



Assessment of Visualization Tools for Business Analytics

Project Sponsor

American Girl

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Executive Summary

During the Fall semester of 2013, our UW-Madison student-team (Team AG) in the OTM 671 e-business course was tasked with assisting American Girl in researching and assessing visual analytics providers. Our project adopted a three-pronged approach by conducting research on the topic of visualization, reviewing functionality with different visualization and/data-analytic providers, and learning from the visual analytics experiences of other UW E-Business Consortium (UWEBC) members. Using online research (including relevant Gartner and Forrester Research reports) we identified the important factors that need to be considered in the evaluation and selection of a visual analytics solution. In addition, we consulted with implementation specialists from Analytics8 who have experience with multiple visualization software. With the vendors, Team AG created a formal RFI to provide an objective review of the software capabilities. In addition we conducted a formal demonstration – with identical data provided by AG – in order to gain a basic understanding of functionality and real use experience. Lastly, the UWEBC was tapped to gain insight from experienced users of data visualization software. This three pronged approach was essential in identifying the critical questions to ask and paths to take when making a decision on a visual analytics provider.

Based on the above analysis, our team developed a decision-making framework to assist in evaluating and selecting the best visual analytics provider for American Girl. This framework involves four main questions or logical steps that must be addressed, to find the best fit for a specific company. First, a company must know why they want a data visualization analytics package. Without having a clear understanding of the need, it is difficult to distinguish between the numerous software options and narrow those to the ones which are capable of meeting the requirements of a company. Once these companies have been identified, it is important to have

specific qualification criteria to further evaluate the vendor options. Examples of these criteria are budgetary constraints, who the users will be, existing system architecture, and data governance capabilities. Additionally, it is important to adopt a consistent approach to evaluating each prospective vendor in order to keep the analysis as objective as possible. Lastly, the vendors should demonstrate the capabilities of their software using real data and specific use cases/questions that are relevant to the company. This will help a company gauge the value and user interface components of a software package, and also demonstrate what capability the new product will bring above and beyond their existing system. By adopting this decision-making framework, American Girl will be able to narrow their search, outline the needed capabilities of a visualization program, and select the system that best fits their needs.

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