BI4Dynamics provides rich business intelligence capabilities to companies of all sizes and industries. From the first day on you can analyse your data quickly, accurately and make informed decisions.
Spending too much of your time on building reports from scratch? Searching for the right data, exporting it to Excel, formatting charts, chasing deadlines... doing it over and over again?

Let BI4Dynamics do the hard work.
BI4Dynamics makes you up and running in couple of hours. Fast to implement. Easy to configure and simple to use.

BI4Dynamics is a standardized Business Intelligence Solution on top of, and certified for, Microsoft Dynamics NAV.

BI4Dynamics is a complete, standalone, horizontal business intelligence solution on top of Microsoft Dynamics NAV. It includes all components of a complete business intelligence solution:

- Data warehouse
- OLAP cubes for each business application area
- Procedures for daily updates; and
- Pre-built reports in Microsoft Excel

The solution has all characteristics that fulfil most analytical business needs of every company, regardless of its size or industry, on operational, tactical and strategic level.

The whole implementation process – installation of the solution and end-user training – can be done in a single day. Users can continue using their familiar reporting environment, like Microsoft Excel, to change pre-defined reports or create new ones from scratch. Data is consolidated in one data warehouse, providing business users the power to analyse information on company or enterprise level. Very attractive price reflects our motto “BI4Dynamics on every Dynamics desktop” and makes it suitable for every company. Our client list includes small sized companies with less than ten employees, as well as large international enterprises.

Solution is built on Microsoft platform and fully open for customizations. Partners with basic Microsoft SQL Server knowledge and Visual Studio experience can use this as a business intelligence platform for more demanding projects.

Solution delivers tremendous value and benefits for Microsoft Dynamics partners and customers.

In short BI4Dynamics is a winning combination of Microsoft technology, business knowledge and technical expertise. It fills the reporting gap and brings real business intelligence to Microsoft Dynamics clients.

Business data from Microsoft Dynamics NAV is processed in BI4Dynamics data warehouse to provide new insights and enhance performance. OLAP cubes and predefined Excel reports include rich KPIs and cover all NAV application areas.
Advantages

✓ Experiences with MS Dynamics AX/NAV and BI implementations (brings vast business value to customer)
✓ Complete out of the box solutions (covers all application areas out of the box)
✓ Deployment wizard
✓ Data warehouse
✓ ETL processes to extract, transform and load data from Microsoft Dynamics
✓ OLAP cubes (sales, purchase, inventory, receivables, payables, general ledger)
✓ Automatic procedures for daily update (data update in any given time)
✓ Incremental update (can update only certain amount of data)
✓ Independent of the front end tool (Excel, SharePoint Server, Cognos, MicroStrategy, QlikView, Panorama, Targit, Wise Analyzer, …)
✓ Licensing model: server license (unlimited number of users, unlimited database size)
✓ Microsoft platform
✓ Installation done in a matter of hours
✓ Flexibility – solution is completely opened for customizations
✓ Price - Fast ROI (in weeks)

Data Warehouse Advantages

✓ Stores historical transactional data and historical versions of master data
✓ Provides an environment optimized for analysing your business
✓ Does not overload your operational system with ad-hoc queries required by management reports
✓ Integrates the data from your various operational systems into one coherent set of reliable information
✓ Is refreshed in a controlled way, guaranteeing reliability of the information
✓ Performance – better accessible information, better and faster reporting
✓ Better and more efficient decision making
✓ Monitoring trends, because of adding the time dimension to your information
✓ Historical data
✓ Snapshots in time (e.g., enables views of historical changes on orders & quotes documents)
✓ Better and compliant calculations
✓ Consolidation over multiple sources and multiple companies
✓ Multi-currency
✓ Multi company analysis

BI4Dynamics uses existing Microsoft infrastructure (SQL database, Excel, and Active Directory for easy adaptability and for best performance. And provides 100% open SQL for further development.
Business Intelligence is a set of methodologies, processes, architectures, and technologies that transform raw data into meaningful and useful information used to enable more effective strategic, tactical, and operational insights and decision-making.

There are various ways of doing BI:
- Front end tools
- Reporting tools
- Custom development projects
- Pre-built data warehouse and OLAP tools (BI4Dynamics)

BI is about using the data you gather to provide insight into your business.

BI4Dynamics is a standardized (pre-built) Business Intelligence Solution for Microsoft Dynamics NAV. It comprises of a complete enterprise-scale data warehouse and several OLAP cubes, covering all of the Dynamics application areas. It is open and completely customizable and it also serves as a framework on which you can extend the solution to fit your needs. BI4Dynamics is a back-end solution and you can use any front-end tool to connect to data stored in the data warehouse or OLAP cubes.

