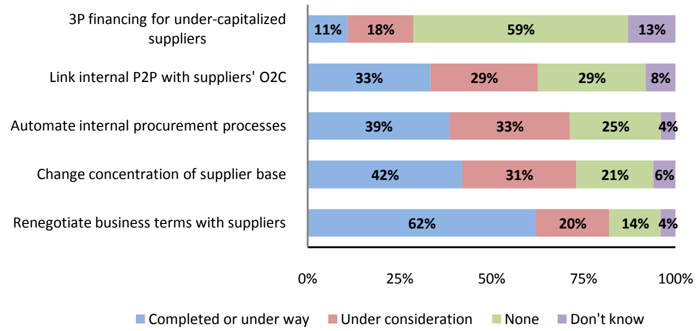
Retail Supply Chain: Recession and Beyond

Many existing enterprise IT organizations neither predicted nor reacted well to the recession or the coincident structural change in consumers' spending patterns. In some cases, post-recession consolidation has led to complex IT infrastructures, creating new opportunities for cost savings as well as new demand for integration and simplification. Such trends should direct the attention of supply chain management professionals toward more robust data management/MDM systems, increased business intelligence integration, and specific solutions such as product lifecycle management aimed at organizing integrated capabilities around a specific (critical) enterprise function. Retailers and OEMs will also expectantly continue to turn to 3PLs and other outsourced providers to help them streamline operations.

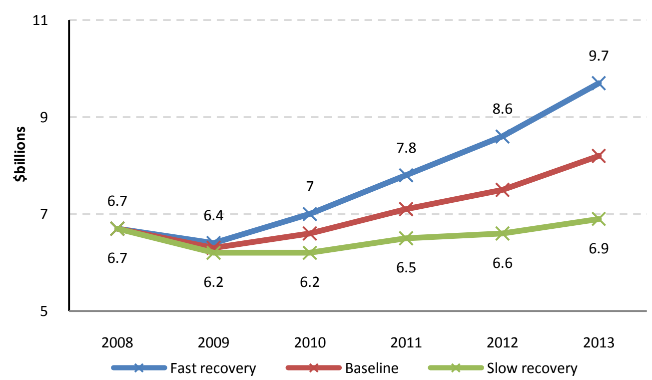
The goals of technology investment in the supply chain remain consistent. In 2011 these investments will again remain focused on projects promising a rapid ROI, including through cost rationalization. The continued focus on controlling costs is consistent with the value delivered in supply chain visibility and control over point of origin inventory management decisions. Costs, after all, are not just out-of-pocket direct expenses but also the secondary incidental costs, including opportunity and risk-oriented redundant costs arising in today's globally sourced world. Market leaders continue to look to increase inventory turns and shorten lead times, increase collaboration and enhance automation and interconnectedness. In a recent supply chain survey of some 500 CFOs, 64% of respondents agree that "reducing direct costs' is a top priority."

Initiatives Undertaken as a Result of the Recession



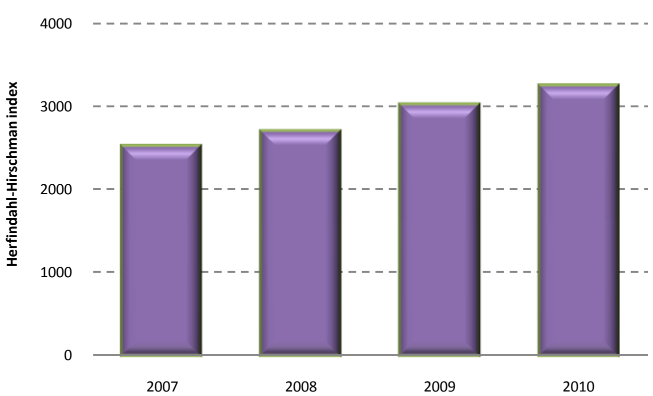
Source: `The New Deals' an Ariba and CFO Research report

SCM Market Size Forecast



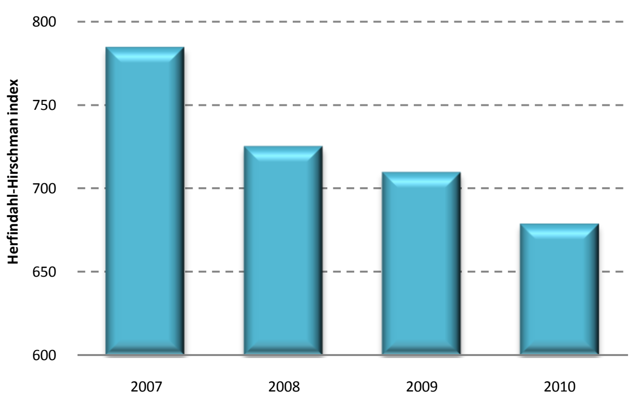
Source: American Software March 2011 investors publication.

