Project write-up

1) Banglar Shiksha School Management System, School Education Department, WB :

EDPL implemented SMS project in Govt Sponsored & Aided school. EDPL engaged a dedicated development & support team at Bikash Bhavan,HQ of School Education Department, WB. Right now SMS system contains information of more than 95000 schools including it's teachers (nearly 5Lakh) & more than 1.7 crore students. The system presently supports login for the following stakeholders: Teachers, HoI/TIC, SI, DI, State Officials. The SMS application is hosted at the State Data Centre, WB on Linux server. The URL is https://school.banglarshiksha.gov.in/. EDPL team manages the system at SDC in regular coordination with the SDC team. Beside this EDPL also developed Android App for the Teacher/HoI for everyday operations like examination marks entry etc. The project needs to be executed by a dedicated team in subsequent phases for the continuation of ongoing development and implementation.

The School Management System contains the following functionalities:

Website development and maintenance of each school.	School Routine for teachers	Student Identity Card generation (Provisional)
Student Attendance	Examination Schedule	Formative Marks Entry
Summative Marks Entry	Progress Report Generation	Class Plan
Class Log	Question Bank	Activity Marks Entry
Tracking of Petty Cash Expenditure (provisional)	Games & Sports, Co-Curricular Activity information (provisional)	CCE Integration
Online Assignment	Student Teacher's Communication	School specific Online Test (MCQ)

2) Pranishakti Project, ARD Department:

This is a multi-functional web as well as mobile based application of the Animal Resource Development Department, for managing different verticals as mentioned below:

#	Modules	#	Modules
1	**Application Modules**	3	**Data Collection & Reporting Module**
A	**Poultry Management module**	a.	**Treatment Diseases Wise**
b.	**Lab Investigation Tracking**	b.	**Treatment Vaccination Wise**
c.	**Inventory Management**	c.	**Health Camp Information**

2	Information & Content Management Module	d.	Cattle Insurance Reporting
a.	Livestock Q&A	4.	Communication Module
b.	Feed & Fodder/Vaccination Training	a.	Messaging module (Chat Based)
c.	Content Synchronization & Updation	b.	Electronic Notice Board

EDPL engaged a dedicated development & support team at the ARD Department, HQ, Kolkata. EDPL team worked in close coordination with WTL as well as ARD Department officials. The application was developed using opensource technology: Linux, PHP, MariaDB, JavaScript, HTML5. This is hosted in State Data Centre, WB and having domain: https://pranishakti-ard.wb.gov.in/ The Mobile App is hosted to Google Playstore.

3) GPS based Mobile Veterinary Clinic, ARD Department:

This is a flagship project of the ARD Department to keep track of MVC unit across the state. EDPL developed Web portal as well as Mobile Application for the project.

The overall objective of the project is to enable a digital platform that will achieve the following objectives:

1) Keep track of the execution of the MVC team in each designated block.
2) Manage Health Camp Schedules duly approved by respective higher authority
3) GPS based tracking of journey on Google Map of the MVC unit to the respective health camp.
4) Manage the field visit records of Animal Health Camp like Treatment, Vaccination and Sample collection.
5) Keep track of the beneficiaries as per Departmental rule
6) Attendance by the respective MVC members through the Android Tablet
7) Generate block wise, district wise reports to the Department as per their requirements.

Beside the applications, WTL also provided Android Tablet having following specification to each MVC unit.

- Brand: Lenovo Tab
- Model: TB 4 8 Plus (Variant 2) (TB - 8704X)
- RAM: 4GB RAM
- Storage: 64GB storage
- Processor: 2.0Ghz Octa Core (Qualcomm)
- Connectivity: 4G
- Screen Size: 8 inch FHD
- Rear Camera: 8MP AF with Flash
- Battery: 4850 mAh
- Operating System: Android 8.1
  The application is hosted in a dedicated Linux server with https://wbardmvc.in/ domain.

4) Karma Tirtha, MSME Department

The main objective of the unique initiative is to create a digital platform to reach out the grass root level stakeholder of Self Help Group, Artesian, Micro & Small scale entrepreneurs who will get the benefits of the Government scheme as well as able to promote their product in the market place. There are more than 500 Karma Tirtha units available across West Bengal. Each Karma Tirtha unit has the provision of 4 storied building where each floor contains 20 stalls having basic amenities like electricity, water connection etc.

The portal should contain an excellent landing page with various information like About the scheme, Funding Departments, Gallery, Success Stories, GIS based KT information on West Bengal Map, Notifications, Stall availability etc and login for the entrepreneur as well as officials. Officials can view different MIS reports for analysis and timely intervention (if required). The project was initially managed by the CMO for smooth functioning of the different functional component and reporting and later on it has been managed by the MSME Department. EDPL designed, developed and deployed the application. The application consists of the following users

- Entrepreneur (who can apply for stall)
- BDO (Block Development Officer)
- District level head of Departmental user
- DM (District Magistrate)
- State level Departmental user

Beside this, EDPL provided support for security audit as well as hosting of the application at the State Data Center. The application is hosted to https://karmatirtha.wb.gov.in/

5) Web Portal of SCERT, PTTI & DIET, MSME Department

Development & maintenance of Web portal of SCERT (State Council of Educational Research & Training) & DIETs (District Institute of Education & Training). The existing websites were already developed by WTL using Content Management System (CMS) framework with PHP, JS, CSS, HTML . MySQL is used as database. The existing site is fully dynamic and updatable from Admin dashboard.

