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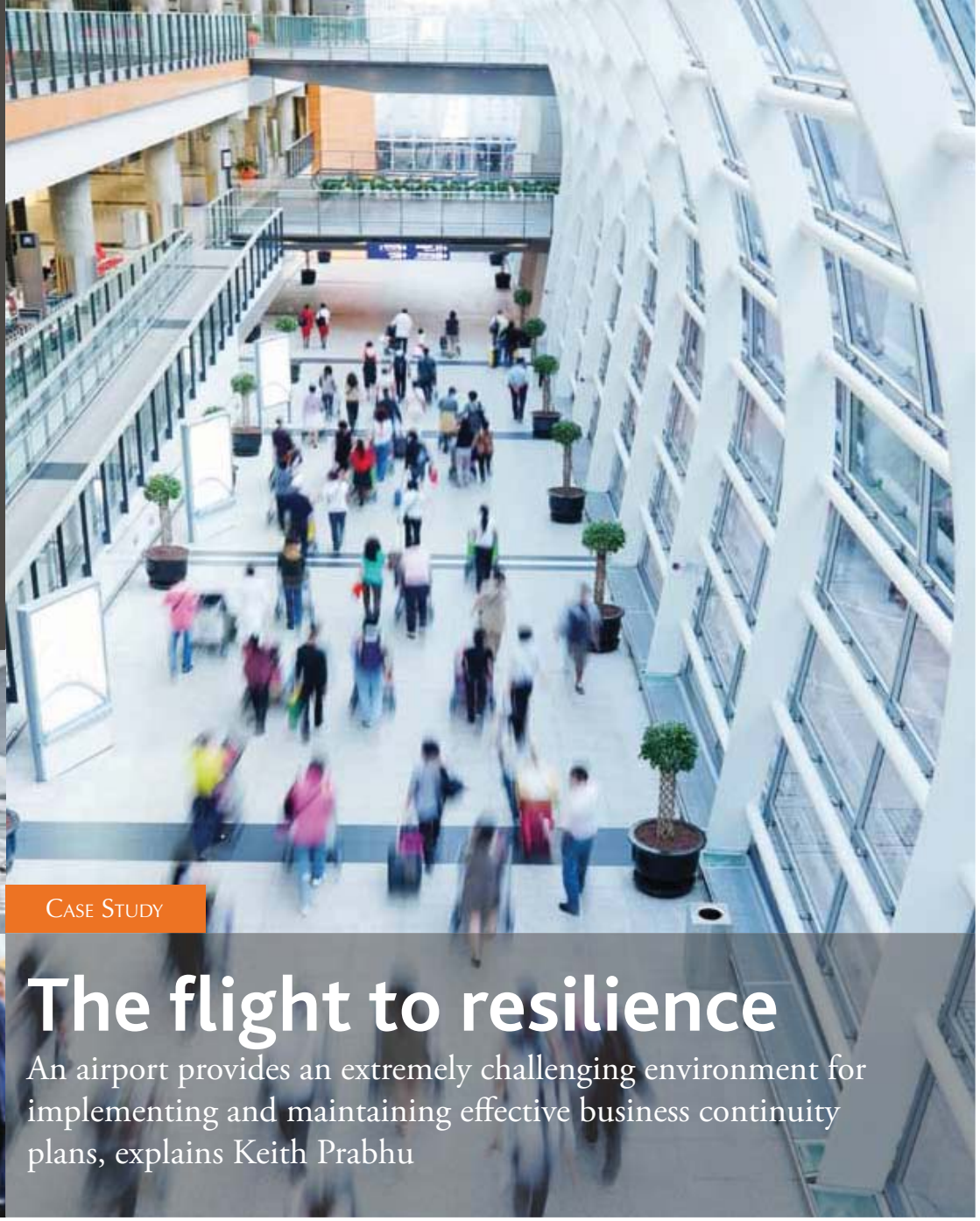

Case Study

# The flight to resilience

An airport provides an extremely challenging environment for implementing and maintaining effective business continuity plans, explains Keith Prabhu

Air transport has today become more of a necessity than a luxury. One could hardly imagine in 1903 when 'Wright Flyer I' took flight that air transport would become such an important part of our lives. However, alongside its growing importance has come the need to handle the complex logistics that underpin it. Airports have sprung up all over the world to cater to our needs, and while aircraft are the means that enable us to travel, it is these hubs of activity that have facilitated the standardisation of the air travel process and made it available to as many as possible.

