

Smart Policing – new tech to make citizens safer

Overview of smart policing

Smart policing is a project designed to improve oversight over law enforcement in Brazil and South Africa. It includes an android application that captures the visual, audio and GPS coordinates of law enforcement using open source software. The tool adds an additional layer of accountability for police to improve community relations and reduce the excessive use of force. It also enhances performance by allowing senior officers to vet the activities of rank and file.



The Smart Policing project is administered by the Igarapé Institute¹, in partnership with Google Ideas and APCOF². The initiative is being rolled out in Rio de Janeiro and Cape Town, with plans to expand in Florianopolis and Johannesburg. All strategic communications and research related activities are overseen by the Igarapé Institute in cooperation with partners. The initiative was launched in 2013 with support from the Department for International Development (DfID) and ends in 2016.

Testing smart policing



The Smart Policing initiative has involved testing in both Brazil and South Africa since 2014. The Igarapé Institute has formed a formal partnership with the Military Police of Rio de Janeiro (PMERJ) and tested the app – called CopCast – in several low-income settings with over 50 police officers.³ Likewise, the Institute consulted the key police units – the HQ, CICC and others – to identify appropriate technology transfer potential.⁴ The secretary for public security has authorized the scale-up of the project in 2015.

Meanwhile, in Cape Town, APCOF and the Igarapé Institute have worked with the Department of Community Safety (DOCS) to test the app. Copcast has been tested with road traffic police and representatives of the Violence Prevention and Urban Upgrade initiative. DOCS has contributed financial support to the project⁵ and expects to dramatically scale-up use in cars and with neighborhood watch groups in 2015 and 2016. The Governor of West Cape has praised the tool and called for its expansion.

¹ Smart Policing is managed by the Igarapé Institute. The coordinator is Robert Muggah and the project manager is Leria Figueiredo. The software development team includes Bruno Siqueira and Alex Salgado.

² In Cape Town, the Smart Policing pilot team consists of Chelsan America, the project manager, together with Sean Tait from APCOF who remains the core institutional partner. Likewise, the West Cape government has delegated Winston Cogill, a programmer, as its technical support lead and is backed by Gideon Morris from the Department for Public Safety. David Bruce is also on the team and completing a paper on “lessons” emerging from the Cape Town experience.

³ Key sites includes Rocinha, São Carlos, Santa Marta and Alemão.

⁴ The Igarapé Institute also created an agreement with the Fire Department Military Santa Catarina - CBMSC, another state, to also test and apply the solution in 2014-2015 to improve e- Firefighter program, expanding its functionality.

⁵ Indeed, they have already contributed R\$200,000 to the process in 2014 and another R\$200,000 in 2015.

Pilot progress

The Smart Policing project consists of a mobile phone app, an administrative dashboard, protocols for data use, and accompanying research products. Since the project's inception in 2013, the Igarapé Institute has designed an open source app – CopCast – developed a digital interface, and generated five publications. The initiative has been covered by international media including the BBC, Guardian, Wired and many others.



Figure 1. CopCast client interface



The genius of Smart Policing is that it is an open source platform. The design of the app and interface is iterative – produced on the basis of ongoing consultation with end-users, including the police in Rio de Janeiro and Cape Town. The Igarapé Institute team has undertaken intensive coding, field tests and feed-back with its key partners and dozens of experts meetings with data information specialists to ensure a high quality product. Smart Policing is a not-for-profit initiative and all the technologies are free of charge.

In order to support testing in 2015, the Smart Policing team has set up Deploy Gate (<http://www.deploygate.com>) to better link with all pilots in Rio and Cape Town. This allows for the routine update of CopCast on the mobile phones of all partners as new versions become available. Recognizing that our partners have different needs, Deploy Gate also enabled Igarapé to custom build different functionalities depending on user needs. The Igarapé Institute has also created a backlog file allowing all pilot partners to review updates and changes to the app when they wish.

Figure 2. Administrative interface

The administrative interface is a web-based dashboard with a dark blue header containing navigation tabs: REALTIME, REVIEW, EXPORT LOGS, and USERS. The user is logged in as 'krylon@copcast.com'. The main area features a map of Copacabana, Brazil, with a pink route overlaid. A calendar on the left shows the current date as September 02, 2014. Below the map, there is a list of users. Two users are visible: Leonardo Nogueira and Amanda Cardoso, both from the 'Santa Marta 1' group. Amanda Cardoso's profile is expanded, showing her last seen time as 9/4/2014 10:57:02 AM and a summary of her recorded footage: 4 hours of recorded footage, 10 min paused recording, 16 min without location data, and 12 of 60 videos reviewed. Below the user list, there are several video thumbnails representing recorded footage, some with play buttons and others with redaction icons. A 'Export reviewed footage...' button is visible at the bottom right.

Next steps

The Smart Policing project is generating interest and enthusiasm in key sites – Brazil and South Africa – but also internationally. Requests for testing Smart Policing have already been sent from Canada, the UK and US. There is growing interest globally in the use of body cameras, and Smart Policing is well positioned to meet this demand. The Igarapé Institute has also presented Smart Policing technology to new potential users, including the United Nations Department for Peacekeeping.⁶



Meanwhile, Smart Policing is also generating visibility in commercial markets. The tool was first presented at a Google Summit in October 2013 and featured in accompanying videos.⁷ The Igarapé Institute was subsequently awarded a major prize in March 2014 by Google Chairman, Eric Schmidt, for its innovation in law enforcement. In November 2014 the Institute was also awarded a Networked Society award from Ericsson.⁸ The Institute is also exploring additional private support for Smart Policing in 2015.



The Igarapé Institute is expanding pilots in 2015 and 2016 in Brazil and South Africa. In Brazil, the expectation is to grow the number of users to 300 in Rio, and also expand partnerships in Sao Paulo and elsewhere. In Cape Town, the goal is to expand to over 800 users in the metro police and in VPUU settings. Likewise, the Igarapé Institute has initiated preliminary conversations with DOCS Johannesburg to explore partnership potential in 2015 and 2016. Future expansion will depend on additional support from DFID in 2015-2016 as well as formal buy-in from local partners.

Igarapé Institute

The Igarapé Institute is a southern “think and do” tank devoted to evidence-based policy and action on complex social challenges. Its goal is to stimulate informed engagement on emerging security and development issues. The Institute currently works on three themes: citizen security; global and national drug policy; and international cooperation and assistance.

The Igarapé Institute works on a diverse array of policy and research activities related to citizen security, violence prevention and reduction. These range from the national to the international levels, and include dialogues on citizen security across Latin America and Africa, diagnostics of urban violence and prevention interventions in Central America and the Caribbean, and design of new information technologies to improve law enforcement.

⁶ Specifically, the Institute presented the project to a Partners Dialogue on Technology and Innovation in Peace Operations in Berlin in August 2014. The event was supported by ZIF as well as a High Level Panel on the future of peacekeeping operations organized by the United Nations Secretary General.

⁷ See the video here: <https://www.youtube.com/watch?v=KJ0im58A35w>.

⁸ See the video at: <https://www.youtube.com/watch?v=UbjIRRNRL8>.