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# Dynamics 365 for Nonprofits

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# Executive Summary

**N**onprofits need software to power their missions which are often quite different from those of commercial, for profit organizations. There are several types of nonprofits, and they may be quite small or large and global organizations. The U.S. tax code recognizes 29 types of nonprofits, from corporations organized under an Act of Congress to co-op health insurance issuers. Charities need to manage contributions and track donor activities. Nongovernmental organizations fulfill a wide spectrum of services. In some cases, they are similar to government agencies and manage field operations over wide geographic areas. Churches and ministries need tools to manage in-person events, outreach, contributions, and case management. Associations interact with members and constituents through communications, meetings, publications, certifications, training and other activities.

In the past, nonprofits have had to choose between adopting off-the-shelf products intended for commercial companies and building custom solutions. The first of these options can fall short of nonprofit requirements, and custom solutions can be expensive to develop and maintain.

Microsoft Dynamics 365 provides a third option which can be used to configure solutions for nonprofit needs while significantly reducing technical risk, cost, and implementation time, compared to traditional custom application development. It contains many fundamental capabilities right out of the box and may be extended and customized for an exact fit with nonprofit requirements.

Independent software vendors (ISVs) like Serenic Software create products on the Microsoft platform to fulfill the needs of nonprofits and take advantage of the extensive product development of software giants like Microsoft.

Building on the foundation of Microsoft Dynamics 365 avoids many of the common pitfalls of custom application development. It gives users a starting point for functional requirements, contains a rich data model, handles many common low-level programming tasks, and provides advanced functionality such as offline replication and integration with Microsoft Office.

Microsoft Dynamics 365 is integrated with other elements of the Microsoft platform such as Office 365 and SharePoint and readily integrated to other products from other vendors. Microsoft Dynamics 365 can effectively function as the primary interface to information in your organization.

This white paper, written for business decision makers, addresses the challenges of software for nonprofits and the role that Microsoft Dynamics 365 can play as line of business (LOB) applications for nonprofits. It shows how Microsoft Dynamics 365 minimizes the risk of implementing solutions, making it a software platform that merits serious consideration.

# Business Software Types

Associations use two types of business application software in their daily operations-- general purpose software and line of business software.

## General Purpose Software

General purpose (horizontal market) software performs functions that are common to most businesses, such as e-mail, word processing, web content management, or spreadsheet analysis. "Off-the-shelf" software, such as Microsoft Office 365, provides this general-purpose functionality. No matter what industry or sector a user represents, the same features are generally desired. There are benefits to businesses as a whole on standardizing their general-purpose software, such as ease in file sharing and improved training efficiency. For example, if each business created its own word processing software, productivity would suffer as employees moved from one organization to another.

Competition and volume drive the unit price of general-purpose software down, even as the power and features of the software grow. The market for general purpose software is huge and affords the leaders of a given software category to spend hundreds of millions of dollars on research and development and still make a profit at a low unit price. This type of software is often sold in bundles and may be purchased along with hardware. The cost of switching from one product to another is not usually high.

While general purpose software has an impact on the overall productivity of an organization, it rarely provides a competitive advantage, because other organizations can buy the same software. Furthermore, because general purpose products provide similar features, switching word processing software package is not likely to appreciably affect a nonprofit's effectiveness.

Microsoft is the most popular choice of nonprofits for email, word processing, spreadsheets, intranets and portals. Many nonprofits subscribe to Microsoft volume licensing which makes it easier and less expensive to add Microsoft products than purchasing through retail channels. Some charities are eligible for pricing with steep discounts or even no cost software, including Office 365 and Dynamics 365.

## Line of Business Software

Line of business (LOB) software, also called vertical market software, on the other hand, is developed to meet specific industry needs. The software that runs an orthodontist's office is not suitable for an automobile factory or a county housing agency. Because LOB software is generally tied to a particular industry or function, it employs business rules and assumptions. For a system to succeed, the business rules in the system must match the business rules of the organization. For organizations that lack defined processes and business rules, LOB software can bring much needed standardization and organization. Table 1 shows examples of general purpose and line of business software.

