

Set Your Data Free

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DATA IS IMPORTANT; DATA ACCESSIBILITY IS CRITICAL.

Data must be movable. Data “lock-in” costs organizations time and money, and it decreases their ability to get value from their data. Data has always been a critical asset for organizations. In today’s world, we can — and do! — collect and store so much more information than ever before. This means that organizations’ various data sets have now turned into multi-dimensional resources that are critical to pursuing objectives efficiently.

A potential stumbling block to storing data is data “lock-in,” a situation where an organization’s data is stored in third-party systems that don’t include built-in tools for complete, standards-compliant data-access. At the very least, data lock-in causes unease, and at worst, it compromises an organization’s ability to act effectively.

If data accessibility and portability are important to your organization, it would be beneficial to learn and implement data storage best practices, and this white paper explores many of them. This paper can serve as a practical guide for auditing your data accessibility status, building data accessibility into your information architecture, and preparing your organization to get the most from its most critical asset: data.

THE HISTORY OF DONOR DATA

Modern donor databases are an increasingly central input to strategic planning and are radically larger and more detailed than their predecessors. Traditionally, the term “donor database” was used to describe a physical ledger or Rolodex® that contained donor contact information and perhaps some information about previous gifts. Often, knowledge about donors and the history of their relationships with nonprofits lived inside the heads of gift officers, which was a perfectly acceptable practice.

As information moved on to computers, the first donor systems stored the same information but made it easier to index and search for it. Plus, multiple people could access the data independently. In the late 1990s versions of The Raiser’s Edge®, organizations would typically store about four kilobytes of data for each donor. These records were important, but an organization’s marketing and program decisions could still be made without extensive consultation with the data set.

Fast forward to today’s Amazon.com world and consider how the average donor database and its role in your nonprofit’s operations have changed. Customer data records in The Raiser’s Edge and Blackbaud Sphere™ (Blackbaud’s web-delivered online events and marketing solution) regularly top 85 kilobytes per supporter. The rich information set is stored in a relational database and covers everything from gifts, family relationships, pets, and fine-grained cause-affinities to even food preferences! As is the case for the online retailer, the data set is a critical resource for the nonprofit. Data is used to select and target messages,

+ Executive Summary

Has your organization ever changed the system it uses to store supporter, donation, or program data? Or have you found that your organization needed the data in one system copied to another? Have you experienced a system outage or have you been concerned about your data’s dependence on a single system?

For most organizations, the answer is “yes” to at least one of these questions.

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personalize communications, and drive program decisions in a near real-time feedback loop between ongoing operations and organizational planning.

The catch with these robust modern profiles is that for organizations to realize the full value of the data over time, they must be able to retrieve it and move it from one system to another with relative ease.

DATA ACCESSIBILITY BEST PRACTICES

To ensure data accessibility and portability, adhere to the best practices listed below as you select and configure your software systems.

Standards Conforming Data Export

Data should export in CSV or XML formats. Your marketing database, customer services system, donor database, and, in fact, all of your systems should be capable of exporting your data. Moreover, the export mechanisms should be:

- Built in: You should not have to contact your vendor to access your data.
- Included in the base price: Vendors that charge you to access your own data should be avoided.
- Able to produce files in an industry-standard format: Comma separated value (CSV) files, or, increasingly, extensible markup language (XML) files are the most portable formats. Avoid proprietary formats that can't be easily imported into other systems.

Comprehensive Data Dictionary

Exports should be described by a comprehensive “dictionary.” The data dictionary is often overlooked, particularly at the beginning of a data project. However, its importance becomes clear later when mapping into the target system's representation is underway. The data dictionary defines the structure and meaning of each field of export data; the usability of the data hinges on having a complete dictionary.

An example dictionary entry for an “NTEE_C” field could read “A non-null, three character string with a single alphabetic character [A–Z] followed by two numeric characters [0–9] referring to the national taxonomy of exempt entities label for the nonprofit.”

More simply put, you should avoid systems that don't couple their export mechanism with a complete, easy to access and understand dictionary.

Programmatic Access to Export

Data must be accessible to external software systems as well as human users. In addition to being able to manually trigger exports of your data, your organization needs software systems that can respond to programmatic (sent from other software) requests for data export.

Avoid systems that don't include programmatic access; they will force you to create manual operational processes to achieve even the most basic data objectives.



About the Author

David Grayson — As a principal consultant, David Grayson plays a dual role as a business analyst and project manager. David recommends best practices for customer business needs and plans, schedules, monitors, and controls each project. David has more than 14 years of project management and analysis experience in software development in nonprofit and commercial industries. Prior to joining Blackbaud, David managed the development of the assessment system for CompassLearning's educational product line. The ever increasing scrutiny of educational testing instilled a drive within David for generating and reporting high quality data. At Blackbaud, David manages the entire software development life cycle for custom data integrations utilizing various methodologies. David also manages data migrations and single sign-on projects, including Shibolet's implementations. David volunteers his technical expertise at his church, acting as technical director for weekend sermons and also working with the church's community outreach efforts. David holds a PhD in Chemical Engineering with a specialization in Biotechnology. David is based in San Diego, California.

