Hospital Impact Study

Context

A NHS acute hospital with 500 beds asked Navenio to help it improve the efficiency of its facility management team. As a starting point for the rollout of our solution we chose the hospital Portering team, so the team that moves patients and assets around the hospital's various sectors and buildings. Typical tasks of a Portering team include:

- Moving patients in beds and wheelchairs from their room to e.g. physiotherapy, radiology, etc.
- Moving high-value assets that are shared between departments (e.g. diagnostic instruments)
- Delivering prescription medicines from the hospital pharmacy
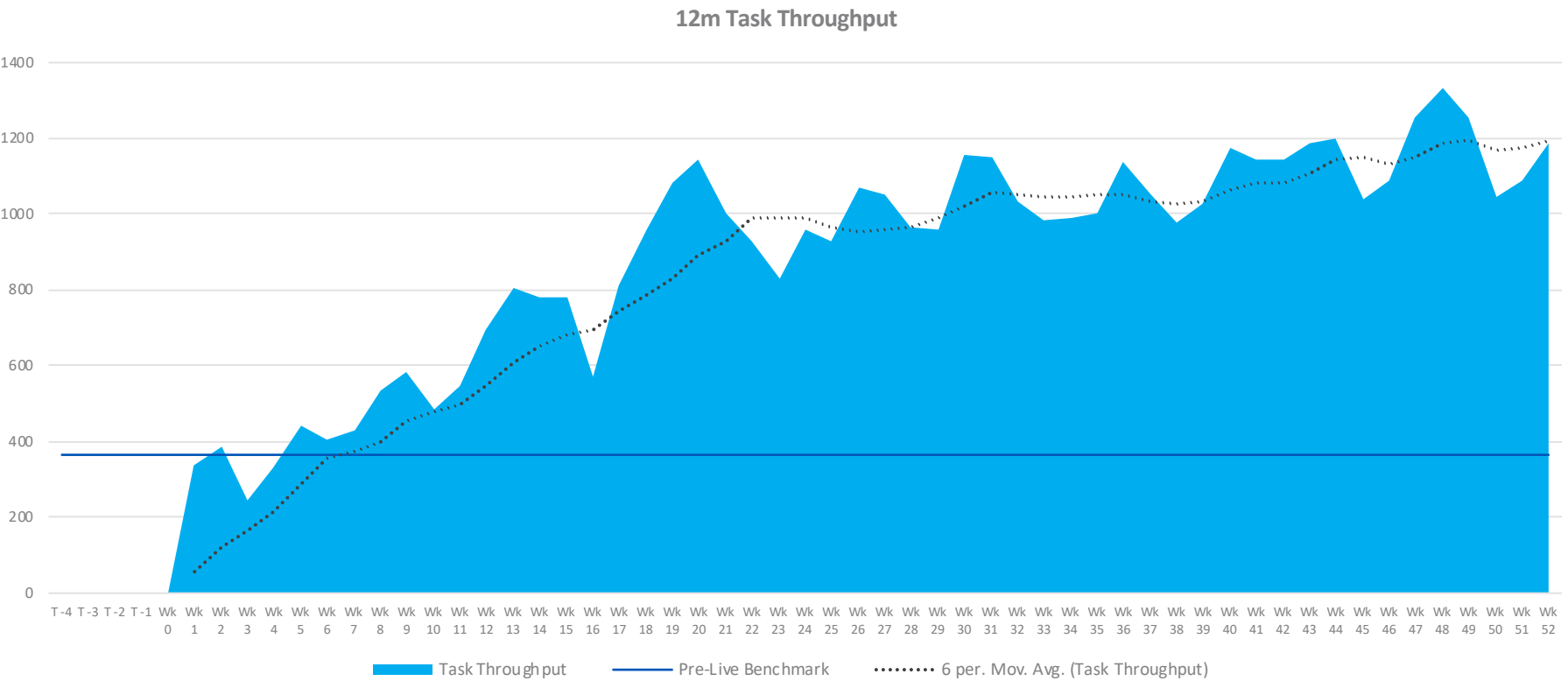- Delivering urgent blood and tissue samples to the hospital's laboratories

The previous way to task the members of the Portering team was via a helpdesk. In this setup, staff would ring the help desk and the helpdesk would radio out to the porters who accepted the task based on their preference. This system – which is still the prevailing system for most hospitals - was inefficient, prone to delays and delivered not a great service. In this particular hospital, the Portering team was able to handle approx. 400 tasks per day using the old system.

