



CASE STUDY : CALCUTTA STOCK EXCHANGE

APPLICATION TO FACILITATE REAL TIME DISSEMINATION OF INFORMATION TO SMALL INVESTORS AND ENTREPRENEURS

Client: Calcutta Stock Exchange	Country: India
Industry: Finance & Securities	Status: Completed
Solution Area: Web Application for Real Time Information Dissemination	

Company Profile

The Calcutta Stock Exchange had its humble beginning in the 1830's and since then the Calcutta Stock Broking fraternity has come a long way. The North-Eastern region today plays a crucial role in the country's capital market and Calcutta Stock Exchange has emerged as the epicenter of the tremendous growth.

At the time of incorporation in 1908, the Stock Exchange had 150 members. Today the total membership has risen to more than 900, which contains several corporate and institutional members. The number of companies listed on the Exchange is more than 3,500. The Annual turnover of the Exchange in 1997-98 was to the tune of Rs.1,78,779 crores. The Exchange has been granted permanent recognition by the Central Government with effect from April 14, 1980 under the relevant provisions of the Securities Contracts (Regulation) Act, 1956, with a view to render useful service to investors.

Project Brief

Recognizing that the Internet is altering the nature of business, Calcutta Stock Exchange took the initiative to change the data delivery mechanism and the way in which people operate in the seamless world of Net Trading. CSE understands that the Internet has the potential to revolutionize its business just as the net has changed the banking industry and thereby create a strong foundation for the Indian Capital Market. Over the years, the client-broker relationship in the Indian Equity Market has been more of a family affair based on trust, personalization, informality and less of strict financial discipline as is known to advanced economies. But if a super structure is to be built, it has to be technology based to eliminate the problems and risk factors associated with trading offline.

The objectives of building the Application Centric Website, with pivotal focus on building Investor Relations and Corporate Affairs of the Exchange are enumerated as:

1. Real Time Information Dissemination to investors.
2. Listing Guide to Listed Companies.
3. Valuable information about the exchange.
4. Process of Arbitration and resolution of disputes.

A Snapshot

“The underlying objective of having the Calcutta Stock Exchange on the net was to provide small investors simple and easy access to market information as well as statutory requirements. To execute our current plans and that in the future, we used IBM’s technology to implement the project successfully”

*Goutam Bhattacharya, General Manager (ITD)
Calcutta Stock Exchange*

Key Issues

The Calcutta Stock Website (www.cse-india.com) is built with the objective to facilitate Real Time Dissemination of Information to investors, entrepreneurs and investment professionals. The beauty of the site is in its online ticker, share price charts, index snapshots, scrip details and the touchline, which is conspicuous by its exclusivity.

Challenges

The challenges of this project were to create a web presence for the Calcutta Stock Exchange which would place it among the likes of Nasdaq, Hong Kong stock exchange. With state of the art real time application, this site achieved what it set out to do and more.

Solutions Overview

To achieve the solution objectives, CSE wanted an application centric website which performs the various functions like:

- 1. Ticker** – Online prices of shares in Real time
- 2. Touchline** – This is the replica of the Trader's Work Station or the Broker's Trading Terminal made available to the investors. It is completely configurable to ones portfolio.
- 3. Share Price Chart** – This is the Java Applet which shows the scrip chart. Here the user inputs the scrip name and the date range. With this information the graph is immediately displayed with the abscissa as the date range and the ordinate depicting the prices. The resultant is a graphical capsule of the trends in the scrip prices over a period of time.
- 4. View Scrip Details** – This application provides the investor with vital scrip related information for better decision making on the proposed investment and returns thereon.

More information for the investors is presented in the site through the daily official quotation of the exchange. The user simply chooses the date and accesses the information from the Archive. Scrips under compulsory Demat and compulsory rolling feature among the exhaustive scrips information adding extraordinary value into the site. The Market News Section with downloadable features contributes to the overall essence of the site in terms of the quality of information relevant to keep the investors updated on stock market activities. Outstanding position of companies, Badla Statistics, daily press releases, Notices and Announcements, Dividend & Bonus Information, top ten gainers and losers, etc form major components of this section.

The site used Java Servlets to link the DB2 database with JDBC for the above applications.

Among the other functionalities of the site, the following value added features hold key attention:

1. Investment forum for investors which includes lessons on how to invest and benefits, frequently asked questions, publications from the stock exchange, complain registration format, arbitration rules and regulations etc.
2. A secured section for members, which included restricted access through password only, trade, related report, margin related report, settlement related report, badla related report, downloadable masters and modules.

The Static pages are hosted remotely in pair.com, U.S.A. The applications are hosted on the local server, www.cse-india.co.in, in the CSE premises and are linked by a lease line from VSNL with a router.

The website was launched on Sunday, the 17th of December 2000 with resounding success. No effort was spared to ensure that the site turned out to be absolutely state of the art.

Technology Specifications

State of the art technology was used to ensure maximum functionality of the applications provided via the web site. "To succeed with an initiative like that of CSE, a killer foundation for the complex applications was the most crucial requirement. Somick Goswami; V.P, Sales & Marketing of Web Development Company maintains," IBM was an unanimous choice for CSE for the simple existing fact that it has a strong end- to- end proven story backed up by the E-business framework.

WDC has developed the Applications using the following technology and services platforms.

Key Components	
Technological Details	<ul style="list-style-type: none">• IBM Web sphere application Server• IBM DB2 Database• Java servlets to connect HTML Front-end to Back-end database• Java Applets for Graph and Touchline• Lotus Domino Go Web Server

For more information, visit our website at: www.wdc.in