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CAN AIRLINES WING IT WITHOUT REVENUE LEAKAGE?

WNS
Extending Your Enterprise

Executive Summary

"The formulation of the problem is often more essential than its solution, which may be merely a matter of mathematical or experimental skill."

— Albert Einstein

Einstein's observation is spot on when applied to the airline industry's battle against revenue leakage. Attempts to stem revenue leakage are neither new nor unexplored. From manual reviews to software scripts that balance capacity with pricing parameters, a host of methods have been tried. Formulating the problem, as emphasized by Einstein, perhaps might be the answer.

Meanwhile, airlines witnessed a decline in passenger yield for the fifth year in a row amidst record profits and operating margins in 2016. Revenue Per Available Seat Mile (RASM) and Cost Per Available Seat Mile (CASM) declined to the lowest levels in over 10 years. The industry continues to bolster ancillary revenues, and focus on customer experience to enhance loyalty and sales. Airlines have leveraged revenue optimization and asset management strategies, and deployed advanced revenue management tools and techniques to maximize revenue opportunities. They have turned to technology and digitalization for higher efficiencies and innovation. But revenue leakage continues to be the inevitable bane plaguing the industry.

In this paper, we look at how airlines can overcome this challenge by formulating the problem and arrive at an effective solution. The solution can be further augmented by deploying analytics, and bringing in automation and process efficiencies.

Can Airlines Wing It Without Revenue Leakage?

Raj Sivakumar & Kashyap Mansata

Introduction

It's the airline industry's Achilles' heel. A constant thorn that puts a dampener on revenues. Revenue leakage — the gap between the revenue that airlines book and ultimately realize — costs airlines as much as three percent of their revenues, according to Airline Revenue Integrity Group (ARIG).

Multiple factors cause revenue leakage, including:

- Disruption management
- Incorrect and unticketed bookings
- Multiple bookings
- Changes and cancellations
- Non-compliance to fare rules
- Travel restrictions

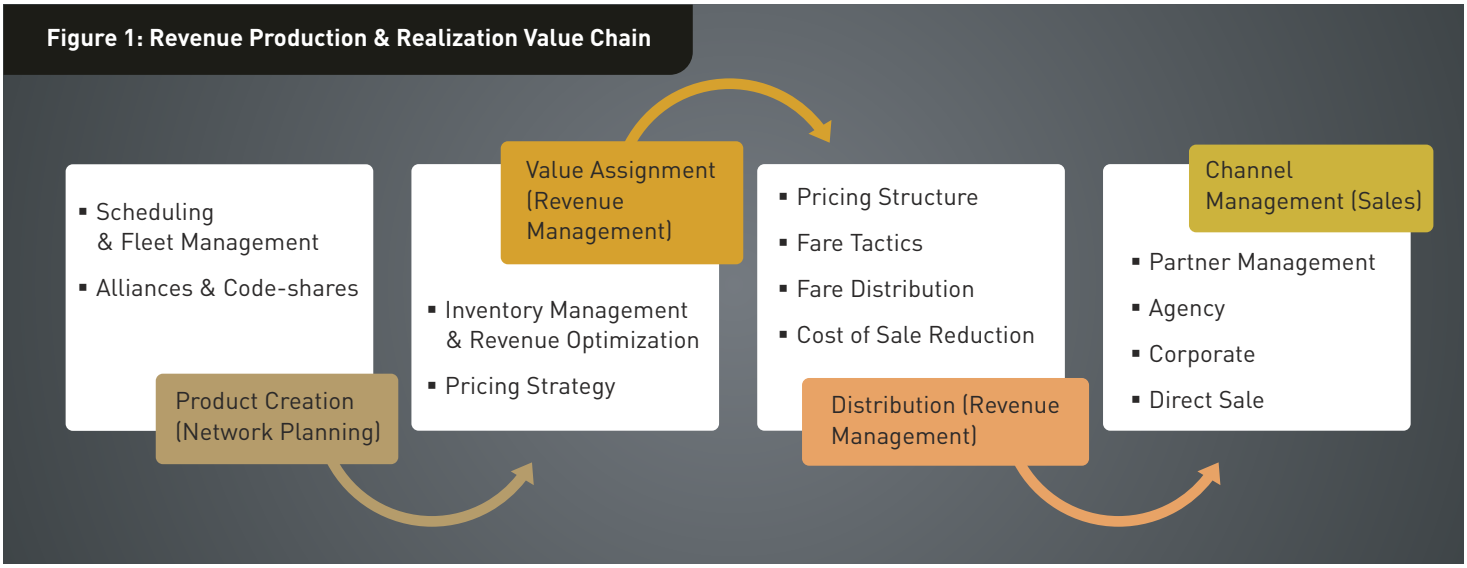
The spread of revenue potential across interline agreements, partnerships and networks leads to further complexities, and possible revenue loss. Let's put things in perspective with an example. Non-ticketed bookings are a sure-fire way for revenue leakage, but the fact that such exceptions are made despite this inhibit revenue accrual. Hence, before we formulate the problem, let's look at the broader perspective of revenue leakage.

