

INSIGHT

Microsoft Dynamics™ NAV

Business Intelligence

Driving business performance for companies with changing needs

White Paper

January 2008

www.microsoft.com/dynamics/nav/



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Introduction

This white paper is intended for Microsoft Dynamics NAV customers. It reviews how business intelligence tools and capabilities in Microsoft Dynamics NAV help empower companies to improve business performance as their business grows and their requirements change.

After reading this paper you will know:

- How business intelligence is defined today.
- How Microsoft envisions a complete and integrated business intelligence offering for its customers.
- How Microsoft Dynamics NAV enables companies with varying needs to gain business insight.
- Which Microsoft® Business Intelligence applications work with Microsoft Dynamics NAV.
- The business benefits of Microsoft Dynamics NAV business intelligence solutions.

Executive Summary

Business intelligence is becoming an important strategic tool for business management. Business intelligence software offerings can help companies gain insight into their business, make smart decisions, and ultimately improve business performance.

But, when it comes to acquiring business intelligence, many small to midsized companies are often at a disadvantage. Compared to larger companies, they may lack the resources and the appropriate systems and software to process their data and turn it into meaningful business insight. Or the systems and methods they use cannot keep pace with their company's growth and changing needs. This can limit their ability to optimize performance and compete effectively.

The Microsoft vision for business intelligence is to help drive businesses to improved performance by enabling all decision-makers—essentially empowering all employees throughout the organization—to make strong decisions. Microsoft plans to achieve this vision by providing cross-product integration, delivering business intelligence capabilities within Microsoft Office, and making its business intelligence offerings scalable so everyone in the organization is empowered with business intelligence tools. Whether they are working on the strategic, tactical, or operational level, Microsoft business intelligence applications can help make informed decisions a natural part of the everyday work experience for all employees.

Microsoft Dynamics NAV is a good example of this cross-product integration and offers a range of business intelligence capabilities—spanning from built-in reports and wizards, to advanced tools that enable users to gain the insight required to optimize performance across the entire organization. This comprehensive, flexible solution meets the requirements of both small businesses that need easy-to-use, yet effective tools as well as the requirements of larger organizations that need the most technically advanced business intelligence capabilities.

Microsoft Dynamics NAV provides flexible business intelligence capabilities and a growth path that enables you to capitalize on your existing investments.

What Is Business Intelligence?

When people think of business intelligence, they may think of data, information, reporting, analysis, and online analytical processing (OLAP) cubes. But over the last several years, business intelligence has become much more than that. Companies are trying to make use of the enormous amounts of data and information generated by their enterprise resource planning systems and other applications, and business intelligence is now an essential part of strategic and tactical business management. In fact, a recent survey of 1,400 CIOs by Gartner, an independent IT research firm, reveals that business intelligence has surpassed security as the top technology priority in 2006. Business intelligence has become a strategic tool that can help people lead, measure, optimize, discover, and innovate in order to change the landscape of their organization.

The challenge lies in being able to access the right information at the right time and transform it into insight, knowledge, and smart decisions. And this is how business intelligence software can help. In terms of offerings, business intelligence can be described as any technology that enables companies to gain insight into their business (and their data) to understand what is going on. In this context, business intelligence encompasses all solutions, tools, and features that enable people to gain insight to make informed decisions about current and future activities.

When it comes to acquiring business intelligence, many small to midsized companies are often at a disadvantage. Compared to larger companies, they may lack the resources and the appropriate systems and software to process their data and turn it into meaningful business insight. Or the systems and methods they use cannot keep pace with their company's growth and changing needs. And this can limit their ability to optimize performance and compete effectively.

Strong business performance

The ability to access, use, and share data and information in an efficient and relevant way helps improve business performance. Business intelligence capabilities empower employees to:

- Align day-to-day operations with overall company strategy and objectives.
- Identify and understand the relationship between business processes and their impact on performance.
- Access information relevant to specific user roles and responsibilities.
- Analyze data from documents and spreadsheets easily.
- Gain contextual insight into business drivers.
- Monitor the vital business indicators that are needed to move an organization forward such as:
 - Current status and trend of essential financial ratios.
 - Effectiveness and profitability of sales channels.
 - Crucial operational metrics.

