

INNOVATION - S1

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LONDON, ACUTE



FOR INFORMATION ON THE
INNOVATION PROGRAMME
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THE INNOVATORS

I have worked within Finance and technology for the past 20 years in both the public and private sector designing, developing, and managing numerous systems. I passionately believe technology can improve society and can envision a day when the NHS operates a shared eco-system of inter-operable systems to enable data-sharing in pursuit of excellence in healthcare understanding and delivery.

THE PROBLEM

The Royal Marsden Finance team **needs to** cost-effectively meet the specific operational needs of a Wholly Owned Subsidiary (WOS) pharmacy through implementation of an automatic digital finance and reporting system. **Because otherwise** extra staff are required to manage the additional administration- attracting people costs, creating data delays and risking error, and whilst bringing additional licence costs, the traditional proprietary approach might not provide sufficient flexibility to react to the developing WOS or give options for integration with required systems.

THE CHALLENGES

- **How might we** deliver a modern looking, intuitive and functionally effective system within a short period of time to manage the financial operations of a newly-formed subsidiary?
- **How might we** find a way to minimise the recurrent costs traditionally associated with Financial systems without compromising on quality?
- **How might we** build a system able to flexibly accommodate changes **so that** we can meet our evolving needs over time?
- **How might we** obtain a system capable of easily integrating with other business systems and to ingest data without costly or time-consuming development overheads or the requirement for specialist knowledge?
- **How might we** be able to access financial data in real-time to provide bespoke reports for management insight while avoiding the human errors often associated with spreadsheet reporting?
- **How might we** provide automated reports for monitoring purposes **so that** issues can be explored and solved as required?
- **How might we** deliver the necessary automation of processes **so that** we can increase staff productivity?
- **How can we** train end-users effectively **so that** uptake of the system is positive and immediate?
- **How might we** obtain a system that delivers a community marketplace of freely distributable add-ons to increase functionality without significant investment?
- **How can we** obtain a system that is capable of covering the business requirements of a full Enterprise and not be limited in business scope coverage?

THE INNOVATION

To deliver the system we partnered with an Open-Source supplier whose values mirrored our own and whose track record of delivering bespoke systems into the NHS and the wider public sector stood out. With an aligned vision for the project from the outset, both parties worked in close collaboration throughout, working tirelessly to create a bespoke system tailored to the Trust's needs. The basis for the system was the Open-source ERP product, Odoo, which provided out of the box functionality with a modern and intuitive interface. With the core platform in place, the configuration and bespoke development of additional functionality was capable of being delivered within a very aggressive 2–3-month timeline. The delivery included financial modules for GL, AP, AR, FAR plus financial reporting functionality and interfaces for banking and HMRC. In addition, a suite of training videos was created to supplement face-to-face training enabling staff to quickly adopt and adapt to the system. Due to the Open-Source nature of the system, we were able not only to configure the system to meet our specific requirements but to develop bespoke functionality. The development work was greatly facilitated by the existence of Odoo's community marketplace from which thousands of pre-developed applications are downloadable with no or minimal one-off fees to immediately attain the desired functionality or to greatly speed up its development and delivery.

Notable developments included:

- System integration with the Wellsky (formerly JAC) pharmacy system, enabling the finance team, to import automatically, rapidly, and reliably financial and purchasing data into the ERP system, for accounting purposes and accurately invoicing suppliers in a timely fashion.
- The creation of an integration with HMRC to ensure that the business was compliant with their Making Tax Digital requirements. Here, the supplier designed a module for the system to automatically interface the ERP system directly to HMRC to import financial data, meeting the requirements for UK VAT registered businesses.

The system also joined-up the subsidiary's whole financial operations, meaning users of the system had a holistic view of all financial and purchasing data in real-time. This enabled the rapid delivery of data and information to different departments thanks to its native BI reporting functionality, reducing human error and manual administration whilst greatly increasing staff productivity who now had more time available to complete higher-value activities.

By opting to work with Open-Source technology, we avoided the recurrent costs associated with proprietary license fees while realising a unique, tailor-made system built on freely available technology. The Trust now has a system that is owned in perpetuity with unencumbered and unlimited access and which can be updated as required to meet changing regulatory and internal needs. Furthermore, by using Open-Source technology we have created a system which is freely available to all other NHS organisations to adopt, use and improve as they desire. This approach is an exemplar of the public money, public code principle and the key to achieving increased value for money from NHS investments.

THE LESSONS LEARNT

- We wouldn't overstretch the Finance team again by taking on too many projects at once. Because the Trust ran two other concurrent projects, it meant that teams were working in isolated siloes with little opportunity for cross-communication, where any decision made by one team could drastically effect the others.
- We learned to embrace Open Source technology and encourage other NHS organisations to do the same. By working with an Open Source supplier who was capable of demonstrating the way this technology can meet complex needs, we were able to realise an alternative vision for delivering IT and finance initiatives that aligns closely to the altruistic values of the NHS.

