Anatomy of a Supply Chain: Diagnosing the Business Pain

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Supply Chain Management Makes the Headlines

"New technologies for supply-chain management… imply that businesses can perceive imbalances in inventories at a very early stage—virtually in real time—and can cut production promptly in response to the developing signs of unintended inventory building."

- Greenspan Again Cites e-Commerce Effect; Wednesday, February 28, 2001

The Pain is Everywhere

"…sales are slowing, and its inventory is through the roof compared to last quarter."

March 29, 2001 Red Herring

"…with both its sales and the value of its surplus components shrinking, Cisco said it would write off $2.5B in its bloated inventory."

April 18, 2001 Wall Street Journal

"…slashed full-year profit forecast… because of production delays."

January 25, 2001 CNET, Bloomberg

"…facing sagging sales this year, which many analysts attribute to…inventory-control snafus. "

March 19, 2001 BusinessWeek

The Pain is Everywhere

ERICSSON

"…low first quarter sales accentuated by high inventory levels and low replacement demand."

March 12, 2001 Industry Week

Lucent Technologies
Bell Labs Innovations

"…inventories grew 34% in fiscal 2000…far outpacing revenue growth of about 12%."

May 7, 2001 BusinessWeek

RadioShack CORPORATION

"…deteriorating profit due to cut-rate prices on computers to clear excess inventory…"

April 9, 2001 Yahoo! News

handspring

"…will take a $20 million dollar write down..due to inventory problems..."

June 7, 2001 TheStreet.com

The Pains Become Nightmares

- **Accountants**
  - Do you manage inventory investment across the chain?
  - Do you understand risk?
- **Mummies**
  - Can you adapt rapidly, or do your practices and systems wrap you in a straight jacket?
  - Do you live in real time?
- **Bogeymen**
  - Can you really see what is happening outside your four walls, or do you just rely on reports after the fact?

Extended visibility prevents nightmares and can mean tens of millions of dollars in drop-through.

The Only Thing You Know is That Your Supply Chain Will Fail to Execute…

- Forecasts are wrong.
  - **Demand is unpredictable.**
- Suppliers don't execute.
  - **Even best-in-class suppliers miss dates or targets 10% of the time.**
- Black holes appear.
  - **Yields are lower than expected.**
  - **Items mysteriously disappear off the shelves.**
  - **Shipments are lost.**
  - **Carriers are late or neglectful.**

There are simply too many external dependencies…

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The New Outsourced Supply Chain Increases the Chance of Failure

The supply chain encompasses every <u>event</u> from the procurement of the first raw materials for a product to the moment that the finished product is consumed by the end customer.

SCM Attempts to Build a Bridge for the Extended Supply Chain

- **Supply Chain Management (SCM): The management of materials, information, and cost as they move in a process from supplier to manufacturer.**
  - The ultimate goal of any effective SCM system is to get the right product to the right place at the right time at the right cost, thereby optimizing inventory levels.
  - "Just-in-time" inventory allows a company to save money that is sunk into goods not sold, and lowers carrying and storage costs. *In other words, if you improve your supply chain, you save money.*

Better visibility = better data (event) availability = better event management response = SUPERIOR SCM.

Superior SCM Lessens the Pain

- **Supply chain malfunctions significantly impact stock prices:**
  - When a supply chain malfunction is announced, a company's share price drops by an average of 9%.
  - If the supply chain glitch is caused by a supplier, investors are even more unforgiving – punishing the offending company with a 12% drop in share price.
- **Companies with superior SCM techniques:**
  - Have supply chain costs 36% lower than the average company,
  - Achieve a 40 – 65% advantage in cash-cash cycle time,
  - Hold 50 – 80% less inventory than competitors, and
  - Gain a 4% savings in their bottom line.

