HOW TO MAXIMIZE BENEFITS FROM A NEW BI AND ANALYTICS TOOL

Selecting software based on proven insights from peers and analysts

Research note

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The volume of data worldwide continues to grow rapidly by 500 to 600 percent per year – and so does the amount of corporate data. Data is increasingly perceived as a valuable resource for sustaining and growing businesses – it is the glue that holds together efficient processes and yields insights about customers.

Leaders in data processing and digitalization achieve more benefits from BI than others. They are exerting immense pressure on competitors who fail to recognize the potential of data in time. Late adopters are increasingly forced to speed up their analytics ambitions to stay on par with competitors and new market entrants. The challenges along the road to becoming data-driven are manifold, but there is a lot to learn from others about exploiting the true potential of data through BI.

History teaches us that late adopters have decisive advantages over pioneers. They benefit from the experience of the latter and make the process of change smoother by avoiding their mistakes.

Therefore, it is vital to understand what sets leaders apart from laggards. Business intelligence (BI) represents the heart of every data-driven enterprise and is therefore the epicenter of transformation. The results of BARC’s “The BI Survey 19” presented here give an exclusive insight into the experiences of other companies that have implemented BI solutions and show you best practices for the selection of BI software. Growing the impact of an organization and making it more efficient are the ultimate goals of implementing a new BI tool. The degree of achievement of these goals is measured by BARC’s Business Benefit Index (BBI) gleaned from responses from “The BI Survey 19”.

Based on the results of BARC’s “The Future of Reporting 2020” survey, we highlight the trends that enable you to get the most out of your corporate data treasures. With this knowledge, you can begin your transformation and maximize your benefits from new software investments.

Robert Tischler & Alexander Rode, June 2020
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Evidence for action: BARC recommendations based on peer insights

Insights from successful BI projects around the globe help you to find relevant signals in data, provide information to decision-makers and create value for your company.

01 What can I learn from leading companies to profit most from a new BI solution?

To get the best possible benefit from a new BI solution, evaluate multiple tools in a competitive setting based on your unique requirements. Engage the vendors in competitive proofs of concept (PoC) to rate their ability to deliver on your needs.

02 Which criteria are the most important when selecting BI software?

Focus on the performance of the tool and the innovative power of the vendor. Far too often, the price of a tool plays much too big a role in the selection process, although numerous other criteria have a much greater influence on the success of a purchase.

03 What benefits can I expect from implementing a new BI solution?

Increasing the speed and accuracy of reporting, analysis and planning are the core benefits of modern BI solutions. On this basis, you can make better and faster decisions that improve your business in many ways. Cutting-edge technology helps you to automate mundane tasks to get more done with less effort.

04 Which analytics and BI trends should I be familiar with to get the most out of data?

Be aware of prevailing trends in the BI market and evaluate how machine learning and cloud deployment can help you to gain better insights in less time. Tools that are not only intuitive to use but actively guide users to reveal important insights deliver a competitive edge.
01 What can I learn from leading companies to profit most from a new BI solution?

Only competitive formal evaluations lead to the most suitable product - and to the greatest benefits

<table>
<thead>
<tr>
<th>Evaluation Method</th>
<th>Business Benefits Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competitively evaluated multiple products</td>
<td>6.2</td>
</tr>
<tr>
<td>Evaluated only the selected product</td>
<td>5.7</td>
</tr>
<tr>
<td>No formal evaluation</td>
<td>5.1</td>
</tr>
</tbody>
</table>

Formally and competitively evaluated products deliver better results for buyers. When looking at the business benefits achieved by companies that did not do this, the difference is quite clear and shows the value-add of a thorough investigation leading to the purchase of the most suitable tool.

“Thorough and in-depth vetting and testing create clear value-adds for buyers, such as more satisfied users and pervasive usage. Skip this step at your own risk.”

Selecting the right tool is crucial to reach the goals of analytics and BI projects and to lay the foundation to achieve substantial business benefits. However, many companies are eager to skip this step by favoring tools they have already deployed or by relying on good reviews and gut feeling. But as BARC’s Business Benefits Index (BBI) shows, they fail to maximize returns on their investment.