Industry Concentration in POS and Inventory Management Software

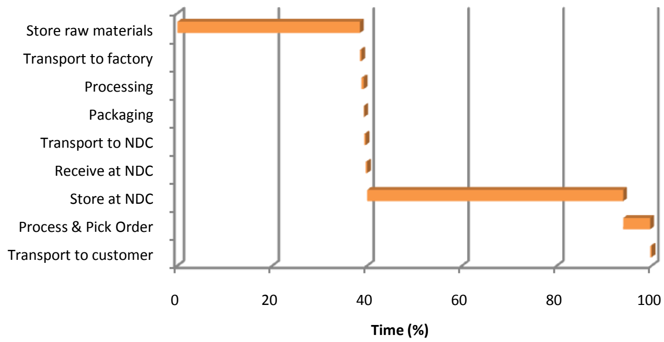


Source: Based on Hoover's Company Records data and classifications

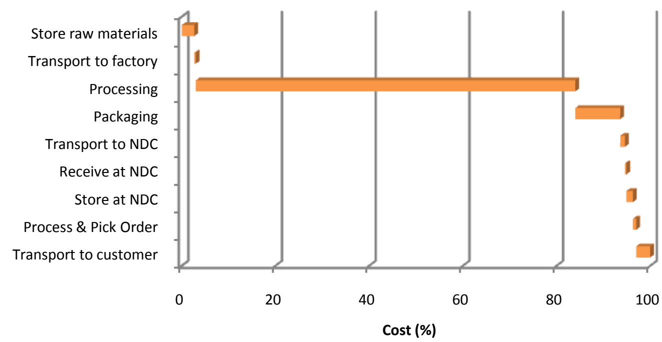
Industry Concentration in SCM and Logistics Software



Case Study: Time in the Supply Chain



Case Study: Costs in the Supply Chain



Source: Nottingham University Business School study of a large, aggressive consumer goods manufacturer based in Europe, Asia and the U.S., with approximately $10 billion in annual revenues and 20,000 employees

Drivers of Retail Supply Chain Investment

Upstream Factors

Upstream markets influence retailers' supply chain investment decisions in an important way both historically and prospectively. While new investment has been focused on resuming supply chain projects that were suspended during the recession, fallout continues to affect retailers' appetite for new projects. Store closings brought about by the recession were widespread, and this phenomenon has caused some damage to retailers' supply chain networks. This trend could lead to a new wave of supply chain network design initiatives. In addition, shifts in consumer demand brought about by the recession may be permanent As a result, retailers are seeing rapid increases in private label products as well as increases in brand differentiation. This trend has created new opportunities in inventory management systems as increasing numbers of SKUs are becoming a challenge for old inventory management systems.

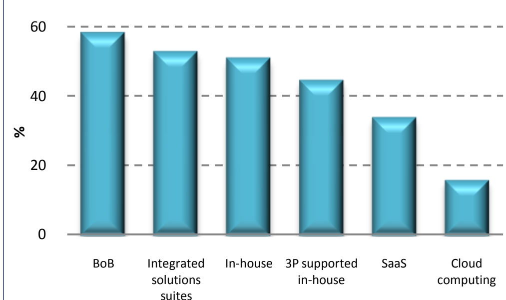
In the present, shifts in the competitive landscape of the supply chain are playing a key role as near-sourcing goes out of fashion and focus is renewed on upstream control of product.

Looking to the future, retailers can anticipate near-term supply and infrastructure shocks to transportation networks. In particular, the widening of the Panama Canal, which is projected to be operational in 2014, is expected to shift some distribution centers out of the Midwest and into the East and Gulf coasts. On the supply side of the transportation market, new CSA regulations are projected to reduce driver capacity by 4%, and financing challenges are expected to mute the trucking industry's response to the price increases that are likely to result from these changes. This trend will contribute to increases in transportation costs in the supply chain.

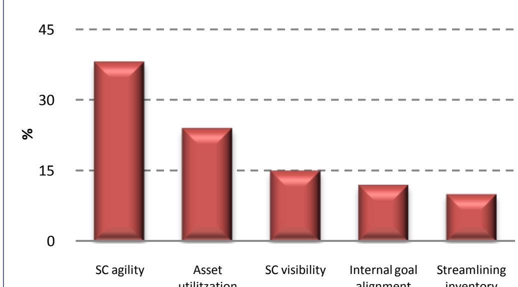
Downstream factors

In 2011 retailers are doing business with a more demanding and knowledgeable customer. This shift has led to some new sources of demand for supply chain solutions. In response to consumer interest, retailers have significantly improved their web presence in recent years. Warehouse management system infrastructures that were originally intended for meeting the needs of a storefront retail format have not kept pace. Meanwhile, consumers continue to expect a more personalized and relevant offering from retailers. For example, mobile technology has put new pressure on retailers to maintain accurate information on inventories. The trend has encouraged retailers to consider technologies that promise to enhance their ability to meet consumers' needs, including space planning, demand management, and collaborative planning, forecasting and replenishment, especially integrating the latter into sales and operations planning.