Accounting software also falls into this category. While all businesses must conform to accounting standards, nonprofits must report income and expenditures according to local tax laws. Fund accounting rules apply to nonprofits that receive grants and are obligated to show how monies are spent in accordance with provisions of the grantors. Serenic Navigator is a leader in comprehensive cloud ERP solutions for nonprofits.

For nonprofits, the LOB software business rules and assumptions may not match the organization’s practices, which likely represent a significant component of the organization’s competitive advantage. Changing LOB software to conform to existing business rules can be a painful, expensive process.

For instance, there are many kinds of nonprofits which operate in distinct and mutually exclusive ways. Membership organizations such as the American Association of Retired People primarily rely on individual membership and have large memberships who pay small annual dues. Trade associations, on the other hand, such as American Petroleum Institute, have a relatively small number of members who pay higher per member dues and receive quite different benefits. A membership software package that would be a great fit for the National Rifle Association might not suit the American Chemical Society or the American Federation of Teachers. Similarly, a global nongovernmental organization with thousands of users might have different functional requirements from a small, local charity.

LOB software becomes the heartbeat of an organization because it embodies, enforces and validates standard operating procedures, workflows, and other processes that make the organization run. This software is essentially a virtual model of how an organization operates, and its use determines, to a significant extent, the overall efficiency of systems. Managers look to LOB systems for performance metrics and make far-reaching business decisions based on the information these systems provide.

GENERAL PURPOSE SOFTWARE	LINE OF BUSINESS SOFTWARE
Word processing	Time billing system (law firms)
Spreadsheet	Medical record tracking
Email	Warehouse Management System (WMS)
Document Management	Case Management

Table 1. Examples of General Purpose and Line of Business Software

Line of business software is typically more expensive than general purpose software both in terms of cost per user and overall cost. LOB systems are specialized, not generalized. The market for any given vertical product is limited, so development costs must be spread across a smaller group of customers, leading to higher unit costs. Consequently, there are a small number of companies that provide vertical solutions to a given industry. Many of these are small companies which focus entirely on a single industry, such as retail point-of-sale terminals or telecommunications billing systems.

While the cost and risk of implementing a new LOB package is typically high, the benefits of a LOB system that enables the organization to provide greater value are immeasurable. The implementation process can be used to examine and refine processes so the resulting software deployment results in significant organizational improvement

## Nonprofit Line of Business Solutions

Nonprofits require several line of business solutions, and most nonprofits use different vendors for each. For instance, a typical association will have most of these solutions:

- Membership
- Annual Meeting
- Annual Tradeshow Exhibits
- Smaller Events
- Online Commerce
- Committee Assignments
- Fundraising
- Certifications
- Outreach
- Accounting

Some data overlaps among these solutions, so integration is quite desirable, but control must be maintained by the departments that “own” the data. In some instances, the integration effort needed to tie together disparate systems is greater than migrating the systems to a common platform.

Nonprofits sometimes choose a combination of software packages over the years which are inconsistent and incompatible. Each department picks their favorite, based on person experience, price or product popularity. Only later does leadership recognize the value of integration and compatibility. For instance, a set of products such as this may be used within a single non-profit:

CATEGORY	PRODUCT
Accounting	QuickBooks
Membership	iMIS
Fundraising	Raiser’s Edge
Grant Management	Grantium
Email Marketing/Outreach	MailChimp
Social Marketing	Hubspot
User research/surveys	SurveyMonkey
Document Management	FileNet
Office Productivity	Microsoft Office

Some of these products offer integrations to the others, but it can become challenging to identify which is the system of record, and to propagate address changes and deletions from mailing lists among all these systems.

Microsoft Dynamics 365 can be the shared enterprise database and replace all these functions, either on its own or with add-in applications or modules from third party vendors which are based on Dynamics 365.

## Microsoft Dynamics 365 as an Enterprise Platform

Microsoft Dynamics 365 provides an off-the-shelf solution for the shared database required for most line of business applications such as case management, membership, events, marketing, and publication sales. Microsoft Dynamics 365 is built on the Microsoft platform and therefore takes advantage of the Microsoft Cloud, Windows server and client operating systems, Microsoft SQL Server, SQL Reporting Services, and Office 365.

