
UNIVERSITY OF MANCHESTER VISUALIZATION APPLICATION INFORMATION PACK

Introduction

Earlier this year Research IT requested feedback on a proposal to implement a 'core research application suite' that would focus support, training and licence resources on a selected suite of applications chosen to offer maximum value to University researchers. Based upon the feedback received it was clear that there is demand for the implementation of a general purpose data visualization tool.

You have volunteered to participate in the evaluation of a set of candidate tools, with the objective of selecting and deploying such a tool later this year. This information pack covers some of the details required to proceed with the evaluation.

The remainder of this information pack provides details about the target space for consideration, the four candidate application packages, links to software and training, some optional case study data for use in the evaluation phase and finally an overview of the evaluation process, including a preview of the survey questions and the link to the survey.

Visualization, Data Analysis and Data Analytics

The visualization application space is crowded with many potential candidates and this evaluation focusses on the intermediate space between rudimentary visualization solutions e.g., Excel and those regarded as providing high-end visualization and analytics e.g., R, Mathematica and Stata.

This class of software has typically been shaped by the needs of business intelligence and information visualization and as such has capabilities to create visualizations that are interactive allowing for better understanding and insights about the data. Data analytics enhances the visualization and data analysis process by adding sophisticated tools to extract meaning, detect changes and unravel complex relationships and as such is a major driver for investigation.

Candidate Applications

It is not feasible to conduct a selection exercise to cover all potential software applications, as such this evaluation only considers market leaders and applications with prior local investment. The following software packages have been elected for evaluation:

- ◆ Tableau
- ◆ Qlik
- ◆ SpotFire
- ◆ IBM Watson Analytics

Note: All four candidates provide cloud-enabled versions, where users can upload data to online tools to undertake analysis and visualization. Tableau, Qlik and Spotfire also provide desktop clients that can perform visualization and analytics locally.

Software Access and Training Materials

Tableau

Software: <http://www.tableau.com/products/trial-email>

Learning: <http://www.tableau.com/support/manuals/quickstart>
<http://www.tableau.com/learn/training?qclid=CK2W9Lqo6MwCFfYy0wod2t8Ftg>

Notes: Tableau Desktop is free for students and instructors at accredited academic institutions. It can be used on Windows/Mac/Cloud.

Qlik

Software: <http://global.qlik.com/uk/landing/go-sm/sense-desktop> - Desktop Edition.
<http://www.qlik.com/try-or-buy> - Cloud Edition.

Training: <http://www.qlik.com/products/qlik-sense/getting-started>

Notes: Windows/Cloud versions available. Qlik has two products QlikView and Qlik Sense. The Qlik Academic Program Manager recommends Qlik Sense.

Spotfire

Software: <http://spotfire.tibco.com/trial>

Training: <http://spotfire.tibco.com/learn/spotfire-desktop-quickstart>

Notes: This is the only one of the offerings which has a 30 days limited use. Windows/Cloud.

IBM Watson Analytics

Software: <http://preview.tinyurl.com/zm588jj>

Training: <https://www.ibm.com/communities/analytics/watson-analytics-blog/upskill-with-watson-analytics-training/>

Notes: Unlike the others IBM Watson Analytics is only available as a cloud offering. Get an IBM ID to get started. There is a University partnership program which will be investigated in view of responses to this evaluation process.

Sample Data

While it is expected that participants will use their own data for the evaluation, in order to facilitate additional participation, the following external data sources have been selected which are used in research studies around the world:

Socio-economic: <http://hdr.undp.org/en/data>

Physical environment: <http://www.ipcc-data.org/observ/index.html>

The two sources were selected in order to ensure a good representation of various disciplines.

You can always find open data for your own discipline from sources like <http://data.gov.uk> and for example you can get property prices from <https://www.gov.uk/government/statistical-data-sets/price-paid-data-downloads>

Evaluation Survey and Details

The survey can be found here. Note that this survey can be taken multiple times, though please limit to one review per candidate application:

<https://www.surveymonkey.com/r/QZT9B7Z>

A preview of the survey is included at the end of this PDF document, so you may review the questions before undertaking the survey.

Some notes:

- The evaluation survey will be open for 60 days from 1st June and closing on 31st July.
- Research IT will be presenting three prizes to the best evaluation reports we get. These prizes will be £250, £150 and £100 in Amazon Vouchers.
- The evaluation survey is entirely undertaken through SurveyMonkey.
- We are expecting evaluators to act as representatives of their schools, colleagues and potential other users where possible. Please bear that in mind when giving feedback and comments and let us know your thoughts on the subject areas.
- Prizes will be allocated based on what we (Research IT) deem the 'best' feedback we receive, considering both the tools you are assessing, and insight into your subject area, discipline and colleagues.
- If you would like us to see your work, you can share your visualizations with us, either by providing links within the feedback survey or directly contacting us by email.

