



## How Business Intelligence Impacts Enterprise, Mid-Market, and Small US Companies

*The value of understanding your business in detail is impossible to calculate, except to say that it is priceless...*

### What does Business Intelligence mean?

Business Intelligence (BI) in its broadest sense is company data gathered and presented in ways that provide a strategic approach to better business decision-making. Better decision-making is based on analyzing evidence: facts, not feelings.

### Why do we need it?

Steering a company in the strategic direction of defined goals is different from the company essentially running itself based on history. Steering by way of anecdotal information and gut instinct often leads business down expensive and time-consuming avenues. Further, there may be unanticipated direct as well as opportunity costs associated with managers and even employees focusing on tasks and strategies that are out of step with direct goals and larger company strategies.

### Is automated Business Intelligence right for my company's size?

For companies, whether enterprise, mid-market or small business, knowledge is powerful, and it can be used to change and improve outcomes. There are custom solutions in every budget category and they can be elaborate or simple depending on company size and need.

### What are the tasks Business Intelligence can be used for?

#### Sales Improvement

- Customer Behavior Analysis

- Sales Trends, Budgets, Targets
- Forecasting
- Pricing, Margins Revenues
- Customer Relationship Management
  - Buying Patterns, Orders, Volumes, Deliveries. Least Profitable Customers, Most Profitable Customers
- Marketing Campaign Performance
  - Web and E-commerce Analytics

### **Production and Operational Improvement**

- Process Optimization
  - Supply Chain and Delivery Analysis
  - Production Analysis, Work Orders, Machines, Capacity, Utilization, Wastage, Processes, Procedures, Operational Steps
  - Inventory Analysis, Stock Position, Stock History, Reorder Quantities, Resetting Safety Stock Levels
  - Bottleneck Identification
- Performance Optimization
  - Personnel
    - Hiring
    - Performance Measurement
    - Counseling
    - Termination

### **Financial Improvement**

- Planning and Forecasting, Drill-downs, Trends, Ratios
- Budgeting
- Risk Analysis
- Strategic Value Driver Analysis

### **What kind of impact can we expect?**

Business Intelligence answers the question of exactly what happened: yesterday, last week, last month, last quarter, and last year. The impact will be felt in understanding what is sold, to whom, where, and by whom, and for how much. This allows resources to be channeled into the most profitable channels. Inventory analysis can reduce stock and free-up working capital.

The possibilities depend on the individual company's needs. However, the ultimate goal, increased profitability, no matter what the company size, can be proactively managed rather than just reported. Realistic goals and targets can be set with access to hard data generated over time. Decision forks in the road become obvious with verifiable data and higher risk in one area can be offset by lower risk in another.

***Note: Knowledge without a commitment to action is useless.***

Business Intelligence is best utilized by companies and executives who are passionate about learning in general, and improvement, specifically. There must be committed leadership buy-in to the principle of

intelligent decision making, rather than just “going with gut instinct”. There must be a willingness to share information and learn from it.

Before investing in BI, there are sometimes difficult questions that must be answered by management. For example, if hard data became available that showed a significant downturn in the sales and market of a flagship product in favor of another product in the line, would management willingly convert the level of investment in resources and personnel in the traditional product to the other product to reflect the market opportunity, despite the company tradition and emotional attachment to the original product? This could require a reworking of the entire business’ focus.

Organization wide, this is the level of information BI provides, however, it may require a complete cultural transformation to capitalize on the opportunity presented. Only you can determine if this describes the management climate in your company and management has to be determined and committed to “knowing”. The impact will depend on the commitment of company personnel to steer in the direction the data provides.

***“Business Intelligence impact can be measured by the difference between steering the ship and heading into the wind without a rudder.”***

Mark Turkel, CEO and Senior Software Architect,

Palm Beach Software Design

## **What is a “Business Intelligence Dashboard”?**

A business intelligence dashboard is a custom screen data visualization that displays the current status of data metrics and key performance indicators (KPIs) for an enterprise. Dashboards consolidate and arrange numbers, metrics and sometimes performance scorecards on a single screen. “Scorecards,” are smaller narrower versions which display progress over time and are often developed for individual departments or business units. They can be aggregated onto upper management dashboards, providing an overall look at performance.

Often, these dashboards are run every night or at week, month or quarter end, and can be sent to executives as .PDF files at the start of every business day. They specialize in providing summary data, like sales revenues YTD or sales revenues against a budget. Most dashboards provide important “at-a-glance” information, and the better ones will allow the user to drill-down to see the supportive data easily, to understand how the BI was gathered and processed.

## **Why do we need custom Business Intelligence reporting?**

All kinds of data, from every system you employ, are required for robust Business Intelligence. Getting the information you need is often difficult. It is spread across different databases, maintained by different systems, spreadsheets, and even physical locations. Aggregating data from different sources, with different structures and formats, usually proves to be a “programmer’s job” rather than one for IT personnel.

