provelio

Digital Estates Management for NHS Trusts

Empowering decisions through data intelligence

CONTENTS

"OPAL provided a comprehensive view of our estate portfolio, allowing for data-driven decision making and scenario testing. The system was fully bespoke to our estate, therefore enhancing the quality of our strategic decision-making."

Director - Public Sector Organisation

EXECUTIVE SUMMARY

This document outlines the three primary categories of decisions that NHS Trusts face regarding operational and estate management.

Understanding this is crucial for creating a system which can make the lives of everybody easier in the Trust - the Chief Executive, the Finance Director, the Director of Estates, and all other parties who must jointly make complex, interconnected decisions.

We explain how the digitisation of operational and estates data can automate most of the arduous work in reaching conclusions. The speed with which digital information can test and resolve a wide variety of scenarios and issues will continue to impress as the technology and associated databases improves and grows.

Digital systems should communicate with each other, and we can bring in other, respected data to support an NHS Trusts estate planning, in conjunction with operational matters.

It begins with 10 questions that we find most people want to resolve. But this is just the start - we work in partnership with clients and stakeholders, encouraging them to raise other issues.

We introduce OPAL - a system that provides data-informed digital systems to optimise the use and development of the physical assets of NHS Trusts, combined with capital and operational costs.

In the last section of this document, we discuss the applications of OPAL, underscoring the intricacies and challenges of operational and estate planning. This involves striking a balance among long-term strategic objectives, operational excellence, and a responsive estate, which has safety at its central pillar.

SETTING THE CONTEXT

This paper is intended for the key decision-makers within an NHS Trust, who are responsible for strategic planning.

The process of making investment decisions within the NHS Trust's Estate presents complexities and challenges. Ensuring that these decisions optimise value while mitigating risks is not straightforward.

The NHS Estate, encompassing hospitals, clinics, and administrative buildings, holds a crucial position in healthcare service provision. Constantly evolving, it must adjust to shifting spatial and service requirements of hospitals. This perpetual transition necessitates adaptations to accommodate changes in healthcare delivery models, including space reconfiguration, creation of new healthcare facilities, and the integration of digital advancements.

DECISION-MAKING IN NHS TRUSTS

Decision-making in an NHS Trust involves a careful balance between long-term strategic goals, the practicalities of operational delivery, and the physical capabilities of its estates. Therefore, decision-making within an NHS Trust is multi-faceted, involving:

Strategic Planning - The big-picture, long-term decisions

Strategic Planning in the NHS involves setting long-term goals and determining the best course of action to achieve these objectives. This process includes:

- **Designing a service that works for everybody**: The NHS aims to provide equitable services to all segments of the population. Strategic decisions must consider demographic changes, health trends, and social determinants of health to ensure services are accessible and meet the needs of diverse communities.

- **Taking account of medical advancements:** Healthcare is a rapidly evolving field. Strategic planning must incorporate the latest medical research, technological advancements, and innovative treatments to improve patient outcomes. This requires continuous monitoring of the healthcare landscape and adapting strategies to integrate new practices and technologies and developing the estate to meet these needs.

Operational Planning - The short to medium-term issues

Operational Planning translates strategic objectives into actionable plans for delivering services. This involves:

- **Deciding which services are required**: Based on the strategic objectives, the NHS Trust identifies specific services that need to be provided or enhanced. This could include expanding mental health support, increasing cancer screening programs, or improving chronic disease management.

- **Determining how services will be delivered**: Once the required services are identified, the NHS Trust must decide on the delivery mechanisms. This could involve a mix of in-person consultations, digital health services, community-based interventions, or specialised clinics. Operational planning also includes workforce planning to ensure there are enough healthcare professionals with the right skills to deliver these services.

Estates Planning - The adaptive decisions

Estates Planning involves the physical infrastructure of the NHS Trust and the crucial role it plays in delivering high-quality care. Decisions related to estates include:

- **Making sure the buildings are fit-for-purpose**: This involves assessing the current state of NHS Trust's facilities and determining whether they meet the needs of the services being provided. Above all it must be safe and comply with all current regulations. It may lead to renovations, new constructions, or repurposing existing buildings to better support healthcare delivery.

