SITA

Total Airport Management

THE LEADING EDGE TODAY.
THE GLOBAL STANDARD TOMORROW.

Contents

MAKING AIRPORTS EVEN MORE AMAZING

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When you work in aviation, it's easy to forget how amazing airports really are.

You see the everyday challenges up close. You watch the passenger volumes growing. You feel the pressure on your team and profitability.

You know that even small operational hiccups can create big problems.

In fact, that's why airports are amazing. It's an astonishingly difficult act to pull off.

Millions of passengers make their way through your doors and onto flights. Thousands of airplanes take off and land. Bags are rarely mislaid. (And per passenger mile, air travel is twelve hundred times safer than driving.)

So, rather than the challenges which the press is always ready to hand out, airports should be receiving plaudits.

Because we always ask ourselves the hard questions:

- How can we get better?
- How can we serve more customers more efficiently?
- How can we improve on-time performance and do more with the resources we have?
- How can we help smooth out congestion in our skies?
- How can we control costs and offer better value?

All those pressing questions are being answered right now by SITA's unique new approach to intelligent Total Airport Management.

Today's leading edge will become tomorrow's global standard.

Total Airport Management: Complete end-to-end clarity

How to optimize all of your airport operations for the greatest possible gains in efficiency.

All over the world, senior airport professionals have 'total airport management' on their minds.

Approaches vary though. Some airports have stitched together dashboards to offer a view of current conditions in the airport.

However, these dashboards don't tell you what's going to happen next.

Others have created a 'digital twin' – basically a clever 3D map with status overlaid – which usually proves to be interesting without adding much value.

Many have created Airport Operations Control Centers (AOCC), bringing together professionals in a physical location with classical A-CDM and AMS. This kind of enforced centralized control does support better decision-making.

However, the lack of shared data sources means that the varying viewpoints and inherent tensions remain. But the underlying challenge – perhaps even the biggest challenge – is working out what everyone means by Total Airport Management.

You've certainly seen vendors who offer 'total airport management' when they mostly look at airside operations – piecing together elements with a few buzzwords but without shared data or predictive power.

The bigger, more interesting question is how to completely re-frame the way the industry thinks about Total Airport Management.

We need to be clear about definitions.

When SITA says Total Airport Management (TAM), we mean total, comprehensive, complete, end-to-end management – from the parking lot to the skies – not partial or superficial solutions.

Most importantly, we mean a cost-effective, coherent plan delivered at a pace that suits you and your current situation.

Then you'll have the ability to shape your future airport experience totally, minute-by-minute, for maximum efficiency.

What we don't mean is a graphical interface, nice model or partial 'sticking-plaster' solution. We also don't mean costly 'rip and replace' strategies.

More importantly, SITA wants to spell out the benefits and a simple, affordable path to implementation.

We're talking about breathtakingly simple steps – with a tried, tested and trusted global partner – which you can take right now to transform your airport's performance.

What's driving the need for TAM?

Everybody in the industry agrees that Total Airport Management would be a good thing.

Airports are already scratching around for solutions.

So what's really driving this ambition?

It's become a truism that passenger volumes will double by 2040. We all know that the current infrastructure and staffing resources could not cope with that number of people, bags, and planes.

There will be new airports and new runways. But, most of all, we hope that transformative technology will save us, eventually. And yet, it's the current 'day-of-operations' that consumes our attention.

This thinking also masks the existing, wildly different levels of performance we see among airports.

As a result, the opportunity to release capacity right now is probably greater than you imagine.

The second driver is siloed operations. We think that if we only optimized the individual silos, this would create the promised overall efficiencies.

This is what's wrong with conventional approaches to 'total airport management'. It's still a piecemeal solution where the whole is less than the sum of its parts.

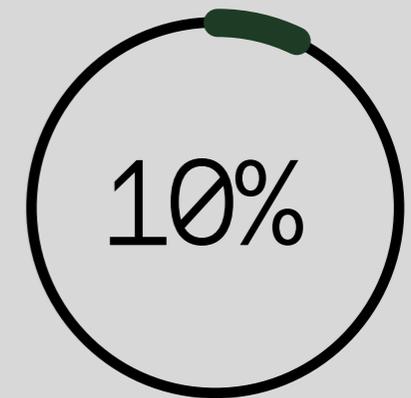And, when you think about it, the reason becomes obvious.

All you have to do is consider the complete ecosystem of airport operations as a backward flow.

Consider the case of two different airports, both globally-known and respected for performance and passenger experience.

50%

One airport puts through around 50% more passengers than the other.

10%

Yet it does so on a physical footprint that's just 10% of the other airport.

EVERY SLOT IN THE SKY IS LIKE GOLD DUST

You know that every plane that arrives or departs late cascades through the system, causing hassle, headaches, and operational issues.

You understand that every delay in take-off and landing – and every minute lost in taxiing or sitting at the gate – also costs real money.

Every second lost in boarding really matters. All of our airport information systems need to get valid passengers to the gate on time – because we know the chaos that a missing passenger or inadmissible traveler causes.

So, we also need efficient queues and smart insight at security and borders. Because we also want happy passengers in the shops and restaurants.

That means we must have easy check in, slick self bag drops, and smart gates to smooth traveler flow.

And we really ought to know who's arriving, when and in what volumes – by car, taxi, train, bus, or even volocopter.

You can see how these flows are totally connected. Optimizing for individual silos doesn't work – it merely shifts the issue downstream.

So, having the total data as a single shareable source of truth is a huge step forward.

However, without context, it's not that helpful.

Here are the big questions:

Is there a difference between what's happening now and what you expected to happen?

What's going to happen next and what do you need to happen?

And what can you do about it?

This is the conundrum addressed by SITA's intelligent Total Airport Management solution.

What if you're expecting and resourced for 1,000 people in the next hour and there are 2,000 heading your way right now?

What if big groups of skiers and golfers turn up at self-bag-drop all at once?

What if there's, you know, 'weather'?

The new opportunity is intelligent Total Airport Management.

You can automatically co-ordinate all your information sources, including partners and stakeholders.

You can set the context of KPIs and expectations. Ultimately, you can track performance and find the optimal solution right now.

SITA's leading edge approach is based on simplicity. In our proof-of-concept projects, we've shown that Total Airport Management is remarkably cost-effective.
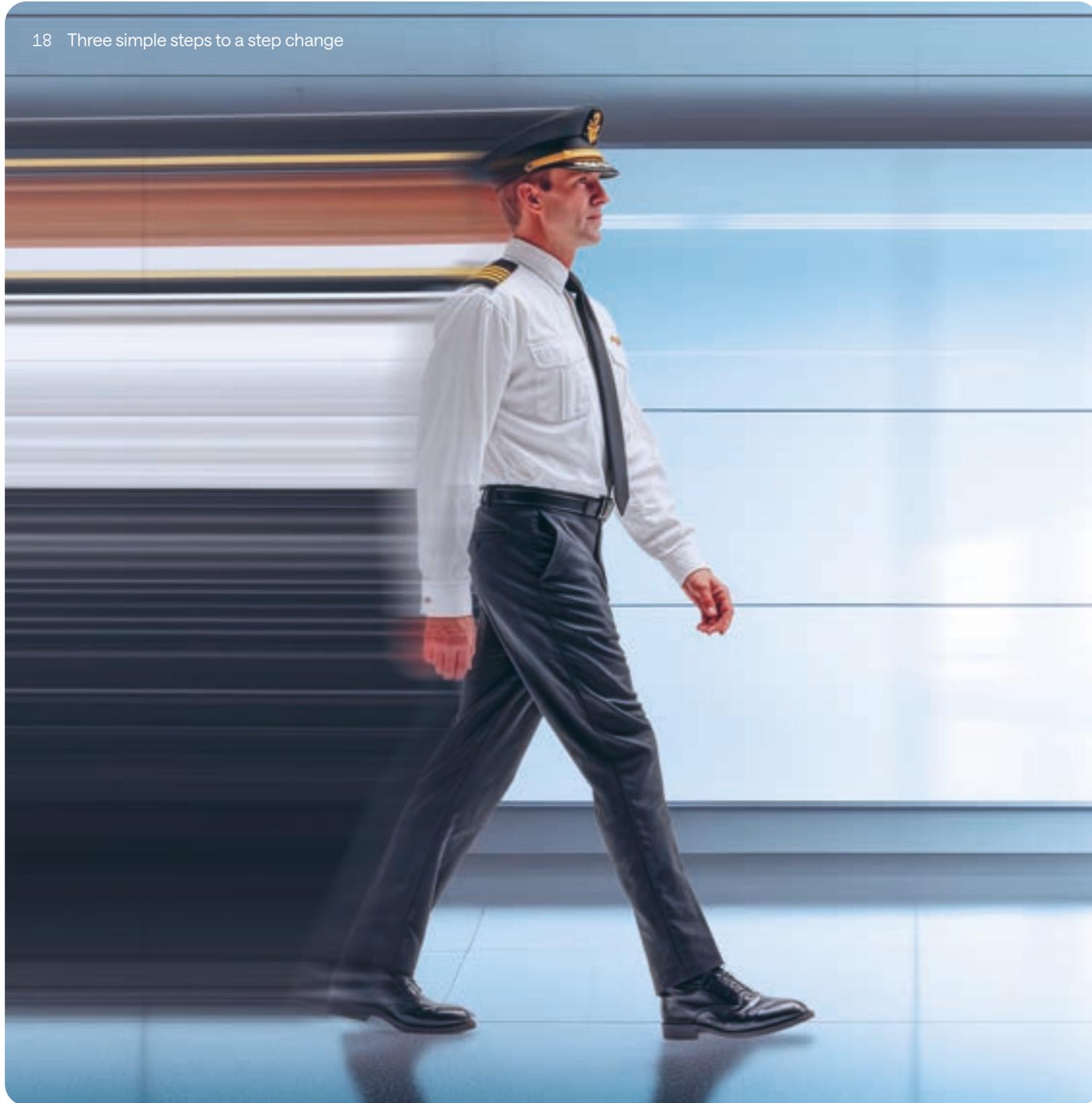
Three simple steps
to a step change

With SITA, there are just three straightforward steps
to intelligent Total Airport Management.

What SITA suggests is additive.

Our process has three simple positive steps. But, before talking about those steps, it's important to be clear about what you don't need to do.

You don't have to rip out or replace any of your existing software or hardware – which is a huge relief.

You don't touch your day-of-operation systems because those systems are running your airport.

The genius is in the simplicity of the thinking behind our three-step process.

01

02

03

First, we absorb and conform all of the data from all of your sources into one single shareable point of truth.

This is not exactly rocket-science, but it does help to have decades of technical leadership, as well as in-depth understanding of end-to-end airport operations.

You get a genuinely holistic picture of your airport operations. It's a functioning, analytical tool – not just as a graphical interface or nice-looking 'digital twin'.

SITA leads the market in technology for passenger processing, biometrics, self-bag drop, border control and airside operations – at scale and across the globe.

The aviation sector is our specialist focus.

So, we help set the worldwide standards which enable airport systems to support the traveler across the journey. We help airports and airlines work together to build efficiencies and delight the passenger.

SITA is the preferred technology partner for many of the busiest, most admired airports in the world. Indeed, there probably isn't an airport on earth that doesn't rely on SITA in some way.

The same is true of the airline business. So, if you're going to ask your partners to share data, you need a partner with a trusted pedigree in aviation tech – and that's SITA.

The second step is to enrich the data with context.

Knowing that a queue has a 25 minute wait is one thing. Knowing the context of what it should be and could be – and what the consequent impacts are – is something else entirely.

As you know, every day at an airport is the same, in theory. You understand in detail what's meant to happen. But, from the weather to the all-too-human behavior of passengers, the unexpected happens all the time.

Of course, that's part of the fun of working in the airport business: no two days are ever the same. But that's also part of the stress.

The solution is to set your KPIs – the metrics that matter in keeping the people, bags and planes flowing.

Then we map those variations and the optimal response to any given situation.

And, because we believe human intelligence and control are more important than buzz-words, AI and machine learning are used in safe, secure ways – to sift the data for the options which you and your team need for minute-by-minute effectiveness.

The third step is to envision your end-to-end airport not as infrastructure, or even as siloed steps, but as a series of interconnected flows: people flows, bag flows, plane flows.

It's a long time since airports saw themselves simply as landlords. The business is far too complex for that nowadays.

But some vestige of estate management still lingers: how do you sweat the asset when you're already sweating the asset?

