*by Jon Inge*

THE MODERN PROPERTY MANAGEMENT SYSTEM

Plays well with others, has learned to share and breeds options faster than bunnies
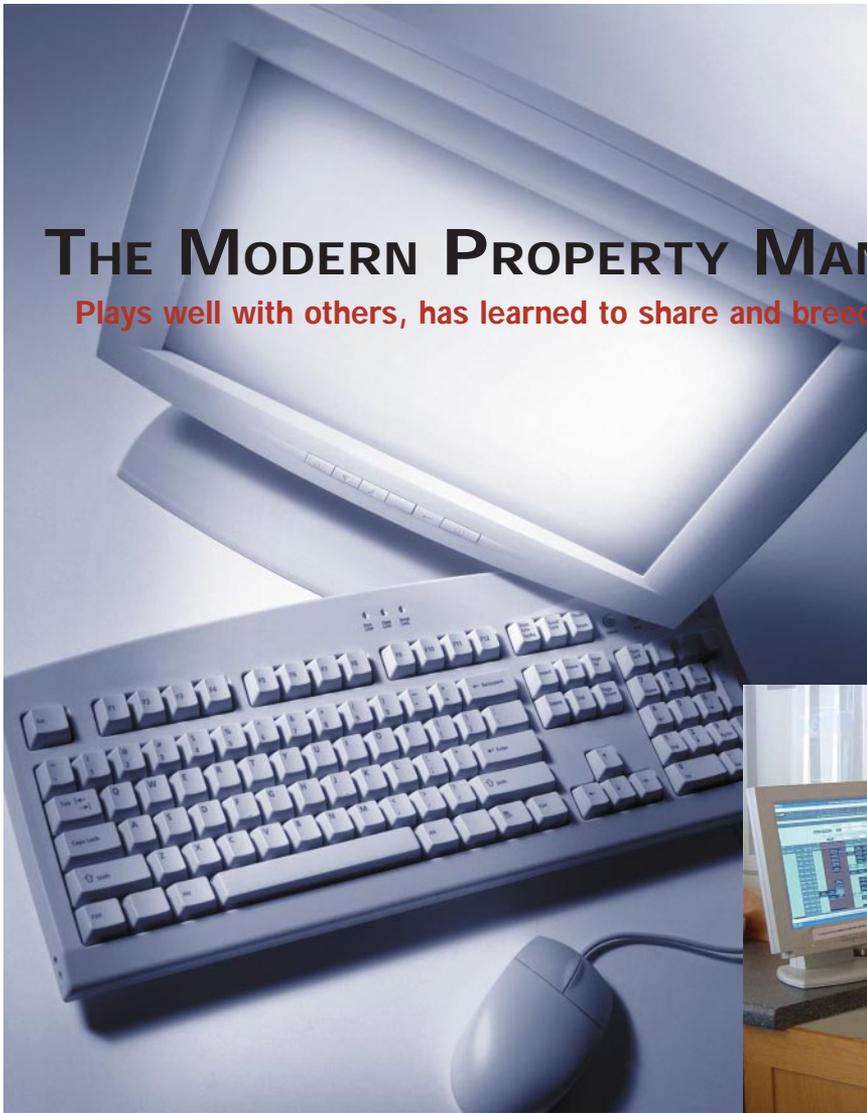
Courtesy of Bellstone Hotel

After a number of inquiries as to whether I had updated my last property management system (PMS) article, it came as a shock to realize that it has been four years since that article appeared. That was back in the olden times when this magazine was called the *Hotel & Restaurant Technology Update* and John Springer-Miller advertised his systems with a centerfold pose featuring his naked… feet.

Back then, many new Windows systems were gaining prominence, but the established character-based (DOS, UNIX, OS/400) products were still very much worth considering. A round of consolidation had left fewer but (hopefully) stronger vendors at the top, and a number of foreign vendors (AremisSoft, Hogatex, InnSite, HotelLinx and others) were either looking for U.S. representation or had just become established there.

