Chapter 3: Evaluating Membership, Development & Participation Systems

Application Specific Requirements

Membership: List Maintenance

The construction and maintenance of a membership list involves a substantial amount of data entry, sometimes under less than ideal conditions, such as at the entrance desk or during a phone solicitation. Data entry must take place quickly, because the member or donor is waiting, but it must proceed as accurately as possible. Functions that support fast and accurate data entry include user defined, session specific, default values; user defined linked fields with default cursor movement and default values for the second field; user defined tables and table driven entry; interactive code expansion; and the ability to copy the immediate previous record, a part of the previous record including one field, and all or part of a named, prior record.

Organizations should look for screen layouts that either imitate their existing paper forms, can be easily modified by staff, or are clean and efficient. Data on any given form should be subject to local re-arrangement, including removal or session specific suppression. Audit trails should be automatically generated from system date and user log-in and should not require additional effort on the part of the user.

All values should be checked by the data dictionary, value tables or authority files to assure that they are as accurate as possible. New names and addresses should be run through duplicate checking algorithms to assure that they are not already in the database. It is useful if the system can validate postal codes (ZIP or ZIP plus 4 in the U.S.) based on street and city address, and it is especially desirable for the system to automatically enter city and state, telephone area code, and county (if this data is relevant) from the postal code alone. When this feature is present, the screen should reflect the fact that ZIP code will be among the first information to be recorded, rather than occupying its traditional output location following state.

Membership, participation and development systems are multi-user, transaction-oriented, computing systems. Because many users need to enter data and retrieve information from a membership and development system at the same time, record level lockouts and multi-function security are essential. These features should be checked in the technical documentation. Two users with modify permission should not be able to access a single record at the same time. It should be possible to define users with view-only, create and modify, and delete permissions; it is desirable for these functions to be further specified by record type, or even data element. Because of the number of users and the size of the client database, performance characteristics of the system should be checked carefully before purchase; if the system is too slow, the lack of speed can get in the way of using it, especially in the telephone solicitation process and at the admissions desk or box office. If possible, identify a user of the system you are considering for purchase who already has a database 150% of the size you anticipate yours will be when it is fully populated, and inquire or observe response time for entering new records, and for retrieving a specific individual from the database using a variety of search tactics.

Because clients have numerous affiliations with the organization and associations with each other it is important in the membership and development context that clients be automatically cross-referenced. For example, family relationships (brother, father, uncle etc.) should create their reciprocals in the associated family member record without requiring staff to call up that record and make a separate entry. Similarly, matching gift relationships, gift membership and memorial donations, and employees listed in corporate records, should all post in their reciprocals.

Membership: Membership Cards

Mundane as it sounds, important advantages can be obtained from a system that has a well thought out membership card issuing function. For example, it should be possible to prints cards on the spot as well as in batch, so that those who sign up for membership at the entrance can be given immediate access to member privileges. Besides providing an immediate reward, local printing saves a mailing and enables the museum to begin to record participation history immediately.

The number of cards issued to a single membership should be variable. The organization should consider whether the number of cards required by each member should be a staff supplied variable, or if it depends on the number in a family, or the number of listed corporate affiliations or the level of membership. In any event, when multiple cards are issued, the purposes of participation tracking are best served if each card carries a unique identifier in human readable print as well as in any machine-readable coding.

If cards are machine readable, with bar-codes or magnetic strips, they can be more easily used to record member participation. Machine-readable cards also make possible variable preferential rates on tickets, shop sales, cafeteria use or other in-house offerings. In addition, sophisticated magnetic strip cards can be programmed to have electronic credits; these could be used as gift certificates, to record pre-payments for which special inducements were offered, for subscription ticketing, or in association with other discounts.

The more places in the museum that provide visible benefits to members, the greater the inducement to membership and to carrying a membership card. The museum is interested in capitalizing on the attraction of membership, both for the benefit of immediate support and because tracking member participation patterns is thereby facilitated.

Membership: Mailing

Because memberships must typically be renewed annually, and involve assessing fees, the maintenance of the list requires updating each record at least annually, following a mail, telephone or personal contact with each member. Because any chance for membership renewal is dependent on these contacts, mailing list and telephone campaign support capabilities should be the first functions to be examined in any system.

It is important that the mailing list functions supported by a membership and development systems have output flexibility, in addition to demonstrated ability to support a list of the size the repository requires. It should be possible to select a wide variety of label output sizes, different numbers of labels across the page of label stock, and multiple copies of mailings, as well as to print addresses onto envelopes. Any system will need to provide a mail merge capability, allowing database values to be inserted for personalized letters. It would be valuable for the system to be able to store text libraries that can be recalled for the construction of master letters, and to support a word processing system that allows for multi-font printing. Because large numbers of letters are sent weekly, signature libraries (graphic images of signatures) for use with mail merge documents may be desirable; if these are used, the organization should require that their use automatically trigger an audit trail.

