

# Institute Performance Evaluation System

**Client:** Commissionerate of Employment and Training

**Client Vertical:** Govt./PSU

**Project Type:** Web Application

**Technology Used:** ASP.NET / MS SQL Server

## Client Overview

**About Client:** The Commissionerate of Employment & Training, CET is working under the Department of Labor and Employment, Government of Gujarat. It was formed in 1971, by merging the Employment Wing, functioning under the Labor Commissionerate, and the Vocational Training Scheme which was under the Directorate of Technical Education.

The major objective of CET is to provide Vocational Training and Employment Services to the youth of Gujarat. To achieve these objectives the CET runs a variety of long & short term training programs in Industrial Training Institutes/Centers in the State. It also registers the youth who are looking for employment, and provides placement services to them. They also maintain a list of the prospective employers.

**Requirement Overview:** Commissionerate of Employment and Training department wanted to develop a solution to evaluate the performance of and the facilities provided by the different ITI / ITC institutes located across India. The performance of the institute would be evaluated by the department officers or by hired peoples.

There are approximately 723 ITI / ITC institutes (including the government, grant-in-aid, self finance, and other technical schools) across India. The client required

a stable and secure system that could efficiently manage the large amount of information coming in from all these institutes and then evaluate the performance; it should also manage the different user roles and access rights granted by CET.

Client required following key functionality as a part of the system:

- Information that is available at institute level should be made available in the centralized database
- Five user roles need to be implemented: Administrator, Institute, Head Office, Nodal Inspector and Hired Employee for Inspection. The administrator should be given the rights to access the back end and define the roles for the other users
- Data of one institute must be isolated from the other institute. Only some data such as basic institute information, their course and accommodation information etc. should be available and shared with other institutes
- Head Office User should be allowed to access all information / data
- System should record symptoms that lead to wastage, inefficiency, lack of discipline & attitude; it should also record the reasons for enhanced creativity
- System should also provide basis for root-cause analysis with a view on how to improve the performance or facility of the institute

# Institute Performance Evaluation System

- Head Office User should be allowed to access all information / data
  - System should record symptoms that lead to wastage, inefficiency, lack of discipline & attitude; it should also record the reasons for enhanced creativity
  - System should also provide basis for root-cause analysis with a view on how to improve the performance or facility of the institute
  - The system should be able to rate the performance of the instructional staff for the particular institute as well as between the among the different institutes based on set parameters.
  - Based on the information and ratings provided by inspector the overall performance should be calculated
  - The system should display various types of reports for the different modules that are present in the system.
- Following are the brief list of reports that the system must be implemented:

- a. Institute Reports:** Reports & Charts regarding the institute admission, performance, activity, standards, health-safety-hygiene awareness etc.
- b. Training Reports:** It would include Raw material, Training delivery, Internal inspections, Attendance reports and charts
- c. Resource Reports:** Various resources available for particular institute and their utilization, power consumption,

## Proposed Solution:

Based on the client requirements, Silver Touch proposed developing a system based on .NET framework using MS SQL as a backend database. The solution facilitated customizations for modules, forms, user roles and report generation. For chart functionality Microsoft Chart Report was included.

The solution implemented a functionality to evaluate the performance of the institute based on the information and ranking submitted by inspector. Institute would be able to get the information on how to improve the performance and will be able to compare their ratings with the other institute ratings.

The solution also implemented functionality to keep certain information secure within the institutes, ensuring only a certain amount of information will be accessible to the institutes.

