

KGQuant Single Run Report

Shared CT Scanner

Generated 2026-08-28 03:16

Dashboard: <https://kgquant.com/demonstrations/shared-ct-scanner/>

Executive Summary

Network	Shared CT Scanner
Run type	Single
Single run	net_6a2556_single_run_817187
Status	Completed
Profit	£-840.55
Total revenue	£10,785.00
Total cost	£11,625.55

Recommendations

Issue	Evidence	Suggested intervention	Scenario to run
Resource "CT Scanners" is overloaded at 102% utilization.	Utilization = 101.5%	Add capacity to "CT Scanners" or reduce demand on activities using it.	Increase "CT Scanners" capacity by 50% and re-run.
Queue "Shared CT Queue" averages 33 items.	Avg queue size = 32.6	Increase downstream staffing, reduce service time, or change shift coverage.	Increase capacity of activities downstream of "Shared CT Queue".

Run Details

Resources

resource	utilization	cost
Porters	47.55	194.01
CT Scanners	101.54	2193.35
Radiologists	60.98	1097.57
Radiographers	50.77	414.3
ED Clinicians	19.6	216.42

Activities

activity	completed	blocked	cost
ED Request Prep	48	0.0	57.6
Radiologist Report	38	0.0	456.0
CT Scan	39	0.0	1482.0
Ward Patient Prep	42	0.0	75.6

Queues

storage_queue	avg_q_size	avg_q_time	cost
Ward Request Queue	0.67	00:02:50	0.0
Reporting Queue	0.5	00:00:00	0.0
ED Request Queue	0.5	00:00:00	0.0
Shared CT Queue	32.65	03:58:19	0.0

Exit Points

exit_point	completed	avg_time	revenue
Admitted After Scan	15	04:48:58	2100.0
Decision Cleared	23	04:47:45	2185.0