

The Hidden Leak in Your Supply Chain

Solving miscommunication caused by scattered information

By James Vinson
President, V-Chain Solutions, Inc.
August 29th, 2010

The logo for VCHAINsolutions is centered on a dark blue curved band. The word "VCHAIN" is in a bold, orange, sans-serif font, and "solutions" is in a white, sans-serif font with a slight drop shadow.

VCHAINsolutions

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By: James Vinson, President & Founder, V-Chain Solutions, Inc. & supporting research from Forrester Research, Ventana Research, TechNIQ Systems, University of Western Ontario, North Carolina State University, Georgia Institute of Technology and PricewaterhouseCoopers.

Executive Summary

Since the global recession, companies are looking at new ways to preserve shareholder value by focusing on greater efficiency. One area that has come to the forefront is the supply chain. Between 2003 and 2010, several research firms, universities, and V-Chain Solutions have studied the negative impact of supply chain glitches on shareholder value as well as the root causes to why they occur. This research finds that the average company can save as much as 18.5% on their shareholder value by addressing supply chain glitches caused by miscommunication within the supply chain.

Until recently, this area has not been a focus by companies. Instead, CIOs and CTOs made huge investments in IT infrastructures that provided a conglomerate of e-applications from software mega-vendors, deploying different modules for specialized areas of the business. In fact, the average company uses between 9 and 15 software applications to drive their business. This proliferation of specialized software tools has created a new problem. And it is not a small problem; it is one that has contributed a huge negative impact to the company's shareholder value.

Scattered Information Causes Miscommunication

Miscommunication is the leading factor that causes supply chain glitches. The traditional approach to supply chain management fuels the problem of miscommunication by creating scattered clusters of inaccessible, unshared information ("**information silos**"). Studies from Forrester Research, Ventana Research, PricewaterhouseCoopers, and V-Chain Solutions revealed that this problem exists in medium sized to large enterprises with 5 or more applications that drive their business.

Mega vendors such as Oracle, SAP, Microsoft and IBM have not been able to solve this problem because of the major acquisitions that they made creating the conglomerate of e-applications in which they bundled together in order to offer a seamless supply chain. Since large companies are engaged in creating the problem, it will take an emerging technology with a 21st century method to solve this problem.

This white paper examines the misconceptions made by CIOs and CTOs causing them to fuel miscommunication in the supply chain. It reveals the negative impact and a tactical solution to solving the problem without having to re-invest in a new IT infrastructure or interfere with your existing IT infrastructure. The target audiences for this paper are **CIOs, CTOs, CFOs, CPOs** and other senior supply chain roles.

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NOTES & RESOURCES

V-Chain Solutions conducted surveys and interviews with mid-size technology companies and large enterprise companies from June 2007 until June 2010 and combined the information with existing studies conducted from the related research documents listed below:

RELATED RESEARCH AND DOCUMENTS

- ❖ Management Dynamics, “Supply Chain Visibility Best Practices”, June 2010
- ❖ PricewaterhouseCoopers publication of “Supply Chain Miscommunications”, December 2009
- ❖ AMR Research May 31, 2007,2008,2009,2010 “Top 25 Supply Chains.”
- ❖ October 2008, Case Study: “Motorola/CTDI Repair Center Operations, El Paso Texas and Juarez, Mexico” (V-Chain Solutions)
- ❖ June 2007, Case Study: “Motorola Enterprise Mobility’s Supply Chain” (V-Chain Solutions)
- ❖ October 5, 2006 Case Study: “Motorola’s Quest for Supply Chain Excellence” (Forrester Research)
- ❖ April 11, 2006, Trends “The State of Global Supply Chain Management” Forrester Research
- ❖ Ventana Research 2004 White paper, “Successful Standardization of BI Solutions.”
- ❖ October 2003, “Aligning Demand and Supply” Issue 22 by Robert Handfield (Supply Chain Resource Consortium, North Carolina State University)
- ❖ “The Effect of Supply Chain Glitches on Shareholder Wealth,” by Kevin B. Hendricks University of Western Ontario and Vinod R. Singhal, Georgia Institute of Technology, April 2002, revised January 2003

Miscommunication in the Supply Chain

An efficient supply chain is the back bone for every success story in companies. It is defined as a supply chain that delivers the right product, in the right hands, at the right time, without carrying large amounts of inventory or spending greatly on logistical costs. It is also a supply chain that controls defects and reduces obsolescence.