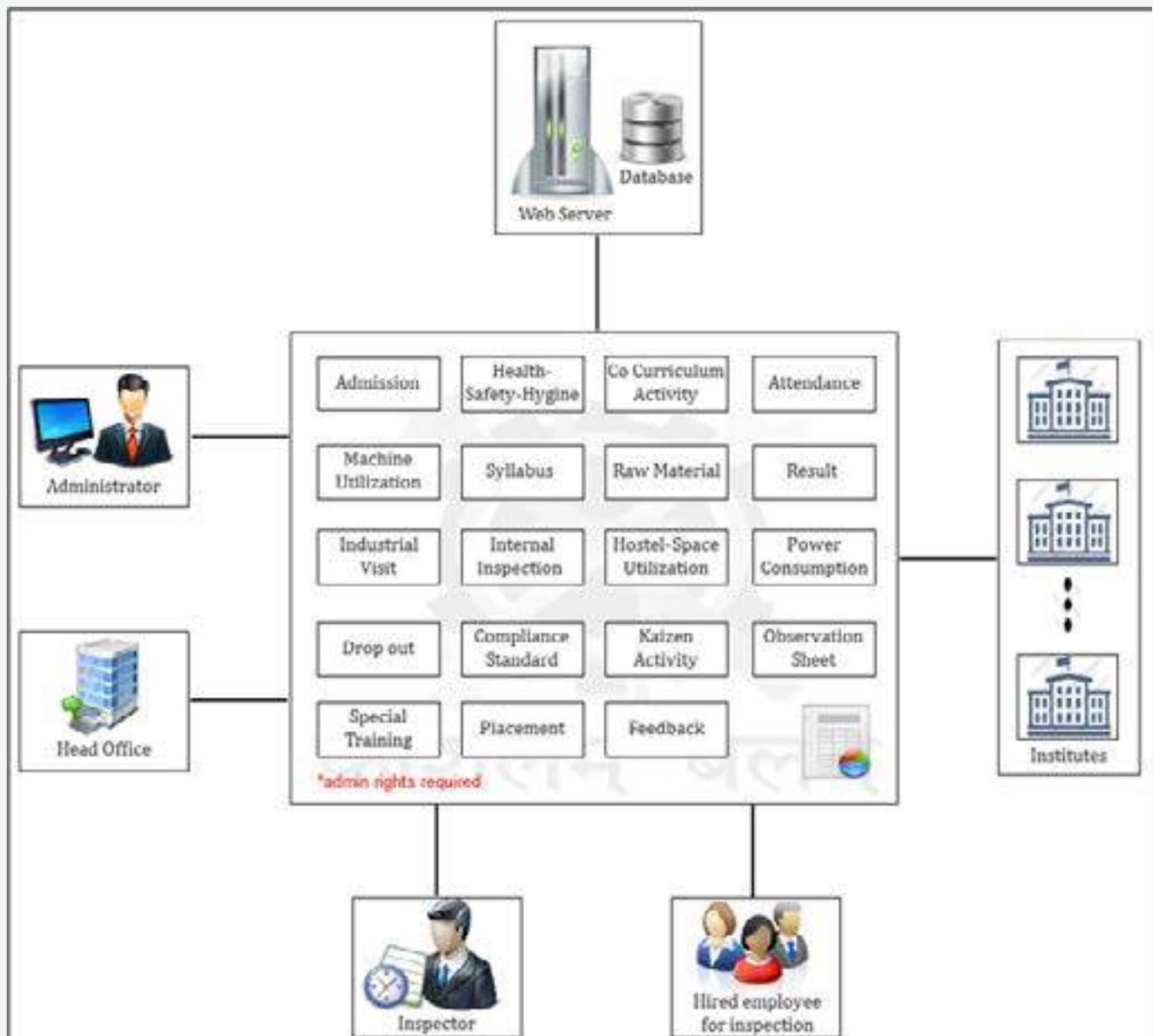
The information provided by the institute would be verified by the Inspector, The solution has also considered conflict situation in ratings.

# Institute Performance Evaluation System

## Benefits:

1. All institute related information that helps evaluate the performance are stored in the centralized database offering convenience and accessibility
2. Easy to comprehend data is available
3. Transparency in performance tracking process thus giving out precise results
4. Easy to track low rated institutes and offer measures to improve their performance
5. Easy to track the utilization of critical machine which is available in high cost
6. Utilization of space as well as placement activity can be tracked at a central level

## Application Architecture:



# Institute Performance Evaluation System

## Project Description:

Client required a solution wherein the information for ITI / ITC to be stored in a single / central location. The scattered information available from the different institutes is now available at central level. Different forms (for individual institutes) and masters (for all the institutes) have been created.

Individual institute provides the information by filling up the different type of forms according to access rights given by Administrator. Once the information is submitted it is accessible to the central department through the application.

The central department has the access to all the information and reports. The solution covers all the client requirements and contains following major modules:

### 1) Admission:

This module includes information regarding number of applications segregated by Gender / Qualification / Caste/Category wise, and registration fees. Individual institute or central department (if necessary) will enter required information.