Bulk and reduced rate mailings require special reporting to the receiving post office; systems should sort by zip-code and count each grouping of labels according to post office rules. A printed report by collation units, with costs calculated after envelope weights are added, should be provided. A system that automatically adds "zip plus four" codes to addresses from a zip-plus-four database can be an asset in the United States, because of postal discounts offered for such mailings.

Development offices find it useful to evaluate the efficacy of mailings by using named or coded mailing labels or return envelopes; the system should be able to track results based on such codes. If recurrent mailings can be scheduled in advance, they can often take place at times other than peak activity periods. Some offices find it useful to have a choice of methods of mailing; systems that can automatically send mailings by electronic communication with vendors or by mailgrams can cut in house processing of mail substantially, albeit at a price. A variant on this is to use direct mail facilities to which user defined magnetic tape output may be sent. A recent innovation is to use facsimile output directly from the membership and development system to reach clients, requiring access to broadcast fax services, and of course, fax addresses.

Membership: Prospect Matching

Membership and development offices obtain large lists of potential members and donors from many sources, both commercial and not for profit. These lists may be in machine-readable form or in the form of labels. Regardless of how they are received, these lists will contain names of many individuals already associated with the museum and will also duplicate each other. The ease with which machine-readable lists can be read into a system varies greatly and should be tested. In particular, the readability of files in which the fields do not exactly match those of the system should be tested.

Techniques for matching names based on short forms of name and address and based on non-exact matching algorithms can save substantial amounts of money, annoyance on the part of potential donors and members who are otherwise subject to multiple mailings and solicitations, and time in sorting through lists that are organized in a dissimilar fashion. A variety of matching algorithms are possible; in evaluating an implementation, users should assess the degrees of similarity required for a potential match to be flagged and should try reading real lists into the system for cross matching. Typically a few letters from the first and last names together with some characters from other portions of the address may be selected for entry based on a duplicate checking algorithm. If the system supports optical character readers (OCR) for duplicate label checking, these should also be tested. In the absence of either, duplicate checking will need to use keyed data. Users see if the unique codes used for duplicate checking can entered directly.

Membership: Contacts Management

Development offices are well aware of the value of recording the actual content of what was said to contacts. Generally membership and development systems will permit the recording of such notes, but it is important to determine what kind of keyword or full text access is provided. Can the office retrieve contacts based on the reason they were initially contacted, the amount of time since the last contact (aging), a date on which recontact was requested or scheduled (tickling), or any words in the text that was recorded? Can the office schedule future contacts based on characteristics of previous contacts?

In addition to the content of the contacts, many membership and development activities are triggered by the date of a prior contact. Users should carefully assess the tickling function: can it generate a list of clients who have not been contacted in a given time period, or who requested recontact on a certain date? Can a tickler list be the selection criterion for a search, so that the museum could, for example, automatically follow up by mail on any client reached by telephone who indicated an interest in any of several different pre-packaged membership packets?

Development: Solicitation

Solicitation is typically conducted by telephone, so functions supporting the conduct of a telephone campaign can be very useful. If automatic dialing of prospects from a search list is combined with display on the screen of the prospect record, solicitors are saved from having to dial many phone numbers that do not answer, and are provided with information on the household answering their call. Some such systems can automatically return to busy numbers later in the evening, and recycle to numbers not reached one day at a different hour on a subsequent day. They can automatically log calls made by solicitors, keep track of successes, and route solicitors to clients to whom they have spoken on previous occasions.

Some solicitations take place by mail, advertising or broadcast media. Where these approaches are used, museums may want their systems to track which prospects received which mailings, or responded to which ads or broadcast appeals, in order to support analysis of the success of these approaches to solicitation. When the donations are received, clerks should be able to enter data on gifts and pledges, and view existing giving and pledging history, from the client screen.

Development: Gifts Management

All development offices must records gifts and pledges and issue acknowledgements and receipts, but the way that a system supports these functions can vary widely. In almost all cases when gifts are received, it is useful if the system automatically matches them against open pledges, allowing the staff to determine whether to credit them as pledge payments or consider them as new donations.

It may be valuable to support automatic posting of gifts to the general ledger, or at least to have a function that supports review of cash batches before they are posted to accounting. In either case, audit trails will be necessary for protection of all parties involved. Information about each gift instrument, such as bank number, check number and date, should be recorded for short-term tracing and reporting. Lists of checks processed each day should be generated for bank deposit and audit purposes.

