BEST PRACTICE IN CRISIS MANAGEMENT DURING COVID-19 EMERGENCY: A CASE STUDY FROM THE AIRPORT SECTOR

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Abstract

The purpose of this work is to analyze a performing model of process management in a state of emergency in the airport sector. This work reveals the Torino airport model for crisis management realized to ensure the continuation of activities during the beginning of the COVID-19 pandemic. The case study has been analyzed by means of the innumerable measures carried out and included in the operational continuity plan (OCP) of Torino airport (ital. Aeroporto di Torino-Caselle) in Turin, a specific plan aimed to satisfy the exigencies of passengers, the commercial relationship with sub-dealers and commercial partners as well as all the human resources working in the airport during the pandemic spread. The analysis focused on internal documents, reports sent to Airports Council Europe (ACI EUROPE) International to compete the international competition, and public economic and financial reports as well. The findings help to demonstrate not only the model adopted but also the perfect interaction between all the involved corporate sections of the Torino Airport aimed at a main objective: the continuation of activities as well as the safety and satisfaction of stakeholders. For its theoretical and practical evidence, the paper expresses both scholarly and professional relevance.

Keywords: Governance, Crisis Management, Corporate Social Responsibility, Regulations, Innovation Management, Airport Sector

Authors' individual contribution: The Author is responsible for all the contributions to the paper according to CRediT (Contributor Roles Taxonomy) standards.

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1. INTRODUCTION

The European air transport sector recorded a decrease in traffic of 1.72 billion passengers in 2020 compared to 2019, returning to 1995 traffic levels. This is data from the Airports Council International Europe (ACI EUROPE) that frame the effects of the pandemic on the aviation sector of the old continent in 2020: the drastic and dramatic effect of the COVID-19 pandemic affected all sectors of air transport, from low-cost to full-service, from

cargo to charter, generating in Europe alone a traffic decrease of 70.4% compared to the year precedence, for a total of 728 million passengers enlivened throughout the area (ACI EUROPE, 2020).

The European framework is part of a global context where demand has fallen by 65.9%, according to International Air Transport Association (IATA) data, marking the blackest year for aviation in the world. International traffic was reduced by 75.6%, against a capacity collapse of

68.1%, while domestic demand recorded a -48.8%, against a capacity reduction of 35.7%.

As far as the Italian context is concerned, due to the 2020 pandemic, the Italian air transport industry has suffered a dramatic economic impact: the airport system closed the year with only 53 million passengers against 193 million in 2019, losing 140 million passengers in one year, or 72.6% of the traffic.

In such an international context, Torino Airport (ital. Aeroporto di Torino-Caselle) in Turin has stood out for its ability to react to a totally unknown enemy, continuing its public service without fear of the potential economic and financial repercussions. working groups The creation of transversal dedicated coordinating operations to the emergency context, the opening of the COVID-19 test point airport, the first in Italy available to all citizens, the constant flow of information on all platforms to passengers and the airport community, the assiduous dialogue with all partners and suppliers, the almost immediate activation agile working arrangements are just a few examples of the organizational effort that has characterized the 2020 management.

This is the reason why Torino Airport has been awarded internationally in its category and its process management model has been chosen as a case study.

In terms of literature, the works of Scheelhaase et al. (2021), Warnock-Smith et al. (2021), and Suau-Sanchez et al. (2020) express an interesting basis for the research.

To analyze the Torino Airport model, this work has been structured as follows. Section 2 provides an analysis of the literature. Section 3 explains the research methodology realized through the analysis of documents and reports provided by Torino Airport. Section 4 consists of the model analysis. This is the main part of the work and is focused on the operational continuity plan (OCP) applied by Torino Airport. Section 5 provides the economic, financial, and social results obtained using the analyzed model. The work is concluded with a final Section 6 that furtherly describes the importance of the model used and presents the proposals for future analyses.

2. LITERATURE REVIEW

In the wake of the COVID-19 pandemic, there has been a worldwide need to follow corporate restructuring aimed at enabling innovative processes to face potential challenges and keep services active. With the COVID-19 pandemic, resilience and the ability to define agile strategies to deal with a dynamic environment (Agba et al., 2020; Orth & Schuldis, 2021; Korber & McNaughton, 2017) are requirements that have proven to be absolutely valid for the survival of both public and private organizations.

The sector hardest hit was the health sector, which faced incredible and difficult to predict (Donelli et al., 2022; von Behr et al., 2021; Poudel et al., 2021; Leite et al., 2021; Demir & Turan, 2021). However, the literature shows that many sectors have felt the need to reformulate their strategic and operational criteria (Li et al., 2022; Gil Fombella et al., 2022; Elia et al., 2022; Marques et al., 2021; Frederico et al., 2021; Albers & Rundshagen, 2020;

Crick & Crick, 2020), defining new strategies for human resources management (Setiawan & Albert, 2022; Yawson, 2020), and adopting innovative technology systems as well (Ardito et al., 2021; Liu & Yang, 2021; Pratono, 2021; Rangone & Busolli, 2021; Guest et al., 2020).

