EMBEDDED BI & ANALYTICS BUYER'S GUIDE

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Embedded BI & Analytics Buyer's Guide

Every application has a user base that is responsible for making data driven decisions on a daily basis. That's why the demand for business intelligence inside those applications is increasing. Unfortunately, in the drive to provide better business intelligence in applications, key considerations that impact time to market, cost, and ongoing maintenance and enhancements are overlooked.

End users, meanwhile, continue to expect more from their applications. The demand for real-time analytics and self-service data discovery, and the consumerization of IT, are new challenges faced by software application providers. Too often buyers focus on feature function and emerging technologies like Big Data and overlook their core needs and priorities.

This buyer's guide is designed to help software companies define their core needs and effectively evaluate their options for delivering BI and analytics to their customers.

General Considerations

- Why are you doing this project now?
- What BI functionality does your application require?
- Is your data ready for business intelligence?

Technology

- How experienced is the BI vendor at providing embedded solutions?
- Can the solution seamlessly integrate with your application?
- Does the solution adopt your security model?

Cost & ROI

- What costs are associated with the integration?
- What impact will the licensing model have on ROI?
- What additional hardware or software does the solution require?
- Who will support the BI solution over the life cycle of your application?

General Considerations

Why are you doing this project now?

Writing down the key objectives is a key starting point to focus your evaluation and determine the clear drivers of ROI. Common reasons for adding BI functionality to an application include:

- Entering a new market or seeking competitive advantage
- Redirecting developer resources to work on core application
- Meeting demands of large clients or customers in general
- Migrating to the cloud or changing application architecture
- Improving organizational efficiency

Many organizations start an evaluation with a clear understanding of its objectives, only to drift from the core goals and deliverables during the evaluation process. The result is lost time or a deployed solution that fails to deliver against key goals.

Identify the project's critical stakeholders and decision makers. Who is this project really for? Obtaining alignment early with key stakeholders prevents an evaluation team from conducting a siloed process that does not meet everyone's needs. An executive sponsor and routine touchpoints to ensure key objectives are in alignment are essential to efficient evaluation.

What BI functionality does your application require?

When finalizing your list of functionality to evaluate here are key areas to consider.

Complete and Integrated Suite of Functionality

- Ad hoc reporting
- Dashboards with the ability to drill down and through
- Visualizations to aid in the exploration of complex data sets
- Pixel perfect forms or fixed layout reports
- Multi-language capabilities

While all these capabilities exist in different tools it is important to look at how they are integrated inside the platform you are considering. Many solutions have distinct development efforts required to leverage different components rather than delivering a truly integrated platform that is deployment ready.

Responsiveness

The proposed solution should provide a responsive, web-based application that supports use across multiple devices. You shouldn't be left supporting two different environments or dealing with desktop dependencies. These are issues common to many BI tools.

Self-service

Customers expect a self-service BI solution that enables their non-technical end users to create, customize and consume analytics in real-time without requiring the support of another user. Otherwise, they will be contacting your customer support staff regularly to create reports, drill downs and dashboards, cutting into the ROI for your application.

Real-time Data Access

The solution should provide real-time or near real-time data access directly from multiple databases without requiring ETL into a data warehouse.

Aliasing and Categorizing

To optimize the user experience and drive adoption, the reporting solution should display data with business-friendly labels recognizable to end users, rather than using esoteric database field names.

Is your data ready for business intelligence?

Data quality is one of the main determinants of success in an integration. Data sanitation by your DBA can make an evaluation easier and a POC more impactful. Optimizing databases at the outset will minimize the cost and time of working with vendors or consultants during implementation.

Data should be well-formed, organized and optimized to improve reporting speed. A best case would be to have database views that are reporting ready and pre-aggregated. This prevents performance problems that arise from creating a report from multiple tables.

Additional questions to ask each BI vendor

- **What are the key features of your solution?**
- **How do these features positively impact our organization?**
- **How do these features affect the users of our application?**
- **What percentage of your revenue comes from selling BI solutions that are embedded?**
- **Tell us about your experience working with software companies.**
- **Can non-technical end users create, customize and consume analytics?**
- **Will developers be required to support report creation?**
- **Do you provide resources to help ISVs market these new capabilities?**
- **What have you done with ISVs to help them generate ROI?**

Technology

How experienced is the BI vendor at providing embedded solutions?

Choose a BI vendor that has a track record of successful implementations working with organizations developing applications. When buying a BI solution or tool you are entering into a partnership with that organization. Do they have a customer success team that works with each client through implementation?

Are you in their target market? Many BI vendors focus on selling to enterprises and not ISVs, SaaS or other software companies. Their product roadmap reflects that focus. Ask about how they will focus future development efforts.

The vendor should supply references from companies of comparable size and in the same industry. If they primarily sell to enterprises and not just OEM partners their commitment and dependence on your success may not be as strong.

Can the solution seamlessly integrate with your application?

