

# The Challenges of Economic Intelligence in the Rational Decision-making Process: The Case of the Management of COVID19

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## **Abstract:**

*Far from controversies over the nature, manifestations, vaccine or treatment of the Corona virus, the aim of this article is to show that at the start of this health crisis, the decisions of each government were proportional to the ability risk assessment by the decision maker (the Government). In other words, that the decision-maker has oriented his decisions according to his ability to perceive and then anticipate the difficulties in his environment. Indeed, decisions taken in times of crisis are always debated and aroused controversy both in academia and in public opinion. The case of the Corona virus is no exception, especially since unlike other health or security crises, it has several specificities: it is a global pandemic with several impacts, including health and economic ones. Decisions to curb the effects are not unanimous, with each country implementing its own security measures. The comparative study of the different strategies put in place by the leaders of different countries according to the vision and the perception of each one will help us to discover then to clarify the rational process of decision-making in the context of this pandemic.*

## **Keywords:**

*Decision-making, Indicator, Decision-making Process, Crisis, Corona virus, Economic Intelligence, Pandemic*

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## **1. Introduction**

Alexandra Novosseloff defines crisis as "a sudden change, often decisive, favorable or unfavorable, a brief, sudden and violent attack, a decisive or perilous period of existence, a shortage or insufficiency of something. On the political and international level, it is a rupture of balance, an intermediate period, which is characterized by a brief, sudden and violent outburst which has a history, a background, very precise origins [1]. In medicine, we speak of "sudden manifestation of a disease or sudden worsening of a chronic condition". Morin, for his part, derives the definition of "crisis" from its etymology: from the Greek Krisis which means decision, "it is the decisive moment, in the evolution of an uncertain process, which allows the diagnosis" [2]. Nowadays, the meaning is reversed, it is "indecision". The philosopher and sociologist Morin thinks that the word "crisis" is now used to name the unspeakable.

As part of our work, we will retain the crisis as disturbances, upheavals requiring special management. So over time, the world has experienced difficult periods punctuated by conflicts, worrying situations that have been managed differently according to the leaders in place. They had to take measures according to the situations and contexts (history, origin, etc.). Measures that have not always enjoyed general approval and the effectiveness of their disputed implementation. Unlike other crises, the one linked to the Corona virus lies in its specificity (very high contamination rate) in its implications. It quickly went from epidemic status to pandemic status, causing crises among other things, health and economic. At the start of the crisis at the end of 2019 when the disease was declared in China and in early 2020 when it spread around the world, the 196 member countries of the World Health Organization (WHO) agreed to put measures in place to contain the pandemic. These include, among others:

- 1) wash your hands frequently with soap and water or a hydroalcoholic gel;
- 2) avoid close contact (keep a distance of 1 meter from anyone who coughs or sneezes);
- 3) avoid touching your eyes, nose and mouth;
- 4) follow the rules of respiratory hygiene (cover your mouth and nose with the bend of the elbow or with a tissue in case of coughing or sneezing, then throw the tissue away immediately);
- 5) consult a doctor without delay in case of fever, cough and difficulty in breathing.

In most countries, schools and universities have been closed as well as borders. More or less total confinement made compulsory and essential. For the WHO / Europe, "... it is up to each country to determine the nature of the interventions to be carried out in order to prevent or slow down the transmission of the virus, and the moment at which they must be deployed..."<sup>1</sup>[3]. This calls on the capacity of discernment of each leader. The central question of this article is: is the decision-maker's capacity for discernment linked to the effectiveness of the protection or security measures put in place in times of crisis? To answer them, we will need to take an overview of the various decisions taken by the leaders of certain countries according to their perception and their assessment of the risks. We will present how these measures were received and then executed to finally highlight, if applicable, the link that could exist between the decision-maker's capacity for discernment and the effectiveness of the measures put in place. For this study, we will analyze the strategies of the leaders of the countries of four continents:

- 1) Asia: China and South Korea;
- 2) United States of America;
- 3) Europe: France - Italy - Spain - England
- 4) Africa: Cameroon - Nigeria - Rwanda

