

On-Time-Performance & Delay Impact Management

Not every delay is created equal. In some cases, a delay is acceptable or even desirable under specific conditions. It's not only the number of minutes which turns a late arrival into a relevant delay. Rather, the real impact on the organizations' schedule as well as implicated fuel consumptions, crew rotation etc. should be considered.

What if your plane is ten hours delayed, but all your cargo arrives at its final destination on time? Conversely, who is liable if a 10-minute delay, defined as being On-Time, causes 30% of the PAX to miss their connecting flights? Will you measure a station's tardiness by total sum of delayed minutes, or do you differentiate between net and gross delays, taking into consideration reactionaries or root causes? How does your organization learn from historic events, and how are the analytics results used?

avialytics' On-Time-Performance / Delay Impact Management (OTP-DIM) software allows operators to predict and control these and other aviation-scheduling situations that may arise. It visualizes the impact of a potential delay and aids economic decisions regarding additional fuel costs and/or the acceptance of a delay to serve a greater good.

Benefits:

- Offers best-practices scheduling and delay management
- Enables conscious and proactive delay decisions
- Saves time and resources
- Offers better visibility around recurring issues
- Allows root cause analytics and follow up
- Simplifies the controllers' reaction process

On-Time-Performance & Delay Impact Management



avialytics' InfoBOX gives your airline the possibility to manage planned and unplanned delays and defines handling in OTP reporting. Furthermore, data gathered about the reasons of delays (ground handling, technical issues, weather) help to understand and improve your operations. The avialytics' OTP-solution does not just consider single flight events for reporting and analysis. It enables a complete current and historic view on the airline operations.

How it Works

1. Delay Request from Station

• Automatic operator notification of the request

| Carrier No Sx XX 987 | Owner Type XX 77F | Reg AVIA1 | DEP BRU | ARR | DIV | STD 04.11 | 2017 02:50 | STA 04.11.201 | 7 04:35 | ATD 04.11.2017 0 | 3 - 3 - 4 - 5 - 5 | 04.11.2017.04:40 | | |
|-------------------------|-------------------|--------------|-------------|------------|------|--------------|------------|------------------|-----------|---------------------|-------------------|------------------|--------|----------|
| General Journey Lo | Load Detail | Comments | Messages | DocGen | APIS | Dolay I | EZFW. De | ay Request | Statistic | Crew Rest | FSUM | Ground Reports | Pormit | |
| Station | | | | | | | | | | | | | | |
| 🔯 Edit delay request | | | | | | | | | | | | | | |
| Requested duration | 00:15 [hh:mm | n] Reason | 91: Load | connection | | | | | | | | | | |
| Additional information | Delayed trucks | due to RT/ | A (approve | d by INCC |) | | | | | | | | | ~ |
| | | | | | | | | | | | | | | \times |
| Name | Katrin Dreiseitel | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

2. Delay Request Handling

- Approve, reject and adjust delay requests based on real-time dependency information
- Management of actions necessary in case of a delay
- E-mail notifications are automatically generated
- The delay request status is displayed in the InfoBOX flight overview

| oproved | @Yes 🛛 🌱 | No. I | DEP ARF | t Date | Ground STD STA PSF FSF | Comments | | |
|-------------------|---------------|-------|---------|------------|-------------------------------|----------|-----|----|
| | OPartially | 987 6 | BRU STR | 04.11.2017 | 05:59 02:50 04:35 13:45 15:55 | | | |
| | ONo | 654 3 | STR SIN | 04.11.2017 | 02:45 07:20 19:35 04:45 06:45 | | | |
| Approved duration | 00:15 [hh:mm] | 456 | SIN BKK | 04.11.2017 | 02:00 21:35 00:05 20:05 32:05 | OCC | occ | |
| | | | | | | | | Re |

3. Delay Refinement

Standard delay-information framework will be enhanced with details like:

- 1) which flight caused a reactionary delay on an individual flight
- **2)** which flights will be affected by the delay of the actual flight, etc.

