

## Using information and innovation to reduce costs and enable better solutions

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### ABSTRACT

*This paper outlines how the UK Royal Mail Group Property Holdings selected the relevant*

*SAP modules (Real Estate, Project Systems, Material Management, Plant Maintenance) to provide their management information system (MIS) requirements. It discusses the business case, how the project was managed, the benefits to date (18 months after implementation) and the key lessons learnt. Hopefully the paper will allow the reader to understand the context for the project and how the selection decision was reached, the general approach to the benefits case (quantified and unquantified), the key aspects of the implementation, governance, project team, training and key lessons learnt. While every property organisation is different and the challenges are unique, a number of the issues are likely to be the same even if the solutions are different.*

**Keywords:** SAP real estate, real estate system, business case development, successful system implementation

### INTRODUCTION

Few organisations with large estates have property information of the right type and granularity, at the right time, to support either one-off or routine decision making. The UK Royal Mail Group (RMG) is no exception. In 2000 it took the decision to replace its stand-alone real estate systems with various modules that are part of the



SAP Enterprise Resource Planning (ERP) system. This paper explains:

- Why this was necessary
- What was done and how
- The design and implementation challenges
- The benefits achieved to date and how these compare with the business case
- How high quality information supports the property function
- Where Royal Mail is on the systems benefits maturity curve and where it is aiming.

### **ROYAL MAIL'S CORPORATE REAL ESTATE PORTFOLIO AND THE NEED FOR QUALITY DECISION MAKING**

Royal Mail Property Holdings (PH) manages all aspects of the group's property portfolio. This consists of some 3,300 property interests (covering 4.4 million m<sup>2</sup>) which include:

- Mail centres (larger than 20,000 m<sup>2</sup>)
- Delivery offices
- High street retail outlets
- Distribution and warehouse units
- Offices

The tenure of the estate by square metre is 33 per cent freehold (and long/valuable leases) and 67 per cent leasehold. The freehold value is US\$2.1bn.

The annual expenditure for property rents, rates, hard and soft facilities management costs, utilities etc and new builds/fit-outs exceeds US\$825m per annum.

As well as working to improve its profitability, RMG now faces competition for the first time in its history. Having an estate which meets the Group's strategic and operational requirements in terms of location, correct service levels and costs is therefore vital. Also, given the size of the estate and annual spend, good property

decision making and execution can have a very material impact on RMG's annual operating performance.

Since 1998, Property Holdings had embarked on a total transformation agenda. At the core of this was the objective of making property (including capital projects and facilities management) support the core business processes. This was at a time when RMG was undergoing major structural change. Consequently the programme devised in conjunction with the business units combined redefinition of objectives and business operating model, new organisation structures, new processes, new key performance measures and reporting framework and considerable retraining. The result was a service unit whose activities much more proactively supported the business units in their key activities, aligned service to agreed service levels and took out over £80m per annum of costs.

During this programme, it was recognised that Property Holdings' previous information systems were inflexible, frequently failed to give the information that the business now needed and much of the data they did provide were of poor quality and not trusted. To work around these problems, an industry had developed in 'personal databases', resulting in duplication, inefficiency and poor reconciliation of management reports. Therefore improved MIS to enable and support the process changes was always envisaged as the second stage of the overall change programme.

### **THE PROJECT OBJECTIVES AND GOVERNANCE MODEL**

The project objectives can be summarised simply as:

- Replace the legacy systems and fill the existing gaps in Property Holdings systems functionality
- Deliver agreed levels of benefits

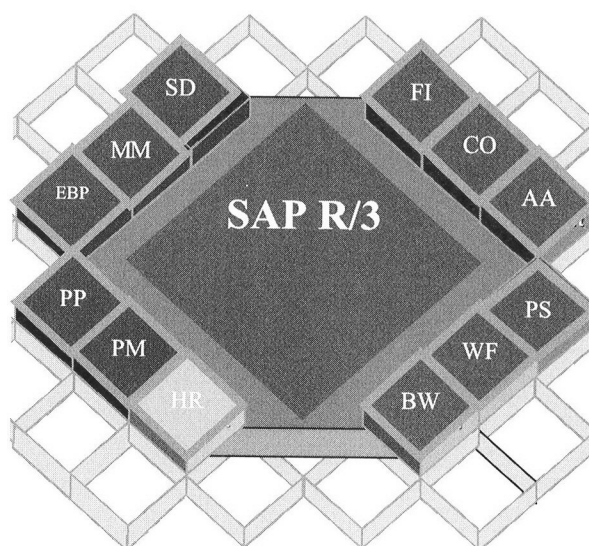


Figure 1 SAP modules

- Establish a business culture that values data and enables users to take the correct decisions quickly
- Provide a standard platform which allows the quality and use of information to improve over time.