Many companies strive for this goal but fall short of it due to the technology available in the 20th century. V-Chain Solutions has conducted numerous case studies, as well as major research firms such as Forrester Research, Ventana Research, and many universities which all revealed that the average company loses approximately 18.5% of its shareholder value due to supply chain glitches caused by miscommunication throughout the supply chain.

Leaving Money at the Table

When a company cannot meet their delivery schedules for products, lost sales occur which impact the bottom line and eventually shareholder confidence. Large corporations such as Apple, Ericsson, Motorola, and Sony have all experienced dips in shareholder value when they were unable to meet the market demand for their products. Apple’s sale of the I-Pad and their latest I-Phone were grossly under forecasted to avoid having a negative impact on shareholder value. This strategy worked for Apple; however, the customers paid the price with long waits and lengthy back order periods for the products. Sony on the other hand saw a dip in shareholder value when they released the Play Station 2 console. Or when Ericsson released a popular phone in which they experienced supply chain disruptions constantly. No company expects to release a new technology and see their overall value drop as a result of it. There is a clear unquestionable link between the ability to deliver the product to market and shareholder value.

Many large corporations place supply chain lower on the scale of importance because they believe they've already made major investments in this areas, or they are afraid to make changes to this area given the fragile state of their business and the economy. Instead, they settle for the status-quo and often go a decade or more without improving. That mentality is costly, and sometimes fatal.

Supply Chain Disruptions in Perspective

If a production product exhibited an 18.5% field-defect rate, you would immediately stop the line to investigate and address the problem. The supply chain is no different. So the question becomes, "Why do CIOs and CTOs not get it?" Perhaps it is a sense of fear. Many companies are fearful of change to their supply chain during the recession. With most 20th century technologies, implementations are costly, long, and inherently cause dissatisfaction with customers during their learning curve. These types of dips in customer satisfaction and revenue can prove fatal to a struggling company during a recession. The bottom lines of companies are so fragile that a C-Level executive fear change during a recession. Or perhaps it is the misconception that they have already invested in a costly enterprise suite of applications and they no longer have the resources necessary to add and maintain more applications. Or they have simply lost focus thinking that they have solved the challenges within the supply chain and there isn't additional value to gain from there.

Take Motorola, for example. They were once ranked the 12th best supply chain in the world; however, they have fallen off the top 25 of AMR Research's best supply chains in just three short years. Could it be because they lost Rita Lane, former Vice President of Motorola's Integrated Supply Chain Group or Shail Godambe, former Sr. Vice President of Supply Chain for Motorola? The answer is not clear but what is clear is that these two saved billions for Motorola based on the supply chain improvement initiatives. I worked for Motorola during their era as well and supply chain was a highly visibility and addressed issue back then. Rita left Motorola a few years ago and joined Apple and they have held the number one best supply chain three of the past four years. Furthermore, I made a number of improvements within various business units which are still in use today, but to my surprise, no further significant improvements have been made since then. This does not mean that they have completely stopped improvements in the area of supply chain. It simply means they are not as aggressive as they once were. The point is that CIOs and CTOs cannot believe that just because they have made investments in the area, that they have solved the problems within the supply chain. Rita Lane and Shail Godambe are famed with their clear focus on supply chain continuous improvement. When a company fails to maintain this mentality, the entire business falls short of its potential.

Our research has found that many companies simply do not understand the driving issues that cause miscommunication. There are three main challenges that fuel supply chain miscommunication. They are:

1. Scattered Information Silos
2. Fluctuating Demand & Inventory causing Bull Whip Effect
3. Supply Chain Visibility Issues

Scattered Information Silos

Many CIOs thought that purchasing the entire e-business suites from companies such as Oracle or SAP would solve their supply chain needs. They invested in a platform of products that deliver Materials Requirement Planning, Forecasting, Purchasing, Business Intelligence, Inventory Management, Electronic Sourcing, and many more in order to deliver full service to their supply chain operations. CIOs are aware of the huge financial investment required to implement and manage these large applications, however, they knew little about the negative impact on the user.



“Half my day is spent putting out and explaining supply chain fires and the other half is spent trying to maintain the system. There’s no time to become pro-active!”

The common voice from Supply Chain Managers interviewed by V-Chain Solutions.

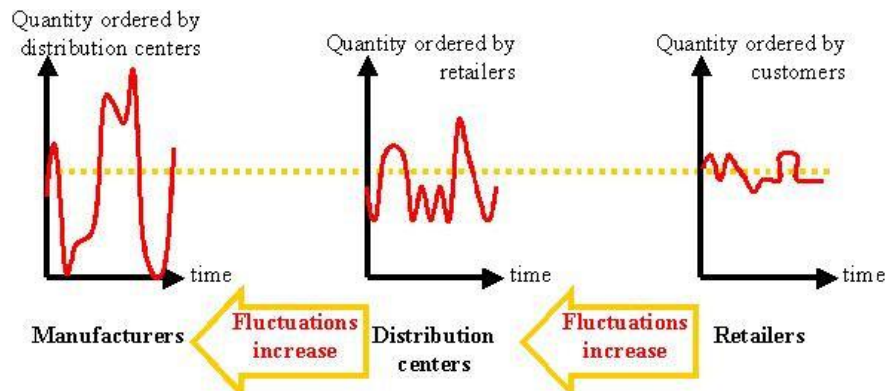
The more applications that you combine to deliver a total solution often meant that the user had to learn several different software applications, which fuel miscommunication. Think about it this way. If I took you to the library and said everything you need to drive the supply chain is within the four walls of this building, then your first thought would be, wow! It is going to take me a long time to go through this information. During a supply chain failure, there are eight critical questions that senior management wants to know. They are:

1. Where is the supply chain disruption?
2. Why did it occur?
3. Who is responsible?
4. What’s being done about it?
5. How does it impact the customer?
6. How does it impact the business?
7. When will we recover?
8. How can this be prevented from reoccurring?

In fact, the time that you spend gathering information about existing failures is time taking away from becoming proactive. This is all too common with every company that we conducted a case study on. Managers often chalk up a supply chain disruption as having weak planners or buyers or poor service level from their supply base. What we found was that planners and buyers spent so much time getting answers to the eight critical questions in a supply chain disruption that they often did not have time to properly maintain the system causing them to use intuition in their decision making process rather than facts. This was mostly driven by the demand from senior management for answers. Many decisions are made off a portion of the information which is a dangerous practice that can cost millions when wrong. On one hand, we want planners and buyers to make strong decisions supported by facts; however, it is at the cost of becoming proactive. It is very difficult to find time to become proactive because of the information being scattered between many different applications. Key entry errors were also a high factor in mistakes being made within the planning and purchasing environment. The more applications that you maintain, the more keystrokes are required to maintain them which increases the opportunity for error. Many companies we interviewed lost millions due to a single keypunch error by a planner or buyer. Most were contributed to the fatigue of the planner or buyer due to eye stress from working with numbers all day. Keystroke errors cause demand to fluctuate creating yet another problem. When demand fluctuates, it causes the bull whip effect throughout the entire supply chain.

Fluctuating Demand causing Bull Whip Effect

The Bull Whip Effect is a padding of inventory at each level of the supply chain that increases as you go further away from the customer. This creates millions in inventory and often ends with excess inventory and obsolescence.