Support and help during the evaluation period

If you have any questions, clarifications or help with any aspect of the evaluation process please do not hesitate to contact us. Please make note that each of the software you are using are time limited when you download the trial version. Please get in touch with us to help you arrange extensions as we have contacted vendors and we have our channels to arrange that.

ITS-research@manchester.ac.uk

Research IT at the University of Manchester has identified that there is demand for a general data analytics and visualization tool that is simpler to use than more sophisticated and complex software like Matlab, Python, R, Mathematica, and STATA.

You have been invited to evaluate one or two of the candidate applications, specifically Tableau, Qlikview, Spotfire and IBM Watson Analytics. You will also have received an information pack with more details about this evaluation - please ensure you have read the information pack before completing this survey.

Please complete this survey ONCE for EACH of the candidate applications you have chosen to evaluate.

Amazon vouchers of £250, £150 and £100 will be awarded to the three best evaluation reports we receive. If you wish to be entered for a chance to win a prize, please include your email address and name at the end of the survey so we can contact you.

***1. Which visualization software package are you evaluating in this survey?**

- IBM Watson Analytics QlikView Spotfire Tableau

Please specify which particular version you are evaluating and which platform you are using e.g., cloud/desktop, PC/Mac/Linux.

***2. How likely is it that you would recommend this software to a colleague?**

Not at all likely - 0	1	2	3	4	5	6	7	8	9	Extremely likely - 10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***3. How satisfied are you with this software's ease of use?**

- Extremely satisfied
 Very satisfied
 Somewhat satisfied
 Not so satisfied
 Not at all satisfied

Any additional comments

***4. How would you rate the quality of the documentation?**

- Very high quality
- High quality
- Neither high nor low quality
- Low quality
- Very low quality
- N/A

Any additional comments

*** 5. How would you rate the quality of the training materials?**

- Very high quality
- High quality
- Neither high nor low quality
- Low quality
- Very low quality
- N/A

Any additional comments

*** 6. How satisfied are you with the reliability of this software?**

- Extremely satisfied
- Very satisfied
- Somewhat satisfied
- Not so satisfied
- Not at all satisfied

Any additional comments

*** 7. How satisfied are you with the security of this software?**

- Extremely satisfied
- Very satisfied
- Somewhat satisfied
- Not so satisfied
- Not at all satisfied
- N/A

Any additional comments

*** 8. How satisfied are you with the ability to integrate other software with this software?**

- Extremely satisfied
- Very satisfied
- Somewhat satisfied
- Not so satisfied
- Not at all satisfied
- N/A

Any additional comments

***9. How satisfied are you with the look and feel of this software?**

- Extremely satisfied
- Very satisfied
- Somewhat satisfied
- Not so satisfied
- Not at all satisfied

Any additional comments

***10. How satisfied are you with the ability to collaborate with other users on this software?**

- Extremely satisfied
- Very satisfied
- Somewhat satisfied
- Not so satisfied
- Not at all satisfied
- N/A

Any additional comments

*** 11. How satisfied are you with the supported data file formats?**

- Extremely satisfied
- Very satisfied
- Somewhat satisfied
- Not so satisfied
- Not at all satisfied

*** 12. How satisfied are you with the database access capabilities?**

- Extremely satisfied
- Very satisfied
- Somewhat satisfied
- Not so satisfied
- Not at all satisfied
- N/A

*** 13. How satisfied are you with the missing data and cleaning data tools?**

- Extremely satisfied
- Very satisfied
- Somewhat satisfied
- Not so satisfied
- Not at all satisfied
- N/A

*** 14. How satisfied are you with the ability to handle Big Data?**

- Extremely satisfied
- Very satisfied
- Somewhat satisfied
- Not so satisfied
- Not at all satisfied
- N/A

*** 15. How satisfied are you with the mapping capabilities?**

- Extremely satisfied
- Very satisfied
- Somewhat satisfied
- Not so satisfied
- Not at all satisfied
- N/A

*** 16. How satisfied are you with the data modelling capabilities?**

- Extremely satisfied
- Very satisfied
- Somewhat satisfied
- Not so satisfied
- Not at all satisfied
- N/A

*** 17. How satisfied are you with ability to handle multi-dimensional, multi-variate data?**

- Extremely satisfied
- Very satisfied
- Somewhat satisfied
- Not so satisfied
- Not at all satisfied
- N/A

*** 18. How satisfied are you with ability to handle real-time data?**

- Extremely satisfied
- Very satisfied
- Somewhat satisfied
- Not so satisfied
- Not at all satisfied
- N/A