THE OUTPUTS

The 'tangible' outputs that came from our innovation were:

- Odoo Open Source ERP System proven for NHS use.
- Integration with the Wellsky pharmacy system and RBS bank.
- Compliance with HMRC Making Tax Digital Requirements.
- Real-time reporting and access to data.
- Low-effort and sustainable operations.

THE OUTCOMES

- As a result of this project, the Trust realised:
- A way of managing complex financial operations via a digital system owned in perpetuity.
- £200,000 in cost savings on license fees by switching from proprietary technology and opting for a free and open source solution.
- Increased staff productivity due to joined-up data and departments requiring less manual administration.
- Opportunities for iterative improvement to the system whenever required.

THE QUICK WINS

- Locate a professional Open Source implementer with experience of both technology and the NHS needs.
- Consider the expected alignment from your project and from your provider with aspects like values and culture, capabilities, locality.
- Set out what you want to make happen so you can measure your goals.
- Acknowledge risks and plan how you'll mitigate them from the start.
- Ensure you have a detailed test and implementation plan, developed with your team in place.
- Define the level of freedom required to use, develop or customise your solution, and ability to change supplier during or after implementation.

THE REVIEWERS SAID

THE USE OF OPEN SOURCE SOFTWARE ALLOWS FLEXIBILITY AND THE USE OF APPS, WHILST REMAINING A VERY COST EFFECTIVE ERP SOLUTION. THIS EXAMPLE SHOULD ENCOURAGE OTHER ORGANISATIONS TO CONSIDER OPEN SOURCE SOFTWARE OPTIONS.

BESPOKE BUILD - GIVING THE ORGANISATION EXACTLY WHAT THEY WANT INSTEAD OF A "MAKE DO" TRADITIONAL PRODUCT WITH IT BEING A BESPOKE BUILT - THE ADAPTABILITY HAS THE POTENTIAL TO BE LIMITLESS COST SAVINGS BUT TANGIBLE FROM THE SYSTEM COST PERSPECTIVE AND THEN INTANGIBLE RE TIME SAVINGS WHICH CAN BE REINVESTED INTO OTHER VALUE ADDING ASPECTS OF THE ORGANISATION.

THIS DEVELOPMENT MOST DEFINITELY DESERVES RECOGNITION. THE ORGANISATION THOUGHT OUTSIDE OF THE BOX AND DELIVERED SAVINGS BOTH TANGIBLE AND INTANGIBLE AND ALSO IMPROVED THE QUALITY OF ITS OUTPUTS WHILST DOING SO.

WHAT YOU CAN DO NOW

If you recognise the problem stated and have implemented your own innovation to overcome it please submit this innovation to the programme and give others more examples to learn from.

SUBMIT INNOVATION

If you recognise the problem stated and would like to know more details about this innovation in particular, we will be hosting showcase and workshop sessions throughout the year, so all interested staff can gain ideas and inspiration from innovators in a manageable one-to-many format.

REGISTER INTEREST

If you have a problem but don't currently know of a solution to it, then please submit it here and in 2022 the Forum intends to crowdsource solutions to problems that don't currently have known innovations.

SUBMIT PROBLEM

If you would like to learn more about about the innovation programme please click below for more details

LEARN MORE

IN SEPTEMBER 2021 THE FORUM LAUNCHED...

- A national Innovation Programme for NHS Finance staff to submit their innovations for peer review. Successful innovations will be published and accessible to all on the One NHS Finance website
- A 'Software Skills For Finance Staff' event series taught by NHS Finance for NHS Finance including MS Excel, PowerBI, SQL etc.
- An 'Art of the Possible' briefing which explains two new technologies AI & Blockchain and discusses the opportunity for NHS Finance
- An Automation Group to review and improve the efficiency of existing national processes and returns

WHAT YOU CAN DO NOW

- Submit your innovations for peer review
- Sign up to be an innovation peer reviewer
- Read Art of the Possible
- Sign up for Software Skills for Finance
- Register your interest in automation and all things innovative

Innovation Programme



Software Skills



Automation sign up



Be a peer reviewer



Art of the Possible



FURTHER INFORMATION

Website: [FinanceInnovation.nhs.uk](https://financeinnovation.nhs.uk)

Email: finance.innovation@nhs.net

LinkedIn: [One NHS Finance](#)

Twitter: [@OneNHSFinance](#)

ENDORSEMENT DISCLAIMER

The Finance Innovation Forum's Innovation Programme asks NHS Finance peer reviewers whether the "Innovation overcomes, successfully addresses, or solves the problem identified". The programme does not endorse, recommended or provide any assurance of software used or mentioned in any of the published innovations. If you think a published innovation is being used to falsely validate a commercial product or company please contact finance.innovation@nhs.net



One NHS Finance brings together the Future-Focused Finance, National Finance Academy, and the Finance Innovation Forum programmes and networks to make sure that everyone working in NHS Finance has access to skills, knowledge, methods, and opportunities to influence and enhance patient services.



Identifying and developing innovative ways of working and new areas of improvement.