Bull Whip Effect Diagram Figure 1.0

The problems stated above occurred even after making huge investments with 20th century technologies, such as full service e-business suites from Oracle and SAP. The problem is obvious. It is a disbelief in the demand pattern at every level of the supply chain. This causes each planner and buyer at every level to respond with the same behavior of increasing inventory levels to compensate. Planners and buyers at each level respond with the same behavior because they each have to explain to senior management the 8 critical questions that caused their supply chain disruption. CIOs should be aware that there is a productivity curve that occurs with every user based on the number of applications that they must manage and maintain. At some point they will begin to lose productivity because of scattered information between applications. A third enabler to the problem is supply chain visibility.

Supply Chain Visibility

Everyone talks about supply chain visibility but no one has actually created a true way to see into and across the supply chain. Rather, they have slightly changed the meaning of supply chain visibility to fit what they are doing. So what is visibility within the supply chain? The basic definition is the traceability of products in transit from the manufacturer to the final destination. No matter whether we are talking about raw materials, component parts or finished goods, supply chain visibility is the consolidation of information brought forward to the end user for processing. It is in essence the increase availability of business data or supply chain transactions in a way that is easy to understand and digestible to the end user.

If your company was a military, then your strategic weapon in your arsenal would be your supply chain. The quicker you can resupply troops, the greater the advantage that you have on the battle field. A company is no different. Having visibility is an advantage that you have over your competition. Your ability to access, analyze, communicate, and process information more efficiently than your competition will give you a definite advantage in the market place. Most CIOs and CTOs are aware of this; however, their intuition tells them that supply chain investments usually require a large infrastructure and additional resources which supersede the benefits they would gain from using such systems. So they respond that they have already made investment in this area and don't believe there are a need for additional investments. Or they respond with they don't have the people, time or money necessary to support another long drawn out implementation. This is no longer true in the 21st century and we will discuss this later in the article.

When buyers and planners lack a view of the entire picture, their decision making process is made using tunnel vision and intuition. Is this how you want your business to be run? To use a tunnel vision view and outdated intuition? Here is a way to think about it. Imagine if you were driving a car without an instrument panel and you were driving by only looking through the rear view mirror. There is one thing that is certain. You will operate the car but you will most certainly crash.

Rear View Driving without an Instrument Panel



=



A guaranteed way to crash!

Not having all relevant information is why many decisions have proven to be very costly to a business. CIOs and CTOs will be happy to learn that there are new technologies that don't interfere with their existing IT Infrastructures and that they don't need to invest more into IT infrastructures. So the question goes back to the reader. **If you have a chance to make huge savings for the company without causing a disruption to your existing organization, is it worth learning more about it?**

The Hybrid Methodology

Faced with competitive pressures in the marketplace with increasing demand for stronger communications, supply chain visibility and stronger analytics, V-Chain Solutions has developed a new approach to solving the needs of our clients. The Hybrid Methodology is a holistic approach to driving the supply chain. Our methodology combines and shares information between demand planning, supply planning, sales and marketing activities. Our methodology brings value by using everyday transactions and a communication workflows to paint a vivid image of your global supply chain. This holistic capture of information arms planners and buyers with the full view before making decisions. The Hybrid Methodology was created for CIOs and CTOs that believe they have exhausted investments on IT and are running out of options on how to improve upon the monstrous infrastructure that they currently have. It is the next logical progression of supply chain maturity which sets the company on the path toward supply chain visibility.

There are many areas that can be improved within the supply chain and there is no doubt that large enterprises have already taken leaps to address many of them. As they take steps to improve their supply chain, they begin to notice overlap and redundancies throughout the process. This is all too true when companies acquire other companies, a practice of many mega vendors.

