

Appendix A: Data Requirements

Not every institution has the same informational requirements, but there is a standard set of data that are required to support the full range of membership, participation, development and sales applications. When the universe of data required to support the full range of membership and development related applications is identified, each repository can examine its present data and decide if any additional information will be required in order to support expanded functions.

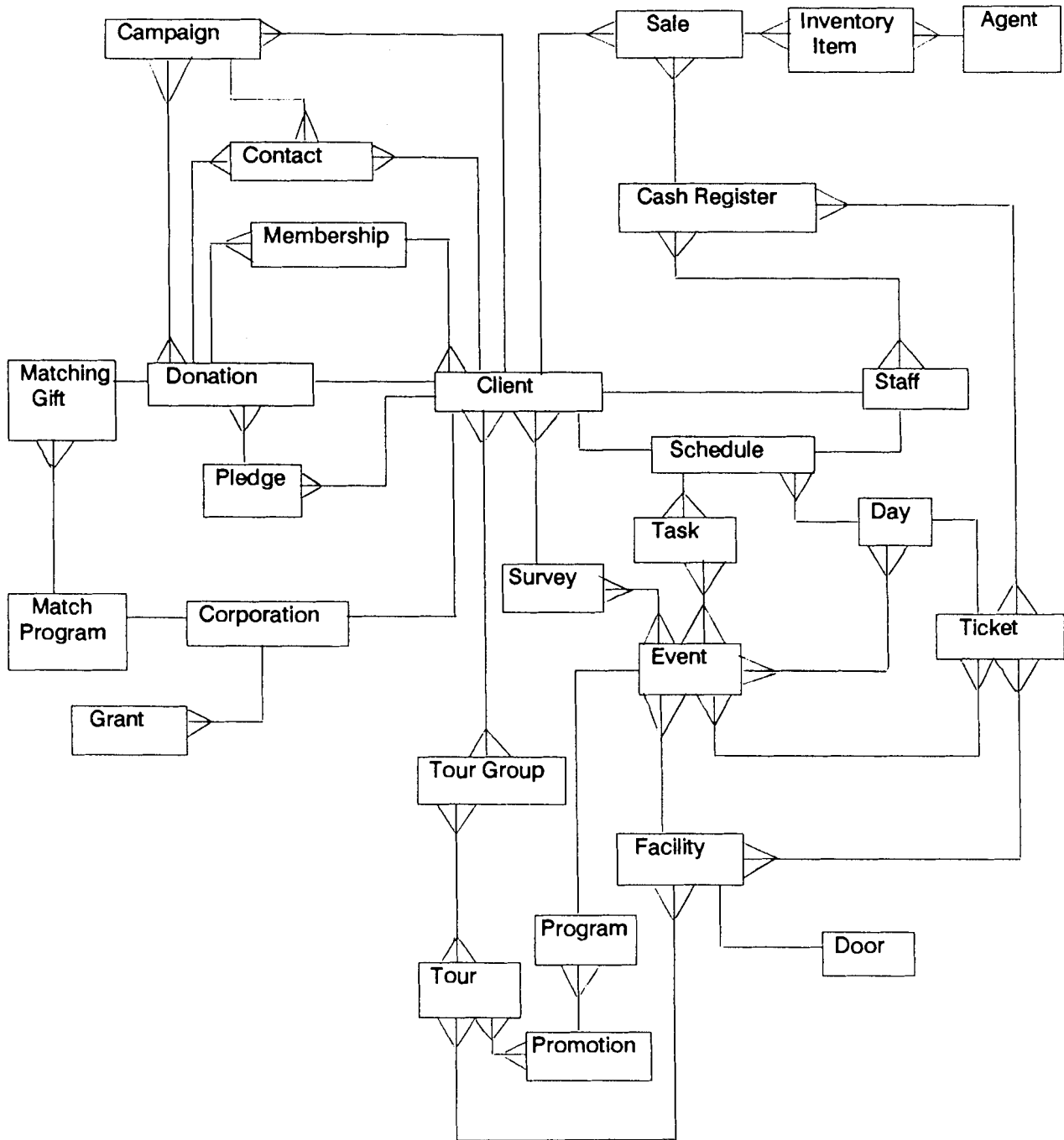
Every organization has its own names for data elements and each membership and development software company has its own names for the fields (or data elements) in its system. In order to compare the data in one repository with that in a variety of systems and in the general model presented here, this report adopts a standardized naming convention that can be applied to all the data elements under consideration. This convention consists of data entities (groups of data about the same "thing") and data elements (characteristics or attributes of these things). It is based on the fact that every data element is an attribute of some entity. For further information about data dictionaries and data models see: Archives & Museum Informatics Technical Report #10, *Archives and Museum Data Models and Dictionaries*.