* This is an independent process wherein the operator inputs/queries A.I.R. and examines data. The station has no involvement with or visibility into the refinement.

| | STR 🙏 | | 8 04.11.2017.05.24 |
|-------------------------|--|--|--|
| tail Comments Messages | DocGen | APIS Delay EZFW Delay.Request Statistic Crew.Rest 1 | SUM Ground Reports Permit |
| ionary delay caused by | 0 | No flight selected / no reactionary delay | N |
| ight related root cause | 0 | No non flight related root cause selected / no reactionary delay | |
| | | | Delay 2 - 32/32D: 58 Min Loading/Unloading S8 Min 28E: DAMAGED OR INCORRECT BUILT UP OF ULD GO) |
| | | Delay 3 - | O Delay 4 - |
| | | | 0 |
| | F AVIA2 SFRA FRA FRA A | FF AVIA2 × FRA STR 4 fail Comments Messages DocGen sonary delay caused by Image: Comments Image: C | FF AVAA2 STR Image: Street and Str |

4. Root Cause Analytics & Learning Opportunities

- Flight and non-flight related root causes can be assigned to delays, along with the durations thereof.
- Gross and net delay times are calculated along with recovery efforts based on minimum turnaround times to identify real performance and critical paths.
- Recovery & Best Practice Workflow can be initiated and assigned to a specific person in the organization to track progress and ensure lessons learned.

| Root Cause | Total Deley | Reactionary | Delay Info | Doley |
|------------------------|-------------|----------------------------|--|-------|
| A1514 CRISPIKT (LNLMN) | 03.10 | 0 2 fights | 91(91A) 28 Mix 1918 (MM) PROC 51 Min | 01.14 |
| | | 1 A1521 S2X-DRS (URLNIN) | 41(41A) 10 Nev 83(83A) 4 Mer | 01.00 |
| | | 2 A1314 RKT-SZX (UKLAN) | 93(93A) 18 Min | 09:56 |
| A1599 BZK-ORS (URLMIN) | 38:23 | 0 4 tights | 41(41A) 514 Mm | 19.21 |
| | | 1 A1570 DRS-NOB (URLMN) | 93(938) 162 Min | 09-47 |
| | | 2 A1573 NGB-HHN (URLMN) | 83(938) 202 Mm | 09.52 |
| | | 3 AMETO HERE SZX (LIKLAIN) | 93 141 Min | 03:09 |
| | | 4 ASESSION (URLAN) | 93 145 Min | 02:14 |
| TEN CREATE GARNERS | 18.42 | 0 4 fights | \$2(52A) 157 Min * 52C (GO) HUMAN 200 Min | 08.25 |
| | | 1 A1500 UTP-KUL (LAINOP) | P10953(2) Bills ***155 (2004) PI0CC 51 Mon 47(15) (5) Mon (5) (2004) 4 Mon 47(15) (5) Mon 47(15) (5) K Mon 4000001 700 Mon 4000001 700 Mon 4011 4 Mon 40 14 Mon | 04:35 |
| | | 2 ASSIS KULAMAA (LMINOP) | 95(R3A) 158 Mm | 03:19 |
| | | 3 A1SOT MAA-DRS (LMNOP) | 83(80A) 29 Mer | 02.78 |
| | | 4 A1110 DRS-CVT (LAINOP) | 93(93A) 49 Mile | 01:55 |

List of occurred root cause delays and reactionary affected flights.



OTP reporting suite

5. A.I.R. Data Distribution to Gross and Net Reporting Tools

Benchmark functions include:

Flight Statistics

- Define and prioritize specific information about how a flight is considered.
- Each flight can be excluded from OTP or included as not delayed (= cleared). Cancellation(s) can also be set with reason as well as Full and Partial Service Failures (FSF/PSF).

OTP Reporting

- Review the list of delays occurring within a given week, as well as the reasons, duration, and PSF-/ FSF-/AdHoc-flags of each event.
- Service Failure Events & Flight Changes
- Delayed flights will be grouped by category and listed alongside their service failure threshold, reason, and ancillary comment information.

OTP Summary

• Extrapolate information from the OTP summary of delay indicators and airline data being run through the network.

Request Project Estimate

For more information or to request a project estimate contact us at:



Evolving aviation data into actionable insights. *avialytics* is focused exclusively on the information value chain relevant for airlines, providing solutions for all steps along the way.

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