- **Adapting to new models of care**: As the way that healthcare is delivered evolves, the physical spaces need to adapt. This could mean creating more flexible spaces that can accommodate several types of services or incorporating technology into facilities to support digital health initiatives.

It requires collaboration across various levels of the Trust and engagement with stakeholders, including patients and the public, and a commitment to continuous improvement to ensure that the health system can effectively meet the needs of the population.

THE LONG-TERM NATURE OF ESTATES PLANNING

The planning and development of an NHS Trust's estate must be visionary, looking decades into the future rather than just focusing on immediate needs. Physical assets in healthcare are significant investments, and their utility spans many years, often outliving the technology and medical practices they were originally designed to accommodate. This long-term perspective is crucial for several reasons:

Adaptability	Buildings need to be designed and maintained with flexibility in mind, allowing for changes in medical technology, patient care models, and even the potential for repurposing spaces as healthcare demands evolve.
Sustainability	With increasing emphasis on environmental responsibility, NHS estates are planned with sustainability goals at the forefront, reducing energy consumption and minimising waste to achieve a net zero estate.
Cost-effectiveness	Given the substantial investment involved in healthcare infrastructure, long-term planning ensures that assets remain fit for purpose for as long as possible, delivering value for money and supporting the financial sustainability of the health service.

EXTERNAL CONTROLS AND REGULATIONS ON ESTATES

The operation and maintenance of an NHS Trust's estate is subject to a wide range of external controls and regulations, emphasising the importance of safety, accessibility, and efficiency. For instance:

Fire Safety	**Building Safety Regulations**	**Accessibility**
Buildings must comply with strict fire safety standards, protecting patients, staff, and visitors. This involves not only the design and construction phases but also regular inspections, risk assessments, and updates to fire safety protocols.	NHS estates must adhere to building regulations that dictate everything from structural integrity to energy efficiency. These standards ensure that facilities are safe, environmentally sustainable, and conducive to delivering high-quality healthcare.	Ensuring that all individuals, regardless of their physical abilities, can access and use healthcare facilities is a legal and moral imperative. This includes considerations for mobility, sensory impairments, and other accessibility needs in the design and layout of buildings.

One of the challenges in managing NHS estates is that the control of these aspects lies outside the direct influence of healthcare planners.

Regulations are set by governmental bodies and external agencies, and compliance requires constant vigilance and adaptation. Furthermore, the integration of new safety and environmental standards can necessitate significant investment and retrofitting of older buildings, presenting logistical and financial challenges. As the NHS continues to evolve, so too will its approach to managing the physical spaces in which care is delivered.

TRANSFORMING ASSET MANAGEMENT WITH DIGITAL INFORMATION

The integration of strategic, operational, and estates planning through digitisation is critical for an NHS Trust's success. A single point of truth, facilitated by comprehensive digital information systems, underpins this integration.

Digital information has been encapsulated in the regulatory regime for buildings, which are now mandatory for new high risk buildings. Producing Digital Twins for existing buildings is becoming significantly easier as the technology is moving at a fast pace.

By **concentrating data**, the NHS Trust can ensure that all levels of planning are aligned and based on the most current and accurate information available. This coherence is essential for anticipating future challenges, optimising resource allocation, and delivering services that meet the needs of the population.

A **unified digital platform** enhances communication and collaboration across different departments and specialties within the NHS Trust. It allows for seamless sharing of information, whilst fostering a more coordinated approach to healthcare delivery. In an environment as dynamic and complex as the NHS, the ability to quickly access and analyse reliable data is invaluable.

By integrating digital technologies and data into estates management decision-making, the NHS can address a range of critical questions that are essential for optimising the use and development of its physical assets. Here are some of the key questions that digitising estates can help answer:

01 How can we improve asset utilisation?

Digitisation can provide detailed insights into how buildings and spaces are used, identifying underutilised areas, and enabling more efficient allocation of resources.

