

Management Information Systems (for real estate portfolios)

Decisions, decisions. Making the right choice of system to adopt is not straightforward. Going to a trade fair such as PCS Expo can help or confuse in equal measure. There is a long history of abandoned Management Information Systems (MIS) in the industry. The following 20 points mainly focus on system selection, set-up and initial operation.

1: Portfolio MIS

The focus is on property legal tenure and occupation data. Good systems will include extensive document storage capabilities so in effect, the system acts as the complete data repository for the portfolio, including photographs, maps, deeds, memoranda, correspondence, etc. Some have links to modern mapping software. The best ones have intuitive and flexible reporting functions.

2: Facilities MIS

These systems concern themselves with the actual management of the building, such as fittings and installations. Typically, they are structured in modules (plant and machinery, room management, furniture inventory, vehicle fleet management) around a core system. One module may be a help desk.

3: Help desks and workflow

Basic facilities MIS systems tend to have a help desk capability, which has the advantage of linking in with the main property and/or asset database. This is not a bad idea, as long as: (a) the basic system is all you require; (b) the help desk module is a separate, inexpensive license (you may need to give to contractors); and (c) training is available. However, this may not be the system of your

facilities services provider. You will need to spend time considering the benefits of the contractor's system over the one you employ 'in-house' and who will use it.

4: 'Real money' systems

About 10 years ago, portfolio MIS software designers thought that organisations would use the systems to control real money accounts, print bank checks and so on. Whilst some more advanced systems have data links to accountancy packages such as SAGE and SAP, generally the two systems are kept separate. If connection is required, at least get the portfolio MIS sorted and trusted first before taking this next step.

5: Assessing needs

There needs to be an 'assessment of needs' that lists all MIS functionality required into priorities, e.g. 'must have now', 'important but not essential now' and 'desirable if offered'. Consider the stages of development that would be acceptable, which areas need tackling first and which users will be involved. Resist the temptation to start analyzing the proprietary systems before covering off this aspect.

6: Multi-lingual/multi-currency

If you need a system capable of handling multiple currencies and/or languages, this needs to be defined at the outset. It will narrow down your choices considerably.

7: Organisational impact

The MIS initiative is sustainable because the organization is structured to make it so. There is always some form of organisational impact, from changes in job description to creation of completely new functions (e.g. data change control). Typically, MIS is an enabler and a pre-requisite to successful outsourcing operational portfolio management.

8: System selection

If the needs assessment is robust, it can act as a good basis for scoring the systems on offer. Experience suggests that there are usually one or two deciding factors between short-listed systems. Cost of software must be viewed as only one part of the total set-up cost, and is rarely more than 20% once you add in data audit, uploading the data, custom report development, training and so on.

9: Acceptance testing

A small but representative group of people need to act as the testers, who identify problems. Ensure this group is a fair representation of the final user group, not just those in the real estate department and/or those naturally inclined to see the benefit in such systems.

10: Ownership

Who actually owns the system? With modern extranet based systems, you own very little, usually just rights to access the data on it, certainly not the software. Read the small print on intellectual property. Make sure you own the data and have physical possession of the data record at some time (see Business continuity, point #17).

Who has a stake in it? Some user groups have a strong incentive to

Read the small print
on intellectual property.
Make sure you own
the data and have
physical possession
of the data record.

Management Information Systems (for estates) **continued**

make the project a success. They will go on to be the training champions.

11: 'GIGO'

Garbage In, Garbage Out: the easiest way of destroying your MIS, short of turning off the power, is to allow inaccurate information to enter the database. Treat the database like a 'clean room' in a hi-tech manufacturing facility. To get inside, it has to be 'made clean'. In this context, data extracted from paper records need to be audited by a team who have everyday experience of this type of work and are liable for the accuracy of their work.

12: Data change control

Don't allow those using the data to change data directly on the system. Set up a simple (but auditable) data change control process, where the changes are made by a team that has responsibility for data integrity. Users fill in a form (paper, electronic) and request the change together with submission of the supporting evidence. These data change request forms are a good back-up resource in your business continuity plan.

13: 'Pending' records

Experience shows that for portfolio MIS, tracking leases, etc. there are 16 essential fields of data. Without these basic data, the record has to be considered incomplete, 'pending further information' or 'pending' for short. Likewise, at some time, most records will be waiting for new, authenticated data to come in. You need to take steps to limit the number of pending records on the system (5% max).

14: Missing data

All data sets have missing data,

sometimes referred to as 'null' values. The main problem is that whilst some 'null' values are acceptable others can make reporting on estate metrics immediately erroneous. Can 'proxy data' or estimates replace null values where there should be a value? Yes, as long as a) the null value is not mandatory data; b) this is made clear in the notes; and c) the record remains 'pending'.

15: Key Performance Indicators (KPIs)

Using the system to deliver (real-time) KPIs such as those that support total occupancy cost metrics (cost per head, etc.) is a very attractive feature because: (a) KPIs draw interest from non-system users, raising the credibility of the system; (b) KPIs test the validity of the data from which it is derived; and (c) KPIs test the way the data is structured.

16: Delivering the benefits

Some system modules have a relatively low cost and a high return, but only if the business itself is willing to change in ways that allow them to work. The best example is room booking or desk allocation systems. Just removing 10% of the unused space can give a big pay-back. Accordingly, a good cost/benefit analysis will root out the factors that stop the organization delivering on the benefits – usually to do with people and the way they work. See '20 Thoughts on Workplace Strategy'.

17: Business continuity

Work on the basis that the software supplier, web hosting firm and so on are going to close down tonight. Make a plan and then test it. A play on 'Murphy's Law' says that if you

are fully prepared for the worst, it won't happen! Resource for doing this as part of the initial set-up cost.

18: Data structure

At the heart of every MIS is a relational database, with a data dictionary that describes how all the data fields are organized, labeled and so on. Not every system provider will share this with you, but they usually have a small group of in-house or contract engineers who have access and 'know their way around'. Access to these people must come as part of the deal.

19: Data compliance

Some day you may need to change the system or – here's a thought – hand it over to another company. On that day, it helps enormously to have a data structure that is PISCES compliant. PISCES is the international data standard for portfolio & FM MIS.

20: Is it worth it?

This largely depends on whether all users find the system accessible and relevant in terms of functionality and adopt it as their primary data source and stop maintaining duplicate libraries. Whilst such duplication is potentially wasteful, the main concern is that partial but wide-spread duplication of the MIS dataset means that users have less incentive to ensure all data in the MIS are correct. Disaster! However, a sure sign of MIS project success is when users remove such duplication of their own volition. That's the challenge!

This document is part of the "20 Thoughts on..." series, available at www.casp-r.com

INDEPENDENT CORPORATE REAL ESTATE ADVISERS

Hong Kong T: +852 8170 1055 E: info@casp-r.com

THIS ARTICLE CONTAINS THE VIEWS AND OPINIONS OF ITS WRITERS AND CANNOT BE READ AS AN ABSOLUTE PREDICTION OF THE FUTURE.

The information contained in this article may contain forward-looking statements which are subject to certain risks and uncertainties that could cause actual results to differ materially from those projected. These statements are not guarantees of future outcomes and are subject to certain risks, uncertainties and assumptions that are difficult to predict.