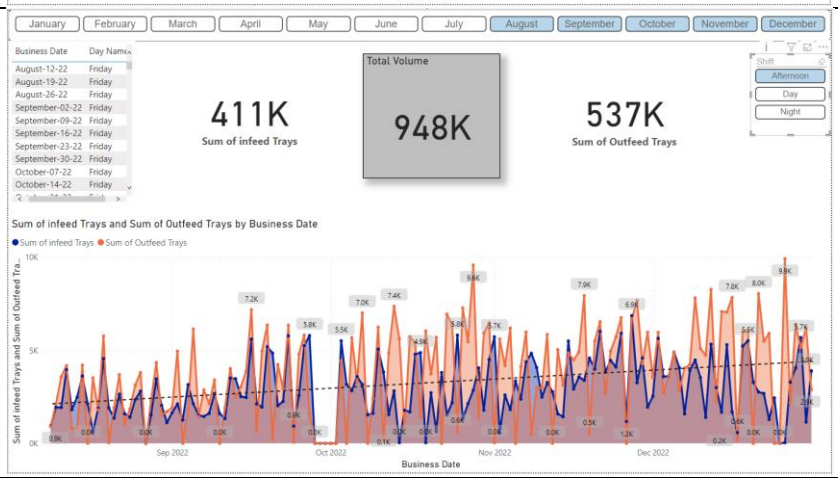
2022 Volume Summary (In Trays)

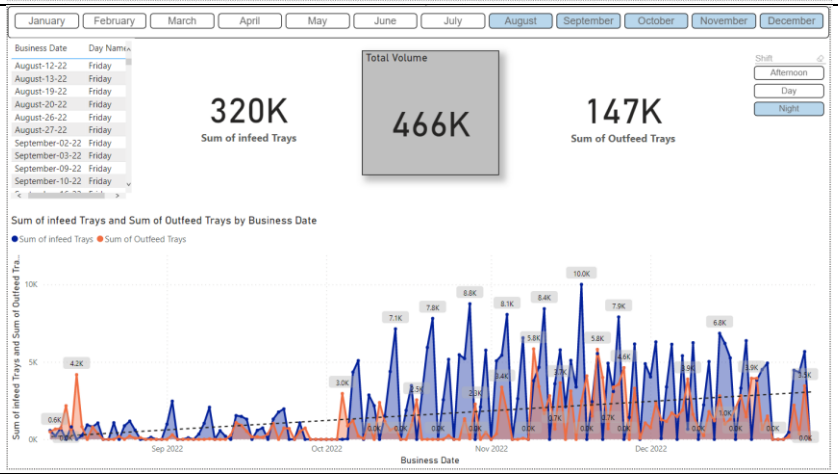
Day Shift (1M)
Infeed Volume: 482K
Outfeed Volume: 522K

Ratio Out/In:
108%
(Slightly more Outfeed)



Afternoon Shift (948K)
Infeed Volume: 411K
Outfeed Volume: 537K

Ratio Out/In:
130%
(More Outfeed)