## 2. Conceptual frame

### 2.1. Who Is the Decision Maker?

The Larousse dictionary defines the decision-maker as any natural or legal person empowered by his or her functions or position to decide, guide or ensure that a decision prevails. In the context of the decision-making process, Amos David speaks of the decision-maker as "the one who is able to identify and pose the decision-making problem to be solved in terms of issues, risks or threats weighing on his organization" [4]. For him, this is the person who takes care of steps a, f and g resulting from the breakdown of the seven (7) phases of Economic Intelligence:

- a) Identification of a decision problem;
- b) Translation of the decision problem into an information search problem;
- c) Identification of relevant sources of information;
- d) Collection of relevant information;
- e) Analysis of the information collected to extract indicators for the decision;
- f) Interpretation of indicators;

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<sup>1</sup> <http://www.euro.who.int/fr/health-topics/health-emergencies/coronavirus-covid-19/news/news/2020/3/who-announces-covid-19-outbreak-a-pandemic> - consulted on 03/27/2020

g) Decision making.

Between phases (a) and (g), several suggestions / orientations can take place but it is the final decision that interests us.

The decision maker can be at several levels. In our case study, we will see decision makers at two levels:

- 1) at the level of the Government, it will be the leaders, the heads of state. Those who set policies and guide strategic decisions;
- 2) at the individual level, it is all the individuals responsible for applying the published rules. How do they apply the rules or not? What are the motivators for the application or not of these rules?

## **2.2. Economic Intelligence**

Economic intelligence (EI) is perceived by Carlos Revelli as a "process of collecting, processing and disseminating information which aims to reduce the share of uncertainty in the making of any strategic decision" [4] Considered as "a rational decision-making process" [5], [6] associates EI with the rational decision-making process and the satisfactory choice of Falque&Bougon [7]. We are going in the same direction in the context of this study because the decisions studied here are part of a process. All options are assumed to have been assessed and prioritized in advance before the final decision to make them public and enforceable. Likewise, the satisfactory choice refers to a familiar model of decision-making which would require the decision-maker to base himself on the experience of past events in order to anticipate those to come. These three concepts (EI, rational process and the good choice model) will help us in our analysis to understand and evaluate decisions during this crisis.

## **3. Global Pandemic Management**

### ***3.1. Retrospective Analysis in the Decision-making Process***

In their work, David and Ndjock demonstrate that "Intelligence begins with observing the environment and identifying critical problems" [8]. In other words, to decide, you have to understand your environment and to understand, you have to observe. In addition [9] already noted that observation requires investment time. Indeed, this time allows a better understanding of the issues at hand. Every situation has a story, a past. However, two major challenges emerge from the observation process [10]:

- 1) how to identify the elements that can serve as benchmarks or indicators facilitating the understanding of the environment for the decision maker, this is the retrospective analysis;
- 2) how, on the basis of the elements drawn from the observation, the decision maker can anticipate the future. How can the experience of the past be used to solve problems in the future is predictive analytics.

Paulhac (2007) speaking of retrospective analysis said that "it seems that knowledge of history can [...] effectively guide understanding of the present and guide future action. [However], not as an exact science, [...] but as empirical data rich in meaning and lessons"[11].

It is from this experience that Asian states have served in the face of the covid-19 pandemic.

In fact, at the end of 2002 and the beginning of 2003, SARS (Severe Acute Respiratory Symptom) broke out in China, spreading to around thirty countries around the world, causing death as it passed. The WHO then accused China of "covering up the seriousness of the epidemic" (WHO, 2003).

Following the control of the epidemic, here are some lessons learned by WHO: -

- 1) preparation and planning for an upcoming influenza pandemic;
- 2) global alerts, widely supported by a responsible press and amplified by electronic communications, can increase awareness and vigilance at all levels;
- 3) rapid detection and notification of the first cases;

- 4) stimulation of high-level research in order to develop the scientific basis for defining good control interventions;
- 5) political commitment at the highest level can be decisive.

