

A photograph of two young men sitting at a light-colored wooden table in a modern, brightly lit indoor space, likely a university or research center. The man on the left is wearing a grey hoodie and a dark baseball cap, looking down at a tablet computer. The man on the right is wearing a dark jacket over a light-colored shirt, looking at a smartphone. On the table, there is a tablet on a stand, a smartphone, and some papers. The background shows large windows with greenery outside.

# TIC TANK,

a step forward in digital transformation

This think tank of the Universidad del Rosario does far more than merely reflect on the power of new technology. It puts discourse into practice and provides the theory around the tech. First project up: a tool for transparency and the fight against corruption.

By Ángela Constanza Jerez  
Photos Universidad del Rosario  
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In 2017, state entities gave 50 percent of their contracts to micro, small, or medium-sized companies. For procurement orders, an average of 5.1 suppliers were invited to tender; in the end 3.4 presented. The total values of the registered contracts in public procurement platforms were in the order of 111.9bn pesos.

This data and much more can be discovered by any citizen who wants to know about the public procurement system in the country by consulting the application Indicadores to measure the National Procurement System in Colombia (<http://analitica.colombiacompra.gov.co>). This application provides figures analyzed and obtained from information on contracts public bodies have registered on the three platforms set up for Colombia Compra Eficiente (Efficient Public Procurement): Secop I, Secop II, and the Virtual Online Colombian state Store.

This important tool is the first project of the TIC Tank developed jointly with the Center for Research and Development in Information Technology (CINTEL). TIC TANK is the new academic unit at the Universidad del Rosario. Its aim is to find another dynamic at the institution in which higher education weighs in through innovative scenarios with the challenges imposed by today's world, which calls for the appropriation of new strategies and methodologies in education and thinking.

In the words of Faculty of Jurisprudence Professor Juan Ramón Martínez Vargas, and member of TIC Tank, "it is an open space involving professors from different areas that come together in interaction processes on information technology

....  
Innovación



and communication. So, it's a gathering of diverse prisms, Master's holders, and graduates and students. We want the academic community to see TIC Tank as a space in which innovation, technology, and the revolution 4.0—the fourth industrial revolution—are the excuse for working together on supporting the University's research processes and the construction of public policies.”

It is specifically in line with this second point, the building of state policies, that TIC Tank has taken place in the project *360 degrees of Efficient Public Procurement in Colombia*, which developed a web app that gives a friendly visualization of Indicators of public procurement in the country, these related to transparency, accountability, and monetary value. The different audiences (citizens, public procurers, suppliers, and control agencies) find the information they are interested in (in detail and technicalities), and this is complemented by infographics on diverse issues.

“360 degrees is a project that has several components, and we were involved in component one, data analysis. We worked on this with an interdisciplinary team comprising professors from the faculties of Economics and Jurisprudence, and the Applied Mathematics and Computer Sciences Research Group. First, we explored the Colombia Compra database to determine that the data was indeed available and that we could work with it. Then we created a system that could classify the information. It was data-cleaning work, since we selected those that were of little import. We calculated the indicators for accountability, value for money, and transparency, based on OCDE guidelines for digital and open government,” explains Tatiana Dangond, project leader.

That work required a legally conceptual line in order to determine, for example, all the stages involved in public procurement for the 360 degree application, and it had to conform to the Colombian legal system, which was a matter for the heads of professionals from the Faculty of Jurisprudence.

#### MORE PROJECTS IN THE PIPELINE

In the belief of those who have taken part in the project, Colombia now has a key tool for transparency and for the anti-corruption struggle, one much needed in a country with a history of waking up frequently to new corruption scandals.

It also shows that TIC Tank is not merely a think tank, but also a space in which ideas can be put into practice, and quickly. In less than one year, the team managed to gather the outcomes of the analysis the University carried



From left to right: Juan Pérez, professor at MACC; Andrés García, profesor of the Faculty of Economics; Juan Daniel Oviedo, director of Planning and Institutional Effectiveness; Valérie Gauthier, director of the Applied Mathematics and Computer Sciences Research Group; Juan Miguel Gallego, professor of the Faculty of Economics; and Juan Ramón Martínez, professor of the Faculty of Jurisprudence.



**TIC TANK IS THE NEW ACADEMIC UNIT AT THE UNIVERSIDAD DEL ROSARIO, ITS AIM TO SEEK ANOTHER DYNAMIC AT THE INSTITUTION IN WHICH HIGHER EDUCATION WEIGHS IN THROUGH INNOVATIVE SCENARIOS WITH THE CHALLENGES IMPOSED BY TODAY'S WORLD.**

out in 2017 in relation to the need to work on the search for transparency through a technological tool. These reflections were later aired in the University's forum on *Technologies for Anti-corruption Fight*.

“We didn't stop short at discussing theory but, thanks to the efforts of the Colombian Ministry of Information Technologies and Communications and *Efficient Public Procurement in Colombia*, we managed to place the content of the discourse and theory within public policy, which has now led to a tool to satisfy the needs required. That is why we started this project,” explains Martínez.

In addition, TIC Tank found in the *Efficient Public Procurement in Colombia* system the way put in practice the interest the Universidad del Rosario has in actively participating in Colombia's adhesion

process with the OCDE, which is recommending a more active role for academia in digital government.

For the creators of this think tank, it is essential that ways are sought from within academia to get the best from technologies for achieving the UN Sustainable Development Goals, since these are a global commitment to benefit everyone. “At TIC Tank we want to see how, through indicators of open data, we can create more solid institutions and, through the digital divide indicator, we can start talking about gender equality,” adds lawyer Dangond.

In this sense, this academic unit is working on different ideas. One of them aims to reach the regions through the construction of intelligent cities based around getting closer to the citizen. The first proposal is intelligent tourism, based on data analysis that will mean promoting a more sustainable tourist industry in environmental terms, and in terms of better opportunities for the public sector to put forward the services and activities needed.

“The Minister of Commerce has some initial indicators, but we should like to have information on which people are

interested in going to specific regions of Colombia, what their tastes are, what services they want improved, or which services Colombia does not offer in the regions but which could be interesting for them. With this we could create input to give to the productive sector and tourist sector to create better services and processes,” explains Dangond.

Finally, TIC Tank is considering the creation of indicators for the University itself (which would be updated every two months), and these would show, among other things, how it is doing in open data and in divides associated with gender issues. “With TIC Tank, we can see the beginnings in the University of a need to look for scenarios from which we can contribute as an institution to the digital transformation of the country,” points out Martínez. ■