Support for Incremental Exports

Incremental Exports are critical for efficiency and enterprise level installations.

Especially as data-sets become large, full record-set exports are only adequate for weekly or even monthly batch updates. To make sure that a postal mail donation processed in your fundraising database automatically adds the new donor to your email marketing and online engagement system or to maintain a continuously updated reporting database, you need a system that allows for frequent, incremental data exports.

Make sure the software you select provides a mechanism by which external systems can extract all the records that are new or changed since the last request.

Crawl Your Web Content Data

It is clear that your donor information, including gift, communication, and activity records, are part of your organization's core data set and that they need to be accessible and portable. For most organizations, the same thing holds true, albeit to a lesser extent, for the data in the content management system (CMS) that you use to publish your website. Often, the most straightforward approach for moving or archiving this data is to use an independent third-party tool that systematically visits every page (called "crawling" or "spidering") on your website to download and store all of the pictures, videos, and web copy as needed.

Don't overlook data portability and accessibility requirements related to website content data.

HOW ACCESSIBLE IS YOUR DATA NOW?

Determine how accessible and portable your data is with a "stress test." At this point, you probably have a good sense of your organization's data portability and data accessibility requirements. A good way to audit your current information architecture or to evaluate a piece of software you are considering adding to your infrastructure is to run through a series of hypothetical "stress tests." Begin by asking questions like:

- If I needed to extract all of the important data from my fundraising system, could I do it?
- Can I extract my fundraising data quickly, easily, and completely without contacting my vendor?
- Can I extract all of my fundraising data without incurring additional costs?
- When I extract my fundraising data, will I know the meaning of each field of data?
- When I extract my fundraising data, will it be in a standard format that can easily be transferred into another system?
- Can an external software system request an incremental data export, or can an incremental data export be set up to run on a regular schedule?

Here's a final thought: Assume you have data accessibility requirements like those described in this paper even if that isn't currently the case. Eventually you will want to replace your existing system with a new one, add a robust data-backup strategy, or share data between two different systems. Starting with and maintaining a commitment to data accessibility from the beginning is much easier and less costly than rescuing "locked-in" data once you are years down the road!



About Blackbaud

Blackbaud is the leading global provider of software and services designed specifically for nonprofit organizations, enabling them to improve operational efficiency, build strong relationships, and raise more money to support their missions. Approximately 19,000 organizations use one or more of Blackbaud products and services for fundraising, constituent relationship management, financial management, direct marketing, school administration, ticketing, business intelligence, website management, prospect research, consulting, and analytics. Since 1981, Blackbaud's sole focus and expertise has been partnering with nonprofits and providing them the solutions they need to make a difference in their local communities and worldwide. Headquartered in the United States, Blackbaud also has operations in Canada, the United Kingdom, and Australia.

For more information about Blackbaud solutions, contact a Blackbaud account representative. In the United States and Canada, call toll-free 800.443.9441. In Europe, call +44 (0) 141 575 0000. Visit us on the web at www.blackbaud.com.

WHERE TO GO FROM HERE

Blackbaud is an experienced partner that offers both products and services that support portable and accessible data. This paper provided a starting point for developing a sound data accessibility discipline within your organization. If you are looking for an experienced partner that understands the importance of data accessibility and can help you with related products and services, Blackbaud offers the following:

Blackbaud Professional Services — Blackbaud Professional Services has been helping nonprofits build and run effective technology strategies for 25 years. Over that time, Blackbaud professionals have managed countless data migration projects and can help you build and maintain an effective data accessibility discipline.

Visit www.blackbaud.com/services/designservices/bbi_overview.aspx to learn more.

eTapestry Online CRM — Blackbaud's web-delivered CRM is a great fit for smaller organizations looking to get started quickly, control costs, and avoid buying servers to run their software. eTapestry comes with powerful, built-in APIs that you can use without incurring extra charges. www.etapestry.com/node/726

Blackbaud Sphere – With one of the industry's leading API -based open platform, Sphere® Events™ and Sphere® eMarketing™ are well suited for organizations that need to access their data and move it around. Visit www.blackbaud.com/connectplatform for a solution overview and then visit www.blackbaud.com/sphereapi for a detailed description of these powerful supporter databases.

The Raiser's Edge — The Raiser's Edge has been the nonprofit industry's standard-bearing fundraising system for more than 20 years. The Raiser's Edge comes with a powerful set of APIs that can be used to seamlessly move data both into and out of the system. A good starting point for investigation is the Blackbaud® NetCommunity™ open platform site: <http://labs.blackbaud.com/netcommunity/open>.



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