Property Holdings had recently completed an extensive programme of changes to its business processes and the supporting organisation structure. This had been designed in the expectation that subsequently new systems would be implemented to support these changes.

As Royal Mail was implementing SAP as its complete ERP system (a suite of integrated modules that cover all of a business's information needs as opposed to a combination of 'best of breed' packages (Figure 1), the questions were: could the relevant SAP modules deliver the correct functionality efficiently and did the business case make financial sense?

The answer to both was yes, which then meant Property Holdings had to manage a major systems design and implementation project that was part of a

wider SAP implementation; hence the need for both good advisers and strong governance.

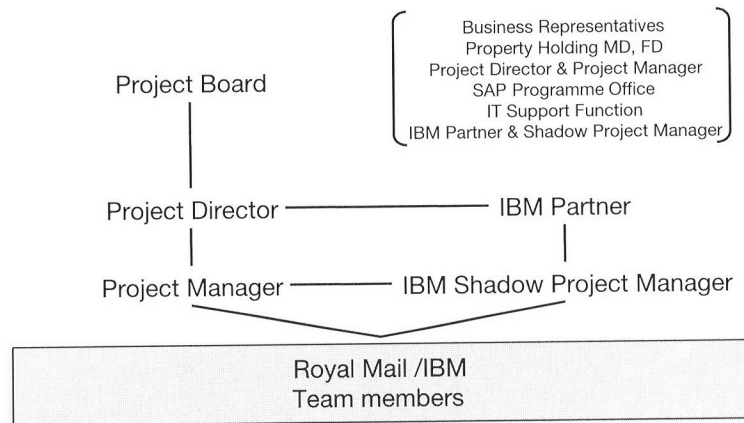
Later in this paper, the business case quantified and non-quantified that supported the recommendation is set out.

The project was established under the PRINCE II methodology with the governance structure (Figure 2). The role of the business representatives was key to ensuring that their business units would have access to the right quality data to meet their management needs.

In considering the right team composition, a number of considerations were taken into account including:

- The need for specialist skills in the relevant SAP modules including configuration
- The needs to keep 'business as usual' processes running effectively
- A timetable, where the 'openings' for the property modules to be integrated into the overall programme were significantly affected by the different priorities of the individual projects and

Figure 2 PRINCE II methodology governance structure



the overall capacity constraints so as not to 'go live' with too much too quickly.

Consequently, a decision was taken to create quite a small project team made up of full-time staff from RMG and IBM.

IBM BCS (ex PwC Consulting) Physical Asset Management Group had been working with Property Holdings over a number of years and understood and indeed designed many of the new processes and what needed to change to enable the staff to make better quality decisions. IBM's specific roles were to:

- Help define the user requirements
- Design and implement the technical solution
- Oversee UK configuration, as this was the first time SAP Real Estate had been installed in the UK
- Oversee the configuration of other SAP modules to support the real estate function, eg Plant Maintenance, Project Systems
- Design the interfaces with other systems including those used by Royal Mail's external property help-desk provider
- Manage the change programme including the design and roll out of training

- Manage the communication process to all the internal and external stakeholders
- Work with SAP Germany on the design, build and implementation of country-specific enhancements.

Property Holdings staff doing 'business as usual' tasks were left to concentrate on their current jobs but were heavily involved in a 'data cleansing' project and training, both of which are discussed later.

### What was built and what were the challenges?

The SAP system that was designed and implemented can be summarised as shown in Figure 3.

Clearly, the design built in flexibility for the supplier model to change over time, for example, for the Property Agents handling estate management tasks to have similar type of access to the real estate (RE) module as the external help desk operation does to the plant maintenance (PM) module.

