Graph Builder is king here. We do a lot of modeling and multivariate analysis, and the new Project feature in JMP 14 makes it very easy to document complex processes…. It's is a real game changer… People are excited. We can now use JMP like a PowerPoint."

Even the more experienced data scientists in Telefónica's ranks see significant advantages in JMP, Navarro adds. Though statisticians or developers at Telefónica may regularly write scripts or contribute to an increasingly vast open-source library, they still benefit considerably from the graphical interactivity of JMP. The JMP Graph Builder is a cornerstone of data exploration, even when data scientists may choose to run their own scripts in R or Python with the output. "Sometimes our data comes from a process that originated in R or in Python, but then we feed it into JMP… connect through the query builder to a data set and then do the exploration and gain insights," Navarro says. "You can be an open source minded data scientist and still be in love with JMP."

## JMP® bridges the gap between creative experimentation and useful application

Applying a collaborative, creative approach to statistical analysis is at the very heart of Navarro's work and his JAM Sessions Methodology; he is passionate about demystifying the world of data both within Telefónica and beyond.

"As far as Telefónica Germany's Digital Command Centre is concerned, conducting JAM Sessions is an open exercise of insight generation where business knowledge comes across statistics with visual interfaces facilitating team-ups between non-statistical experts and data scientists," explains Navarro. "Ideas flow spontaneously and unexpectedly. Nevertheless, the same way an impromptu concerto is possible only after years of practice and study, a systematic methodology is needed for this serendipity to be achieved in a useful way. Insights and theories ought to be grounded."

## Solution
Use JMP to extract practical insight from any given data set – external or internal – to narrow the gap between data and decision across the organization.

## Results
Telefónica has adopted the JAM Sessions Methodology, a system based on JMP that allows professionals from different backgrounds to collaborate on data insight generation.

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