But when you think about flows, the answers become clearer.

The change of mindset sounds simple (and it is). The ability to see how variance flows through the system can have huge impacts. It focuses the mind on the things that really matter.
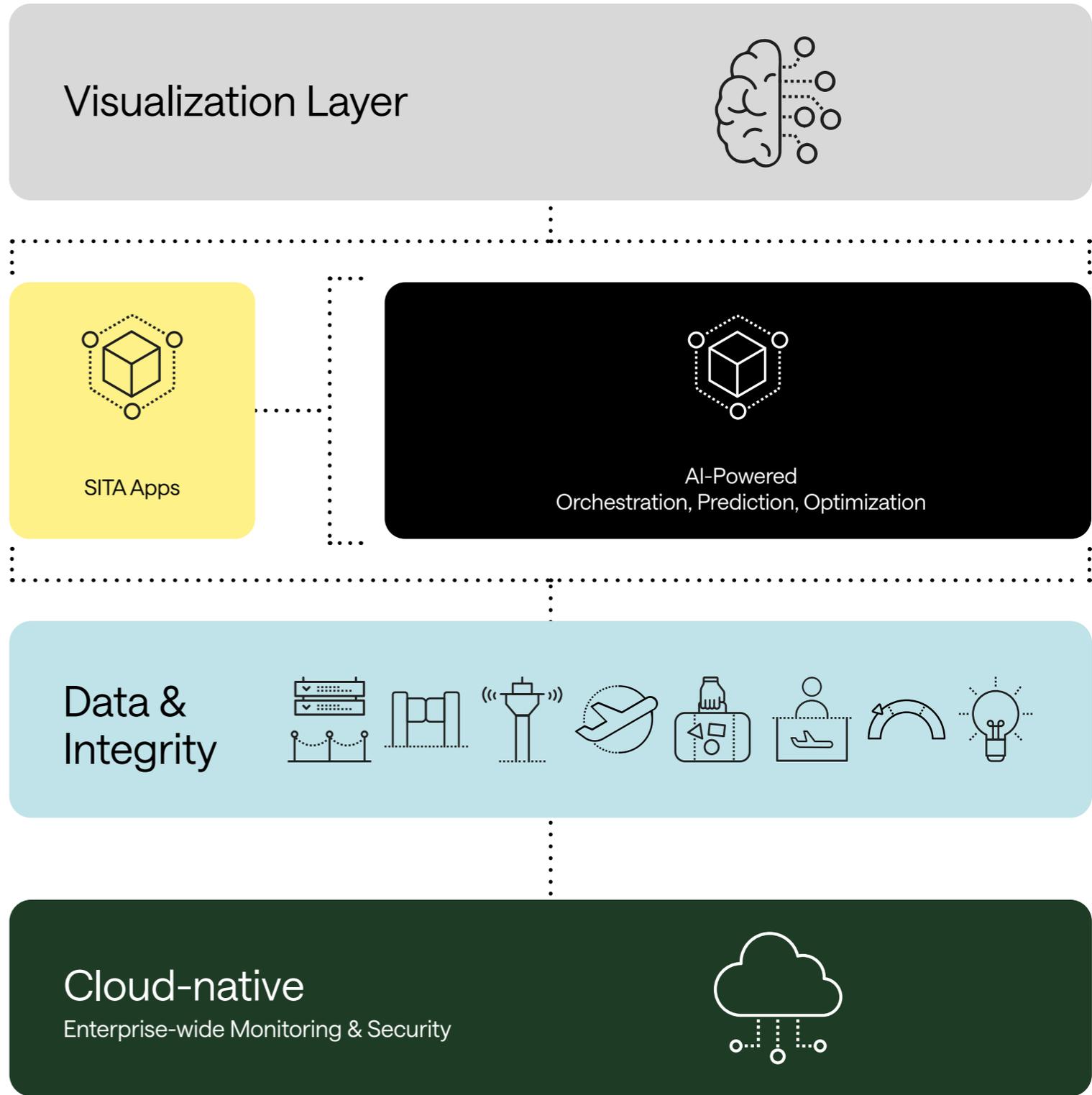
It enables early 'downstream' intervention to ward off problems. It creates a step change in resource allocation and effectiveness.

