## MUSEUMS AND COMPUTERS: WHAT'S HAPPENING NOW?

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**RESUMO** 

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Os museus estão buscando um uso efetivo para os computadores. Esse ensaio discute projetos de automação de museus que vão além da instituição individual. Embora cada museu tenha suas próprias necessidades e preocupações, muito pode ser feito em níveis regional, nacional e internacional. Projetos bem sucedidos de automoção requerem parceria e pensamento renovador. A respota não está na seleção do software correto, mas na capacidade para fazer questões críticas que atinjam o coração da missão dos museus.

Unitermos: Museus - Computadores - Bases de dados.

Stafford Beer (1972:31), a noted cybernetics expert, wrote that many organizations asket how could they best employ automation to serve their businesses. How should the enterprise be run given that a computers exist?". Automation challenges museums to reconsider how to most effectively collete, conserve, research, communicate, and manage.

When facing the issue of automation, most museums are equal wether they are in developed or undeveloped coutries. A museum in Canada's North West Territories or a small community history museum in the mid-west United States faces the same problems of isolation, lack of ready acess to and information about technology, lack of technical experts and expertise, unstable power, suplliesd, few vendors, untrained staff, a lack of funds, no easy

answers, etc. as does a museum in a developing country. Although there are many, between twehty to thirty, commercially developed collections management products available to Americam museums, these museums also face the same issue of records and documentations in favor of other more urgent priorities such as acess for the disbled, more exhibits, better education programs, etc. The answer to the problems cited above are not always solved by the fulfillment of what has been lacking to date, but in the recognition of greater issues and opportunities.

Canada successfully sports museum automation through significant federal government involvement in the areas of cultural policy and funding. In the early 1970's the Secretary of State for Canada, (Gerard Pelletier) established guidelines for Canadian cultural policy embodied in two words: democratizacion (increased access) and decentralization (an active battle to make cultural symbols available to all Canadians) (Canada, 1972). One of the programs designated to achieve this task was a national inventory of Canada's scientific and cultural heritage, now called he Canadian Heritage Information Network (CHIN). CHIN held meetins of experts in various disciplines and developed a structure for data bases and the recording of information. In addition, the Canadian governament created an agency capable of proving technical and museological advice, established data elements for the recording of documentation, and a funding programme, established the base for successful automation projects.

France led the way in the concept of a national inventory in the early 1960's and now other countries along with Canada such as Denmark, Norway, and Austria are developing on-line national data bases to allow access to their scientific and cultural heritage. These countries are creating national resources of information of significant value.

In the united Kindom, the first concern was not towars automation but to the development of documentation systems for museums documentations:

This group [first called the Information Retriefal Group of the Museums Association IRGMA, now called The Museum Documentation Association] initiated a project to examine the form and content of a museum record, identifying the different data categories that make up a record, and the way in wich theses different categories were logically related... This theoretical work on data standrs provided the background for subsequent development of manual - and computer-based systems. (Ligkt, Roberts & Stenart, 1986:116).

One of the most valuable products produced by The Museum Documentation Association (MDA) is a wide variety od recording forms, registers, and cards wich are designed to be used according to the requirements of the

individual museums. This early emphasis on good manual systms set the stage for solid documentation for automated systems. The MDA recently developed a data entry system for micro-computers called MODES which designed to tie into the MDA's data processing and data interchange procedures.

Museums in the United States began to use computers to inventory collections in the mid-1970's, with no governament policy on automation and no concept of a national inventory. A survey undertaken in the early 1980's indicated that "[while'at least 500 individual collections management projects using computers are now underway in American museums, relatively few have been successful in using computers effectively". The authors, Sarasan and Neuner (1983:9), cited the major reasons for failures:

- 1. Inadequate project management;
- Poor understanding of the principles and functions of documentation; and,
- Insufficient familiarity with the operations and applications of computers (p.10).

While the state of Amercian museum automations has improved considerably since this survey, museums in the United States are proceeding to automate on an individal basis. One product though, developed by the National Park Service to meet the demands of documentation and accountability for its own museums, because of its low price (\$25), good documenation, and easy availability is used by many community history museums. The National Parks Service selectd to develop the product for use with dBase Plus. Once again, a venture undertaken for a particular purpose by a national agency had a significant impact on other areas.

Enlightened self interest also drives American museums to consider common automation solutions, not at the level of a national inventory, but solutions as to how automation might solve commom problems such as not enough storage space, a lack of curatorial expertise for specific colletions and how can it refer donations that are outside the scope od collections to other more appropriate venues? The emphasis is shifting from a focus on the individual object and inventory control to a consideration of how automation might increase scarse resources through cooperative joint ventures.

The Common Agendas project (Taylor, 1987), led by the Americam Association for State and Local History in parnership with the Smithsonian Institution and the Americam Association of Museums, attempts to determine where synergetic collaborative efforts among local history museums can improve the quality of museum research, colletions management and public access. One of the Common Agendas efforts is to establish guidelines for sharing colletions data. To accomplish this a Common Data Bases Task

Force is undertaking a scope and to make this information accessible to academics and museum professionals alike.