In short, business intelligence helps companies gain a comprehensive and integrated view of their business and facilitates effective decision-making.

Microsoft Business Intelligence

This section defines the Microsoft vision and strategy for business intelligence.

The Microsoft Business Intelligence vision is to help drive businesses to better performance by enabling all decision-makers—essentially *empowering all employees* throughout the organization—to make informed decisions. So what do we mean by *all employees*? Historically, the ability of gaining insight into business data has been the privilege of the finance departments and business analysts. Those days are over. Financial reporting is still a very important area of business intelligence; however, the scalable, user friendly, rich analytics of solutions such as Microsoft Dynamics NAV, can help expand access to this insight to all users throughout the organization. Whether they are working on the strategic, tactical, or operational level, Microsoft business intelligence applications can help make more informed decisions part of the everyday work experience for all employees.



Three kinds of decisions

In effect, there are three kinds of decisions that organizations make.

- **Strategic decisions.** These are the big decisions that companies make (for example, should we buy a partner or should we enter a new market). The value of these decisions is large—but the quantity is few.
- **Tactical decisions.** This has been where business intelligence has been traditionally implemented. For example, this is where the product manager decides what discount schedule to put in place or makes a pricing decision for a new product.
- **Operational decisions.** These are the business decisions (often made by people who have never heard of business intelligence) that happen on a daily basis, yet they have smaller business impact when measured by themselves. However, in aggregate, multiple operational decisions add up to a lot of value—and can drive stronger business performance.

The Microsoft business intelligence offering endeavors to enable *all* of these decisions. In today's competing markets, it's critical to provide the entire business with an infrastructure that drives decisions and propels the company forward.

The Microsoft strategy for doing this is threefold:

1. Microsoft will provide a complete and integrated offering that supports all facets of business intelligence. This means cross-product integrations which enable different applications such as Microsoft Dynamics NAV, Microsoft Office SharePoint® Server 2007, and Microsoft Office PerformancePoint™ Server 2007 to be brought together on the Microsoft SQL Server® platform.

This smooth integration with SQL Server makes it possible to leverage the key benefits from solution to solution, thereby reducing total cost of ownership while making it easy for companies to expand their solution as their business needs change. A complete offering also means that in addition to providing all of the tools that an organization needs, Microsoft is the only provider of business intelligence that supports the information worker, the IT pro, *and* the developer.

2. We will provide business intelligence where the majority of users want it—inside Microsoft Office applications. People shouldn't have to jump out of their business intelligence tool and get back into their productivity application when they uncover some new insight.
3. Enable the entire organization by driving business intelligence to all decision-makers. Microsoft will provide a business intelligence infrastructure that scales to the entire enterprise—and that has an attractive price.

Business Intelligence Capabilities in Microsoft Dynamics NAV

Microsoft Dynamics NAV is one example of how cross-product integration helps companies optimize their business. Microsoft Dynamics NAV is an integrated business management solution ideally suited for businesses looking for one solution that is fast and easy to implement, customize, and use and maintain. Microsoft Dynamics NAV is built on Microsoft technology and integrates with a number of Microsoft products and technologies to help companies realize business success by enabling employees to work productively and cost-efficiently; connecting people, processes, and information throughout the business; and providing employees with insight so they can make informed decisions.

With flexible business intelligence capabilities and a growth path that capitalizes on your existing investments, Microsoft Dynamics NAV offers a range of business intelligence capabilities that spans from built-in reports and wizards to advanced tools that enable users to gain the insight required to optimize performance across the entire organization. This comprehensive, flexible package meets the requirements of both small businesses that need easy-to-use, yet effective tools as well as the requirements of larger organizations that need the most technically advanced business intelligence capabilities. This flexibility makes Microsoft Dynamics NAV an ideal solution for companies that anticipate their business intelligence needs will change as their business grows.

What's more, Microsoft Dynamics NAV is built on industry-standard Microsoft technology and integrates with other Microsoft products and technologies, so companies can be confident they're making a sound software investment. For example, it's possible to start with the basic granules of Microsoft Dynamics NAV and Microsoft Office Excel® and then move to Microsoft Windows® SharePoint Services and then later to Office PerformancePoint Server 2007.

