An Oracle Strategy Brief
April 2011

Building the Case for Business Intelligence in the Insurance Industry
Executive Overview

To manage through volatile times in a highly competitive market, insurance companies need a single view of the enterprise. That view must be flexible enough to connect with multiple policy administration and claims systems, extract data from those systems, and transform it into meaningful information. Operational, regulatory, and financial data must be completely transparent as business requirements change.

Business intelligence (BI) can deliver the information that managers need to make critical decisions, and many are hungry for the value that added insight would deliver; yet they are cautious about projects that could take years to implement and returns that are difficult to predict.

One way to alleviate these concerns and build a strong business case for BI is to use both quantitative and qualitative metrics to evaluate the total potential return to the business. For most companies, the return generated by a BI implementation extends well beyond traditional cost-savings analysis to encompass far-reaching benefits, such as:

- Fewer wrong (and costly) decisions made based on insufficient data
- Knowing which products to bring to market
- Knowing which policies to stop writing
- Understanding renewal rates

By exploring these possibilities in the context of their own organizations, insurance carriers can gain an understanding of the big picture and greatly increase their chances of long-term success. This paper examines the challenges associated with measuring the return on business intelligence investments, recommends different types of ROI drivers with sample measurements, and concludes with guidance for building a business case.
Before and After Business Intelligence

In recent years, unprecedented market pressures, increased regulation and mobile technologies have caused turmoil in the insurance industry. New market leaders are able to outpace competitors in delivering new products, expand and optimize distribution channels and ensure channel compliance. Adaptability is the key to success.

Business intelligence can help companies meet this new imperative by making the business more predictable. Without the right solution in place, insurance carriers lack the data required to support their most important directives. They resort to a trial and error approach, which increases the time it takes to move through the cycle of results, analysis, and course correction.

By adding business intelligence to the mix, managers can make decisions based on facts, instead of guesswork. They can make smart changes faster and at a lower total cost to the business.

Challenges of Measuring ROI for Business Intelligence

Before proceeding, IT and business managers need to build a strong case for the technology. Unfortunately, a number of challenges stand in the way. Figure 1 shows the most common reasons why BI projects fall short, according to a Novarica survey.

![Average Ranking of Impediments to Creating Value with Business Intelligence](image)

Figure 1: Results from a Novarica industry survey demonstrating why BI projects often fall short. (Source: “Business Intelligence in Insurance: State of Play and Expectations for the Future,” Novarica, 2008.)
These findings suggest that many businesses aren’t prepared to make necessary changes based on what they learn from a business intelligence initiative. Follow-through is critical. Once you have the insight in hand, you need to act on it. That means getting buy-in at all levels, changing business processes and employee behavior, and analyzing the results over time.

Fortunately, if you know where the value of BI is likely to appear, you can set up the initiative for success from the start.

**Find the Hidden Sources of ROI**

When measuring ROI for business intelligence, many people default to standard financial metrics. They weigh revenue enhancements, cost savings, and cost avoidance against hard dollar costs such as license fees, server costs, ongoing maintenance, internal labor, and any external services.

Along these lines, managers might ask questions such as:

- How long will it take to get the BI system into production?
- How much money will I save by going with a pre-built model versus building one internally?
- Will I be able to maintain the new solution with fewer resources?
- How much will it cost me to customize the models that are in the market today?
- What does one solution save me versus another?
- What is the cost of developing everything in house?
- How much maintenance cost will I save over my current solution?

This is a fine place to start, but quantitative measurements will fluctuate wildly depending on the project scope, system design, management commitment throughout the project and the organization’s ability to handle change. Moreover, these numbers alone cannot tell the whole story.

To form a complete picture, it’s important to factor in the larger business benefits. For example, what is the value of higher customer satisfaction, better decision making, or a single version of the truth? When companies implement business intelligence properly, they benefit from the empirical analysis and increased accountability that comes from better visibility.

So what exactly should an insurance enterprise measure to calculate the results that business intelligence can deliver?
Assessing the Value of Better Decision Making

To be meaningful, ROI measurements must reflect overall corporate strategy objectives. Try to assess the value of better decision making for your organization. It might lead to lower costs, improved market share, or increased revenue. Customer satisfaction often improves when companies have better insight into customer needs – and with increased satisfaction comes higher retention rates, lower churn and more revenue. Similarly, internal communication is enhanced when management has the data to back up decisions, rather than simply implementing new processes without explanation – leading to increased employee satisfaction, lower turnover and reduced hiring costs. Consider these and similar factors in any ROI calculation, and you’ll be in a good position to know the end result.