The wider adoption of standards for systems at the hotel – Windows, Protocol Technologies/HITIS, Crystal Reports, MS Office integration – had made it easier to bring new property management systems to market, but external interfaces were still a challenge. Further, increasing systems standardization by the major chains was beginning to reduce the sales opportunities open to the smaller vendors.

"Complexing" was the buzzword of choice for running multiple properties on a single server, exemplified by Sheraton's use of Geac, and the Internet was just beginning to make a difference in providing access to systems and their data.

What a difference a few years makes.

Windows Rules

Virtually all PM systems on the market now use graphical user interfaces, either Windows or browser-based, and most of those that don't are moving there. It's simply a more powerful and intuitive way to use a system. The newer applications are built with architecture, languages and techniques that assume from the start that flexibility, expandability and interoperability with other systems are key factors. These days, flexibility of access is as important as flexibility of function. (See Figure 1.)

No one is writing new systems for UNIX or IBM iSeries (born AS/400) any more, but these are still reliable and powerful platforms. Ven-

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Figure 1: An example of how modern graphical user interfaces can be used to present a good set of useful information from different parts of a PMS on one screen. A front desk agent can access many different functions directly and intuitively from this starting point.

Courtesy of Galaxy Hotel Systems.

dors with well-established PM systems based on them (such as Galaxy - born Geac - and IAD) are keeping them relevant and competitive with browser-based front ends and tighter interfaces to other applications. UNIX systems in particular have received a boost from the recent popularity of Linux as a powerful and lower-cost alternative server platform.

Playing Well with Others

While vendors continue to expand their PM systems' functionality to cover more and more of a property's operational needs, most must operate with a mixture of systems from other vendors and must exchange data with them.

Looking at the great library lists of interfaces offered by PMS vendors in the past, you might think that working with other systems had been resolved a long time ago. However anyone with experience in installing interfaces knows this isn't so. Older systems weren't really designed for data exchange, so for every interface each pair of vendors had to agree on exactly which data elements were to be sent and received, of what length and type and in what order. The slightest change could stop the interface cold, and it's no wonder that inter-vendor relations could become a little acrimonious when a client's interface stopped working.

The arrival of XML – eXtensible Markup Language – has transformed this situation by making each data element within the message self-describing, both for content ("here is a four-digit room number"), and in what functions can be performed with it. As a result, complex data exchanges between different vendors' systems can be accomplished more easily. It may be coincidence, but this seems to have led to a marked increase in the number of vendors working cooperatively together, solving joint clients' problems and leveraging their own areas of expertise into wider markets. The power of partnership is, thankfully, becoming a recognized business plan.

For example, many PM systems can now access the full details of a guest's check in a POS system. You might expect this of Fidelio and MICROS, but it's also true for Northwind's Maestro and Silverware's POS, to name just one other instance. Other PMSs such as Springer-Miller and IAD exchange real-time availability and group booking action item ticklers and much more, with sales and catering systems such as Newmarket's Delphi and Daylight's enterprise. PM systems can now have a potential piece of business evaluated automatically by a revenue management system, with various date and rate options re-displayed directly in the PMS.

Perhaps even more telling in a world where customer relationship management (CRM) is critical, we are seeing property systems exchange guest profile data with other guest-focused systems such as spa management. For example, when a PMS reservation is made in INNfinity or Visual One, they automatically create a matching guest profile in spa systems Rio or ProSalon, allowing spa appointments to be booked at the same time as guestrooms and linked to the guest's all-inclusive travel itinerary.

Agreeing on the Rules

One of the stronger forces affecting this greater interoperability is the Open Travel Alliance (OTA), a group working on standardizing traveler "super-profiles" and data exchange message formats between the airline, hotel and car rental industries.

As an example, the OTA traveler record allows each person to have multiple personal preference profiles covering their different needs for airline seats, car size, hotel facilities and room type when traveling on business, for personal pleasure or with their families. OTA lets them describe those in one place and have them available to any travel supplier's system that works with OTA standards.