Sources: Yankee Group, October 2000
IBM Study, January 1999
Ga. Tech Study, December 2000

So, let's look at three issues that tend to get in the way of superior SCM…

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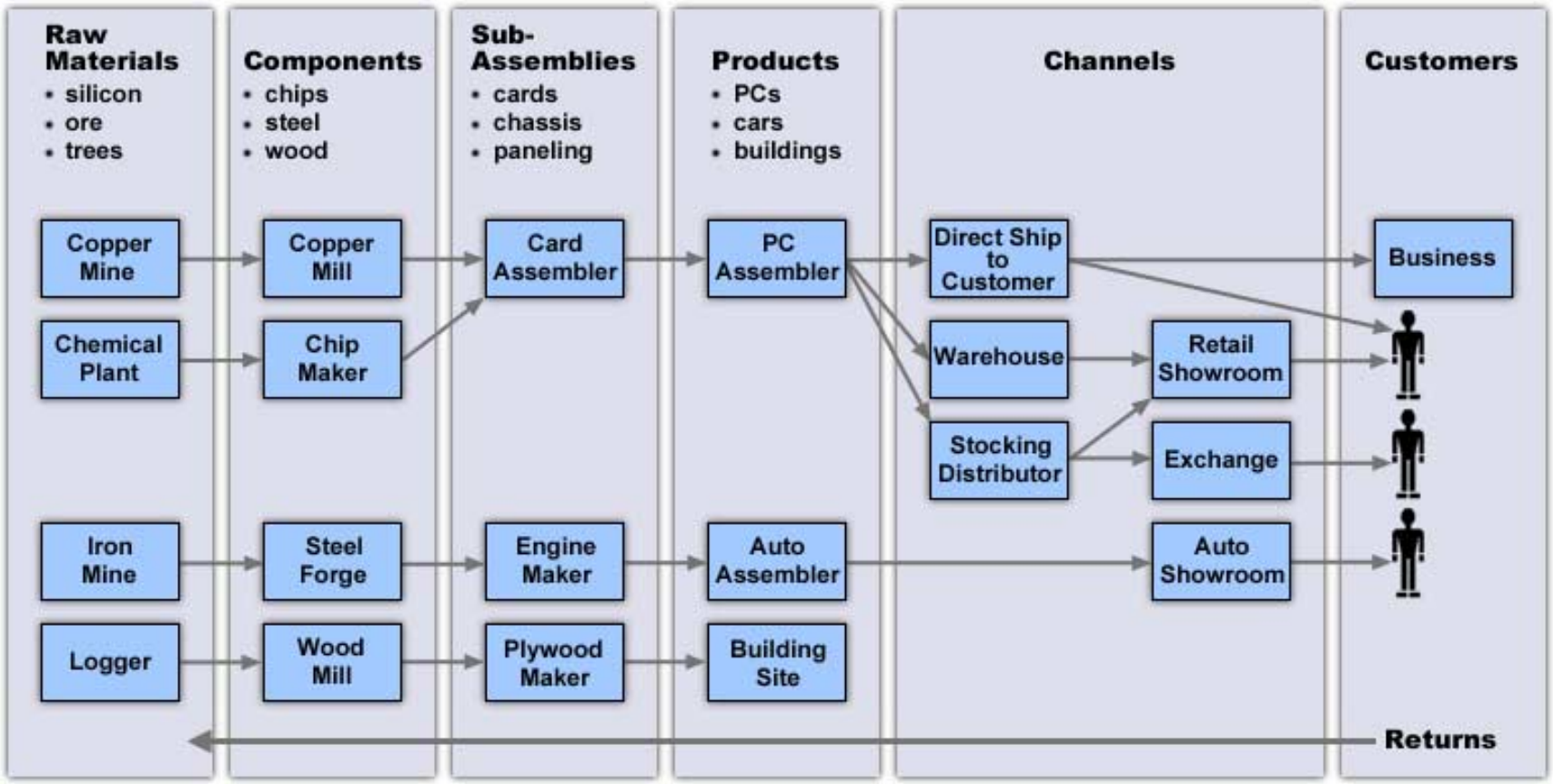
Issue 1: Every Supply Chain is Different and Complex



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Issue 2: The Internet has Changed the Rules

- Eliminates the need for proximity to new marketplaces.
- Creates pressure from a new class of competitors.
- Customers demand shorter lead-times, higher reliability and up-to-the-minute visibility into supplier systems.
- Supply chain velocity increases at an exponential rate.

