



INFOVISION
GLOBAL IT SERVICES AND SOLUTIONS COMPANY

CASE **STUDIES**



SAS based Business Model for movement and sale of DVDs

The client is one of the world's leading providers of in-home movie and game entertainment with more than \$5 billion in annual worldwide revenues and more than 8,500 stores throughout the Americas, Europe, Asia and Australia. The company rents more than 1 billion videos, DVDs, and video games at its Video outlets each year. It also operates an online business and has marketing partnerships with companies such as Time Warner and DIRECTV.

CLIENT'S NEED

The SAS solution used by the client supported its legacy business model wherein pre-planned allocations drove the distribution of material to various points-of-sale. The new business model required an 'on-demand' emphasis, one that rapidly matched anticipated demand with available inventory, often situated in up to 5000 locations. Once located, the inventory needed to be routed to its new destination, using available warehousing and distribution infrastructure. A new Business Operations Model was required.

Additionally, the SAS solution implementation supported real-time processing of a limited number of SKU's overnight. With the change to the business model, the computational model needed to be able to support several thousand SKU's in a few hours. This required a new SAS Operations Research Solution.

HOW INFOVISION HELPED

Working closely with our client's team, InfoVision developed a Business Operations Research (BOR) model to support the new business model. Our BOR model accommodated the client's new and emerging requirements related to inventory pull/push, warehousing and distribution in support of its new business model.

Additionally, we developed a new SAS Operations Research (SOR) model. The new SOR model would leverage the existing SAS deployment and extend it by integrating additional computational elements and steps process. This would result in an increase in (a) the number of SKU's supported and (b) the number of points-of-sale supported while reducing the overall processing time by about 2000%.

Finally, InfoVision developed a proof-of-concept to support our recommended solution.

IMPACT

InfoVision's work has helped our client develop an innovative solution to (a) Rapidly respond to product demand (b) Leverage current technology and logistics investments and (c) Maximize its competitiveness and stay at leading edge of the market

Business Insights for Home Video and Video Game Rental Business

American-based provider of home movie and video game rental services, originally through video rental shops (both owned and franchised), later adding DVD-by-mail, streaming, video on demand, and cinema theater. Over 60,000 employees and 9,000+ stores.

CLIENT'S NEED

Media owners offered bundled portfolios with 2 Hits, 5 Average and 20 Below Average releases. In order to maximize profits and understand buying patterns, detailed analytics had to be done. The organization had to identify the viewing habits of consumers by each zip code - to predict the demand, segment the viewers demographically and identify aggregation for each portfolio by analyzing the large volume of data. This data was generated at an enormous pace from various stores and making sense of the data was the only way to gain a competitive edge.

HOW INFOVISION HELPED

InfoVision's team of 20+ Data Experts developed the Data Warehousing and Analytics Solution for their retail operations to prepare, explore, transform & select the data, build reports to analyze trends, patterns and formulate insights to optimize their operations, transform their business, innovate and ensure compliance. The technology used was Hyperion for multidimensional data storage and SAS/SPSS for advanced analytics. Marketing automation was driven using OLAP.

IMPACT

InfoVision's Big Data Expertise has helped our client determine the Strike Price for each portfolio, with volume commitments.

Customer Satisfaction Survey

Data Analysis for a Global Retailer

The leading global food service retailer with more than **20,000 local restaurants serving over 30 million people in more than 100 countries each day.**

It is one of the world's most well-known and valuable brands and holds a leading share in the globally branded quick service restaurant segment of the informal eating-out market in virtually every country in which it does business.

The company generates well over \$10 Billion in revenues annually.

CLIENT'S NEED

The client organization required ongoing analysis of its business operations at various levels - National, Regional, District and local. Insights were also required across various demographical segments - Business Unit Managers, Unit Operators, Staff and even Customers. Further, this effort needed to span several thousand locations in several countries.

Once data regarding the performance is gathered, often composed of 100 to 150 attributes, it needed to be analyzed to decipher patterns, trends and other insights. A complex business data warehouse, analysis engine and report generation capabilities were required.

HOW INFOVISION HELPED

Working closely with our primary client, InfoVision's Data Architects developed a quarterly data collection and validation process. The process allowed each of the 1000 restaurants in the 10 countries to easily contribute data regarding business practices, client experiences, food menu, hygiene parameters, employees and other related issues. InfoVision also developed a Data warehouse model to aggregate the gathered data and prepared it for periodic analysis. Further, a performance analysis tool was built to analyze the data and develop specific insights for business decision makers. Finally, a report generation system was created to generate the required reports for distribution. Each quarter, for the past several years, we have been delivering analysis and results to our client.