Failing to evaluate multiple products in a structured way reduces a company’s chance of purchasing the BI tool that is best suited to its needs. The striking advantage in terms of business benefits gained makes it obvious that a competitive evaluation is a must when selecting new tools.
01 What can I learn from leading companies to profit most from a new BI solution?

Analytics and BI leaders know that competitive evaluation is a must - laggards often skip this vital step

A comparison regarding the selection method between companies that benefited particularly strongly from the introduction of a new BI solution (leaders) and those whose success was only moderate (laggards) underlines this insight.

Since almost half of the laggards (48 percent) also evaluated multiple tools competitively, it becomes clear that applying the right criteria is another decisive success factor (see section 02: ‘Which criteria are the most important when selecting BI software?’).

BARC’s RECOMMENDATION

When searching for best-in-class software, evaluate all the leading tools on the market instead of focusing on vendors with existing ties to your company. Include future requirements and use cases in your decision, even if your current use for the tool is clear-cut. Evaluate three to six tools in competitive PoCs.

Competitive multi-product evaluations are the proven starting point for the most successful implementations.
02 Which criteria are the most important when selecting BI software?

You get what you pay for - a low price tag does not compensate for functional shortcomings

Analyzing the reasons to buy in relation to the benefits achieved reveals that the three factors that correlate most strongly with a high Business Benefit Index (BBI) are not considered by buyers as often as they should be. Therefore buyers should reconsider their priorities to get more for their money.

The innovative capacity of a vendor is the third most important decision-making factor in the selection of a BI tool, as it serves as an investment in the future of your company. Tools are often selected for a clear-cut set of use cases, but successful tools get used outside of their initial realms. If a company fails to select tools from innovative vendors, achieving success in new areas becomes more difficult. Section 04 – "Which analytics and BI trends should I be familiar with to get the most out of data?" – gives an overview of the innovations currently taking place in the analytics and BI market.
02 Which criteria are the most important when selecting BI software?

Look beyond current needs - innovative vendors help you stay on top of changing requirements

There are several other good reasons to focus on aspects such as software flexibility and ease of use for report recipients and report designers. Although these factors seem to be less important in terms of generating concrete benefits, they are becoming increasingly valuable for successful self-service analytics environments (see section 03: ‘What benefits can I expect from implementing a new BI solution?’).

The most overvalued buying reason is the price-performance ratio. Indeed, buyers without highly individual requirements can profit from the maturing market as multiple tools offer similar functionality suitable for common standard tasks. Buyers looking for software for smaller deployments or those with unusual requirements would be well-advised to focus on product-related criteria rather than on cost aspects to secure future benefits from analytics and BI.

BARC’S RECOMMENDATION

Reconsider your criteria by adapting the learnings derived from our survey. Think ahead, focus on functionality and openness instead of letting the price of a solution influence you too much.
03 What benefits can I expect from implementing a new BI solution?

Informing decisions with better and faster analyses is the primary goal of analytics and BI initiatives

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Weighted Business Benefit (BBI, n=2,477)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faster reporting, analysis or planning</td>
<td>8.1</td>
</tr>
<tr>
<td>More accurate reporting, analysis or planning</td>
<td>7.7</td>
</tr>
<tr>
<td>Better business decisions</td>
<td>6.9</td>
</tr>
<tr>
<td>Improved employee satisfaction</td>
<td>6.9</td>
</tr>
<tr>
<td>Improved data quality</td>
<td>6.6</td>
</tr>
<tr>
<td>Improved operational efficiency</td>
<td>6.5</td>
</tr>
<tr>
<td>Improved customer satisfaction</td>
<td>6.5</td>
</tr>
<tr>
<td>Increased competitive advantage</td>
<td>5.2</td>
</tr>
<tr>
<td>Reduced costs</td>
<td>4.1</td>
</tr>
<tr>
<td>Increased revenues</td>
<td>3.5</td>
</tr>
<tr>
<td>Saved headcount</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Weighted Business Benefits achieved Index (BBI, n=2,477)

Organizations investigate, select and deploy analytics and BI software to better understand markets, businesses or operations and to capitalize on their improved understanding. Growing the impact of an organization and making it more efficient are the ultimate goals of BI. BARC measures the degree of achievement of these goals through its Business Benefit Index (BBI).