02 What is the current condition of our assets, and how can we manage maintenance better?

Digital tools can facilitate real-time monitoring of the state of facilities, predicting maintenance needs before they become critical and planning preventative maintenance schedules effectively.

03 How can energy consumption be reduced in NHS facilities?

By analysing data on energy use, the NHS Trust can identify opportunities for energy savings, implement more sustainable practices, and reduce its carbon footprint.

04 Can we enhance the safety and security of our estates?

Digitisation allows for the integration of advanced security systems and ensures compliance with safety regulations through continuous monitoring and immediate response capabilities.

05

How do we ensure our estates are adaptable to future healthcare needs?

Digital models can simulate various future scenarios, from demographic changes to new healthcare technologies, helping to plan adaptable and flexible spaces.

06

What are the most cost-effective investments for estate development and refurbishment?

Through data analysis, the NHS can prioritise investments based on impact, cost, and long-term sustainability, ensuring that funds are allocated to programmes and projects that offer the greatest benefit.

07

How can we enhance patient and staff experiences within NHS facilities?

Digitising estates can improve wayfinding, reduce wait times, and create more comfortable and healing environments for patients and workspaces for staff.

08

What are the barriers to implementing healthcare technology within existing infrastructure?

By understanding the current limitations of NHS estates, digitisation can guide the integration of innovative technologies, ensuring facilities can support the latest healthcare innovations.

09

How can we improve compliance with regulations and standards?

Digital systems can help track compliance with health, safety, and building regulations, automating reports, and ensuring that all facilities meet the required standards.

10

How do we manage the complexity of decision-making in NHS estates more effectively?

Digitisation offers a comprehensive view of the NHS estate portfolio, simplifying management tasks, enhancing decision-making processes, and improving communication across various levels of the organisation.

By addressing these questions through the digitisation of estates, the NHS can significantly enhance its ability to provide high-quality care, improve the efficiency of its operations, and ensure that its physical assets are well-maintained, sustainable, and fully aligned with the future needs of healthcare delivery.

INTRODUCING OPAL

We have developed a system called OPAL, which is a powerful system that enables digital estate management for NHS Trusts.

The term Operational Alpha was originally coined in the finance industry, where it refers to the excess returns generated by an investment manager through the efficient management of operational activities, rather than through investment decisions alone. (This is based on a recognised index of investment performance).

In other words, it links operational management, with estate management.

It gains its power from using data, integrated from various sources and systems and brought to life by the way it is visualised. It can also link to reputable external data sources such as the Office for National Statistics.

OPAL provides a comprehensive view of the NHS estate portfolio, allowing for data-informed decision making and scenario testing. This system is fully customisable, scalable, and adaptable, making it a valuable tool for unlocking the value of the NHS estate and enhancing the quality of strategic decision-making.

OPAL facilitates the digitisation of estates information that can be used to change the NHS Estate to match changes in the operational business.

But it is more significant, because it can use the estates data to influence the changes to the operational business and strategic decision-making. OPAL integrates investment, project delivery and operations.

For example, in cases where there is a huge backlog of maintenance, then this may suggest the replacement or a change in the purpose of the facilities. This could solve the problem of backlog maintenance and compliance and carbon reduction, because if you must spend a lot of money, you may as well spend it on facilities that are sound in operational terms.

This makes the examination and analysis of the operational business and the estate, truly integrated, in ways that have hitherto been unachievable, and can ensure that the value of the estate increases.

OPAL involves strategic planning, effective utilisation of resources, and adapting infrastructure to meet evolving healthcare needs. It therefore unlocks the value in the estate by providing a rigorous platform to use for systematic and informed decision-making. As the analysis progresses more and more value is discovered, with each discovery leading to further avenues of interest to pursue.

STRATEGIC OBJECTIVES OF OPAL

OPAL is a digitised approach to get the most from your estate and to enhance the quality of strategic decision-making.

