METRIC INSIGHTS

The ROI for a
Business Intelligence Portal

Generating a compelling return on investment analysis is a critical step in justifying a new Business Intelligence Portal initiative to senior management.

This white paper outlines a methodology with a set of drivers to help you with this process. A series of examples are presented for these drivers to assist in building a strong ROI business case for a new Business Intelligence Portal.

This white paper is intended to be used in conjunction with the Metric Insights ROI Calculator Excel workbook.

Sources of ROI

There are typically five distinct drivers for generating ROI for a BI Portal. The total return on investment is computed by aggregating the ROI calculation for each of the following components.

1. Business User Time Savings

ROI is generated through saving the valuable time business users typically spend searching for reports and analytics. Time savings are realized by:

- Organizing all relevant content in a portal with Favorites and Folder access to commonly used content

- Combining commonly used visualizations in a Portal Page, saving time spent flipping between dashboards

- Providing pre-filtering and bookmarks, saving time spent manually setting filter values

- Utilizing comprehensive search functionality so users can quickly find what they need

Sample Scenario

A large manufacturing organization has one thousand users who consume analytics. Business users consume analytics from multiple sources including: MicroStrategy, Excel, Tableau, and ERP system reporting. Users had dozens of reports and dashboards available to them and often faced the time-consuming task of blindly navigating through multiple reports in search of a reliable answer to a specific business question.

Organizing all certified content in a set of folders within a BI portal and providing personalized, pre-filtered reports via a Portal Page streamlined self-service analysis. The result was at least one hour per month saved for business users who would otherwise continue inefficiently searching through countless dashboards. If the average user salary is assumed to be $75,000 per year, this time savings translated to $450,000 per year.

1,000 users x $37.50/hour x 12 hours/year

Number of Business Uses Impacted	1000
Average Annual Loaded Salary	$75,000
Hourly Cost per Business User	$37.50
Hours Saved per Month per Business User	1
Annual Business User Savings	$450,000

2. Analyst Time Saving

An effective BI Portal simplifies the process of finding and publishing commonly used reports and datasets for self-service analysis by business users. These capabilities significantly increase the ability for business users to self-service their analytics needs. As a result, substantial ROI is achieved by relieving BI Analysts of the unnecessary reporting requests from business users, allowing them to apply this saved time towards more important initiatives.

Sample Scenario

A bank has 30 BI Analysts who support the analytics needs of the business. Analysts were spending, on average, 75% of their time developing new reporting and performing in-depth analysis to answer complex business questions. An average of 25% of BI Analyst time was consumed in responding to routine user requests for reporting that was already available.

Analytics were organized into a BI Portal so that each business user has easy access to the certified content for their role, self-service levels were increased, and the time spent by the BI Analyst servicing routine reporting requests was reduced by at least 50%. If the average BI Analyst's salary is assumed to be $100,000 per year, the BI Analyst time savings equates to an annual savings of $375,000.

30 Analysts x 25% of time spent on routine requests x 50% reduction due to Portal

Number of Business Intelligence Analysts	30
Average annual loaded salary	$100,000
% Analysts time spent responding to user queries	25%
% Analysts requests that can be moved to self service	50%
Analyst Time Savings with BI Portal	$375,000

3. Alerting Efficiencies

The alerting capabilities of a BI Portal enable users to act immediately when data anomalies or exception conditions occur. The ability to focus on the impacted area of the business and take prompt action creates significant ROI opportunities in terms of cost savings, improved customer retention, and revenue growth.

Sample Scenario

An enterprise software company has a large account sales team selling over $50M in software licenses annually. The sales process is complex and contains multiple stages in their CRM, requiring coordination between members of the sales, product, and engineering teams. Sales management works closely with sales representatives, but sometimes discovered problems in the sales process too late, which resulted in lost sales opportunities.

By using the alerting capabilities of the BI Portal, sales management are now immediately alerted of any critical changes in the sales pipeline and also receive daily notifications of any deals that appear to be stuck in the sales funnel. This enables management to more effectively coach sales reps and to keep their teams focused on the deals requiring immediate action. Leveraging proactive alerting, sales management has been able to save, on average, 10 additional deals per year, which would have otherwise been lost. At an average deal size of $75,000, this represents an annual ROI of $750,000.

Average deal size	$75,000
Number of deals saved	10
Value of deals saved	**$750,000**

4. KPI and Reporting Visibility

Existing KPIs and reports are often underutilized simply because users are very busy and the information they require is not readily accessible. As a result, many decisions are not data-driven and generate inefficiencies and increased costs. By pushing KPIs and critical reporting directly to users in a customized digest and making all key metrics easily accessible via both the web portal and a mobile app, users leverage analytics to make better decisions, resulting in significant ROI.

Sample Scenario

In a hospital, many team members collaborate to provide the best care possible to patients while effectively managing costs. Various factors such as a rise in re-admit rates, an increase in claims denial rates, or an increase in average cost per discharge can drive up overall costs and adversely affect operating margins. It is vital that hospital management closely track these critical metrics, however doing so was challenging since these KPIs are distributed across various dashboards and reports.

