

BI4DYNAMICS

STANDARDIZED BI SOLUTIONS FOR MICROSOFT DYNAMICS

Years of undelivered  
promises

White Paper

2010

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# First page

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**Something is wrong and market is confused. Everyone is talking about BI since Microsoft introduced OLAP tools with MS SQL Server 7 in 1999. But all these years are years of permanent potential and undelivered promises.**

**A good front-end tool cannot replace the weaknesses of a bad back-end solution.**

## Years of undelivered promises

All small and midsize businesses **desperately need a better insight into their business** and would benefit a lot from an affordable, easy to use BI solution that would not require IT resources.

BI (Business Intelligence) is still a **synonym for expensive and complex solutions that require IT skilled users**. The market is ruled by front-end vendors and BI service providers who have are focused on enterprise segment, not SMB.

**Microsoft technologies** (SQL Server, Excel, Share Point) are already present in SMB and can easily be extended to BI usage (back-end and front-end). Microsoft has no appealing solution for structural (back-end) part of BI. **Microsoft Dynamics partners are under pressure** from their customers and are trying to solve this. As some are selling reporting tools others are building up BI teams that develop back-end solutions (the structural part) in house. Most of Dynamics partners do nothing; they are waiting to jump on the right wagon. But – which one?

**SMB segment can not be served the same way as the enterprise segment** (where BI needs are well served) because of the costs and lack of internal resources.

There is **not enough business knowledge** in existing reporting tools that are quite popular with SMB. Companies will not be satisfied with fancy charts for long.

## In this white paper

You will get an overview of

- ✓ How customer resources influence their decisions and implementation
- ✓ Who are the BI partners and how are they serving SMB
- ✓ How Microsoft has played a very positive role in development of whole market but also caused some frustration

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Most used BI solutions in corporations are made of two parts:

**Back-end or structural part** is a part of database where ERP data is structured in a “BI” way for new features and better performance. **Front-end or viewing part** is a separate solution used for viewing back-end data.

Excel is a basic front-end product and there are many more on the market.

# Customers and their IT resources

**“We think that the biggest differential factor regarding BI in small and midsize businesses is IT personnel. This makes a big difference in how companies behave in selecting, implementing and using a BI solution”.**

## SMB companies

Small and midsize businesses (SMB) represent the most dynamic segment of companies. In this white paper we address business intelligence in Microsoft Dynamics end-user companies, but it can probably be extended to all SMB.

### Microsoft definition

Microsoft definition of this segment is:

1. Small business: 1-49 employees using 1-24 PCs
2. Mid-sized business: 50-1000 employees using 25 -500 PCs  
(in smaller countries 50-500 employees using 25-250 PCs)

### Key differentiator about BI

We think that the biggest differential factor regarding BI in SMB is IT personnel; therefore we have segmented SMB companies according to this.

### Customer scenarios

Type of the company	CIO	IT personnel in-house
1. Companies without IT personnel	-	-
2. Companies with some IT personnel in-house but no CIO	-	✓
3. Companies that have CIO	✓	✓

**Small companies depend heavily on their ERP partner, who is usually a central provider for all services.**

**Choosing a reporting tool to BI solution may not be the best choice but this is a reality. Check and you will see that one BI add-on solution is on the list of most sold solution for many years.**

**A complete BI solution with installation and training in just two visits for an affordable fixed budget will guarantee »yes« from the customer.**

## Scenario 1: What if there are no IT personnel? Does this mean – no BI?

### Decision making process

Often, both companies (customer and IT vendor) are small. Person (owner or a department leader) who is in charge of IT decisions is usually not an advanced IT user. Companies are very price sensitive.

### A partner

A BI partner is an existing ERP partner. ERP partners don't have many resources as their offering is limited to system integration and some (usually one) business area: ERP, BI or CRM. They will unlikely be adding BI business to existing ERP practice as the two are too different.

### A project

For those ERP partners, who are under pressure of their customers for a better reporting, the easiest answer is to offer a reporting solution, not a BI solution, because:

- ERP partners and customers are already familiar with ERP reporting
- A small investment in new knowledge is required
- Such projects deliver immediate visible result

### How to better serve small companies?

The main role belongs to ERP partner. For a BI vendor it is very difficult, almost impossible, to get any attention for BI solutions directly from a customer. Different approach (not classical business model) is therefore needed to serve this segment. ERP partner will invest into new line of business only if it is positioned, marketed and implemented as an extension of existing ERP business.