Another area where common interests are prevaling is at the Smithsonian Instutions where staff at the National Museum of Americam Art, the Hirshhorn Museum and Sculptre Garden, and the National Portrait Gallery realize that some reserch efforts into biographies of artisits and sitters may be redundant and that the museums have the opportunity through the use of computers to more precisely target areas of research, to coordinate research, and to share the results.

Collaborative automation efforts can expand museum borders leading to the exchange of infomation and collections care. In Norway, as part of the investigations into the establishment of a national inventory, a museum task force is considering the development of regional centers for professional advice, conservation, and collections storage.

In the international area the International Committee for Documentation (CIDOC), a committe of the International Council of Museums (ICOM), created a working group to prepare for a museum documentation standard to be presented to the International Standards Organization (ISO). At recent CIDOC meetings representatives from the Smithsonian Institution; the Victoria and Albert Museum in London; the British Museum; the Museum Documentation Association in Cambridge, England; the Nation Museum of Denmark; and the National Museum of Natural Science in Ottawa, Canada realized that they were developing very similar documentation standars in isolation, with much overlapping work. This realization was the start of a CIDOC working group to develop an international standard to share the benefit of work alrady accomplished with other museums. The working group is now preparing fund-raising proposals so that it can meer frequently and produce results faster.

For museums the world is getting smaller and closer. An electronic mail network sponsored by the J. Paul Getty Conservation Information Network now brings together museum professionals in over 18 countries and provides access to two conservation data bases, one: materials and supliers, and the other, an extensive annoted bibliography of conservation literature.

Through the medium of eletronic mail exchanges of information can be effected immediately without the time-consuming work of trying to place international telephone calls and finding the right time frame and zone in wich to contact your colleagues. What makes the eletronic mail system work is that museum professionals around the world have a lot to communicate: the planning of exhibitions - the arranging of loans; the undertaking of research

"I have these objects/specimens in my collection, do you have similar of revellant objects?" and the arranging of meetings or the continuation of commite work, such as that of the International Documentation Committee (CIDOC).

It is not only museums wich are benefitting from the results of cooperative work in automation - the public is beginning to see the benefits too. In Canada, access to heritage information in considered o political right. Individual museums also permit public access to documentation. At the Nation Museum of. Civilization in Ottawa, Canada some 500,00 records representing historical, ethnographic, and archaeological collections will be accessible to the visitor and much planning has gone into the provision of complimentary video-disc images. While not every objetc may be on view, the intent is to provide visual access for to the visitor. This project will also assist in the preservation of objects through lessening the need to handle the real object.

Automation is a major policy issue that forces museums to look to the future: how will museums serve the public in the twenty-first century? For both developing and developed coutries information and automation are long-term investiments that may not relap benefits withinin the next decade. Automation forces museums to reconsider their role in the future and to rethink traditional methods of collecting, researching, conserving, communicating, and managing. These deliberations do not have ready answers: we do not know alternativs are just as dificult as resources of money, staff, and space are strained with increasing expectations from the public for services.

Information and automation cost money. Many museums cannot nort afford to aumate as it is an expensive "experiment". Other museums cannot afford not to automate as acess to information and the ability to better manage resources is critical. Museums cannot simply automate existing documentation systems that were inadequate because computers were unavailable. Stafford Beer writes: "... agian we are concetrating on slicker ways of doing things rather than what we do. What is the use of ever slicher, more nearly perfect implementation. Establishing new priorits for documentation and new procedures for the production and use of that documentation are difficult. Funding these actives on an on-going bases is difficult. The effective use of computers demand essential changes in the way museums operate and national support throug the development of government cultural policy and funding. Museums must answer Stafford Beer's question.

## SUMMARY

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Museums are in search of answer concerning the effective use of computers. This essay disusses projects which take museums automation beyond the individual institution. While every museum has it s own needs and concerns, much can be done at regional, national, and international levels. Successful automation projects require partnerships and innovative thinking. The aswers lie not in the selection of the right softaware, but in the ability to ask critical questions that strike at the heart of a museum's mission.

Key words: Museums - Computers - Databases

## REFERENCES

- BEER, Safford (1972). Brain of the Firm. London: Allen Lane, The Penguin Press, ISBN 07139 0291
- CANADÁ. Office of the Secretary of State. Pelletier, Gerard (1972). Notes
   for an address by the Secretary of State, the Hnourable Gerard
   Pelletier, to the Canadian Club of Calgary, tuesday, 28 March,
   1972. p.4.
- 3. LIGHT, Richard, ROBERTS, D. Andrew and STEWART, Jennifer D. (eds) (1986). Museum Documentation Systems: Developemts and Applications. ROBERTS and L:IGHT contributing chapter. "The cooperative development of documentation in United Kingdom museums", London: Butterworths, ISBN 0-408010815-0/
- SARASAN, Lenore & NEUNER A.M. (1983). Museum Collections and Computers. Lawrence, Kansas: Association of Systematics Collections, 1983. p.9. ISBN 0-942924-03-7.
- TAYLKOR, L.W. (ed) (1987). A common agenda for history museums. Conference proceedings, 19-20 February, 1987. Nashiville, tenn: Americam Association for State and Local History, ISBN 09 10050-89-19.