*** 19. How satisfied are you with data clustering/hierarchical capabilities?**

- Extremely satisfied
- Very satisfied
- Somewhat satisfied
- Not so satisfied
- Not at all satisfied
- N/A

*** 20. How satisfied are you with the data selection tools?**

- Extremely satisfied
- Very satisfied
- Somewhat satisfied
- Not so satisfied
- Not at all satisfied
- N/A

***21. How satisfied are you with the data mining capabilities?**

- Extremely satisfied
- Very satisfied
- Somewhat satisfied
- Not so satisfied
- Not at all satisfied
- N/A

***22. How satisfied are you with the visual drilldown capabilities?**

- Extremely satisfied
- Very satisfied
- Somewhat satisfied
- Not so satisfied
- Not at all satisfied
- N/A

***23. How satisfied are you with the data analytics capabilities?**

- Extremely satisfied
- Very satisfied
- Somewhat satisfied
- Not so satisfied
- Not at all satisfied
- N/A

***24. How satisfied are you with the user interface and overall interactivity?**

- Extremely satisfied
- Very satisfied
- Somewhat satisfied
- Not so satisfied
- Not at all satisfied

*** 25. How satisfied are you with the visualization view controls and its overall interactivity?**

- Extremely satisfied
- Very satisfied
- Somewhat satisfied
- Not so satisfied
- Not at all satisfied

*** 26. How satisfied are you with the options for exporting/publishing your results?**

- Extremely satisfied
- Very satisfied
- Somewhat satisfied
- Not so satisfied
- Not at all satisfied
- N/A

*** 27. How satisfied are you with the support for creating and editing dashboards?**

- Extremely satisfied
- Very satisfied
- Somewhat satisfied
- Not so satisfied
- Not at all satisfied
- N/A

*** 28. How satisfied are you with the options for sharing interactive dashboards?**

- Extremely satisfied
- Very satisfied
- Somewhat satisfied
- Not so satisfied
- Not at all satisfied
- N/A

*** 29. How satisfied are you with the reproducibility of the visualization, analysis and output results?**

- Extremely satisfied
- Very satisfied
- Somewhat satisfied
- Not so satisfied
- Not at all satisfied
- N/A

30. Please select up to FOUR features which are ESSENTIAL to you for this kind of software.

- | | |
|---|---|
| <input type="checkbox"/> Multiple Data Sources | <input type="checkbox"/> Multiple simultaneous visualizations |
| <input type="checkbox"/> Integration with other software | <input type="checkbox"/> Customizable dashboard |
| <input type="checkbox"/> Wide variety of data filters | <input type="checkbox"/> Print and Export |
| <input type="checkbox"/> Wide variety of data mappers | <input type="checkbox"/> Create and save queries/analyses |
| <input type="checkbox"/> Wide variety of analytic tools | <input type="checkbox"/> Storyboarding |
| <input type="checkbox"/> Wide variety of visualization techniques | <input type="checkbox"/> Collaboration |
| <input type="checkbox"/> Web-based client | <input type="checkbox"/> Social media support |
| <input type="checkbox"/> Desktop-based client | <input type="checkbox"/> Security and access control |
| <input type="checkbox"/> Mobile-based client | <input type="checkbox"/> HTML5 support |

31. Please select up to FOUR features which are DESIRABLE to you for this kind of software.

- | | |
|---|---|
| <input type="checkbox"/> Multiple Data Sources | <input type="checkbox"/> Multiple simultaneous visualizations |
| <input type="checkbox"/> Integration with other software | <input type="checkbox"/> Customizable dashboard |
| <input type="checkbox"/> Wide variety of data filters | <input type="checkbox"/> Print and Export |
| <input type="checkbox"/> Wide variety of data mappers | <input type="checkbox"/> Create and save queries/analyses |
| <input type="checkbox"/> Wide variety of analytic tools | <input type="checkbox"/> Storyboarding |
| <input type="checkbox"/> Wide variety of visualization techniques | <input type="checkbox"/> Collaboration |
| <input type="checkbox"/> Web-based client | <input type="checkbox"/> Social media support |
| <input type="checkbox"/> Desktop-based client | <input type="checkbox"/> Security and access control |
| <input type="checkbox"/> Mobile-based client | <input type="checkbox"/> HTML5 support |

*** 32. Overall, how would you rate the software?**

- Excellent
- Very good
- Good
- Fair
- Poor

*** 33. If the software was available today, how likely would you be to use it?**

- Extremely likely
- Very likely
- Somewhat likely
- Not so likely
- Not at all likely

34. What would you say is the best feature of this software?

35. Do you have any thoughts on how to improve this software?

36. Do you have any other comments, questions, or concerns?

37. If you wish to be entered for a chance to win a prize, please include your name and email address so we can contact you, otherwise your submitted evaluation will be anonymous.

Name:

Email Address: