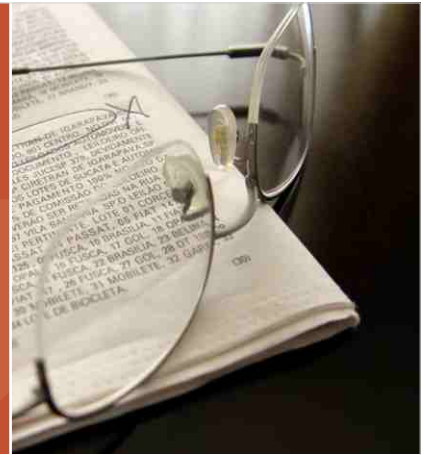


# Case Study

## Product development, advancement and sustenance - SCM solution for the organic foods industry



### ➤ THE CUSTOMER

A supply chain management solution provider in the organic foods market. They offer collaboration between buyers and suppliers by bridging the existing gap between buyer demands and the ability to meet those demands through the usage of technology.

### ➤ THEIR NEED

A portal solution that would allow suppliers and buyers to coordinate better towards satisfying demand for organic foods. This e-commerce solution was to be a gateway to buy natural and organic products through buying clubs and had to handle all orders, payments and other administration requirements of the portal.

### ➤ OUR DEED

Aspire was (and continues to be) the sole engineering team behind this product, developing it from scratch to its existing third version, supporting 1000 buying clubs and more than 60000 users. The scalable SCM product allows multiple suppliers and buying clubs to be part of the product ecosystem. Aspire also played a vital part in guiding the customer's product roadmap and helped them evolve their business model over a period of time.

### ➤ TECHNOLOGIES USED

ASP.NET 2.0, C#.NET, XMLHTTP, AJAX, Web Services, SQL Server 2005

## Organic Foods Portal

The supply chain portal is a highly efficient alternate distribution system comprised of buying clubs or co-operatives (co-ops). Organic food suppliers sell and market their products to geographically proximate groups of consumers who are members of these buying clubs.

Every buying club and its members (located in a particular area) are managed by a buying coordinator for that club. Orders are aggregated into a Co-op order which has cut-off times by which orders must be placed and submitted to the supplier. This effectively allows for procurement of organic foods at a very competitive price as it is from suppliers or manufacturers directly, and ordered in bulk.

### The salient features of the product are:

- Buying clubs can aggregate orders from various members of the group (in different quantities) and collate them.

### Quick Facts

- Length of Engagement: 6 years
- Model of Engagement: Pure Offshore
- Stage of ISV: Early to Growth
- Customer Since: 2002
- Customer Location: Texas, USA

