

EXHIBIT A

Request for Proposal: Enterprise Data Warehouse and Business Intelligence Solution - Functional Requirements

This portion of the RFP will be used to evaluate the technical and functional ability of the proposed Enterprise Data Warehouse and Business Intelligence solution to achieve CCC' needs.

*** FAILURE TO COMPLETE AND SUBMIT THIS SECTION COULD IMPACT THE RESPONSIVENESS OF YOUR PROPOSAL IN ITS ENTIRETY. ***

1. Platform Functions (interactivity, ease of use, customization)

Number	Category	Description	Vendor Response: Please provide "Yes" to one of the following choices				Comments
			Out of the Box	Need to Configure	Need Customization	Not Available	
1.01	Interactive Visualization	The solution's dashboard enables exploration of data by changing charts using colors, brightness, size, shape and motion.					
1.02	User Friendly	The solution is simple and intuitive providing users a good user experience. An interface users understand and use without the need to remember or memorize almost anything					
1.03	User Friendly	The solution allows user to customize the homepage by embedding reports, dashboard, or links to the reports or dashboards.					
1.04	Report Customization	The solution allows users to add notes and commentary to reports and charts.					
1.05	Report Customization	The solution allows users to ambed outside data points (example: targets).					
1.06	Report Customization	The solution allows users to customize the reports to suit their requirements.					
1.07	Report Customization	The solution allows users to add fields which support different functions and formats.					
1.08	Report Customization	The solutions supports different report style sheets.					
1.09	Customizable Dashboards	The solution allows users to customize dashboards based on their preferences and requirements.					
1.10	Programming Language	The programming language should be common programming language if required to use the tool in advanced mode.					
1.11	Information sharing	The solution allows users to share information and interact via discussion threads, chat capabilities, and annotations to facilitate decision making and content analysis.					
1.12	Browser Compatibility	The solution supports all major browsers (IE, Edge, Google Chrome, Firefox, Safari, etc.)					
1.13	Customization/White Labeling	The look-and-feel of the solution can be customized to meet users' specific needs, even to the extent of making the interface similar to the existing business software.					

2. Query Construction

Number	Category	Description	Vendor Response: Please provide "Yes" to one of the following choices				Comments
			Out of the Box	Need to Configure	Need Customization	Not Available	
2.02	Visual Querying	The solution helps constructing complex database queries with minimum knowledge of SQL statements.					
2.03	Visual Interaction	The solution allows users to build data queries with code-free "drag and drop" visual tools to enable non-technical personnel to easily find desired data points.					

3. Reporting

Number	Category	Description	Vendor Response: Please provide "Yes" to one of the following choices				Comments
			Out of the Box	Need to Configure	Need Customization	Not Available	
3.02	Automatic Scheduled Reporting	The solution allows users to schedule automated business intelligence reports to receive them via email or other formats.					
3.03	Conditional Formatting	The solution enables conditional color formatting on the charts.					
3.04	Report Searching	The solution allows users to search all available reports, FAQs, keywords, tags, data definitions, etc.					
3.05	Report Searching	The solution allows users to search data within a report.					
3.06	Report Tagging	The solution provides an easy way to tag reports.					
3.07	Tooltip	The solution provides tooltips that can be added to measures, text and/or column header.					
3.08	Help Resources	The solution provides access to help resources that provide answers to common challenges and questions.					
3.09	Report Listing	The solution provides the report sort capability.					
3.10	Usage Statistics	The solution allows power users to access BI tool usage statistics.					
3.11	Ad Hoc Analysis	The solution facilitates analysis of a single, specific business requirement.					

4. Data and Data Visualization (representing analysis in a visual medium, easily configurable and shareable reports)

Number	Category	Description	Vendor Response: Please provide "Yes" to one of the following choices				Comments
			Out of the Box	Need to Configure	Need Customization	Not Available	
4.02	Geospatial Data Visualization	The solution supports analysis of geospatial data through interactive visualization. The solution helps intelligent and dynamic analysis of information with respect to a particular geography.					
4.03	Data Quality and Cleansing	The solution allows design and enables users to deploy processes and technologies for profiling, analysis, remedial actions and automated cleansing.					
4.04	Data Customization	The solution is able to transform CCC's business requirements into meaningful datasets. It also allow users to control what data to show/hide.					
4.05	Data Dictionary	The solution provides data dictionary views that allow to display information on the business rules, regulatory flags, descriptions, technical owners, app and business owner.					