Too often decisions are made with incomplete data or data that is unsuitable in terms of adequacy or maturity. The features and benefits are included on an estate wide and integrated basis.

OPAL uses your existing data, from any source or software that the Trust may be using. The strength of OPAL is that it seeks to work with what you have, determine its maturity and then work with the Trust to improve over time; and according to priority.

It aims to establish direction of travel quickly and then refine over a timeframe that suits the Trust. The primary goal is to provide the Trust with integrated data to make optimal decisions. The Trust can then use OPAL in part or full whether for a specific investment decision or a long-term transformational programme. This makes OPAL entirely scalable within the Trust as a decision-making tool.

OPAL was developed specifically for the decision makers, and the Trust can be sure that it is making sound decisions with high confidence.
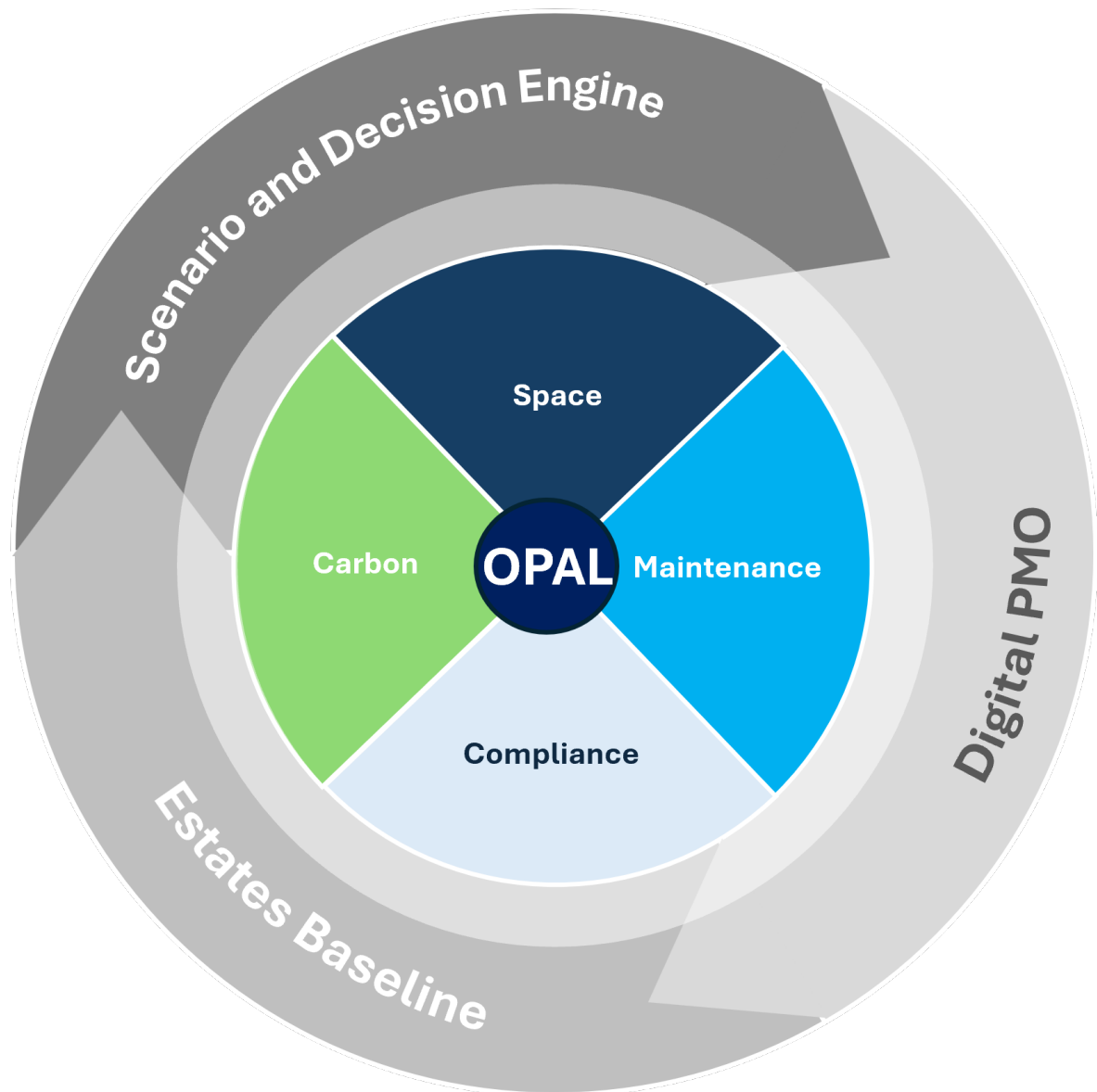
OPAL will transform the way in which you think about your assets in the property and estate environment. Decision-makers are presented options and choices with clear understanding of the source and nature of the data that is being used. The estate typically has the largest impact upon borrowing, one of the highest revenue costs and attracts most of the capital investment. The estate is one of the biggest drains but is also one of the biggest enablers to transforming an organisation. The importance of the estate in reducing costs, increasing revenue, and transforming an organisation is therefore critical. If an organisation or business is shrinking, consolidating, or growing, the influence of the estate is a critical part of the decision-making process.