China in its fight to contain the pandemic made, use of these recommendations as well as its experience during the SARS period. Thus:

- 1) three weeks elapsed between the internal declaration of the illness and the official announcement of the Chinese government after several months had elapsed during the SARS episode;
- 2) the government immediately took drastic measures including the cancellation of the Chinese New Year festivities and the closure of tourist sites such as the Forbidden City;
- 3) rapid advances in science allow rapid sequencing of the virus, which favors the generalization of rapid tests;
- 4) political commitment at the highest level which allows the provision of colossal financial means for the care of patients. For example, a large hospital was built in about ten days and the deployment of law enforcement to enforce the lockdown of the city of Wuhan, the site of the disease. Meanwhile, volunteers were going door to door to check residents' temperatures.

In contrary in 2002-2003, the WHO congratulated China on this bold and effective method. Calling it "the most ambitious, agile and aggressive containment effort in history" [13]

Today, even if the disease has not yet entirely disappeared, according to the WHO report, there are no more new cases of contamination in the territory. The reported cases are those of imported cases.

Like China, other Asian countries have put in place strategies to contain the pandemic. For example, South Korea has bet on technology. Indeed, as soon as the virus emerged, important but less restrictive measures in relation to China were put in place. In addition to the closure of schools and administrations, large gatherings have been canceled and banned. Systematic and free tests are carried out. Failing to remain confined, the population is encouraged to go out for tests through "drive-in"<sup>2</sup>. An application that also allows for self-diagnosis. The infected are placed in self-quarantine and monitored remotely. In addition, the application allows everyone to see in real time whether they are near or far from those at risk. The use of technology combined with science and discipline has enabled the country to avoid panic among the populations and effectively curb the disease.

### ***3.2. The Decision-maker's Capacity for Discernment in the Decision-making Process***

Let us recall decision maker's definition given above: "one who is able to discern the problems of his environment". It is the one who realizes the difficulties, assesses the risks and decides. In his work on the observatory as a decision-support tool, Ndjock (2017) believes that decisions will be more effective if the decision-maker has the relevant information they need at their fingertips. This is all the more true as any decision is made on the basis of the information available. However, the management of this crisis highlights what has not yet been explored: it is the decision-maker's capacity for discernment when faced with a decision-making problem. The problem can be clearly defined, the information relevant and available, however, if the decision maker does not fully appreciate the seriousness of the situation, the decisions taken will not be effective.

While the experience has been at the service of Asian countries (China, South Korea, Japan, Taiwan, etc.), the divergence of strategies in other regions depends on the ability of each leader to assess the situation.

Accused of waiting, the UK government justified its inaction by citing "collective immunity" and the desire to ease the pressure on public health services.

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<sup>2</sup>A "drive-in" is any service arranged in such a way that motorized users can benefit from it without leaving their vehicle (bar, bank counter, restaurant, etc.). In this case, these are open-air laboratories that allow passengers to perform their test without getting out of the vehicle.

On this basis, approximately 60% of the population would need to contract the virus over several months in order to develop this immunity and prevent new epidemics. Meanwhile, the disease sets in and the death toll continues to rise. This is when the government reconsiders its decision and considers much more radical measures such as a ban on assemblies and the possibility of closures of schools and public places.

In Italy, the perception of the disease is initially focused on China. Indeed, the epidemic being declared in China, the concerns are directed towards the Chinese community on the Italian territory including the residents, the tourists as well as the Italians living in China. The "sanitary cords"<sup>3</sup> are then installed in airports. This perception will change when the first case of contamination is reported from an Italian who "apparently" had no direct contact with a "Chinese" case. From that moment, it was the government's awareness that shifted from a communication that initially wanted to be reassuring to a crisis communication raising awareness of the dangers of the disease.

France has implemented a policy of gradual hardening according to the course of the disease. Knowing that the major factor in the spread of Covid-19 is person-to-person contact, the government initially targeted epidemic foci before extending measures across the country. Jean-Marie Januel will say "This crescendo strategy made it possible to prepare the country for more drastic measures for several weeks and not to be too aggressive in the face of a major slowdown in economic activity"<sup>4</sup>

### **3.3. Monitoring and the Decision-making Process**

As demonstrated by the Asian experience, which calls for experience in decision-making and helps in effective problem solving, we believe that the use of data resulting from information intelligence could boost the decision-making process. Several authors have mentioned this the day before in their work: [14], [15]. This can be defined as "the use of technological means to know the elements and the strategic and operational movements of the environment of organizations" [16]. It is not just a question of technological means but of any means enabling the same objectives to be achieved. The watchman will say [17] will be the one who can provide the decision-maker with specific solutions for anticipated or emerging problems.

