

THE SMART AIRPORT OF THE FUTURE



THE GROWTH OF COMMERCIAL AVIATION



2017

\$743_{BN}

3.8_{BN}

2035

\$1486_{BN}

7.2_{BN}



OVER 50%
AVIATION
GROWTH
IN ASIA
PACIFIC



LARGEST
AVIATION
MARKET
BY 2024

THE SMART AIRPORT OF THE FUTURE

PROBLEM: TIME CONSUMING TRAVEL

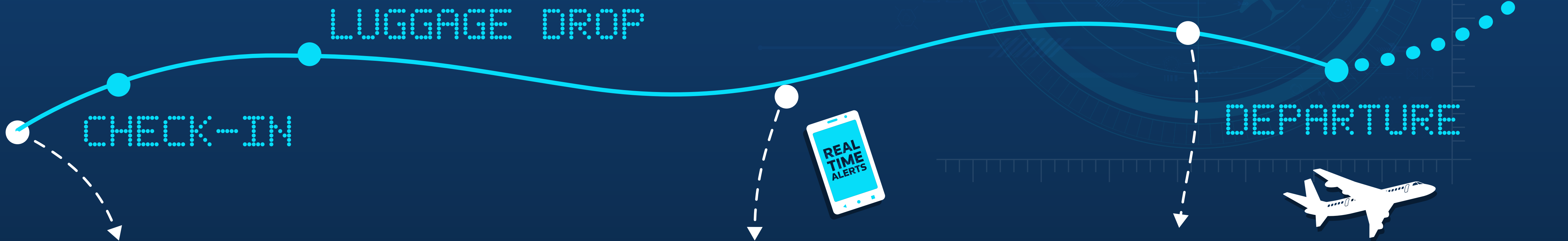
Travellers want:

- Shorter, faster queues
- Streamlined screening
- Trackable luggage & queues
- Notifications for airport queue density

ENHANCED PASSENGER EXPERIENCE



SOLUTION: ADVANCED ICT SOLUTIONS FOR A SELF-SERVICE, AUTOMATED PROCESS



CROWD DENSITY QUANTIFICATION

- ✓ Real-time crowd density levels
- ✓ Waiting time information
- ✓ Increased efficiency

PASSENGER NOTIFICATIONS

- ✓ Real-time flight information
- ✓ Increased efficiency with self-service
- ✓ Tagging & tracking of luggage

BIOMETRIC GATE

- ✓ Fast-tracked immigration
- ✓ Fully automated, efficient & safe
- ✓ Seamless travel for low-risk passengers

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PROBLEM: INEFFICIENT SECURITY CHECKPOINTS

- Security concerns
- Outdated technology
- Increased passengers

SAFETY AND SECURITY

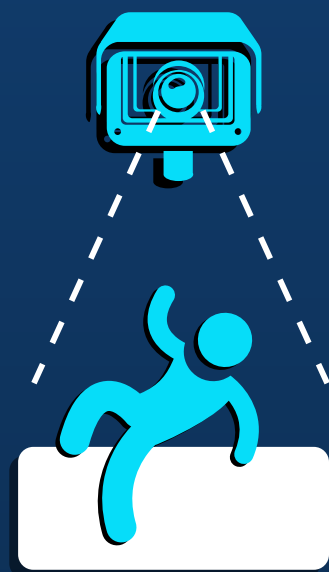


SOLUTION: TECHNOLOGIES FOR SAFETY, COMFORT AND EFFICIENCY



AUTOMATED BORDER CONTROL

- ✓ Efficient immigration control
- ✓ Cheaper operation costs for airports
- ✓ Safety & efficiency prioritised



AIRPORT SURVEILLANCE

- ✓ Detection of suspicious behaviour
- ✓ Direct reporting of risks to operation centre
- ✓ Detection of uneasiness & anxiety with emotion detection
- ✓ Search for missing children/passengers



BOARDING

- ✓ Self-boarding
- ✓ Passportless & ticketless boarding process
- ✓ Enhanced security at boarding

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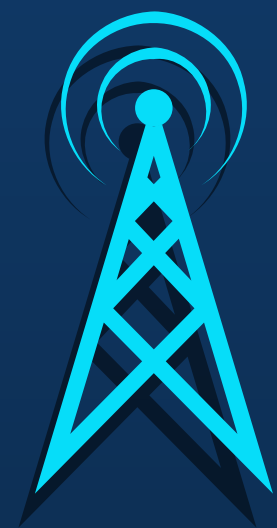
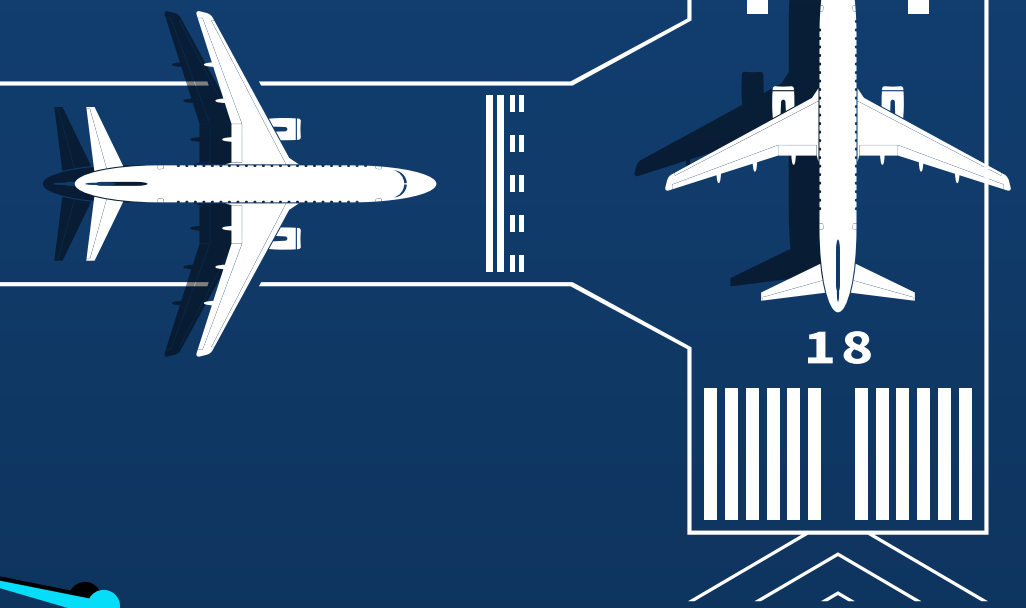
PROBLEM: AIR TRAFFIC CONGESTION

- Outdated analogue communications and radars
- Growing demands for air travel
- Increased security concerns

AIR TRAFFIC CONTROL



SOLUTION: INTEGRATED AIR TRAFFIC MANAGEMENT



AUTOMATIC DEPENDENT SURVEILLANCE

- ✓ Highly accurate
- ✓ Cost effective
- ✓ Constantly updated



AUTOMATED RADAR TERMINAL SYSTEM

- ✓ Traffic management
- ✓ Traffic approach & density information
- ✓ State-of-the-art technology



AIRPORT SURVEILLANCE RADAR

- ✓ Digital technologies
- ✓ Ground & weather clutter suppression
- ✓ Interference-free output