These don't replace the earlier HITIS interface standards, which defined detailed specifications for data exchange among the systems found at a hotel property. The OTA is more externally focused, and in fact adopted the HITIS specifications as its standard for internal message exchange at the property level. PMS vendors who work to these standards will have a real edge in the more integrated, multi-disciplinary environment the whole travel industry is working toward.

Another initiative to encourage greater interoperability is being promoted by the HTNG (Hotel Technology Next Generation) group. Less data-specific than OTA or HITIS, HTNG works to encourage vendors to commit both to a common set of modern technology standards which simplify data exchange, and to common business ground rules for cooperative partnerships in working with each other. Many vendors have endorsed the initiative and pilot projects are under way.

Distribution Channel Management

Distribution channel management is undoubtedly the hot button of the moment. Every hotel posting different rate and room inventory to the GDSs, such as Sabre and Worldspan, alternate distribution systems (ADS)

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such as Expedia and Travelocity, on its own Web site and with its reservations agents is using a multi-channel sales strategy, and needs a multi-channel PMS to track it. With Internet booking options breeding faster than rabbits, modern PM systems provide clear reports on the most productive sources, even down to the search-engine keywords used to find the property, and help the hotels compare each against its cost per reservation. None of these channels give their services away, and productivity always has to be balanced against fees and commissions. (See Figure 2.)

But this is really only an extension of the revenue management practices hotels have used for years, making specific rates and room allocations available for different guest categories according to various date and occupancy parameters. Good PM systems have long had extensive and easy-to-work-with rate management functions to control this, and taking it down to the individual channel used for each reservation is just a further refinement, albeit an important one.

It's interesting that even some of today's more straightforward PM systems incorporate surprisingly sophisticated rate and distribution management functions. BookingCenter and U.K.-based RezLynx are two good examples. Even a small property with simple rooms management can benefit from better control of its selling.

Of course, a good interface to a separate revenue management system provides even greater control, proactively suggesting changes as the actual booking pace fluctuates. Reflecting this, a number of PM systems have tightly integrated links with revenue management systems such as Opus 2's Topline PROPHET and IDeaS' e-yield.

Among related trends aimed at reducing hotels' reservations costs, some vendors (such as SoftBrands) are developing direct links to the four GDSs, bypassing the Pegasus and Wizcom switches. Other vendors such as Northwind and TimeShareWare provide centrally hosted Web booking engines with direct links to their clients' PM systems. These can simplify security via a central firewall and offer a generally higher standard of system support; the vendors can also use them to provide more leverage when marketing their clients' properties to specific travel groups.

We Know Who You Are

Customer relationship management (CRM) is an equally important area, and one at least as subject to over-hyping as channel management. It's just a fancy name for knowing who your customers are when they call, knowing the details of their previous stays (including any problems and their resolution) and tracking and accommodating their preferences. Most PM systems have done this for some time with varying degrees of success, automatically running every new reservation inquiry through their guest history files to look for a match, but duplicates and missed opportunities to shine are still frequent.