Figure 2: Reported benefits from real-world BI implementations, and the percentage of companies that realized those benefits. (Source: “Business Intelligence Success, Lessons Learned,” Process ERP Partners, March 2009.)

In a 2009 survey, the majority of respondents who realized benefits from a BI initiative reported that they had experienced faster, more accurate reporting, improved decision making, and improved customer service (see Figure 2). When assessing the value of business intelligence, it’s important for insurers to assign dollar figures to expected areas of improvement by asking:

- How much additional revenue does the company expect to drive through better decision-making?
- How much will better decision-making lower our costs?
- How much extra market share do we expect to gain?
- How much will an increase in customer and channel satisfaction contribute to our bottom line?
Building the Business Case

When setting out to build a compelling case for business intelligence, it’s important to address two types of metrics: performance metrics and process metrics. Familiar key performance indicators (KPIs) measure return on assets, return on equity, gross margin, and operating margin. By contrast, key process metrics use balanced scorecards to:

• Track the introduction of new products
• Monitor continuous improvement
• Show cross-functional root cause analysis
• Analyze forward-looking business data

Each department needs its own list of expected performance and process benefits, and the entire set must align with the corporate strategy. Some sample questions to ask include:

• How long does it take to create a custom report today?
• How many questions go unanswered due to the difficulty of getting information?
• What is the cost of not having quick access to information at every level of the organization?
• How fast can you go to market with a new product today?
• Where could you use better/faster/more information?
• Do you know if you are profitable at a policy level?
• How can you accelerate the go-to-market cycle?
• Do you know if you are profitable at a policy group level (e.g., male drivers, age 21, who drive Mazdas)?
• Can you save money within your claims workflow if you knew certain information?
• Would more accurate pricing information make you more competitive?
Three Business Intelligence Scenarios

To illustrate the potential impact of business intelligence initiatives in insurance carrier environments, we’ve modeled two real-world situations, showing a range of outcomes, from conservative to aggressive. The first example illustrates potential revenue growth:

<table>
<thead>
<tr>
<th>BENEFIT OPPORTUNITY</th>
<th>CONSERVATIVE</th>
<th>PRAGMATIC</th>
<th>AGGRESSIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue / Margin Opportunities</strong></td>
<td>--------------</td>
<td>-----------</td>
<td>------------</td>
</tr>
<tr>
<td>Increase cross-selling via web and call center channels</td>
<td>1% in NWP uplift</td>
<td>2% in NWP uplift</td>
<td>3% in NWP uplift</td>
</tr>
<tr>
<td>Improve customer acquisition and conversions with profiling and segmentation</td>
<td>0.5% in NWP uplift</td>
<td>1% in NWP uplift</td>
<td>1.5% in NWP uplift</td>
</tr>
<tr>
<td>Increase product changes through better analysis, hence increasing speed to market</td>
<td>Tweak 5% of total products Will affect product profitability by 10%</td>
<td>Tweak 10% of total products Will affect product profitability by 10%</td>
<td>Tweak 15% of total products Will affect product profitability by 10%</td>
</tr>
<tr>
<td>Improve policy and claims analysis to increase margins (underwriting leakage)</td>
<td>$80M</td>
<td>$100M</td>
<td>$120M</td>
</tr>
<tr>
<td><strong>Total Annual Steady-State Benefits</strong></td>
<td>X$</td>
<td>Y$</td>
<td>Z$</td>
</tr>
</tbody>
</table>

Figure 3: Chart of potential revenue/margin opportunities afforded by a BI implementation.
Scenario two shows potential cost savings:

<table>
<thead>
<tr>
<th>BENEFIT OPPORTUNITY</th>
<th>CONSERVATIVE</th>
<th>PRAGMATIC</th>
<th>AGGRESSIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reduce costs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decrease claims supplier costs</td>
<td>Reduce supplier costs by 1%</td>
<td>Reduce supplier costs by 2%</td>
<td>Reduce supplier costs by 3%</td>
</tr>
<tr>
<td>Reduce fraud through better policy and claims analysis (one-time reduction)</td>
<td>Reduce fraud by 10%</td>
<td>Reduce fraud by 15%</td>
<td>Reduce fraud by 20%</td>
</tr>
<tr>
<td>Reduce the cost of maintaining the existing data warehouse</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td><strong>Total Annual Steady-State Benefits</strong></td>
<td>$X</td>
<td>$Y</td>
<td>$Z</td>
</tr>
</tbody>
</table>