Many of the components of a finished application come straight out of the box with Microsoft Dynamics 365:

**User Interface:** Microsoft specializes in usability, and Microsoft Dynamics 365 contains a fully featured user interface based on Microsoft standards. Outlook integration means that features in Dynamics 365 can be accessed without leaving Microsoft Outlook, a key benefit to many users.

**Security:** You get a fully developed system for user authentication, user administration and role-based security, based on Active Directory. The security is highly granular, allowing you to control access to individual records.

**Data Model:** The platform includes extensive templates for tracking organizations, people, contacts, contracts, marketing activities and service activities.

**Mobile:** Microsoft offers mobile apps for all popular devices and maintains these in the app stores such as Apple App Store and Android Play.

**Workflow Engine:** You can build business workflows to route transactions and track progress of work activities based on Power Apps.

**Reporting:** Start with a set of prebuilt reports and an extensible reporting architecture (Microsoft SQL Server Reporting Service), ad hoc query tool, and report export to Excel and PDF files. Microsoft Power BI provides visualization for data stored in Dynamics 365.

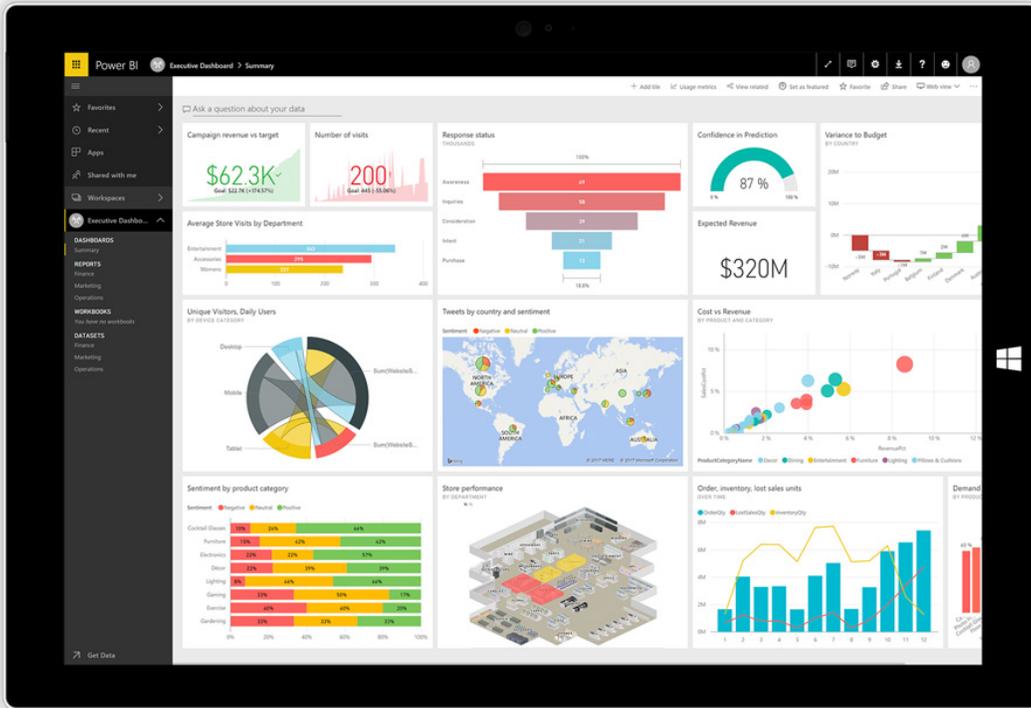


Figure 1. The Microsoft Power BI Desktop

**Compatibility:** Microsoft Dynamics 365 is built using standard Microsoft technologies and is fully extensible and customizable.

## Microsoft Dynamics 365 Key Features for Nonprofits

Microsoft Dynamics 365 includes hundreds of features that are useful for business applications. If you build on the foundation of Microsoft Dynamics 365, these features are at your disposal. They have been implemented, tested, and are widely deployed. Without Microsoft Dynamics 365, any single feature in Table 2 would require extensive work to duplicate as part of a custom application.