Simple Actions & Complex Operations

First, let's understand the entire revenue production and realization value chain (Figure 1). There are three stages. The process begins with product creation (scheduling), moves to value assignment (pricing and inventory management) and distribution (fare tactics) and finally to channel management (sales).

In each stage, a slew of actions are performed to ensure smooth

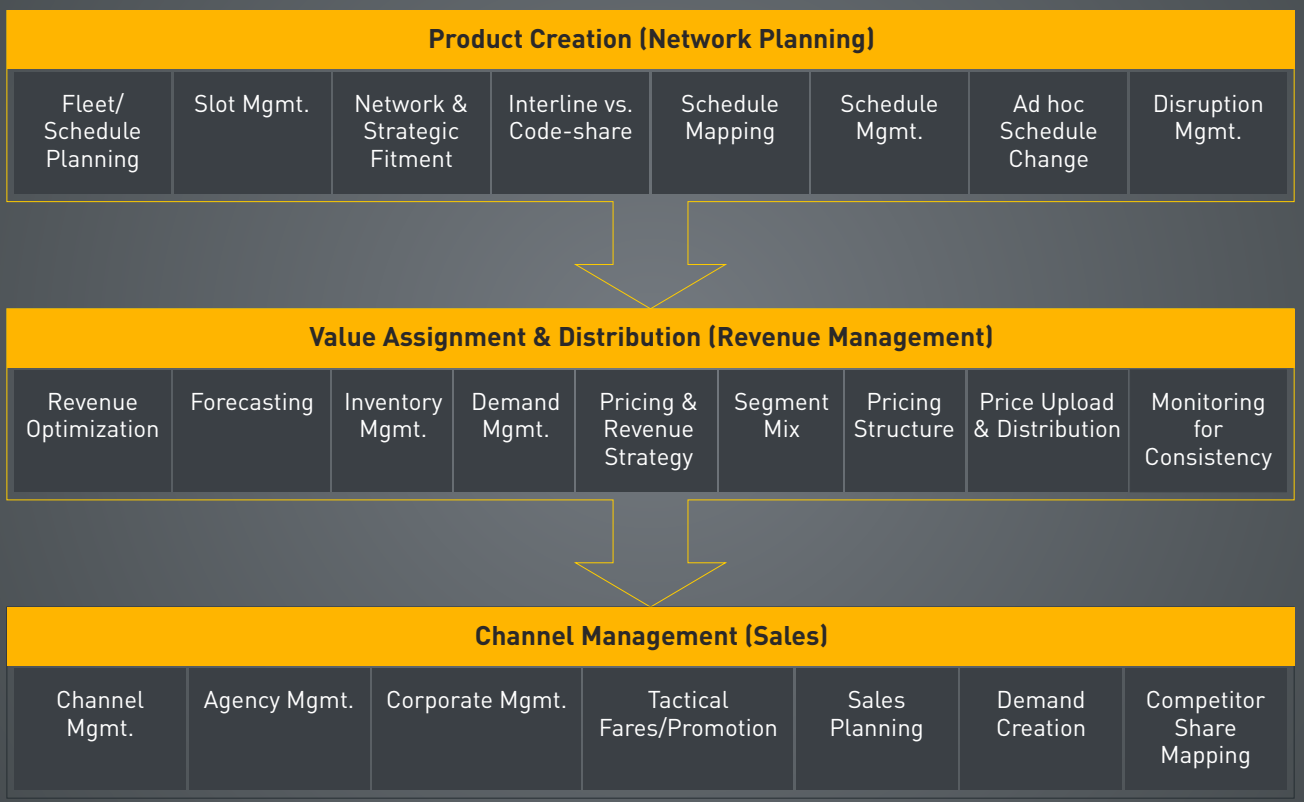
Figure 1: Revenue Production & Realization Value Chain