4.06	Data Dashboards	The solution provides dashboards so that users can get a snapshot view of important conditions, trends, exceptions and other KPIs.					
4.07	Data Discovery and Preparation	The solution provides tools to compile and prepare data for analytics, testing hypotheses, performing visualization, creating/sharing reports, or setting up custom alerts.					
4.08	Issue indicators	The solution has the capability to point out issues within the data.					
5. Analytics (real-time analysis and forecasting)							
Number	Category	Description	Vendor Response: Please provide "Yes" to one of the following choices				Comments
			Out of the Box	Need to Configure	Need Customization	Not Available	
5.02	Benchmarking	The solution allows users to compare business processes and performances.					
5.03	Predictive Analytics	The solution helps users utilize a variety of sources to analyze current and past information in order to analyze the probability of events.					
5.04	Embedded Analytics	The solution allows analytics to be embedded into other internal or 3rd party applications.					
5.05	Big Data Analytics	The solution has the ability to support and query large, hybrid, columnar, and array based data sources, such as Hadoop, MapReduce, or other NoSQL databases, to analyze full range of available business data.					
5.06	Descriptive Analytics	The solution enables users to understand data by creating relevant summaries and presenting the data in self explanatory mode.					
5.07	Diagnostic Analytics	The solution lets users analyze the root cause of certain events and behaviors.					
5.08	Performance Analytics	The solution provides performance analytics to address goals, objectives, and accountability. Performance analytics typically use a variety of KPIs including strategic scorecards; relevant comparisons against plans, budgets, forecasts, prior performance, and industry benchmark data; and the ability to drill down to root cause details.					
5.09	Prescriptive Analytics	The solution helps identifying the best outcome to events, given the parameters, and suggesting decision options to take advantage of a future opportunity or to mitigate a future risk.					
5.1	Social Media Analytics	The solution enables users to gather and analyze data from blogs and social media websites to make business decisions.					
5.11	Statistic Analytics	The solution provides statistical tools to analyze and draw inferences from data.					
5.12	Text Analytics	The solution converts unstructured text data into meaningful data for semantic text analysis.					
5.13	Web Analytics	The solution allows collection, analysis and reporting of web data to understand and optimize web usage.					
5.14	What if Analysis	The solution enables "What if analysis" to allow organization to assess the potential effects of critical business decision before they're actually made.					
5.15	Geolocation Analysis	The solution provides the ability to handle maps, drill down to information based on a specific region, or use data that is automatically refreshed according to a specific location, i.e., location intelligence.					
5.16	Trend Indicators	The solution has the capability to point out patterns within the data.					
5.17	Performance measurements/Ranking Reports	The solution enables users to measure the success or failure of an organization's project or activity. The solution helps track various business dimensions to identify best and worst performing aspects of the organization.					
5.18	Data Mining	The solution allows users to examine large preexisting databases in order to generate new information.					
6. Document Management (exporting data visualizations and reports into different formats)							
Number	Category	Description	Vendor Response: Please provide "Yes" to one of the following choices				Comments
			Out of the Box	Need to Configure	Need Customization	Not Available	
6.02	Export	The solution supports user reports and output to be saved (exported) in common formats, such as HTML, Excel, CSV, or PDF to provide flexibility.					
6.03	Versioning	The solution allows users to view past versions of a report.					
6.04	Application Reporting	The solution allows users to import analytical tables, embedded data and charts from other application.					
7. Decision Services (security, user access controls to access, export, modify files, spreadsheets and graphs)							
Number	Category	Description	Vendor Response: Please provide "Yes" to one of the following choices				Comments
			Out of the Box	Need to Configure	Need Customization	Not Available	
7.02	Compliance	The solution makes it easier for CCC to prove compliance.					
7.03	Decision Management	The solution allows users to perform analytics, transform data, create business recommendations, and comment on the information to help drive decisions.					
7.04	Decision Management	The solution allows users to perform analytics, transform data, create business recommendations, and comment on the information to help drive decisions.					
8. Mobile Data Delivery & Analysis							
Number	Category	Description	Vendor Response: Please provide "Yes" to one of the following choices				Comments
			Out of the Box	Need to Configure	Need Customization	Not Available	

