

**DECISION, ANALYSIS, RESOLUTION (DAR)
BUSINESS INTELLIGENCE TOOLS
COMPARISON**

VER.1.1

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1. Overview

This DAR was produced originally to evaluate a number of popular BI tools against JasperSoft, which is the tool that Mitrais currently uses for its internal product development.

We decided to publish this evaluation to assist our clients in choosing the correct BI tool for their own unique requirements.

Clients can change the weighting on each evaluation criteria to assist them in their final decision.

An easy to use Weighting Calculator in Excel format is attached.

2. Evaluated Platforms

PLATFORM	
1	Tableau Server
2	Qlik Sense Enterprise
3	Jaspersoft BI Enterprise Edition
4	Jaspersoft BI Community Edition
5	Power BI Free
6	Power BI Pro

Table 1 – Evaluated Platforms

3. Other Platforms

Other platforms which were not evaluated but may be included in the future are listed below:

- Birst
- Domo
- Alteryx
- SAS

4. Evaluation Criteria

The evaluation gives points to selected criteria where the weight of each criteria is determined by its importance to the user.

NB: This document uses a weighting schema which is currently relevant for Mitrais use. Our clients may have different weighting for each criterion.

4.1. Non-Feature Related Criteria

CRITERIA	MITRAIS WEIGHTING
Entry Cost	0.4
License Cost for Per User	0.3
Ability to be Commercialized	1
Training Options	0.3
Technical Support	0.2
Hardware Specification	0.1

Table 2 – Non-Feature Related Criteria

Criteria used:

1. **Entry Cost**
Entry cost means the initial cost to start using the tools. This is the license cost of the minimum number of users. This minimum may not be the same for differing tools (e.g. Jaspersoft's BI minimum purchase supports up to 200 users, etc.). The lower the better.
2. **License Cost per User**
This is the cost per user. The entry cost for differing tools does not always equal the cost per user. The lower the better.
3. **Ability to be commercialized.**
Free or inexpensive tools sometimes have some limitations on licensing or features. This criterion tries to capture whether there are any limitations that may make a solution using the BI tools unsuitable for selling. Lower points mean that there are some factors that may make it unsuitable for commercial purposes.
4. **Training Options**
In general, this is the "cost" to train resources in how to use the tool. The evaluation should be based on:
 - a. The availability of online training material and/or formal classes and their price. Ideally all training material should be available online.
 - b. The learning curve a new developer will face to understand how to implement the product. The easier it is to implement the better.
5. **Technical Support**
The speed and availability of support when required. The team evaluated this criterion by analysing reviews of the product support.
6. **Hardware Specification**
The specification for minimum hardware requirements to use the tool. This could mean the minimum specification for the server, the network specification necessary etc. Most of the tools have cloud counterparts where hardware specifications will have a minimal impact.

4.2. Feature Related Criteria

CRITERIA	MITRAIS WEIGHTING
Reporting Capabilities	0.4
Data Visualization and Analysis	0.4
Platform Supported	0.05
Enterprise Level Performance (Scalability)	0.1
Integration with Existing Security	0.05
Output Media Supported	0.1
Data Warehouse and Integration	0.1

Table 3 – Feature Related Evaluation Criteria

Criteria used:

1. Reporting Capabilities
This represents the difficulty in creating a standard report using the tool:
 - Will it need a dedicated developer or could a user with minimal training do it? Ideally a user should be able to produce standard reports.
 - How much time is needed to create a simple report either from scratch or by modifying an existing one? The quicker the better.
 - Is it easy enough to access and generate a report? The easier the better.
2. Data Visualization and Analysis
This represents the capability of the tool to visualize data and be used for analysis by the user:
 - Is the tool capable of delivering a visualization of the data? Current generation BI tools should be able to do this.
 - Is it easy to visualize the data? The easier the better.
 - Could the visualization be used for analysis (i.e. drilled down and rolled up, attached with other information such as location)?
 - Does the product support OLAP ?
3. Platform Supported
This criterion evaluates the platform/s supported by the tool
 - What operating systems are supported (Linux/Unix, Mac OS, Windows)? The more the better.
 - What data sources are supported (XML, RDBMS, Hadoop, Amazon RDS)? The more the better.
4. Enterprise Level Performance
This criterion evaluates the scalability of the tool. Will the tool be able to handle the number of users our client has or plans to have concurrently?
5. Integration with Existing Security
As BI is usually an addition to an existing system, can does the tool integrate with the security of the current system (e.g. using Active Directory)
6. Output Media Supported
The output media here could be print outs or access through web and mobile devices. The more output media supported the better.