Better systems track enough information to be useful and present just enough of it to the reservations and front desk agents to help them without getting in their way; OPERA, Springer-Miller's Host and Visual One are all good examples. The best systems also include tools to identify possible duplicates and merge them into one profile, but even with good equipment it takes dedicated manual efforts to keep your guest profile database clean and accurate.
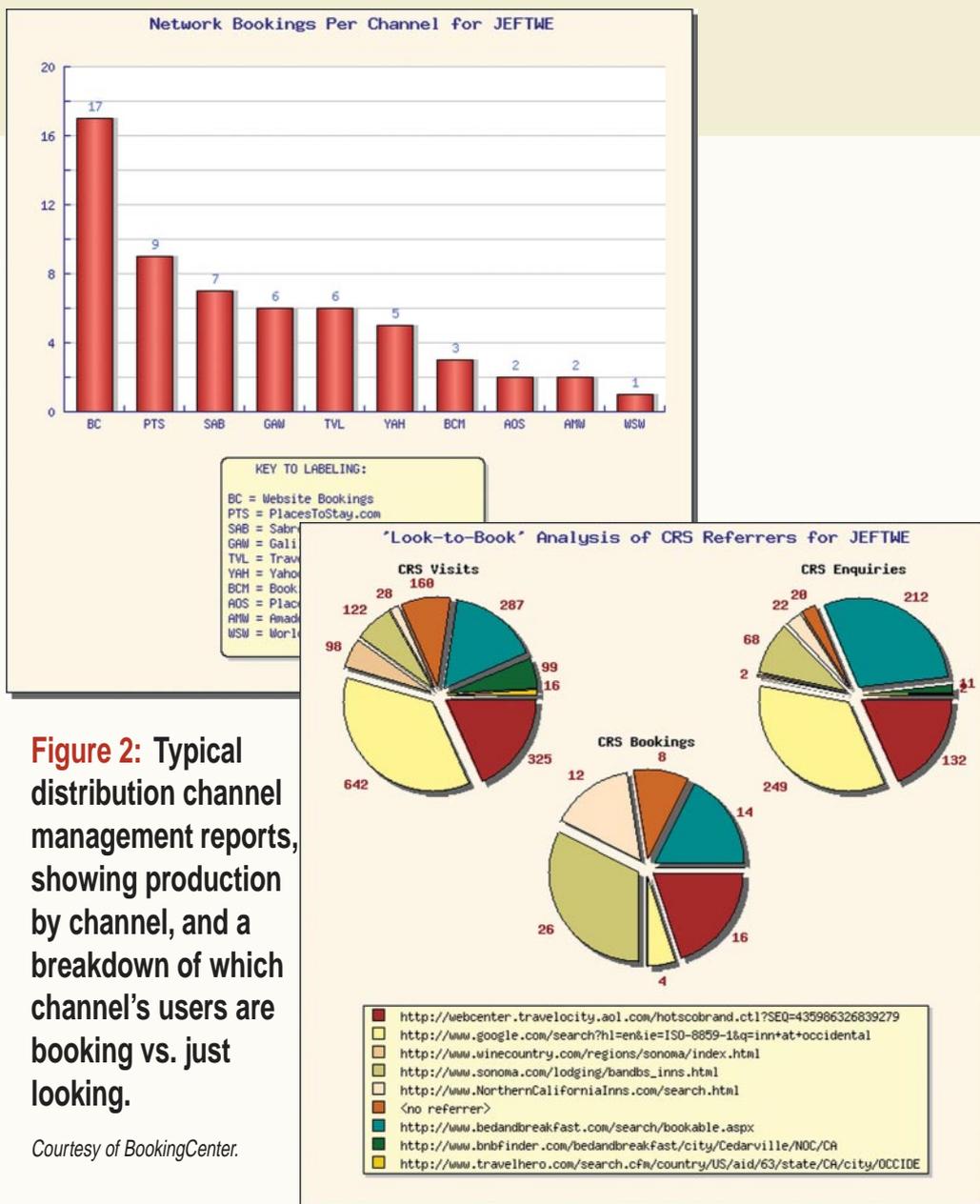

Figure 2: Typical distribution channel management reports, showing production by channel, and a breakdown of which channel's users are booking vs. just looking.

Courtesy of BookingCenter.

What's different in today's multi-property, data-consolidating and personal service-oriented world is that PMS-generated data is no longer sufficient. Profile and stay data needs to be passed on to a central guest information database, and the PMS must be able to receive profile updates from outside.

Guest preferences are an obvious example, which need to be separated into the property-specific (ocean view) and the guest-specific (feather pillow), but input on a guest's experiences and preferences can come from many places, such as a bellman's or restaurant server's observations. Good PM systems allow this kind of input to be recorded simply and effectively.