Air transport has also become critical to the economy of every country. While international airports enable cross-border transport, domestic airports enable intra-country trade. Hence an airport is not just a critical asset to the airport operator (private or public) but also to the country. Any disruption of airport operations has serious repercussions. In addition to the direct impact on the country's economy, there is also a negative impact on the country's reputation. It is for this reason that airports are classified as part of 'Critical National Infrastructure' by governments across the world and are accordingly protected.

While most risks can be objectively evaluated and mitigated, business continuity management is needed to mitigate the impact of those risks that cannot be easily predicted and accurately quantified. This article seeks to outline one of the approaches to implementing BCM at airports and encapsulate some of the insights gained from this process.

## Understanding airports

The airport ecosystem is incredibly complex. There are a large number of entities, both private and government, that need to interact with each other to ensure successful airport operations. This also includes the private agencies like baggage handlers, transport companies, fuel companies and commissionaires, which are closely intertwined to facilitate the smooth running of the airport.

In fact, in this symbiotic system, the actual airport operator is significantly constrained. It cannot unilaterally take decisions without approvals from government bodies. In matters of security and operations, the airport operator is heavily regulated not just by national but even international organisations.

One of the biggest challenges in implementing BCM for airports is integration of government functions into the overall BCM strategy. These include the immigration and customs departments that also need to understand the need for BCM. At times, they are slow to appreciate this need and hence it is difficult to get them on board. In international airports, matters are further complicated by

the need to segregate those who have passed immigration check from those who have yet to do so. Potential 'contamination' of passengers is a nightmare scenario for airport operators and government agencies alike.

Airports also have unique and expensive equipment for which redundancy cannot be easily built in. One such example is the machine required to clean the runway. Constant landing of aircraft leaves rubber residue on the runway. This reduces the friction that is required for safe landing and takeoff of aircraft. As per national and International Civil Aviation Organisation (ICAO) regulations, the rubber residue needs to be removed to ensure safe friction levels. The machines that are required to perform this operation are usually quite cost prohibitive. Having spare machines is an expensive proposition.

Furthermore, in a similar manner to manufacturing facilities, airports are faced with physical constraints. For example, they cannot be relocated in case of a disaster! Many of the airport processes are also physically constrained with only a few that can be virtualised and moved to an alternate geographical location.

With constraints like these, BCM in airports requires a pragmatic approach. Of course, considering the criticality of the facility, one could argue that money should not be a constraint when planning for BCM. However, ground realities are different (no pun intended). Airports are a business just like any other. While being an important national infrastructure, they are primarily run to make money. Any BCM activity should keep in mind the basic cost/benefit equation.

## BCM approach for airports[1]

One of the first steps in implementing BCM at airports is to begin working with the risk management team. Risk management is a key part of every airport's operational activities. Airport risks are usually already defined and controls have already been put in place as prescribed by regulatory bodies. This is because each airport is part of the overall air transport ecosystem consisting of components such as aircraft, flight paths, airports etc. This enables a level of global standardisation across airports – without this it would prove difficult to fly an aircraft from Airport A to Airport B.

The first step in any BCM implementation at airports is to meet up with the person responsible for risk management. This is required to achieve several key objectives:

- To understand the current status of continuity planning at the airport
- To understand where BCM will dovetail into the risk management function
- To provide assurances to risk management that the BCM programme will not 'trespass' into the risk management domain

The last point is important from a change management point of view. This enables smooth conduct of the BCM engagement, with the risk management team willingly playing a constructive role.

At this stage, one also needs to clearly define the BCM policy and establish who will lead the BCM function. In cases where an external consultant is handling the BCM implementation, it is important to involve a senior internal resource at this stage. This person will ideally lead the BCM function once the

consultant completes his/her job.

It is also important to establish an understanding of the culture of the organisation at this stage:

- How open are staff to new concepts?
- Do they know about BCM?
- Do they consider it important?
- Is this entire exercise just part of an audit requirement?
- What awareness methods will work?