### 2) Health-Safety-Hygiene:

Every institute will provide their Health-Safety-Hygiene information at regular intervals. At the time of the scheduled inspection, the inspector will cross check the information entered. In case both the values differ, it will affect respective institute's ratings

### 3) Co Curriculum Activity:

There are pre-defined activities that are organized by each institute. On the basis of this activity, the institute ratings are defined. Data are entered by each institute and it is verified at central level.

### 4) Attendance:

Every institute feeds their attendance data into the application on regular basis. The attendance is fed for a particular batch of the course offered by the institute.

### 5) Machine Utilization:

Machine utilization (both for simple and critical machines) is filled at institute level. Some of the machines are very critical (with high cost) that are monitored for their utilization. Working and non-working condition of the machine is entered on regular basis and related reports are also generated from the system.

# Institute Performance Evaluation System

## 6) Power Consumption:

In this module each institute enters power consumption in KWH (kilowatt-hour) format. The report with chart are generated which shows the power consumption against required norms.

## 7) Training Delivery:

This module consists of batch wise syllabus delivered by the instructor. The syllabus to be covered for each week is decided right at the beginning of the course, and it is reviewed to check the status of the course progress. Reports are available for complete analysis.

## 8) Raw Material:

Course-wise material consumption is fixed at central level and it is monitored using this module. Whenever any material is consumed it is entered into the system. Trainee who is consuming the material enters these details. Comprehensive reports are generated from these data.

## 9) Result:

Result information is entered at institute level and it is monitored at the institute as well as central level. The chart and report pertaining to students' results show the number of students who have passed the exam.

## 10) Drop Out:

Whenever any student is leaving the institute or changing their trade, information including reason is captured into the system. This information is then used to get reports and analysis of reason-wise drop-out for various Batches, Trades, Institutes, State and Regions.

## 11) Kaizen Activity:

Any special activity performed at institute level is recorded and shared at central level making it accessible for the individual institutes. Each institute has access to the entire Kaizen Activity data. This type of activity may increase the overall ratings of the institute.

## 12) Placement, Space and Hostel:

Institute wise yearly campus placement is fed by each institute to the database and it is monitored at the central level. Space utilization at institute level is recorded and required reports are generated by the application. Various details of the hostel is recorded and maintained by each institute having hostel facility.

## 13) Industry Institute Interaction:

This module contains the information related to industrial interactions that occurs at institute level. The interactions include meetings, job training, special lectures, joint projects in the specific industry etc. The system also generates institute-wise reports.

# Institute Performance Evaluation System

## 14) Special Skill and Training Need:

Extra skills or training needs for each inspector is recorded by Institute. Extra Skills are then used as per the requirement by the same or different institute and training is planned.

## 15) Observation:

Observation reports for a particular institute are used to identify the institute's rating as well as the average rating for particular module. Two types of reports are provided:

- 1) Observation Sheet – Detailed information with remarks/suggestion
- 2) Observation Chart – Visual representation of institute and average rating

## Objectives

1. Effectively manage the information of all the ITI / ITC institutes at central level
2. To make the information at the central level accessible to the institutes, inspectors and departments
3. To develop a system that offers transparency in performance calculation, and help to evaluate the performance of the institutes
4. To come up with a central system that give techniques to improve the performance of the institutes which are ranked poor for their performance

## Project Approaches/Activates

The Project was divided into various phases to achieve the best results in less time with optimal utilization of available features, capabilities and new enhancements.

**Phase I:** System requirement Study Document and Re-estimation

**Phase II:** Preparation of Wireframes of the entire site

**Phase III:** Designing

**Phase IV:** Development & Design Integration

**Phase V:** Testing

**Phase VI:** Deployment and provide documentation

# Institute Performance Evaluation System

## Technology

### Development Platform

Technology	Specifications
Technology & Framework	MS.NET 4.0 Framework
Languages	ASP.Net, C# 4.0
Database	MS SQL Server 2008
Web Server/Hosting Platform	IIS 7.0
Operating System (Development)	Windows 7

### Deployment Platform

Technology	Specifications
Technology & Framework	MS.NET 4.0 Framework
Languages	ASP.Net, C# 4.0
Database	MS SQL Server 2008
Web Server/Hosting Platform	IIS 7.0
Operating System	Windows Server 2008