There are many property management tools, but they focus on one aspect of the estate such as capital projects, maintenance, space management and carbon reduction. OPAL is unique because it:

- Encompasses ALL of these aspects of the estate

- And then integrates them from business case to capital delivery to operational management

This means that strategic decision-makers can have transparent access to the entire estate management process from start to finish. OPAL can be used at senior team level and within the project management office, property development or asset management teams.

BENEFITS OF OPAL

Planning and Prioritisation

Business case production

OPAL assists in the production of business cases and investment appraisals, for various estate-planning and development scenarios, using data-driven analysis and visualisation. This is for decisions made at the strategic level.


Options and feasibility production

This provides a flexible and tailored model for rapidly assessing feasibility options to suit your ways of working. They can be fully linked to provide real-time impact for the business case.

Prioritisation modelling

OPAL facilitates the modelling of all viable options to determine the optimal prioritisation of all projects. It also presents them in a visual form so that project & logistical clashing can be avoided.


Scenario testing

This enables the creation of a bespoke primary decision-making model to permit the testing and visualisation of various scenarios, as and when they become apparent. It allows options to be analysed very quickly and is the principal reason for making more data available.
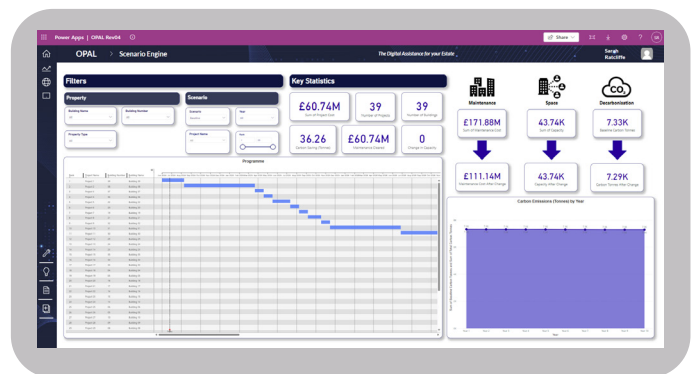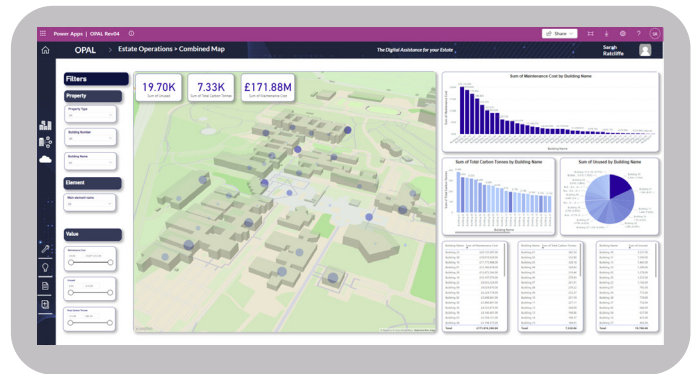
Enterprise Risk

