

## The Market from the Consumer's Perspective

Within its operational centers, the museum must manage an enormous amount of information in a variety of formats and media for administrative as well as collections purposes. There is the need to handle numeric data in accounting systems, documents, images both still and moving, audio tapes, list of members, publications and large quantities of text in collections information systems.

One way to group application areas for convenience is as Administrative and Business, Collections and Research, Public Programs and Utilities.

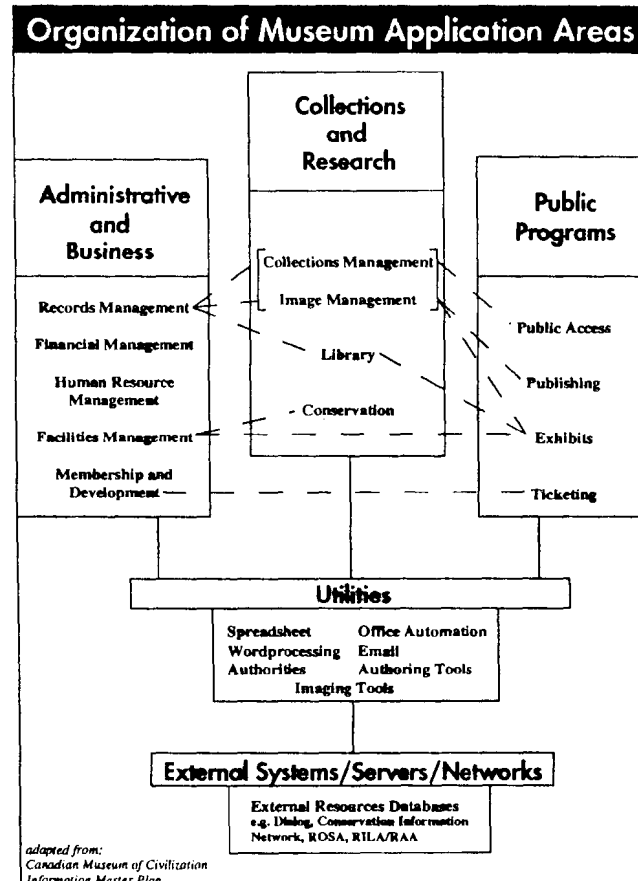


figure 7

There are systems available for all of these functional areas and while most of them exist as isolated applications, increasingly there are ways to make them inter-work through integrated implementation practices.

Most applications considered to be administrative or business in focus, and those that have broad and generic enough appeal to be called utilities, word processing, for example, can usually be implemented directly from commercially available sources. Those in public programs may need more customization before they can be used. Collections oriented applications are the most specific requiring a great deal of customization and modification to make the commercially available systems effective.

Unlike the case of even two to three years ago, there is little reason for most museums to consider self-development now that there is a vast selection of application software in all price ranges and expertise to assist with custom implementation of a commercial system if that is required.

### Range of Applications

The museum market is better served now than at any previous time, showing a doubling of the available museum software between 1988 and 1990 (Reference 1). The number of mature applications in all areas of museum information management is greater, there are approaches to suit all budgets and systems are coming with greater functionality.

The applications are now available in a variety of operating systems capable of running on a wide range of different hardware. Following general trends, many museums are adopting microcomputer technology, while others are attempting to integrate a variety of hardware into a coherent system. Museum software generally supports these trends through its availability in microcomputer versions or system independent form.