When stock, bonds and property are donated to an institution in place of negotiable assets, their assessed or stated value is typically recorded at the time of gift, but the system needs to record their value at the time of sale and the gain or loss from the sale based on value at time of donation. The description of the actual property donated, and its valuation at an given time, must therefore be discrete.

Some information that is of importance in the administration of a development function is often overlooked in evaluating the "receipt of gifts" function. Most organizations need to be able to provide for restrictions imposed by the donor over the purposes or funds to be credited or the way in which the gift is to be reported. Ideally recording restrictions should impose them over the appropriate funds throughout the system as intended. All repositories will need to have gifts recorded against specified accounts and possibly against specific lines within funds. Automatic annual tax reporting to donors and the I.R.S. is a useful feature of a system. Depending on local policy, it may be necessary for the system to optionally split gifts between the records of spouses, or separately acknowledge gifts donated in honor or memory of another to both the person who made the donation and the person in whose honor the donation was made. In both cases, multiple client and address records must be accessed by a single function. In some cases, it may be necessary to add a new constituent from the gift or pledge function.

Development: Pledge Management

While most of the time it is adequate for the system to calculate pledge payments automatically based on the date of the initial payment and the desired number of payment periods, some pledges will require variable payments dates with different amounts to be paid on each. The system must support recording this information and billing based on it. Some systems limit the number of pledge dates that can be recorded on a pledge or the number of years forward that may be pledged. Some limit the number of pledges that an individual may have open at a time, requiring new pledges to be folded into old schedules. Development staff will want to determine whether or not they will be happy with automatic pledge delinquency reports based on the aging of balances due; if not, they will need to find systems that permit notification at staff option. Any system will need to support writing off of pledges; the process should be documented in an audit trail and pledges written off should report to the general ledger. The system should distinguish final payments on pledges and send automatic acknowledgements and thanks for completed cycles.

Development: Planned Giving

With each new tax act, the management of planned giving changes, and always seems to be more complicated. Development offices that use planned giving approaches know that a large number of calculations are required to compare the tax implications of different approaches to giving, an that donors want to be shown the consequences worked out under a number of different scenarios before making large gifts. Systems that can calculate the after tax rate of return of Charitable Gift Annuity and Inter-Vivos Charitable Lead Trusts, perform bargain sale calculations for charitable gifts, and analyze the Alternative Minimum Tax and capital gains consequences of various sizes and timing of gifts, will be much appreciated by donors and may help secure gifts that otherwise would not have been given. During the term of such gifts, systems that can calculate remainder value of charitable remainder annuity trusts and unitrusts for multiple lives, and plan deferred gift annuities will be of great benefit to the development office.

Development: Fund-raising Campaign Management

Fund raising campaigns are complex projects, involving many steps and people, each with timing constraints and reporting requirements. Project management tools are extremely valuable to plan the allocation of human resources and monitor the progress of the campaign once it is in swing. Reports from campaigns need to sort by both the volunteer structure and the defined campaign increments and to compare against established goals for both increments and teams. Individual solicitor performance measures need to be monitored both with respect to the solicitor and with reference to the prospects, in order to match solicitors with prospects with whom they are likely to have the greatest success. Systems should monitor solicitation costs and reports should show net incomes as well as gross receipts.

Participation: Attendance

Body counts are the most rudimentary form of attendance data, but they can be extremely useful and they can be automated by installing counters employing light beams or turnstiles across relevant doorways. The museum will want to determine whether counts made by this method can be automatically reported to the system. Different doors will need to be defined to the system for such counts so as to track movements within the repository as well as attendance, and the system will need to capture date and time of day with each count. More sophisticated measures of participation can be recorded automatically using turnstiles operated by membership cards or exhibition/event tickets, or simply by collecting tickets and recording membership numbers when tickets are purchased.

Participation systems should analyze attendance data for security, building maintenance, and program planning purposes, as well as analyzing member-specific activity counts for membership and development purposes. Development officers will want to check to see if their systems can merge data from participation histories with solicitation letters to remind members of the specific programs they took advantage of during the year. Membership marketing will want to use the data to assess the benefits of membership to various categories of members if the system allows for its ready analysis.

Participation: Reservations

Reservations may be required for individuals and for groups to participate in certain museum activities. A calendar of the events for which reservations might be required needs to be maintained with activities on it at least six months in advance. Because reservations may be for separate events or for events that are defined to the system as components of a series, it must be possible to identify such series.

The price of tickets may be set by the event, the venue, the time, or other factors. Separate pricing policies may effect reserved ticketing, combination sales, subscriptions or large volume ticket purchases.