Figure 4: Chart of potential cost savings afforded by a BI implementation.
Finally, the third scenario models a potential improvement in the customer experience:

<table>
<thead>
<tr>
<th>BENEFIT OPPORTUNITY</th>
<th>CONSERVATIVE</th>
<th>PRAGMATIC</th>
<th>AGGRESSIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve Client Experience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduce customer churn (reduce loss sales)</td>
<td>Reduce churn costs by 2%</td>
<td>Reduce churn by 4%</td>
<td>Reduce churn by 6%</td>
</tr>
<tr>
<td>Improve customer satisfaction incrementally</td>
<td>Increase by 5%</td>
<td>Increase by 10%</td>
<td>Increase by 15%</td>
</tr>
</tbody>
</table>

**Total Annual Steady-State Benefits**

<table>
<thead>
<tr>
<th></th>
<th>$X</th>
<th>$Y</th>
<th>$Z</th>
</tr>
</thead>
</table>

*Figure 5: Chart of potential improvements in client experience afforded by a BI implementation.*

**Case Study: Desjardins General Insurance**

Based in the province of Quebec, Canadian insurer Desjardins General Insurance has experienced firsthand that the biggest drivers of ROI for business intelligence come not from cost savings, but from the growth that BI enables.

In business since 1944, Desjardins offers automobile and home insurance to individuals and businesses via Quebec’s largest network of agents. Through its subsidiaries, Desjardins General Insurance Group offers direct property and casualty insurance to the general public, to members of partner groups across Canada and to businesses in Quebec. It is also a player in the white label market. Products are distributed through P&C insurance agents in the Desjardins caisse network in Quebec, through several Client Care Centres, through Desjardins’ web sites and, in some cases, through smartphone technology.

Desjardins approached BI from a holistic viewpoint. Before spending any money on software, hardware or business requirements, Desjardins set up a team to:

- Establish a solid, organization-wide BI strategy
- Determine how the business and IT would work together in implementing the strategy
- Assign the appropriate roles/people to attack the project

Sonia Sevo, vice president of the BI Competency Center at Desjardins, says that “a cross-functional organization spanning the business and IT groups is a must-have within any company that is serious about business intelligence and providing the most value to its user base.”
The Desjardins project has gained buy-in at the highest levels of the organization and has received interest from all business and IT parties. Within the company, the BI initiative is seen as “the” project to work on because of its vision and cohesiveness, and because it is expected to deliver measurable business results over the next several years.

Conclusion

Rapid access to business intelligence is essential to compete and thrive in today’s insurance industry. Traditional ways of calculating ROI do not tell the whole story of the value that a business intelligence solution can bring to the enterprise. Managers must consider hard and soft metrics and understand that it takes time for the full benefits to accrue. Companies that consider a broader range of returns will have a more accurate picture of expected results and a strong business case to present to their stakeholders.

Ready to begin? Start by setting up a BI project that spans several business and IT groups. Establish shared goals, and identify the projected revenue enhancements and cost savings. Break the project up into manageable steps and tackle one at a time, always keeping the overall goal in mind. In the end, you’ll have pervasive business intelligence that enables better decision-making throughout the enterprise.

Jason McDonald is director of product strategy at Oracle Insurance, responsible for business intelligence and data warehousing applications. His portfolio includes Oracle Insurance Insight, an insurance-specific data warehousing solution. The adaptive data modeling approach of Oracle Insurance Insight 7.0 offers insurance companies a faster, easier way to get the intelligence they need to make better-informed business decisions.

About Oracle Insurance

Oracle believes that insurers should be able to leverage technology to help transform their business. Oracle Insurance provides adaptive, rules-driven systems that let insurance companies easily change business processes as their business needs change. These systems position insurers to become more adaptive themselves, ready to respond to dynamic market conditions and take advantage of new opportunities as they arise. Engineered to work together, Oracle’s solutions support the entire insurance lifecycle – from product development, to marketing and sales, to customer service and support, to management and compliance.

For more information on Oracle Insurance, please visit oracle.com/insurance, contact us by e-mail at insurance_ww@oracle.com or call 1.800.735.6620 to speak to an Oracle Insurance representative.