The design was specifically configured so that it would allow third party suppliers, for example initially maintenance suppliers, access to see (with

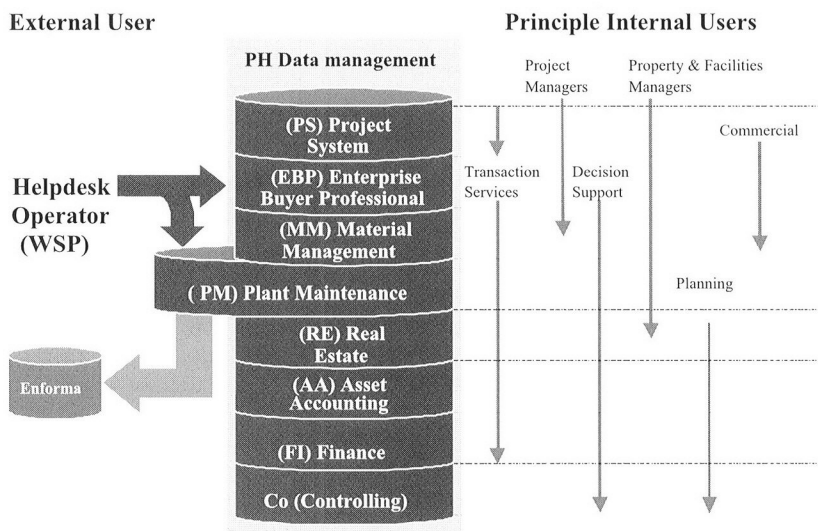


Figure 3 The SAP system as designed and implemented

appropriate firewall protection) future orders, historic data and relative performance that applied to them. This both improved the processes and responsiveness and eliminated duplicate systems, double entry and potential sources of confusion.

The design and implementation challenges included those that are typical of a major systems implementation, such as closing off business requirements, controlling scope creep, integration of the modules, the data strategy for migration/collecting/testing so the new system goes live with correct data which users at all levels trust, and definition and production of the right reports. The two of most interest to Property Holdings in achieving its overall objective, however, were to do with training in the use of the system and beginning to change the existing culture (which could be characterised as not trusting data in the system or caring about their integrity). Without success in these areas, however good the system, Royal Mail Property Holdings would not have done its part in helping achieve the Group objectives.

Data cleansing was a key project in its own right, which relied totally on business as usual staff to update the existing systems so that when the data were cut across to the relevant SAP module they were both correct and the same data were held in all the relevant modules. Previous experience has demonstrated that if this is not done then there is a real danger of the data never being made compatible.

While the real estate module has been implemented successfully in a number of countries from Germany through the USA to Australia and South Africa it had never been implemented in the UK-specific enhancements. Here the key challenges were to do with some of the more historic aspects of UK property processes such as Quarter Days. An approach was agreed with SAP in Germany, before the final selection decision was made, about not only how they would produce UK-specific enhancements, but also how these would be integrated for version updates etc.

This type of configuration was very different from the levels of specification



that is planned to allow proper integration between the various modules. The key difference from integration, for example 'best of breed' property systems into an accounting packages, is that all the interfaces are already built.

The four key learning points from the training were:

- (1) Base training on real job roles and not the generic SAP roles, to which in-house teams find difficult to relate.
- (2) Train people in their own environment with data they recognise, otherwise training becomes abstract.
- (3) Training needs to be continuous, no one absorbs it all first time.
- (4) Provide a strong support regime (eg Super Users) and remember that any organisation has new joiners, job transfers and role changes.

All these are simple but key to success.

As with most changes to culture, success stemmed from a series of linked actions within the very visible sponsorship of the Managing Director. At the heart was to establish the trust in the new data entered into the system and therefore what was being produced. The actions included clarity about ownership of the data and the mechanisms to test and protect them, while recognising that use of the data was open to all. 'Siloism' and keeping one's own personal database outside the system undermines data integrity and were no longer acceptable.

### **The benefits achieved to date**

In the business case produced in September 2000, the benefits were split into the quantified and the non-quantified. Dealing with each of these in turn:

#### *Quantified*

These were based on cost savings for each of five years although in many cases

these would be expected to continue for longer:

- Decommissioning the legacy systems
- Staff savings from improved data management
- Delivery of capital projects in more efficient ways because of the quality and availability of information, saving 1 per cent of project costs
- Improvements in understanding requirements, estate data, performance of suppliers, synergies from bundling services in different combinations and/or different geographic regions, leading to cost savings of 5 per cent
- Better understanding of estate data, utility usage and different utility supply options and combinations leading to cost savings of 1 per cent.