Some museums will want reserved seating to be either ticketed (preferably in self-mailing output) or held for pick-up, at the users option. A system to support this option will need to store data on where the tickets have been sent. In both cases the names of ticketed clients must be known to the system and the fact that they purchased (or reserved without fee) tickets to an event should report to the membership participation history, even if the tickets are subsequently canceled by the client. The expression of interest can be coded, like other purchases in the museum shops or responses to direct interview questions to cumulate a profile of member interests.

Group sales, in addition to requiring reservations to be made for a number of people at one time, and for facilities other than the usual ticketed events (such as the foyer, lunch room, parking lot, etc.), often require a function that schedules based on a date range, or day of week, or time of day. It may be necessary to print out group itineraries for group leaders and staff which identify the schedules for each individual on the tour. Some repositories will need to compile special statistical analyses of minority attendance, handicapped visitors, young and old age groups, and other special services in order to qualify for particular subsidies and grants. For groups that attend multiple events, the system may need to make revenue allocations between events at user discretion.

Organizations that run workshops, courses and tours have special requirements in reservation systems. In each of these kinds of activities, the system must schedule instructors or tour leaders, rooms and facilities, and equipment. Different facilities and levels of equipment and staffing may be required depending upon the size of the registration and characteristics of the registrant population. Some programs have limited enrollment, so it may be useful for the system to maintain waiting lists and support notification of people on waiting lists sequentially as openings occur. If the organization sponsors any traveling educational programs, it may need to calculate fees for individuals or for the entire course based on the program, mileage and expenses, and the instructor's fee level. It might be useful as well if the system readily supported the customization of course materials and publicity based on variables from the event description database. In all cases course lists must be prepared.

Participation: Ticketing

Any archives or museum that runs ticketed programs, conducts reserved tours, or holds classes should consider the added capabilities of a system that can make reservations and issue "tickets" (even if, for aesthetic reasons the museum feels these should only take the form of confirmation letters). In considering the ticketing facilities of a membership, development and participation management system, museums need to consider the number of events they might ticket at one time, given the lead time required. It should be possible to issue tickets for multiple performances of the same program and for multiple programs being held in the same facility, and the number of such programs and performances should be carefully evaluated.

Sophisticated ticketing systems can calculate prices and make reservations based on the seating available in a number of different venues, using different ticket prices for different seating sections and different days of the week or times of day. Group discounts and packages of tickets with non-additive prices may be necessary for some organizations. It will probably be advantageous to look for systems that can print tickets on demand, hold them for pick-up or print them in a self-mailer. Ticketing functions that access the client database by client name or membership number can automatically load address data so that it need not be re-acquired, while additionally allowing ticketing to be an opportunity to update files and solicit memberships.

Other ticketing functions that can be useful in some settings include the ability to optionally print one ticket per person which includes entry for multiple events, so that a single ticket can serve for entry to a number of exhibits and shows on one day rather than having to issue separate tickets for each event. Some repositories will need to have a user selected basis for ticket discounts, including whether the user can select a basis for the discount such as percentage based on buyer record, percentage of the ticket price, fixed dollars per ticket, multiple event add-on discounts based on numbers of events attended, or number of tickets per event. The ability to upgrade tickets without reissuing them, which depends on being able to recall a specific transaction and collect the difference between the cost of the initial transaction and the upgrade, may also be of value. In reporting it may be useful to have separate counts for walk-up and pre-bought tickets, and to have a simple mechanism for return and reissue of subscription series tickets.

For museums, the secondary function of reservation and ticketing systems is to inform museum staff of the visitors, course registrants, andf tours they can expect. In assessing these capabilities, museums will want to see systems which generate registration sheets, and lists of daily activities and anticipated participation. The ability to make projections and analyze trends based on such data will also be valuable features.

Participation: Visitor Surveys

Participation management uses largely "non-obtrusive" measures to evaluate the success of museum programs, but from time to time some more "obtrusive" tools, such as visitor interviewing and surveys, are also required. An automated membership, development and participation system can support the effective evaluation of programs by facilitating the collection of visitor characteristics data. Matching such characteristics data to visitors reactions to museum programs makes it possible to assess the success of programs for different museum audiences. Visitor characteristics information can be gathered directly from visitors, from the client database once visitors are identified as previous clients, or from demographic databases linked by a ZIP-plus 4 key. Systems that support the authoring of simple interactive scripts will permit the repository to write surveys that can be left for visitors to complete on their own. Of course, museums will also want features that help analyze the results of such data collection and provide statistical and graphic reports.