The first few years the company is most inefficient because they have overlapping roles by employees, processes, and supply chain conflicts. They often leave the customer in the dark about the future of their existing product lines, and it takes as much as 5 years before they can operate as an efficient operation. They need to rationalize their supply base, their products and services which take many years to do. Most of the mega vendors like Oracle, SAP, and IBM are in the heart of this pain staking process with their recent acquisitions of Hyperion, Business Objects, and Cognos. This has left the consumer wondering what will be next on the scale of supply chain technology. The Hybrid Methodology is designed for companies that have already rationalized their supply base, implemented an MRP, Inventory Management, Sales Order Management, and Purchasing Order Management systems and are taking steps toward supply chain visibility. Supply Chain Visibility is considered the ultimate weapon for the company against competition. The below chart shows how shareholder value is improved with various supply chain initiatives:

Supply Chain Initiatives to Shareholder Value

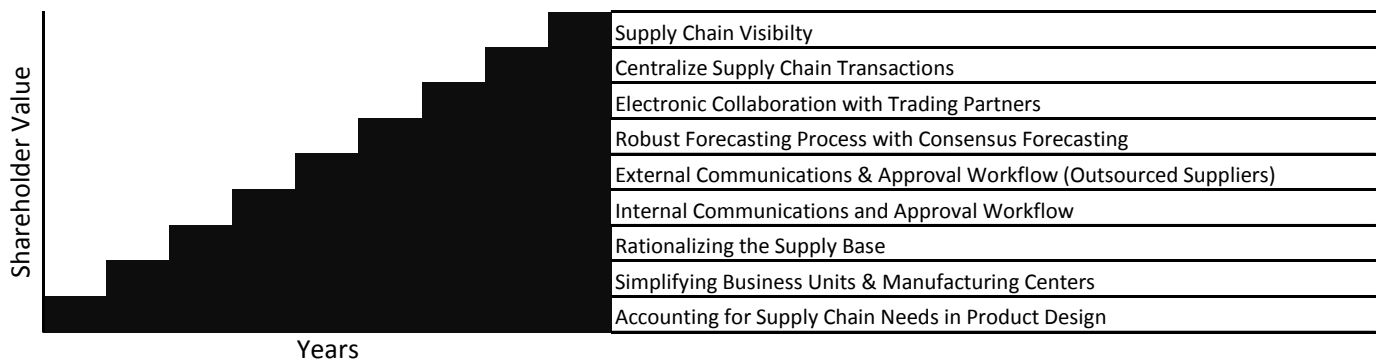
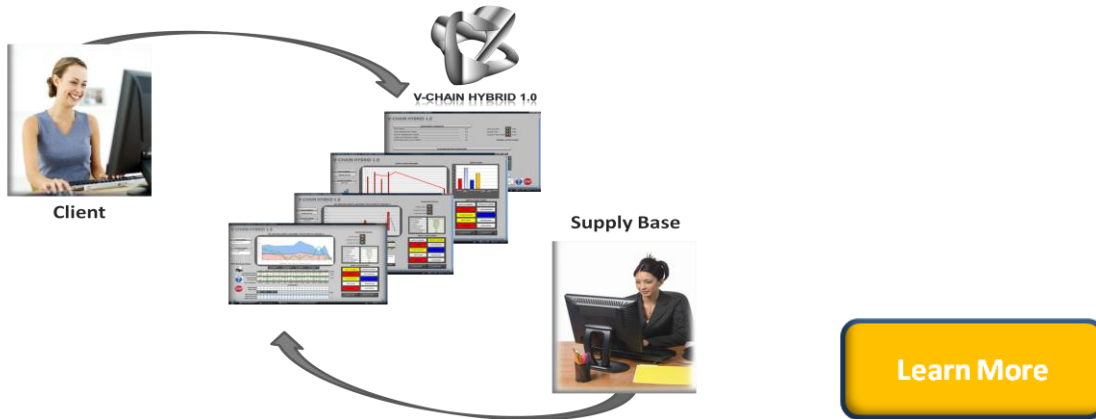


Figure 2.0

An efficient running supply chain is one that utilizes seamless communication and visibility across marketing, sales, operations, and supply chain management. Many companies have never been able to establish a seamless supply chain because they have yet to implemented supply chain visibility.

V-Chain Solutions' Hybrid Methodology creates a path for companies getting ready to take on supply chain visibility. Our methodology focuses on centralizing supply chain transactions and establishing business rules & Key Performance Indicators to monitor them. It also focuses on establishing a communications and accountability process within the company and throughout your supply base. We then combine our methodology with a revolutionary technology we created called the V-Chain Network. This technology enables users to access, analyze, communicate, and process supply chain transactional activities with lightening efficiency.

