

# INGREDIENTS FOR INNOVATION

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## ▶ What steps need to be taken to innovate in the professional sphere?

First, it is important to examine the current situation in depth to identify deficiencies in the processes or materials used.

The main objective, however, is to define the desired outcome in precise terms. Without defined goals, you will only get anywhere by chance.

#### What are the leading fears you have to face?

Whether the decisions you make will actually lead to the desired outcome. Studies can be done to help the decision maker, but decisions are made individually and it is the decision maker who is ultimately responsible for getting it right or wrong.

## ▶ What is the greatest external obstacle you need to overcome?

In the area of defense, there are not many external obstacles. Naturally, acquiring resources to implement change is essential, but the greatest challenge, in my opinion, is to get the institution's internal culture to evolve, to pursue and accept change, especially when good work is already being done.

## Is money a necessary ingredient?

Money is necessary, of course, but it is not the most important thing. There are lots of examples in history, and I have personal examples as well, in which creativity, teamwork, dedication and honest intentions led to change and innovation without many resources.

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#### ▶ In the area of technology, what is essential in order to innovate?

Having a clear idea of the desired outcome also applies here. Once you have that, technological solutions fall into place as you work toward achieving your goals. Although, initially, the institution's technological capacity is not tied directly to the desired outcome, working through different stages is central to navigating the knowledge curve that will lead to that outcome.

#### Why do these processes take us a little longer in Latin America?

Defense matters are secondary in Latin America; since it is one of the regions least affected by conflicts, defense budgets tend to be lower and, as a result, technological evolution ends up falling behind.

However, in terms of security, there is an urgent need for evolution; Latin America is the most violent continent in the world, but this still has not translated into security advances. This may be due to the chronic lack of resources in several countries or the fact that many talented people end up emigrating to more developed countries and using their knowledge and creativity outside of their countries of origin.

## Can you tell us about an institution or a person who is an example to follow, a benchmark, in terms of innovation?

I have worked with many Brazilian and foreign countries and I have seen how they deal with innovation, which has helped me a lot in my job. To be fair, I am not going to name any particular one.

## Do you have any tips for your colleagues in charge of technology in this Public Safety sector?

One key word is cooperation. Whoever works with technology in the area of command and control, electronic warfare, intelligence and cybernetics must know how to exchange relevant experiences and be prepared to do so. This knowledge exchange enables the institution to evolve more quickly and create a network of trust that is crucial in this area.