### Data Warehouse and OLAP Cubes

In computing, a data warehouse (DW) is a database used for reporting and analysis. The data stored in the warehouse is uploaded from the operational systems.

A data warehouse maintains its functions in three layers: staging, integration, and access: Staging is used to store raw data for use by developers. The integration layer is used to integrate data and to have a level of abstraction from users. The access layer is for getting data out for users.

An OLAP cube (online analytical processing) is a data structure that allows fast analysis of data. It can also be defined as the capability of manipulating and analyzing data from multiple perspectives. The arrangement of data into cubes overcomes some limitations of relational databases (used by transactional systems such as NAV).

**Pivot Tables**

Pivot tables can be seen as a simplification of the more complete and complex OLAP concepts. In other words, they are your best choice when dealing with multidimensional data stored in OLAP cubes. The most used tool to work with pivot tables is Microsoft Excel.
What BI4Dynamics has to offer?

Sales Module

Do you know which products are your most profitable, and which customers are buying them? Can you run ad-hoc analysis and see your seasonal aspect of Sales? Analysis of sales trends, margin, parallel period and year-to-date sales reports extend standard reporting and make analyzing data simple, powerful and quick.

Make sales analysing data simple, powerful and quick

Powerful and Simple Sales Dashboard

That’s how everyone in your organization should analyze sales data. For a complete sales overview, this dashboard includes sales and receivables. Sales Dashboard includes sales by categories, profit in percent, growth in percent and sales by countries.

Top Dashboard

Top dashboard includes sales analysis, Top countries and Top customers.

Top Dashboard

Top dashboard includes Top Salesperson and Top Item Categories.

Sales Overview Dashboard

Sales overview dashboard show net sales, net sales Year-to-date percent change, profit, top customers by the net sales and profit, top salesperson by the net sales, profit and discount in percent and top item categories by the net sales, profit and discount in percent.

Salesperson Analysis - Who is The Best Salesperson?

John is #1 as he has the highest Net Sales and makes a good profit. Mary and Richards Net Sales are close together. Richards’ profit is 7 percentage points higher although he did give out more discounts. If we look at the net sales YTD Index, we see that Richard also has a higher sales growth. Knowing this, it is clear that Richard is our #2.
Seasonal Aspects of Sales

BI4Dynamics has a separate independent Date Dimension to cover seasonal aspect. Standard reports in NAV only have one Date Dimension. Separate Date Dimensions enable you to monitor the trend over certain period of time and show you the seasonal aspects of your business.

Year to Date

If we look at the report over a period of time, we can easily compare our Net Sales this year with the one from last year. At the same time we can also calculate an YTD index, which shows us what was the difference between a cumulative Net Sales in a specific period of time.

Sales Not Invoice (Shipped / Invoiced Variance)

If your team forgot to invoice some shipped items, BI4Dynamics will immediately show mistake (the difference) and when this has been corrected.

Sales by Type (Item, Resource, GL Account, FA)

Standard NAV reporting is designed to get data from only one ledger (In Inventory area we can analyze Sales by Item) and cannot show all types (Item, Resource, GL Account, FA) in one standard report. BI4Dynamics solves this GAP by joining all ledgers into one. It is important to understand that BI4Dynamics reads data from ledger entries and not from posted sales lines (posted documents). You can see that Net Sales in Sales Cubes is equal to Sales in Receivables Cube.

Bill-to, Sell-to, Ship-to

In Microsoft Dynamics NAV "Bill to" customer is available in receivables, "Sell to" in the sales area, and "Ship to" Name/Code only in delivery notes. BI4Dynamics makes it possible to analyze sales by any of these 3 customer information, quantities and values. This gives you more choices to build customer hierarchy.
**Receivables Module**

Users can easily analyze receivables debit/credit relations, balance and various rotation coefficients through different dimension attributes, as well as overview of due and overdue accounts.

Users can drill down to specific invoices and track changes with daily snapshots stored in the data warehouse.

*Analyze payables, receivables and various rotation coefficients*

**Do You Want to Know Where Your Money Is?**

Get better inside by analyzing receivable structure. Over years, our receivable Overdue has grown much faster than Before Due. Stacked Area Chart shows relative share of both measures regardless of the total receivable balance.

**Receivables Overview Current Year**

The best way to compare growth is to index measures to the first date that we compare to (standard MS Excel 2010 functionality). This dashboard show that receivable balance grew faster than sales due to longer receivable turnover. Check dependences as you calculate indexes: Receivable Balance = Sales x Turnover (Days).

**Receivables Table**

Receivables table provide information about Receivables Balance, % of Total Balance, Sales, % of Total Sales, Customer Net Change, % of Total Net Change, Average Payment Terms, Average Open Days Receivables, Average Due Days Receivables and Receivables Turnover in days.