KEY FEATURES OF MICROSOFT DYNAMICS 365	
<p><b>USER INTERFACE</b></p> <ul style="list-style-type: none"> <li>Integration with Microsoft Outlook</li> <li>Customizable user views</li> <li>Offline capability</li> </ul>	<p><b>QUICKBOOKS</b></p> <ul style="list-style-type: none"> <li>Record merging</li> <li>Rich data model</li> <li>Import tool</li> </ul>
<p><b>INTEGRATION FEATURES</b></p> <ul style="list-style-type: none"> <li>Link and export functionality to Microsoft Excel</li> <li>Web services support</li> <li>Word Mail Merge</li> <li>Mobile client</li> <li>“Click through” capability to related records</li> </ul>	<p><b>SECURITY</b></p> <ul style="list-style-type: none"> <li>Integrated with Active Directory</li> <li>Business roles</li> <li>Granular permissions</li> <li>Hierarchy of users</li> </ul>
<p><b>WORKFLOW</b></p> <ul style="list-style-type: none"> <li>Power Apps</li> <li>Power Automate</li> <li>Queuing capability</li> </ul>	<p><b>REPORTING</b></p> <ul style="list-style-type: none"> <li>Ad hoc query capabilities</li> <li>SQL Server Reporting Services</li> <li>Power BI</li> </ul>

Table 2. Key Features of Microsoft Dynamics 365

For nonprofits, Dynamics 365 includes extensive data elements to track individuals and organizations, including multiple addresses, relationships between people and organizations, and details of all interactions such as phone calls, emails, mailings and meetings.

The Dynamics 365 Customer Service app is suitable for many nonprofits’ requirements including eligibility determination and social services case management.

A comprehensive list of the features of Microsoft Dynamics 365 is beyond the scope of this white paper. For an up-to-date list, consult the evaluation guides and product information on [www.microsoft.com](http://www.microsoft.com).

## Extensibility

Despite all the features that are included in Microsoft Dynamics 365, you may find some business requirements that it does not fulfill. In these cases, you can extend Microsoft Dynamics 365 by configuring Dynamics 365, integrating other products and by writing custom software modules.

For advanced business intelligence, many customers augment standard Microsoft Dynamics 365 reports with visualizations, maps, and aggregation tools such as Microsoft SharePoint.