Participation: Volunteer Management

The use of volunteers throughout archives and museums provides a way for members to participate to the benefit of the organization, but it also presents a challenge to management that can be much eased by good automated support. A system can automatically assign volunteers to tasks based on their previous involvement, skills, interests, and available time, assuming these have been defined to the system and the requirement is defined in terms of these variables. The system can prepare advance work schedules for individual volunteers so that they will know their assignments for the coming week or month. It can check assignment of volunteers and docents to tours and educational workshops on the day of the event, and it can tickle personnel in advance and on the day of the event. Each day it can print schedules of the day's events with coverage lists for management. The system can ensure that jobs have back-up volunteers assigned to them, and that no individual is assigned to more than one task at a time. Such a system can compile assignment histories so that managers know which volunteers have served at which tasks in the past and how long it has been since their last experience or orientation.

Membership and development program managers should remember that for the management of fund raising campaigns it is frequently necessary to mobilize large numbers of volunteers in teams, so the system must be able to support volunteer reporting structures. Summation both of assignments and achievements by multiple hierarchies of teams should not interfere with individual productivity reporting.

Volunteer program managers will want their system to automatically generate thank you notes based on completed assignments and year end reports on numbers of hours donated to be sent both to the volunteer an to management. Management reports on volunteers may need to be broken down by kinds of activities to which they are assigned and by the funds that are offset by volunteer efforts with value estimates placed on time. Often grants administrators will need to account for such volunteer time.

Participation: Publications

Publishing newsletters, circulars and event calendars is an important component of most participation programs. While many of the tools involved are simply word processing and desk top publishing, the ability to bring events data and membership lists directly into such publications to print lists of acknowledgements and graphics from campaign gift analyses will prove useful.

Obviously, publications will also rely heavily on the mailing list functions of the system; in most museums, these lists will extend far beyond the "members" and "donors", to others in the community who are receiving publications for public relations reasons and even to some who may subscribe to museum publications. In these cases, users will want to determine whether the system is up to the demands of supporting order fulfillment functions.

Sales as Participation: Retail Shops

The merchandise visitors buy from museum shops is a strong indicator of their interests and is relevant marketing information not only for the shop manager but for education and exhibition planners and membership and development staff. Automated systems can be implemented to document the interests reflected in merchandise sales with little additional effort. Although they are not full point-of-sale cash register systems, some membership, development and participation applications have cash drawer control capabilities that record the initial "bank" at the opening of each register and for each cashier, all sales, handling fees, taxes, cash removal, refunds, and voids. Systems may support credit card company interfaces with online verification, whether for membership fees, donations, ticket purchases or merchandise sales. They may balance cash registers and receipts at the end of the day and support limited inventory control and reordering without bar coding of merchandise, and some systems may provide for automatic unique identification used in conjunction with member id cards, tickets, or parking cards that can be used in retail merchandising. If items of inventory are coded according to the presumed interests of buyers, systems can provide a general profile of these interests and, when items are purchased by known buyers (members and donors), these interests can also be recorded in their personal profiles.

In evaluating any sales support system, users should note that any automated support of sales, other than through mail order fulfillment, involves transaction processing in real time and therefore imposes both response-time and up-time performance requirements.

Sales as Participation: Mail Order and Fulfillment

In addition to their shops, many archives and museums sell merchandise and photographic or xerographic reproductions by mail and phone order. Mail order sales have an advantage over shop sales in providing information of value to membership and development offices since they necessarily include the buyer's name and address. But mail order and fulfillment management require back ordering, the ability to track fulfillment of partial orders, the application of handling fees based on a variety of user defined variables, and facilities to bill for orders sent and to follow up on invoices based on aging. Since these functions are not required for point-of-sale cash registers and shops inventory management applications, users should define their requirements in these areas before buying a museum shops application, whether or not it is part of a membership, development and participation application.

Sales as Participation: Promotion

The marketing of products, services and events in cultural repositories employs a variety of promotional techniques; some of these use avenues which are free and others employ vehicles for which the museum will be charged. Because marketing is no less important to an archives or museum that to a for-profit business, and because the expenses involved can be a considerable proportion of an event budget, it is important to track promotions and their impact on sales. The techniques for monitoring promotions that are used in cultural repositories are the same as those employed in business; they may include specially named post office boxes for responses, coupons for discounts coded by media source, and interviews with clients. The underlying purpose is to link the way in which a consumer heard about a museum program to their attendance at events or purchase of services.