7. Data Warehouse and Integration

This criterion evaluates whether the tool can use data integration and create data warehouses.

5. Platform Evaluation

The tools that Mitrais compared were Tableau, Qlik, Power BI, and Jaspersoft BI.

Tableau, Qlik, and Power BI are in the [Gartner](#) Leaders quadrant. Jaspersoft BI is represented by TIBCO Software and sits quite low in the Visionaries quadrant, however it is included in our comparison as it is what Mitrais is using for its internal product development.

6. Platform Recommendation

6.1. Non-Feature Related Criteria

6.1.1. Entry Cost

SOLUTION	EVALUATION
Tableau Server	<ul style="list-style-type: none">•Tableau Desktop Personal: \$35 per month per user•Tableau Desktop Professional: \$70 per month per user•Tableau Server: \$35 per month per user•Tableau Online: \$42 per month per user
Qlik Sense Enterprise	US \$1500/year which is the price for a token. http://www.qlik.com/us/pricing
Jaspersoft BI Enterprise Edition	Minimum configuration licensed as 4 core server. 1-year Jaspersoft BI Enterprise Edition Standard -- USD \$40,000 1-year BI Enterprise Edition incl. Jaspersoft Studio/iReport Pro, JasperReports Pro, JasperReports Server Enterprise (ad hoc, dashboards, audit logging, multi-tenancy), Jaspersoft ETL (Jaspersoft ETL for 1 Developer Named user only)
Jaspersoft BI Community Edition	Free
Power BI Free	Free
Power BI Pro	USD\$119.88 per user/year. https://powerbi.microsoft.com/en-us/pricing/

Table 4 – Entry Cost

Conclusion:

- Tableau Server: 8
- Qlik Sense Enterprise: 7
- Jaspersoft BI Enterprise Edition: 1
- Jaspersoft BI Community Edition: 10
- Power BI Free: 10
- Power BI Pro: 9

Both Power BI Free and Jaspersoft Community are free giving them full marks.

Of the paid versions, Power BI Pro has the lowest entry cost, though as it is still new some features that exists in other products (e.g. export to other formats, number of visualizations, etc.) are still lacking. But with periodic updates including new features in every release (see Technical Support for details), it has good potential for the cost.

Tableau have just updated their Pricing Model and now offer an attractive \$35 per month per user option for Tableau Server.

Qlik Sense Enterprise is the next highest in regards of entry cost, but is already more than 10 times more expensive than Power BI Pro.

The highest entry cost is Jaspersoft BI Enterprise Edition.

6.1.2. License Cost per User

SOLUTION	EVALUATION
Tableau Server	\$35 per user/month = US \$420 per user/year https://www.tableau.com/pricing
Qlik Sense Enterprise	US \$1500/year http://www.qlik.com/us/pricing
Jaspersoft BI Enterprise Edition	1-year 2 core Add-on for BI Enterprise Edition – USD \$11,000
Jaspersoft BI Community Edition	Free
Power BI Free	Free
Power BI Pro	USD\$119.88 per user/year. https://powerbi.microsoft.com/en-us/pricing/

Table 5 – License Cost per User

- Tableau Server: 8
- Qlik Sense Enterprise: 6
- Jaspersoft BI Enterprise Edition: 7
- Jaspersoft BI Community Edition: 10
- Power BI Free: 10
- Power BI Pro: 9

The free products get maximum 10 points on this criteria, followed closely by PowerBI Pro and Tableau Server with their new pricing model.

Jaspersoft BI Enterprise editions are allocated additional points because of their lower initial purchase. The effective license cost per user of Jaspersoft BI is more than Power BI Pro (assuming 200 users), and Tableau Server is actually less expensive than Qlik Sense Enterprise. Qlik Sense Enterprise is therefore allocated the fewest points.

6.1.3. Ability to be Commercialized

SOLUTION	EVALUATION
Tableau Server	No restrictions

SOLUTION	EVALUATION
Qlik Sense Enterprise	No restrictions
Jaspersoft BI Enterprise Edition	No restrictions
Jaspersoft BI Community Edition	Using GPL license which means the developer needs to provide the source code to anyone for free.
Power BI Free	There are some restrictions: <ul style="list-style-type: none"> - Data capacity limit to 1 GB/ user vs 10 GB/ user from Pro - Data auto refresh 10k rows/ hour vs 1M rows/ hour from Pro - No collaboration options besides publishing data to public (viewable by everyone)
Power BI Pro	No restrictions

Table 6 – Ability to be Commercialized

- Tableau Server: 10
- Qlik Sense Enterprise: 10
- Jaspersoft BI Enterprise Edition: 10
- Jaspersoft BI Community Edition: 1
- Power BI Free: 5
- Power BI Pro: 10

The free versions of Jaspersoft BI and Power BI have limitations on using them for commercial product development.