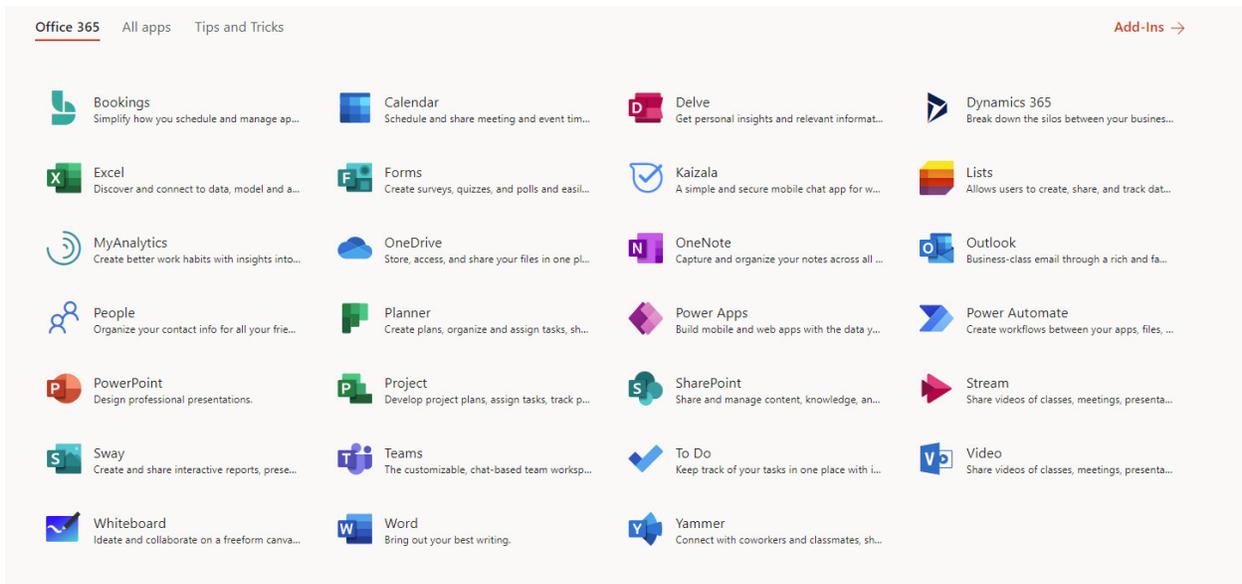


Figure 2. Office 365 provides several business apps all in the Microsoft Cloud

Microsoft Dynamics 365 can host dashboards that highlight key business metrics. Similarly, Bing Maps can be used to render geospatial data which comes from Microsoft Dynamics 365. For example, you can show the location of your members or projects on a map as pushpins on a Bing Maps map or satellite image.

## Microsoft Dynamics 365 and SharePoint

SharePoint provides web content management, document management (including versioning), a portal framework for digital dashboards, and a powerful search engine.

By using the built-in integration of Office 365 SharePoint with Microsoft Dynamics 365, you can easily add this extensive functionality to your solution. For instance, you can add a tab to a Dynamics 365 screen that shows a document library containing draft documents, as shown in Figure 3. The content management features of SharePoint allow you to build a page on your website which can display reports or other data from Microsoft Dynamics 365.

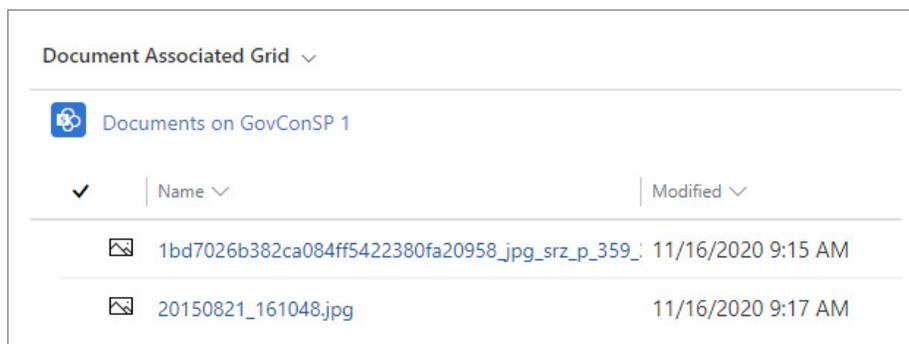


Figure 3. Document Library displayed in Microsoft Dynamics 365.

# Suitability of Microsoft Dynamics 365

Microsoft Dynamics 365 is an excellent framework for line of business applications that track people, organizations, contacts, contracts, and other common business entities. These include not only customer relationship management but related systems for tracking interactions with employees, vendors, suppliers, constituents, inventory, contracts and more. It also excels where workflow is required as well as tracking email correspondence, phone calls, and other interaction.

The greatest return on Microsoft Dynamics 365 is achieved by nonprofits with an extensive Microsoft infrastructure investment. Users find the product simple to learn and use, and integration with other products such as Outlook and Word are valuable.

Microsoft Dynamics 365 Business Central (BC) is Microsoft's ERP product which is suitable for many nonprofits and is the basis for Serenic Navigator.

## Benefits of Microsoft Dynamics 365

With Microsoft Dynamics 365 as an enterprise platform, you can:

**Shorten the requirements process.** End users can respond more easily to a product than to a blank sheet of paper. A quick prototype with Microsoft Dynamics 365 provides a "straw man" for determining the data model, user interface, reports and many other aspects of an application.

**Reduce time to initial deployment.** Installing and configuring Microsoft Dynamics 365 can take days or months as opposed to the years required for custom development.

**Reduce development complexity.** By taking advantage of existing functionality, many modules will come from Microsoft Dynamics 365 rather than be written by hand for a custom application. For instance, Microsoft Dynamics 365 contains built-in functionality for importing data, for taking records offline, and for generating bulk emails. Any of these taken alone would be a significant development challenge.