operations. The product creation or network planning stage encompasses an array of actions ranging from flight schedule and planning to disruption management. In the revenue management stage, pricing, forecasting, revenue optimization and inventory management are a few of the critical actions executed. The channel management or sales stage again has a multitude of actions from channel and agent management to sales planning and demand creation.

Figure 2 lists all the key actions performed in each stage based on which we will arrive at formulating the problem.

Figure 2: Key Actions in Each Commercial Function



With so many actions under each commercial function, we can see the complexity of airline operations and the opportunities for revenue leakage. Hence, the problem can be formulated by accurately identifying sources of leakage across the value chain. This can be achieved by understanding:

- Circumstances that cause leakage
- Inter-dependence and impact of one function on another
- Impact on revenues and cost
- Remedial measures

Leaks Across Touch Points

Network planning and revenue management are two functions in which there are multiple actions that can lead to hemorrhaging.

For instance, the British pound has depreciated against a number of global currencies in the past 12 months. Unless this correction is reflected appropriately in the fare basis codes, revenue leakage will occur as the U.K. Point of Sale (POS) will have the advantage of high availability of seats.

Table 1 highlights the areas in network planning and revenue management that lead to revenue leakage.

Table 1: Revenue Leakage in Network Planning & Revenue Management

Action	Impact Areas
Ad hoc schedule changes	Schedule changes cause significant disruption. Ad hoc re-accommodation results in inventory spoilage and customer dissatisfaction
Incorrect mapping of Reservation Booking Designators (RBDs)	Revenue loss due to interline / code-share agreements wherein a passenger of a partner carrier who has paid a lower fare gets more choices than the airline's passenger who has paid a higher fare
Poor Special Prorate Agreements (SPAs) and Multilateral Proration Agreements (MPAs)	Significant revenue loss occurs when: ▪ Interline / code-share agreements result in long-haul passengers displacing high-yield short-haul passengers ▪ There are gaps between what is stated in the SPA / MPA and the reality when it is applied in the system ▪ When SPAs / MPAs are not reviewed regularly, it undermines the benefits that the interline agreements are expected to bring in
Special rates across distribution channels	While optimizing the distribution channel is a good practice, the fare spread needs to be managed to ensure the right availability without cannibalizing on high-yield passengers
Group management	The potential revenue loss due to mismanagement of groups is often underestimated. Non-adherence to time limits, payment schedules and naming lists are just a few elements that put severe pressure on the inventory. The risks range from inventory spoilage to revenue dilution on account of group pricing sold in the Business-to-Customer (B2C) market
Currency fluctuation	The flexibility to price differently across POS and currencies provide opportunities for revenue optimization. However, a slip-up in monitoring currency fluctuations can lead to revenue leakage
Adjustment of proxy fares in Revenue Management (RM) systems	RM systems forecast and assign availability based on the proxy fares assigned to each RBD. In an ideal situation, the proxy fares should represent the published fares to ensure that the allocation for the proxy fare yields the same revenue as forecast by the RM system. However, on account of a variety of products and special fares, proxy fares often do not represent the fares available in the market and result in forecast errors and revenue loss

Now, let's look at the channel management function. Most of the actions in network planning and revenue management are intertwined with channel management. From multiple bookings to cancellations and discounted fares, the elements in channel management play a critical role in revenue leakage as well. For instance, agents and corporates often get special fares. In the example below, we have explained how such fares can lead to revenue leakage.