Three Common Business Intelligence Growth Scenarios

These scenarios illustrate how companies can use the business intelligence capabilities in Microsoft Dynamics NAV to improve business performance depending on their business needs. (Proceed to the next section for a description of all the business intelligence functionality.)

Scenario 1: The smaller company (essential business intelligence needs)

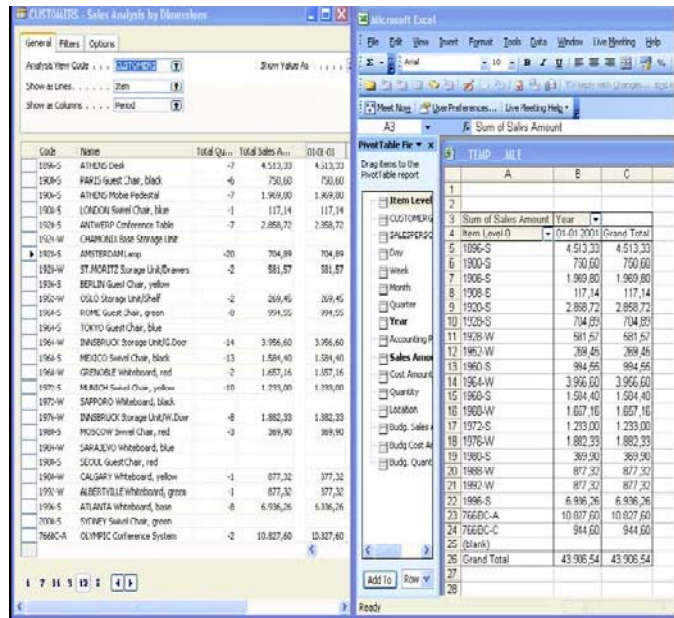
Smaller companies need an inexpensive solution that delivers key business intelligence capabilities. For example, you may need access to data and information for a monthly sales report organized by region and product. Or, you may want to know how much inventory of a certain item is on hand. Microsoft Dynamics NAV provides this basic functionality out of the box. Microsoft Dynamics NAV facilitates the analysis of data in raw format, and with the close integration with Microsoft Office and Excel, you can obtain a graphical representation of data by exporting it to Excel.

This solution is very flexible and easy to use, and employees have access to insight capabilities such as general and user-defined reporting of the various domains across Microsoft Dynamics NAV. Built-in tools such as account schedules enable users to define their own reports for the comparison of actual versus budget results. In this way, they are able to identify whether the business is on plan and see the effects of marketing initiatives.

This scenario, which meets essential business intelligence requirements, includes:

Sample Configuration 1: Easy-to-deploy but essential business intelligence capabilities (Microsoft Dynamics NAV + Microsoft Office).

- + Standard reports
- + Report wizard
- + Account schedules and analysis reports
- + Analysis by Dimensions
- + Office Excel Smart Tags
- + NODBC (if Microsoft Dynamics NAV Server is used)

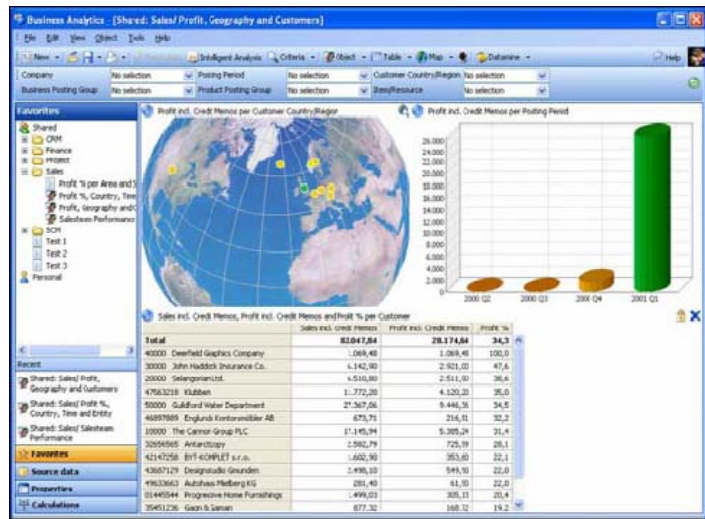


The built-in functionality in Microsoft Dynamics NAV and close integration with Microsoft Office makes it easy to export raw data from Microsoft Dynamics NAV to Excel for graphical representation.