Financial Management: Invoicing

Membership is typically extended for a year at a time, which means that members must be invoiced annually. This can be a tremendous logistical burden for the museum, so users will want to ensure that systems support automatic invoicing by sending reminder letters and bills on the member anniversary date, thereby permitting billing to be spread over the year rather than having all memberships expire at one time. In addition, since members often do not renew on the first notice, aging of accounts and automatic re-invoicing with a different letter is a great convenience. Since many members will make pledges rather than paying their total contribution in one installment, invoicing prior to the dates on which gifts were promised, with flexible billing periods based on the actual date and amount in the pledge agreement, is essential.

Membership offices must remember that not all members pay their own membership fees. A museum that provides for sponsoring or gift memberships from corporations to their employees or allows for gift memberships from individuals, needs to assess whether the system should automatically rebill the gift to the sponsor, and how the gift should be acknowledged to the sponsor and announced to the recipient. If gifts are not renewed by the sponsor, it is useful to be able to switch billing to the recipient. Corporate sponsors making numerous gifts of memberships may need statements for their accounts; some systems generate these on demand.

Financial Management: Matching Programs

Development systems need to document corporate matching gift opportunities, both so that individual donors can be made aware of the added value of their gifts to the museum and so that the income potential of such programs is not overlooked. Not every individual will be aware that their employer offers matching gifts, so the information about matching gift programs needs to be accessed, hopefully automatically, when the donor names his or her employer. Matching program information should not be buried in the record of a specific donor. In addition, it should be possible to record information about matching gift programs of organizations that have not, as yet, had any employees make gifts.

The terms of corporate gift matching programs are not all the same. It is helpful if the system can automatically calculate the value of the match based on the percentage of the gifts matched by each program and their annual limits per person and per program. The system should display match history both for the matching corporation and the individual matched. It should calculate bills for matching, and invoice either as gifts eligible for matches are received, or on a monthly basis, as preferred by the matching corporation. Cumulative reports will also be appreciated by the matching firms.

Financial Management: Administering Gifts

Appreciating property, such as real estate or stocks and bonds, is often donated to cultural repositories. It is not always possible or desirable to sell such assets immediately, but the institution must manage the gifts in a way that reflects both their initial value at the time of donation and their current market value. Costs incurred by the holding of such gifts, such as insurances or management fees, need to be documented and considered in accounting for the true net value of the gift to the museum. At the same time the value of the gift as it was given needs to be documented for the donor.

Few membership, development and participation systems provide for a rich enough description of gifts in kind and in time. Such donations can be of immense value to the museum, and must be recognized in accounting, but their documentation has traditionally been a problem for development offices because these types of gifts tend to be solicited, received, and managed by other offices, and methods of reporting these gifts are not consistent with the rest of the membership and development information system.

Financial Management: Accounting

Some link between membership and development and accounting is required in any system, whether that link is accompanied by accounting functions within the membership, development and participation system or not. The link must accommodate the transfer of auditable, disaggregated, income data with the source, amount, fund or purpose and restrictions of the income indicated and the instrument identified. The person responsible for recording the data, the date and the batch to which the receipt belongs must be audit stamped. Obviously, the smoother the linkage between the membership and development system and the accounting package is, the less difficult each will be to use. The degree and nature of all integration claims should be rigorously tested by users, since vendor claims in this regard are particularly suspect.

General Systems Functions

Because membership and development activity requires access to information to support interaction with clients, automated systems to support the functions must be online, interactive systems with real time update of their databases. In most situations, more than one staff member will use the system at the same time and therefore it must provide record level lockout to prevent two users from simultaneously editing the same record. The success of a membership and development function depends upon the size of its client databases and the skill with which they are solicited, so systems generally require large files that are updated through continuous transactions, many of which take place on-line while talking to donors. In this context system performance is a major concern; potential buyers will need to evaluate the response time for a variety of types of transactions on systems with fully loaded databases and as many devices as they intend to support.

Membership and development software needs to be designed with a substantial amount of flexibility to accommodate local practices. Because procedures in archives and museums vary, not all data elements in any commercial system will be wanted by any given institution. The ability to suppress elements and reconfigure screens, using a screen writer (and if possible a "What-you-see-is-what-you-get" screen writer) is very desirable. The ability to resequence screens to reflect the procedures as they are sequenced within the office is also useful. The categories of members, benefits, services and programs in any organization differ from those in any other setting. Membership, participation and development systems must, therefore, either be customized for each site, at expense to the client both in the cost of the system and its subsequent inflexibility and support requirements, or by the client through modification or definition of tables. It is important that there be online editing of value tables and that the validation they provide and the code explosions they support, be interactive with data entry and not require a special indexing or updating function to be run in batch mode. Purchasers of systems should determine whether they might also need to define new code categories in addition to defining new code values for categories established by the software designer.