Our solution shares supply chain information with the sales, marketing, operations, and supply chain trading partners to eliminate confusion on demand and supply needs. The one thing that holds true to every e-application is that they generate transactional activities. We created a technology that gathers and shares relevant supply chain information from the conglomerate of e-applications your organization has. We've created a solution that enables planners and buyers to become proactive by providing them with tools necessary to access, analyze, communicate, process and resolve supply chain disruptions. Furthermore, our technology doesn't disrupt or interfere with your existing IT infrastructure. We bring value to your business by analyzing the daily, weekly, and monthly transactional activities that you generate from your IT infrastructure. If we've got your attention, then your next step would be to learn more about our technology. The first product in our network is called the V-Chain Hybrid 1.0, a revolutionary proof of concept that we can installed and deliver an ROI within 60 to 90 days per business unit. Imagine that, a product that we can prove in as little as 60 days that doesn't interfere with your existing IT infrastructure!



The V-Chain Network

The V-Chain Network is a 21st century cloud based technology that delivers true supply chain visibility. The V-Chain Hybrid is a planner and buyer e-suite that enables clients to manage supply chain activities on a daily, weekly, and monthly basis without disrupting your current IT infrastructure. Our solution is SaaS based and does not require long implementations.

10+ reasons to invest in V-Chain's technology:

- *Eliminate the need for additional IT Infrastructure or the risk of disrupting your existing infrastructure.*
- *Improve productivity by 40% in planning, forecasting and procurement*
- *Reduce inventory levels quarterly by as much as 25%. Reducing your costs by millions of dollars.*
- *Eliminate the bull whip effect by providing supply chain visibility of your entire Enterprise –World Wide!*
- *Provide real-time critical information to become pro-active versus wasting valuable time reading emails and determining why processes failed.*
- *Strengthen decision making capabilities with a very powerful dashboard, reporting tools and what if scenarios.*
- *Strengthen communications with your supply base resulting in better service and response time using our advanced tools.*
- *Monitor supply chain performance and report transactions that impact corporate goals, disrupts business and impacts your customer base.*
- *Eliminate key entry errors using our advanced forecast upload capabilities.*
- *Alert buyers and planners to address potential issues before they become supply chain failures.*
- *Our solution was designed with the user in mind. We offer custom designed screens to guide the client in customizing the solution to fit their business and work processes. This is in sharp contrast to other systems that require companies to fit their business processes to their solutions*
- *The system is easy to use with great documentation! V-Chain Solutions offers a next generation tool for training now and in the future.*

V-Chain Solutions is a SaaS provider of Supply Chain Visibility solutions for the retail, telecommunications, manufacturing and healthcare industries. We pride ourselves in saving companies millions of dollars without adding additional cost to existing infrastructures. Our revolutionary methodology enables companies to become more efficient and we can prove it in as little as 60 days through a pilot.

SUMMARY

No matter how you look at our methodology, it solves present and future challenges by enabling companies to transition into the 21st century with lightning efficiency. By combining our solutions, your organization will reap the benefits for decades. Best of all, we were able to solve these challenges at a fraction of the cost of our competition. In Closing, our methodology is groundbreaking along with our technological solutions. Rise above your competition by focusing on supply chain improvements and give us a call to see if we can help arm your organization with the ultimate weapon for success! Please call us at 866-761-7888 to discuss your current needs and future requirements.

Sincerely,

James Vinson
President,
V-Chain Solutions, Inc.

The V-Chain Hybrid brings value by analyzing your daily, weekly, and monthly transactional activities.



Client

Supply Base

See the whole picture!

- Supply Chain Visibility
- Business Intelligence
- Performance Monitoring
- Supply Chain Alerts

Client IT Infrastructure

Consolidated Supply Chain Transactional Information

Secure Cloud Server managed by

FusionStorm
Making Technology Work

V-CHAIN HYBRID 1.0



VCHAINsolutions

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