

What business are airports really in?

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Abstract

Most airports have an elevated vulnerability to aviation market fluctuations, which was emphasised during the coronavirus disease-2019 pandemic, when most airports experienced traffic downturns in excess of 90 per cent. This led them to batten the hatches by cutting operational costs to the bone, shelving major capital programmes and shuttering swathes of terminal infrastructure. Worldwide, terminals became ghost towns, and there were rumours of airport bankruptcy. The crisis made it patently clear that airports typically had very little alternative income with which to keep the wolf from the door during such events, leading the authors to ask the question whether the airport business is not too specialised and whether it might not benefit from diversification. In considering this question, it became apparent that the airport business as we know it today might also be in danger of major disruption within the next decade. This paper argues that it might be time for airports to reassess their business model by asking the question:

What business are we really in? The proposed answer might be surprising for many airport authorities who have focused on aviation as their core business for the past century. The paper offers a range of provocative thoughts and ideas aimed at encouraging airport authorities to reassess their strategic plans and innovate towards a more resilient and sustainable business model that is integrated with their surrounding communities and regions, while staying ahead of the evolution of the mobility market.

Keywords

business model, resiliency, diversification, innovation, disruption, mobility, connecting

DEFINITIONS

Some terms are used in their common sense, while others have been used in a particular sense:

Airport refers to larger aerodromes, whether publicly or privately owned, with scheduled commercial passenger and cargo service.

Airport authority refers to the commercial and organisational entities that manage or own airports, as defined earlier, on a going concern¹ basis.

Circular economy is defined by Dame Ellen MacArthur as one ‘based on the principles of designing out waste and pollution, keeping products and materials in use, and regenerating natural systems’.² It is a blanket term that unifies a large variety of sustainability initiatives and theories.

Mobility refers to the movement of people and things globally, through all modes of transportation.

Mobility as a Service (MaaS), as defined by the MaaS Alliance, refers to ‘the integration of various forms of transport services into a single mobility service accessible on demand’.³

Mobility hub. The definition of a mobility hub changes depending on geography, but generally mobility hubs represent major transit stations and their surrounding areas, with significant levels of planned transportation service and high residential and employment development potential within a certain

radius of rapid transit. Alternatively, some areas define mobility hubs as places of high connectivity where different modes of transportation come together seamlessly and where there is an intensive concentration of working, living, shopping, and/or playing.

Supply chain. Will Kenton provides this rich definition:

A supply chain is a network between a company and its suppliers to produce and distribute a specific product to the final buyer. This network includes different activities, people, entities, information, and resources. The supply chain also represents the steps it takes to get the product or service from its original state to the customer.⁴

THESIS

The traditional airport business model is built on a single product offering — the ability for people and cargo to board and deboard aircraft. Most other airport-revenue sources support this key activity. The coronavirus disease-2019 (COVID-19) pandemic demonstrated that this single offering might also represent a single point of business failure. It highlighted the fact that most existing airport infrastructure is dedicated to one specific business offering, which resulted in most airport services and facilities being either closed or severely underutilised during the pandemic. Many

airports pivoted some of their operations to cargo, but generally all they could do was cut their operational costs and capital programmes to protect liquidity, while waiting for demand to return.

Ancillary to that, airports have historically been forced into locations well outside of urban centres and are typically poorly integrated into the surrounding city fabric. The drivers of this phenomenon were things like zoning regulations aimed at protecting communities against the adverse environmental impacts of aerodromes (eg aircraft noise, air pollution etc), the availability of land and their history — coming of age during the era of car dominance, when driving out to the airport would have been seen as a bit of an adventure. Once an airport has been located, it cannot simply be moved — the sheer size of their footprints, and the magnitude of the capital invested in them, typically make such ideas unfeasible, thus limiting their opportunities to dynamically adapt to market conditions.

At the same time, various developments — some of which are being accelerated by the COVID-19 pandemic — are underway, holding the potential to disrupt the traditional airport business model. Developments are as follows:

- Urban air mobility vehicles, capitalising on developments in vertical take-off and landing (VTOL) technology. They are spawning a new generation of aircraft, powered by renewable energy, which can take off and land from nearly any location and do not require a runway. Coupled with fast-evolving autonomous control systems, these vehicles could theoretically become as accessible to the general public as cars did in the early 20th century. A good example of this trend is Uber Elevate.⁵
- The emergence of delivery drones (eg Amazon Prime Air⁶), which can deliver parcels autonomously, raises questions of whether these will have a place within airports, or whether they will operate outside of the airport sphere, competing for the same air space.
- The development of quiet, clean aircraft engines⁷ — both alternative-fuel and electrically powered, which would eliminate the need for airports to be located away from urban centres to control noise and pollution.
- High-speed ground transportation technologies like high-speed rail (HSR), magnetic levitation trains and hyperloops, changing the role that aviation plays within the broader regional mobility network, by shifting demand primarily towards long-distance trips, with rail preferred for short-to-medium distance trips.⁸
- The general resurgence of mass ground transportation of all modes, fuelled by the global environmental crisis.
- The growth in Mobility as a Service (MaaS). Multimodal mobility is viewed more holistically as an integrated network where different modes of transportation each work together and play a role throughout a trip (eg walk to a transit stop, take a bus to a neighbourhood and complete the last mile via bike share).
- The growth in mobility hubs, as cities increasingly focus their development efforts in areas with high concentrations of transportation options.
- The unrealised economic potential of the massive employment zones that typically surround airports, to which they tend to be poorly connected. For instance, Toronto's Pearson Airport is

the second-largest employment zone in Canada, contributing 6.3 per cent or CAN\$42bn of Ontario's GDP.⁹ This is more than the central business districts of other major Canadian cities like Montreal, Vancouver and Calgary, yet despite this, the airport has relatively poor connections to its surrounding region characterised by an excess of vehicular parking, highway connections and a single train link that solely transports passengers to/from Toronto's downtown core.

- Last, but not the least, the significant headwinds created for the aviation sector by a global societal change favouring decarbonisation and circular economies, combined with the growth of 'flight shame' ('flygskam' in the original Swedish), through the efforts of a newly invigorated youth-led environmental movement epitomised by activists like Greta Thunberg and the Extinction Rebellion movement.

This raises the question whether the current airport business is sustainable, and if not, how airports could innovate and diversify organically, anticipating near-future changes and positioning for long-term changes, thus ensuring their continued survival as going concerns. People still need somewhere to live, and goods still need to be delivered throughout a pandemic or economic downturn, but commercial travel drops. Could airport infrastructure be leveraged to include industries that are more recession-proof, to spur economic activity?

Harvard University Professor, Theodore Levitt, is credited for popularising the question: 'What business are you really in?' The first few paragraphs of his 1960 Harvard Business Review article, 'Marketing Myopia', uncannily describes

the dilemma facing airports today. He starts by saying that:

Every major industry was once a growth industry. But some that are now riding a wave of growth enthusiasm are very much in the shadow of decline. Others that are thought of as seasoned growth industries have actually stopped growing. In every case, the reason growth is threatened, slowed, or stopped is not because the market is saturated. It is because there has been a failure of management.¹⁰

He then goes on to describe this close-to-home example, in which it might be useful to substitute the word 'railroads' with 'airports':

The railroads did not stop growing because the need for passenger and freight transportation declined. That grew. The railroads are in trouble today not because that need was filled by others (cars, trucks, airplanes, and even telephones) but because it was not filled by the railroads themselves. They let others take customers away from them because they assumed themselves to be in the railroad business rather than in the transportation business. The reason they defined their industry incorrectly was that they were railroad oriented instead of transportation oriented; they were product oriented instead of customer oriented.¹¹

Another way of phrasing Levitt's question would be to ask: How do you create value that matters to your clients/end users? Or you could simply ask: Why? as advocated by Simon Sinek.¹² Why should airports exist? If one could drill down to the root cause of this why, it might provide vital insights into what airport authorities could be doing to remain in step with their rapidly changing world and customer base.

WHY SHOULD AIRPORTS EXIST?

The historical *raison d'être* for airports could be summarised as follows: The world needs airports so that people and cargo, transported to the airport by road, can board and deboard aircraft that need long runways and restrictive take-off and landing rights of way to operate safely and thus get part-way from Point A to Point B. Many of these assumptions are in danger of being disrupted. Consider that:

- The available modes of transportation are constantly increasing in number and cities are ramping up investments in various modes of ground transportation because it is a significantly more sustainable alternative than driving and flying. The aviation industry is increasingly being pressured to decarbonise their operations, encouraging passengers and cargo forwarders to use alternative modes, where available. Flying has become just another leg in the multimodal journeys of passengers and cargo. The burgeoning MaaS industry portends an era of app-based, on-demand, end-to-end mobility services that would be agnostic of the mode of travel, as long as it is low carbon.¹³
- Depending on the sophistication of ground transportation infrastructure, air travel is no longer the favoured mode of travel for trips of shorter duration. According to the International Union of Railways, extensive research in different markets has proven that HSR, where available, dominates the market for trips shorter than 3.5 hours.¹⁴ This means that, as the HSR market evolves, the 'spokes' of traditional airline hub and spoke operations will increasingly be overtaken by various modes of ground transportation, with flights

favoured only for long-haul journeys. For instance, during the HSR expansion in China between 2007 and 2014, the number of air passengers per route fell 7 per cent for routes that faced HSR competition but grew 32 per cent for destinations that did not compete with HSR. It was also estimated that further expansion of the HSR network and enhanced frequencies are anticipated to lead to further declines in air travel on competing routes in the future.¹⁵ There might be opportunities for airport authorities to influence the planning and development of this regional rail market, so as to secure walkable connections between transportation stops and their airports, rather than letting these developments happen elsewhere and suffering the loss of their regional air connections. A good example of this would be the 'joined-up thinking' proposed by Alistair Lenczner, '... throughout the transportation sector, viewing aviation, high speed rail and regional rail as 'a complete system'.¹⁶

- The basic principles of how aircrafts take off and land dates from 1903, and are ripe for disruption by VTOL concepts. It is unlikely that VTOL aircraft will displace all aircraft types, even in the long term, but they could well displace a fair proportion of traffic, starting with short-haul routes. Without the need for runways on most routes, would the current locations of airports still be optimal, or would they be at risk of being disrupted by new entrants into the market, converting old parking lots and rooftops or investing in new developments within urban cores?
- Aircraft engines are being designed to operate ever cleaner and quieter due to growing environmental concerns and associated political and regulatory pressure. This could resurrect the feasibility

of the much-maligned downtown airports as well as leading to changes in the zoning by-laws governing airports and their surrounding land, which were historically focused on industrial uses, due to noise and pollution. This will open opportunities to incorporate more of a mix of uses in and around airports.

- Airports increasingly need a ‘social license to operate’,¹⁷ which means that they need to become model neighbours to their surrounding communities, rather than disruptors and polluters.
- Airports have typically focused primarily on one mode of transportation, without recognition of the fact that there are reasons people and things must board and deboard aircraft. To use Leavitt’s phrase, cited above: ‘The reason they defined their industry incorrectly was that they . . . were product oriented instead of customer oriented’.¹⁸

Taiichi Ohno, pioneer of the Toyota Production System, advocated that one ‘Ask ‘why’ five times about every matter’.¹⁹ The thesis is that five is roughly the right number of times to ask why in order to reach the root of an answer. If one were to ask the question, why should airports exist? five times, it might go something like this:

1. Why should airports exist? So that aircraft can take off and land safely.
2. Why do aircraft need to take off and land safely? So that they can load and offload people and things (and also to be serviced, but that is not the primary reason).
3. Why do aircraft need to load and offload people and things? Because people and things need transportation by air.
4. Why do people and things need transportation by air? Because they need to move from one place to another.
5. Why do people and things need to move from one place to another? Because people and/or things in one place need to be connected with people and/or things in another place, for society to function.

So, what business are airports really in? They are in the connecting business — the business of connecting people and things in different places with one another. They are not in the mobility (or transportation) business — that belongs to the operators of buses, trains, airlines, ride share applications etc — but they enable mobility by facilitating the necessary connections between modes and providing all the infrastructure that supports those processes. Airports could well be the highest-level connectors of the physical realm, with the internet service providers fulfilling an analogous role in cyberspace.

The reality is that people and things (including baggage and cargo) want and need to move from point A to point B for whatever reasons (mobility is a fundamental human need), but no single mode of transportation can yet provide them with the ability to do so directly for all journeys. With the trajectory of environmental degradation, it is increasingly considered that mobility be a service provided on demand, rather than through an unchecked proliferation of purchased, and therefore underutilised vehicles.²⁰ Depending on the distance for which mobility is required, a certain number of connections between different forms of mobility would be required — some including connections with large aircraft — the only interface airports currently facilitate.

Should airports still be confining themselves only to large aircraft mobility connections in the 21st century? Our

communities are changing in a way that requires airports to not only look at how people come and go within an airport, but also look at how people and goods come and go beyond the airport. Historically, providing an abundance of parking on-site was the answer for providing external connections. This is changing, as vehicle ownership decreases.²¹ The opportunity for airport operators is to act as connectors for the entire transportation network, and to do so in ways that facilitate the decarbonisation and circularisation of world economies.