Figure 1 illustrates the entities found in membership, development, participation and sales systems and their relations. The following list presents them in alphabetical order:

- Agent
- Campaign
- Cash Register
- Client
- Day
- Donation
- Door
- Event
- Facility
- Foundation
- Grant
- Group
- Inventory Item
- Job
- Match
- Match Program
- Membership Level
- Non-Financial Gift
- Organization
- Pledge
- Promotion

Figure 1

Membership, Development & Participation Systems
Major Data Entities & Relations



Sale
 Schedule
 Staff
 Survey
 Team
 Ticket
 Tour

Each of these entities may have any number of attributes, but only some of these attributes are relevant to the membership and development function. For example, eye color is certainly an attribute of all clients, but it is not a factor in membership or development and is therefore not recorded here.

In the naming conventions employed in this report, the first term in the name of a data element is the entity of which the entire element is an attribute. The second term and subsequent terms qualify the entity, identifying the aspect of the entity to which the attribute refers if it does not refer to the entire entity, and the quality being described. The final term in each name is the data type of the element. The data types are: text, name, number, count, amount, date, time, code, id and group. A few sample data element names as they are written in this conventional form and as they might appear in the existing repository information system or in software are given below.

ENTITY-ASPECT-QUALITY-DATA TYPE
Examples:

Name in Existing
Information System:

Campaign-Increment-Begin-Date
 Client-Gifts-Life-Amount
 Facility-Name
 Client-Match-Eligibility-Code
 Event-Begin-Time
 Facility-Section-ID
 Staff-Skill-Text

Campaign Quarter
 Total Giving
 Building
 Matching Program
 Time
 Seating Section
 Skill

Data types identify the way in which the values recorded in a particular field will be treated by an automated system. Text is the most generic; it is treated simply as an alphanumeric text string. Name is an identifier of a person, place or thing, but it need not necessarily be unique. ID is a unique identifier. Number is a numeric string (sorted as a number rather than from left to right) but it is not treated as additive. Count is an additive quantity. Amount is a quantity of currency, expressed with two digits of decimal and a symbol for the kind of money. Date and time are self explanatory. Code is a set of characters assigned to a lookup table. Group is a set of data elements defined as linked together but not identified as a discrete entity; in effect, group is simply a shorthand for writing out all the data elements in the group. An example of group is "Address-group", which consists of street, city, state, zip code, country and phone number data.

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The following list of data elements is indicative of the large quantity of discretely defined data items needed to manage the full range of membership, development, participation and sales functions. It is not exhaustive, nor is it what any given museum wants or needs. The list is provided only to help museums think about the kinds of data they will use in support of the membership, development and participation function.

Address-street-text
Address-city-name
Address-state-code
Address-postal code-code
Address-country-name
Address-work-phone-id
Address-home-phone-id

Agent-id
Agent-name
Agent-address-group
Agent-category-code
Agent-item-id
Agent-average fulfillment days-number

Campaign-name
Campaign-begin-date
Campaign-end-date
Campaign-purpose-text
Campaign-goal-amount
Campaign-increment-code
Campaign-increment-begin-date
Campaign-increment-end-date
Campaign-increment-goal-amount
Campaign-team-name
Campaign-team-leader-name
Campaign-team-goal-amount
Campaign-team-worker-name
Campaign-income-total-amount
Campaign-increment-income-amount

Cash Register-identification
Cash Register-begin-cash-amount
Cash Register-end-cash-amount
Cash Register-cash removed-amount
Cash Register-cash removed-manager-code

Client-identification
Client-affiliation-code
Client-status-code
Client-name
Client-address-group
Client-address-begin-date
Client-address-end-date
Client-address-purpose-text
Client-employer-name
Client-salutation-text
Client-membership-year-level-code
Client-donation-year-level-code
Client-match-eligibility-code
Client-special mail-code
Client-gifts-life-amount
Client-gifts-year-amount

Day-number
Day-holiday-code
Day-special-code
Day-announcement-text
Day-day of week-name
Day-open-time
Day-close-time
Day-weather-text

Donation-source-name
Donation-amount
Donation-purpose-text
Donation-restriction-text
Donation-level-code
Donation-type-code
Donation-campaign-name