By combining all critical KPIs in a single Portal Page within the BI Portal, hospital executives, as well as department heads, can now closely monitor their metrics on their mobile devices and address any problem before it becomes a large cost overrun. ROI can be calculated by estimating the possible cost savings enabled through closer tracking of each key metric. For example, by tracking claim denial rates by reason and acting promptly to improve documentation in the claim filing process, denials were reduced by 5% which resulted in an additional $650,000 per year in approved fees for the hospital.

Improvement in denials rate	5%
Saved approved fees	**$650,000**

5. Improved License Management

A BI Portal collects usage analytics to assess an organization's utilization of its BI tool licenses. Significant savings are achieved by identifying areas where BI tool spend is excessive.

i. Reduce the Licenses for Inactive Users

It is common for 25%-50% of allocated BI tool licenses to go unused. Often, license pools are allocated to all members of a business unit and only a fraction of these users actually consume analytics. By deallocating licenses from inactive users, the cost of BI tool licenses is dramatically reduced.
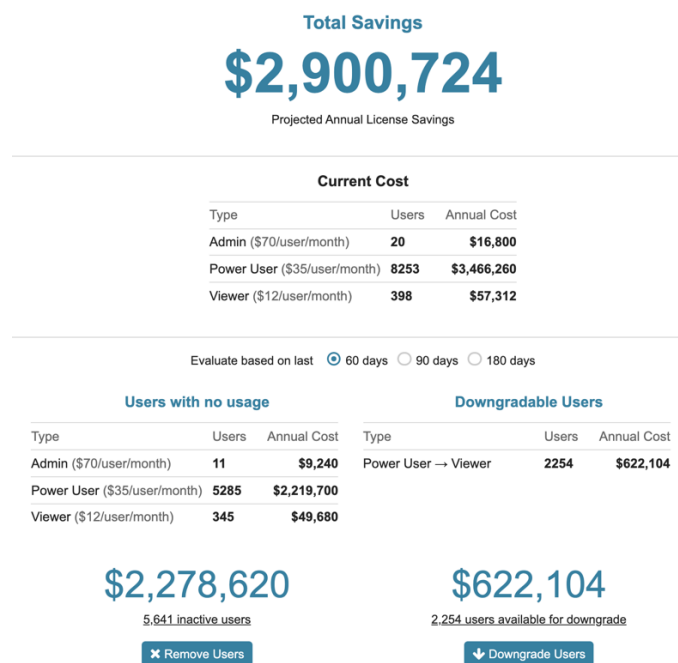
ii. Ensure Users have the Appropriate License Type

BI tool vendors provide different types of licenses for content creators vs content consumers. Content creator licenses are typically much more expensive than those required for content consumption. Often, only a fraction of the users granted content creator licenses actively build reports. Significant savings are realized by ensuring each user has the appropriate license type.

iii. Delivering Bursts to Infrequent Users

There is often a large pool of users in every organization that almost never utilize their BI tool licenses. These users may view a dashboard periodically but are unlikely to perform any ad-hoc analysis. Bursting dashboard images, often pre-filtered for each user, can eliminate the need for these licenses while increasing user engagement with the information by providing a better experience.

Metric Insights' license analysis tool identifies potential savings from each of the above sources and provides a cumulative expected savings ROI that can be achieved.

Total Savings

$2,900,724

Projected Annual License Savings

Current Cost

Type	Users	Annual Cost
Admin ($70/user/month)	20	$16,800
Power User ($35/user/month)	8253	$3,466,260
Viewer ($12/user/month)	398	$57,312

Evaluate based on last ● 60 days ○ 90 days ○ 180 days

Users with no usage

Type	Users	Annual Cost
Admin ($70/user/month)	11	$9,240
Power User ($35/user/month)	5285	$2,219,700
Viewer ($12/user/month)	345	$49,680

Downgradable Users

Type	Users	Annual Cost
Power User → Viewer	2254	$622,104

$2,278,620
5,641 inactive users

✖ Remove Users

$622,104
2,254 users available for downgrade

⬇ Downgrade Users

Sample Scenario

A large retailer uses a BI tool to provide analytics to its 20,000 employees at a cost of $1,250,000 per year. Usage analysis revealed that 21% of licensed users have not utilized their license in 180 days, representing an overspend of $265,000. This analysis also revealed that $76,000 in savings could be achieved by downgrading creator licenses to consumer licenses for users who are not publishing or modifying reports. Finally, the usage analysis identified that users at the company's 1,000 stores were accessing reports very infrequently and that the combination of a weekly sales summary burst along with a portal page showing category level details could support the needs of those users and generate additional license savings of $128,000. Effective license management saved this organization a total of $470,000.

Reduced license fees from inactive users	$265,750
Savings from right-sizing BI tools license type	$76,250
Reduced licenses from bursting infrequently used content	$128,000
Total savings from improved license management	**$470,000**