Application Price Range			
Application Area	Price Range		
Administrative and Business Management	Finance and Accounting		1,000-15,000
	Membership and Development Records Management Human Resource		3,000-50,000
Collections and Research	Collections Management	small	1000-5,000
		medium	5,000-50,000
	large	50,000+	
	Library		500-500,000+
	Image & Image Management	Digital	3,000 up
		Analog	3,000 up
Public Programs	Event Management		
	Ticketing Exhibition/Information		10-50,000
Utilities	Word Processing, etc.		200-20,000
External Systems	E-Mail Resource Databases		500-10,000+

figure 8

The less specific museum applications, those falling under Administrative & Business, Utilities and External Systems are generally available in any operating systems for any hardware. Applications in the Collections and Public Programs areas tend to be crowded into the IBM and compatible DOS environment. A minority are either hardware independent or hardware specific. Collections oriented applications in particular suffer from limitations that makes it difficult for them to operate effectively across a variety of systems: the ones with the best characteristics of performance and user interface often are limited to microcomputers or a single operating system; the ones most suitable for large scale implementations are often lacking in user interface or functional niceties expected in contemporary software.

### Approach to Implementation

Along with the variety of applications there are a number of different approaches that vendors will take, but since museum systems are very seldomly useable right out of the box there is a need for the involvement of the vendor in tailoring and adapting an application for use. Costs and approaches vary and examination of the individual approaches is worthwhile.

### Market Conditions to Monitor

For those considering purchasing software from the current market there are a number of pulse-points that can give useful strategic indications.

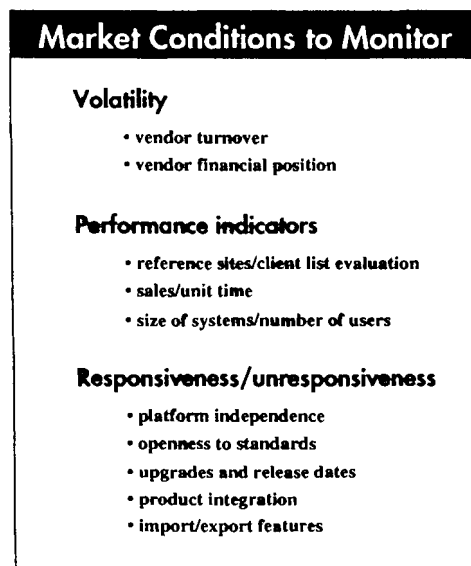


figure 9

### Volatility

While there has been substantial growth since 1988, there has also been a large turnover in system vendors. A substantial number are no longer operating and over 50% of those listed in the 1988 Archives and Museum Informatic's "Directory of Software for Archives and Museums", were reported to have changed their address in the two years before publication of the 1990 edition. It is not clear if this indicates a dynamic or chaotic market (See Ref 1,2), but is cause for legitimate caution.

## Performance Indicators

The acid test for performance is to know who is using what system and how it is performing. This information becomes even more useful when sales/unit time can be determined. Vendor supplied reference sites can be misleading and it is often more interesting to compare the list of a vendor's clients with those offered as reference sites. Other important indicators of the overall health of a system in the market are the amount of advertising and appearances at professional meeting trade shows, upgrade and new product release announcements, and size of staff.

These indicators usually have to be gleaned from raw data but are worth investigating.

## Vendor Responsiveness

Systems developers who expect to be in the future market should be engaged in R&D. While there areas of research are almost limitless, methods for incorporating digital images and migration to platform independent software are two critical areas. Developers who address these areas successfully will have very interesting future applications.

## The Market from the Supplier's Perspective

The market perspective from the developers point of view is not often considered by museums. While this is understandable, the view from this direction is most interesting.

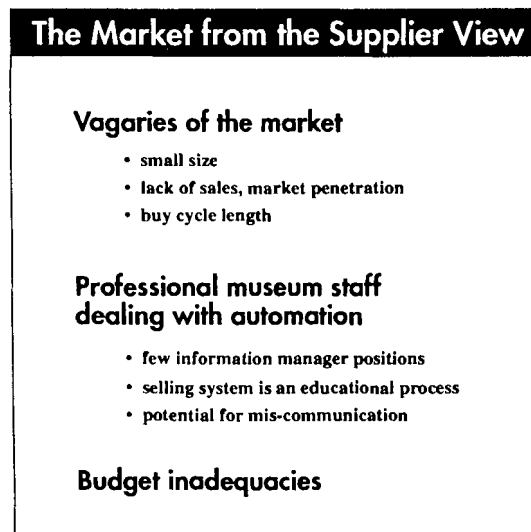


figure 10

## Size

The total number of museums in the systems market in North America is under 10,000. One can say with certainty that Lotus 123™, Excel™, or Quattro Pro™ would not have been developed for 10,000 sales yet museums have a choice between systems. For museum specific systems this