In this dramatic context, the air transport sector has had a profound impact (Atems & Yimga, 2021; Florido-Benítez, 2021; Truong, 2021; Xue et al., 2021; Warnock-Smith et al., 2021; Nižetić, 2020). This led to a re-formulation of process management but also of the vision that characterizes traditional business models (Albers & Rundshagen, 2020; Suau-Sanchez et al., 2020). The consequences have, therefore, greatly expanded the adoption of managerial parameters (in some cases already adopted and developed) aimed at a continuous and constant interactive relationship with corporate stakeholders (Best & Yalezo, 2022; Malisa et al., 2021; Auer Antoncic & Antoncic, 2011). This is because the blockage of air transport and passenger flows has very important economic, social, and political repercussions (Scheelhaase et al., Florido-Benítez, 2021).

Although the flow of passengers was drastically reduced due to lockdowns and disruptions on flights to and from abroad, airports kept playing a key role, especially in the transport of medical equipment and personnel to combat COVID-19. Unlike others, Torino Airport never closed, not even during the peak of the health emergency, and has defined a prompt response.

The continuation of its public service has been possible thanks to an extraordinary business-to-people (B2P) vision and a high-performance process management model aimed at emphasizing efficiency and speed in adopting specific technologies, reforming passenger services, and reorganizing active staff.

Therefore, given the key role, if, like other sectors, the adoption of new strategies and cutting-edge technology has been able to facilitate activities, only a "socially responsible" vision (Firmansyah & Estutik, 2020; Haryono et al., 2016; Khan et al., 2016) has allowed Torino Airport to achieve important results, not only for the company but for the entire economic and social context of reference.

To date, the literature has highlighted aspects related to environmental issues concerning airline operations during and after the mitigation of the pandemic (Ringbeck & Koenig, 2021; Nižetić, 2020), the determination of measures to protect the health of passengers (Braude et al., 2021), the impact of COVID-19 on the air traffic (Koelle & Barbosa, 2021) and tourism (Florido-Benítez, 2021; Malisa et al., 2021) as well as passenger perceptions of the resumption of air transport (Song & Choi, 2021).

However, no work shows specifically how the airports' operational models have evolved considering the needs arising from COVID-19.

The case study presented in this paper fits into the context of the existing literature, contributing to the demonstration of how the horizons of airports are evolving (or better, how they should evolve) to face the new sector challenges and above all in a context of sustainability, therefore adapting the business process management according to people-oriented models and not exclusively to economic and financial performance.

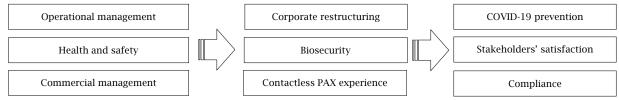
3. RESEARCH METHODOLOGY

In this case study, it is investigated how Torino airport's model for crisis management has been realized through the implementation of a specific OCP approved by the Italian civil aviation authority (ital. *Ente Nazionale per l'Aviazione Civile* — ENAC). It has been conceived according to the *Guidelines* for passenger services at European airports provided by

ACI EUROPE and it has been aimed to satisfy the exigencies of passengers, the commercial relationship with sub-dealers and commercial partners as well as all the human resources working in the airport management company (ACI EUROPE, 2020).

Thanks to the OCP, during the emergency Torino Airport, has achieved excellence through commitment in different and complex areas (Figure 1).

Figure 1. Areas on which Torino Airport has achieved excellence and has been particularly appreciated



Source: Author's adaptation from 47.

Società Azionaria Gestione Aeroporto Di Torino S.p.A. (SAGAT S.p.A., 2020a).

The model analysis is composed of different parts related to the OCP which can be summarized in the following different aspects: 1) operational management, 2) health and safety intervention, and 3) commercial management.

A specific focus concerns the way working groups have been conceived and organized in order to define and realize the procedures for crisis management (Table 1).

The result is a real company restructuring which demonstrates that thanks to a prior securing of the workplace and extraordinary human resources management, the subsequent stages addressed to all external stakeholders have been made possible.

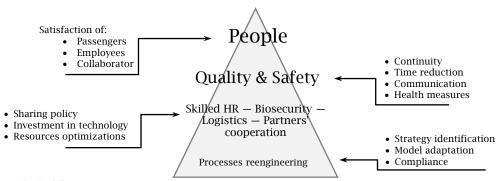
In this regard, particular attention has been paid to the changes in internal communication

aimed to achieve performing results, as well as to the technology used for the implementation of new health systems such as the contactless experience and the biosecurity for passengers.