Door-facility-id

Event-begin-date
Event-end-date
Event-begin-time
Event-end-time
Event-performance-name
Event-program-name
Event-coordinator-name

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Facility-name
Facility-location-text
Facility-capacity-count
Facility-section-code
Facility-section-capacity-count
Facility-section-row-id
Facility-section-seat-id
Facility-room-id
Facility-room-range-id
Facility-room-shelf-id
Facility-room-shelf location-id

Foundation-name
Foundation-address-group
Foundation-application-deadline-date
Foundation-application-limit-amount
Foundation-application-purpose-text

Grant-amount
Grant-title-text
Grant-principal investigator-name
Grant-begin-date
Grant-end-date
Grant-phase-text
Grant-phase-reporting-date

Group-name
Group-id
Group-type-code
Group-age range-text
Group-age average-number
Group-interest-text
Group-handicap-code
Group-minority status-code
Group-grade-number

Inventory Item-name
Inventory Item-id
Inventory Item-agent-name
Inventory Item-cost-amount
Inventory Item-interest-code
Inventory Item-tax-code
Inventory Item-discount-code
Inventory Item-reorder level-count
Inventory Item-account-id

Inventory Item-price-amount

Job-name
 Job-description-text
 Job-begin-date
 Job-end-date
 Job-location-text
 Job-supervisor-name
 Job-evaluation criteria-text

Match-amount
 Match-date
 Match-source-name
 Match Program-sponsor-name
 Match Program-limit-amount
 Match Program-limit-individual-amount
 Match Program-verification-text
 Match Program-billing address-group
 Match Program-billing contact-name
 Match Program-billing-date

Membership Level-code
 Membership Level-description-text
 Membership Level-benefit-text
 Membership Level-qualification-amount

Non-Financial Gift-description-text
 Non-Financial Gift-title-text
 Non-Financial Gift-accession number-code
 Non-Financial Gift-restriction-text
 Non-Financial Gift-valuation-amount
 Non-Financial Gift-valuation-date
 Non-Financial Gift-appraiser-name
 Non-Financial Gift-date
 Non-Financial Gift-source-name

Organization-name
 Organization-address-group
 Organization-position-text
 Organization-position-structure-code
 Organization-contact-name
 Organization-sponsor-client-name
 Organization-sponsor-match-name
 Organization-sponsor-tour/event-name
 Organization-source-grant-name

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Pledge-date
Pledge-id
Pledge-source-name
Pledge-purpose-text
Pledge-restrictions-text
Pledge-amount
Pledge-payment-periodicity-code
Pledge-payment-date
Pledge-increment-number
Pledge-increment-amount

Promotion-description-text
Promotion-placement-text
Promotion-medium-code
Promotion-date
Promotion-target-text
Promotion-cost-amount
Promotion-impact-count

Sale-date
Sale-type-code
Sale-amount
Sale-item-id
Sale-description-text
Sale-discount-percent
Sale-discount-amount
Sale-discount-special price-amount
Sale-cash tendered-amount
Sale-credit card-id
Sale-credit card-expiration-date
Sale-credit card-validation-code
Sale-check-id
Sale-client-identification-text
Sale-subtotal-amount
Sale-tax-amount
Sale-total-amount
Sale-change-amount

Schedule-work-date range-begin-date
Schedule-work-date range-end-date
Schedule-work day-begin-time
Schedule-work day-end-time
Schedule-vacation-date range-begin-date
Schedule-vacation-date range-end-date

Staff-name
Staff-skill-text
Staff-assignment-text
Staff-schedule-group

Survey-name
Survey-date
Survey-id
Survey-question-id
Survey-question-type-code
Survey-question-answer-text

Team-name
Team-id
Team-coordinator
Team-goal
Team-volunteer-name
Team-supervisor-name

Ticket-id
Ticket-date
Ticket-event-id
Ticket-event-name
Ticket-event-date
Ticket-event-time
Ticket-seat-id
Ticket-category-code
Ticket-discount-code
Ticket-price-amount

Tour-organizer-name
Tour-sponsor-name
Tour-contact-name
Tour-contact-address-group
Tour-contact-phone-id
Tour-billing-name
Tour-billing-address-group
Tour-payment-method-code
Tour-payment-due-amount
Tour-possible dates-begin-date
Tour-possible dates-end-date
Tour-unavailable dates-date
Tour-meeting place-text
Tour-lunch-code
Tour-hours not available-text