## Duration:

1. Project Man Hours: 2500 Hours
2. Project Life Cycle: 8 Months

## Results Achieved

1. A performance evaluation system at the central level was established based on certain fixed and a few variable parameters, thus offering transparency and convenience to institutes and inspectors
2. Report analysis and insights are easily availed, thus helping in improving the performance of the institutes
3. Overall scoring of the institutes can be improved by the Kaizen activity
4. Easy to identify the course that achieves low attendance or shows low performance
5. Drop-out analysis is now easily carried out with the help of data available in the system

# Institute Performance Evaluation System

## Screen Shots

The screenshot displays the 'Institute List Page' of the 'Commissionerate of Employment & Training, Gujarat, India'. The page features a blue header with the organization's logo and name, a welcome message for 'Nirang Pabdy', and a 'Logout' button. A navigation bar includes links for 'Master Forms', 'Institute Forms', 'Training Forms', 'Resource Forms', 'Institute Reports', 'Training Reports', and 'Resource Reports'. The main content area is titled 'List of Institutes' and includes search filters for 'Institute Name', 'Institute Code', and 'Institute Type'. Below the filters is a table listing various institutes with columns for 'Institute Code', 'Name of Institute', 'Institute Type', 'Region', 'Model', 'City', 'Edit', and 'Delete'. The table contains 9 rows of data, including institutes like 'Industrial Training Institute, Ahmedabad' and 'Industrial Training Institute, Surat'. A 'Page Size' dropdown is set to 50.

Commissionerate of Employment & Training, Gujarat, India  
(An ISO 9001:2008 Certified Organization)

Welcome Nirang Pabdy Logout

Master Forms Institute Forms Training Forms Resource Forms Institute Reports Training Reports Resource Reports

Home > Master Forms > Institute Master

List of Institutes

Institute Name: Institute Code: Institute Type: Select Type Search Reset


Add Institute Page Size: 50

Institute Code	Name of Institute	Institute Type	Region	Model	City	Edit	Delete
101	Industrial Training Institute, Ahmedabad	Government	Ahmedabad	ITI, Ahmedabad	Ahmedabad		
103	Industrial Training Institute, Surat	Self-Finance	Ahmedabad	ITI, Ahmedabad	Kamrej		
121	Industrial Training Institute, Patan	Government	Ahmedabad	ITI, Ahmedabad	Patan		
145	Industrial Training Institute, Bhavnagar	Self-Finance	Ahmedabad	ITI, Ahmedabad	Bhavnagar		
162	Industrial Training Institute, Kadi	Government	Ahmedabad	ITI, Ahmedabad	Ahmedabad		
223	Industrial Training Institute, Padra	Grant-in Aid	Ahmedabad	ITI, Ahmedabad	Mahesana		
2452	test	Government	Ahmedabad	ITI, Ahmedabad	Dhari		
91567	6666	Government	Ahmedabad	ITI, Ahmedabad	Trkar		
500	test	Grant-in Aid	Ahmedabad	ITI, Ahmedabad	Daskroi		

Figure 1: Institute List Page



# Institute Performance Evaluation System

**Commissionerate of Employment & Training, Gujarat, India**  
(An ISO 9001:2008 Certified Organization)

Welcome Nisarg Pandya [Logout](#)

[Master Forms](#) [Institute Forms](#) [Training Forms](#) [Resource Forms](#) [Institute Reports](#) [Training Reports](#) [Resource Reports](#)

[Home](#) > [Institute Forms](#) > Admission

## List of Admission









Institute Name :


Year :

Month :

[Search](#) [Reset](#)

[Add Admission](#) Page size

Institute Name	Year	Month	Form Received By Institute	Form Received By Other Institute	Edit	Delete
Industrial Training Institute, Padra	2013	September	100	100		
Industrial Training Institute, Padra	2013	September	10	10		
Industrial Training Institute, Padra	2013	January	100	0		
Industrial Training Institute, Padra	2013	February	100			

 [User Guide](#)

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Figure 2: Institute wise Admission List Page