This raises two questions:

- How can airport authorities become enablers of mobility?
- How can airports become mobility hubs?

To facilitate an open-minded consideration of these questions and to remind readers that:

- Airports might have to shift their focus beyond just ‘air’ mobility, and that
- Airports might be better thought of as ‘ports’ serving all types of mobility.

The two entities mentioned earlier will henceforth be styled differently:

- Airport authorities will be styled as (air)port authorities.
- Airports will be styled as (air)ports.

HOW CAN (AIR)PORT AUTHORITIES BECOME ENABLERS OF MOBILITY?

The most important single message for (air)port authorities is to realise and come to terms with the business they are really in — the fact that their focus

should be much broader than only air mobility, and to rethink their strategies and plans accordingly. It requires a complete change in mindset — pivoting from being the enablers of air mobility to being focused on why people and things need to move — and have their journeys connected, formulating plans and providing facilities and services that meet those end users’ real needs.

It is a truism that every (air)port is different. The authors can therefore only offer a broad, generalised list of provocative suggestions to stimulate innovative thinking. (Air)port authorities need to study their own unique circumstances and formulate strategies that are both appropriate and opportunistic for their conditions. Some (air)port authorities might already be addressing many of these suggestions. They are offered in the hope that some of the ideas might spark ideas not yet considered or understood in the same way.

Pre-empt disruption: (Air)ports might consider protecting themselves against future disruptions in aviation and mobility by following the advice of Harvard Business School Professors, Bower and Christensen, in their Harvard Business Review article titled: ‘Disruptive Technologies: Catching the Wave’. Apart from making it abundantly clear how unwise it is for companies to ignore disruptive technologies, they advocate that companies study the market and clearly identify potential disruptive technologies, define their strategic significance, locate a market for them and then create an independent organisation to serve the emerging market. (In a sense they are advocating that companies disrupt themselves). History has shown that these disruptive technologies often grow at much faster rates than established technologies and they make it quite clear that

the original enterprise might have to succumb to the new entrant they created.²²

Strategic planning: (Air)port authorities might benefit from expanding their vision to include the greater (air)port environment and trying to create an ecosystem of enterprises rather than focusing only on a single facility (the (air)port). Many (air)ports have been developing ‘(air)port cities’ (Denver, Hong Kong, Frankfurt etc), but the rethink could potentially go much deeper and wider than just creating a focused economic hub around the aerodrome.

Diversification: (Air)port authorities could diversify their asset base by investing in a portfolio of counterbalancing, mobility-connecting enterprises that support the operation of their primary asset, the (air)port. The key would be to invest in businesses that complement and support that of their ‘home’ (air) port. This could include enterprises in aligned industries, such as cargo terminals for various types of mobility (sea, land, air etc), and could be located off-site. The objective would be to control upstream and downstream ‘port’ facilities that enable all manner of transportation connections, such that by controlling them, the (air)port protects itself against competition and downturns in demand in any of the modalities it is enabling. A fascinating example of diversification by an (air)port operator is the recent acquisition, from Amtrak, of the concession to design, build (redevelop), finance, operate and maintain the historic Gray 30th Street Railway Station in Philadelphia (with 12 million annual customers) by the Vantage Airport Group, as part of Plenary Infrastructure Partners.²³

Facilitators of MaaS: MaaS cares about the mode of transportation only in so far as it is low carbon.²⁴ This does not spell well for aviation as we know it. Would it

be appropriate to invest in this market, so as to stay abreast of developments and thus secure the role of (air)ports within it?

Supply chain facilitators: During the COVID-19 pandemic, the only types of mobility that flourished were those related to supply chains — it was the only available counterbalance to people mobility. It therefore might be useful for (air)port authorities to give cargo mobility a greater weighting in their range of offerings and to consider how they might become active players in regional supply chains by providing supporting facilities and services.

Social license to operate: (Air)port authorities could become facilitators of mobility by being good neighbours and being active in building and enriching their local communities, thus gaining a social license to operate and fostering greater interconnectivity, which would not only benefit their communities, but their own businesses as well. (Air)ports could consider acquiring adjacent land for development and could enter into mutually beneficial arrangements with adjacent landowners and other regional entities to increase their (air)port’s integration into the community it serves.

HOW CAN (AIR)PORTS BECOME MOBILITY HUBS?