## Analysing the situation

As with any BCM programme, analysis takes the most time. Performing business impact analysis (BIA), continuity requirements analysis (CRA), and risk assessments (RA) is a challenge at the best of times. In the case of airports, this is further complicated by the real-time nature of the environment. Operations staff are always on their toes and need to be available immediately to handle any incident. Getting process owners to sit through a 45-minute interview is a challenge. Also follow-up interviews and BIA sign-offs can pose significant challenges.

The key precaution that one needs to take at this point is to plan BIAs so that there is not much iteration. One needs to read the process manuals well in advance to understand the various processes at airports. One of the key learnings at this stage is the sheer number of acronyms and jargon associated with airport operations. It is important to create a bibliography of airport terms so that BIA interviews can become smoother, without the need for explanation of basic concepts. You must be familiar with airport operations before meeting up with process owners. Unless you have a good grasp of 'airport speak', process owners can become quickly dismissive of you. Further, an attitude of respect is important to get information at this stage. The process owners are hardened airport professionals who have lived to tell the tale.

## Designing the programme

As one completes the analysis phase, there are several 'Eureka' moments that occur. As a BCM professional, you soon realise the constraints in designing business continuity measures.

### Eureka moment #1

As mentioned earlier, the cost of putting in continuity measures at airports can be prohibitive. While airport management many have budgeted for the BCM project, they may not have budgeted for the BCM programme that includes continuity measures.

### Eureka moment #2

However much you plan for continuity, one constraint will always remain. You cannot easily relocate to another airport. Of course, there may be instances in certain countries where other airports could provide a fall-back position when they are located within a short geographic distance. However, when dealing with a major international airport, with no other airport close by, you need to focus your efforts on prevention rather than redundancy.

### Eureka moment #3

Airport processes are not as virtualised as processes in the financial industry, for example. They are physically constrained by the airport location. Even departments like human resources are located within the airport premises while they can be easily virtualised. This makes it difficult to plan relocation strategies even for processes that don't necessarily need to be physically carried on at the airport.

### Eureka moment #4

Airports have a large number of suppliers. Due to the unique nature of services provided, it is difficult to plan for alternate suppliers

Keeping these constraints in mind, some of the continuity measures that can be suggested for airports include:

- **Prevention**: Great care needs to be taken to prevent incidents in the first place. These include having mitigation measures for incidents like fires, bird hits etc.
- **Spares**: While it may not be possible to have standby equipment, it may be possible to maintain critical spares. This is a cheaper and feasible option.
- **Process virtualisation**: Processes that do not need to be physically carried out at airports should be virtualised. This does not necessarily mean that they should be done offsite. It means that it should be possible to carry them out from offsite locations, if so required.
- **IT disaster recovery**: With IT systems playing such a key role at airports, it is absolutely essential to have a strong IT disaster recovery strategy in place.
- **Alternate suppliers**: It is important for airports to maintain alternate supplier lists or even have a multi-supplier strategy. At the very least, supplier contracts should include necessary BCM clauses.

## Implementation and validation

During the implementation phase, awareness is the key to success. One of the challenges to raising awareness about the BCM programme is the size of the organisation. Traditional methods like class-room sessions do not work. Instead, techniques like posters, e-Learning and online assessments need to be explored.

During this phase, it is important to keep a strong grip on the timelines. Given the pressures of running airport operations, it is difficult to implement continuity measures. The only way out of this dilemma is to either add more resources to specifically handle continuity-related tasks or factor these responsibilities in as part of each person's daily schedule.

Validation of the BCM implementation is of utmost importance to get assurance that the business continuity plan will work in a disaster situation. Airports normally have a well-defined exercise schedule as part of emergency drills. Planning for BCM tests and exercises should follow a similar approach to avoid it becoming a standalone activity.

## Up, up and away

Planning for business continuity at airports is a challenging task. The inherent real-time, location-constrained nature of airports, coupled with the high cost of continuity measures, call upon not just the technical but also the creative skills of BCM practitioners. As with all BCM programmes, due diligence needs to be exercised as life and property is at stake.

***Note***

*1. The approach described in this section largely follows the BCI's BCM Lifecycle.*

***The views presented in this article are the personal views/opinions of the author and not of the organisation he represents. The content is for information purposes only.***

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