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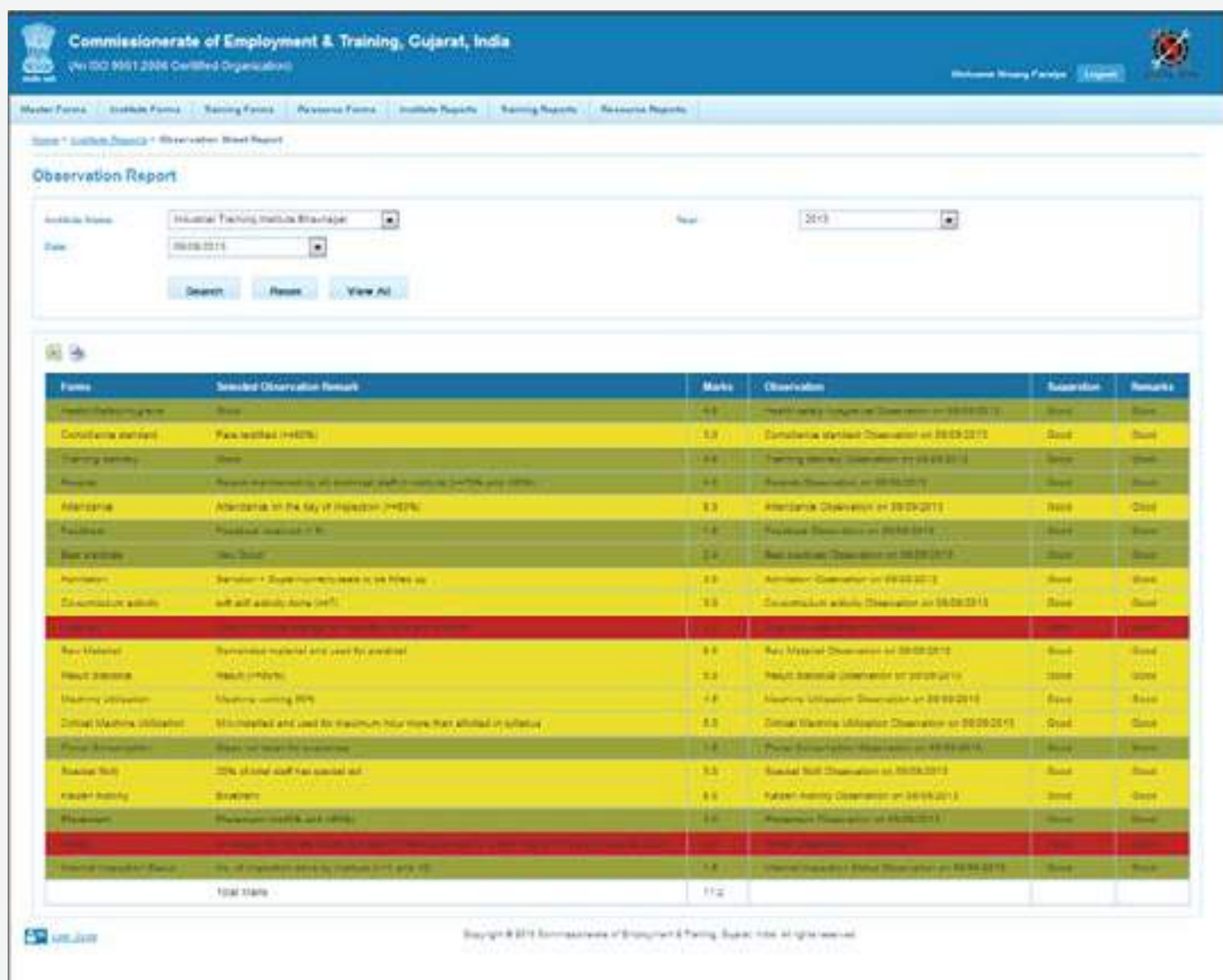