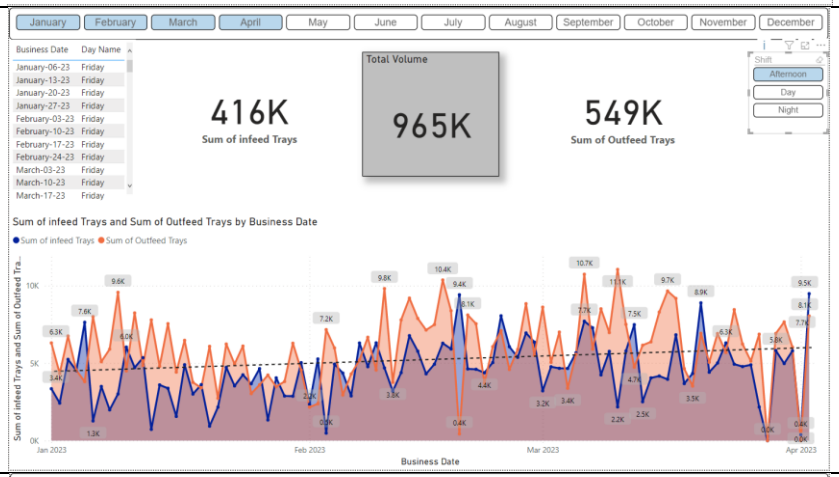
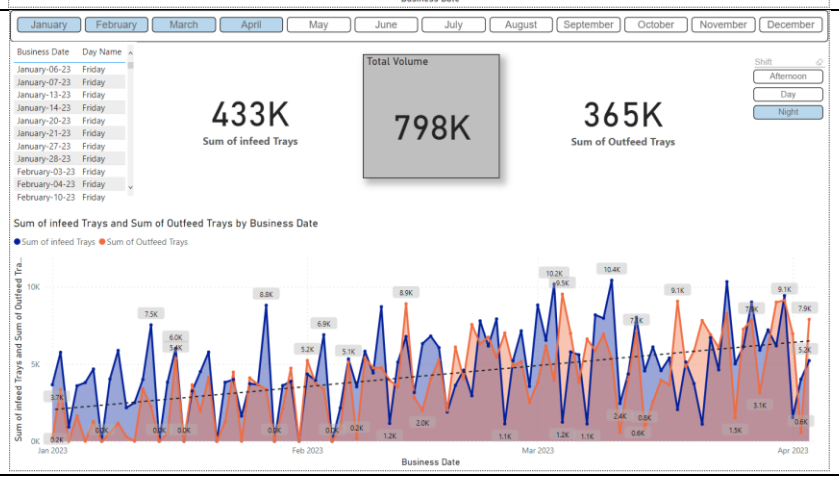


Night Shift (466K)
Infeed Volume: 320K
Outfeed Volume: 147K

Ratio Out/In:
46%
(More Infeed, Less Outfeed)

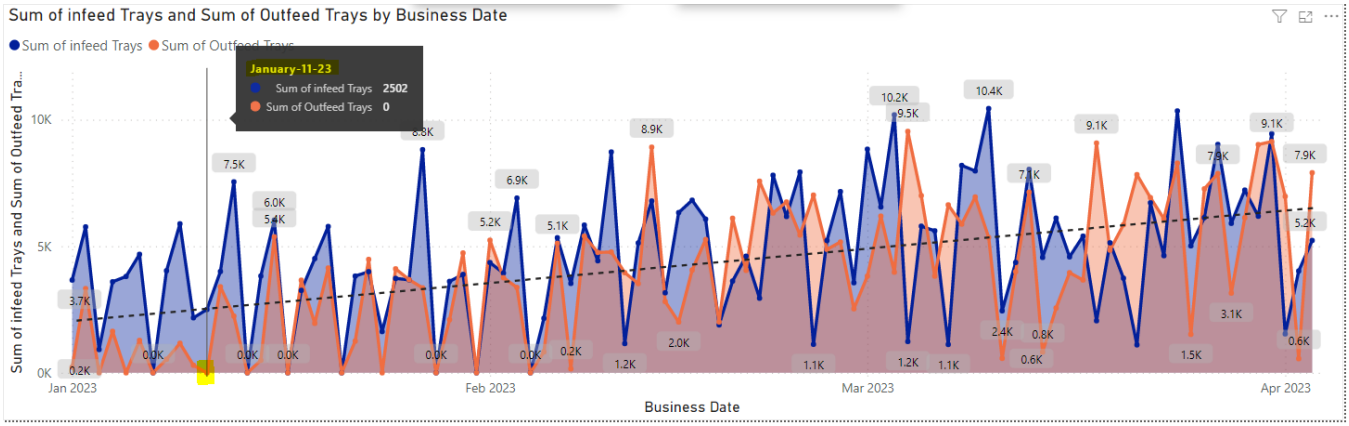
- Night Shift half as utilized as other shifts (Heavy Infeeding, much less Outfeeding)
- Afternoon Shift was heavy on outfeeding
- Day Shift on perfect balance