Scenario 2: The larger company (more advanced business intelligence needs)

As a company grows, requirements for flexible software solutions and business intelligence capabilities become more demanding. At this stage, companies need more complex views of their data and access to big-picture views of company operations.

When a business develops to this stage, new functionality can be added to the basic functionalities described in the first scenario. Business Analytics in Microsoft Dynamics NAV delivers information in predefined or easy-to-customize information units called online analytical processing (OLAP) cubes, directly to SQL Server. Users can access and analyze data—within a familiar Excel interface or another front-end solution—with easy-to-use tools that enable straightforward analysis and provide a quick overview of business conditions. Super-users can save and reuse OLAP cubes. As they develop a strong focus on understanding business conditions, employees can manage their work more effectively.



Microsoft Dynamics NAV integrates with SQL Server to help users transform data into solid business decisions.

A more advanced offering of Business Analytics supports businesses that have more complex reporting and analysis needs, while maintaining the simplicity and ease-of-use that are hallmarks of Microsoft Dynamics NAV. Working within a graphical interface that is similar to Microsoft Office Outlook®, employees can gain a 360-degree view of business performance and quickly set up and review graphical displays and reports. Employees can perform targeted analysis of detailed information to gain a deeper understanding of it. With the Business Analytics Web Viewer, decision-makers have quick access to critical Microsoft Dynamics NAV data from any location with an Internet connection.

Sample Configuration 2: Greater business intelligence capabilities (Microsoft Dynamics NAV + Microsoft Office and dedicated business intelligence software)

- + SQL Server Analysis Services
- + Business Analytics in Microsoft Dynamics NAV Basic
- + Business Analytics in Microsoft Dynamics NAV Advanced

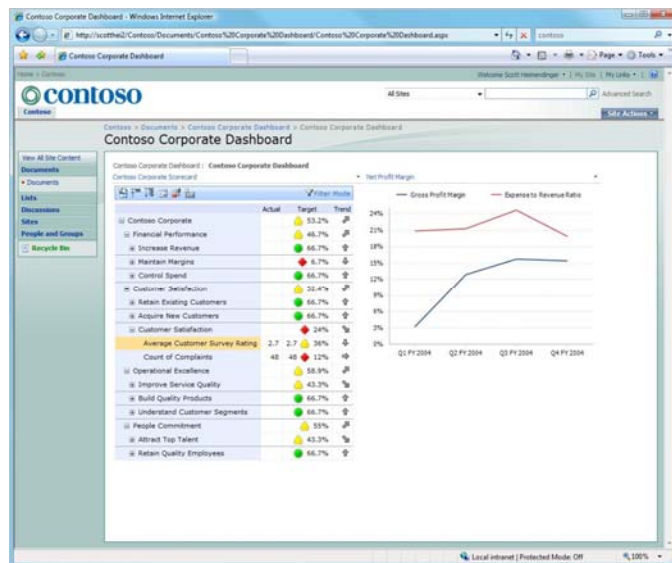
Scenario 3: The large company (more complex business intelligence needs)

As a company's operations continue to grow and more complex business intelligence requirements emerge, Microsoft Dynamics NAV, Microsoft Office, and other dedicated Microsoft Business Intelligence and Web solutions enable companies to realize the maximum benefit of their business intelligence.

Here companies need access to business insight capabilities that can be customized to meet their needs and that they can use to monitor business performance. The ability to combine historical patterns with forward-looking trends and indicators becomes vital to sound decision-making. Here the optimal solution will use SQL Server Analysis Services and OLAP technology to provide the business insight capabilities described in Scenario 2. However, the solution also takes advantage of other Microsoft technology such as SQL Server Reporting Services, Windows SharePoint Services, Employee Portal in Microsoft Dynamics NAV, and Office PerformancePoint Server 2007. Here the solution connects employees by using the Web-based interface delivered by SharePoint technology.