The analysis of the processes together with the destination and use of resources, in light of the objectives achieved, thus makes it possible to understand that the business model adopted by Torino Airport to deal with the COVID-19 emergency has been indisputably people-oriented.

For this reason, since all the processes upper mentioned have been carried out always maintaining people as a priority, particular importance has been given to the aspects of the applied measures that more than others concern the relationship with stakeholders (Figure 2).

Figure 2. Business model implemented



Source: Author's elaboration

After the model analysis, the paper describes the results it achieved in economic, financial, and social terms. A specific focus is thus realized on the performance appraisal.

This is extremely important for testifying to the efficacy of the model here presented and the results achieved.

All the performances and results identified clearly show an interconnected system in which people are the first and most important category.

In the realization of this case study is important to underline that no comparative analysis with other airports has been carried out since the model implemented by Torino Airport has already been evaluated internationally by the main European airport authority, ACI Europe¹, which gave to Torino the *Best Airport Award* for operations management. Therefore, any statistical or comparative analysis to determine the best practice in the sector would have been superfluous. For this reason, the analysis of the model adopted by the airport of Turin is principally based on internal reports and official documents (courtesy of SAGAT S.p.A²) presented to ACI EUROPE for evaluation

² SAGĀT S.p.A. is the company that manages Torino Airport since 1956.

 $^{^{\}rm 1}$ Airports Council International Europe is an Association representing over 500 airports in 55 countries.

during the international contest Best Airport Award 2020 of ACI Europe — under five million passengers category (SAGAT S.p.A., 2020a).

4. MODEL ANALYSIS

To face the emergency and to manage at best the crisis situation, since the beginning the emergency during the periodic executive board meeting a dedicated section was entirely focused on COVID-19.

To quickly respond to the changed operational scenario, and protect the health and safety of passengers, group workers, and the entire airport community, Torino Airport created three working groups to implement an operational continuity plan (SAGAT S.p.A., 2020a).

The approach was aimed to:

- Implement any regulatory updates within the company's procedures and processes.
- Collect and share best practices with other national and international airport managers and keep in touch with similar corporate functions of other airports and potential providers.
- Share information with working groups members and with the whole company.
- Hold meetings at least bi-weekly within the group and maintain a permanently open channel of communication between members to face realtime scenario changes.

In this context, working groups were created and organized as indicated in Table 1.

Table 1. Objectives of the working groups implementing the OCP

No.	Working group	Objectives
1.	Workplace health and safety	Drafting summary protocol on the safety and health of workers. Implementation and continuous monitoring of all provisions contained therein.
2.	Airport operations/ COVID-19 action group	 Landside and airside remodeling flows and crowd management. Review of operations. Creation of an operating model that makes the airport attractive based on the new needs of the passengers. Liaise with stakeholders (airlines, subcontractors, etc.) to share and gradually adapt procedures.
3.	Commercial extra aviation	Sharing with suppliers and subsuppliers of all security procedures implemented in the airport. Constant monitoring of compliance with established security procedures.

Source: Author's elaboration on the basis of SAGAT S.p.A.

4.1. Workplace health and safety

The protocol on the safety and health of workers, drafted by the Working group No. 1 concerned specific recommendations against the diffusion of COVID-19 in the working environment.

Specifically, the protocol provided for (SAGAT S.p.A., 2020b):

- general rules;
- requirements for health checks;
- arrangements for arrival at the workplace, checks, and delivery of protective equipment;
- modes of conduct (movements workplaces and smart modality) (see Table 2);
 - verification of compliance.

Table 2. Percentage of employees that have been working in smart modality

SAGAT group	Total of employees	Total of employees in smart working	
	No.	No.	%
SAGAT S.p.A.	222	98	44%
SAGAT Hadling ³	132	5	4%
Total	354	103	29%

Source: SAGAT S.p.A. (2020b).

4.2. Airport operations/COVID-19 action group

The continuity of airport operations has been achieved especially thanks to a specific working group No. 2, also named COVID-19 action group.

In clear accordance with the B2P model conceived by the Torino Airport's governance and in compliance with the guidelines provided by ACI EUROPE, the airport operations (COVID-19 action group) organized and managed the operations following a precise framework (Figure 3).

However, it must be stressed that the flow remodeling and crowd management, the review of operations as well as the satisfaction of passengers' needs were possible thanks to a delicate intervention carried out together with internal and external stakeholders.

4.2.1. Premises

In 2020, total investments in infrastructure and plant works amounted to € 4,153,000 (SAGAT S.p.A., 2021a).

The infrastructural and plant interventions were aimed both at the rehabilitation of airport buildings and operating areas and at the conduct of interventions aimed at containing the spread of the COVID-19 pandemic.