It is a considerable advantage for systems, therefore, to provide online, context sensitive help that can be edited by the repository to explain its procedures. However, users should remember that they will need to create specialized on-line help instructions if considerable custom tailoring of the application is permitted, since membership and development activity is, almost by definition, usually assisted by large cadres of volunteers for whom the system will be new each time they use it.

Several functions of membership and development systems are best supported by batch operations. The ability to batch upload mailing lists, census data, retailing demographic statistics, and other files can be of great use in rapidly building and analyzing prospect files. Mass updating is another important batch function and systems that lack the ability to make global changes will create lots of extra work for staff. Some batch reporting functions, such as scheduled mailings compiled and run overnight, are important to conserve the daytime interactive use of the system for applications that require it.

In spite of the fact that data entry and database searching are the primary functions in membership, development and participation systems, the museum will require many printed reports that are unique to it. Buyers should, therefore, look for a built in report writer rather than relying solely upon setting parameters of software vendor designed reports. In evaluating a report writer as part of the membership and development system, the organization will want to consider the number of varieties of output formats supported (columnar/page oriented; portrait/ landscape; statistical/graphic), the number of elements permitted in a report, the number of different physical files that these elements may come from, and the number of sort sequences and complexity of the sort rules. They will want to be certain that the system permits them to save report logic under a user assigned name so that it may be re-executed, and that the system exerts security over the running of reports so that individuals without permission to retrieve data in the reports will not be able to execute them. It needs to save the reports as written, both for audit and archival purposes and in order to manipulate them in a post-processing system, such as a word processing plus typesetting environment.

The nature of membership and development data makes it valuable to the organization and sometimes confidential. Care should be exercised in the system selection process to make sure that the security provided meets the requirements of the organization. Simple password protection over access to the system will usually not be adequate. Most museums will, at the least, want to have passwords govern access by account and program, by function (with view, add, edit, delete) as separate levels of permission, and by some sensitive data elements. It may be necessary to insist, in a large organization with many access points, on record level ownership of data, and it will certainly be necessary to have transaction audit trails for all financial transactions. Because confidential personal information may be recorded in development systems, the ability to write reports should be security controlled by the system, just as report products should be administratively controlled. In some situations, multiple organizations may want to share a system on a single machine and license, in which case additional file security will be required.

The requirements for information retrieval in membership and development settings are relatively simple compared with those required for collections-based research. Searches rarely involve complex Boolean expressions or even range searching, although some capability for both should be present. The ease with which unsophisticated users can search is a major consideration, so query-by-example will be preferred to command languages. The need for some free-text fields to be searched for words if not for proximity, adjacency and other complex relations has been discussed under contact histories. Phonetic, or "soundex", searching, which will retrieve words that sound like the query term, can be an extremely valuable feature of a membership and development system, reflecting the importance of names, for which spelling does not obey any stringent rules, as search variables.

Staff will need to be able to select mailing lists based on any client or participation criteria and to build integrated lists for campaigns from sub-lists selected with a variety of independent criteria. It should be possible to define retrieval selection criteria and store named searches for subsequent reuse. It must be possible to use Boolean AND, OR, and NOT operators in searches both within and between fields. And it must be possible to use some kinds of wildcards and truncations in searches.

"Integration" refers to the relationship between the membership and development systems and other automated applications, including office functions. If there is substantial integration between a variety of functions, they will be able to use each other's data fluidly. Integration is a desirable end, but it is not always a realistic objective, and striving for full integration is likely to cost more, take longer, and produce more management headaches, than accepting somewhat less than complete integration but demanding it in strategic areas. Museums should analyze the extent to which information in one system is required, but not be influenced by the abstract claim of benefits derived from integration.

Word processing and spreadsheet management, for example, are applications that can be integrated with membership and development systems simply by providing facilities to export data to, and receive data from, the membership and development package. Once received, each system can process the data according to its own facilities. While it would be hard to imagine an acceptable membership and development system that did not in some fashion support word processing, the advantages of a fully integrated word processing facility (that would use commands consistent with those employed throughout the membership and development package) are offset by the advantages of loosely coupling the application to commercially available word processing software. On consideration, even a relastively loose link to a package already in use throughout the institution will usually be preferable to a tight link to an internal editor function that requires staff to learn a new set of word processing commands.

Similarly, some features of a spreadsheet facility that would be invaluable for development applications can be supported through data interchange to a loosely coupled spreadsheet package. The graphics facilities that are a part of many commercial spreadsheet packages would be ideal for business graphics, such as displaying longitudinal trends in development, campaign progress by increments or support by segments of the community. However, the sophistication of commercially available applications and add-on products for those applications, plus the experience of staff in using popular spreadsheets, suggests that loose integration to a commercial package might be preferable to replicating these functions within the membership and development application.