Power BI suffers less because the limitation is only on features. Depending on the requirement it is still usable in commercial situation.

Jaspersoft BI Community edition cannot be used as part of a commercial product development because the license specifically prohibits users from doing that.

6.1.4. Training Cost

SOLUTION	EVALUATION
Tableau Server	Free online on demand tutorials are available in Tableau webpage along with paid virtual classroom trainings. Classroom training starts at US\$ 1,300. The learning curve is actually smaller than learning Jaspersoft.
Qlik Sense Enterprise	Free online on demand tutorials are available in Qlik webpage. Paid virtual classroom training starts at US\$ 1,400. Very easy to learn.
Jaspersoft BI Enterprise Edition	Free online on demand tutorials are available in Jaspersoft webpage along with paid virtual classroom training. Classroom training starts at US\$ 1,000 with the essential package costing US\$ 3,200. Mitrais has already trained three resources using this method, and has adapted the materials to our MLS.
Jaspersoft BI Community Edition	Community supplied tutorials.
Power BI Free	Free online on demand tutorials are available in PowerBI webpage. Community exists and seems very supportive. Very easy to learn.

SOLUTION	EVALUATION
Power BI Pro	Free online on demand tutorials are available in PowerBI webpage. Community exists and seems very supportive. Very easy to learn.

Table 7 – Training Cost

Conclusion:

- Tableau Server: 7
- Qlik Sense Enterprise: 7
- Jaspersoft BI Enterprise Edition: 8
- Jaspersoft BI Community Edition: 8
- Power BI Free: 7
- Power BI Pro: 7

Tableau is judged the best in this criterion for “greenfield” developments.

Qlik products training is not bundled and need to be purchased one by one.

Power BI tutorials exist and are well organized, though maybe not as well as the those for Tableau.

6.1.5. Technical Support

SOLUTION	EVALUATION
Tableau Server	Support from the company and community. Currently most users in forum seem satisfied with the support.
Qlik Sense Enterprise	Support from the company and community. Currently most users in forum seem satisfied with the support.
Jaspersoft BI Enterprise Edition	Support is based on license bought: standard allows the reporting of 12 issues, while premium allows unlimited issues. Also has support from community. Usually bug fixes are released in new versions. Sometimes a new version is not fully backward compatible.
Jaspersoft BI Community Edition	Support only comes from the community.
Power BI Free	Updates are shipped weekly (cloud version) or monthly (desktop version). Each version incorporates ideas given by the community in the official forum. The forum members seem very helpful.
Power BI Pro	See above.

Table 8 – Technical Support

Conclusion:

- Tableau Server: 8
- Qlik Sense Enterprise: 8
- Jaspersoft BI Enterprise Edition: 6.5
- Jaspersoft BI Community Edition: 5
- Power BI Free: 8
- Power BI Pro: 8

Tableau, Qlik, and Power BI products seem to have both good official and community support. Jaspersoft Enterprise Edition also has official support but anecdotal evidence suggests that it is unresponsive and sometimes unhelpful (note: Mitrais lodged a question in October 2014 that was not answered until February 2015).

Our experience suggests that installing a new version of Jaspersoft BI can be quite complex, although we have not tried the other tools.

Updates for Power BI are very frequent, and each version incorporates ideas given by the community in the official forum. This shows that they are responsive and listen to what the community needs.