### Estates enterprise risk management

We create a customisable checklist of enterprise risk for NHS Trusts, which can contribute to any risk management system that may already be used. This allows the integration of risk into decision-making at enterprise level.
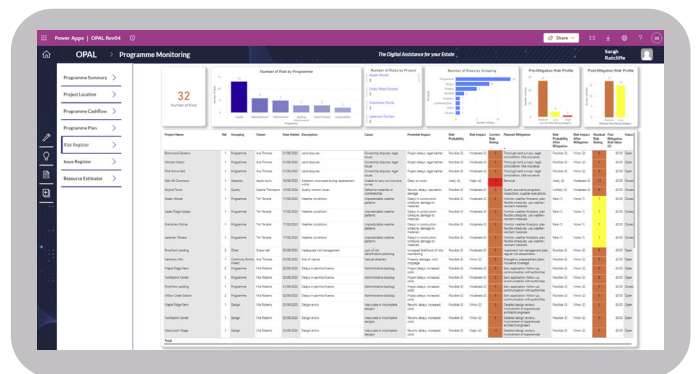
Compliance and Monitoring

Compliance assurance

There are many parts of the compliance of buildings which are mandated by third parties; for example, the Fire Safety Act and the Building Safety Act. We have a number of templated checklists for testing existing performance of the existing building, but what is more important is that they are all looked at from first principles. OPAL can automatically generate RAG prioritisation reports and provides the opportunity of running impact assessments of proposed remedial action.
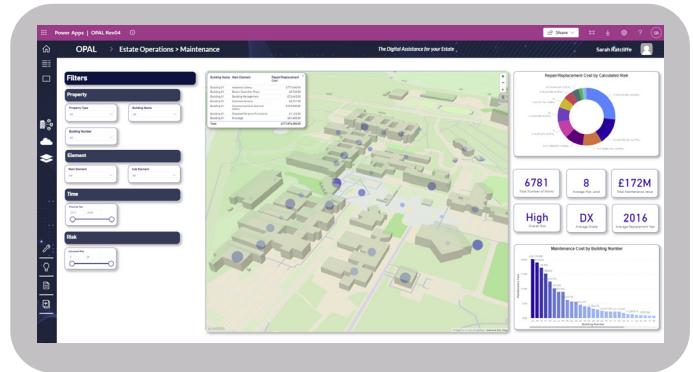

Dashboard controls

We provide fully customisable dashboards, so the Trust can emphasise its own priorities and communicate with all stakeholders. These dashboards enable systematic analysis of the portfolio, programme, or project performance.

Key performance indicators

OPAL derives all KPIs from the data and integrates it with the business case, programmes, projects, and operational requirements. This benefits from the constantly maturing database for comparing with other Trusts and organisations outside of the NHS.
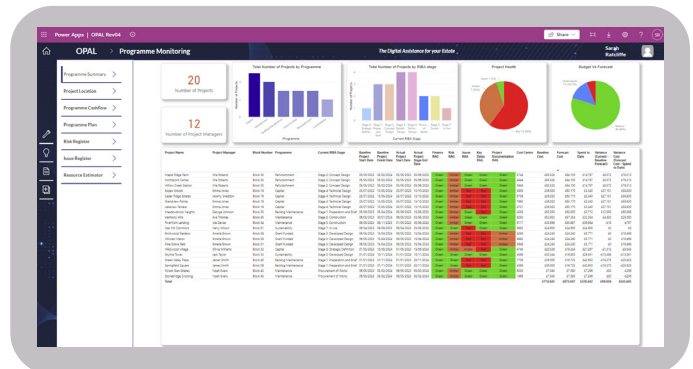

Enterprise Modelling

Fully costed estate

We capture the entire cost base of the estate across all functions, so that it can be communicated to all stakeholders, and break down "information silos." The modelling of the shared data creates a single source of truth for reliable modelling, monitoring, and compliance.