Within 3 months of implementing the new Navenio location-based tasking system, the Portering team was handling approx. 800 tasks so 2x vs before. This number rose to over 1000 tasks as the hospital changed their workflow to benefit even more from the new Navenio system.

- See chart overleaf for the week by week increase in tasks completed

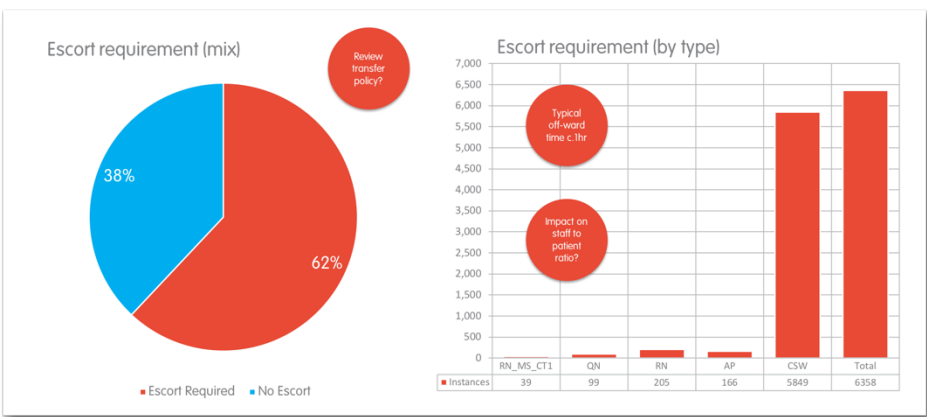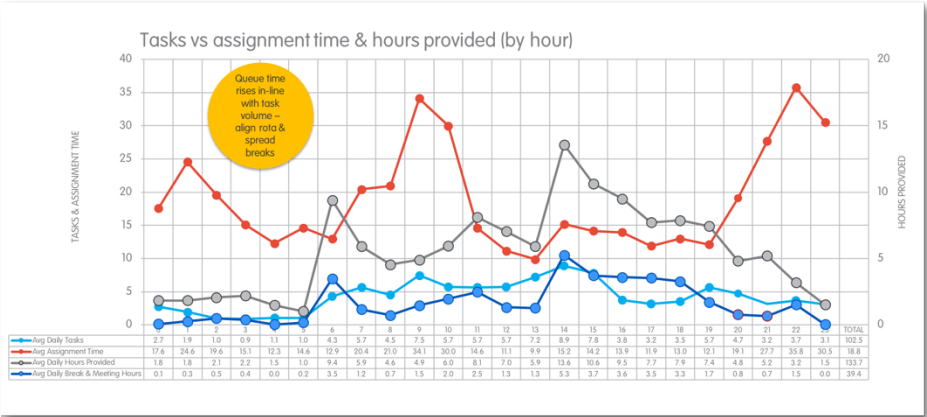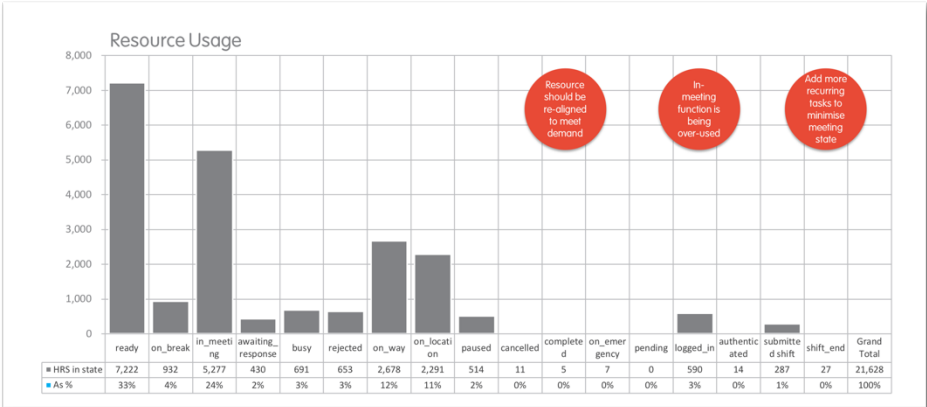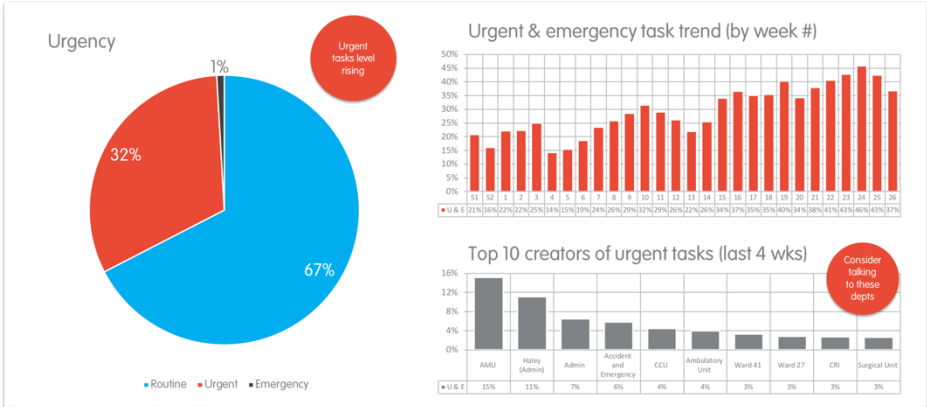# Throughput has Nearly Trebled, Sustainably & with Less Staff