Mobility interconnectedness

Curbside Management: (Air)port authorities might consider proactively upgrading their curbside management for future autonomous vehicles. The existing private-vehicle ownership model (where most people own a car) might change as autonomous vehicles emerge and the mode might change more towards ride hailing. Thorough consideration needs to be given as to how

these might integrate with transportation improvements lest the errors of the past — asking passengers to all drive to (air) ports — be repeated with autonomous vehicles, swapping abundance of parking space for abundance of pick-up/drop-off space.

Regional Transit Links: (Air)port authorities might consider greater investment in regional rail links to support a shift towards serving mostly the long-distance aviation market and leveraging the strides that HSR is making by using it to better integrate with rail connections. Rather than being disrupted by them, (air)ports could take advantage of the synergies between the two modes, thus creating new opportunities to further their core business of connecting people and things. A good example of this is Lufthansa's Express Rail connections to 14 cities from Frankfurt Airport that can be booked on a single ticket, with a seamless intermodal connection between air and rail at the airport.²⁵ Hong Kong airport did the same for ferries.

Commercial vehicle connections: (Air)port authorities might also consider how commercial vehicle movements connect and interact with their (air)ports, and whether there are opportunities to leverage intermodal connections to rail and shipping to provide more cost-effective delivery solutions. This would be similar to the way urban mobility networks are changing to serve trips with multiple different modes (ie walk for a portion, take transit for a portion, transfer to a ferry for another portion).

Freight Automation: Considering the substantial cost and specialisation of airport baggage-handling systems, and the fact that they are not utilised 24 hours a day, there might be opportunities to increase their return on investment by

considering how existing automated baggage-handling systems might be able to be adapted for freight and package handling during off-peak hours or seasons. The current freight supply chain is already multimodal but is starting to shift away from (air)ports towards dedicated freight hubs. (Air)ports might consider how regional transportation or rail links may serve a broader purpose for connecting (air)ports to freight supply chains and opening opportunities to serve this purpose within the community. (Air)ports could conceivably become freight hubs used by small businesses or freight operators alike, thus mitigating infrastructure costs related to both baggage and parcel/goods handling. This could further expand to better integrate aviation, rail, truck and ship freight by incorporating (air)ports into more diverse supply chains.

Baggage handling as a separate business: The COVID-19 pandemic has highlighted the difficulty of sanitary hand luggage processing, with some airlines banning larger, wheeled baggage types. It has also raised the prospect of separating passenger and baggage processing prior to preboarding security checks to speed up the departure process. This trend is taken to its logical extreme in door-to-door baggage handling, which has tended to be more of a niche offering, but which might grow into maturity as MaaS gains traction. Consider how a single app reservation might allow travellers to have both themselves and their luggage picked up at home, but travelling separately, with full tracking of progress and reuniting in their hotel room. If these thoughts were combined with those on freight automation, there might be value in (air)port authorities creating separate (possibly subsidiary) goods-handling companies

with a broader mandate to serve both the (air)port's and the broader community's goods-handling needs.

Integration with the surrounding urban fabric

As newer, more fuel-efficient and quieter aircraft are introduced, this may mitigate noise issues and other negative externalities that have precluded a desire for residential living close to (air)ports. Urban design and architecture can mitigate the impacts of noise and traffic that are often associated with (air)ports. While in the immediate future, height restrictions are likely to be maintained due to how conventional aircraft operate, in the future, new VTOL vehicles (that can land and take-off vertically) may make (air)ports more suitable for higher densities and residential developments. (Air)ports might also want to consider whether they should be diversifying their offering by investing in sites further afield, more focused on VTOL vehicles, as they have all the technical expertise to manage such sites. Why allow outsiders to disrupt the (air)port business?

Mixed-Use Developments: (Air)ports could promote and develop a mixture of land uses to create more sustainable, livable communities in and around them. Many (air)ports are exclusively surrounded by industrial or commercial uses, but there are opportunities to consider that there is a growing shift towards urbanisation, where people are opting to live closer to their work. Many airport employment hubs push prospective employees into purchasing a vehicle due to limited nearby residential units. This in turn translates into more car-oriented environments that preclude opportunities to change (air)ports into destinations

rather than sterile utilitarian facilities. For instance, the presence of residential uses may present opportunities for (air)ports to become commercial centres that do not just serve (air)port passengers, but the broader community, which could be a new source of revenue through commercial rent and revenues.

