SILVER TOUCH®

Case Study

Punjab NRI Web Portal

Client: Department of NRI Affairs, Govt. of Punjab

Client Vertical: Govt./PSU

Project Type: NRI Web Portal

Technology Used: ASP.NET, CMS

Client Overview

About Client: Client provides the services for NRI (Non-Residence of India) people belong to Punjab state. NRI people have typical mannerism of their motherland and families. With the primary object of strengthening their attachment with the people and culture of their home town and to help them to sort out their grievances especially concerning lands, urban properties, the NRI Sabha Punjab was established as an NGO Society registered with the approval of Punjab Government.

Proposed Solution:

Silver Touch proposed developing the web portal in .NET framework with MS SQL as a backend database. Content Management System was proposed as a cored module of the portal to manage various types of content.

Content Management System enables users to manage complex work flow in a collaborative environment with the easy management of both text & multimedia contents.

For online payment for NRP card registration fees BillDesk Payment Gateway was integrated. Website was also integrated with Social Networking site for posting views & ideas about the department.

For online chatting facility on portal we have proposed PureChat API & for web seminar we have implemented ClickMeeting API. Custom module was developed for Grievance functionality.

Requirement Overview:

Department of NRI affairs of Punjab wanted to develop a portal that provides information about various aspects of Punjab and its culture to Indian people & especially to NRI people so that they can get connected with their motherland & culture.

Previously there was not a single platform from where NRI people get contact to Punjab government and get the information of India. Looking to the citizen's concern client planned for a multi dimensional portal which includes information regarding Punjab history, state population, festivals, fort & places, and tourist facility etc.

Other than above content specific information, client also required the facility of online Grievances functionality so that NRI people can lodge a grievance on the portal easily. Client required following functionality in the Grievance module:

1. Registered user can send complaint to Punjab Government through web portal under Personal or Public section
2. The complaints can be then transferred to the respected department via Nodal officer and authorized department member can process it
3. Department members should be able to view the

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CMMi Level 5 RATED

complains assigned to him and change the status of complains regularly

4. Advanced searching and filtering functionality for department users is required to search particular grievance and update status
5. Registered users can also check status of their complaints

Registered NRI users should be able to get NRP (Non-Residence of Punjab) card from the web portal with online payment against card issue charges. Card issue charges should be managed by the administrator. Client required land information, new planning & development activity, police department information, and education-sports-airports-transportation information on the portal with proper location details on Google map.

Client also required photo & video gallery, news & publications regarding the Punjab Government activities and culture. Web portal contents, users & grievances will be managed by the administrator. Web portal should be implemented global search for content searching.

Further to above, client also required following common functionality:

1. Two type of website views: standard & contrast view with multiple content size options
2. Social Networking integration for sharing content of web portal to social sites
3. Facility to access the website using screen readers for visual impairments people
4. Online chatting & web seminar functionality for registered users