6.1.6. Hardware Specification

Listed are minimum requirement for production

SOLUTION	EVALUATION
Tableau Server	<ul style="list-style-type: none"> 64-bit processor 8 physical cores, 2.0 GHz or higher CPU 32 GB system memory 50 GB minimum free disk space
Qlik Sense Enterprise	<ul style="list-style-type: none"> 64-bit processor Multicore 8 GB Memory minimum (see note below) 500 MB free disk space (installation) <p>Note:</p> <ol style="list-style-type: none"> Qlik Sense is the most RAM-intensive as all data is loaded in memory. Other solutions balance their In-Memory Analysis with I/O operations to the data source. Currently Qlik Sense uses compression techniques but the specification needed will always depend on number of users and data size. Note - Qlik Sense requires .NET 4.0
Jaspersoft BI Enterprise Edition	<ul style="list-style-type: none"> 32 or 64 bit (see note below) 2-core processor (see note below) 4 GB Ram 1.3 free disk space (installation) <p>Note:</p> <ol style="list-style-type: none"> Supports 32-bit processors only for Linux The minimum license is for a 4-core processor.
Jaspersoft BI Community Edition	Same as above
Power BI Free	<p>For the Desktop version the minimum requirements are:</p> <ul style="list-style-type: none"> Windows 7 / Windows Server 2008 R2, or later .NET 4.5 Internet Explorer 9 or later Memory (RAM): At least 1 GB available, 1.5 GB or more recommended. Display: At least 1440x900 or 1600x900 (16:9) recommended. Lower resolutions such as 1024x768 or 1280x800 are not recommended, as certain controls (such as closing the startup screen) display beyond those resolutions. CPU: 1 gigahertz (GHz) or faster x86- or x64-bit processor recommended. <p>Please note that in the forum there are users that report problems with performance when loading up data with big numbers of rows, even with 4 GB of RAM.</p>

SOLUTION	EVALUATION
Power BI Pro	Same as above.

Table 9 – Hardware Specification

Conclusion:

- Tableau Server: 8
- Qlik Sense Enterprise: 6
- Jaspersoft BI Enterprise Edition: 8
- Jaspersoft BI Community Edition: 8
- Power BI Free: 6
- Power BI Pro: 6

Most of the tools have similar minimum requirements. Qlik products have been allocated lower scores, as the requirement escalates quicker than with the other tools. Power BI seems to have the same problem.

6.2. Feature Related Criteria

6.2.1. Reporting Capabilities

SOLUTION	EVALUATION
Tableau Server	Supports standard report creation but not a 'pixel perfect' report editor (i.e. not suitable in creating tax forms, formal reports, etc). Reports created can be exported as Image / PDF file, Microsoft Access data, Crosstab to Microsoft Excel, and Tableau packaged workbook. Easier to use than both version of Jaspersoft BI.
Qlik Sense Cloud Enterprise	Qlik provides NPrinting which needs to be bought as a separate product, but integrates quite nicely with all their products. It seems to have the same capabilities as iReport/Jasperstudio in Jasperreports.
Qlik Sense Cloud Free	See above
Jaspersoft BI Enterprise Edition	Powerful pixel perfect reports based on SQL queries. Reports can be exported to various formats, including PDF, Excel, Excel with pagination, CSV, DOCX, RTF, Flash, ODT, ODS, Excel 2007, and Excel 2007 with pagination. Advanced features require training and knowledge of Java.
Jaspersoft BI Community Edition	Same as above
Power BI Free	Supports standard report creation but not a 'pixel perfect' report editor (i.e. not suitable in creating tax forms, formal reports, etc). Resulting reports can be published and shared publicly. Printing is only supported by the Power BI cloud service and only to formats that are supported by the browser (i.e. no full-fledged export to excel, only csv export is supported).
Power BI Pro	Same as above with the addition that the report could be published to a certain Office 365 group.

Table 10 – Reporting Capabilities

Conclusion:

- Tableau Server: 7
- Qlik Sense Enterprise: 8
- Jaspersoft BI Enterprise Edition: 9

- Jaspersoft BI Community Edition: 8
- Power BI Free: 6
- Power BI Pro: 6

Jaspersoft products excel in creating reports compared to the other tools, as it is the basis upon which the suite is created on. The Community Edition is allocated a lower score as it does not have some features usually used in reports (some charts, integration with maps, etc.).

Qlik provides Nprinting for creating reports. The only problem is it is sold as a separate product.

Tableau cannot create pixel perfect reports, but can print.

6.2.2. Data Visualisation and Analysis

SOLUTION	EVALUATION
Tableau Server	Easy data visualization and relatively simplicity in creating hierarchies for slicing and dicing. Not as powerful as OLAP but still customizable. No OLAP support.
Qlik Sense Enterprise	The links between records are done automatically when loading the data. Data visualization is great and slicing and dicing can be done as soon as the data loading is finished.
Jaspersoft BI Enterprise Edition	Ad Hoc reporting is used for data visualization. It has more options in selecting data source for slice and dice but is more cumbersome (i.e. very technical) to set up than Tableau Server and Qlik Sense.
Jaspersoft BI Community Edition	No out of the box data visualization. Slicing and dicing must come from OLAP with no visualization.
Power BI Free	The links between records are done automatically when loading the data. Data visualization is great and slicing and dicing can be done as soon as the data loading is finished. Visualization is not as powerful as Tableau or Qlik.
Power BI Pro	The links between records are done automatically when loading the data. Data visualization is great and slicing and dicing could be done as soon as the data loading is finished. Visualization is not as powerful as Tableau or Qlik.