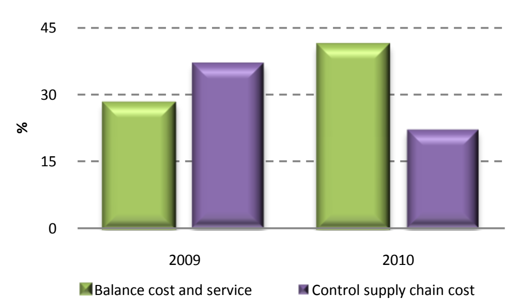
Software Architecture 2011



Supply Chain Goals 2010



Shifting SCM Strategic Focus



Source: RIS 2011 Retail Technology Study and SC Digest's "State of The Retail Supply Chain 2010"

Risk in the Retail Supply Chain

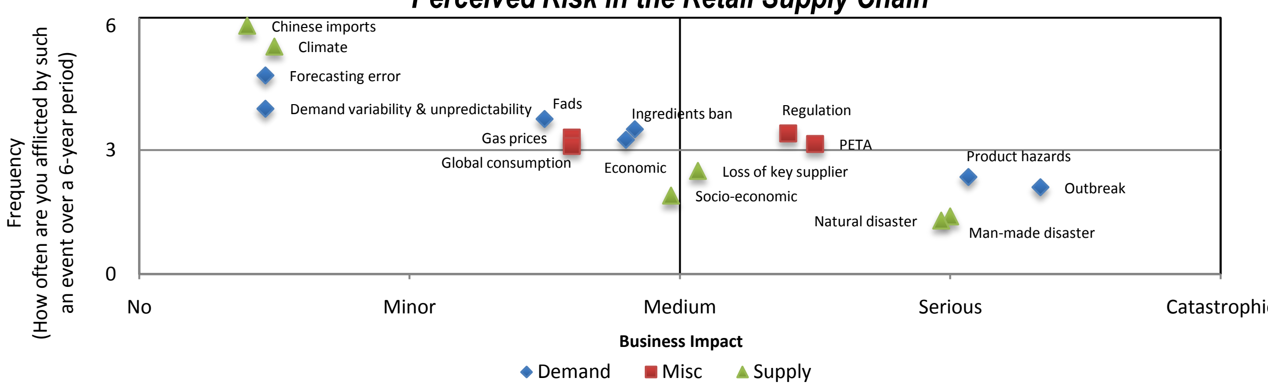
The year 2011 is shaping up to be volatile when it comes to risk. Major political events and natural disasters are unfolding, in addition to continuing economic uncertainty. The year's major political upheavals in the Middle East and continuing bouts of activity could impact retailers. Under such a scenario, the retail supply chain would be affected by added upward pressure on oil prices and the possibility of a threat to transportation routes.

Japan's March tsunami and subsequent nuclear disaster have disrupted the electronic component supply chain, in particular for components used in the production of automobiles. In the short term this has led to cuts in the production of some consumer goods, but in the long run it could lead to more structural changes to supply chain networks if producers are forced to look elsewhere to meet their needs.

Lastly, as the economy continues a slow and seemingly uncertain recovery, the outlook for future consumer demand remains uncertain. Weak consumer sentiment figures, the Federal Reserve's interest rate policies and a weakening dollar have engendered uncertainty over inflation, while rising oil prices threaten to increase transportation costs and the availability of goods.

A recent study by Mohan Gopalakrishnan of Arizona State University helps to shed some light on how supply chain executives view the potential for future risk (see chart). Chinese imports, climate driven shocks, and demand uncertainty stand out as the most prevalent. Meanwhile product hazards and outbreak pose the biggest threat.

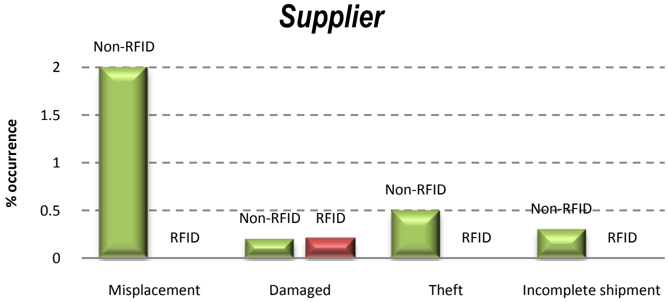
Perceived Risk in the Retail Supply Chain