In the context of overall investments (Table 3), those specific to contain the spread of the pandemic were the most numerous. Thus, the processes related to these interventions and involved in the business continuity plan have characterized several important aspects.

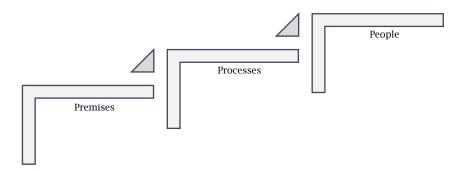
In view of the fact that the number of operations has been very high, an attempt will be made below to provide as accurate a summary as possible of the areas and activities carried out.

According to the guidelines provided by ACI EUROPE, the airport of Turin has adopted preventive measures intended like "premise" (premises), namely immediate actions to put in safety the structure and the stakeholders, giving way to a contactless passenger experience (Figure 4).

³ Company active in the airport sector and provides assistance services to airlines operating at the Torino Airport. It is wholly owned by SAGAT S.p.A.



Figure 3. Path of the main steps to shape a healthy passenger experience according to the ACI EUROPE guidelines



Source: SAGAT S.p.A. (2020a).

Table 3. Investments made by Torino Airport in 2020

No.	Area of intervention	Intervention realized		
	Passenger terminal	1. Reorganization of passport control stations at arrivals and departure levels in the northern		
1		wing of the terminal.		
		2. Installation of automatic tray retrieval systems for security screening of baggage and personal		
		belongings of departing passengers.		
		Completion of the construction of the new training center.		
	Works and supplies	2. Upgrading of the runway touchdown area.		
2	relating to other buildings, airport infrastructure, and facilities	3. Upgrading of thermal power stations.		
		4. Construction of new pipelines and renewal of sections of airport aqueduct networks with		
		the aim of minimizing network losses. 5. Installation of specific electricity metering systems for sub-dealers.		
		6. Completion of relamping activities with new LED technologies.		
		7. Remodulation of the lines of the BHS plant (baggage handling system).		
	Information technology	1. Updating of the hardware devices of the access control system, to gradually expand the use of		
		the new airport passes equipped with contactless proximity chips.		
3		Hardware and software update of the parking management system.		
		3. Enhancing the e-commerce platform to further improve user experience and user interface.		
		1. Installation of special thermos scanners for measuring body temperature and setting up of		
		dedicated monitoring stations.		
	Specific investments for COVID-19 pandemic containment	2. Construction of two new stands for the boarding of passengers on foot (stands 106 and 107).		
		3. Delimitation of routes and spaces (bulkhead, tendiflex), modifying automation and alarms for		
		automatic doors, and installing dedicated and widespread signage.		
4		4. Installation of dispenser systems for hand disinfection.		
		5. Remodulation of air circulation systems, aimed at guaranteeing suitable air renewal due to		
		the pandemic event.		
		6. Installation of new offices and operational spaces (at the passenger terminal and in all airport		
		buildings) to ensure adequate distance of airport staff on duty.		
		7. Completion of the supply of the new hardware and software equipment, in order to facilitate the widespread and rapid recourse to agile work that has involved almost the entire company		
		population.		
		population.		

Source: SAGAT S.p.A. (2021c).

Initial sanitary measures consisted of "no touch" dispensers of water and alcohol-based sanitizing gel installed in various locations (passengers' terminal, general aviation terminal, cargo terminal, staff rooms, baggage handling system (BHS) building, training centre, headquarters, etc.), and again in the installation of automatic machines and outlets of face masks. The protective screens have been installed on the counters or where social distancing was not possible: 1) check-in desks, 2) ticket office and information desk, 3) lounge room, 4) police control stations, and 5) general aviation terminal (SAGAT S.p.A., 2021a).

Additional plexiglass protective screens have also been installed on all boarding gate desks.

In order to avoid direct contact with passengers, an "e-gates" system at the departures

and arrivals level has been installed. In this regard, Torino Airport adopted an innovative touchless procedure to check passengers at security controls. Checks and perquisites made by screeners on passengers have been implemented to reduce as much as possible contact between each other.

The manual control of passengers was carried out by following precise steps and principles: 1) operator safety, 2) respect for privacy, and 3) reduction of the time required to carry out the checks (SAGAT S.p.A., 2021a).

A last aspect included in the *Premises* consisted of the realization of contactless touchpoint to buy Torino Airport services.

In this regard, particularly significant were the improvement of the e-commerce portal and the creation of the Torino Airport APP⁴.

⁴ https://www.aeroportoditorino.it/en/tolive/airport-services/app-torino-airport-en

Figure 4. The "Premises" achieved in compliance withuidelines provided by ACI EUROPE

Premises

Sanitary measures
Use of face masks
Protective screens
Border controls
Security checkpoints
Innovation and technology

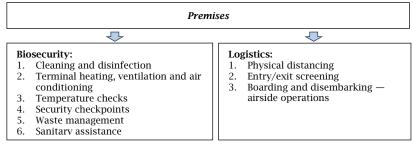
Source: Author's elaboration on the basis of SAGAT S.p.A. (2021a).

