

Chapter 10

Good Governance and Resilience in Providing Public Services in Times of Pandemic: The Case of Water and Sanitation Services in Bucharest

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Introduction

Like most companies in Romania, Apa Nova București (ANB) was not specifically prepared for a pandemic in terms of day-to-day operations, but its reaction was quick and the challenges were managed properly so that water provision, a vital public service for people, was not affected at all. However, the strategic and operational reengineering process that the company started in 2016, with a strong focus on developing a digitalization culture was, for sure, one of the greatest assets during the COVID-19 situation. Moreover, the company worked closely with local authorities and followed the official guidelines rigorously in order to make sure that health and public safety are met at the highest standards.

This chapter takes a closer look at the operations of Apa Nova București (ANB), the provider of water and sewerage services in Bucharest, the capital of Romania, and also the largest city in Central and Eastern Europe. Special focus is placed on three distinct moments during the pandemic crisis. First, we looked into how the company reacted during the COVID-19 pandemic, highlighting best practices, especially in the field of human resource management and digitalization. Second, we tried to determine how much the company was affected by the crisis, and last, we were interested in how the company was prepared for the crisis, showcasing the importance in this respect of the Business Process Reengineering (BPR) the company started in 2016.

In terms of methodology, the data collected for this case study was based on desktop research, by analysing secondary data such as: company presentations, reports, press releases, budgets, statistics, etc. A qualitative semi-structured online interview with

Bucharest University of Economic Studies Publishing House
Published in *GOOD GOVERNANCE AND RESILIENCE. Sharing Best Practices and Challenges in Times of Crisis across Europe* by Mina-Raiu, L., Johannsdottir, L., Načinović Braje, I. and Díaz-Tendero, A. (eds.). 2022. ISBN 978-606-34-0416-0.
https://doi.org/10.24818/978-606-34-0416-0_10

a human resources (HR) representative of ANB was carried out in March 2021 in order to gather data about internal procedures, work loads, work plans, etc. Therefore, the time frame that this case study covers is March 2020- March 2021.

The chapter is structured into four sections. First, theoretical aspects related to organizational resilience, PPPs, and BPR are introduced. Second, the particular case of the water and sanitation services in Bucharest during pandemic is presented. Then questions and debate topics for classroom discussions are formulated, and finally the chapter includes suggestions for further readings related to the topic of the case study, along with the references list.

Keywords: good governance, resilience, public services, public-private partnership (PPP), crisis, COVID-19, business process reengineering (BPR)

Theoretical aspects

The COVID-19 crisis acted as a challenge for the national and subnational quality of governance, showcasing the public and private institutions' capabilities and vulnerabilities. The unprecedented events induced by the pandemic required organizations to be very flexible, adapt rapidly, and change their operations dramatically (Goldin et al., 2022). In this particular context, public utilities companies were very much challenged and had to figure out solutions in order to continue providing the much-needed services. When referring to solutions to extraordinary events induced by the pandemic, most scholars and practitioners make use of the concept of resilience in their discourse.

One of the most common understandings of resilience is the capacity of a system to face an unforeseen events and maintain its basic functions and characteristics (Cai et al., 2012). Increased environmental turbulence generates organizational change, which has an impact on organizational modus operandi and capabilities, transforming contemporary organizations (McNulty & Ferlie, 2004). Sometimes, this transformation is very profound and even irreversible. Therefore, in the academic literature there is a debate whether business resilience is about the capacity to recover after a shock or the capacity to adapt and redefine the business model (Gherghina, Volintiru & Sigurjonsson, 2022), or it includes both the reaction and the recovery from a crisis.

Studies reveal that the factors that help organizations cope with the challenges of a crisis are closely linked to their performance before the crisis (Gittel et al., 2006). As Wang, Qi and Ran (2022) argue, traditional public-private collaborations that are usually led by public actors often encounter significant difficulties in a crisis situation, as public bodies tend to be less flexible (Profiroiu & Nastacă). Several studies show that digital transformation of enterprises is an effective way to improve organizational resilience (Zhang, Long & von Schawen, 2021). With the impact of global COVID-19, efficiency improvement, social coordination, and resource allocation brought about by digitization have been particularly significant to the recovery and rebound of organizations.