Table 11 – Data Visualisation and Analysis

Conclusion:

- Tableau Server: 8.5
- Qlik Sense Enterprise: 9
- Jaspersoft BI Enterprise Edition: 6
- Jaspersoft BI Community Edition: 2
- Power BI Free: 8
- Power BI Pro: 8

For Data Visualizing and Analysis, Qlik Sense is the best in terms of simplicity and power. Anyone with a little training can easily use Qlik Sense to analyse data, get trends, and find information.

Next comes Tableau then Power BI: both latter products have the same complexity, but Tableau has more options.

Jaspersoft BI Enterprise has much less power in data visualization and is highly complex to set up. It's redeeming feature, however, is support to OLAP.

Jaspersoft BI Community Edition does not support data visualization features without the user adding them themselves.

6.2.3. Platform Supported

SOLUTION	EVALUATION
Tableau Server	OS: Windows Server (2008, 2012), Windows 8.1 Database: Multiple databases supported via ODBC. Cloud data sources such as Amazon Redshift, Salesforce.com, and Google Cloud SQL are provided out of the box.
Qlik Sense Enterprise	OS: Windows Server 2008 and 2012 Database: Databases supported by OleDB and ODBC. Connection package could be downloaded from webpage.
Jaspersoft BI Enterprise Edition	OS: Windows and Windows Server 32-bit Red Hat Enterprise Linux 5, 6 Novell SUSE Linux Enterprise 10, 11 Debian 6 Ubuntu 10 Mac OS 10.6 and 10.7 Database: Data source supported by JDBC, cloud support to Amazon Redshift, Amazon RDS etc. JDBC drivers needed to be downloaded and set up manually.
Jaspersoft BI Community Edition	Same as above
Power BI Free	Windows only for desktop version, multiplatform for service (web) version
Power BI Pro	Windows only for desktop version, multiplatform for service (web) version

Table 12 – Platform Supported

Conclusion:

- Tableau Server: 8
- Qlik Sense Enterprise: 7
- Jaspersoft BI Enterprise Edition: 8
- Jaspersoft BI Community Edition: 8
- Power BI Free: 7
- Power BI Pro: 7

Looking at the OS support, Jaspersoft hold a slight advantage in that it is based on Java and as such supported by multiple OSs. The others are strictly Windows based. As for database support, Tableau has a good lead in handling many data sources out of the box. The other tools are similar to each other in this department. Note that all the tools here support other data sources which use ODBC and JDBC (i.e. virtually all).

6.2.4. Enterprise Level Performance (Scalability)

SOLUTION	EVALUATION
Tableau Server	Good performance if it is still within the recommended usage (8 core to 100 users).
Qlik Sense Enterprise	Great performance for low count rows and user. However, increase in user and rows will eat up resource (i.e. RAM) quickly. A rough estimation given by Qlik the RAM needed = $(RAM_{user} \times \text{No. users}) + RAM_{initial}$. The RAM_{user} and $RAM_{initial}$ are based on the data size.
Jaspersoft BI Enterprise Edition	Good performance if it is still within the recommended usage (4 core to 50 light report or 20 heavy report).
Jaspersoft BI Community Edition	On the speed level, the Community Edition has the same performance as the Enterprise Edition. Unfortunately, the lack of tools usually used in an enterprise environment (e.g. ad-hoc reports, multi tenancy, data meta-layer etc.) makes it dubious as a solution for large scale company.
Power BI Free	Seems to display the same advantages and disadvantages in performance as Qlik Sense above. It is very fast with low row counts, but will eat up resources and reduce performance as the row count increases. There are restrictions on how many rows can be used. Sharing is restricted to public only (sharing will be seen by everybody in the web).
Power BI Pro	See above with much bigger rows restrictions and option to share to people in group.