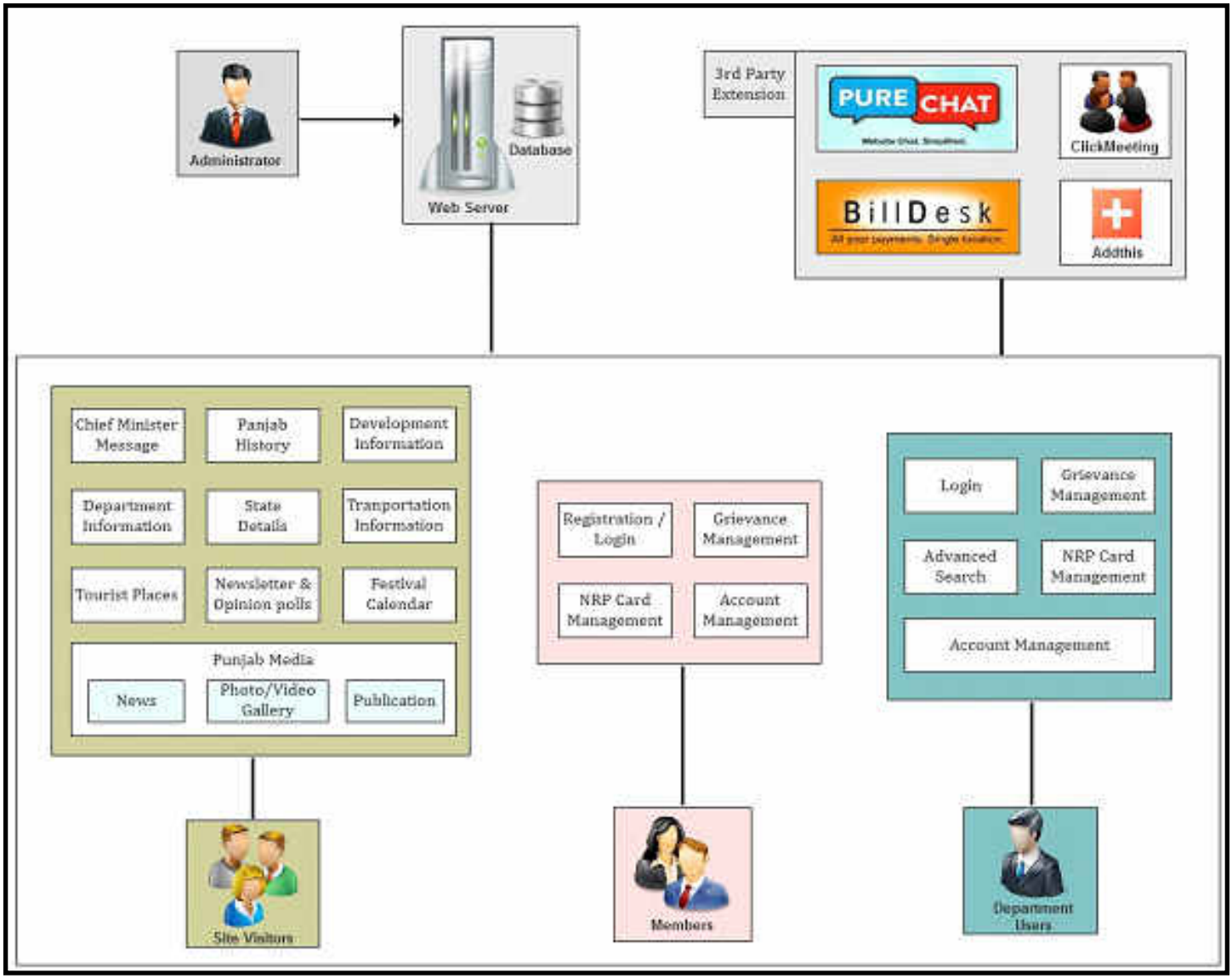
Benefits

date information of their motherland

2. Portal is now providing required information on 24x7 basis
3. Site visitors can get the details of most famous tourist places in Punjab helps for trip planning
4. How to Reach? – contains transportation – Trains, Airports & Buses information
5. NRI people can easily get the details of property investment options in Punjab
6. Registered user can place the complains under particular section / department for which the complain is belong to
7. Users can also track their previous complains
8. Client can get opinions on many aspects for research using opinion polls
9. Screen reader access functionality useful to people who are blind, visually impaired, illiterate or learning disabled

Project Architecture & Description

Project Architecture



Project Description

Portal was developed with dynamic Content Management System to facilitate NRIs to avail various facilities of the Punjab State. This portal also provides instruction to NRIs in a very well structured method so NRPs / NRIs can get information quickly and easily.

The portal contains following information regarding Punjab government & it's activates towards Indian Citizens & NRI People:

1) Information regarding the current Chief Minister of Punjab and his message to common people
2) History of Punjab, information regarding time zone, language, healthcare & postal services of Punjab
3) Festival Calendar, Museum, Fort & Places, Best Tourist places across the Punjab with location information displayed on Map

4) Clickable map contains various states of Punjab so that user can click on it and get basic information related to the state of Punjab
5) Infrastructural, Rural, Health sector development information in a statistical manner
6) Media content such as news, photo gallery, video gallery and publications managed by administrator
7) Information of special privileges and acts that helps NRI / NRP people to invest their capital in the Punjab's land / plots
8) Site visitors can access, search & share all the above mentioned content.