In the academic literature, institutional resilience is analyzed in a holistic manner that incorporates three timeline dimensions, which correspond to three important phases of a crisis in general (Gherghina, Volintiru & Sigurjonsson, 2022):

- The Preparedness dimension corresponds to the actions that can be performed before the crisis. Preparedness looks into how the institution is prepared for a crisis, by putting in place measure and action plans for risks management. It also checks whether the operations of the organization are sensitive in case of unexpected circumstances.

- The Agility dimension deals with the actions that are to be considered during the crisis. Agility looks at how fast organizations react to critical situations, what their responsive capacity is to challenges, and how the organizations are structured in order to quickly adapt to potential crisis.

- The Robustness dimension captures the actions that are necessary after the crisis. Robustness looks into how organizations recover after a crisis, assessing both the strengths and vulnerabilities that resulted from the confrontation with the crisis. Robustness also implies a comparative approach, by trying to evaluate whether the organization/sector was hit deeper than other similar entities.

In this chapter, we focus on the reaction of ANB in front of the pandemic, but most of all, we are very interested in what determined this particular reaction, mainly how did the company consciously or not prepared for a crisis situation, by undergoing a complex internal restructuring process, based on Business Process Reengineering (BPR). Restructuring public services is mainly driven by three goals: improving performance, sourcing finance, and meeting new legislative requirements (Bakker, 2003).

BPR origins are to be found in the 1990s, in the manufacturing industry in the USA, but it quickly became popular also in Europe, in other industries, including public services. BPR is a tool to help organizations achieve their goals, which may target improved customer services, cutting down operational costs, or becoming leaders in their domain (Srinivasan, 2011). BPR can be defined as a fundamental rethinking and radical redesign of business processes aimed at achieving dramatic improvements in performance measurements, expressed as costs, quality, service levels, and speed (Hammer & Champy, 1993).

BPR should, however, not be confused with process improvement, which is a specific aspect related to TQM (Total Quality Management) that refers to programs and actions that are aimed at improving the working processes within an organization. While process improvement accepts to a certain level the existing processes, BPR is concerned with a total revision of the processes, leading to profound changes in the organizational structure, systems, culture, and competences. BPR does not aim for improvements, but innovation in the existing processes and starts from a simple question: *If this process would not exist, how would we sketch it starting from a blank page?* (Dobrin, 2005).

The case of Apa Nova București

Apa Nova București (ANB) is the company that provides water and sewerage services in Bucharest, since 2000, when Bucharest Municipality signed a 25 years concession contract with the French company, Veolia Eau (Veolia Water). Later on, in August 2020, the municipality extended the concession contract until 2037. The Concession agreement is being monitored by the municipality using a set of 23 key performance indicators that must be fulfilled and maintained by the private operator.

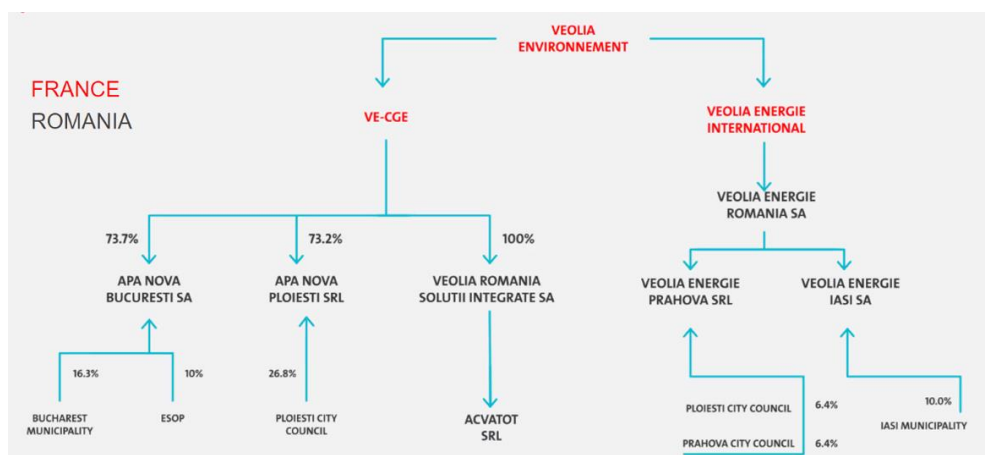
ANB is an institutional public-private partnership (PPP) with 16.31% of its shares owned by the Bucharest Municipality, 10% belong to the employees, and the rest of 73.69% belong to Veolia Eau. In Romania, Veolia Eau is present both on the water market (Apa Nova București, Apa Nova Ploiești), as well as on the energy sector (Veolia Energie Prahova, Veolia Energie Iași) - see Figure 1 for a more detailed view on Veolia's presence on the Romanian market.

