

# Timestamped Invoice Log

invoice_id	vendor_type	risk_flag	amount_usd	received_timestamp	approved_stage1_timestamp	approved_stage2_timestamp
INV-10000	Goods	High	2323.28	2/21/2025 14:42	2/24/2025 10:42	3/8/2025 4:42
INV-10001	Services	Low	3106.53	1/24/2025 2:21	1/25/2025 3:21	2/2/2025 8:21
INV-10002	Goods	High	1202.22	2/27/2025 21:43	3/1/2025 13:43	3/8/2025 22:43
INV-10003	International	Medium	3417.52	3/3/2025 14:50	3/6/2025 12:50	3/14/2025 14:50
INV-10004	Services	High	1192.92	3/14/2025 6:17	3/16/2025 19:17	3/23/2025 3:17
INV-10005	Services	High	1330.96	3/1/2025 6:43	3/2/2025 13:43	3/13/2025 15:43
INV-10006	Goods	High	3886.91	1/4/2025 1:05	1/6/2025 10:05	1/15/2025 7:05
INV-10007	Local	Low	2628.13	2/3/2025 9:35	2/6/2025 0:35	2/17/2025 7:35
INV-10008	Services	Medium	1815.93	3/3/2025 7:20	3/5/2025 19:20	3/12/2025 9:20
INV-10009	Local	Low	2145.84	3/1/2025 12:40	3/3/2025 2:40	3/12/2025 2:40

## Averages (sample of 10 invoices):

- Avg Received → Stage1 = **2.14 days**
- Avg Stage1 → Stage2 = **8.86 days**
- Avg Stage2 → Processed = **2.20 days**
- Avg Total Received → Processed = **13.19 days**

## Insights from the timed log

- Stage1 → Stage2 is the largest delay (avg ~8.9 days). That's the primary bottleneck.
- Some invoices (INV-10000, INV-10007, INV-10005) have total lead times > 15 days.
- Approver unavailability and 2-level approval for all invoices amplify delays.