Output and capability costing

The fully costed estate paves the way for meaningful output and capability costing with the NHS Trust. This can be used to model long term scenarios and ensures that you look at cost rationalisation and transformational programmes, both of which can be a significant financial boost for the Trust.
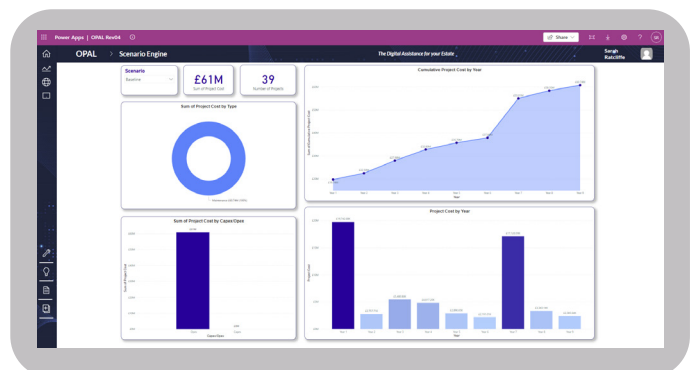
OPAL - INSIGHTS IN THE REAL WORLD

The number of ways that OPAL can direct and plan the future of the Trust's estate is unlimited. Since it uses your data and systems, it is only constrained by the demands of the users.

The more a Trust wants to know and explore, the more that OPAL can scale and flex to answer the questions that are being posed.

We have helped many large asset-owning clients in the following ways:

Enterprise Level Cost Rationalisation

The consolidation of costs across the entire organisation creates output level costings across all top-level budgets. We have used organisational data and ways of working to generate numerous executive team strategies including cost rationalisation, strategic option analysis and transformation programme, time and cost models.

Backlog Maintenance Strategies

We have consolidated all estates data including backlog, planned and reactive maintenance with functions, including capital projects, carbon reduction and fire improvement works. This creates a decision-making tool for determining project selection and prioritisation. It also enables the decision-makers to significantly reduce forecast costs by consolidating functional budgets into delivery budgets.

Operational Sites Relocation

We have developed strategic plans for relocation and rationalisation to fewer operational sites, whilst maintaining "business as usual." It included option analysis and business case modelling for investment decision making and scenario testing and long-term benefits realisation.

Integrated Business Planning

We have captured the NHS standard approach to business planning, to ensure that outputs are automatically generated in their most useful state. This provides our clients with the ability to consider multiple, overlapping options for acquisition, disposal, refurbishment, and new build.

Programme and Project Controls System

We have prepared programmes and project level controls system for managing delivery of both internal and external projects. These systems integrate with finance systems for real-time cost management and reporting. We have customised multiple dashboards, for rapid identification of key issues, risks, resourcing, and prioritisation.

Operational Excellence

We have developed control systems for integrating all business functions, to provide director-level transparency of business performance and required actions. Working with finance, HR, estates, IT, and other departments to consolidate data and allow focus to achieve operational excellence.

SUMMARY

OPAL allows you to effectively analyse all the information you need to consider a wide range of options. Digitising the estate management data will transform the way that you can make informed decisions.

By employing these strategies, NHS Trusts can adjust their estate to align with changes in the operational business, ensuring that healthcare facilities are well-equipped to meet evolving healthcare needs and deliver high-quality care to patients across the UK.

OPAL provides you with a comprehensive solution that can be implemented rapidly. It allows you to manage:

• Strategic investment decision-making and project selection.

• Capital project monitoring.

• Backlog maintenance and upgrading the buildings.

• Optimisation through analysis of options.

REQUEST A DEMO

If you would like a full demonstration of OPAL, we would be delighted to arrange a friendly, practical demonstration, to you and your colleagues.

We can do this online, or in person. It requires just one hour of your time and will answer most of your questions.

Phone	Visit	Email
Call us on:	Visit us at:	Email us at:
0117 302 0001	www.provelio.com	mail@provelio.com

provelio