8.02	Mobile Features	The solution has the capability to utilize mobile devices' native capabilities to enhance mobile access, such as a touchscreen, camera and location awareness.					
9. Data Modeling							
Number	Category	Description	Vendor Response: Please provide "Yes" to one of the following choices				Comments
			Out of the Box	Need to Configure	Need Customization	Not Available	
9.02	End-User Data Mashups	The solution enables code-free, 'drag and drop', user-driven data combinations of different sources and the creation of analytical models, such as user-defined measures, sets, groups, and hierarchies.					
9.03	Natural Language Searching	The solution enables users to search through data using natural language text and linguistic rules thereby making search function intuitive.					
9.04	PMML Support	The solution permits import of third-party analytic models using Predictive Modeling Markup Language (PMML).					
9.05	Reusable Data Models	The solution has the ability to let users create data models to enhance future searches and analysis.					
10. Data Warehouse							
Number	Category	Description	Vendor Response: Please provide "Yes" to one of the following choices				Comments
			Out of the Box	Need to Configure	Need Customization	Not Available	
10.02	Data Tool	The solution is able to map, convert and store data from flat file formats like text and comma separated files, as well as from SQL platforms like MS SQL, Oracle, MySQL, etc.					
10.03	Data Tool	The solution is capable of schedule dependent jobs; that can be driven by a data event automatically or manually.					
10.04	Data Integration	The solution integrates with ERP tools, specifically PeopleSoft Campus Solutions 9.x, PeopleSoft Contributor Relations v.9.x, PeopleSoft Enterprise Human Resources Management v.9.x, PeopleSoft Enterprise Student Administration v. 9.x, PeopleSoft Enterprise Financial Management v.9.x.					
10.05	Data Integration	The solutions is able connect to data warehouse OLAP cubes to allow users to slice and dice, drilldown, rollup the data.					
10.06	Data Integration	The solution provides API for data access/extraction from outside applications.					
10.07	Data Quality	The solution ensures the confidentiality, integrity, and availability of data with the system preventing duplicate records and only allowing records to be removed by administrator action.					
10.08	Data Optimization	The solution is optimized that data queries generated as result of user interaction with the applications will not affect existing performance of the transactional database from which data are pulled.					
10.09	Data Optimization	The solution translates business requirements into meaningful datasets.					
10.10	Data Modeling	The solution vendor provides programming assistance in modeling the data warehouse, normalizing extant CCC data siloes into a data warehouse and assisting CCC in data warehouse schema development.					
11. Infrastructure, Security and Support							
Number	Category	Description	Vendor Response: Please provide "Yes" to one of the following choices				Comments
			Out of the Box	Need to Configure	Need Customization	Not Available	
11.02	Networking	The solution provides single sign on (SSO) capabilities through integration with AD/LDAP.					
11.03	Networking	The solution provides load balancing capability to minimize the risk of server failure.					
11.04	Hardware/Software	The solution is fully compatible to host in any of major cloud services (e.g. AWS, MS Azure, Google Cloud, etc.)					
11.05	Hardware/Software	The solution is compatible for mobile devices including but not limited to: Android, iPhone, and iPad.					
11.06	Hardware/Software	The solution is compatible with any CCC servers and client machines and provides ongoing technical support.					
11.07	Analytics Tool	The solution is integrated with predicted analytic tool or other machine learning solutions.					
11.08	Analytics Tool	The solution is capable of provisioning programming studio/environment for easy integration of in-house applications or of middleware.					
11.09	Security	The solution provides capability to provision users and restrict access for various tiers by roles and responsibility (authorization).					
11.1	Security	The solution is able to record an audit trail of all changes made to the application configurations and to CCC data. The minimum criteria for audit logs should be date, time, user performing the change, and changes made.					
11.11	Security	The solution supports data encryption between all server components and client to server connections.					
11.12	Security	The solution allows CCC to own all data loaded into the system including log data relating to our use of the system. vendor may not use data in any way other than to serve CCC. Advance approval from CCC authorized contact must be obtained for any data usage not outlined in the agreement.					
11.13	Support	The solution vendor provides telephone based product support on a 24 x 7 x 365 basis.					

11.14	Support	The solution vendor shall integrate installation and setup plans into CCC authored change management and acculturation plans to integrate BI into CCC workflow.					
11.15	Training	The solution shall empower users with selfservice training via webbased video and text tutorials, as well as via instructorled facetoface training opportunities.					