Online NRI Grievances Management:

1) This module gives the facility to the registered users (NRI / NRP) to put their complains on the portal
2) This complains will be forwarded to the respective departments via Nodal officer
3) Nodal officer is the user access all the complains and redirect it to respective department based on the type of complain
4) Respective department will then look into the complain and get back to the users with resolutions
5) Particular department can have access to assigned grievances only
6) Department user can change the status of the assigned complains and that will be auto-informed to respective user
7) If any department does not reply to the user's complain then it will be escalated to the higher level authority
8) Registered users will get regular notifications throughout the complain resolution process
9) Nodal officer can send a reminder to respective department for pending complains

Web portal also gives the facility of issuing online NRP cards to NRP (Non Residence of Punjab) people. Only registered users can apply for the NRP cards. Users have to provide their identity proof for NRP card request.

Once user provides all the required information, their request will be sent to the NRP department and the department will issue the card to user in two ways:

1) Physical copy – Sent to user's physical address
2) E-copy – Sent to user's email id as well as easily download from his account

The portal also contains following general features:

1) Global search functionality that helps to search any topic related to Punjab government across the portal
2) Site visitors are able to change the size and view of the portal
3) Social networking site integration for easy sharing a website content
4) User can subscribe for newsletter by providing the email address
5) Event Calendar displays the list of upcoming events across the Punjab
6) Site visitors can give his views on different opinion polls

Administrator manages both type of content (text & multimedia) from backend CMS. Users, User Roles & Privileges, opinion poll questions, newsletter are also managed by administrator.

Punjab NRI Web Portal

Objectives

1. To develop a portal that provides all the information of Punjab state government and facilitates administrator to change the content dynamically
2. To present the PDF document for all the content pages required by the client on the web portal
3. To provide the online grievances to registered users with complain tracking functionality
4. To manage the department structure and facility to transfer the grievances to higher level authority
5. To develop clickable Punjab state map on which user can click on particular state and get the information regarding it
6. To integrate following 3rd party API with the web portal:
    a. PureChat API – Online chatting for registered users
    b. ClickMeeting API – Online web seminar for invited members only
    c. BillDesk API – Payment gateway for online payment of NRP cards
    d. Addthis API – Social Networking website integration

Project Approaches / Activities

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: API checking for compatibility (BillDesk API for payment gateway)

Phase III: Preparation of Wireframes of the entire site

Phase IV: Designing

Phase V: Development & Design Integration

Phase VI: Testing

Phase VII: Deployment and provide documentation

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: 750 hours
2. Project Life Cycle: 2.5 Month