Sample Configuration 3: Full business insight capabilities (Microsoft Dynamics NAV + Microsoft Office + dedicated BI and Web solutions)

- + SQL Server Analysis Services
- + Business Analytics in Microsoft Dynamics NAV Basic
- + SQL Server Reporting Services
- + Employee Portal in Microsoft Dynamics NAV
- + Windows SharePoint Services
- + Office PerformancePoint Server 2007



With Performance Point Server 2007 and SQL Server Analysis Services, people can create dashboards using data from Microsoft Dynamics NAV.

Built-in Business Intelligence Functionality in Microsoft Dynamics NAV

This section describes the built-in functionalities that are a standard part of the Microsoft Dynamics NAV solution. These include:

Standard Reports

People who need generic and predefined analytical reports on the state of business (order summaries, inventory availability, and more) will find such capabilities in more than 300 standard reports across the functional areas of Microsoft Dynamics NAV.

Report Wizard and Report Design Tools

When user needs are not met by one of the more than 300 standard reports, use the Report Wizard to create ad-hoc reports that can meet demanding requirements such as customer-specific reports. For example, if a company requires a type of report that is unique to their business but is not included in the standard package, it can use the Report Design tools to develop what they need. In addition, these tools are very useful when moving reports from previous systems to a new Microsoft Dynamics NAV implementation.

Account Schedules and Analysis Reports

These are built-in analysis tools, which enable users to slice and dice data from General Ledger, Sales and Purchase, and Inventory. Users can compare data to budgets across time, departments, project, campaigns, and other dimensions. The easily defined line and column layout provides users with a comprehensive and tabular form of analysis. The results can be presented in print, in a window from which you can easily navigate to original entries and documents, and/or in Excel for further processing.

Analysis by Dimensions

This is the Microsoft Dynamics NAV built-in multi-level and multi-dimensional business insight capability. This tool enables users to gain a comprehensive understanding of the business and its activities. Different analysis views can be created for different purposes. For example, users can see an analysis view relating to sales in a particular area for a particular time period and for a particular group of customers. The views can be sent to Excel with the click of a button where the automatic creation of relevant PivotTable® views enables you to drag fields and use additional measures, dimensions, and criteria.

Navigation “transactional insight”

With this capability, users can find—from any transaction or document in the system—all other related transactions or documents. Use this feature to easily understand to what extent a transaction has had an impact on other accounts or simply to find the original documents for further analysis. It helps users find the exact numbers they are looking for.

Business Intelligence Tools and Applications That Work with Microsoft Dynamics NAV

In addition to the built-in functionalities of Microsoft Dynamics NAV, there is a range of other applications with which the system integrates. These include:

Microsoft Office Excel

Account Schedules, Analysis Reports, and Analysis by Dimensions in Microsoft Dynamics NAV have the built-in capability to be exported to Excel for further processing.

Business Analytics in Microsoft Dynamics NAV

Business Analytics is a powerful application that quickly turns data into business information. There are two Business Analytics offerings: Basic and Advanced. Both give users a deeper understanding of the information stored in Microsoft Dynamics NAV.

Basic Analytics enables the transformation of business data into information on SQL Server. Users can then access the information they need via the core Microsoft Business Intelligence offerings and work with the information within the familiar user interface of Microsoft Dynamics NAV. Basic also simplifies the complexity of setting up OLAP cubes on SQL Server.

Advanced Analytics supports more complex reporting and analysis needs, while remaining simple and easy to use. Users can obtain a 360-degree view of business performance and quickly set up and review graphical displays and reports.

NODBC

The Microsoft Dynamics NAV ODBC Driver (NODBC) is used to extract data from Microsoft Dynamics NAV running on its native server so that the raw data can be moved to Excel or other Microsoft Office applications like Microsoft Office Word so users can create relationships between transactions.

Microsoft SQL Server Analysis Services

OLAP is a technology that pre-processes a company's data into an information unit called a cube. In Microsoft Dynamics NAV, OLAP is performed by SQL Server Analysis Services, a capability that is part of SQL Server. When a company runs Microsoft Dynamics NAV on SQL Server, they will benefit from analysis capabilities that can be leveraged in orchestration with the rest of the Microsoft stack such as Excel and SQL Server Reporting Services. When these cubes have been defined, users can access them through a variety of applications to see different views of the data.