Let's say there are three published fare levels — USD 100, USD 90 and USD 80 — corresponding to RBDs Y, M and T respectively. The discount offered to corporates or agents is approximately 5 percent across RBDs M and T. This results in special fares of approximately USD 85 and USD 75.

However, if these fares are filed in RBDs Y and M, it results in a difference of USD 15 between the published and special fares. Then the probability of revenue leakage goes up significantly since the discount in real terms goes up from USD 5 to USD 15 which is the difference between the published and discounted fare. The revenue leakage here is USD 10 per segment.

Now, imagine this number where an airline is flying across five million segments annually with special fares at 35 percent. As a conservative estimate, even if we consider the leakage as occurring only 15 percent of the time (about 4-5 percent of average fare), the loss will be to the tune of USD 4-6 Million.

We have highlighted the other key areas of revenue leakage in channel management in Table 2.

Table 2: Revenue Leakage in Channel Management

Action	Impact Areas
Breach of policy and fare rules	Revenue loss due to exception handling, system manipulation, failure to apply penalties, and mismatch in booked RBD vs. actual ticketed
Multiple and unticketed bookings	Multiple bookings, poor flight balancing, invalid/incorrect ticket numbers and spoilage cause revenue leakage. Cancellations, overbooking and no-shows impact the RM system and indirectly lead to loss of revenue
Frequent churn and status changes not actioned	Frequent churn results in higher distribution costs and lower profitability. When a segment is cancelled, if the status is not changed by the agent immediately, the airline bears the cost of that segment
Filing of discounted fares (for agents and corporates) in the wrong RBDs	Special fares offered to corporates and agents can lead to significant revenue loss when applied across millions of segments annually
Cross-border sale	Differential pricing offered by airlines based on Origin and Destination (O&D), POS and seasonality are accessed by some agents and misused. A cross-border sale does not always result in revenue leakage, but it is essential for airlines to keep a track and crack down on revenue loss

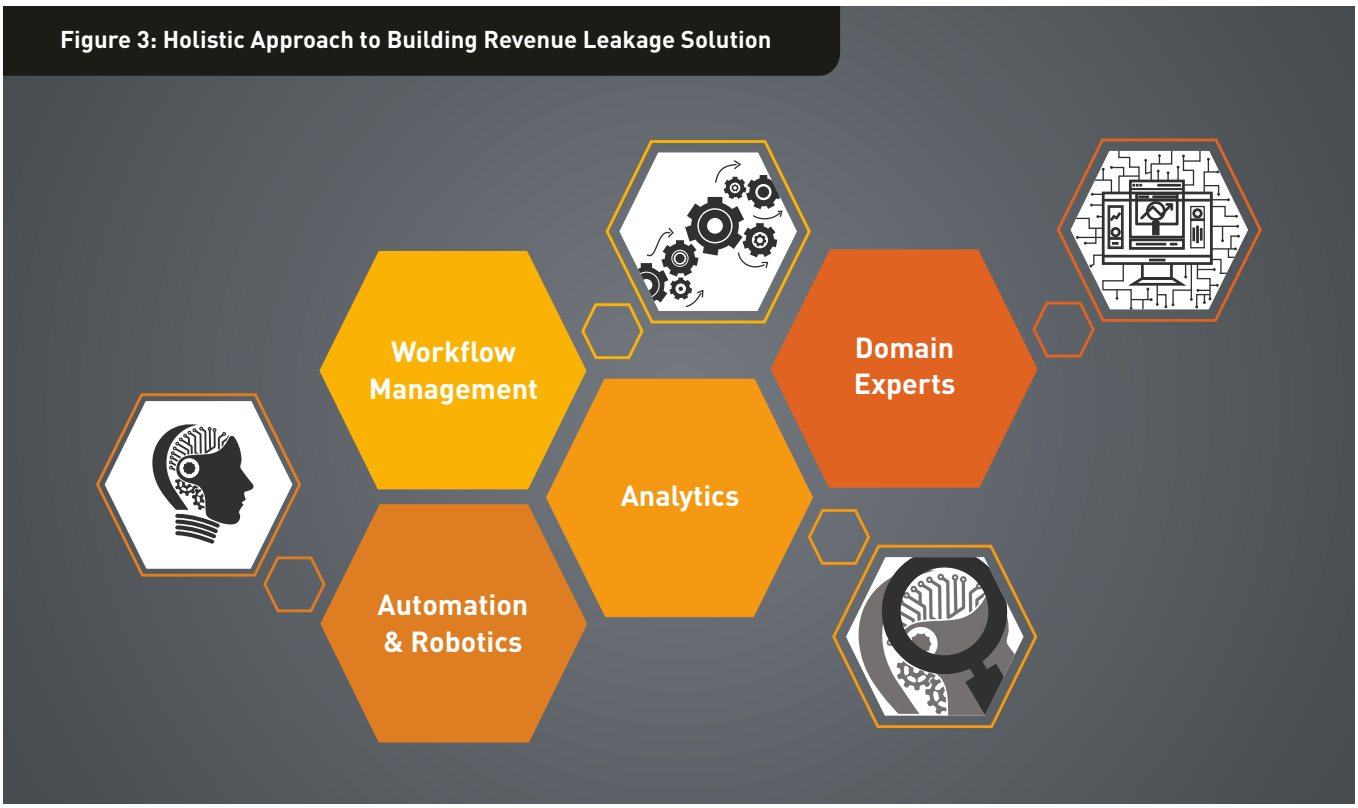
Problems thus exist at multiple levels across the entire value chain. A deep understanding and intervention is required at each stage to ensure monitoring, control and feedback. A few tasks should be executed on a 'right first time, every time' basis to minimize the time and effort of correction at later stages.