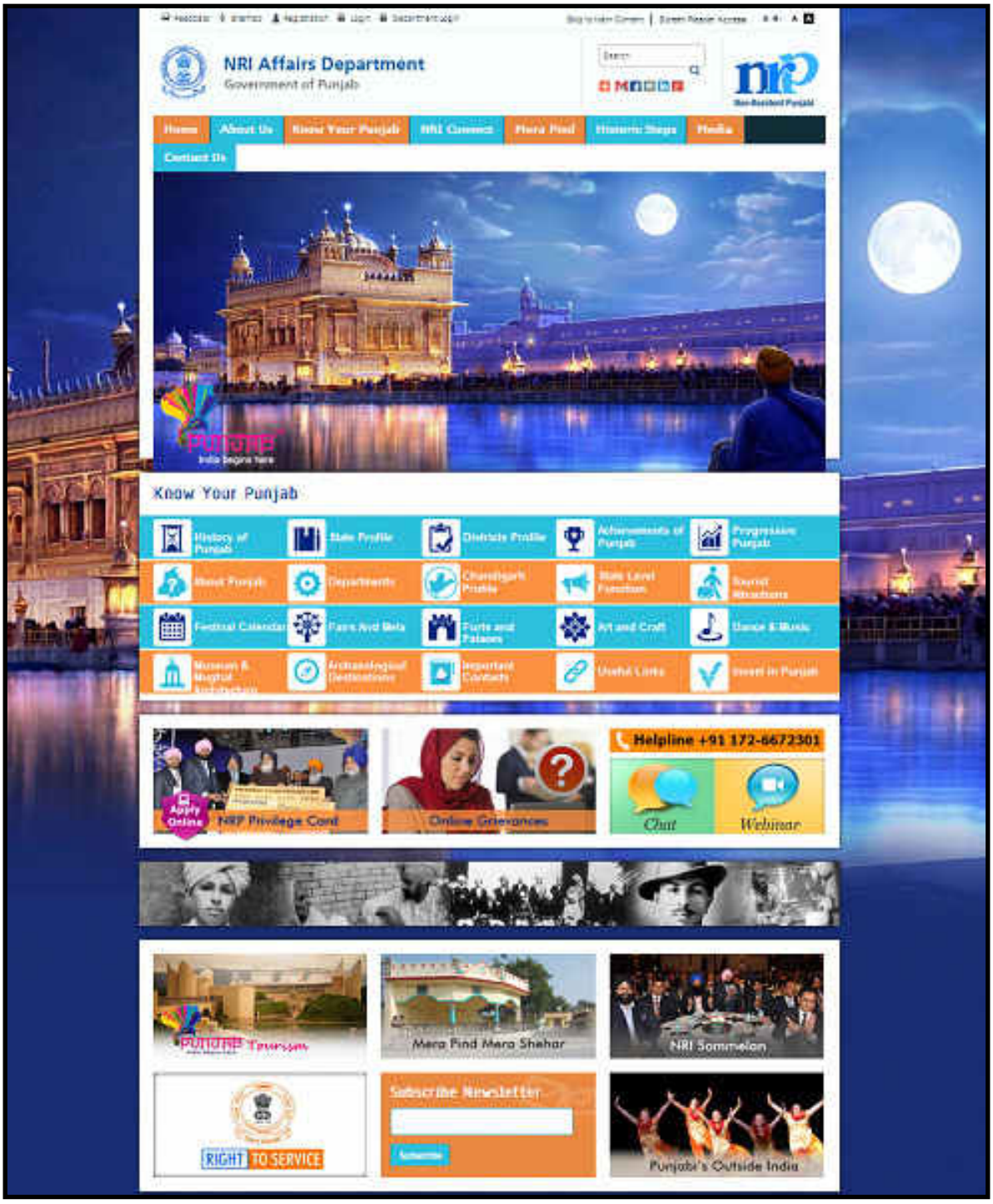
Key Challenges

1. **Problem:** Client required online complain booking & resolution process on portal bifurcated into various department
   Solution: We have developed dynamic module for department & user where admin can create as many types of department users with different access rights and a department user can resolve complains assigned to him.
2. Integrated PureChat & ClickMeeting and customized it as per client's requirement
3. Implemented BillDesk payment gateway for online payment of NRP card fees

Results Achieved

1. Information related to Punjab State on 24x7 basis
2. Dynamic Portal allows managing and updating content as and when required and keeping portal up-to-date.
3. Online NRP card application with online payment
4. Online Grievance for Citizen's common issues
5. Advance search for faster search on the portal
6. Online Chat functionality for real time help to the Punjab Citizen living anywhere in the world