4.2.2. Processes

The model used to define the processes to be carried out for a safe and optimal experience at Torino Airport includes two key aspects. The first concerns "biosecurity" while the second is the "logistical aspects" related to landside and airside operations. The measures adopted in the field of biosecurity have been aimed at

perfecting or implementing what has been achieved in the field of *Premises*, through specific investments in technological equipment. In fact, existing processes needed to be adapted to meet the new requirements. Thus, the use of innovative technologies and the organization of processes was necessary to support the actions to be carried out (Figure 5).

Figure 5. Processes achieved in compliance with guidelines provided by ACI EUROPE



Source: Author's elaboration on the basis of SAGAT S.p.A. (2021a).

Biosecurity

The concerns "biosecurity" include:

- 1. Cleaning and disinfection All the airport cleaning and sanitization procedures have been adapted to the national regulatory provisions, in particular to the "Protocol shared between the Government and the Social Parties to realize measures to prevent the spread of the COVID-19 virus in the workplace" dated March 14, 2020, and the recommendations issued by the international aviation authorities (SAGAT S.p.A., 2021a).
- 2. Terminal heating, ventilation, and air conditioning Torino Airport has implemented a series of extraordinary measures related to the systems of air conditioning/ventilation.

In addition to the scheduled maintenance and cleaning procedures, the following activities have been carried out in accordance with the guidelines issued by the Italian National Institute of Health (ISS), Federation of European Heating, Ventilation and Air Conditioning Associations (REHVA), and the Italian Association of Air Conditioning, Heating and Refrigeration (AiCARR):

- to maximize the air flow rate on all machines;
- to eliminate the air recirculation, placing the machine in "all-air" mode;

- to by-pass of the heat retriever, where possible;
- operation of the ventilation system and extraction facilities during periods of continuous use of the station and buildings, in conditions of a significant presence of people and/or potential mass gathering.
- 3. *Temperature checks* A temperature control station has been set up at the entrance of the terminal, both at departures and arrivals levels.
- 4. Security checkpoints Torino Airport defined a new procedure for security check operations. A very innovative security protocol allows passengers to use disposable plastic gloves and disposable plastic cover trays and to scan their personal belongings, avoiding direct contact with public surfaces (Table 4). After two years it may be obvious, but it is important to underline it was a completely new procedure at the security controls at the beginning of the pandemic (SAGAT S.p.A., 2021a).
- 5. Waste management In the whole passenger terminal, Torino Airport placed stickers on bins, with clear information for users about the waste management of disposable masks, tissues, or gloves. Appropriate bins were bought to manage disposable plastic waste. This kind of waste is separately delivered (SAGAT S.p.A., 2021a).

6. Sanitary assistance — SAGAT Group decided to keep open the airport emergency first aid service, managed by the Italian Red Cross (CRI), in order to support SAGAT management during the emergency. A pre-triage tent has been put at disposal both on the landside and on the airside, in case an emergency should occur. In May 2020, the partnership between Torino Airport and the Italian Red Cross Committee of Turin was renewed. Sanitary personnel was also on duty to check the temperature of passengers and airport operators (SAGAT S.p.A., 2021a).

Table 4. Hygienic-sanitary procedures to be adopted at security controls

Step	Sanitary procedures	
Step 1	Hands sanitization	
Step 2	Step 2 Wear of disposable gloves	
Step 3 Plastic bags of various size for passengers' needs		
Step 4	Disposal of the bag in the appropriate containers	
Step 4	after security controls	

Source: Author's elaboration on the basis of SAGAT S.p.A. (2021a).

Logistics

The concerns "logistics" include:

- 1. Physical distancing The achievement of physical distancing has been reached thanks to some specific measures. At the check-in desks, boarding gates, security checkpoints, passport controls, and body temperature checks, Torino Airport put in place measures to maintain a social distance of at least one meter. These solutions include floor marks and posters, indicating to passengers the interpersonal distance to be respected (SAGAT S.p.A., 2021a).
- 2. Entry/exit screening Torino Airport differentiated the path of entry/exit the terminal, both at the departures and arrivals levels. At departures level the access was open only through one entry door and one exit door. In this way, the flows of passengers, visitors, and operators were correctly canalized avoiding gatherings (SAGAT S.p.A., 2021a).
- 3. Boarding and disembarking Boarding procedures paths of the arriving passengers from the departing ones have been clearly separated. Arriving passengers are disembarked through the boarding bridges or through walk-in/walk-out procedures. Torino Airport set up the mezzanine level (level + 3.5 m): It is now totally dedicated to arriving passengers, in order to avoid gatherings inside the passenger terminal, and never overlap departing/arriving passengers' paths. procedures allow the airport to reduce as much as possible the use of buses for boarding and disembarking (SAGAT S.p.A., 2021a). The following procedure was followed in drawing up the plan for the boarding and disembarkation of passengers at Torino Airport (Table 5).

