

PC Magazine believes that these programs can do an attractive job with the combination of reasonably priced laser printers.⁸⁶

D. SITE ANALYSIS OF INSTALLED EXHIBIT SYSTEMS

In 1987, the author evaluated a number of software systems designed specifically to manage many of the tasks required for travelling exhibits. These systems are up and running and are producing successful data tracking. Three of these examples are considered below.

The first system was the Museum Object Stock Control microcomputer system (MOSC). Andrew Choi designed it for the Museum and Art Gallery Service for Yorkshire and Humberside in Leeds, England.⁸⁷ This service center is one of nine such government organizations that provide joint conservation, design, funding and advisory services to the provincial museums. The Leeds center serves eighty small museums. Each year they offer a program of eight or more travelling exhibits to member museums.

To maintain an up-to-date record of all the museum objects in the custody of the Leeds service, manual records were converted to the MOSC computer files. These files are divided into: Conservation, Transit, and Loan Exhibition categories. These categories correspond to tasks seen in the FAM Flow Chart and Marcy Reed's Data Model in Coordination, Loan, and Shipping. Manual input documents (In Receipt, In Receipt Detail, Internal Movement Docket, Ready Docket and Out Receipt) are transferred into computer records, held on floppy disks. The database is then immediately available for query. The system usually holds 2,000 records but has room for 64,000 records.

The system routinely produces a series of output documents or reports (Out Receipt Detail, Location Statement, Ready Statement and Archives) to check for lost items. A monthly stocklist and lading (cargo) list are also produced. Similar reports, like the Outgoing Release Agreement, the Archival Index

86. Cheryl J. Goldberg, "Desktop Publishing's Inexpensive Upstarts", PC Magazine (April 12, 1988): 92-149.

87. Michael Loynd, Director, Jeanne Smith, Registrar, and Andrew Choi, Accounts Clerk, Museum and Art Gallery Service for Yorkshire and Humberside, Leeds, England. Interview with the author, September 1986 and correspondence June 1987. MOSC system documentation, 1986.

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and Crate List, can be found in the FAM Flow Chart. The system is built on Dataflex software made by Data Access Corporation of Florida and is run on a COMART CP-200 microcomputer with two 790K floppy disk drives (no hard disk drive). A Thesaurus aids in terminology control and is periodically revised. Object labels correspond to the MOSC system number for each object. It appears to be a well crafted and well maintained system and has been successfully operating for almost four years.

The author visited Wingate and Johnston, Ltd.,⁸⁸ an international packer and shipper of Fine Arts, to examine a second custom designed microcomputer system, developed by Mike Packman of BeeJay Systems in Suffolk. This is a Wang system, both hardware and software. It allows the user word-processing capability, password control, general file utilities, printing controls, and an office information system for data entry, reports, database search and listing. Data may be entered into four relational databases: an Exhibition file for permanent exhibition information; a collection file for addresses, dates, brief descriptions, remarks and delivery details; an Item file for listing items and their values; and a Permanent file for the company address, VAT (value added tax) number and telephone number. Reports are varied, with five custom reports and eleven set-form reports for receipts, invoices, delivery notes, agents' advice, packing and freight instructions, insurance and certificates of shipment. Up to nine printed copies may be made of each report. Backup files are taken to the Program Operator's home on floppy disk each night, in addition to floppies filed in the safe and kept in a storage box. As a further aid to this system, a computer program was created for estimating the size of the packing according to the type of the packing material. This system approaches more nearly the variety of reports and capabilities needed in museum exhibit management.

A third example of a simple object tracking system is the Arts and Sciences microcomputer program designed by George Collins at David K. Lindemuth Co. Inc.,⁸⁹ a customs broker and international air and ocean freight forwarder in South San Francisco. The system uses dBASE III software, and has two main relational databases: the shipper file (with information

88. Roy Pateman, Director and Annette Alix, Program Operator, Wingate and Johnston Ltd., London. Interview September, 1986. W & J system documentation, 1986.

89. George Collins, Computer Technician, Arts and Sciences Division, DKL Inc., South San Francisco. Interview May 7, 1987. Contact Mary Louise Beecroft, Director. DKL system documentation.

about the cargo such as shipper name and address, pickup, arrival, size and weight, insurance and value) and the object file (with information about location, size, and description). Querying the system produces various reports using description, listing objects by file number, by pickup date, by shipper or by packing list number. The system converts measurements to English or Metric as the occasion demands. Client information resides on a larger minicomputer system, the Digital Equipment Corp. PDP 1174, for billing purposes. Shipping company President, Guy de Gramont, from West Coast Keating, Inc. in Los Angeles, says that he also has designed a shipping program using dBASE III Plus.⁹⁰

Finally, mention should be made of at least one commercial vendor's loan system. Appendix B contains a vendors list. The American Federation of the Arts (AFA) unveiled their new loan system at the AAM National Conference in San Francisco in June, 1987. AFA describes the loan processing package as being able to "manage incoming and outgoing loans, track exhibitions and maintain borrower files." It operates on Altos supermicro computers and is being developed for microcomputers. Users can define their own fields and add them to the fields of general information, object data, shipping, insurance, catalog, import/export and exhibition record information. AFA and their support computer company, the Williamson Group, use test museums in their software development.⁹¹

Although these custom-designed software packages relate to the Fine Arts Museums, they illustrate that a museum need not develop a new design for their computer system for travelling exhibits. MOSC, Wingate and Johnson, DKL, West Coast Keating and the AFA all have provided some solutions to loan tracking for travelling exhibits. As commercial companies or services (perhaps MOSC should be excluded from the commercial group since it is government supported), they needed to develop efficient and profitable solutions to object tracking. They could be considered as low-volume examples of cargo management.

In contrast to these small systems is the newly computerized Miami International Cargo system (MIC), unveiled

90. Guy de Gramont, President, West Coast Keating, Inc., Los Angeles. Conversation with the author at the Western Museums Conference, September 24-27, 1986.

91. Gigi Dobbs Taylor, AMAA Director of Computer Operations. Interview with the author, April, 1987. Quote taken from, "ARTIS Collections Management Executive Summary," (April 1987): 5.

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last December for airports and seaports.⁹² Under the name Infoport, it is an adaptation from London Heathrow's successful ACP80. MIC plans to eventually put on line 350 customs brokers, forwarders and agents, 100 airlines and shipping lines and 100 customs and government agencies. British Airways hopes that by 1990, the top 10 international airports and seaports in the United States will have cargo systems.

Large trucking firms like North American Van Lines and Profit Freight Systems have developed computer object tracking systems. They can trace objects as part of their customer service, as well as for their own accounting records. North American has a central computer system in Fort Wayne, Indiana for shipment control. Customers can call for up-to-the minute status information about their shipments. They also handle large delicate shipments with containerization, for easy transfer to and from airlines. Their computer systems keep track of these container shipments as well.⁹³

92. British Airways Cargo Yearbook, "USA's First Airport Cargo Computer Close to Switch-On," (1986): 45.

93. Advertisements by both companies at the AAM Annual Meeting, New York, 1986.