Scope of Work for

Interactive Dashboard Design Document for e-Primary School System for the Government Primary Education

Project : ICT in Education, Shishuder Jonno Program

Consultant Company : mPower

Location of work : Dhaka

Duration : I April, 2015 to 20 June, 2015 (Number of working days given in detail).

Remuneration : Tk 625000 (six lac twenty five thousand taka only)

Mode of Payment : Payment will be made in Taka.

50% upon submitting the High Level Design Document for Dashboard

and 50% after completion the assignment period

Background

In 2011, the Sponsorship Program of Save the Children has designed and developed e-Primary School System to decrease schools' reliance on paper based forms/ reporting by introducing a systemic recording, archival and retrieval of data for communication and decisions. Originally developed as an offline system, Students Performance Management System (SPMS), to track individual student's performance throughout primary school cycle. Senior officials at DPE were very impressed with this software and asked Save the Children if an online version could be developed, which would also contain two additional modules for teachers and the schools infrastructure. A MoU was then signed with MoPME for web-based system development and pilot testing at 116 government primary schools in Gazipur.

Pilot Program of ePrimary School System

The system is being pilot tested in the project GPS in Meherpur and other GPS in Kaliakoir upazila. During the pilot testing phase the system has also been hosted on the DPE website and DPE has asked teachers across the country to enter the data for the 3 modules. As of December 2014, nearly 300,000 teachers, 63000 schools and 31000 students (only Kaliakoir and Meherpur) have already been entered into the system.

In 2015, Save the Children will continue piloting the ePrimary school system in the current project in Meherpur and 116 schools in Kaliakoir upazila. The pilot testing will include a dashboard with additional features (including data visualization) for data analysis and decision making. During the pilot testing mechanisms for verifying data entry processes and resolving contamination issues in addition to see how UEO, DPEO and schools analyze the data and make decisions and how UEO and DPEO give feedback to schools based on data analysis.



ePrimary School System Development

Since the beginning of 2012, Save the Children has been working on this project. The initial SPMS was developed by Save the Children team members. For the web-based system development, an external software company, Nano IT, was hired both by Save the Children (only for the students' module) and by the DPE (for teachers and school infrastructure). The Information and Management Department (IMD) of DPE and Save the Children IT team project members were also involved in development of the system. In addition, from need analysis and system development, the government officials and teachers were fully involved in the process.

At the end of 2014, a new contract was made with the previous software company (Nano IT) for 6 months on dashboard designing and development. The IMD team of DPE and Save team will work closely for further improvement of the system.

Hiring mPower for Dashboard Design Document and Technical support in system development

The key objective of the ePrimary school system is to ensure transparency, efficiency and effectiveness at all levels of educational administration by using organized data flow. For this to be achieved, the administration needs to have all the correct data from scratch with no missing links. The storage, tracking and sharing of information of data is a vital part for the administration of the education institutions. To tackle all these issues, Save the Children will create interactive data visualization platforms (dashboards) from Schools to DPE central level. In this regards, Save the Children would like to assign mPower for designing and supporting interactive dashboards. The organization, mPower has significant experience and expertise on designing and deployment of systems that create optimal information flows within the organizations/ systems . mPower works for the effective use of real-time data for efficient monitoring and management, effective resource allocation and ultimately maximizing impact. From design to analysis, mPower aims to understand the program needs to find ways that the process can be made simpler, more cost-effective and above all, more dependable.

As the major focus for ePrimary school system now is to see how schools, upazilla education office analyze the school data and make decisions and how upazilla education office and Dhaka DPE give feedback to schools based on data analysis, therefore at this stage, Save the Children would like to work with mPower for getting their supports for making the existing eprimary school system more user-friendly and interactive.

I. Main Objectives of Assignment:

Design interactive dashboards for e-primary school system to-

- 1. visualize and process timely and reliable production of data and information from the government primary schools
- 2. integrate and share data from central DPE to school level
- 3. use data effectively for making school improvement plan/ decisions



II. Scope of Assignment:

Assignment I

High Level Design Document for Dashboards: High level design document for dashboards will include data design, architecture design and interface design for the following stakeholders.