Table 5. Process of creation and approval of the boarding and disembarking procedure

No.	Process	Responsible person/body
1	Plan drawn up by	Post holder movement area
		Post holder terminal
2	Verification carried	Safety manager
2	out by	Compliance manager
3	Approval of the plan	Accountable manager

Source: SAGAT S.p.A. (2021a).

The procedure was conceived to cover operations without the use of interchanges or embarkation decks.

4.2.3. People communication

According to the fast evolution of the regulatory provisions on health emergencies, information signs on social distancing have been installed and similar messages are shown on the local flights information display system in the terminal.

As indicated by the Ministry of Health, in the retail areas open to the public of the passenger terminal COVID-19 information posters have been installed.

Torino Airport launched a structured communication campaign, covering both online (website, social media, and newsletters) and offline communication (digital signage systems, on signs and billboards), as well as sound announcements communication inside the passenger terminal.

This campaign is covering all public areas, in order to remind the basic rules of hygiene and interpersonal distancing.

- 1. From the beginning of the COVID-19 emergency, information has been provided to customers on the website, by dedicating entire pages and focused banners.
- 2. Through social network channels (Instagram, Facebook, LinkedIn) Torino Airport has always been providing information about safety measures, restarting flights, and commercial activities reopening.
- 3. The "WhatsApp" channel has been opened to support the information office during the first phase of the pandemic, in response to the large flow of requests, and to offer passengers an additional mode of instant interaction with the airport (SAGAT S.p.A., 2021a).

All these initiatives were aimed to provide service information and confidence to passengers that the journey through the airport is safe.

Furthermore, phone info point activity never stopped in order to answer the questions posed by customers on flight restarting, dates, entry-exit procedures, and service information.

4.3. Commercial extra aviation

The extra aviation activity refers to services complementary to the aviation activities and concerns a wide and varied range of services, both business-to-consumer (B2C) (i.e., aimed at passengers and airport users) and business-to-business (B2B) (i.e., aimed at companies and economic operators working in partnership with Torino Airport).

All services ancillary to aviation activities have had to adapt and downsize because of the COVID-19 pandemic. However, through constant dialogue with all partners, it has been possible to maintain an essential minimum level of service for passengers.

Specifically, the focus of the working group of Commercial Extra Aviation in consultation with stakeholders was on the following strategic pillars: 1) development of traffic, 2) correctness of operations, 3) quality of services, and 4) health and safety at work.

This strategy allowed Torino Airport to generate value for the services kept active (Table 6).

Table 6. Classification by value generated of Extra Aviation services kept active

No.	Services	Values (in € thousands)
1	Parking	2,068
2	Rent a car	701
3	Food & beverage	696
4	Advertising	456
5	Duty-free	365
6	Vip room & fast track	291
7	Travel & facilities	252
8	Ticket office	221
9	Beauty & fashion	203
10	Other	669

Source: Author's elaboration based on SAGAT S.p.A. (2021c).

year 2020 has, been therefore. characterized by continuous dialogue with all the partners, finalized first of all to renegotiate contractual conditions that have allowed the maintenance of the activities inside the airport. Moreover, the comparison focused on the diffusion of COVID-19 regulations, on actions to give full application also in all commercial units to the prescriptions aimed at the containment of the pandemic and the maintenance of the minimum

essential level of service for passengers, even in the face of limited traffic in certain periods of the year.

5. RESULTS

5.1. Internal and external evaluation of performance

In the general context of great uncertainty and difficulty, thanks to the prompt intervention and the measures implemented and examined in this paper, Torino Airport has been able to limit the damage as much as possible. The overall analysis of the findings that emerged at the end of the audits showed that there were no significant criticalities in the system of internal controls and the organizational structures in charge (SAGAT S.p.A., 2022a).

In full agreement with the control theory (Mella, 2022; Reinking et al., 2020) the management dashboard (Table 7) was used to monitor performance targets and standards to be maintained.

Key performance indicators have been identified in accordance with Table 7.

Table 7. Areas covered by the control dashboard

Activities	Directorates concerned
Security management process	– Technical-operative;
Security management process	 General safety and health.
Management of the general warehouse (focus on loading-unloading of stock)	– Human resources.
Credit management process (focus on trade credits and composition of risk funds)	Finance, control, and information and communication technologies (ICT) administration.
Innovation management and digitization (focus on completed and ongoing projects)	– Finance, control, and ICT administration.
Remuneration and incentive system	– Human resources.
Prevention, protection, and environment	All;Technical-operative.
Passive cycle management — Passive billing (invoices due and payment authorization)	– Finance, control, and ICT administration.
Management of intercompany contracts	 Corporate affairs, legal, and procurement.

