The Cabin Factor

Performance Metrics

Maintenance Economics & Operational Availability

IATA MCC Athens
September 2019
CABIN APPEARANCE

EFFECTS

- GUEST COMFORT
- BRAND
- LOYALTY
- REVENUE
AIRCRAFT INTERIORS APPROACH

PRESENTABILITY

AVAILABILITY

SAFETY

SERVICEABILITY

IMPACTS

COMFORT

FUNCTIONALITY

VALUE
Cabin Maintenance

TANGIBLE BENEFITS ?

MAINTENANCE COSTS

GUEST SATISFACTION

PRODUCT EXPECTATIONS ?

Source: Aircraft Operational Availability; IATA 2018; 1st Edition
Reported as a Rate (PIREP)
Often hidden – white noise
Fails to identify down to P/N level
Fails to highlight Guest Comfort impacts
Cabin Performance Index

- **IDENTIFIABLE**
- **CHALLENGING**
- **DATA INTENSIVE**

CABIN DEFECT + SEVERITY INDEX → PERFORMANCE & AVAILABILITY
Cabin Severity

What?

- Translates cabin defects to actual business impact considering:
  - Passenger (Experience and Comfort) Impact
  - Brand Impact
  - Cost to business
  - Revenue (loss potential)
  - Crew Workload Impact
  - Maintenance Workload
Cabin Severity

Why?
• Highlights pain points from business perspective, rather than rate of reports alone.
• Enables prioritisation of defects for rectification.
• Guides OEM focus to key areas for product improvement.

How?
• Setup impact scores and rules (customised to your operations)
• Automate data extraction and calculation
• Deliver on Customised Schedule through Dashboard/E-mail.

Electronic Maintenance System | Reporting Systems
---|---
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Cabin Severity – Principles

Set right priorities - Collaborative approach to define the missing metrics
## Cabin Severity - Matrix

<table>
<thead>
<tr>
<th>Sub-Category</th>
<th>Pax Comfort</th>
<th>Cabin Crew Impact</th>
<th>MTBUR (??)</th>
<th>CAREP rate (main)</th>
<th>MTBUR (??)</th>
<th>CAREP rate (main)</th>
<th>Cost</th>
<th>Criteria</th>
<th>$</th>
<th>Cost</th>
<th>Criteria</th>
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### Notes:
- **Severity of each occurrence**
- **Today based on CAREP rate**
- **Cabin maintenance cost Unavailability cost?**
Cabin Metrics - Dashboard

Rate

Rate and Severity
Cabin Metrics - Dashboard

Rate

Rate and Severity
Cabin Metrics - Dashboard

Rate

Rate and Severity
Cabin Metrics - Dashboard

Rate

Rate and Severity
Extending the Concept...

Integration with out-of-service time provides an, ‘impact factor’, a holistic view of effect to the airline:

1) Aircraft maintenance/defect rectification efforts
2) Product improvements

Significant potential as algorithm can incorporate:

1) Defect Resolution Timeframes
2) Aircraft Utilisation
3) Average Load Factor
4) Routes Flown

* Airline Customisable
SUMMARY

- Cabin Appearance and functionality impacts Brand and Revenue

- Cabin performance metrics are available, but challenging to identify pain points

- Cabin factors when integrated with a Severity Index can provide an effective performance indicator

- Operators define the Severity based on Product expectations to create customised reporting

- Extend the concept to define a holistic approach on impacts
Thank you.

Questions?