2023 Volume Summary (In Trays)

	**Day Shift (1M)** Infeed Volume: 549K Outfeed Volume: 480K Ratio Out/In: 83% (Slightly more Infeed)
	**Afternoon Shift (965K)** Infeed Volume: 416K Outfeed Volume: 549K Ratio Out/In: 131% (More Outfeed)
	**Night Shift (798)** Infeed Volume: 433K Outfeed Volume: 365K Ratio Out/In: 84% (More Infeed, Less Outfeed)

- Night Shift utilization doubled compared to 2022
- Afternoon Shift has same performance
- Day shift now outfeeding more than before

Night Shift Improvement Drill Down:

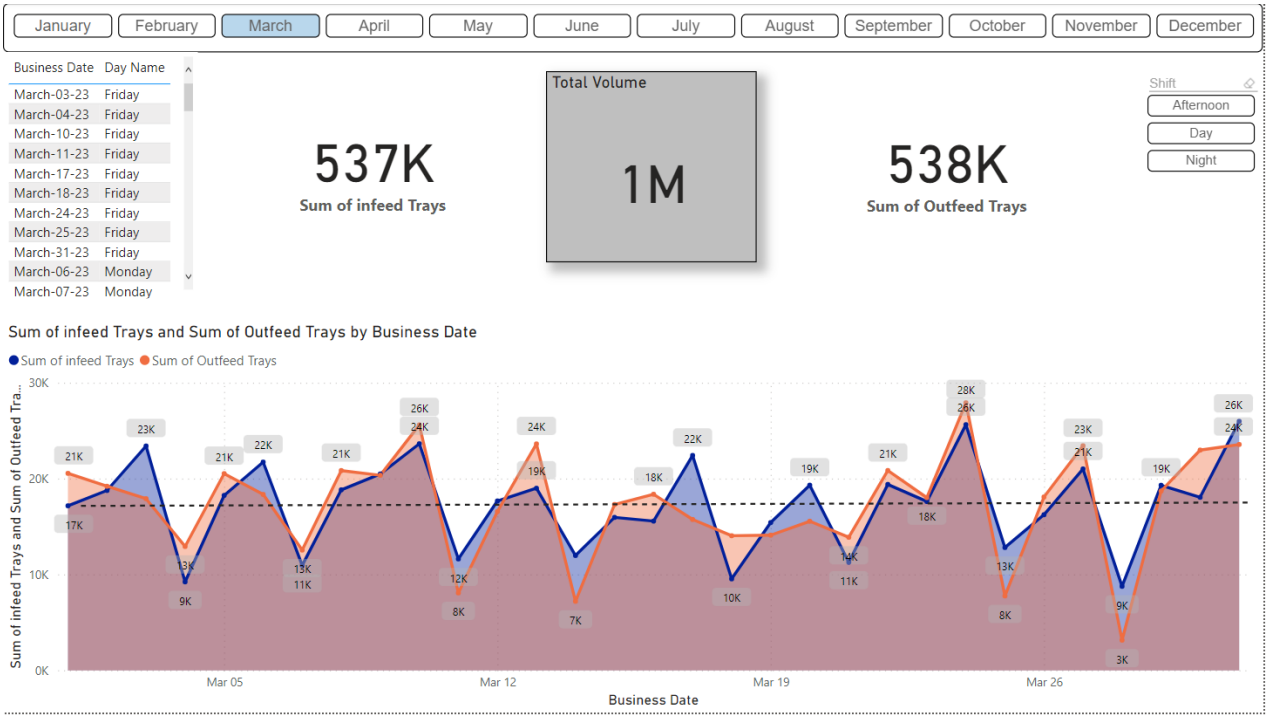


After Jan 11th, Night shift Started utilizing outfeeding capabilities drastically