The websites are hosted in Linux server with scertwb.org domain name. The DIET websites were developed and hosted in subdomain of the scertwb.org. For example,

- Site of Burdwan DIET is hosted at http://burdwan.scertwb.org/
- Site of Bankura DIET 2nd campus is hosted at http://bankura2nd.scertwb.org/
- Site of Katwa Govt PTTI is hosted at http://katwagovt.wbptti.in
- Site of Midnapore Govt PTTI is hosted at http://midnaporegovt.wbptti.in/

Number of Websites:

- SCERT (www.scertwb.org) website
- 17 DIET website
- 10 DIET 2nd Campus website

- 44 Govt /Govt sponsored PTTI

The following work will be done as advised by the competent authority
- Modification of the website
- Update Design
- Update Banner image and other images
- Update existing content
- Upload Notice, Videos
- Provide training on Administration dashboard to the authority so that they can operate the site when required
- Manage the codebase, database and images in server
- Take backup of database and application
  Provide necessary support to the SCERT as well as DIET officials related to website

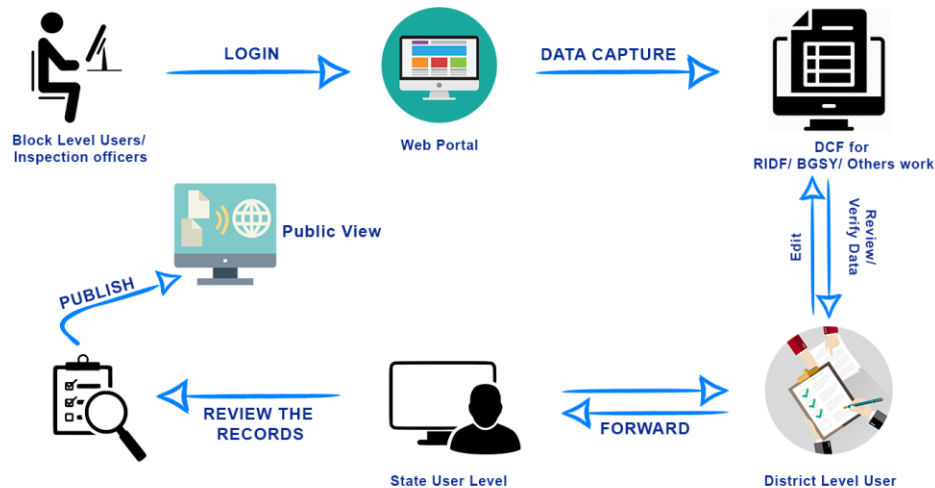## 6) Pathashree, Panchayat & Rural Development Department

The portal **https://prdroads.wb.gov.in/** was developed, hosted and managed by EDPL on behalf of WTL with the functionalities as mentioned by the Competent Authority. The portal has been running successfully and capture information of rural road construction, completion status, road length, images etc in gram panchayat across West Bengal. Block level user input information in the prescribed form available in their dashboard. The road information is approved by the respective district authority and finally published by the state authority for public view. Block wise, District wise information of rural roads can be viewable in the portal. The authority would like to enhance the functionalities of the application as well as introduce mobile application for the ease of work of the department. The main modules are given below:

- RIDF Works
  - Physical & Financial Progress of RIDF Work which includes the following information:
    - District
    - Name of Road
    - Length (Km for Road Meter for Bridge)
    - Physical Progress %
    - Sanctioned Amount
    - Awarded Cost
    - Financial Progress
    - Block
    - RIDF Trenches
    - Work Order Date
    - Physical progress Status
    - Contractual Rate
    - Expenditure
    - Update date & Road Image

  - Quality Monitoring of RIDF Works
    - District
    - Name of Road
    - Length (Km for Road, Meter for Bridge)
    - Date of Inspection
    - Grade S/SRI/U
    - Block
    - RIDF Trenches
    - Status during Inspection
    - Inspection Officer information
    - Inspection Report (PDF)

- BGSY Post 5 Year Works

  - District
  - Name of Road
  - Length(Km for Road Meter for Bridge)
  - Physical Progress %
  - Sanctioned Amount
  - Awarded Cost
  - Financial Progress

  - Block
  - RIDF Trenche
  - Work Order Date
  - Physical progress Status
  - Contractual Rate
  - Expenditure
  - Update date & Road Image

- Other Works
  - This is for roads other than RIDF & BGSY This may include the following information
    - District
    - Block
    - Name of Road/Bridge
    - Length
    - Completion status
    - 3 Images
- Notification/Circulars
- Blacklisted Agencies & Terminated Agencies for Breach of Contract in last 3 years

- User Management: The role-based management systems provide different functionalities for different types of users. The different roles are listed below:
  - Admin: admin has super power - has accessed all the functionalities
  - Superintending Engineer: can access multiple assigned district
  - DM/Executive Engineer/District Engineer: can access a specific assigned district
  - Sub-division Engineer: can access multiple assigned blocks in a district
  - ZP/PS/SRDA/MBL/AGRO: Several agencies can access the roads assigned from state level in different schemes for a particular district
  - Assistant/Junior/Pathashree Engineer: can access the roads assigned by agency in different schemes

The Block level users/ Inspection officers shall login to the system and fill up the data capture form (DCF) for RIDF/ BGSY/ Others work. The required information is mentioned in above section. The information will be viewable /accessible by the district authority. The district level user shall verify the records and may revert back to Block user if anything needs to be edited. Next, the verified record is submitted to the state authority. State authority may review the records once more before publishing to the portal for public view. The records may be edited by district authority if required.