In the 7 phases of the EI, the watchman is the one in charge of phases b, c and d, that is to say:

- 1) Translate the decision-making problem into an information search problem;
- 2) Identify the relevant sources of information;
- 3) Collect relevant information.

He must not only understand but anticipate the information needs of the decision maker, explore all potential sources of information to extract the most relevant and allow the decision maker to make the right decision on the basis of the right information at the right time. To do so, the activity of the day before can be summarized in 5 main steps:

1. Expression of need;
2. Recurrent search;
3. Saving the results;
4. Analysis of the results;
5. Presentation of the results.

This information from the day before allows the decision maker to be armed and ready to decide. Yet the management of the covid-19 pandemic by the United States of America (USA) is a counter-example to the use of yesterday's data. As if these weren't available. According to a report from the Central Intelligence Agency (CIA)<sup>5</sup>, this pandemic was announced. Indeed, "In 2005, Alexandre

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<sup>3</sup>a controlled space in order to monitor access to an area where an epidemic is raging - [https://fr.wikipedia.org/wiki/Cordon\\_sanitaire](https://fr.wikipedia.org/wiki/Cordon_sanitaire)- Consulted on 3rd april 2020

<sup>4</sup><https://www.lorientlejour.com/article/1210585/asia-vs-europe-les-differentes-strategies-pour-venir-a-bout-du-coronavirus.html>- Consulted on 31st march 2020

<sup>5</sup>The Central Intelligence Agency, founded in 1947 by the National Security Act, is one of the best-known intelligence agencies in the United States. She is in charge of intelligence acquisition and most clandestine operations carried out outside American soil - [https://fr.wikipedia.org/wiki/Central\\_Intelligence\\_Agency](https://fr.wikipedia.org/wiki/Central_Intelligence_Agency) - Accessed 04/4th/2020

Adler<sup>6</sup> prefaced for Robert Laffont editions "The new CIA report - How will the world be tomorrow ", the result of two years of work by dozens of experts assessing the situation of the planet on fifteen years to come (2005-2020). This Covid-19 crisis, experts had predicted with startling precision"[18]. We present to you below, a few moments of the interview conducted by "Public Senate" with Alexandre Adler who discusses the details of the virus:

Upon leaving this report, Alexander Adler points out that there was no reaction because, he believes, it was a report like any other released every five (5) years [19].

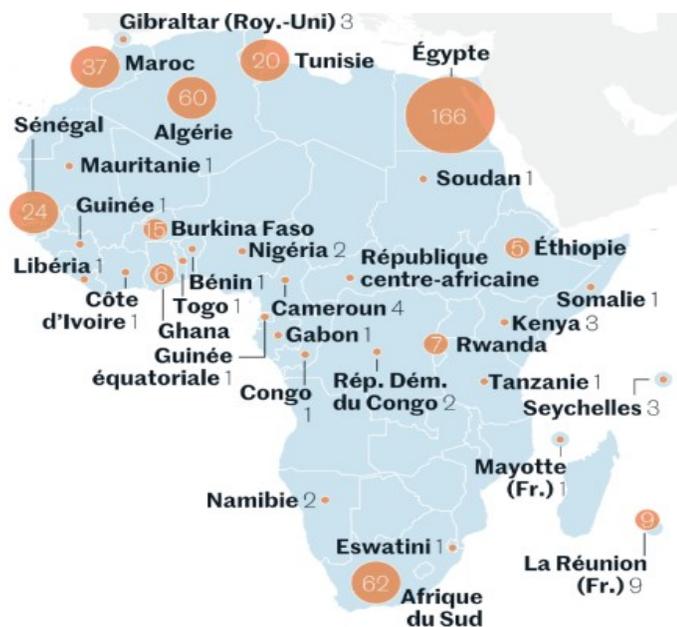
In that report, however, it is clearly stated on page 75 that: "The emergence of a new, virulent, extremely contagious human respiratory disease, for which there is no adequate treatment, could trigger a pandemic. If such a disease appears, by 2025, tensions or internal or cross-border conflicts are sure to erupt. Indeed, nations will then endeavor - with sufficient capacities - to control the movements of populations seeking to avoid infection or to preserve their access to natural resources..."