A different level of integration is required, however, to link a membership and development application to an integrated fund accounting package, point-of-sale package, or collections management system. The value of making links to each of these applications would, potentially, be realized at many points in the membership and development application. Integration cannot be achieved here simply by taking data from the membership and development system and processing it within the facilities of another system. Instead, the nature of the requirement demands true interaction between the applications involved, with data passing back and forth during the execution of actual application processes in each piece of software. This kind of integration is rarely achieved unless the functions are supported by modules of an integrated system, by two packages made by the same firm, or by packages made by two firms with a strong commitment to integration and a co-marketing agreement.

Organizations should evaluate the typesetting capabilities of their membership and development systems, especially for direct output to laser printers, both to determine if it is adequate for special certificates, such as acknowledgements of gifts and volunteer service, and to assess its value for printing booklets, such as directories which are frequently called for from membership services. Particular attention should be paid to the ability to integrate graphics easily.

Management Concerns in Systems Acquisition

Membership and development programs and marketing offices are in the business of raising money and providing services to clients; they should not be expected to be in the computer applications business. However, it is encumbent upon management to understand the process of acquiring and implementing systems sufficiently to ensure that the final result meets the organization's needs. Archives and Museum Informatics Technical Report # 4, *Automated Systems for Archives and Museums: Acquisitions and Implementation Issues*, describes this process.

Management should determine, before deciding to acquire a membership and development system, whether it wishes to procure a turnkey system, consisting of hardware and software integrated and supported by a single vendor; a software license, consisting of software that will run on machines already owned by or acquired by the repository; or a service bureau, consisting of a remote site at which software is available for use by telecommunications.

Management also needs to decide whether it will require vendor assistance in the installation of hardware and/or software, and what kind of hardware maintenance contract to require. Hardware maintenance can range from on site repair with guarantees to respond within an hour and to repair or replace equipment in a very short time, to minimal guarantees and off-site repairs under warranty. Not all parts of the system will necessarily require the same degree of maintenance support. Attention should be paid to the quoted price of software support and to whether it will include enhancements released during the maintenance period, or only fixes to bugs. Management should carefully review the terms of warranties, and especially should protect the repository in the event the software firm becomes bankrupt and its code is held by a court as an asset under proceedings of the bankruptcy law. If the system were to become unavailable for any reason, the consequences would be extremely serious, so the organization will want assurances, insurance and back-up plans and/or back-up systems.

The market offers a considerable variety of on-site training, off-site training, and software based tutorials, but few vendors offer more than one approach. Management will need to consider who on the staff needs to be trained and to what extent each individual will need to know the system. They should recognize that training is not a one time expense, since current staff will need continuing training to make more sophisticated use of the system and exploit any newly developed features, and new staff and volunteers will require training throughout the life of the system. Management should be liberal in making their estimates of the cost of training; failure to provide for adequate training will have significant negative impact. While training is a major expense of having an automated membership and development system, it must be viewed as an essential cost.

In evaluating membership and development systems, weight should be given to the quality and readability of documentation, the availability of a vendor help line and a vendor newsletter, and to the existence and support of a user group. These factors are both measures of the system and important indicators of its likely success. Management should always follow up on references to previous users and should especially seek information about the transition period between manual and automated systems and how best to organize it.

Converting the databases of membership and development offices to a new system, whether the previous database was in machine readable or manual form, is not a process that can be spread out over an extended period. It is crucial to convert the data quickly, and transfer to making all transactions through the new system, because the membership and development database is highly volatile and will otherwise rapidly be dated. Management needs to conduct tests of various approaches to conversion of the data and plan for the quick and carefully validated transfer of data. The implementation plans also need to provide for bringing up the new system and putting newly trained staff to work with it in as short a time frame as possible. The management of the implementation process is an area in which consulting assistance might well be sought.

Before a new membership and development system is acquired, its capabilities to support the range of requirements of the repository will be carefully assessed. But after the system is acquired, many questions will still remain about how best to implement it, and how to support each part of the membership and development process. Special, custom, documentation on how to use the system within the procedures of the repository will need to be written and tested. Staff may need technical support from the vendor including application support, in which case they should look for substantial application related expertise in advance and make sure that it is available at an acceptable price. Application assistance combined with a knowledge of the particular software system will greatly speed the definition of user specific tables.

Before implementing any system, management should select data, based on non-random sampling from the complete database, that will be used when the system is fully installed and operating to test the system for acceptance. The data should contain examples of all kinds of special cases, unusual data relationships, and processing contingencies that stretch the system limits.