The other activity usually included under CRM isn't really aimed at taking care of the customer; it's targeted marketing based on analysis of your history database. Certainly you can use this to identify which of your regular guests are likely to respond to a particular new package and send them customized invitations. However, analysis of this database is more often used to identify typical guest demographic profiles, which can then be targeted among the world at large to attract new guests likely to enjoy your facilities.

To support this, a modern PMS needs both a sufficiently detailed guest profile record that tracks pertinent details for a meaningful number of guests, and a powerful, flexible analysis module that helps the marketing team mine it effectively. This is still an area in transition, though. Some vendors include a useful report generator in their basic PMS package, but others still suggest that a hotel acquire and learn an external reporting package such as Crystal Reports or Cognos PowerPlay. The usefulness of the data dictionaries they provide also varies considerably.

Hook Up to the 'Net

Internet booking and access are almost too obvious to mention, but four years ago were a real rarity. With travelers researching their trips and booking online in increasing numbers – Internet reservations are up 500 percent from four years ago – hotels simply have to maintain a Web site, and their PMSs need to be able to take reservations from it. Yes, you can have reservations from your Web site handled by another reservations service before being transferred to your PMS, but if your PMS can handle the bookings directly, why not let it and avoid transaction fees?

Four Vintage Inns: Satisfying Vintage in Toronto's Wine Country

The four Vintage Inns in Ontario's picturesque Niagara on the Lake had some systems challenges familiar to many small, multi-property operations. Although owned and managed as one group, each had its own PMS and guest database, which made cross-selling and guest preference tracking unnecessarily complicated.

"We started looking for a better solution at HITEC last year," said Ron Doi, Vintage Inns' rooms revenue/reservations manager. "Armed with an extensive list of key functions compiled by our users, we needed a better-integrated solution that could link not only the four properties and two spas, but also the sales and catering operation, since 50 percent of our business comes from conferences and groups."

The four properties, the 144-room Queen's Landing Inn, 123-room Pillar and Post Inn, 115-room Prince of Wales Hotel and 26-room Oban Inn, now run on a single, multi-property version of **Northwind**'s Maestro PMS, installed at Queen's Landing with a dedicated fiber optic network to the other sites. How does it work?

"Great!" said Doi. "We can finally handle our repeat guests' reservations for different properties without having to re-key their data, and have a much more complete picture of their history with us. The integrated sales and catering functions have also been a real benefit in streamlining the operation.

"But one of the biggest benefits has been the rate management control we've gained," he said. "Before, I spent far too much time pulling together manual rate sheets for each individual property; now I set the parameters for all four locations from one point within the system. It's much easier both to see what's going on and to manage it. The proof's in the ROI; month-over-month, our ADR has gone up 15 percent compared to last year, even with lower occupancy."

The Vintage keeps improving.

Your guests can get the warm feeling of being recognized, too, if you give them a code to access special rates. This works just as well for general discount categories such as AARP as for specific groups like your frequent guest program members or a convention with a confirmed reservation block. Password-protected access lets your frequent guests update their own profile information in your database, and allows group coordinators to enter rooming list names themselves. They feel more empowered and you do less work and have more accurate information; good news all around.

In this Internet-centric world, of course, it's a given that a modern PMS can e-mail reservation confirmations and folios to guests. The latter is useful not only for guests who need a copy for their taxes but also for larger corporations that centralize their travel reimbursement programs. Multi-Systems, Inc. (MSI) handles this chore for corporate clients of Prime Hospitality, extracting folios nightly from their MSI-equipped hotels, consolidating them centrally and transmitting them to the companies involved. As more corporations implement stricter travel policies regarding approved hotel chains, this need may increase steadily.

One-Stop Shops Add More Departments

Constant improvements are still being made at the property level, both within the traditional guests/rooms management area and in expanding the PMS into other areas. More vendors include sales and catering modules in their PMS (MICROS-Fidelio, MSI, Northwind, Visual One, etc.). Others have added spa management and guest activities management functions; Springer-Miller led the way here some years ago, but Visual One and others now also offer them. And still others offer timeshare management, an advantage since that's one of the few bright spots in the hospitality world right now.