By understanding and formulating the problem, it becomes relatively easy to build the solution.

Building a Comprehensive Solution

Solving revenue leakage issues requires close coordination between airlines and partners, and calls for a holistic approach to curb loss in multiple areas. The diversity and complexity of the operations should be carefully considered while building the solution. An extensive solution can target specific areas of revenue leakage. Our approach focuses on leveraging four key elements — workflow management, analytics, automation and robotics, and domain expertise — to build a compelling solution that can stem revenue leakage (Figure 3).

Figure 3: Holistic Approach to Building Revenue Leakage Solution



1. Efficiency of Workflow Management

The presence of multiple Global Distribution Systems (GDSs) and stakeholders is an integral part of the airline value chain to maximize revenue opportunities. It also adds to the complexity as records have to be pulled from different sources for accurate and on-time processing of requests. Certain tasks have to be done sequentially and assigned to the most competent person for minimum errors and maximum productivity.

The right workflow tool can accomplish the above with speed and accuracy. It can ensure that the revenue pipeline is tightened and opportunities are maximized across different distribution systems. It can significantly reduce revenue loss and leakage through faster processing and better governance. A well-designed workflow can also identify any deviation-causing attribute, and assign the task to the right expert for a swift and corrective action.

Key features of an efficient workflow management solution include:

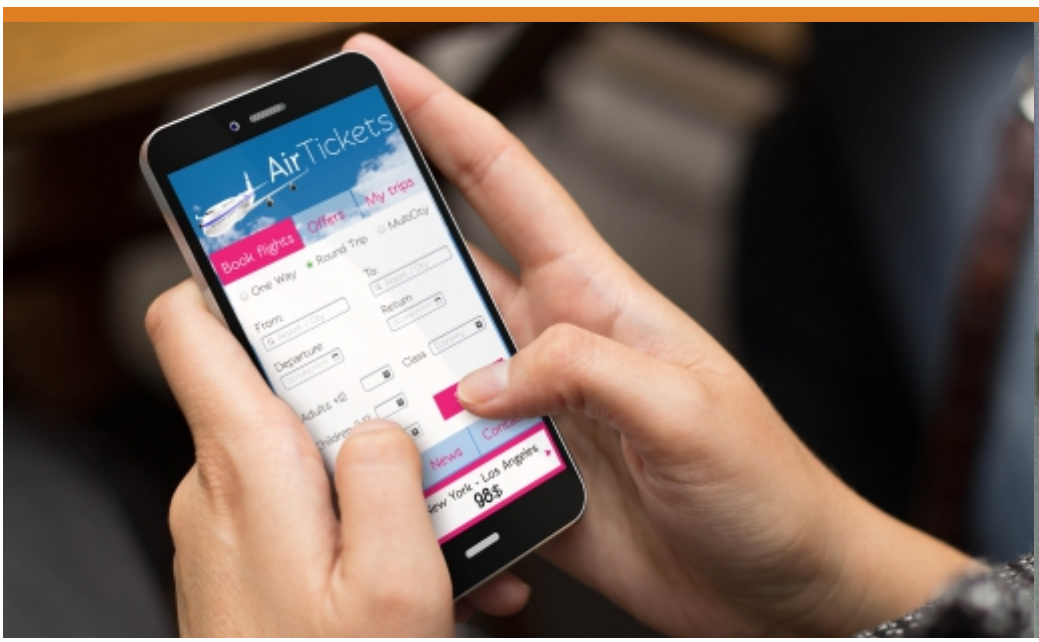
- Preventing process inefficiencies in booking and inventory
- Distribution management
- Accurate pricing and prorating
- Meticulous fare auditing
- Sales and revenue accounting

2. Effectiveness of Analytics

Analytics can enable airlines to glean actionable insights to plug the areas of revenue loss.
It can also:

- Identify profitable partnerships
- Manage risks effectively
- Provide continuous learning for increased profitability

The scope of data and analytics has grown exponentially, going beyond the realm of transaction data into digital channels via social media. Discussions on Twitter, Facebook and other social media channels have the potential to change the way customers perceive the product, service and brand. This impacts



loyalty and future business. Predictive analytics can enable airlines to study huge numbers of past transactions and build algorithms to predict future behaviors that could cause revenue loss.

Advanced analytics can help airlines monitor their booking data for trends, duplication and violations of rules. This allows them to take pre-emptive measures to eliminate revenue leakage. Speech analytics can analyze customer conversations in real time with pre-defined keyword combinations and provide insights on transactions to minimize leakage.

3. Element of Automation

Automation now occupies a pride of place in transformation initiatives, and robotics has significantly optimized costs. Integrating automation and robotics with airline systems can help in the monitoring of inbound Passenger Name Record (PNR) queues for schedule changes so that speedy and responsive actions can be taken based on configurable parameters.

Automated tools can execute transaction-level reconciliation to identify incorrect payments and commissions that cause revenue leakage. Such tools can retrieve, in real-time, ticketing and fare rules across multiple distribution systems to compute the right prorating. It also eliminates human error from key processes and minimizes inaccuracies to curtail revenue leakage.

4. Experience of Domain Experts

Ultimately, technology is only an enabler for people to apply their minds towards designing innovative solutions. Focus on people with cross-functional exposure in the travel industry can add tremendous value to make tools and technologies count. Domain expertise and continuous upskilling will be a powerful game-changer, and organizations should be invested in and committed to keeping the skills of their resources updated at all times.

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Conclusion

In an increasingly competitive industry, airlines have a tall order. They should simultaneously and proactively protect and maximize revenues, minimize leakages and satisfy customers. Revenue integrity solutions that are built to efficiently address formulated problems assure airlines of maximum revenues and minimum losses per booking.

Key benefits that arise from a well-designed revenue integrity solution include:

- Reduced revenue leakage by eliminating disparities between booked revenue and the actual revenue received
- Streamlined flight reservation process that adds efficiency to business operations
- Increased revenue through meticulous and automated mapping of bookings with the set criteria
- Accurate analysis of incorrect bookings for proactive corrective actions and prevention of future leakages
- Reduced costs through minimizing no-shows and denied boarding costs
- Improved load factors and yield
- High customer satisfaction through better access to flights of choice and preferred seating

Airlines need not accept revenue leakage as a norm. Next-gen and proactive revenue integrity solutions can enable airlines to restrict revenue leakage, and maximize recovery of revenues.