12m Task Throughput

Task Throughput   Pre-Live Benchmark   6 per. Mov. Avg. (Task Throughput)

The Business Case

Financial Benefits

- Navenio's solution automates the prioritisation and allocation of tasks, and therefore replaces traditional porter dispatch / helpdesk operators 24x7
    - Typically this equates to 3 FTE equivalent NHS Grade 2 Staff at £26k each

- Navenio not only delivers a doubling of throughput, but as a result the same team now has over 30% un-used capacity
    - Typically this equates to 5 FTE equivalent NHS Grade 1 Staff at £25k each

- Therefore over £200k Benefits on a typical 500 bed site
- This enables rapid payback plus a healthy ROI in yr1. See table overleaf.

- There are many additional positive impacts of the system that cannot be calculated as benefits to the Portering team directly - for example the doubling of task throughput can rapidly speed up patient flow and therefore reduce overall length of stay - which is a benefit to the hospital as a whole rather than any one department, so is almost incalculable as part of a business case.
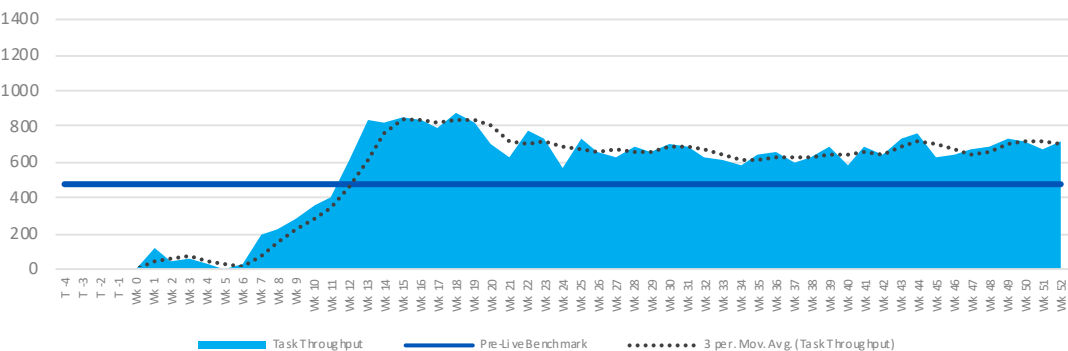
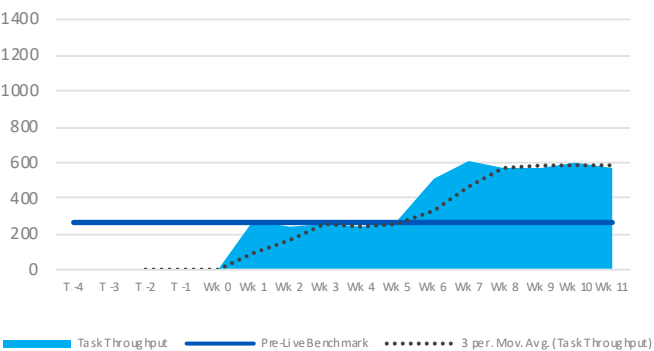# Solution Delivers Rich Analytics for Continual Workflow Optimisation