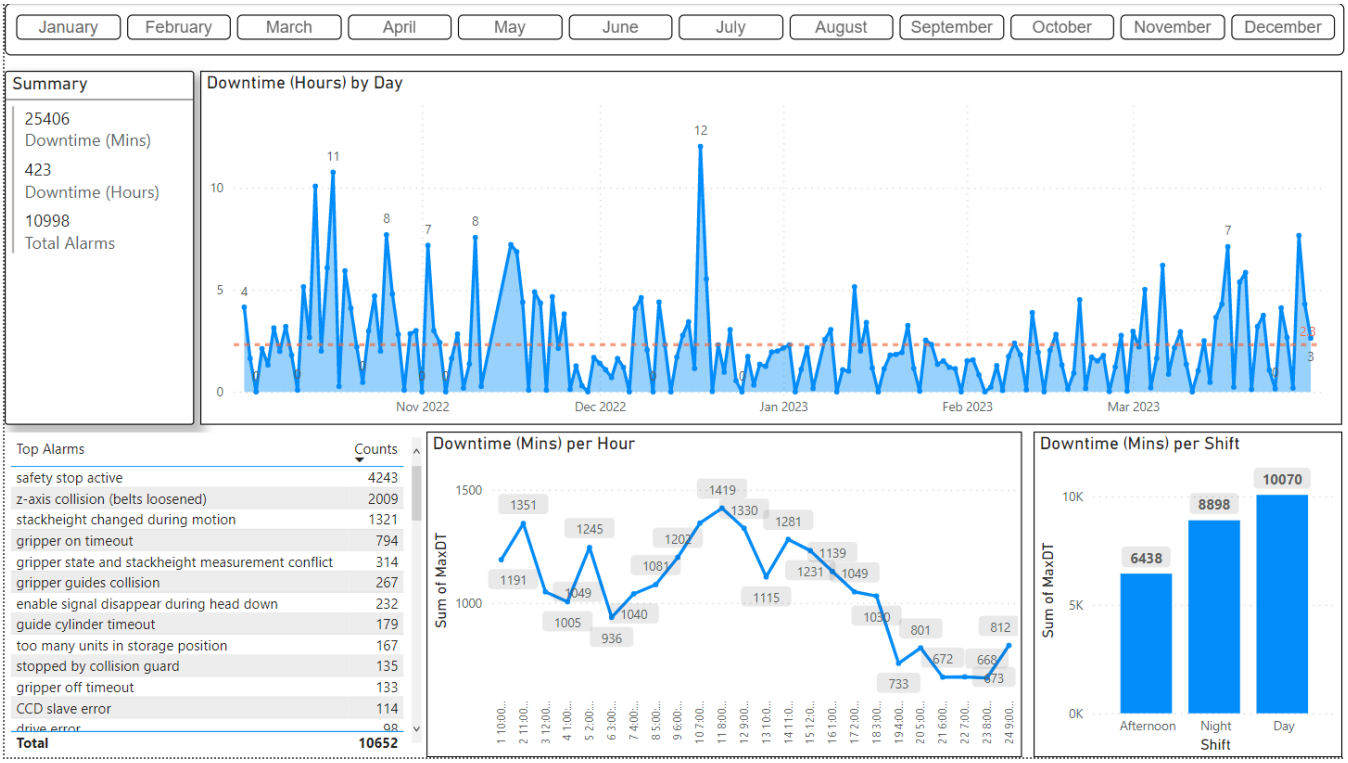
March Month as a Benchmark: (Total Volume in March = 1.1 million trays)

	Day Shift	Afternoon Shift	Night Shift	Total
Infeed	201K	151K	184K	537K
Outfeed	157K	204K	174K	538K
Total	359K	356K	358K	**1M**

- All Shifts are handling almost same volume
- Day Shift is heavy on infeeding, afternoon is heavy on outfeeding, and night shift is almost same for infeed vs outfeed