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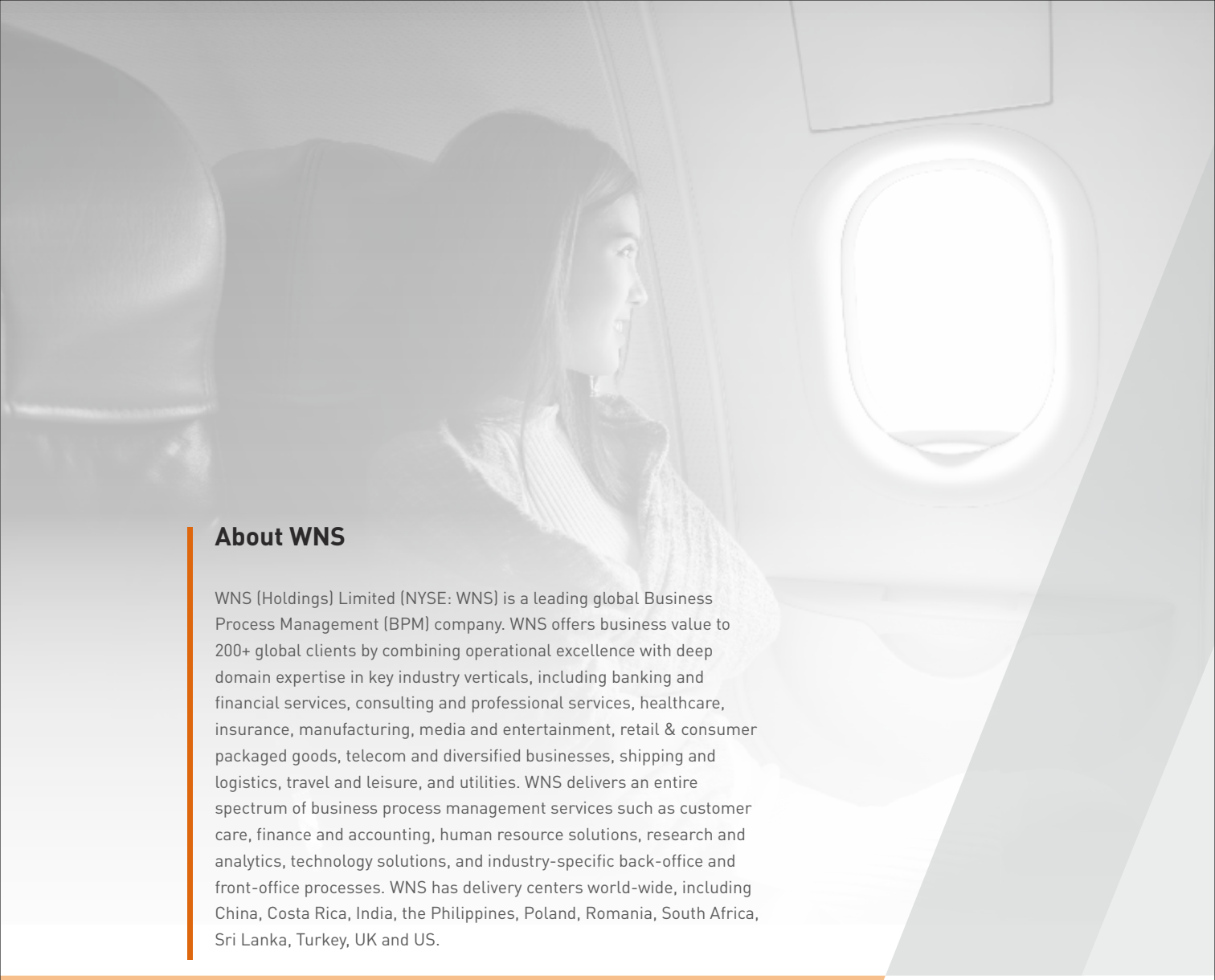
Time
epartures



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