The decision to calculate the likely business benefits from a best estimate percentage in each process area was taken for pragmatic reasons. Based on experience in analysing the previous rearrangement at Royal Mail, designing the new processes and understanding how other organisations with comparable individual processes or process elements use property-related systems (both SAP and best of breed) to enhance efficiency, the likely efficiency gains and in what specific element of the individual processes were analysed. This led to the estimated 5 per cent. For example, the 5 per cent projected cost savings from better-understood services required and bundling in different ways. The proposed systems meant that RMG would be able to store, analyse and then test how different combinations of services and geography regions could be matched with the coverage and performance of suppliers to come to optimum packages. Previous experience in helping other clients outsource a range of services had

**Table 1: Actual benefits achieved and the forecasts for future years**

	<i>Business case US\$000s</i>	<i>Actual US\$000s</i>	<i>Forecast US\$000s</i>
Year 1–2002/3	4,431	7,550	—
Year 2–2003/4	7,351	—	10,022
Year 3–2004/5	9,439	—	10,842
Year 4–2005/6	9,439	—	10,842
Cumulative	30,660	7,550	31,706

demonstrated both the levels of savings that were achievable and the importance of good data to give good contact with the right level of specification performance monitoring and an effective payment reduction regime. To date, as the numbers below show, the expected benefits are being more than achieved.

#### *Non-quantified*

- Staff efficiency from operating on a common infrastructure, whatever the role and an increased ability to multi task
- Improved data management giving increased confidence and speed in decision making over very large annual expenditures (where being able to demonstrate value for money as a public sector organisation is key)
- Improved service levels and speed of response to end users because of the quality of the data on which non-financial decisions are made
- Improved portfolio planning — this could have been quantified but was not during the business case (see below).

The business case had a hugely positive NPV and a pay-back period of less than 15 months. Due to the size of the investment and the frequent concern about IT

projects not fully meeting their financial targets, a comprehensive benefits tracking regime was designed and implemented as part of the project.

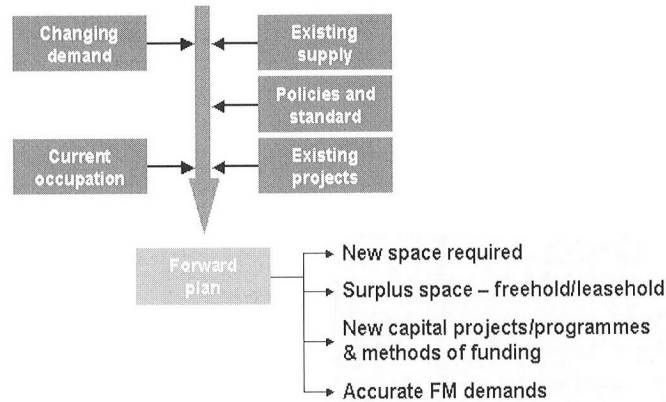
#### **Actual benefits so far**

As Table 1 shows, to date the actual benefits achieved and the forecasts for future years have exceeded those in the business case by some 28 per cent.

This has been achieved despite some changes to the basic assumptions. The most important being Royal Mail outsourcing Romec, its facilities management organisation, to Haden (a subsidiary of Balfour Beatty). This transaction captured many of the savings the Plant Maintenance module would have achieved over time in a ‘one-off’ gain that is accounted for under a different benefit tracking regime and so is not included in the above figures.

The key differences in the first year were achieved through improved VAT optimisation, reduced facilities management cost and lower utilities costs. These resulted primarily from better availability and improved analysis of estates data. Not surprisingly, in a portfolio of some 3,300 property interests, the amount of change in exact space use are significant (for example, space becoming vacant and not requiring regular cleaning, having different

Figure 4 The concept behind the new planning approach



maintenance response levels, etc and so a lower cost per square metre). For the first time Property Holdings now have a system that prompts decision taking by showing the change in status of the property.

### Improved portfolio planning

To meet its overall objective good portfolio planning is fundamental to Property Holdings' actual and perceived performance. Figure 4 illustrates the concept behind the new planning approach.

Given the size and volume of the estate, the ability to have accurate and easy-to-manipulate data is vital in order to be able to test different assumptions and options under various scenarios. At RMG, the space required falls into six main categories: Mail centres (20,000 m<sup>2</sup>), Delivery offices, High Street retail outlets, Distribution, Warehouse units and Offices. Consequently, the key is proper integration with the overall process improvement and change project RMG is undertaking. At present RMG have not implemented SAP HR and so there can be no integrated link to this module, which would be the ideal arrangement.

This type of integrated scenario planning is something that takes time to

develop, fine tune and implement. However, major progress is being made, with increasing levels of confidence in what space can be released (or where the need to acquire or rent extra space can be avoided). This will further ensure that the actual benefits are significantly higher than those currently forecast which took no (quantified) portfolio planning savings into account and will continue for much longer than the five years.

