Sustainable Cotton Tracker – Case Study

How Direction Software LLP created a Tracking System for Purchase, Sale and Inventory across a Supply Chain, starting with the Cotton Producer and ending with the Retailer



Executive Summary

The Client

A leading World Standard for cotton production

Industry

Textile

The Need

A B2B system to enable tracking of a complete supply chain, right from cotton producers to retailers.

Business Solution

Direction Software LLP developed a Multi Company & Multi User Type website that would help them track their complete Supply Chain. And all of it well managed through an online admin

Technology Used

HTML, CSS, Cake PHP framework & My SQL database

Benefits

- Much improved functional performance of all user types in the supply chain
- A totally automated and foolproof system.
- Better decision making and excellent balance tracking at all levels, leading to controlled inventory, lesser wastage and on time availability of needed goods with the retailers
- Increase in business across user types and the entire cost of website development recovered in a short time
- Ease of navigation and better communication leading to well satisfied users
- Online Admin

The Client

Sustainable Cotton Tracker is a project for one of the world's leading standards for sustainably produced cotton.

Their goal is to help people help themselves, via trade rather than donations. They work with a wide-ranging network in cotton-growing countries, including numerous partners throughout the textile value chain, as well as both governmental and non-governmental organizations, to ensure the implementation of the standard and the proper processing of certified raw materials throughout the world..

Business Requirement: An online tracking System across a complete Supply Chain

To develop a comprehensive tracking system of Purchase, Sale & Acknowledgement in each process by direct business partners, in a supply chain starting from cotton producers and ending with the retailers.

The direct business partners being: retailer/ supplier, supplier/ fabric mill, supplier/ spinning mill, fabric mill/ spinning mill, cotton trader/ spinning mill.

Here's what the client wanted from the system:

- There must be logic of an acknowledgement in each process of the Supply Chain
- No data should be in the system without proof of correctness.
- System must allow the upload of documents and provide an output of reports.
- Data input and data matching should work automatically and not manually anymore.
- All relevant information of all supply chain partners is collected here.
- Registrations should be only through invites, a registration code and after admin approvals
- There should be an Online Admin to manage the whole process





How Direction Software LLP Created an Online Mass Balance Tracking System for a Supply Chain

Cotton Producer



Cotton Trader



Spinning Mill



Yarn Trader / Dye House



Fabric Mill



Fabric Trader



Supplier



Retailer / Retail Group

Here's an overview of the B2B solution implemented by Direction Software LLP:

- The complete supply chain starts from the cotton producer and ends with the retailer
- The entities include cotton producer, cotton trader, spinning mill, yarn trader/dye house, fabric mill, fabric trader, supplier and retailer/retail group. There can be common users across entities
- Every entity in the chain functions uses a system of allocations (even bulk allocations) and acknowledgements, running both ways i.e. between entity and suppliers, as well as between entity and buyers
- Rejected sales or purchases can be edited and resent for acknowledgement. Buyers can reject the sale/part of sale and see details on what is refused and what is acknowledged
- It is a mass balance tracking system. Usually rights to purchase/sell depends on balance available, but negative balance is permitted based on user type
- Sales/purchases can be distributed one to many and in some cases combined from many to one, based on balance availability. Also based on this availability users can forward orders/ sell to other users within their own entity type
- Spinners are allocated a % wastage factor based on their performance
- Companies in group see specifics of all other companies in their group
- The entire process is admin managed. Admin can also send user manual along with login credentials
- There is detailed search facility at every stage and well thought of system of alerts
- The various dashboards has helpful charts and useful information to help in decisive activities
- There is an exhaustive variety of reports for purchase, sales and inventory
- Help includes documents, videos and an FAQ based on user types
- Admin manages newsletters and various approvals. Even registrations for becoming part of the system needs a mailed invite, registration code and admin approval
- Entities are allowed to include new companies for buying/selling, but they have to be admin approved before transaction is possible.

About Direction Software LLP

We are a software services firm, specializing in developing and implementing Internet strategies for businesses and providing high-end software development services including Custom Programming and Offshore Development.

With 17,000 sq. ft. of space in a modern building in central Mumbai, the hub of all business activities in Mumbai, Direction Software LLP is fully equipped with state-of-the-art infrastructure and networked with redundant high speed, dedicated internet access from different providers. Our vision is to be a trusted IT partner, leveraging our knowledge of tools and technologies to provide simple, integrated and innovative solutions that result in maximum customer satisfaction.