More properties are going mixed-use, including vacation interval ownership units and even private clubs at the same location as transient guestrooms. A number of PMS products cover many of these areas, but it's tricky to get it right given the wide range of reservations rules, entitlements and vacation points associated with the different types of guests. Careful research is very necessary to make sure that a product will actually match your requirements in the depth you need, or that the vendor is willing to make it do so.

Smaller properties have often felt that they're forced to buy more functionality than they

The Bellstone Hotel
Remotely Satisfied

How does a small, busy city-center hotel find time to look after a property management system? "You don't," said Nigel Lee, proprietor of the 18-room Bellstone Hotel in Shrewsbury, England. "You have someone else do it."

Although they are a small property, they have an extensive F&B operation and very heavy traffic, especially in the evenings at check-in time. When looking for some automated help over a year ago, the Bellstone Hotel knew they'd need something absolutely reliable, since no one on staff has time to babysit a computer. As it turned out their situation called for an ASP-based system with the vendor taking care of system backups and software maintenance.

The Bellstone selected **Guestline's** RezLynx system, and has now been running it for over a year on a broadband connection to the vendor's main office. How is the reliability? "It has been great," said Lee. "We did lose the link a couple of times, but Guestline faxed us our critical guest data immediately and we were fine. We did put in a dial-up line as a fall-back connection after that, though."

"The other key factor we were looking for was rate management. We have a very variable guest mix, with many transient visitors, many regulars and even some long-term guests. Again, the pressure on the front desk staff makes it hard for them always to know if they're offering the most appropriate rates. Now I can set the rates in the system for the right mix of guests and groups, and we no longer find we've sold out the whole house at the cheapest rate."

Reliable, well-managed operations are indeed "remotely" possible.
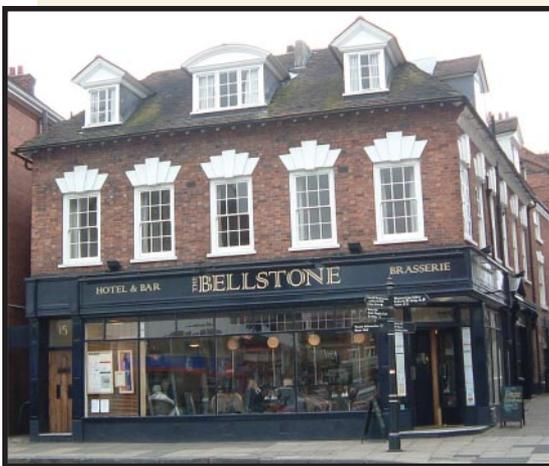
The Bellstone Hotel, Shrewsbury, England

need, especially when optional modules tend to be an all or nothing deal. Two more flexible approaches come from the AlohaPMS product (formerly Fabco's LodgeMaster) and MICROS' OPERA Xpress. The former provides good, basic functionality across a wide range of the most common hotel operations, with several options for increased depth of features in areas such as group reservations, housekeeping or accounts receivable.

OPERA Xpress takes the opposite approach, starting with the full OPERA functionality (and software) but letting the property choose any 40 features to be made active from a list of 82, at quite a fine level (do you want to track turn-aways, use wait lists, etc.). This is flexible for the user and simple for the vendor to support.

Multi-property Systems and ASPs

Multi-property systems have become much more common. In the past one hotel might support several others in the same area, sharing central equipment and support services over a dedicated network. These days the server is more often at a corporate office or at the vendor's business, and hotels are more likely to link to it over the Internet using a browser.

Both arrangements are included under the same application service provider (ASP) label, although this was originally reserved for pure browser-based systems operated by a third party for a monthly or transaction-based fee. Either way, they offer many advantages to management groups wanting a more complete view of their properties' statistics and a more accurate, comprehensive guest profile database.