Microsoft SQL Server Reporting Services

Direct access to the SQL Server enables efficient and powerful reporting. SQL Server Reporting Services is a comprehensive, server-based solution that enables the creation, management, and delivery of both traditional, paper-oriented reports and interactive, Web-based reports. An integral part of the Microsoft Business Intelligence framework, SQL Server Reporting Services combines the data management capabilities of SQL Server and Windows Server® with familiar and powerful Microsoft Office system applications to deliver real-time information that can support daily operations and drive decisions. SQL Server Reporting Services supports the full reporting life cycle, including report authoring, management, delivery, and security.

Employee Portal in Microsoft Dynamics NAV

Employee Portal is an easy way for company employees to work with all their business information on the company intranet. Using the Web-based interface, users can basically view all company data online instead of in the back-end application. The framework is intuitive and requires very little training because it looks and feels like the other Microsoft applications. And because access is role-based, users see only the data relevant to their jobs.

Microsoft Office PerformancePoint Server 2007

Office PerformancePoint Server 2007 is an integrated performance management application that provides monitoring, analysis, and planning capabilities. Flexible, easy-to-use tools help people across the organization build relevant scorecards, dashboards, plans, and budgets to support informed business decisions that align with companywide objectives. With Office PerformancePoint Server 2007 and SQL Server Analysis Services, the technology that performs OLAP in Microsoft Dynamics NAV, users can quickly populate cubes with data from Microsoft Dynamics NAV to perform analyses. The results are delivered using Office SharePoint Server 2007 and Windows SharePoint Services. SQL Server 2008 provides the data integration and collection engine.

Conclusion

Whether or not a company has business intelligence capabilities can mean the difference between real success and mediocre performance. More and more business owners are now realizing the important role business intelligence plays in the success of their business. The company who can exploit its own data and information to gain insight and make smart decisions will have a clear competitive advantage.

As business intelligence capabilities move to center stage as a top management priority, companies will need flexible IT solutions that will meet their business intelligence needs not only in the short-term, but as their company grows and their need for more complex business intelligence capabilities increases. Here are three main factors to consider when choosing a business intelligence solution:

1. **Business intelligence empowerment throughout your company.** Organizations can operate more efficiently and are more apt to stay their strategic course if all employees who make strategic, tactical, and operational decisions are empowered with insight. Look for business intelligence solutions that make it easy for all employees—not just a selected few—to access, work with, share, understand, and interpret data and information.
2. **Integration with other systems and applications.** To empower your entire organization with insight, business intelligence tools should be where your employees need them—on their desktop. Making business intelligence tools accessible and easy to use no matter what application you are working in is paramount to making the most of data and information. Look for business intelligence solutions that will integrate well with the other systems and applications your organization uses or will use in the future.
3. **Flexibility and your needs for business intelligence capabilities today and in the future.** A business intelligence solution must be flexible to accommodate your changing needs to provide a growth path that maximizes and strengthens your existing IT investments. Look for flexible business intelligence solutions that are easy to work with especially when adding new functionality or integrating with other applications.

Simplicity, ease of integration, and flexibility are Microsoft Dynamics NAV hallmarks. Microsoft Dynamics NAV works like and with other Microsoft products and applications. Microsoft Dynamics NAV has flexible business intelligence capabilities that are ideal for companies that are looking for a solution that will help them take advantage of their existing IT investments while their business grows. Whether your business is looking for essential, advanced, or more complex business intelligence capabilities, Microsoft Dynamics NAV will empower everyone throughout your organization with insight to make better decisions and improve business performance.

About Microsoft Dynamics

Microsoft Dynamics is a line of financial, customer relationship, and supply chain management solutions that help businesses work effectively. Delivered through a network of channel partners that provide specialized services, these integrated, adaptable business management solutions work like and with familiar Microsoft software to streamline processes across an entire business.

For more information about Microsoft Dynamics, please visit www.microsoft.com/dynamics.

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Published 3/2008

Microsoft