“Automated user guidance speeds up and enhances data preparation, modeling, analysis and sharing. State-of-the-art analytics and BI tools get more out of less.”

Faster reporting, analysis or planning: Of all the benefits, respondents report the highest level of achievement for faster reporting, analysis or planning. This should not come as a surprise because reporting and analysis is at the core of most BI solutions. Automating content delivery provides data to decision-makers faster than manual reporting and offers greater interactivity for deeper analyses. The level of automated user guidance separates modern tools from legacy solutions. Modern BI tools facilitate better decision-making as they simplify, automate and speed up reporting and analysis processes substantially.
03 What benefits can I expect from implementing a new BI solution?

Most companies gain moderate or even high benefits in the top two categories

<table>
<thead>
<tr>
<th>Benefit</th>
<th>High (%)</th>
<th>Moderate (%)</th>
<th>Low (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faster reporting, analysis or planning</td>
<td>68%</td>
<td>25%</td>
<td>5%</td>
</tr>
<tr>
<td>More accurate reporting, analysis or planning</td>
<td>63%</td>
<td>31%</td>
<td>4%</td>
</tr>
<tr>
<td>Better business decisions</td>
<td>54%</td>
<td>37%</td>
<td>7%</td>
</tr>
</tbody>
</table>

BARC's RECOMMENDATION

Increasing speed and accuracy through BI are a means to an end. Leverage modern analytics and BI solutions to boost them so you can get the most out of your data and drive your business in the right direction.

User guidance powered by ML helps you to glean insights faster from more data by assisting users throughout the analytics process.

More accurate reporting, analysis or planning: Automated insights driven by machine learning (ML) are the next step in getting deeper insights from vast data sources. The accuracy of results to base decisions on is improved significantly by cutting out manual processes and human error.

Better business decisions: Without better business decisions, benefits such as faster and more accurate reporting, analysis and planning mean little. Better business decisions based on sound data and thorough analysis improve a company's performance in every aspect of its activities. Delivering more data to more users is the required foundation to make better decisions – and cutting-edge BI and analytics software is the best way to get there.
04 Which analytics and BI trends should I be familiar with to get the most out of data?

More benefits are earned from BI when emerging trends are used

<table>
<thead>
<tr>
<th>Technology Trend</th>
<th>In use</th>
<th>Planned</th>
</tr>
</thead>
<tbody>
<tr>
<td>BI system in the cloud</td>
<td>32%</td>
<td>32%</td>
</tr>
<tr>
<td>APIs and micro services to embed BI in 3rd-party solutions</td>
<td>18%</td>
<td>32%</td>
</tr>
<tr>
<td>New mobile front ends/mobile delivery of existing content</td>
<td>17%</td>
<td>53%</td>
</tr>
<tr>
<td>NLQ, BI bots, conversational interfaces or search-based BI</td>
<td>10%</td>
<td>26%</td>
</tr>
<tr>
<td>ML for automated pattern and outlier detection</td>
<td>10%</td>
<td>39%</td>
</tr>
<tr>
<td>ML for user guidance and assistance</td>
<td>8%</td>
<td>34%</td>
</tr>
<tr>
<td>NLG to automatically comment on reports and data stories</td>
<td>8%</td>
<td>27%</td>
</tr>
</tbody>
</table>

Making use of emerging trends distinguishes leaders from laggards. Cutting edge solutions have more active users and deliver a competitive advantage.

The goal of implementing new BI solutions is to maximize the performance, quality and accessibility of data to inform decision-making. Major trends shaping the future of BI software are focusing on increased usability and flexibility to democratize data usage. Content must be easy to understand and retrieve for everyone anywhere to get all data to all users. Modern BI tools guide content consumption and streamline content creation through intuitive interfaces to simplify use and shorten the time to insights. This allows more employees to analyze data for relevant patterns and trends to inform their decisions – the foundation of every data-driven company.
04 Which analytics and BI trends should I be familiar with to get the most out of data?

Faster insights through cutting edge technology for increased competitiveness

Modern technologies using machine learning are increasingly leveraged for this purpose. Improvements in many areas are powered by ML:

- **Natural language queries** (NLQ) deployed via chat bots and other dialogue interfaces offer new forms of consumption and interaction with BI content. They lower the entry barrier to analytics for all users.