- i. <u>Public Dashboard:</u> The public dashboard will be accessible without any user ID or password. The public dashboard will give a general and analytical overview of the primary school data.
- ii. <u>Central dashboard</u>: It is intended to be used by MoPME and DPE to facilitate planning and decision making.
- iii. <u>District and Upzilla level dashboards:</u> This platform will be used at district and upazilla level by the local DPE offices. It should be checked to determine the operationally feasibility to link to central module, and vice versa.
- iv. School level dashboard: The frontline user of ePrimary will be the school teachers. The developed software should have built in data analysis tools to report.

Assignment 2

High Level System Design Support: Provide technical supports & feedback to technical partner's (Nano IT) in coordination and consultation with Save the Children on technology architecture, database structure and technology backend.

Assignment 3

Quality Control of Dashboards: Ensure quality of the dashboards provided by technical partner on behalf of Save the Children, by providing feedback and technical supports to the technical partner (Nano IT, software developer company)

III. Specific Tasks to be performed with timeframe

Major Task	Associated tasks	Tentative working days	Location/ working place	Tentative time frame
Work plan	In consultation with Save the Children, a detail work plan will be developed for completing the assignments in	(within 3 days of agreement)		



	stipulated time of agreement			
Requirement analysis To map key decision making flows along with data needs and current status of Kaliakoir Pilot project	Meeting with Save the Children IT team and Nano IT (software developer company) teams to identify existing design and challenges in the system.	Half day	Save office	
	Attend workshop with DPE and other stakeholders	I day	Save/ DPE office	
	Review existing software design and data structure	I day	mPower office	
	Meeting with Save the Children IT team and Nano IT (software developer company) to share the findings and plan for action	Half day	Save office	
Dashboard Interface Design	Design interactive dashboards for the above mentioned users	3 days	mPower Office	
	Share the draft design of dashboards with Save the Children and DPE	Presentation session	Save/ DPE office	
	Finalize the dashboard interface design	2 days	mPower Office	
High Level Design Document for Dashboard	Design document for dashboards with data design, architecture design and interface design	5 days (I week)	mPower Office	
	Submit design document to Save			



	the Children with data design, architecture design and interface design			
Technical Supports for dashboard system development	Provide technical supports and guidance to Nano IT and Save IT teams for developing dashboard system based on the designed document Attend review meeting and provide feedback on developed dashboards by technical partner	3 working days in one week 1/2 day in a week (feedback session) as of convenience With documentation of identified errors, recommendati ons and dates for solutions	mPower/ save/ nano IT office	
Quality Control of Dashboards Field testing of dashboard implementatioat pilot area (Kaliakoir)	Review and ensure quality of the dashboard system for creating a user friendly, transparent and effective data flow management at different stakeholders for key decision making - Develop check list for field testing - Support Save IT team to monitor the initial deployment Presentation/ sharing session with Save team on dashboard visualiazation	2 workings days in one week 1/2 day meeting (feedback session) as of convenience With documentation of identified errors, recommendati ons and dates for solutions	mPower/ save/ nano IT office	



IV Outcome/deliverables of the assignment:

- 1. Interactive Interface Design Document for Dashboards
- 2. Interactive Dashboard Design Document
- 3. Technical supports in High Quality System Development

V. Timeframe:

The interactive dashboard development shall be completed by June 20, 2015.

VI. Total Cost:

The consultation fees will be given in installments to the company according to phases. Payment will be made in 3 phases as follows:

- i) Ist installment as 50% amount of total contract value (successful completion of interactive system design document)
- ii) Final installment as 50% amount of total contract value (Field testing/ QC of system initial deployment dashboard system) and satisfactory evaluation report by Save the Children.

 Vat will be deducted by Save the Children accounts department as per government rule.

VII. Copyrights:

- The copyrights to the Dashboard System Design Document will belong to Save the Children
- All the raw files of the software must be given to SC upon completion of project and no element of this work should appear in any other work. If similarities are found in any two given works, then it shall be considered an infringement of copyright.
- All content, graphics, domain names, files and the look-and-feel of the site are the sole property
 of the Save the Children.

VII. Field Travel:

During the course of software development work, the developer may need to travel to the field. For that purpose Save the Children will bear logistics, food, accommodation and travel expenditure. The developer will not receive any per-diem as per Save the Children policy. However for providing training facilitation the trainer will get honorarium as per Save the Children rate.