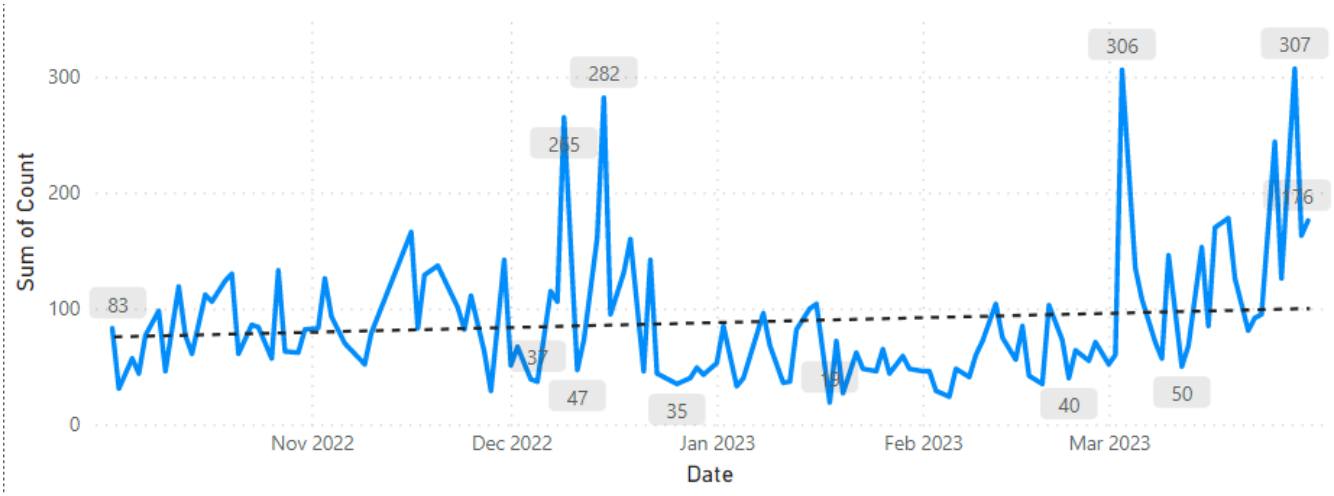


Downtime Summary



Highlights:

- Afternoon shift with the lowest downtime average and day shift the highest
- Average 2 hours and 15 minutes of downtime for Gantry



Highlights:

- Gantry worked with minimum problems during late Dec to early March
- Problems rose drastically after March 3rd, 2023

Important Notes:

- All the data is confidential and source can not be shared
- Downtime (Mins) represents the time when Gantry registered itself as down. In above graphs, the time shown is the downtime for R101/R102 robots only.

For Downtime:

	A	B	C	D
1	Date and time	Operating time	Standby time	Downtime
2	03.04.2023 6:00	2458	311	831
3	03.04.2023 7:00	3184	94	322
4	03.04.2023 8:00	2383	273	944

- As shown above, it shows us downtime per hour for each robot in minutes.

For Alarms:

10	1.R102	23.03.2023 13:04:14	WorkCycle-20	gripper guides dropped
11	2.R201	23.03.2023 12:58:22	Machine-13	safety stop active
12	2.R201	23.03.2023 12:56:58	Motion-11	z-axis collision (belts loosened)
13	2.R201	23.03.2023 12:56:58	WorkCycle-11	z-axis collision (belts loosened)

- .log files generates a list of alarms with the necessary information like when it was generated, and which error was it. As shown above, sometimes a error is generated twice so the number of alarms you see on graph is higher than actual alarms.
- However, the graph generated is an accurate representation of the actual alarms happening per day/per shift

For Feed Rates:

	A	B	C	D
1	Date and time	Capacity, totes out: CNV1034	Capacity, totes out: CNV2034	Capacity, totes out: CNV2047
2	31.03.2023 7:00	1093	757	618
3	31.03.2023 8:00	302	733	564
4	31.03.2023 9:00	1220	860	756
5	31.03.2023 10:00	801	763	717
6	31.03.2023 11:00	920	870	824
7	31.03.2023 12:00	1077	536	673
8	31.03.2023 13:00	1667	570	433
9	31.03.2023 14:00	873	403	415
10	31.03.2023 15:00	862	510	461

- the data shows outfeeding trays per hour with name CNV1034
- For Infeeding, you must add up CNV2034 and CNV2047 columns