The distinction between efficiency and effectiveness becomes important.

If efficiency is the drive to do everything faster / cheaper, effectiveness is the focus on the right areas at the right time to get the right result.

Integrated thinking for integrated systems

An intelligent approach to Total Airport Management gives you the insight to drive operational excellence.

Visualization Layer

SITA Apps

AI-Powered
Orchestration, Prediction, Optimization

Data & Integrity

Cloud-native
Enterprise-wide Monitoring & Security

Walking the talk 100%

The industry has been talking about Total Airport Management for some time. As ever, the difference is that SITA 'walks the talk'.

Our world-firsts work in the real world: that's our pedigree.

For example, not many people know that SITA contributed to the invention of the internet.

We launched the world's first operational network using packet switching and activated the world's first nodal distributed network.

In the 1980s, we created CUTE and, in 2000, the world's first electronic visa.

Moreover, we already work with just about every airport on the planet and almost every airline. We work with over 70 governments on border solutions, including all of the G20 nations.

So, no one is better placed than SITA to address the end-to-end challenges and the fundamental innovation needed by airports and airlines.

And it's happening right now.

We already provide leading-edge airport management solutions to 170 leading airports globally. For next generation solutions, we have proof-of-concept and fascinating use cases for Total Airport Management with some of the world's busiest and most admired destinations.

We're creating the scalable foundation for improved end-to-end airport flows: from smart AI-driven support to strong automation.

Proof of concept

SITA has proof-of-concept TAM projects running with leading airports around the world. Since we meet airports 'where they are', each project is unique and showing overall positive results. If you want to know more, please speak to your SITA account manager.
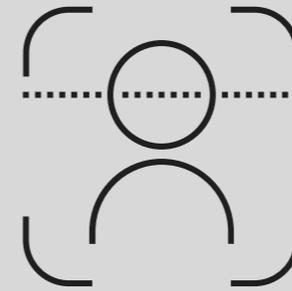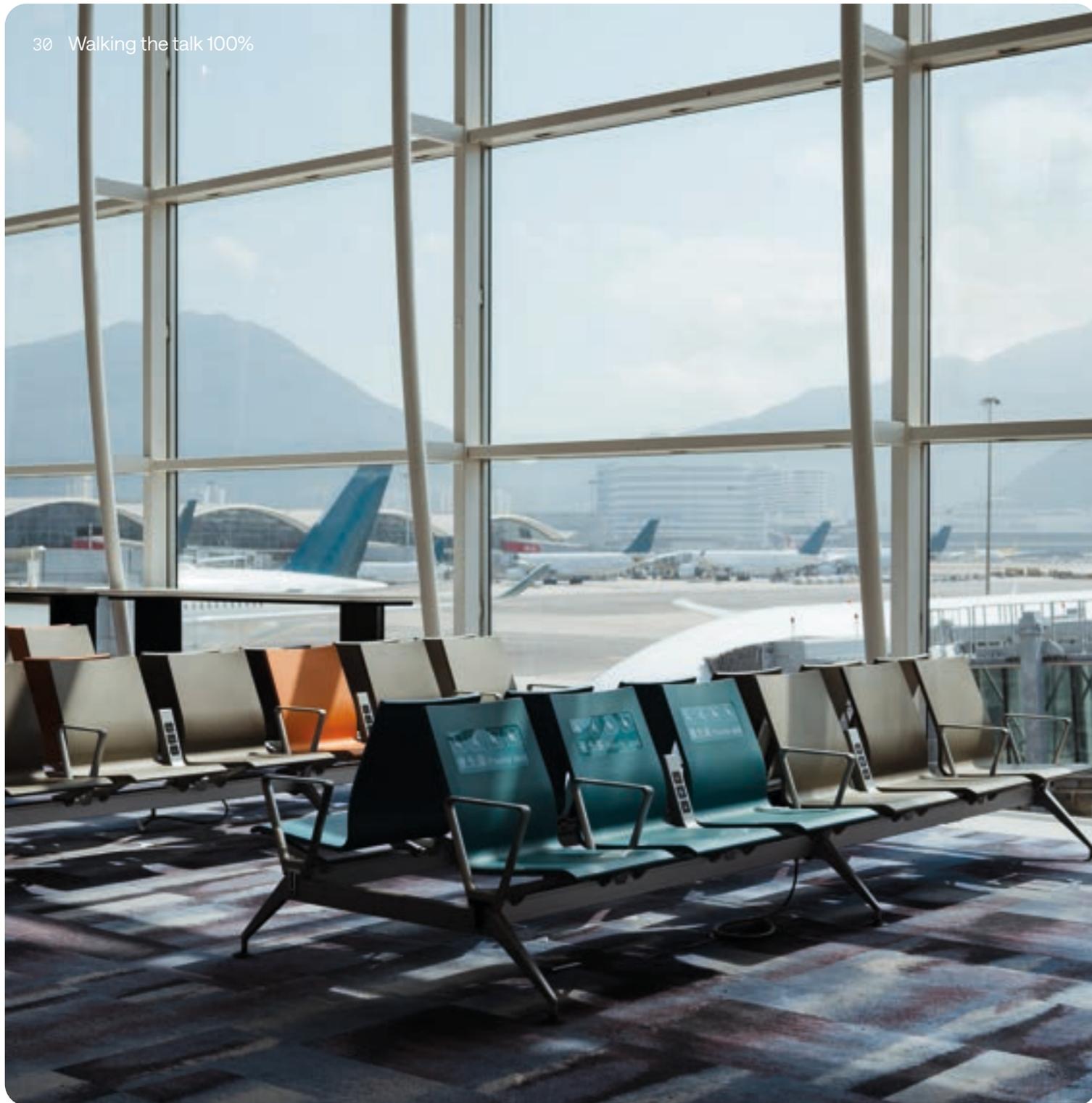
With over 6,000 biometric touchpoints at major airports globally, we're already years ahead in touchless travel.
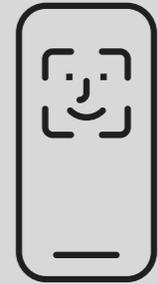
Our new mobile Agent App is enabling a better boarding experience by liberating airlines and airports from fixed desks and rigid systems.

