What you need to know about…

ERP software

What it is

Enterprise resource planning or ERP software allows the collection and consolidation of information across the 'enterprise.' With a complete picture, the application allows for tracking and the running of basic reporting.

How it works

ERP functions as a transactional system for capturing business information. All data input at various locations, from finance and sales to human resources, is collated at a central location. The figures can be automatically slotted into record keeping or reporting files. To have a closer look at what an ERP file looks like, visit Oracle's onscreen sample at **oracle.com/corporate/analyst portal/contacts/erp_bi.html**. Click 'Product Overview;' then click 'Immediate Access to Real Time Information.'

Application and benefits

The City of Winnipeg recently installed an ERP system to eliminate a paper-based setup. Peter Bennett, Winnipeg's manager of information systems, explained how PeopleSoft put ERP to work for the city.

Financial data such as vendor purchases are entered into the system and stored in a kind of data warehouse. The city is able to track all purchases, tie them to the municipal budget and programs under way. The purchases can also be matched against an approved list of vendors. "The city goes to a lot of trouble to RFP particular components. Now it is easier for a particular commodity – here's the approved vendor. This also allows you to do some analysis. What are we purchasing? What is their track record? And we can compare prices," says Bennett.

With data input across the 'enterprise' through a single system, the city can look at a single program such as IT purchasing and use the figures to its best advantage. "For example, in the City of Winnipeg, we pooled all of our IT purchasing and did an RFP to vendors saying we are a large organization and we buy X number of PCs, printers and so on for the year," says Bennett. "We offer to guarantee the business but they have to come to the table with *bona fide* savings for us and shave off X percentage points from the list price. That's what we've done and it's very successful. The added advantage in that sector is that we have consistency in what we're buying."

Drawbacks

ERP systems capture a tremendous amount of data. The adoption of the technology can be very complex and have several shortcomings:

- Legacy paper-based systems together with legacy computer systems used to collect and store information on things like purchasing or staff vacation schedules will take a long time to convert into a single enterprise-level program.
- Duplication of data is a common problem in every organization in the public or private sectors. Information on staff vacation time, for example, will be filed with both Human Resources and with any particular department, division or section supervisors. For various reasons, the figures or dates may not always line up. One person may have altered vacation plans or a scheduled start date falls through the cracks. Once the information is input into a single system, all that duplicated material – including misaligned figures – goes with it.
- An ERP program doesn't actually conduct analysis or management functions. "The question is what do I do with all of this data now?" says Gary Love, public sector program manager for SAS business intelligence software. "What organizations need to do is turn that into actionable information."

Vendors

- Oracle
- PeopleSoft (considered the expert in ERP-HR transactions)
- SAP (regarded as the leader in global operations)

Cost

Price is difficult to nail down. Cost varies according to the size of the organization, its database and the number of users. The City of Winnipeg allocated $24 million over a three-year period. Actual implementation cost was over two years because of requirement studies done by consultants, a cost-benefit analysis and a detailed business case that also looked at return on investment – all done in the first year. The city also stayed very tight to its budget estimate for the project. "It was bang on budget," says Bennett. "We had a very good chief financial officer whose battle cry was: On time and on budget. That was the message and it was understood by everyone."

One secret to the budget success story for the City of Winnipeg was the selection of a product that was about 95 percent off-the-shelf with very little customization. "The main implementation philosophy was going generic – out of the box," says Bennett. "That will buy us all sorts of future benefits. When the software vendors continue to upgrade their products, the fact that we've implemented out of the box – well, it's very easy. You just roll out the product. If you go in and modify it, you spend a considerable amount of time testing the upgrade to see how it impacts your modifications."

What's next

ERP remains the basic of the enterprise-wide software applications to help improve operations. Activity-based management or management-analysis software – known as business intelligence software – is the follow-up to tracking transactions. The City of Winnipeg is looking at this as a next step in the longer term.

Scott Murray, chief technology officer at the Canadian Institute for Health Information, calls business intelligence applications "the slicing and dicing, analyzing and setting up what-if scenarios" with the data. ⋀⋀

Marlene Orton is a freelance writer based in the Ottawa area.