**Improve user adoption.** Microsoft invests billions in usability for its products. For the price of Microsoft Dynamics 365, you can adopt this proven user interface. Many custom development projects fail when users resist learning a new tool. You can avoid this fate with Microsoft Dynamics 365.

**Reduce training requirements.** With a familiar user interface integrated into Microsoft Outlook, training is dramatically lower than a one-of-a-kind interface.

**Reduce technical risk.** Because Microsoft Dynamics 365 is tested and proven, there are fewer points of failure. The approach for customizing Microsoft Dynamics 365 is well documented, and Microsoft provides reference and training materials for developers.

**Gain upgrade power.** As Microsoft improves its product, you will benefit from new features and enhancements. Microsoft has the advantage of extensive research and development that ultimately turn into new product features.

**Gain advanced functionality.** Built-in functionality of Microsoft Dynamics 365 exceeds what most users would request, resulting in bonus features that would be expensive to develop.

## Cloud Deployment

Cloud computing is likely the most hyped technology these days. Nonprofits are evaluating whether they should continue to host their email and other solutions in-house, or switch to dedicated hosting facilities or shared (cloud) computing providers. Microsoft is a leader in offering its products in all three deployment models. Microsoft Dynamics 365 is available as a cloud solution hosted by Microsoft. This deployment approach eliminates the need for spending on server infrastructure and guarantees a higher level of performance and reliability than most nonprofits can afford to provide on their own.

One of the best things about Dynamics 365 is that you are free to choose which deployment model works best for your nonprofit, and to change your mind and move to another model in the future. This is not true for some offerings which are only available hosted.

## Conclusion

Microsoft Dynamics 365 enables you to standardize on solutions for your nonprofit and deploy new solutions in weeks or months that would take years as custom development projects, with high quality, greater reliability and lower cost. Because Microsoft has invested heavily in ensuring seamless integration with the Microsoft Office family of products, a Microsoft Dynamics 365-based solution is easier for users to understand and integrate into the way they currently work.

Because it can be customized and extended as business rules change, Microsoft Dynamics 365 allows organizations to build their unique processes and competitive advantage into the solution versus modifying their organization's process and methods to "fit" the software.

The platform's rich out-of-the-box feature set allows developers to provide rapid turnaround on a "proof of concept" for an organization so business users can validate logic and assumptions early in the development process. Furthermore, business users can be fully involved in the development process which increases user acceptance. The combination of these factors saves development time, reduces risk and leads to a lower overall cost of deployment than custom developed applications.

The Microsoft vision of Dynamics and Power Apps builds on the strengths of key technologies including Microsoft Windows, SQL Server and Microsoft Office to provide a platform that helps people work more productively. As a Microsoft Gold partner, Serenic Software is committed to continue to deliver line of business solutions built on this solid technology foundation.

## About the Author

Jim Townsend is Vice President of the InfoStrat division of Serenic Software. He is a published author and writes on software topics such as Dynamics 365 and on the InfoStrat blog at [blogs.infostrat.com](http://blogs.infostrat.com).

## About Serenic Software

Serenic Software is a global provider of financial and business management software products that satisfy the unique and sophisticated functionality requirements of nonprofits, international non-governmental organizations (NGOs), and the public sector. Serenic Software is a Gold ERP and Gold ISV vendor and a development partner for Microsoft. Serenic's products are based on Microsoft products and technologies, and are marketed in alliance with Microsoft Business Solutions.

## About Serenic Navigator

Serenic® Software's ERP solution, Serenic Navigator™, is powered by Microsoft Dynamics® 365 Business Central, providing advanced software technology with support for multi-language, multi-currency and multi-company consolidations. Serenic Navigator delivers a role-tailored user experience with the specific functionality needed to fuel business productivity and enable confident decision making. It is a comprehensive financial and operational solution that includes grant management, budgeting, procurement, payroll and financial reporting that empowers your organization's mission by enabling you to spend your resources where they will do the most good.

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