Figure 3: Observation Report

# Institute Performance Evaluation System

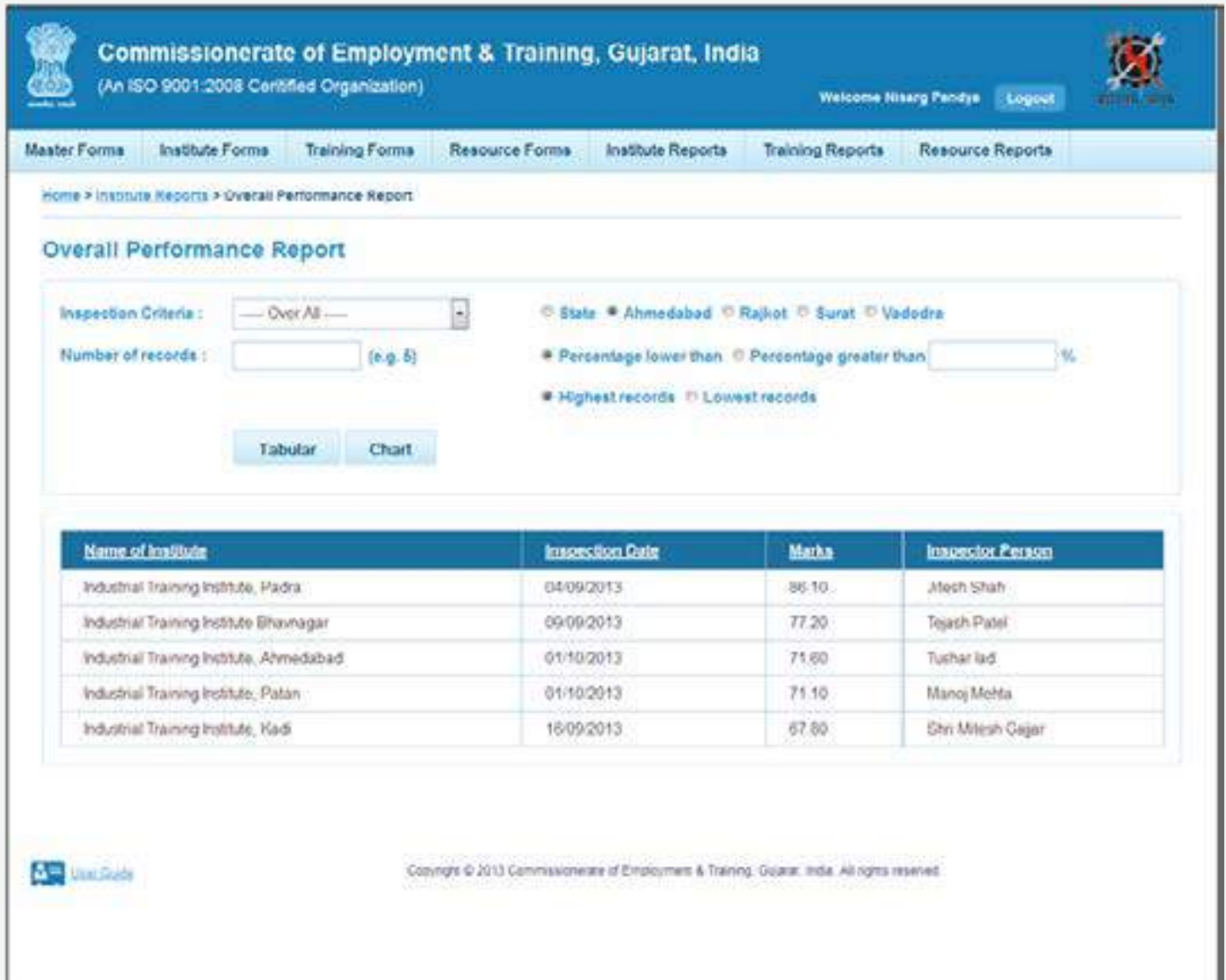


Figure 4: Overall Performance Report

# Institute Performance Evaluation System



**Deliver best products, software solutions and services, on time with quality, and as per customer expectations**

## About SilverTouch

SilverTouch, a company established in 1992 is widely accepted for its IT solutions with a huge customer base in more than 20 countries across the world.

SilverTouch is actively engaged in Enterprise software development, enterprise content management, document management and IT consulting services such as Business process optimization, process consulting, implementation and customization of ERP. SilverTouch leads brilliantly in new technical developments such as: Mobile Application development services on iPhone, iPad, Blackberry, Android, J2ME and Windows mobile platforms. Even now, SilverTouch helps its global clients for major developments, deployments and managements of their mobility solutions and enterprise application development programs.

SilverTouch has alliance with several industry leaders such as Microsoft, Apple, Cisco, IBM, Oracle, SAP, Java, Dell, VM ware, Symantec, Sonic Wall which provides a competitive edge over other industry peers and targets to understand and cater to all types of requirements that concern our clients, thereby, leading to serve them precisely to their satisfaction.

For more information, please visit [www.silvertouch.com](http://www.silvertouch.com) or email [info@silvertouch.com](mailto:info@silvertouch.com)

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