If policymakers and not even those in the US have taken no action, we believe it is because they did not feel concerned. They knew they were safe so didn't bother to anticipate. Likewise, when the disease was officially declared, US policymakers considered it a "Chinese affair." This view is similar to that of all of Europe. It was only when the evil was deep that everyone had to react.

Whatever the data of the day before, only the awareness of the decision maker makes it possible to take effective decisions. The risk assessment is accompanied by the decision-maker's capacity for analysis and perception.

### 3.4. Africa Facing the Pandemic

For now, Africa is not spared by covid19 as shown in the figure below:



Source : CSSE, Johns Hopkins University

Infographie Le Monde

Figure 1. Coronavirus: the evolution of the pandemic in Africa as of March 17, 2020.

<sup>6</sup>Alexandre Adler, French journalist, historian, specialist in geopolitical issues

Not as affected as Europe, it must nevertheless face the pandemic like the rest of the planet. Between pragmatism, recklessness or recklessness, each head of state adjusts his security measures according to his ability to discern the problem and the context of his environment. Aware of the realities that are theirs (fragile health system, precariousness and vulnerability of the population, etc.), the African heads of state have deployed measures initially to limit the contamination of the local population by patients from countries foreigners. These measurements are adjusted according to the course of the disease. Thus, unable to contain the disease which continues to spread (Figure 2), more stringent measures have been imposed in application of those recommended by the WHO, namely: the closure of schools and universities, border closure.

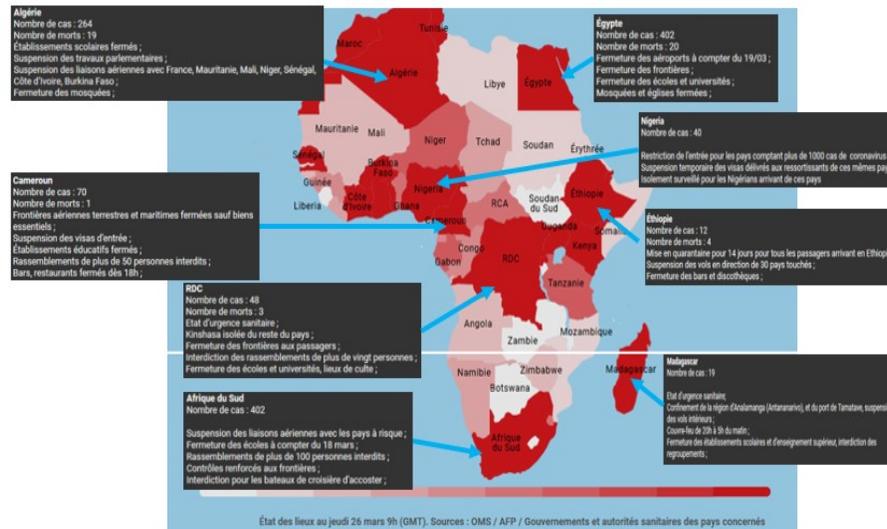


Figure 2. Coronavirus: the evolution of the pandemic in Africa as of March 26, 2020.

Apart from closing borders, schools and universities, the WHO also advocates social distancing, quarantine for suspected cases or confinement.

The decision-maker is not only the Head of State and as we said above, it is a question of "the one who is able to identify and pose the decision-making problem to be solved in terms of issues, risks or threats to its organization". At the individual level, this is any person capable of becoming aware of the existence of a decision-making problem, capable of resolving in terms of issues, risks or threats weighing on his "organization". In our case study, the decision-maker may be "the man" as the individual responsible for applying the prescribed security measures. Given personal protection therefore contributes to the protection of all, to the success of the overall project.