Extending the water and sewerage infrastructure in Bucharest

At the moment, ANB has a portfolio of over 2.2 million customers, and the figures are increasing as Bucharest and its surroundings are developing very fast.

In 2020 the total number of people employed by Veolia in Romania was 3391 employees, out of which around 1800 worked for Apa Nova București.

Figure 10.1 Veolia's presence in Romania



Source: ANB, 2021

In over 20 years of concession ANB invested more than 500 million euros in modernising and extending the water and sewerage infrastructure in Bucharest.

Apa Nova values include responsibility, safety, innovation, solidarity, customer-oriented, respect, ethics, and compliance (see Figure 10.2 for a more detailed perspective on ANB values and aims).

Figure 10.2 Veolia’s Romania ambitions and values



Source: ANB, 2021

Apa Nova București response to the COVID-19 pandemic

The imminent changes brought about by the pandemic, characterized by high levels of uncertainty, required from organizations flexibility both in the way they operate (especially in the HR area) and in adopting the appropriate technology, through digitalization (McNulty & Ferlie, 2004).

Being a public utility provider, which is considered of high necessity, when the COVID-19 restrictions started (March 2020), one of the major and immediate changes that hit the ANB was related to work planning and workloads. Thus, during pandemic ANB employees, especially the "essential" ones (working in water production plants, wastewater plants, etc.) were subjected to an invasive work regime in order to minimize as much as possible the risk of infection and to assure the continuity of water provision.

Therefore, an operational team would go to work for 1 week, with shifts of 12 hours of work, followed by 12 hours of rest at the job. The company created for this category of workers various facilities to help them recreate and spend their free time, including catering services. Meanwhile, "hot reserves" were kept at home, ready to back up in case one field employee would be found positive, putting the whole team in quarantine. In April 2021 ANB was getting ready for a third wave of protection measures in order to keep the pace with the restrictions imposed by the pandemic situation. All of these decisions had participatory grounds, as ANB worked closely

with public institutions and authorities and rigorously followed the official guidelines.

Moreover, during the pandemic, as a protection measure, for each key position in the company, a succession plan was created, meaning two employees were trained and prepared to replace the ones that eventually got the virus.

By March 2021, when we performed our research, out of 1900 employees, 400 have been teleworking exclusively for more than one year, while for approximately 450 employees who had operational jobs, telework was not an option at all. The rest of the employees worked from the office or adopted a hybrid model, so ANB's offices remained open and available for employees all the time during the two years of pandemic.

As provider of an essential public service, ANB staff were included in the second vaccination wave in Romania. By March 2021, more than 70% of ANB employees had already been vaccinated.

The pandemic contributed to the acceleration of the digitalization of all processes in ANB. In terms of internal procedures and human resources, ANB continued the recruitment process in the online environment, except for the final technical interview with the manager, which was held face-to-face. Training and development processes were carried out on the E-learning platform, which was greatly improved due to the pandemics. All employees, including new ones, could have remote access on the platform to more than 550 courses on soft-skills, financial aspects, human resources, leadership, communication, etc. Another major change was the replacement of Microsoft Office with Google Suite, which enables more people to work on the same document at the same time.

In 2020, when the sanitary crisis emerged, ANB inaugurated a face mask factory in Ploiești, with over 1000 m² for the production unit, facilities, and testing laboratory. The face masks are the result of a highly digitalized process, due to fully automated production lines, equipped with IOT sensors. With a capacity of over 8 million face masks per year, the masks are produced in a sterilized environment, following all safety and sanitary requirements: multilayer quality control systems, 3 quality control points, ISO certified, EN 149 certified. The production capacity of the plant covered entirely Veolia's global needs for such a protection equipment.

The measures undertaken by ANB during pandemics had positive impact on the local community, by assuring the provision of water services at the same quality and security standards as usual. ANB also took care of both its employees and customers by adopting security, sanitary, and digitalization measures.