**Receivable Due Overdue Structure**

Receivable Before Due and Overdue structure for current year.
Analyze Your Customers by Payment Habits

Find them, track them like a hawk and improve your financial position. Top 30 customers by receivable balance analysis, provides information about before due, overdue and total receivables for each customer in a current year.

Worst Customers by Overdue

Worst 30 customers by Overdue provide information about customers' debt in range under 90 days, debt over 90 to 180 days, over 180 days and total receivables for current year. These customers present 80% of our overdue balance and are the reason why our receivable balance grows faster than sales. We group these customers and create a Set: "Bad customers (by payment habit)". This is simple and standard Excel functionality.

Receivables Structure Over Years

Receivables structure over years provides information for Before Due and Overdue receivables over the years in percentages and numbers with conditional formatting.

Receivables Customers Over Years

Receivables customers over years provides information for receivables, percentages receivables and grand total receivables over the years with conditional formatting. You can see that the first seven costumers represents a 40% share of the total receivables in 2011.
Inventory Module

To avoid the typical difficulties with inventory valuation in ERP systems, like slow calculations and complications for multi-location items, daily snapshots of data are created in data warehouse to provide business users with very fast and agile analysis.

Analyze trends of inventory value and quantity over multiple locations

Inventory Overview

This is a very useful measure that you cannot find in NAV. Stock rotation is calculated (as all Bi4Dynamics measures) on a daily basis. Even if you have a large database, you will have results in seconds.

Measures and Dimensions

There are many measures and dimension, with witch combination you can get an information about your inventory.

Inventory by Location over Years

Inventory by Item Vendor over Years

Top 30 Items by Various Measures
General Ledger Module

Consolidation of information over multiple companies, dimensions and currencies has never been easier. Create Chart of Accounts and Income statement reports. Compare budgets over the years with YTD (Year-To-Date) KPI which is available in almost all important measures.

Spend less time on producing monthly reports!

Common Measures for Common Sense

The chart of accounts has to be well structured in NAV (function Indent). If so, BI4Dynamics NAV allows you to analyze accounts, groups and subgroups.

YTD (Year-To-Date)

KPI is available in almost all important measures.

Any Dimension with Any Measure

You can easily do income statement reports over multiple dimensions. Here you can see income statement by three different dimensions.

Company

A dimension where all reports can be viewed by one or more companies.

BI4Dynamics Enables You to Compare One or More Budgets

There are all, also YTD measures available for analysis. Plus, there is an advantage (compared to NAV) that you can visualize results.
Purchase Module

Complete purchase analysis over multiple measures with rich dimension attributes and multiple company. Possibility to analyze vendors by Pay-to > Buy-from > Ship-to, which is complicated to do with built in Microsoft Dynamics NAV functionality due to information being scattered across documents.

Track the status of purchased and supplied items

Purchase by Type

It is bridging the NAV reporting GAP, as you can compare purchase and payables. This data is from purchase cube.

Top 10 Vendors by Type (Item, GL Account, Fixed Asset)

Top 10 Vendors by Purchased Items

Top 10 Vendors by Purchased Services

Item Charge Analysis

This NAV functionality is specific for purchase area. NA (not available) is presenting original purchase amount and is not an item charge.
**Payables Module**

Analysis of specific invoices and group of invoices with advanced measures (average account measures, invoice open days, due days, etc.). Perform payables balance through all vendors through time and make account analysis through different attributes on vendor card.

**Use cash flows KPIs, monitor performance and access all your pending invoices**

---

**Payables Overview**

Payables balance and payables turnover (days).

**Payables Trend Over Years**

We can observe, over years, payables Overdue and Before Due. The best analytical view of these two measures is Stacked Area Chart (standard MS Excel functionality). It shows relative share of both measures regardless of the total payables balance.

**Payables Structure**

Payables structure Overdue and Before Due are shown in a Chart Pie.

**Our Payment Discipline**

Top 10 happy and unhappy Vendors.
Account Schedules Module

Account schedules are used to prepare financial reports based on the general ledger. With account schedules users can choose specific accounts and perform basic calculations. In Microsoft Dynamics NAV users define their own account schedule, after processing it with BI4Dynamics, account schedules will be shown in Excel.

100% flexibility. No IT staff, no IT vendor.

Account Schedules Dashboard

This dashboard shows how you can include absolute and relative data into one dashboard.

Analysis by Any Dimension

NAV part of account schedules doesn't allow to add dimensions into column. With BI4Dynamics, any dimension, any hierarchy, any combination can be used.