Proactive management now requires real-time insight across and into the extended supply chain.

Global visibility exposes supply chain weaknesses.

Issue 3: The Data Issue....

- Extraction from multiple and disparate systems.
- Inconsistent quality and availability.
- Security and storage issues.
- Transformation to common format (e.g. XML).

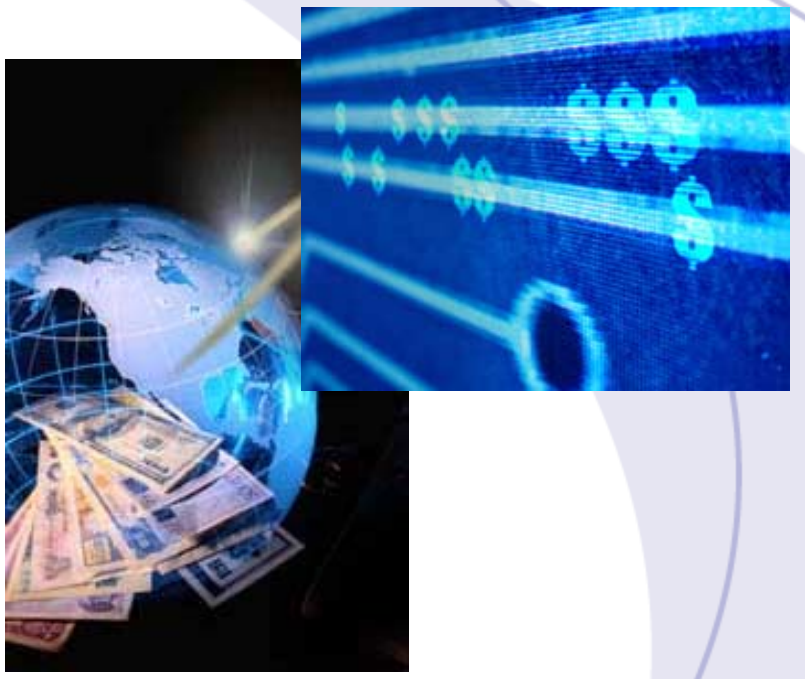
If we solve all of these issues and understand the data… then the data means dollars.

Today's SCM Solutions

- Business will spend $350B on Internet infrastructure by 2003. Almost 75% of this spending will be on systems integration and operations and maintenance.

  Source: Jupiter Media Metrix

- Most of this spending revolves around ERP deployments and the use of EDI.



However, these are only partial solutions that don't address the needs of the extended supply chain.

Technology Can Create Tomorrow - Today

- **Outsourced Internet-based services can collect and analyze data from multiple, disparate sources across the supply chain to:**
  - Gather information in real time for early diagnoses of otherwise costly supply chain problems.
  - Aggregate diverse information to gain visibility.
  - Empower enterprises and transactional communities.
  - Create a single, unified view of complex, multi-process operations.
  - Proactively manage every key component of the supply chain by analyzing trading activities.

With Visibility, the Problems are Solved...

- **Integrate extended supply chain applications together to take advantage of Internet business opportunities.**
- **Gain insight into customer demand and the ability to better plan production and inventory.**
- **Enhance customer service and retention by always having the products they want when they need them.**
- **Make better, more timely, and informed business decisions.**

With Visibility, the Problems are Solved...

- **Select suppliers based on actual performance instead of relationships or price alone.**
- **Lower costs and impact your bottom line by reducing carrying costs, safety stock and improving inventory turns.**
- **Prevent costly mistakes that result from not having real-time data on critical business processes.**

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