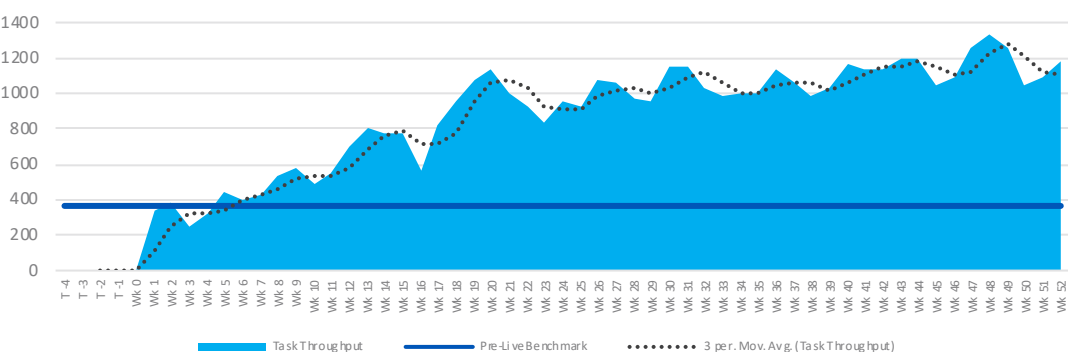# Task Throughput on Various Sites at Various Stages

Sub-Optimal 300 bed site - 12m Task Throughput

Task Throughput — Pre-Live Benchmark .... 3 per. Mov. Avg. (Task Throughput)

500 Site - 11wk Task Throughput

Task Throughput — Pre-Live Benchmark .... 3 per. Mov. Avg. (Task Throughput)

580 bed site - 12m Task Throughput

Task Throughput — Pre-Live Benchmark .... 3 per. Mov. Avg. (Task Throughput)

- Smaller sites perform at around 50% increase

- Larger sites perform at at least 100% increase

- Even at a just launched site the 100% + increase kicks in within 6 weeks

Modules and Licenses available for Facilities Departments

Module	Brief Description
Platform Starter	Everything you need to create your venue, manage your room information and start collecting location data. Includes ingestion of CAD plans into Navenio system in order to generate XYZ, lat-long plans, geofences and reporting and tasking zones.
Porter Tasking	Allow authorised portal users to generate reactive and proactive porter tasks, auto assign those tasks to team members and automatically manage and account for those tasks through to completion. Includes ability to overflow tasks from one group to another using pre-agreed rules.
Cleaning Tasking	Allow authorised portal users generate reactive and proactive cleaning tasks, auto assign those tasks to team members and automatically manage and account for those tasks through to completion. Includes ability to overflow tasks from one group to another using pre-agreed rules.
Catering Tasking	Allow wards and depts to order snackboxes, missed meals, special diets/supplements and authorised users to order hospitality, auto assign those tasks to team members and then manage and account for those tasks through to completion.
Security Tasking	Allow authorised portal users to generate reactive and proactive security tasks, auto assign those tasks to team members and manage tasks through to completion. Includes ability to overflow tasks from one group to another using pre-agreed rules.
Waste Tasking	Allow authorised portal users to generate reactive and proactive waste tasks, auto assign those tasks to team members and manage tasks through to completion. Includes ability to overflow tasks from one group to another using pre-agreed rules.
Logistics Tasking	Allow authorised portal users to generate reactive and proactive linen and receipt/distribution tasks, consolidate tasks on task approval list for review/approval/modification, then auto assign required tasks to team members and then manage and account for those tasks through to completion.. Includes time ability to overflow tasks from one group to another using rules.
Patient Transport Tasking	Allow authorised portal users to generate reactive patient transport tasks, consolidate tasks on task approval list for review/approval/modification, then auto assign required tasks to team members and then manage and account for those tasks through to completion.

Alongside Real-Time Building Heatmaps and Usage Data