IMPACT

InfoVision's work has allowed the foodservice retailer to (a) Establish ongoing visibility to its operations across several countries, (b) monitor performance proactively and (b) protect its business and brand.



Flight Crew and Gate Operations Reporting System

An S&P 500 company, with over \$2 billion in annual revenues, the industry leader in airline operations technology, and the only company that provides a complete portfolio across the spectrum of airline operations. These include Hosted Systems for passenger management, Optimization Solutions for decision support and Specialized Consulting. **More than 170 airlines worldwide use these for their flight operations systems.** Nine of the top 10 airlines use at least one of our client's planning and scheduling products. Over 200 customers use its portfolio of software solutions for decision-support tools to streamline and simplify operations, increase revenue and enhance customer loyalty. The company has offices worldwide.

CLIENT'S NEED

In its desire to continually improve services to its own customers, our client had identified the need for several technical and non-technical enhancements to its Hosted Systems. Among these was the ability to quickly brand a solution for a customer and to tailor reports generated by the Hosted System to suit each customer's preferred format. Our client wanted these capabilities to be seamlessly integrated into its existing Hosted System environment and for these to be readily available to all its customers.

HOW INFOVISION HELPED

Working under the supervision of our client's IT organization, InfoVision team leveraged its expertise in Crystal Reports, a leading report generation software, to design and build several 'report templates', each for a specific purpose. These templates were programmed to be easily customizable to accommodate the needs of an airline customer. Further, the InfoVision Data Scientists created a suite of templates related to (a) Crew Management (b) Flight Operations (c) Dining and Cabin Services and (d) Crew Scheduling. These templates were part of a library of such templates, ready to be rapidly tailored to meet the needs of our client's customers.

IMPACT

The client was able to (a) Increase the productivity of both its computing assets and engineers and (b) implement a seamless flow around drawings related its product life cycle.

Streamlining Supply Chain, using Big Data Analytics

A fortune 500, American multinational company, that's a leader in document technology and services with intensive production and distribution of solutions for more than a century. Today, with an **employee strength of more than 140,000**, offering services to a global audience of more than 180 countries, with in excess of **12,000 active patents and revenue exceeding \$ 21 Billion**. Their focused products include - office equipment, engineering solutions, multifunction systems, digital presses and related materials.

CLIENT'S NEED

The terabytes of unanalyzed data, the growing operational cost, the incapacity to meet the mounting requirements/day, ill-fitting replenishment strategy, incompetence to meet emergency requirements and the inadequately utilized warehouse space was a growing concern for the company.

In order to retain faithful customers, its industry headship and reduce its supply chain's operational expenditure, the company required to: (a) Move up Fulfillment commitment from 85% to 99% (b) Meet emergency requirements overnight (c) Reduce Inventory Carrying Cost to half (d) Utilize meritoriously its Logistics Network by eliminating FLCs, reducing the Logistics Centers from 53 to 12 (e) Transition from Monthly Replenishments by Transporter to Weekly Replenishments by Courier (f) Effectually handle 350,000 parts transactions per month (g) Effectively deal with 32,000 SKUs of Spares Parts and Consumables (h) Guarantee that Engineers and Customers get spares and consumables when required, certainly on the same day.

HOW INFOVISION HELPED

InfoVision with its competence of establishing benchmark practices for Supply Chain with its Data Architects and Data Scientists, worked on the same day delivery through meticulous material planning at different levels of Warehouse - National, Regional, Branch, Satellite, Van and Bike. Exhaustive plan for stocking level of spares and consumables were drawn up based on the consumption pattern at each location and correlated to machine usage volumes in addition to environmental conditions. The core of all planning remained to ensure that Engineers and Customers obtain spares and consumables the moment they required it, on the same day, with the benefit of no excess stocks and minimal inventory carrying cost.

By reducing Inventory carrying cost by dropping days of stock, huge financial savings was accomplished while keeping intact the fulfillment service levels.

IMPACT

Infovision's competence (a) Improved fulfillment commitment from 85% to 99% while meeting emergency requirements overnight (b) Reduced Inventory Carrying Cost to half (c) Utilized meritoriously- its Logistics Network by eliminating FLCs, reducing the Logistics Centers from 53 to 12 (d) Transitioned from Monthly Replenishments by Transporter to Weekly Replenishments by Courier (e) Effectually handled 350,000 parts transactions per month (f) Effectively dealt with 32,000 SKUs of Spares Parts and Consumables (g) Guaranteed that Engineers and Customers get spares and consumables when required, on the same day



Optimizing Manufacturing, Supply Chain and Demand Forecasting for Food and Beverage Company

An American food and beverage company that specializes in dairy products. The company maintains plants and distributors in the United States and the United Kingdom. **With \$11 Billion+ in revenue, 100+ facilities - located in 35 American states** as well as five manufacturing plants in the countries of Belgium, France, the United Kingdom, and the Netherlands. The company's products include frozen and canned foods, dairy products and condiments. It produces milk in the United States under a number of regional and national brands.