Microsoft has a very strong position as an ERP partner's main technology and solution supplier. Microsoft's technology is covering well the front-end (viewing) part but is still weak on back-end (structural) part.

### Suggestion what to buy: a complete BI solution

A complete BI solution that includes back end part (data warehouse and OLAP cubes) and predefined Excel reports (a front-end part) would best serve these companies. In a few days after installation customer will be able to do all reports by himself and a partner will not get even one support call.

**These projects are risky and many times don't deliver what they promise. BI projects and budgets are initially small. Customers are pushing the scope to grow while keeping the budget unchanged.**

**In the world of front-end solutions there is a fierce competition. More money will still bring you more value.**

## Scenario 2: What if there is no CIO? Who is in charge?

### Decision making process

Companies don't view a solution to their reporting problem as a source of competitive advantage and as a result, don't explore their options much. They rarely do market research before deciding to invest. Decision makers rely from recommendations of their colleagues and partners.

### Resources

Formal project management is weak. Customer resources are a mix of IT personnel and business users. Business users are not always available and IT personnel itself cannot make business decisions.

### A partner

Companies sometimes choose their existing ERP partner, sometimes a new BI partner for their project. There are great differences in competency among partners.

### A project

Business users that are involved in a BI project may insist on changes that were not initially agreed upon. Implemented solution can vary: customer may buy a reporting tool, in-memory database solution or a real BI solution with OLAP cubes based on data warehouse.

### How to better serve these companies?

There is no branded mainstream solution that would be easy to recommend. As a customer, listen to those that are willing to speak about their mistakes. Make a plan and stick to the plan. You can do more in more phases. As an ERP partner – learn. Examine the market and propose a solution according to customers' needs, budget, and value.

### Suggestion what to buy: a BI solution that can be customized

Covering all business areas, offering predefined reports and fast implementation is not enough. Changes must be easy to do too. A BI solution should include some web interface and manage rights on at least basic level. Look for a right balanced project, don't overdeliver in some area and fail in other.

**CIOs say year over year:  
“BI is our top priority.  
Give me the budget and I  
will deliver a BI project.”**

**Real BI solution can be  
used as a platform for  
planning or consolidation  
solutions that are outside  
ERP.**

## Scenario 3: BI is not a top CIO priority, the budget is!

### Decision making process

For most CIOs BI is just another IT project. Their main concern is usually the budget. CIOs will not fight for it like they do for infrastructural budget as they expect that an initiative (and budget) should come from business users.

### Resources

CIOs have an important role. Most will make a market research before choosing a BI partner. CIO, who is later also a project leader, is responsible for business specifications (list of user demands) and technical performance (HW, SW). As they are aware that things can go wrong a proof of concept or a pilot project is a must.

### A partner

BI projects bring less organizational changes than ERP projects and are less risky in organizational sense. Projects tend to depend more on BI partner, which is usually not their existing ERP partner. If a BI partner is experienced, company can expect a good but expensive project.

### A project

Customers decide to invest into a BI solution, not a reporting tool. There are a lot of services on top of license. Who and how can access the solution is important from day one and details about centralized reporting system are well planned. BI projects are custom-made projects, time consuming and expensive.

### How to better serve these companies?

As companies know what they want and how to get there this leaves vendors to develop better and more affordable products. Offering good financing for a project can be an advantage.

### Suggestion what to buy: a platform

To cover demands of an enterprise with the budget of midmarket company can be a puzzle. In memory database solution are not robust enough to be put as a bare bone of corporate BI. Company should aim for a reliable BI solution (back-end part) that brings a tremendous business value as a basis and a BI platform for further development. The “dirty work” is done, the price is attractive and project can be delivered in predictable time schedule. If a BI solution includes data warehouse then adding a new data source will be easy and customer should not be worried about performance while still using many calculated measures.