Screenshots



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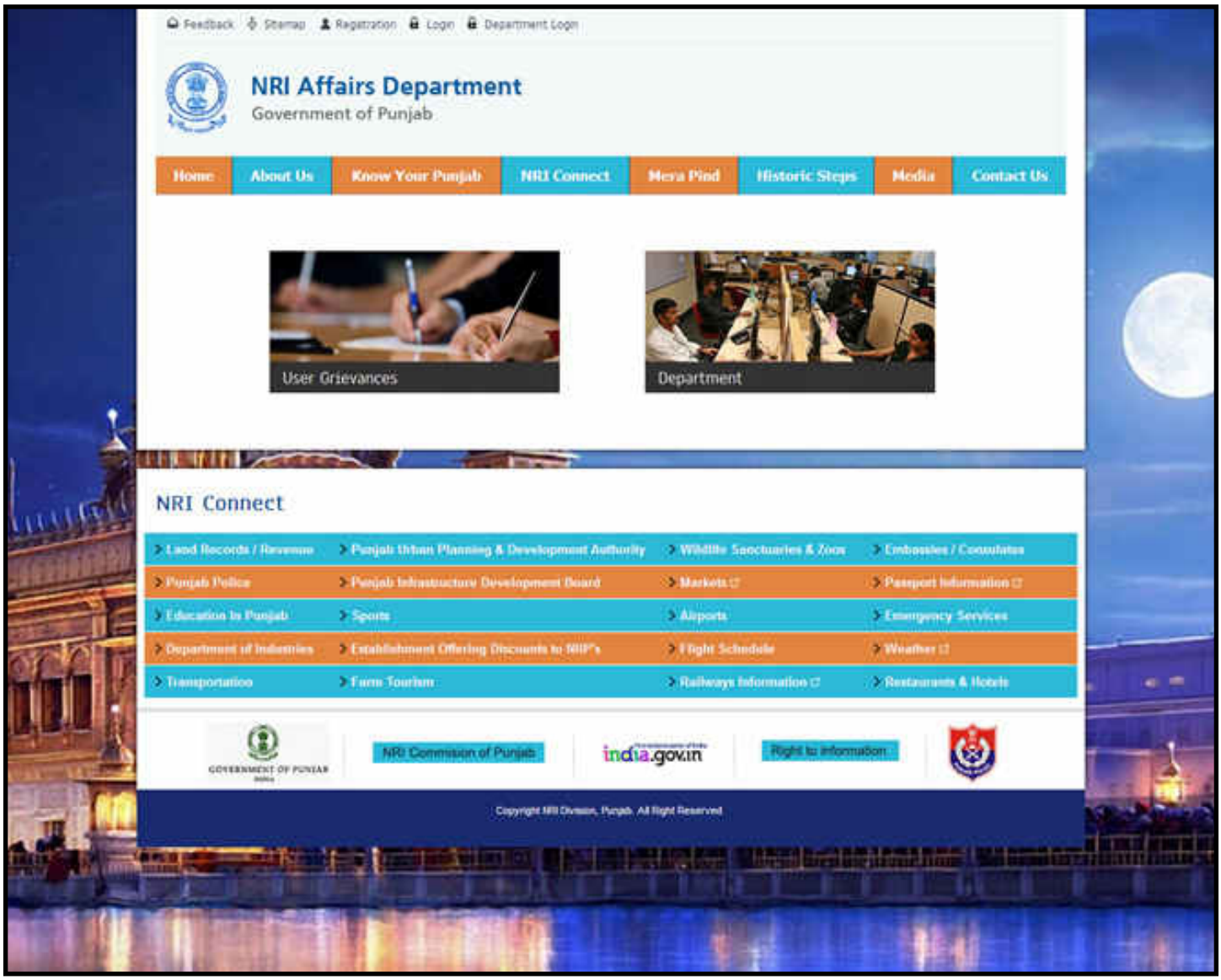

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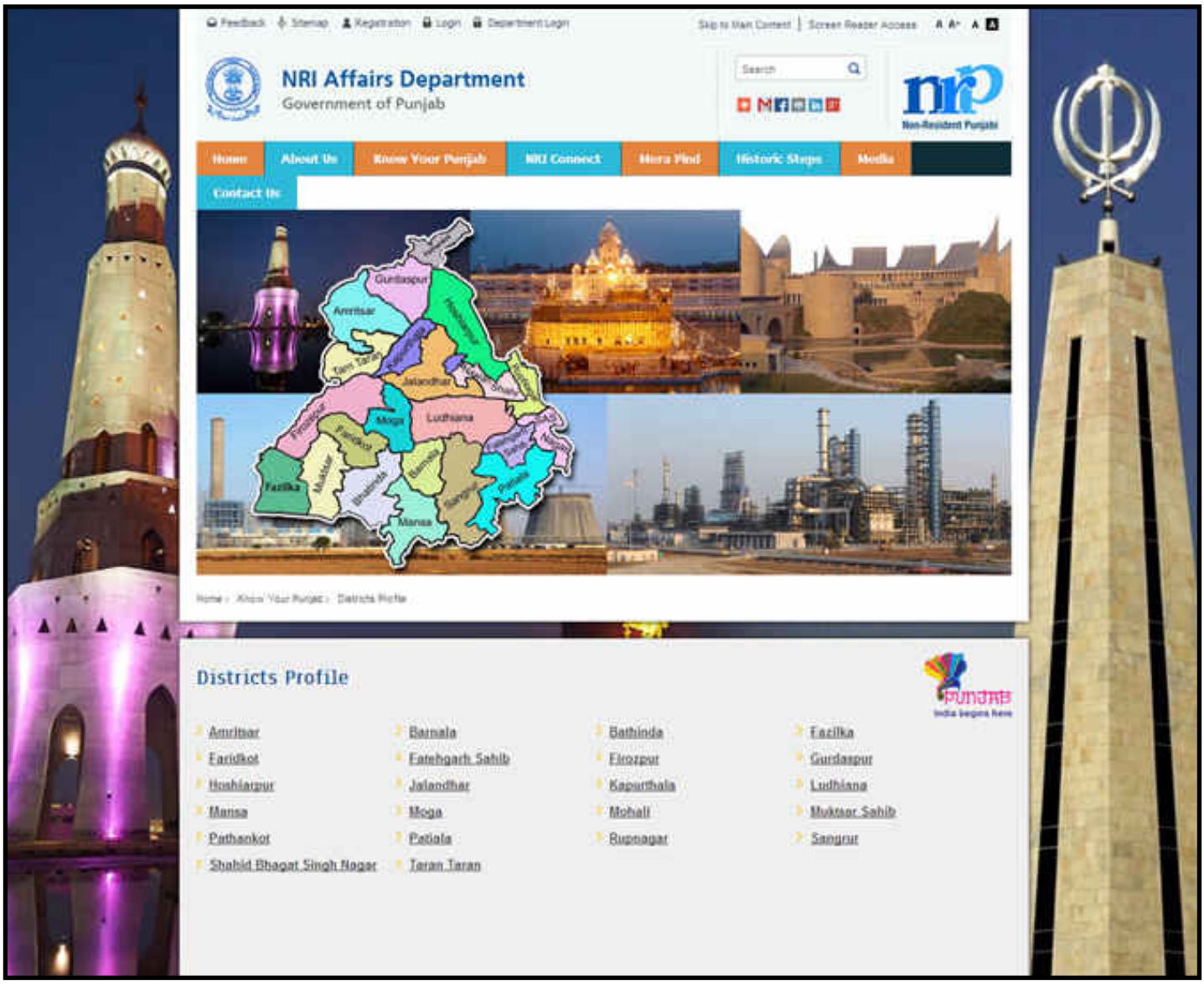