No savings were taken into account because the potential magnitude of even a very small change could have far outweighed the costs and distorted the wider considerations.

At the heart of the benefits are the cultural changes that are underway, based on increasing trust in shared and readily available data. Changes like this do not happen instantly. However, as the user perception surveys show, acceptance of the new system is continuing to grow

Table 2: User acceptance

	Users (%)
April 2002 [at go live]	40
October 2002	64
May 2003	70



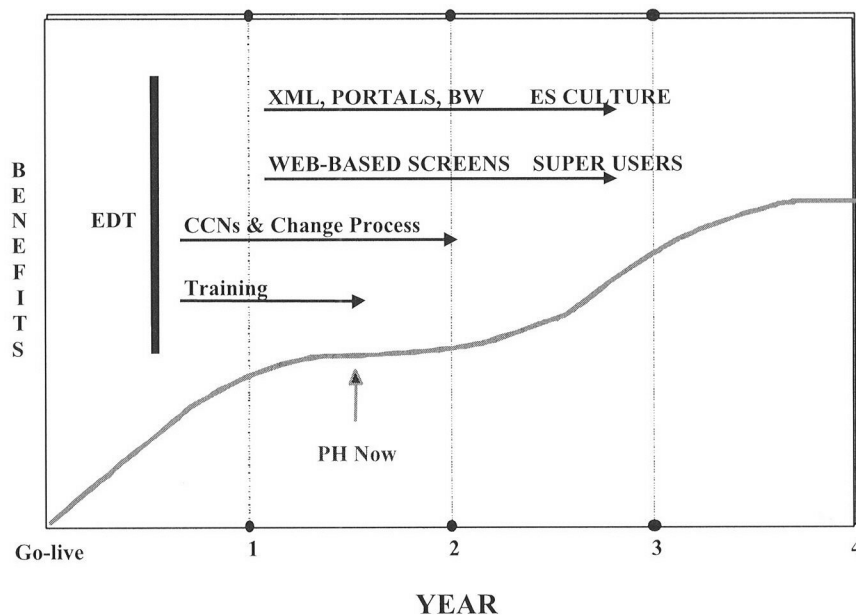


Figure 5 Scope and initiatives 18 months after implementation

with an increasing percentage of users being completely comfortable with the system (Table 2).

Property Holdings always knew this was the beginning of a journey and that the system and how it is used must continue to evolve. Only as people become more expert in using the existing data and functionality do they know what else they can be doing or testing in order to add more value. At the same time the applications need to be seen in the context of changing corporate needs and challenges. For instance, under the heavy focus now being put on making both RMG and its physical environment 'a better place to work' by the new Chairman, response times by contractors to a large range of non-critical failures in the operating units, especially delivery offices, have become much more important. Here the help-desk processes, the automatic processes it triggers and ability to understand supplier performance are vital. Property Holdings' previous systems could not have supported this initiative satisfactorily.

#### WHERE NEXT

From the time of the initial considerations of changing the systems to SAP, both Royal Mail and IBM have used the concept of a benefits maturity curve to illustrate the journey ahead. Figure 5 illustrates where Property Holdings has reached 18 months after implementation.

Also on the diagram are the currently planned initiatives that will help to ensure that Property Holdings continues to drive up the maturity curve and capture the additional benefits (financial and non-financial) that are available.

If Property Holdings does not continue the evolution of the systems and how they are used, there will be significant pressures and ongoing resistance that will push Property Holdings back down the maturity curve.

#### CONCLUSIONS

High-quality trusted data and good systems are core and necessary enablers to

allow Property Holdings to meet its objectives. Without these, neither its processes nor its staff will be able to work efficiently and effectively to meet their 'business as usual' and project tasks that support the core business. Some 18 months post-implementation of the SAP suite of modules, progress is good and business case benefits are being exceeded. There are still, however, considerable additional benefits to be captured and value to be added as experience of using the data and system increases and new insights are gained.

The question remains: was SAP the right answer or would a number of best of breed packages correctly integrated

have been as good or better? No one will ever know. RMG took the decision to go with SAP because their overall IT strategy and the individual and combined property-related modules fully met the user requirements. In addition, the rigour of SAP processes and controls combined with the designed interaction with the other modules to give a complete Enterprise Wide Resource System meant it was a low risk option in corporate environment that will see continuous changes. To date, the project has been very successful and the benefits quantified and non-quantified exceed those projected by a considerable margin; and there is much more to be achieved.