The vast potential of being a 'port': (Air)ports are not only functional infrastructure. If one views (air)ports more as 'ports', or gateways, the rich heritage of vibrant urban and business life associated with such facilities globally becomes apparent. Historic examples include the gates of walled cities, oases in the desert, wayside inns, waterfront developments (like the V&A Waterfront²⁶ in Cape Town, which is inside an operating deep sea port and attracts 24 million visitors per year, see Figure 1) and the cities that grew up around the major sea ports of the world — cities like Amsterdam and Venice. Just thinking about this rich precedent should give (air)port authorities a sense of the vast potential of the business they are in, if only they could liberate themselves of cars and other functional impediments to urban enrichment. Once again, this would require a change in mindset as a precursor to an improvement in business resiliency.

Environmental responsibility: As primary 'connectors', locally and globally, (air)ports will bear the mantle of executing the world's rapidly deepening environmental agenda. While sustainability per se is not the subject of this paper, it nevertheless is a core ingredient for resilience — both socially and physically. It is sufficient to quote Olivier Jankovec, the current Direct General of ACI Europe, in the press release announcing the publication of ACI Europe's Sustainability Strategy for Airports:



Figure 1 A panoramic view of the Victoria and Alfred Waterfront in Cape Town, South Africa, showing some deep sea port activities on the upper left side of the image²⁷

Times have changed. Economic disruption, rising inequality, depleted resources, new societal values and political dynamics mean that airport operators are facing a new imperative: putting their societal purpose at the heart of their business strategy. This is about embracing a new Business-to-People paradigm. This comes with the need for airports to maximise the added value they provide to society — including through enhanced engagement with their communities and other stakeholders.²⁸

The reader is encouraged to read the full document, available from the ACI website.²⁹

Automated airside mobility

(Air)ports could automate airside mobility services, such as passenger assistance vehicles, aircraft service vehicles, and passenger shuttle vehicles. Currently, the biggest challenge for automated vehicles (AVs) remains the abundance of

unknown and unforeseeable issues that might arise while driving down a roadway, which would require a driver or, in this case, the AV to react appropriately on the spur of the moment. Safety could, however, be substantially enhanced by setting specific parameters for their operation. Fortunately, (air)ports operate in highly controlled environments, particularly on the airside, reducing the number of challenges AVs might face. The airside and its operations would however need to be re-planned holistically, with AVs in mind.

AVs may also offer opportunities to reduce operating costs by leveraging automation with fewer vehicle operators needed, although these financial benefits may be limited by the amount of supporting infrastructure required to manage the AVs.

Operational savings from AV implementation may present opportunities to reinvest in customer service or other priority areas that will further enhance the (air)port's competitiveness in their local

market. For instance, savings may be able to trickle down into the development of more experience-oriented facilities that attract people to the airport, even if they are not flying. They also afford flexibility for (air)ports to dynamically adapt to market conditions, or even flexibly change operations overnight.

LEADERSHIP

While not the objective of this paper, it is hard to imagine that the proposed reorientation of the (air)port business would not also lead to or require different leadership skills, both to make the necessary course corrections and to lead the resulting organisation(s). The authors are by no means qualified to opine on this subject other than to suggest that it might be useful for leaders to have experience and skills in the areas of the specific opportunities identified in a new strategic plan thus developed for each (air)port. For instance, if an (air)port identifies significant opportunities in cargo and freight, experience and knowledge of global supply chains might be useful; or if significant opportunities in commercial development are identified, real estate development expertise might be of benefit. In all cases, however, the thesis of this paper would suggest that a customer-centric mind set (including all the environmental responsibility that entails) would be indispensable for navigating the transition to a more resilient and sustainable (air)port business model.

CONCLUSION

The (air)port business is based on a model that proved insufficient at protecting revenues during the COVID-19 pandemic. The ensuing crisis showed

that (air)port authorities tended to 'have all their eggs in one basket' and that, apart from the environmental imperatives facing it, the (air)port business as a whole might be ripe for disruption in the next decade by a range of fast-evolving mobility-related innovations and movements. A thorough interrogation of the question, 'Why do airports exist?' seems to indicate that (air)ports are actually in the connecting business. They might therefore benefit from shifting their focus beyond aviation, to include the entire mobility spectrum, including global supply chains and considering how they could act as ubiquitous connectors (and therefore also environmental stewards) within this space. By realising their roles as 'ports', airports could also evolve into rich, dense, highly connected urban 'people places', fostering a wide range of revenue sources for the (air)port authority. By studying their own unique circumstances in this light, (air)port authorities might be able to identify strategies that would enable them to increase the resiliency of their businesses by diversifying their offerings and pre-empting disruption.

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