Source: Author's elaboration based on SAGAT S.p.A. (2022a).

On a scale of one to five points, the results of the evaluations gave an overall average of four — Adequate⁵ (SAGAT S.p.A., 2022a).

As far as external evaluations are concerned, in November 2020 Torino Airport was recognized as the Best European Airport by ACI EUROPE. As the first in its category (up to five million passengers), Torino Airport was judged by an independent jury made up of civil aviation experts from the European Commission, Eurocontrol, SESAR Joint Undertaking, the European Travel Commission (ETC), and FlightGlobal.

5.2. The economic and financial results

A comparative analysis between 2020 (the year in which the pandemic began) and 2019 seems inappropriate, as it is obvious that the economic and financial performance has suffered major repercussions due to the small number of passengers transported.

What we would like to highlight is the transition from 2020 to 2021, a period that

shows the immediate consequences of a dramatic period of flight reductions and the impact of the decisions taken in terms of business continuity and investments made.

The analysis of the economic and financial performance shows that, although extraordinary investments (linked to the adjustment processes due to COVID-19) were made and high costs incurred for the continuation of operations, as soon as the flow passengers resumed, the main economic indicators also showed a clear recovery. Therefore, in the present case, Torino Airport's short- and medium-term indebtedness must be considered as a real investment in favor of the relationship with stakeholders. The investments made have allowed airport traffic to continue in full compliance with the principle of safety and health. As shown later, this choice has not only led to a very positive social balance but has been widely appreciated and recognized by all stakeholders and has been rewarded by international trade associations, thus increasing the reputational value (Manabe & Nakagawa, 2022; Lins et al., 2017; Walker, 2010) of Torino Airport.

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⁵ The rating of the processes was based on the following attribution of scores: one (1) — Critical, two (2) — Unsatisfactory, three (3) — Improvable, four (4) — Adequate, and five (5) —Excellent.

50 37,203 40 26,583 30 20 10 4,153 5,084 0 EBITDA **EBIT** Net Profit NFP Revenue Investments -5,111 -10 -7,319 -8,407 -11,263 -20 -16,742 -18,565 -19,104 -24,570 -30 ■2020 ■2021

Figure 6. Comparison of the SAGAT group's main economic data for the period 2020-2021

Note: Values in € thousands.

Source: Author's adaptation of SAGAT S.p.A. (2022b).

5.3. The social report

5.3.1. Distribution of the generated economic value to stakeholders

Thanks to the commitment demonstrated and linked to the decision not to stop the process due to COVID-19, in 2020 Torino Airport was able to create an economic value equal to \mathfrak{C} 37,683 (SAGAT S.p.A.,

2021a). This result is the sum of the commitment expressed by a business model focused on people, towards internal and external stakeholders the Torino Airport works with on a daily basis.

As can be seen from Table 8, the total impact of the economic value generated in 2020 is lower than in 2019, the year before the pandemic spread of COVID-19.

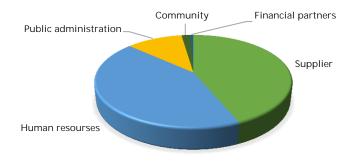
Table 8. ACI impact calculator⁶ on Torino Airport

Impact	2020	2019
Economic value distributed	37,683	53,752
Direct impact in relation to national GDP	64.96	187.38
Indirect impact in relation to national GDP	60.49	174.48
Induced impact in relation to national GDP	21.68	62.53
Catalytic impact in relation to national GDP	944.10	944.10
Total	1,091.23	1,368.49

Note: Values in € thousands.

Source: Author's adaptation from SAGAT S.p.A. (2021a).

Figure 7. Distribution of the generated economic value to stakeholders in 2020



Source: Author's elaboration on SAGAT S.p.A. (2021a).

⁶

⁶ The direct impact is generated by the companies that operate directly at the airport; the induced impact is generated by companies that provide goods, services or assistance to airport activity; the induced impact is generated by the employees of the companies connected with the airport activity, who spend their money on daily needs, helping to generate value in the related sectors; the catalytic impact quantifies the value generated by the presence of an airport on a given territory, facilitating the development of business and work also in other economic sectors.

However, in relation to the difficulties encountered during the year and the strategic decisions taken, the economic value generated was decidedly high and it could not have been issued if Torino Airport had opted for the closure of activities like other airports in the sector. The results of the social impact have been appreciated in many aspects that are examined later.