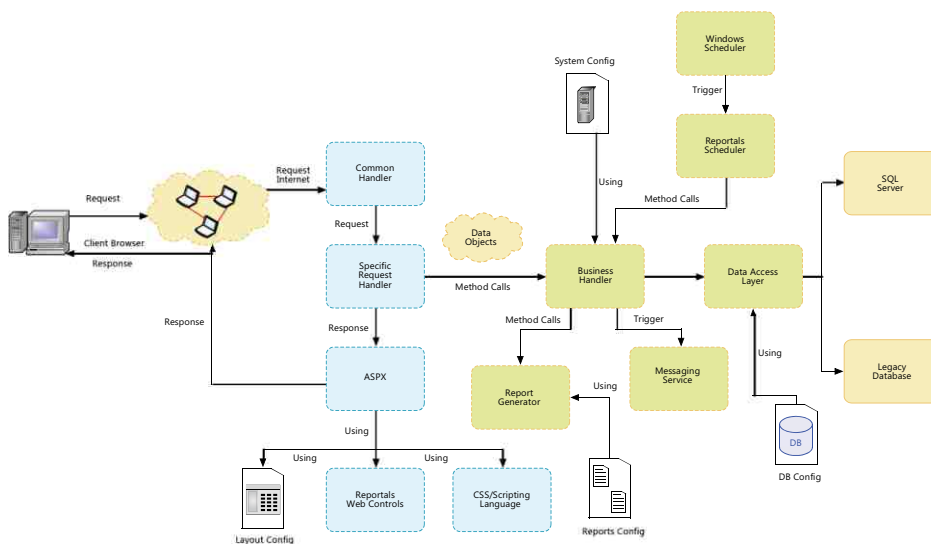


# Product development, advancement and sustenance - SCM solution for the organic foods industry



- Cataloguing, order processing and invoicing is done seamlessly between the buying clubs and the suppliers through the system.
- Workflow related to scheduling of order placements, truck movements of suppliers, 90 days price variation of foods are managed effectively allowing buying clubs to choose and place orders.
- All financial transactions are customizable - volume discounts, summer discounts, pickup discounts and buying-club specific discounts.
- Customizable transaction fee is applied as per the contracts with the supplier and the buying clubs.
- Buying club coordinators can customize the amount of discounts that they want to pass on to the buying club members.

## Product Architecture:



Aspire designed the product architecture entirely, keeping in mind product scalability, performance, data growth and security. N-Tier architecture was designed with extensive use of OOAD concepts. This took into account the localization requirements of suppliers and enabled replication of full or partial content across any number of servers. As the product and number of users grew, Aspire recommended a Web Farm to be integrated with the architecture to allow for data growth and increase in user volume.

As the product was to follow a services model, the architecture took into account issues like multi-tenancy, security, customization, performance and operations readiness.



# Product development, advancement and sustenance - SCM solution for the organic foods industry



## Performance

The speed of the product was very critical to its success as a large number of users were expected to use the product. Well-formatted pages, advanced caching facilities, usage of XMLHTTP and AJAX for rendering pages allowed delivery of thousands of pages per second ensuring a positive user experience. Usage of wrapper classes for database querying also resulted in faster processing of requests. The end results were faster pages, higher capacity, fewer web servers and lower costs.

## Security

Collaboration between multiple suppliers and buying clubs bring enormous complexity and tight security measures were essential. The product was built to allow comprehensive role-based access control with SSL certification and authentication services

## Engagement model

In the initial phases of the relationship, the customer was a start-up with limited funding and only had a vision of the product. Aspire managed the entire product development effort completely offshore - all coordination was through email and conference calls.

Finalization of specifications, requirements understanding, customization, and issue management were carried out offshore. Daily interactions with the customer and adherence to best project management practices allowed for the effective development of this product.

## Key benefits to the customer

Aspire's association with the customer has become strategic in nature (partnering with them since 2002, over the last 6 years). This has enabled them to file 17 patents for their SCM product, and more yet to be filed.

From initial alpha and beta versions of the product, Aspire is currently working on the third full-fledged version of the product. Our team has also been involved in product enhancements, customizations and maintenance besides core development. Documentation of all key modules was also done to ensure knowledge continuity and retention.

The customer was finding it difficult to extend their product to different suppliers as each had a different supply chain workflow. Aspire helped them define their business model, common workflows and also assisted in product positioning and improvisation of product feature sets. This enabled the customer and their flagship SCM product to make the transition from an early stage to growth stage company/product.

Besides this, our strategic association has provided the customer a multitude of advantages, including resource flexibility, quickness to market and offshore cost savings.



# Product development, advancement and sustenance - SCM solution for the organic foods industry



## ABOUT ASPIRE SYSTEMS

Aspire Systems is an Outsourced Product Development firm committed to helping our customers build software products better and faster. We work with some of the world's most innovative Independent Software Vendors and software-enabled businesses, ranging from start-ups to established industry leaders, transforming the way software is built.

Aspire provides complete product lifecycle services, ranging from new product development and product advancement to product migration, re-engineering, sustenance and support. Our product development teams are spread between our Global Innovation Center in Chennai, India and offices in the United States.

### For more information contact:

Website : [www.aspiresys.com](http://www.aspiresys.com)  
E-mail : [info@aspresys.com](mailto:info@aspresys.com)  
Tel  
USA : +1-408-260-2076  
UK : +44 203 170 6115  
India : +91-44-6740 4000