means that (singly or in combination) systems have to be more expensive than consumer software, museums are only part of a vertical market and revenues are found elsewhere, or the developers have extremely deep pockets with capitalization that allows for extended unprofitable operations. The developers who continue to flourish in this market have a real commitment to museum information management.

### Market Penetration

A market size of 10,000 is small enough to begin with but that coupled with significant sales numbering in the tens not hundreds force museums and their systems vendors to take a unique view on pricing, profitability, and operations.

### Buy Cycle

The elapsed time between taking the decision to automate and completion of the implementation process averages 18–24 months for museum systems. A very speedy acquisition is 6 months and it is not uncommon for some to last 4 years or more. Whether this is driven by fear or ignorance is the subject of substantial debate but it clearly influences the conduct of business. Those vendors who are not financially prepared to deal with such a lag-time suffer. Consumers need to note that vendors can only offer services to a reasonable level under these conditions and can't be expected to invest unlimited resources in making a sale that can take months or years to materialize.

### Professionalism

It is still true that most museum automation projects are managed by professional staff whose area of expertise is not systems acquisition. In response to this, museum systems vendors treat selling software as an educational process investing time and energy in providing guidelines, suggestions and step-by-step instructions (see Refs 3,4,5). Obviously, museums need to be aware that this information is usually heavily biased in favor of the vendor who produced the information.

<b>Budget Analyses</b>		
<b>Size</b>	<b>Annual Software Budget</b>	<b>Application Costs</b>
<b>Small Institution</b> (< \$200,000 annual budget)	\$200	\$1,000 +
<b>Medium Institution</b> (\$200,000–\$800,000 annual budget)	\$760	\$5,000 +
<b>Large Institution</b> (>\$800,000 annual budget)	\$10,230	\$50,000 +

Adapted from:  
National Museum Computer Survey (Reference 6)

figure 11

## Budget Inadequacies

It is accepted, practically universally, that there is never enough money for automation projects. This is acute in museums. The amounts in Figure 11 show that in all sizes of museums studied, the average budgets are substantially less than required to implement the most rudimentary systems. Figure 11 does not tell the whole story because often automation projects will have special budgets, but it does give an indication of the general levels available and when these are compared to the indicative costs the need for preparing adequate budgets is underscored. Pick (see Ref 6) provides a detailed discussion of automation budgets for museums both large and small.

## References

---

1. David Bearman, "A Dynamic, or Chaotic, Market", *Archives and Museum Informatics*, Vol.3 No.4, 1989, p1.
2. Archives and Museum Informatics, "Directory of Software for Archives and Museums", 1988-89, 1990-91, 1992-93, 1994-95, *Archives and Museum Informatics*, Pittsburgh, 1988, 1990, 1992, 1994.
3. Jane Sunderland and Lenore Sarasan, "Guidelines for Investigating and Selecting Automated Museum Collections Systems", Willoughby Press, Winnetka, 1988.
4. Lenore Sarasan, "What to Look for in Automated Museum Collections Systems", *Museum Studies Journal*, 3:4 1987.
5. Barbara Bormuth Witt, "How to Choose a Computer System: Advice from a Vendor", *SPECTRA*, 16:4, 1989.
6. James B. Pick, "Artistic Computing in Art Museums: Findings From a National Survey", *Archives and Museum Informatics*, 4:1, Spring 1990.
7. "MCN List of Vendors and Consultants", Museum Computer Network, Pittsburgh, 1991.

Note: Some of these references (3,4,5) are highly biased towards a particular system.