5.3.2. Awards concerning customer and human resources satisfaction

Torino Airport transported 1,407,372 passengers, recording a contraction in traffic of 2,544,786 passengers, equal to -64.4% on 2019 data (SAGAT S.p.A., 2021a). In 2021, on the other hand, it served 2,066,106 passengers, equal to +46.8% compared to 2020 (SAGAT S.p.A., 2022b). Although aware of the drastic reduction in passenger flow due to regulatory impositions related to lockdowns and the fear of the pandemic spread of COVID-19, Torino Airport has always continued its Quality Policy that provides the customer at the center of its work through the constant improvement of the customer experience. This people-oriented model, therefore, observed the following key points:

- Constant control of process indicators, aimed at continuous improvement of performance (monitoring of the quality provided, detection of customer satisfaction, execution of assessments).
- Understanding of the needs and expectations of the customer. This resulted in the execution of more than 30,100 recordings (including interviews and performance measurement) (SAGAT S.p.A., 2021a).

This attention to the needs of its customers has allowed the Airport to achieve important international recognition and direct appreciation from passengers (SAGAT S.p.A., 2021a):

- index "Airport Service Quality" 2020: 4.09/5;
- airport health accreditation;
- the voice of the customer;
- customer experience accreditation level 1:
- overall satisfaction (interviews) 2020: 97.4%.

So, despite the inconveniences and the drop in traffic caused by the COVID-19 emergency, the quality monitoring system has not only been maintained but, as clearly attested by the numerous awards obtained, has produced an inestimable value given the dramatic period.

Regarding human resources, SAGAT Group has always considered them a key factor for business development. Two aspects, in particular, have determined the relationship with the human resources of Torino Airport during the COVID-19 pandemic: 1) the specific training process and 2) the smart working mode.

From the analysis emerges that every employee of SAGAT S.p.A. has undergone an average of 22.37 hours of training per employee (SAGAT S.p.A., 2021a).

In order to monitor the development of smart working, a survey was conducted in which 82.5% of the employees involved participated. It revealed an overall positive assessment. The most appreciated aspects were those related to personal needs. In the stratified analysis by sex and length of service, the data allow us to understand which

groups most appreciated agile work to organize family and children (86.7% of women) or to improve their wellbeing (69% of women and 76% of younger employees) (SAGAT S.p.A., 2021a).

All this, together with the work carried out by the working group *Workplace Health and Safety* (which has taken a number of important measures to minimize the risk of contagion between passengers and airport workers), has enabled Torino Airport to receive the TÜV Italia "*Hygiene Synopsis*" certificate for the protection measures implemented for the workers.

6. CONCLUSION

In the model analyzed in this work, the mere economic-financial performance has taken second place to give way to the interests of the people (employees and passengers), the various stakeholders (suppliers and business partners), and the whole community, in full agreement with the most recent and harmonious doctrines on corporate social responsibility.

The B2P model, applied by Torino Airport for several years now and exalted in this dramatic global pandemic context, has in fact made it possible to maintain high passenger confidence in the entire air transport sector. The targeted — but nonetheless continuous — investment plan has made it possible to set up structures adapted to the new emergency situation and to implement the numerous training processes, those for health adaptation, the management of safe flows as well as those typically operational in the sector.

The case study provided by Torino Airport thus expresses an extraordinary example of how companies, pursuing the ideal of shared value, can really contribute to the common good without necessarily incurring drastic losses.

On the contrary, attention to the needs of stakeholders can turn into a potential characterized by performance and concrete results that not only create economic value for the territory but also define an economic-financial return for the company itself thanks to the satisfaction of customers and stakeholders, all of whom have been adequately served.

It has been shown that, in the general context of the airport and commercial closure due to the COVID-19 pandemic, corporate governance is able to address even the most worrying challenges. As can be seen from this case study, in the specific case of Torino Airport, this was achieved through multiple interventions: the prompt implementation of new internal regulations governing the management and operational structures, the application of innovative technological systems aimed at protecting workers and passengers, the efficiency of operations to be carried out for passenger traffic as well as for air traffic.

Through this evidence, this paper aims to provide important concrete data on the airport sector that are difficult to find in academia. This is done with a double hope: first of all, the best practice recognized at Torino by ACI EUROPE can serve as an example for smaller airports; secondly, at an academic level, it is also possible to stimulate

⁷ The Italian branch of the TÜV SÜD Group offering certification services in the field of quality, energy, environment, safety and products.

new debates and confrontations on the subject of governance and regulation in airport and air transport.

As mentioned at the beginning of this paper, given the official recognition of *Best European Airport* by the ACI EUROPE, it was not considered appropriate to carry out benchmarking. However, in order to increase the potential of this paper and

stimulate new analyses, the author proposes to continue the investigation through the understanding of what has actually been implemented in the area of regulation and process management in smaller airports following the dramatic experience caused by the COVID-19 pandemic.

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