Analysis by Company

NAV reporting over Company is hard to develop and it is slow. In data warehouse all data are per company, so company is just one of dimensions. BI4Dynamics makes a step further. You can compare Account Schedules event if NAV companies do not have the same Chart of Account or the same GL Accounts. BI4Dynamics is smart and calculations are done using Account Schedule line formulas locally, in each NAV company.

Budget

You can compare and visualize Net Change, Budget Amount, Budget Variance and Budget Index by any available dimension.
Sales Orders Module

With the data warehouse’s daily snapshots of sales quotes and orders you can efficiently analyze the whole sales process from quotes to posted documents and receivables at any level. Analyze Sales and Profit by any combination of Item or Customer - compared to plan and growth in previous periods.

Follow the sales process from quotes to posted documents

Get a Time Advantage

Wouldn’t you like to analyze your sales before they are posted? Wouldn’t you like to act few days or weeks earlier with information that you can rely on?

Control Your Sales

In one dashboard you can analyze whole sales process with live and posted documents: sales quotes, sales orders and posted sales documents. Every sale can be analyzed by any BI4Dynamics dimension and measure, which you can find in sales area.

Sales Documents are Daily Copied to Data Warehouse

BI4Dynamics makes a daily snapshot of all sales documents and stores it to data warehouse. Now, we can analyze sales quotes and sales orders even after they are deleted or after their status has been changed. We can track changes in sales documents automatically, without user interference.

Domestic Customers (by quote value)

Analyze Sales Pipeline by Any Dimension (Parameter)

Foreign Customers (by quote value)

Analyse Sales Pipeline by Any Dimension (Parameter)

Hardware - Software - Sport (by quote value)

Analyze Sales Pipeline by Any Dimension (Parameter)
<table>
<thead>
<tr>
<th>Top 10 customers over weeks (by quote value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyze Sales Pipeline by Any Dimension (Parameter)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Top 10 items over weeks (by quote value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyze Sales Pipeline by Any Dimension (Parameter)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Top salesperson over weeks (by quote value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyze Sales Pipeline by Any Dimension (Parameter)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Customer Item analysis over weeks (by quote value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyze Sales Pipeline by Any Dimension (Parameter)</td>
</tr>
</tbody>
</table>
Manufacturing Module

Monitor production orders, Item composition and consumption, Actual and expected quantities with variance. Analyse Average costs and work in progress over many dimensions and hierarchies.

Powerful, agile, simple analyzing across multiple sites and geographies

Manufacturing Overview

Among other things you can analyze your production orders, item composition and consumption, actual and expected quantities with variance, top items consumed and produced, average costs and work in progress over many dimensions and hierarchies.

Work Centre Overview

Work centre is defined (in NAV) as Machine, Capacity or Working resource. It can be grouped as Work Centre Group. This is an overview of work centre cost and shares of work centre groups over years.

Work Centre Detail

In a more detailed view you can analyze and visualize Quantity in basic unit of measure (usually a time measure - hour or minute), Capacity as planned in NAV; if you have planned poorly than Capacity % can be more than 100% when work in more shift is deployed and Average cost per hour can be changed over time due to increasing energy cost, depreciation and poor usage. At this level of analysis you can track and compare. Average cost by any combination of time, Work Centre, Work Centre Group as well as also by the output (produced items).

Production Order - Cost Details

A lowest level of any manufacturing data is Production order. Most basic informations are Cost; of consumed items or work centres, Percentage; a percentage of total cost, very useful when comparing production over time or comparing different input or output, Quantity, Avg Consumption; Costmis a average cost of consumed item or work centre and Avg Output Cost; is an average cost of produced item.

Production Order - Realized vs. Expected

You can compare expected vs. realized quantities and values at any level. This level shown here is one production order. When you applied to date period (year, month, etc) you can analyze how good are yours Production Bill of Materials and predefined Routings.
Where Consumed

It can be a great help to know where an item or work centre has been consumed.

What Consumed

As a standard feature you can analyze what has been consumed for production of an item or item category. You can track quantities, cost or percentages of cost at any level for all consumed items and work centres.

Purchase Orders Module

Powerful analysis of orders and blanket orders is mandatory for efficient supply chain management. It is crucial to track the status of purchased and supplied items and whether they are late. To add to Microsoft Dynamics NAV functionality,

Every day snapshots in the data warehouse make purchase orders analysis very fast and accurate.
Job and Resources Module

Powerful analysis of jobs and resources, which can give answers about budgets, costs and profits on different open jobs in just one report. Job and resources module provides the ability to compare budgets, costs and profit at the same time in one report for a specific project.

Monitor time consumption by multiple dimensions

**Utilisation by Department**

You can view the shares of hour market per specific department (BI, CRM and ERP).

**Hour Consumptions by Project Role**

You can view hour consumptions per project role.

**Hour Consumptions by Employee**

You can view hour consumptions per employee.