CLIENT'S NEED

80% of the distribution of products, were done to Retail Chains and Local Distributors. The organization required to streamline their Manufacturing, Supply Chain and Demand Forecasting, to optimize operations, reduce OPEX, predict demands/fast moving products, and reduce loses.

HOW INFOVISION HELPED

Utilizing its extensive competence in developing business insights for strategic decision making with Business Objects, Oracle Platform based ODS, Enterprise Data Warehouse Analytics using Microstrategy, Cognos, Microsoft BI Stack, Advanced Analytics using SAS and SPSS - InfoVision developed a solution integrating SAP, Supply Chain and BI for streamlining manufacturing, supply chain and for forecasting demand, with greater degree of accuracy.

IMPACT

InfoVision's work has helped the client to (a) Enhance capability to streamline operations, reduce OPEX as a result of the integrated manufacturing, and supply chain systems (b) Improve decision making proficiency and insights regarding Operations (c) Enhance forecasting engine for predicting customer demand.



Consumer Online Portal for Technology Retailer

American leading national retailer **with \$3 Billion+ in revenue, of innovative technology products and services**, as well as products related to personal, home technology and power supply needs. The company owns 4200+ stores and in addition to corporate stores in the U.S. and Mexico, the company **operates approximately 1200 domestic and global locations** through franchise and distribution agreements.

CLIENT'S NEED

Numerous products across various stores was making it tiresome for consumers to identify where specific products were available, where to go, what items were available at a particular store. The organizations required to web enable their whole inventory of products with data sheets of product information.

HOW INFOVISION HELPED

InfoVision's Team of close to 50 Engineers and Data Experts, utilizing its expertise in existing and emerging technologies - transformed the whole inventory of over 50,000 SKUs of products from various stores and created an online portal for the use of consumers. New technology to locate products, knowing where to go, where specific products would be available, run queries, make reservations from the convenience of their homes/offices and pick up the order from the store was developed.

IMPACT

InfoVision's work helped the client to offer a convenient way for consumers to locate products, know where to go, where specific products would be available, run queries, make reservations from the convenience of their homes/offices.



Enhanced Sales, Virtual Online Store, integration for a Global Retailer

A retailer and reseller of consumer electronics, technology products and computer services **with 120+ retail locations.**

CLIENT'S NEED

The client organization required their retail, back office, point-of-sale solutions to be rewritten and a central online retail store to be created, integrating their warehouse management, distribution and ERP Systems. The purpose was to create the capability for consumers to order online from their virtual central store, by viewing the products across several stores and to be able to pick their order - from the store. It also required an ongoing analysis of its business operations at various levels, to understand trends, patterns and translate them into insights that could optimize their operations, categorize their products into various departments and help accelerate their profits.

HOW INFOVISION HELPED

InfoVision's Team of 50+ Data Engineers and Data Experts, utilizing its domain expertise and technology capability - worked on various pieces of their Client Server based Retail Management Solution, transforming it to a Windows based solution and converted it to a web application, to create a Virtual Online Store. The Client Server based solution, using the same client server middleware was integrated with Central Warehouse Management, Distribution and ERP. The Client Server store solution was transformed to a web based solution with a Virtual Central Store that enabled users to order online and pick their orders from the store. Analytics were built into the systems to analyze the fast moving products, sales rate for various products and so on.

IMPACT

InfoVision's work has helped our client develop a workable solution to (a) Effectively handle 15,000 to 50,000 SKU's of products, ranging in value from \$5 to \$2000 - across 120 Stores (b) Enhance capability to streamline operations, reduce OPEX as a result of the integrated distribution, ERP, warehouse management systems (c) Improve decision making proficiency and insights regarding Sales, Operations, Products to be placed at various stores and so on (d) Customer Service Desk, Online Terminal Capability, to inform consumers when the product is available, transfer between stores, check availability at various stores and other added capabilities



Optimizing Merchandising, Marketing and Supply Chain Operations for Department Stores Chain

A chain of American mid-range department stores, operating 1,000+ department stores across 49 US states. **With a revenue of over \$11 Billion.**

CLIENT'S NEED

The organization deemed it necessary to optimize their Merchandising, Marketing and Supply Chain Operations. It was essential that they moved Promotion Management from printed to digital online catalogues. They also required creating flier distribution plan and analyzing its effectiveness for each Location/Season keeping in view the Demand, Print Capabilities and Distribution Infrastructure.

