GLOBAL INFORMATION SOCIETY WATCH 2019

Artificial intelligence:
Human rights, social justice and development

Association for Progressive Communications (APC),
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Global Information Society Watch

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Operational team
Valeria Betancourt (APC)
Alan Finlay (APC)
Mallory Knodel (ARTICLE 19)
Vidushi Marda (ARTICLE 19)
Maja Romano (APC)

Project coordination team
Valeria Betancourt (APC)
Cathy Chen (APC)
Flavia Fascendini (APC)
Alan Finlay (APC)
Mallory Knodel (ARTICLE 19)
Vidushi Marda (ARTICLE 19)
Leila Nachawati (APC)
Lori Nordstrom (APC)
Maja Romano (APC)

GISWatch 2019 advisory committee
Namita Aavriti (APC)
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Valeria Milanes (Asociación por los Derechos Civiles)

Project coordinator
Maja Romano (APC)

Editor
Alan Finlay (APC)

Assistant editor and proofreading
Lori Nordstrom (APC)

Publication production support
Cathy Chen (APC)

Graphic design
Monocromo

Cover illustration
Matías Bervejillo

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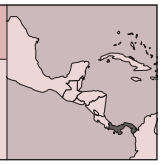
PANAMA

ARTIFICIAL INTELLIGENCE IN PANAMA:
THE PROTOTYPE PHASE



IPANDETEC (Panama & Central America)
Lia Hernández and Kayc James
www.ipandetec.org

Introduction

It is important to recognise the need for artificial intelligence (AI) applications, not only in Panama, but in the world. AI has been shown to have great potential in its application in a variety of fields, including health, agriculture, finance and education. Panama is, however, right at the beginning of the AI learning curve. This is not surprising: there are 2.8 million internet users in Panama, representing 70% of the country's population.[1] Among the first rudimentary steps in using AI in the country was the use of fingerprint technology to clock in workers. But while the country has made advances in AI, it has yet to be used on public service platforms, making the benefits of AI accessible to citizens. This report discusses Panama as being in the "prototype phase" of implementing AI.

Ready or not?

The main interest in AI in Panama can be found in the private sector, which has been primarily engaged in providing AI business solutions. While the government is out of step with these developments, it is nevertheless focused on issues to do with data protection and open government which can serve as a springboard for the future incorporation of AI in public services.

One example of the government's interest in the application of ICTs in the public service sector is Panama Online,[2] which is one of its flagship projects. This platform aims to streamline the way in which citizens transact with state services. For example, citizens can access their police clearance records using an automated system that searches the police database and provides them with the necessary document, without any visit to a police station being necessary.

Despite e-government initiatives like these, one just has to look at other countries in Latin America, with AI projects in the banking, insurance and justice sectors, among others, to see how far Panama is lagging behind.

Below we briefly discuss the potential use of AI in the finance, health and education sectors in Panama.

Finance

E-commerce in Panama is regulated by Law No. 51 of 2008 and by Executive Decree No. 40 of 2009, with subsequent laws dealing with e-commerce also being passed.

In September 2018, the General Directorate of Income initiated a pilot electronic billing programme with 43 companies. The purpose of the programme was to facilitate e-commerce transactions in the country, including electronic invoicing, and digital archiving of transactions. Banks also offer online banking, allowing clients to access customer care using chat, open accounts, and transact. However, it is only private sector banks that offer online services. The state bank has yet to get online.

It is clear that while there is potential for the use of AI in the finance sector – for instance, in predictive modelling of government budgets, in economic forecasts, or in customer services – the context does not necessarily exist for this to become a widespread reality. It was only in 2018 that the government launched its e-billing programme, showing the extent to which the public sector on the whole is behind the e-commerce curve.

Health

There is perhaps more potential for AI pilot projects in the health sector. In April 2019 an initiative was launched by the Ministry of Health (MINSA) which involved using electronic bracelets for newborn babies and their mothers to avoid mix-ups at hospitals and clinics, and to curb baby snatching, a common crime in the country.

The Bracelet System for Neonatal Control works using an ankle bracelet with a transmitter that is placed on the newborn baby, and a receiver bracelet which the mother wears. It includes a hand-held programming device, control antennas on clinic doors (which light up red or green), and an alarm.[3]

1 https://www.elcapitalfinanciero.com/el-70-de-la-poblacion-en-panama-usa-internet-pero-que-hace

2 www.panamaenlinea.gob.pa

3 https://www.prensa.com/sociedad/Presentan-sistema-seguridad-control-nacidos_0_5290720902.html

The bracelets also have a built-in coloured light – green for compatible and red for incompatible – that turns on when mother and baby are together.

This project will be piloted in the province of Chiriqui. However, it has been met with mixed reactions. These reactions show that public understanding and sentiment with any new initiative are important to ensuring its success – and the same will be the case with respect to AI initiatives. A key challenge in the use of AI in Panama will be the public's willingness to participate in these kinds of initiatives.