Often, IT people are asked to provide this type of information, yet they are busy keeping your systems running and supporting users; they may have the technical skill, but not the business experience to ask the right questions to extract and manipulate the data in a useable way. Bottlenecks may form around the personnel

who are able to bridge the gap using non-programming tools such as Excel, for example, and they spend much more time using manual processes than using programming methods to provide the same information in an automated and recurring manner. BI is time-sensitive material, and without automation real-time information to base decisions upon cannot often be achieved.

For example, calculating true gross margins may involve sales rebates or factoring in delivery costs, which makes it a manual process, since all of your systems don't share data or even communicate with one another, necessarily. Customized and automated reporting solves these problems and doesn't require that your managers become IT experts or your IT department become sales managers. Automated reporting also removes an important factor, human error, and provides repetitive access to your information, that can be relied upon as "correct" each time.

Custom BI reporting allows you to determine who needs to see gross data, and when summary graphs or charts impart more impact in the decision-making process. Automatic reports can be sent to mobile devices in the field, where the information may do the most good immediately. Security can be managed easily giving filtered information access only to those authorized.

Finally, most self-implemented BI projects with self-serve reporting fail. (Up to 80% according to Gartner.) In other words, using a general tool reporting against one or more data sources fails when assigned to a non-programmer or even to a (junior-level) programmer without extensive business background and understanding. Unless you have the excess IT resources with analytical and business experience, you need a software design and development firm with BI experience.

## What are the steps involved in creating a custom Business Intelligence solution?

- The types of information and questions that need to be answered must be identified.
- The data sources for your information may come from a mix of internal and external sources should be identified.
- The methodology to access each data source must be identified (raw data, API, etc.) and understood.
- Additional storage and equipment needs must be calculated, if any.
- The quality of the data must be addressed and managed: inconsistent coding, descriptions, duplicate data, and incompleteness. Note: Every business has inconsistent data; it is expected. Implementing BI will improve data quality over time.
- The timing and frequency of the data required must be identified.

## Sample Questions You May Want Answered

### Sales

- How is your sales channel performing – better or worse than last week, month or year? Customer, Product Code/SKU, Product Name, Date, Territory, County, Salesperson, Supplier, Product Group, Category, Unit, Color, etc.
- What is the average sale size? Is the trend going up or down?

- Are margins leveraged correctly?
- Are certain products usually bought together? How can this be leveraged?
- How long does it take to close the average sale? Are there characteristics in common for shorter sales cycles?
- Are there bottlenecks in the sales process?
- Are there identifiable trends for particular products?
- Is a certain kind of customer out-purchasing all the rest of the customer types?
- What percentage of sales personnel time is spent on new business?

### **Marketing**

- How do web metrics or social media impact your sales?
- What is the lead source most profitable to the company?
- How can leads be better managed?
- Who are the least profitable customers?

### **Customer Relations Management and Insight**

- What percentage of sales personnel time is spent on current customers?
- Are certain customers being neglected, while others require far more attention than their impact on the bottom line warrants?
- What percentage of current customers have/have not been contacted and offered other products for sale?

### **Products**

- What is the most profitable product or service we sell?
- What is the least profitable product or service?
- What is the average delivery time from sale to product in hand?

### **Human Resources**

- Can top performers be identified and rewarded?
- Is one employee or department performing far above or below the average?
- Is there a drop in productivity based on the day of the week, or time of the year?
- Can information be channeled to the employees or channels as motivators for improved performance?
- How much time is being spent on the Internet and what is being accessed or downloaded?

### **Financial Planning**

- What is gross revenue? Costs? Payment days?
- How many customers pay on time? How many pay late?
- How are cash flow requirements related to seasonal purchasing patterns?

These are just some general questions to get you thinking about the information your company needs in order to understand the strategic options available. Business Intelligence can turn both management and employees into data-driven decision makers, empowering them to make relevant choices that directly and immediately impact the bottom line, no matter what the company size.

## **About Palm Beach Software Design**

Palm Beach Software Design is comprised of a small, tight team of software and business professionals dedicated to growing businesses up to \$75M by helping them to improve their potential by making operations more efficient, increasing sales and public impact, and modernizing for today's business climate using technology and software as a basis. We are process-driven, with high standards of excellence, and a dedicated staff. We have been in business for 30 years, and although we are a Florida-based company, we serve clients throughout North America. Please contact us at 561-572-0233 and visit us on the web at [www.palmbeachsoftware.com](http://www.palmbeachsoftware.com) to learn more about how Palm Beach Software Design, Inc. can help your business get that competitive advantage in business.