HOW INFOVISION HELPED

Utilizing extensive competence in developing business insights for strategic decision making with Business Objects, Oracle Platform based ODS, Enterprise Data Warehouse Analytics/Advanced Analytics using Microstrategy, Cognos, Microsoft BI Stack, SAS and SPSS Infovision's team developed a solution for providing critical business inputs regarding Merchandising, Marketing and Supply Chain Operations. The insights derived were vital in transforming the flier distribution plan.

IMPACT

InfoVision's work has helped our client (a) Determine Vital Insights for Optimizing Merchandising, Marketing and Supply Chain Operations (b) Identify Key business information for formulating a flier distribution plan.



Optimizing Operations for Furniture and Electronics Rent-to-own Company

An American public furniture and electronics rent-to-own company, operating approximately **2,500+ company-owned stores** in the United States, Canada, Puerto Rico and Mexico. With a **revenue of \$3 Billion+**. Their products include furniture, electronics, computers and house hold appliances.

CLIENT'S NEED

Analyzing data for improving operational effectiveness.

HOW INFOVISION HELPED

Utilizing its Big data analytics competence in developing business insights for strategic decision making with Business Objects, Oracle Platform based ODS, Enterprise Data Warehouse Analytics/Advanced Analytics using Microstrategy, Cognos, Microsoft BI Stack, SAS and SPSS, Infovision developed a solution for providing critical business inputs.

IMPACT

InfoVision's work has helped our client to draw meaningful insights, uncover hidden patterns, unknown correlations and other useful information to optimize its operations.

Streamlining Supply Chain and ERP Implementation for Technology Retailer

An American video game, consumer electronics, and wireless services retailer **operating 6,400+ retail stores** throughout the United States, Canada, Australia, New Zealand, and Europe **with \$9 Billion+ in revenue.**

CLIENT'S NEED

The Client Organization required streamlining their Supply Chain Operations, implementing Navision ERP for their multiregional retail operations and customizing the solutions for the specific requirements of their Europe and Netherlands operations.

HOW INFOVISION HELPED

The InfoVision Team developed a customized solution to comply with the specific requirements of their Europe and Netherlands operations. The solution developed for streamlining supply chain operations, helped in optimizing the distribution and reducing the overhead costs incurred. InfoVision managed their PMO office functions and carried out funding, Earned Value Analysis.

IMPACT

InfoVision's work has helped our client to (a) Streamline their supply chain operations (b) Reduce overhead costs (c) Determine Business Insights for better decision making.

Real Time Vehicle Performance Data for Telecom Provider

A large telecommunication provider in the US with over 100 Million Subscribers.

CLIENT'S NEED

Sensors on vehicles and GPS produce millions of vehicle data every second. The data points have the potential to offer unique insights to Consumers, Vehicle Insurance Companies, Fleet Owners, 3PL Logistics Providers, and Automobile Manufacturers for roadside Assistance, Driving behavior Impact on the vehicle, Suggestions for enhancing driving behavior and other insights, that have business transformational ability.

The Client Organization, required analyzing driving behavior and deciphering market trends, patterns, correlations, business insights for various end users, from the sensors on vehicles, GPS.

HOW INFOVISION HELPED

The InfoVision Team of Data Scientists, Data Architects, Engineers, Domain Experts worked with our Client analyzing driving behavior and decipher trends, patterns, correlations for various end users, from the sensors on vehicles, GPS; to build a Big Data System on Cassandra/Hadoop, enabling Real-time Analytics. The Data Analysts analyzed the Vehicle performance data using Open Source Tools.

Utilizing our expertise in Hadoop, Pool of Data Scientists, Data Architects, Infrastructure Managers, Engineers, Domain Experts—we were involved in the data collection, preparation, exploration, transformation, storing in Cassandra, building the model, validating, and deployment to evaluation. The data was transformed to meaningful insight, by granular analysis - vehicle performance data collected was correlated with vehicle characteristics information in order to unearth active insights to owners and end users.

IMPACT

InfoVision's work has helped our client to (a) Obtain Real time Vehicle Performance Analytics (b) Information for various End User from Improving driving behavior, Information for customized insurance packages, road-side assistance data for automobile companies, valuable inputs for 3PL Logistics Providers, Determine Business Insights for better decision making.



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