- **Automated insights** based on ML enable business users to employ advanced and predictive analytics to discover hidden patterns and correlations in small and big data alike. This significantly increases the depth of their analyses leading to a higher level of insight.

- **Natural language generation** (NLG) helps users to understand patterns and statistical anomalies in data by delivering explanations in natural language. This makes it easier for consumers to grasp the essence of insights presented.

- **User guidance** powered by ML assists users when preparing data and creating analyses and dashboards. ML and heuristics suggest steps to prepare and model data as well as visualizing it in the most meaningful way.

- **Cloud deployments** have matured, and they are the first stop for most new solutions. The cloud can not only speed up implementation significantly. It also delivers new features to users faster and scales computing power to feed hungry ML algorithms.

The illustrated results of the “Future of Reporting Survey 2019” indicate that the aforementioned trends have so far only been implemented in relatively few companies. So, there is still a lot of potential for improvement in this area.

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**BARC’S RECOMMENDATION**

Better insights and quicker results are paramount in dynamic markets. Today, analytics and BI must deliver better insights in less time. Tools that are not only intuitive but actively guide users to reveal important insights deliver a competitive edge.
ABOUT ORACLE

The Oracle Cloud offers a complete suite of integrated applications for sales, service, marketing, human resources, finance, supply Chain and manufacturing, plus highly automated and secure generation 2 infrastructure featuring the Oracle Autonomous Database.

Oracle Analytics is a complete analytics solution (available with on-premises or cloud options) that empowers your entire organization to ask any question of any data to gain intelligent insights — even on mobile devices.

Comprehensive - Meets the breadth of all analytics needs for everyone in your organization. With built-in security and governance, you can easily share insights and collaborate with your colleagues. By leveraging the cloud, you can scale up or down to suit your needs.

Self-Service analytics - Do more faster. You no longer need help from IT to access, prepare and analyze all your data. You can do it yourself, which means quicker time to insights and greater agility for the business.

Augmented - Augmented analytics with embedded machine learning throughout the solution drives always on, intelligent insights. With predictive analytics, realize powerful forecasting to make better, more accurate decisions.

Oracle Analytics includes five core capabilities:

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• Augmented data preparation
• Built-in business scenario modeling
• Mobile analytics for proactive, personalized insights
• Enterprise grade, performance reporting

For more information about Oracle Analytics, please visit www.oracle.com/analytics.
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For over twenty years, BARC analysts have combined market, product and implementation expertise to advise companies and evaluate BI, Data Management, ECM, CRM and ERP products.

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BARC events provide a focused overview of leading software solutions, trendsetting developments and current requirements, as well as market developments in particular enterprise application categories.
Robert Tischler is managing director and senior analyst at the Business Application Research Center (BARC) Austria. His areas of specialty are analytics and business intelligence front ends and process-oriented BI applications. He supports companies in the software selection process, during the introductory phase and with reviews to optimize architecture and organization. Robert has many years of experience as a project manager of analytics and BI projects, and has hands-on expertise with many front-end BI tools, as well as in the back end. He also assists companies with designing, coaching and implementing reporting, analysis and planning solutions with a focus on self-service BI, data discovery, information design, financial planning & analysis and advanced planning.

Alexander Rode is an analyst for Data & Analytics and Data Scientist at the Business Application Research Center (BARC). He advises companies on use case identification for data analysis and on tool selection for advanced analytics. He conducts proofs of concept in the area of advanced analytics and gives data science coaching. Alexander Rode supports the preparation of BARC market studies and research articles. He lectures at conferences and conducts BARC and in-house seminars.
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<thead>
<tr>
<th>Country</th>
<th>Address</th>
<th>Phone Numbers</th>
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<tbody>
<tr>
<td>Germany</td>
<td>BARC GmbH Berliner Platz 7 D-97080 Würzburg</td>
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<td>+41 76 340 3516</td>
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<td>Rest of the World</td>
<td><a href="http://www.barc-research.com">www.barc-research.com</a></td>
<td>+44 1536 772 451</td>
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</tbody>
</table>