Improving the quality of life of PcD in Palestine, optimizing the management and services of the PRCS rehabilitation program.

**Development Contracting** 

# PRESENTATION

BIG DATA – BUSINESS INTELLIGENCE – MACHINE LEARNING



# 1. **DESCRIPTION**

In Stratebi we offer a **large number of analytical solutions** for a **fast growing** company, innovating in the technological areas of greatest development today: **Business Intelligence, Big Data and Social Intelligence**, many of them based on **Open Source** solutions.

In addition, we are **Certified Partners in Microsoft PowerBI and Vertica**, with a large number of projects with both technologies.



We develop new analytical solutions based on Open Source, for the generation of dashboards in real time, with IoT technologies for SmartCities, machine learning, etc...



# A) PROJECT DESCRIPTION

Improving the quality of life of PcD in Palestine, optimizing the management and services of the PRCS rehabilitation program.

The project will contribute to the improvement of quality in the management of social rehabilitation services for people with disabilities in Palestine, provided by the Palestine Red Crescent Society (PRCS) under the agreement signed with the Ministry of Social Affairs (MoSD), through the improvement of its ongoing Rehabilitation Programme in 14 centres in the West Bank and Gaza Strip.

An information management system will be implemented with digitized systems, data collection applications on mobile devices and the development of business intelligence tools, both open source, thus reducing the digital divide of the PRCS...,

The information and evidence generated will allow the development of new rehabilitation techniques to strengthen the capacity to care for children and youth with cerebral palsy. The project will improve the follow-up of at least 7000 users, the monitoring of activities and accountability to the population and to MoSD.

#### **B) SCOPE OF WORK**

The work requested of the contractor shall cover the following scope as well as the detail of tasks indicated:

- We need to contract the development of Business Intelligence systems, Big Data and Machine Learning on Business Intelligence Open Source platforms and the latest generation as Pentaho, LinceBI, Vertica.
- Among the tasks to be performed are the following
  - ETL processes (extraction, transformation and loading) of all sensitive data to be analysed, coming from the corresponding rehabilitation applications, as well as from other possible external sources with relevant information.
  - A mapping of all available source data, a historical loading of the data, as well as the necessary work to establish incremental loads on a regular basis should be done.
  - Development of data models with rehabilitation information to enable all appropriate decisions and actions.
  - Creation of reports and Dashboards with the aforementioned tools that allow visual analysis of all key indicators for more agile and effective decision making.
  - Delivery of the Mondrian schema, custom calculations in MDX for each of the models.
  - Automation of the batch processes of each of the ETLs necessary to load data into the system.
  - Creation of formulas, key figures and 'custom aggregates', necessary for their exploitation by each of the visual elements.

### C) EXPECTED RESULTS AND DELIVERABLES

As a result of the work and tasks indicated above, the following results should be obtained in the deliverables listed below:

- Installation in development environment (Host Server, with sufficient capacities of the following components):
  - o Pentaho Bl Server
  - PostgreSQL/MySQL
  - Vertica Database
  - o Mondrian
  - Pentaho Reporting
  - STReport, STPivot, STDashboard
- Create ETL processes of remediation data from available sources using Pentaho Data Integration and deliver corresponding processes and scripts
- Training in the technologies included in the project to CRE staff hired and/or volunteers (approximately in October).
- Creation of metadata models with Pentaho Mondrian and Pentaho Metadata (delivery of metadata files in XML format).
- Definition of fonts and topography, as well as aesthetic alignment with the application.
- Creation of ad-hoc reports, predefined reports and ad-hoc dashboards.
- Customization of predefined reports, OLAP reports and Dashboards, according to the needs and requirements of the project once the data is loaded and modeled.
- The deadline for the completion of these tasks is 4 months.

# D) INSTITUTIONAL ARRANGEMENTS

PRCS has 14 centres under its Rehabilitation Programme for Persons with Disabilities (PcD), as part of a larger, cross-cutting community programme in different delegations. It has served more than 7300 persons in 2018 in the different services of physiotherapy, deaf education, speech and hearing therapy, occupational therapy, special education for minors with intellectual disabilities, vocational workshops for persons with intellectual and/or physical disabilities, community-based special education (including awareness and advocacy)

Stratebi collaborates with the Spanish Red Cross (which holds the international agreements mentioned here).

Ministry of Social Affairs (MoSD), through an agreement signed in 2010 for the care of PwDs, which includes the delegation of rehabilitation services and education of children and youth with intellectual and hearing disabilities to the PRCS, with the Ministry guaranteeing the sustainability of the services. Currently, the reduction in funding faced by Palestinian institutions makes it difficult to cover all program needs. Within this institutional framework, the role of the PRCS will consist of: 1.Technical adequacy of the server architecture of its IT department for the implementation of the applications and information management solution to be developed.

#### E) WORKING HOURS

The total duration of the work will be 4 months.

Deliverable /Products	Estimated Time to Complete Task	Due Dates
Installation and Configuration of all modules	3 weeks	TBD
ETL Process Creation	Month and a Half	TBD
Metadata Creation	One month	TBD
Reporting, OLAP analysis and dashboarding	2 months	TBD

#### F) PLACE OF DESTINATION

The development work will be done against hosting server in Cloud, being able to perform the development work remotely.

# G) QUALIFICATIONS OF A SUCCESSFUL CONTRACTOR

To be considered successful, a contractor must meet the following requirements

- Dedication of at least one specialist, who must have more than 10 years of experience with Open Source Business Intelligence systems.
- Having more team members with Pentaho/LinceBI training
- Have implemented 3 projects with Pentaho technologies plus LinceBI in the internationalization of applications to different languages.
- Demonstrable knowledge of Pentaho Mondrian, Pentaho Data Integration, Pentaho Metadata and customization of LinceBI tools.
- Have completed LinceBI Certification courses on Pentaho platform.

# H) SCOPE OF THE FINANCIAL PROPOSAL AND PAYMENT SCHEDULE

The contract price shall not exceed 15.000€ (VAT included), for all the concepts indicated in the scope and payments will be made in half and at the end of the work (according to the amount and schedule proposed).

# I) RECOMMENDATIONS FOR THE PRESENTATION OF THE OFFER

Proposals should include the following information:

- Brief description of the contracting company
- Description of the experience with the mentioned technologies
- Methodology to be used in the works
- Proposed dates, project deliverables
- Economic/financial proposal and method of invoicing/payment

#### J) CRITERIA FOR THE SELECTION OF THE BEST OFFER

The bids will be selected according to the following criteria:

- 40% methodology applied, definition of the processes and tasks to be carried out that best fit the scope.
- 30% contractor's equipment and experience
- 30% financial offer

Send your proposals to info@stratebi.com

Deadline for submission: 27/09/2021 Vendor selection date: 01/10/2021