Table 13 – Enterprise Level Performance (Scalability)

Conclusion:

- Tableau Server: 8
- Qlik Sense Enterprise: 6
- Jaspersoft BI Enterprise Edition: 8
- Jaspersoft BI Community Edition: 8
- Power BI Free: 6
- Power BI Pro: 6

Tableau and Jaspersoft seem to display better scalability, as the performance is not too dependent on memory. The worst performers here are the Qlik products as the memory used grows with number of user and rows. It should be noted however for smaller scale, Qlik performs much better than Jaspersoft.

We were unable to find good references on this criterion for Performance Point, and it is not compared in this case.

6.2.5. Integration with Existing Security

SOLUTION	EVALUATION
Tableau Server	Could use MS Active Directory via Kerberos, SAML and trusted authentication. Setting is done using IDE.
Qlik Sense Enterprise	Uses MS Active Directory as a default out of the box. There is support for other authentication using LDAP but configuration is not simple.
Jaspersoft BI Enterprise Edition	Could use Active Directory via LDAP. Also support CAS. Configuration is done by editing XML file as it is based on Spring Security.
Jaspersoft BI Community Edition	Same as above.

SOLUTION	EVALUATION
Power BI Free	This page suggests that developers cannot integrate with on-premise Active Directory (Manage access control and sharing through Active Directory groups is not supported for free)
Power BI Pro	Active Directory via Azure Active Directory.

Table 14 – Integration with Existing Security

Conclusion:

- Tableau Server: 8
- Qlik Sense Enterprise: 8
- Jaspersoft BI Enterprise Edition: 6
- Jaspersoft BI Community Edition: 6
- Power BI Free: 1
- Power BI Pro: 8

Jaspersoft seems to be the most complex in this case, as the configuration needs to be done manually and requires technical expertise.

6.2.6. Output Media Supported

SOLUTION	EVALUATION
Tableau Server	Mobile UI ready and native app is also available. Printing is not as easy as Jaspersoft.
Qlik Sense Enterprise	Mobile UI ready and native app is also available. Can't print easily.
Jaspersoft BI Enterprise Edition	Mobile ready using native apps in iOS and Android. Printing out is simple.
Jaspersoft BI Community Edition	Same as above.
Power BI Free	Only print via browser or copying the pbix file. Mobile UI ready and native app is also available.
Power BI Pro	Same as above.

Table 15 – Output Media Supported

Conclusion:

- Tableau Server: 8
- Qlik Sense Enterprise: 7
- Jaspersoft BI Enterprise Edition: 8
- Jaspersoft BI Community Edition: 8
- Power BI Free: 6
- Power BI Pro: 6

Jaspersoft needs to use a native app to get the best display on mobile devices, but printing with Jaspersoft is the easiest.

Printing is the bane of Power BI. The choices to print are directly related to what the browser can do (e.g. can only export to pdf if the browser printer is set to print pdf files).

6.2.7. Data Warehouse and Integration

SOLUTION	EVALUATION
Tableau Server	The ETL is part of the data load process but the result can only be consumed in that particular report. Developers cannot create a data warehouse using this tool.
Qlik Sense Enterprise	The ETL is part of the data load process but the result could only be consumed in that particular report. Developers cannot create a data warehouse using this tool.
Jaspersoft BI Enterprise Edition	Jaspersoft ETL processes are provided as part of the suite.
Jaspersoft BI Community Edition	Same as above.
Power BI Free	The ETL is part of the data load process but the result can only be consumed in that particular report. Developers cannot create a data warehouse using this tool.
Power BI Pro	The ETL is part of the data load process but the result can only be consumed in that particular report. Developers cannot create a data warehouse using this tool.

Table 16 – Data Warehouse and Integration

Conclusion:

- Tableau Server: 5
- Qlik Sense Enterprise: 5
- Jaspersoft BI Enterprise Edition: 8
- Jaspersoft BI Community Edition: 8
- Power BI Free: 5
- Power BI Pro: 5

Only Jaspersoft has data warehouse building capability out of the box. If no data warehouse functionality is needed, data integration using Tableau and Qlik products are simpler. The only problem is that it is not reusable.

7. Conclusion

Using Mitrais weighting criteria the team recommended Power BI.

Power BI is a relative newcomer to the BI scene. In its first year it caught the attention of many people. Though Power BI still lacks the functionality of its close competitors (Tableau and Qlik Sense), its price and update scheme makes it a good solution to try.

Please note that this is the result from the Mitrais criteria weighting schema which correlates with Mitrais current need, and the fact that Mitrais uses JasperSoft for its internal product development. Other clients may use this report with different weightings to meet their unique requirements and come to a different conclusion.

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