The impact of ANB on the local economy is significant through the taxes and dividends the company pays to the local budget. Unlike many private companies that were severely hit by the crisis in terms of profits, especially in the first year of the pandemic, ANB as a provider of a basic public utility was not very much affected by the pandemic, reaching a turnover of 338,3 mil EUR in 2020. Moreover, during

lockdown, the company registered a 2% increase in the water consumption volumes. In 2020, the company acted in a solidary manner, by paying a few months earlier over 5 mil EUR dividends to Bucharest Municipality.

Good governance in restructuring water supply using Business Process Reengineering

The impact of the pandemic on ANB operations revealed a flexible, agile, and innovative company. This particular reaction was mainly due to the fact that in 2016 ANB started a complex business reengineering process (BPR). The rationale for reinventing its business model was based on the increasing demands coming from the market and from the clients, which were impossible to handle by a company that was perceived by its stakeholders as bureaucratic, slow, static, "old-fashioned" and fragmented (Guitand et al., 2020). Since ANB undertook the concession of the water services in Bucharest, for 15 years (2000-2015), it only focused on how to meet the requirements of the concession contract, without any strategic vision on what would happen after the contract is over. The big change started in October 2015, when the top management team was replaced with a new team, which was determined to transform the company from the roots.

Together with ANB in this ambitious project was the consulting company Advanced Thinking, specialized in business transformation, human capital development, and continuous improvement, but also Bucharest Municipality, which proved to be a very supportive public partner. A five-year master plan was designed, following a set of important principles: involvement of all employees, deep understanding of stakeholders needs, simplification of existing process (Guitand et al., 2020).

The major phases of the BPR were:

- 1) Day-to-day managerial excellence – the first stage of the business transformation process focused on creating a new organizational architecture, as solid foundation for the company. This phase included the following elements: process architecture, organizational structure based on processes, KPI architecture, risk management, job description, integrated management system;
- 2) Operational excellence – the second phase was aimed at promoting continuous improvement as one of the most important values of the organizational culture;
- 3) Strategic excellence – the third phase targets a complete redesign of the processes for strategy development and implementation, in order to make sure that the organization is rallied to its strategic objectives. This final stage helps the organization switch from a control-based management to a collaborative management.

After the business transformation process, the company developed a new flexible organisational architecture that includes 9 hierarchical level (out of 11 levels before the reengineering process) and simplified inter-department communication, aspects that allowed the increase of efficiency and the foundation of a strong digital culture.

Other relevant results of the reforms undertaken by ANB are: increase by 14% in labour productivity, decrease by 24% of customer complaints, 10% productivity increase in water production, leading to water economies of more than 1.000.000 mc/month, labour costs decreased by 6%, average wage increased by 10%, average response time for clients requests decreased by 88%, etc. Although the number of employees decreased from 2112 to 1854 and the number of managers decreased from 312 to 211, turnover and profitability increased significantly (Guitand, 2020). Many of the outstanding outcomes that emerged from the BPR are qualitative and, therefore, difficult to assess using figures, such as: new dedicated spaces for the interaction with clients, new offices for employees, projects for professional training, new fleet of operational vehicles meant to increase action capacity and employees safety, etc.

Considering these exceptional results, ANB moved to the next level, the Continuous Improvement phase, because the crucial challenge is not to reach the desired level of performance, but to maintain it over the long term. The Continuous Improvement stage aims to digitize almost all activities, from operations to clients and employees. Thus, in 2019 ANB relaunched the platform www.apanovabucuresti.ro and developed the mobile application Apa Nova, based on a customer-centric approach. These tools help clients access the latest and personalized information, make payments, register their water consumption volumes, therefore, facilitating all sorts of operations that do not imply anymore physical interactions between clients and employees (Cicovschi, 2020).