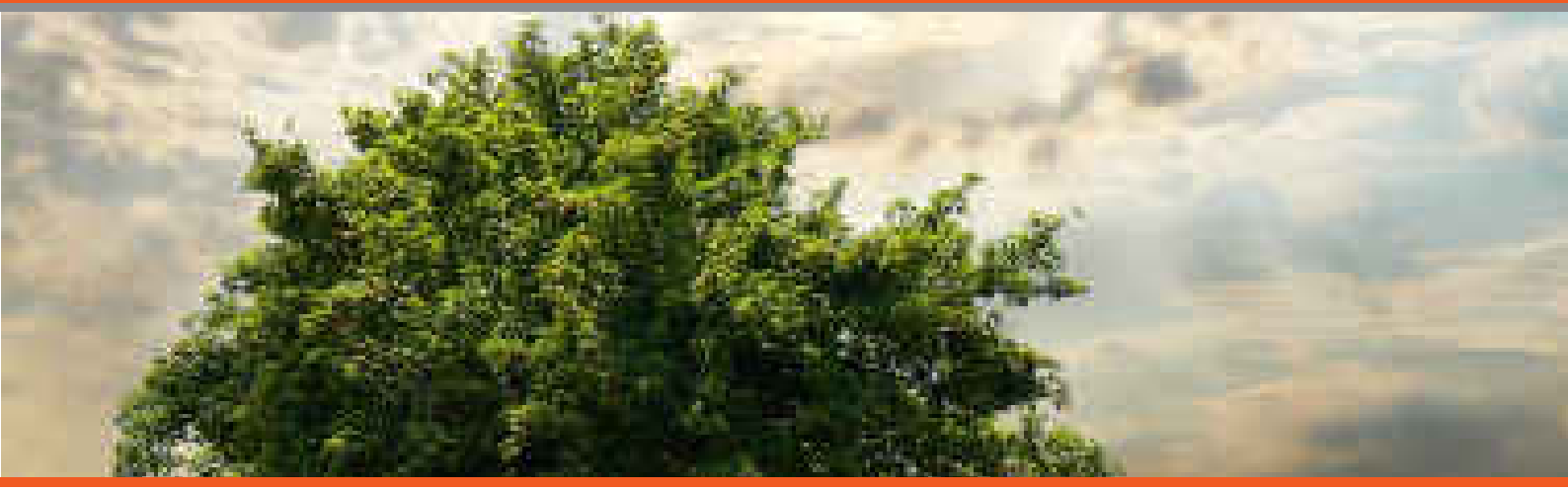

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About SilverTouch

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.

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