As a result, we note that the implementation of security measures strongly depends on the ability of the decision-maker to be aware of the dangers of the situation as well as the consequences of his attitude on the success of the overall project. The overall project here being the eradication of the disease.

This (the project) being spread over several phases: first, to prevent imported cases from entering the territory and, failing that, to control them; avoid cases of contamination of premises by imported cases; limit the spread of the pandemic on national territory and finally eradicate the pandemic by curing all the sick.

If so far no phase has been successful, we think it is because the decision maker (the individual) has not been aware of the situation. In other words, the assessment of the situation and the perception of each person guided the decision-maker in his decision.

For example, despite the screening system in airports, the quarantine of suspicious passengers, some people who are aware of their condition, have allowed themselves to escape to go with their families. It was probably not with the intention of willfully infecting his loved ones. They too, aware of the situation could have decided to advise him but they covered him. It was only a matter of time for family members to come and increase the number of sick people.

So it is with social distancing. Sociability is the basic principle of African culture. Retirement

homes do not flourish on the continent because it is very frowned upon to part with the elders to whom we owe everything. It's up to the children to take care of it. Meals are shared with the family. It is quite natural to fall into each other's arms. If the neighbor is sick, he has no fear knowing how to count on the family spirit of others. In such a context, asking someone to practice social distancing is a crime.

This would require that the person become aware of the gravity of the situation and agree to take the decision in this direction. How she becomes aware will depend on whether or not to apply the prescribed measures.

Because people are unaware of the problem or misunderstand it, they have found workarounds that think they are geniuses. In Cameroon, for example, all gatherings of more than 50 people are prohibited. This includes religious gatherings in places of worship. Drinking places must be closed from 6p.m. However, closing churches presupposes that pastors, priests or imans are deprived of their faithful whose offerings are no longer their means of subsistence. Some, playing the smartest and thus endangering lives, nevertheless organize meetings in closed-door churches and asking the faithful not to sing aloud. If the pastor was aware of the situation, he would not take the risk either for himself or for the faithful. Why do they come to church despite the order to stay at home? Because their perception of the environment is different.

If total containment is difficult in the African context, it should be understood that decision-making depends much more on perception, on how to understand the problem, on the assessment of the issues as well as on the decision-maker's ability to become aware. of the situation.

#### **4. Conclusion**

We see that the mode of risk assessment, the decision-maker's ability to become aware of the situation can make the difference in decision-making and impact the effectiveness of the measures put in place to get out of the crisis.

The experience gained from the management of previous epidemics has enabled countries like China, South Korea, Japan, Taiwan to effectively fight the crisis. It also justifies the sense of individual and collective responsibility of populations. The study of history helps to no longer doubt to better organize the present and anticipate the future or at least, from retrospective data, the decision-maker is not completely helpless in the face of a present situation.

In Europe, it is in particular due to the seismic and hydrological risks which significantly affect its territory, that Italy has been able to have the right "reflexes" and a very good organization in the management of this crisis.

Ndjock (2007) has said so in his work on the concept of the observatory as a decision support tool; decisions will "be" more effective if the decision maker has the relevant information they need at their fingertips. This is all the more true as any decision is made on the basis of the information available.

However, the management of this crisis brings out what has not yet been explored in depth: it is the decision-maker's capacity for discernment when faced with a decision-making problem. The problem can be clearly defined, the information relevant and available at your fingertips. However, if the decision maker does not fully appreciate the gravity of the situation, the decisions taken will not be effective.

Unfortunately, the management of this crisis shows us that any strategic decision depends on the ability of the decision-maker to be aware of the risks and to understand his environment. Behind each decision hide more or less controlled issues. The rational decision-making process opens up new avenues of reflection to be explored in order to minimize the percentage of uncertainty in any strategic decision. Whether you have anticipated or not, experience and anticipation are not always enough. There is one factor that we tend to overlook in the decision-making process. It is about the "human factor". It will be difficult to talk about the efficiency of the rational decision-making process with the interference of the human component. Perhaps future studies will be able to focus on studying its impact on the decision-making process!

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