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# Microsoft and its technology

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**»BI FOR EVERYONE«**

**This slogan has already made many users frustrated. "If something is for everyone, and it comes from Microsoft, than it is for me too." Sadly, it is not true.**

**Business value of this otherwise free OLAP cubes is basic.**

## Technology vendor

### Great technology that is available and affordable

Microsoft is the biggest BI vendor because it sells technology, not solutions. SQL server, SharePoint and Excel are Microsoft's BI products. The broad usage, availability, interoperability, affordability make these products the most attractive BI platform. But, sadly, the back-end part of BI has been forgotten or at least underserved.

### Power Pivot: great product for very skilled users

It is not easy for an average user to connect to one of 1000 Microsoft Dynamics AX/NAV tables with Excel 2010 and create some basic data structure. Most of users don't know the ERP structure and are even not familiar with PivotTable feature. Excel 2010 Power Pivot is an excellent product for an advanced Excel user that knows the underlying ERP structures.

### BI for everyone

This slogan has already made many users frustrated. "If something is for everyone, and it comes from Microsoft, than it is for me too." Sadly, it is not true. Microsoft is making technologies very accessible but Microsoft Dynamics user can not benefit from it directly.

## BI inside Microsoft Dynamics

Remark: this is a short overview of BI concept inside Microsoft Dynamics AX/NAV, where we are focused on the back-end or structural part.

### Great idea

The idea about BI offering inside Microsoft Dynamics AX/NAV is that users will use a tool to create or extend predefined OLAP cubes. That is unlikely to happen in practice today as most users are new to BI concepts and would prefer a business ready solution. There is quite some work to fine tune the solution.

### The value

The solution comes as a free part of ERP. User's first impression is that there are a lot of possibilities, but later find out that the real business value is basic.

**Product documentation explains how a measure is calculated. If a measure is not working right, then this is a bug. If a measure is not working as expected, than this is a business issue.**

### What is the impact?

It is good that cubes are available for more reasons:

- ✓ Selling Microsoft Dynamics ERP is easier as it includes BI. This is good for Microsoft.
- ✓ Using free cubes that come as a part of ERP solution can help customers in basic analysis. This is good for the customer.
- ✓ BI vendors have a reference to compare their back-end products to Microsoft's. This is good for BI vendors.

### Can data be misleading?

Please follow the next example:

A customer owes you 10.000€ from 1. January and settles the bill on 31<sup>st</sup> December, OLAP cubes measure "Average receivable balance" for this year will show you the value of 5.000€. This is wrong. The correct information is 9.972,6€ ( $364 * 1.000€ + 1 * 0€ / 365$ ).

Business users would oppose such calculation. But formally, in documentation every measure is explained and it is clearly written that Average balance is calculated as  $(\text{Beginning Balance} + \text{Ending Balance}) / 2$ . So formally this is correct.

### Do we need a better architecture?

Why would anyone make such a definition? Calculations that are done within an OLAP cube put a load on server. The correct way of calculating measure is a more detailed calculation. Averages must be calculated on a daily basis. But this would be very slow. Fixing this would demand a new concept and architecture of new BI solution.

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# The right approach for SMB

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**Customers don't care about technology as long as it is the mainstream.**

**MIS (management information system) concept is dead. It has been an excuse for expensive projects that were aimed to serve the management.**

## Customer demands and expectations

### Better reporting

Basic need as customers define it is better reporting. Customers rarely differentiate between a reporting tool and a BI solution, between a dynamics ad-hoc analysis and static reporting. The need for static reporting grows with company size.

### Business expectations

Customers in this segment have common business expectations:

- Affordable and fixed priced project
- Fast implementation and immediate results

### Microsoft is still "in"

Customers and their ERP partners like the idea of working with Microsoft and therefore:

- A BI solution should be based on Microsoft's technology
- Customer prefer to continue working with their familiar front end tool – Excel, but wait to explore the potential of Share Point

## BI for everyone (in corporation)

### Custom projects are out

Custom projects are too expensive and very few companies in this segment can afford them. But even if they could, why would they be paying more if standardized solutions are available?

### Welcome to standardization of BI solutions

Today, companies need to share information and democratize decision making process. The right solutions:

- ✓ must be business oriented
- ✓ should cover all business areas
- ✓ should be tested for trial period
- ✓ should be implemented with no IT personnel