During its organizational transformation process, ANB implemented several good practices and principles. Here are just a few such examples (Guitard, 2020):

- While the leadership initiative and constant support for change is crucial, not just the management, but the whole organization must understand, learn, feel, and contribute to the transformation process. Employees were included from the beginning in the change process; their creativity and individual contributions were much appreciated, while differences were accepted and seen as opportunities.
- Stakeholders identification and reaching stakeholders needs is the secret ingredient for successful businesses. Therefore, ANB organized in 2016 several consultation meetings with the stakeholders (clients, public administration authorities, shareholders, employees, and unions) in order to find out their needs and expectations. Later on, such a method became a periodic common practice for ANB in order to build strong and transparent relationships with stakeholders.
- Changing the functions mentality with a processes mentality. Processes are a set of activities that show how an organization actually works. ANB was a fragmented company; therefore, the real processes going on in the company were tangled and spread across the organizational chart and also in employees' heads. For example, when a new customer wanted to sign a water provision contract with ANB he had to interact with 9 different internal structures, with no other logic than the ad-hoc organization of the company.

➤ Taking top-down decisions based on a bottom-up understanding of the processes. When the organizational transformation began, many processes were unclear, lacking proper roles and responsibilities, or had uncertain boundaries. The effort of detailed processes mapping revealed 10 times less processes than the fragments of processes. The correct identification and grouping of the processes helped all the members of the company see far behind the activities that are specific to a certain organizational structure, in order to properly understand what each employee does for each shareholder.

➤ Changing employees' mentalities – ANB employees were not used to being proactive, but instead were accustomed to receiving and implementing passively their managers' orders. The BPR process challenged them to rethink the way they worked, discuss, come up with ideas, debate their managers' solutions, and provide arguments.

➤ In order to simplify existing processes, the numbers of approvals and responsibility overlaps were diminished, with positive effects on the levels of service operation time. On the other hand, some processes were not even mapped, although in reality they were carried on. The analysis of historical dates revealed that in 65% of cases the reported damages of water network could be solved ad-hoc, without the help of technical intervention teams. The so-called rapid intervention teams proved to be auto-sufficient in 75% of cases, helping reduce the fixing time and the operational costs and consequently increasing the quality level.

➤ The redesign of the organizational structure started from the processes, which were stakeholders driven. This way, ANB became a flatter organization, with 9 hierarchical layers, instead of 11.

➤ Decisional processes become bidirectional, meaning that decisions were *top-down*, but based on *bottom-up knowledge*. Moreover, over 130 employees holding key positions in the organization (Legal, Human Resources, Procurement, Production, Customer Relationship Management) were trained to learn to use statistical analysis of data, meant to help them take better business decisions

➤ The implementation of FMEA (Failure Mode and Effects Analysis), one of the best methodologies for managing risks, helped ANB standardize risk management within the company, create a risk culture, a common risk vocabulary, and a common set of risk management knowledge for all the structures of the organization.

The ANB reengineering process transformed it into an elite business, a good practice example for worldwide companies, especially after winning in 2019 the first prize of the Business Transformation World Summit, organised in Orlando, Florida, the USA, for the category „Best Business Transformation Project” (with a maximum score, for the first time in the history of 20 years of competition). In order to get this award, ANB had to reveal the exact methodology that was followed during the BPR and also to statistically demonstrate that BPR had a significant impact on all KPIs (Guitard, 2020, p. 126).

Questions/Tasks/Debate topics for classroom discussion

- How would you appreciate the preparedness of Apa Nova București for the pandemic context? Provide arguments.
- Did ANB act with agility during the crisis situation? Give arguments.
- What is your opinion about the opportunities and challenges that the COVID-19 pandemic has brought for public services in general and water services in particular?
- How would you rate the impact of ANB on society in general and during the pandemic, in particular?
- How would you describe the relationship between ANB and Bucharest local government?
- Which are the particular obstacles that organizations should be concerned about while undertaking BPR initiatives?
- What next steps would you recommend to ANB in the aftermath of the COVID-19 pandemic?
- Using this case study as a reference, find out more about the water company in your city. What were the measures it undertook to overcome the pandemic challenges and how well was it prepared for such a challenging situation?

Further reading

- Chapter 13 "Cases of Successful BPR Implementation" in Srinivasan, R. (2011). *Business Process Reengineering*, New Delhi: Tata McGraw Hill Education Private Limited.
- Chapter 4 "Examples of water supply utility restructuring" In K. Bakker, *Good governance in restructuring water supply*, Federation of Canadian Municipalities. Retrieved from <https://policycommons.net/artifacts/1196982/good-governance-in-restructuring-water-supply/1750106/> on 28 Nov 2022. CID: 20.500.12592/1p5r14.
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