Education

Panama has implemented e-learning platforms to help with its teaching and learning. Some platforms have been developed by schools and universities themselves, and others have been through partnerships with technology service providers.

Some of these platforms include alerts sent to students to remind them of assignment deadlines, the time that has passed since they logged onto a platform, and messages relating to absenteeism. These are first-level e-education platforms, and there is some way to go to explore other potential areas of AI use in schools, such as the potential use of AI to reduce school drop-out rates as seen in India.[4]

Prototype phase

As suggested by the above initiatives, the first-step platforms have been created to lay the ground for more sophisticated use of AI in these sectors. Because of this, we consider Panama as being in the prototype phase of AI implementation. But there remains much room for improvement. Most initiatives that are looking to the use of AI in the country are isolated, including in the private sector.

Two of the most notable initiatives in the private sector involve Microsoft. In the first, Microsoft has partnered with Copa Airlines. The two have reached an agreement on the use of Microsoft's cloud services, productivity solutions and applications related to AI. This partnership is seen as critical in a sector where efficiency and punctuality are essential.[5]

Another company with which Microsoft is working is Atento, a leader in contact centres and customer relations in Latin America, which is also using the cloud platform and cognitive services of the tech giant.

Operating in Guatemala, Panama and El Salvador, Atento created a new "customer service intelligence" area. According to César Cernuda, the president of Microsoft Latin America:

> The implemented solution applies modern voice transcription services, understands the reason for contact (interpretation of intention), and analyses the client's sentiment (nervous, anxious, aggressive, happy). Artificial intelligence allows it to develop the profile more deeply, the inclinations and preferences of the consumer, establishing more effective contact and greater satisfaction.[6]

These examples suggest a clear benefit of AI in the business sector. According to reports, businesses experience a 15% to 30% improvement in efficiency when applying AI to a process or service – and it is this potential that could also prove useful in the public sector.

Conclusion

For IPANDETEC, it is very important to take the necessary steps to lay the ground for the widescale implementation of AI in Panama. This needs to be done in a way that AI enables the human rights of citizens, rather than diminishes them. From this perspective we can learn a lot from the implementation of AI in other countries where the use of technologies is more advanced, whether in the region, or further afield, as in Asia. It is a matter of growing as a country and developing the most promising initiatives that balance the need for technological development, but do not continue to disadvantage groups who are already marginalised.

We see great potential for the use of AI in numerous ways, including the treatment of diseases like cancer (MIT, for example, recently developed an IT-based algorithm that can predict breast cancer up to five years before it appears);[7] in the use of natural language processing for government services; in the support offered to farmers, including in pest identification; and in education. Many of these solutions require a detailed case analysis of the experiences of their use in other countries, especially those that are, like Panama, in the prototype phase of development.

4 See the India country report in this edition of GISWatch.

5 https://www.estrategiaynegocios.net/lasclavesdeldia/1180122-330/inteligencia-artificial-c%C3%B3mo-las-empresas-en-centroam%C3%A9rica-ya-la-utilizan

6 Ibid.

7 Conner-Simons, A., & Gordon, R. (2019, 7 May). Using AI to predict breast cancer and personalize care. *MIT News*. https://news.mit.edu/2019/using-ai-predict-breast-cancer-and-personalize-care-0507

Action steps

The following action steps in Panama will further help to lay the ground for the widespread application of AI:

- Renew the debate on the Law on Protection of Personal Data with greater participation by citizens and civil society, and include aspects such as territorial jurisdiction, among others.
- Push for Panama to implement the international conventions to which it is signatory in terms of digital rights. In particular, implement the Budapest Convention on Cybercrime[8] in its entirety in Panama.
- Panama should improve regulation of areas such as cryptocurrencies, e-commerce and e-invoicing, among others, to encourage foreign investment and protect the national financial system.
- The different institutions of the state must be encouraged to cooperate with ANTAI – the national authority on access to information and transparency – in terms of the country's open government and open data programme. This is important in order to increase transparency and trust in the government.
- The government must promote human and digital rights throughout the country to have an informed and aware population.

8 https://www.coe.int/en/web/cybercrime/the-budapest-convention

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Artificial intelligence:
Human rights, social justice and development

Artificial intelligence (AI) is now receiving unprecedented global attention as it finds widespread practical application in multiple spheres of activity. But what are the human rights, social justice and development implications of AI when used in areas such as health, education and social services, or in building "smart cities"? How does algorithmic decision making impact on marginalised people and the poor?

This edition of Global Information Society Watch (GISWatch) provides a perspective from the global South on the application of AI to our everyday lives. It includes 40 country reports from countries as diverse as Benin, Argentina, India, Russia and Ukraine, as well as three regional reports. These are framed by eight thematic reports dealing with topics such as data governance, food sovereignty, AI in the workplace, and so-called "killer robots".

While pointing to the positive use of AI to enable rights in ways that were not easily possible before, this edition of GISWatch highlights the real threats that we need to pay attention to if we are going to build an AI-embedded future that enables human dignity.

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