"Together with our airport partners, we're working to connect every corner of airports in real time, building a blueprint for the future of the sector: data-driven, collaborative, secure, and truly intelligent. A vital ecosystem that keeps the world's busiest airports and most demanding travelers moving, when there's no margin for error."

Nathalie Altwegg
SVP Airports
SITA

The evolution starts here

Every airport is different.

You may find yourself at a different stage of maturity in the journey to efficiency and enhanced customer experience.

Indeed, the priorities which you place on those goals may make dramatic changes in how your airport approaches technology.

Even compared to airports that seem similar, the needs and wants of your airport may be very different. You need to factor in the local conditions, the changing expectations of passengers, different ownership models and, of course, the availability of funds for investment.

That's why SITA meets you where you are.

We've focused on the sector long enough, and supported airports large and small, international and regional. So, we completely understand your current situation, as well as your potential ambitions.

We know the intricacies of running a live, secure environment, 24/7, 365 days a year.

We know the stakeholder pressures.

We know why you need to protect investments in current systems – especially if some parts of your system are not that old.

That's why, in our initial consultancy, we listen carefully to our customers.

We know – and you know – that there's a need for an effective overview of your operations to deliver real world benefits. But, it's evolution that you need.
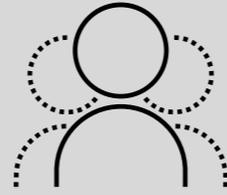
THAT'S WHAT MAKES SITA'S APPROACH TO TAM UNIQUE

SITA's TAM is an overlay on your existing system that opens up the opportunities in your existing system:
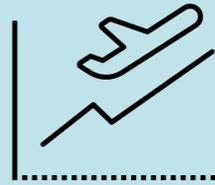
smooth passenger flows

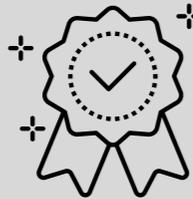release capacity

prevent and mitigate problems

set – and meet – clear targets

enhance the customer experience

protect and build the bottom line

grow your airport's reputation for excellence

support sustainability targets

WE'RE HERE TO ANSWER YOUR QUESTIONS

Let's create that end-to-end, complete comprehensive, Total Airport Management system. Together.

SITA

For more information email info@sita.aero