Browser-based systems started as fairly simple applications for limited-service hotels, for which they have considerable attractions given their typically lean staffing levels. Now they've become much more comprehensive, with PegasusCentral leading the way. Remote-access client-server systems have also expanded their range; Wyndham, for example, is implementing MICROS' OPERA across all its properties, hosted from its data center in Dallas, and MICROS itself hosts other chains' operations both in the United States and in Europe. Other vendors offering ASP versions of their PMS include MSI, Northwind, Springer-Miller, Ramesys, BookingCenter and U.K.-based GuestLine.

The concept is not for everyone, though, and needs to be approached deliberately with a full appreciation for the costs, savings, risks and advantages. Many properties will always be uncomfortable with the concept of their critical guest and operational data being housed somewhere other than at their own site. But real-world experience is growing in just how reliable, accessible and secure ASPs can be, and how easily hotel data can be transferred back if the property decides to change systems or is forced to by a change of franchise flag.

One other bonus of ASPs and Internet access has been the availability of e-learning. E-learning is Internet-based instruction to teach the hotel staff how to use the software before a vendor representative comes onsite to connect the interfaces and support the cutover to live operations. Apart from providing more flexibility in the training schedule (with central monitoring of proficiency gained), this cuts down the vendor's implementation cost considerably.

New Name?

All of this functional expansion means that the "pure" PMS hardly exists any more, in the traditional sense of a system that handles just guest folios and rooms management. Many include sales and catering systems and some also POS. Multi-property systems, especially with Web booking interfaces, are well on the way to being integrated central reservations systems as well, and in fact some vendors do offer an integrated CRS/PMS/S&C system. Do we need a new name for these new applications? Maybe not; ironically enough, it seems that property management systems are finally living up to the full implications of their name.

The Future

Crystal-gazing last time suggested that concurrent PMS and POS applications would be increasingly useful for room service entry at central service desks, as well as for looking up guest check details from the front desk. Both are still advantages, but the need for them hasn't been great. Central service desks haven't taken off to the extent expected, and more PMSs have direct access to POS check detail anyway.

Wireless terminals were going to be hot – but they seem to have come, been tested and gone onto the back burner, except for very specific applications such as remote check-in from courtesy vans at very spread out properties.

System-connected PDAs, however, are one area where growth can still be expected. Property-wide wireless networks are becoming more common, usually installed to provide guests with wireless high-speed Internet access for their laptops, they work equally well for PDAs used by hotel housekeepers, minibar re-stockers, engineers and managers needing access to up-to-date information wherever they happen to be on property. The key to successful use of these devices, however, is a strong focus on the clear display of a well-defined set of the minimum data needed for the specific task at hand. Trying to do too much on a small screen leads to confusion and to the device being ignored.

I believe we're on the verge of major change. XML has redefined data exchange, leading to more powerful and flexible interoperability between systems. Web services on the horizon offer the next step forward by promising the automatic discovery of one system by another looking for a particular type of application, with both learning – without human intervention – how to exchange data. Automatic interface set-up? Now there's a tantalizing prospect.

After a period of relative isolation between systems and of limited sales opportunities for smaller vendors, modern technology is making the PMS field wide open again. Existing vendors are developing more ways to expand their systems' coverage and usability and to link to other products to enhance both. This could lead to more formal and informal partnerships being established as required to meet specific clients' needs and perhaps to further vendor consolidation. The opportunity is there for creativity and innovation from new vendors to come up with matching and complementary products that link to existing ones quickly, reliably and in depth.

I think we're going to see some fascinating developments.

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PMS: Critical Functionality

General trends in systems architecture and interoperability aside, what key functions does a modern PMS have – or have more of – that its predecessors did not?
Prime candidates are:
- | Distribution channel management
- | Customer relationship management
- | Internet links
- | Wider coverage of property operations
- | Multi-property databases