The BI solution should be seamless so that end users don't need to navigate away from your application for data discovery. Iframes are a popular approach but can provide a poor user experience and may require workarounds to securely pass information between pages. Ask the vendor what approach they commonly use and have them show you integration examples.

The solution should adopt your branding. Introducing a solution with distinct third party branding weakens your brand. If that BI software vendor also sells directly to your target market, it will further dilute your brand.

Does the solution adopt your security model?

Many BI solutions require an additional layer of security that increases the management effort, cost and risk. A solution that inherits your security solves this issue.

How granular can data access be controlled? ISVs need a BI platform that allows control of access at the row, column and individual cell level. This is necessary to assure your clients that the BI solution does not compromise compliance with financial, HIPAA and other laws and regulations.

Additional questions to ask each BI vendor

- What technology stack is your BI platform built on?
- Explain how your product roadmap shows a commitment to organizations developing applications.
- What makes your product easy to embed and minimizes my team's overall level of effort?
- Does your application integrate with mine at the code level?
- What data sources can connect to your platform out of the box?
- What effort is required to integrate other sources?
- Will I need unique hardware or 3rd party software to use your solution?
- Does your solution adopt my existing security model?
- What level of effort is involved in white labeling your product?
- What have you done with ISVs to help them generate ROI?

Cost & ROI

What costs are associated with the integration?

Third-Party Consultants: Management of consultants brought in to integrate, configure and deploy the solution increases the staffing footprint and the cost. The BI vendor's integration specialists should assist with the implementation to avoid these costs.

Time to Integrate: How long will it take to complete a typical integration? Ask about the timeline, resources required from your team and the allocation of hours. Revisit this conversation with vendors as your specific needs are defined. An embedded solution should only take days or weeks, not months, to go live.

Prebuilt pages and basic reports: If not provided by the BI vendor, expect your customers to make demands on your developers' time to build them from scratch, which was precisely what the BI solution was supposed to prevent.

Training and support: Ask what training and other resources are provided by the BI vendor to sell and support the new functionality in your application. Otherwise the burden of training users and supporting the solution falls back on your organization.

What impact will the licensing model have on ROI?

The licensing model your BI vendor offers will directly impact your ROI. Many solutions have a high-upfront fee and ongoing royalties, putting the cost ahead of revenue growth. Others have per-seat license fees and fees for production and non-production instances. This lowers margin and makes managing growth more complex. A more OEM friendly and affordable model is subscription-based licensing providing unlimited use.

Many BI tools and platforms are dependent on the licensing of additional software to provide the level of self-service or collaboration required. This adds to the cost and time of integration into the ISV's core application.

Be sure that any add-on tools required by the BI vendor allow multi-tenancy usage.

What additional hardware or software does the solution require?

Besides being a technical fit, the BI tool should not require additional servers or desktops. Hardware requirements should not prevent the BI solution from operating where your application is, whether in the cloud, on premise or hybrid.

Look for a scalable, well supported framework (such as Microsoft .NET) and languages such as C# to future proof the platform. Ask the vendor how it will work across platforms. Will it support proprietary and open source initiatives? Avoid solutions that use technologies that are unsupported or coming to end of life, like Silverlight or Flash. With .NET Core 5, the MS stack will be open source and work in multiple operating systems.

Who will support the BI solution over the life cycle of your application?

User demand, technological or regulatory requirements require all applications to evolve. As you roll out new features in your application, your developers should not need to become experts on maintaining your BI solution. Maintenance should be the responsibility of your BI vendor, the experts at BI and analytics.

The best way to future proof your BI and analytics solution is to keep it in the hands of the experts. A BI vendor that works with ISVs is preferable to an organization looking to shoehorn an enterprise level product into your application.

Additional questions to ask each BI vendor

- How long is the typical deployment timeline?
- Do you require or recommend I engage any third party consultants to integrate your solution?
- How many developers and other staff will I need to dedicate to integration?
- How have others monetized this functionality in their application?
- Describe your licensing model.
- Can we predefine costs in subsequent years?
- What is the release cycle of your solution?
- How many major and minor enhancements do you have a year?
- How will future releases work with custom code in our application?

Conclusion

Embedding a BI platform delivers benefits across the organization. It gets your IT professionals out of the report-writing business. It simplifies the code base that they need to support, and speeds the development cycle. It precludes more spending on developers or data scientists, yet expands your software's features. And it offers your application end users the opportunity to find value in their data and your application in new ways.

Other Resources

BI & Analytics in Applications: 4 Stages of Evolution – Where are you on the embedded BI maturity framework and what are your options moving forward?

Embedded BI: Build vs. Buy – When bringing new functionality to market every software company faces a decision – whether to build or buy? This report provides a framework for approaching this decision.

The ROI of Embedded BI – Buying and integrating a BI Platform can have a significant positive impact on you application but how do you calculate the value?

Monetizing Embedded BI – Delivering additional functionality is great but what are all the ways to monetize these new capabilities?

Izenda's embedded business intelligence improves user adoption and speeds application time to market. To learn how it can be integrated into your application, contact us to arrange a **demo** or start a **free trial**.