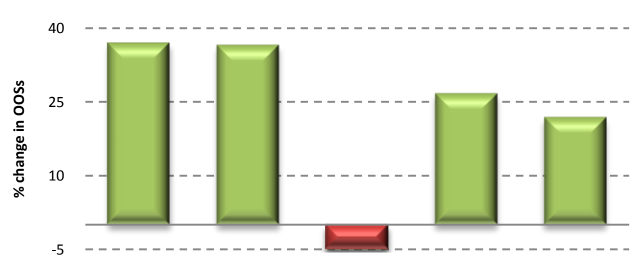
Impact of RFID in Retail

RFID has a storied past. The technology was not embraced early on; many suppliers who did adopt the technology were disappointed by technical challenges and unexpected costs. On the other hand, some still believe in the technology. In 2011 a noticeable percentage of retailers were seen to be in some stage of an RFID investment project. Perhaps it is on the retail end of the supply chain that RFID has the most unrealized potential. Indeed, in 2011 retailers indicate they are focused on demand forecasting and visibility on the storefront, two areas where RFID could help to generate improvements. The following study takes a closer look at this issue, and its main finding is that RFID all but eliminated problems involving misplacement of product and theft for suppliers. Retailers were found to benefit from large reductions in out-of-stocks (OOSs) for high velocity items such as cleaners and baby formula while relatively little benefit was derived for lower velocity items such as furniture.

Case Study: Impact of RFID on a Retail Supplier

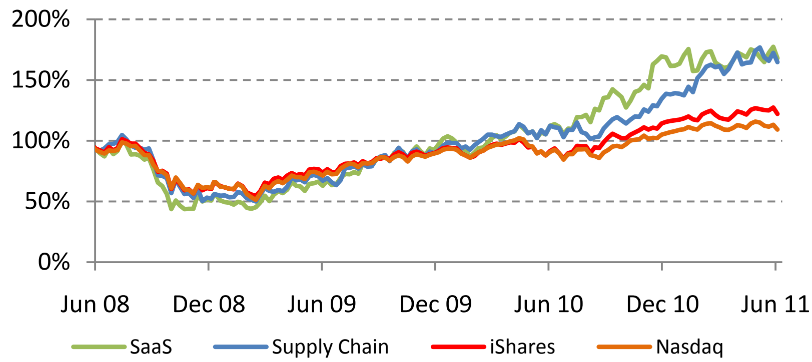


Case Study: Impact of RFID Integrated IMS on OOSs by Product



Sources: Data from Auburn University retailer study covering 31 retail stores that chose to invest in RFID and 1,268 distinct products; a 2009 supplier cost study in the Transportation and Logistics Review; and a retail textile company in Turkey that annually handles 400,000 products in its warehouses

Public Market Trading and Performance



Source: Capital IQ as of June 13, 2011. iShares S&P North American Technology-Software Index Fund (ARCA:IGV)

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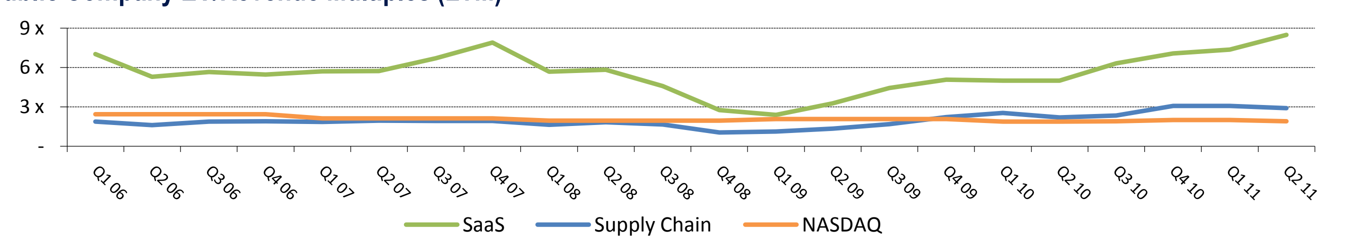
Public Company Valuation and Performance – Retail Supply Chain

	Stock Price	% of 52-week		Market	Enterprise		EV / Revenue				EV / EBITDA				P/E Ratio		
Company Name	6/13/2011	High	Low	Cap	Value	Cash	LTM	LQA	CY2011 E	CY2012 E	LTM	LQA	CY2011 E	CY2012 E	LTM	CY2011 E	CY2012 E
Ariba Inc.	$30.12	84.0 %	204.2 %	$2,791	$2,593	$198	6.4 x	6.0 x	5.6 x	5.1 x	NM	NM	25.6 x	18.9 x	NM	36.5 x	28.5 x
JDA Software Group Inc.	30.05	85.8	144.7	1,280	1,327	226	2.0	2.0	1.9	1.8	8.2	10.3	7.4	6.6	18.9	15.0	12.0
Manhattan Associates, Inc.	33.84	90.9	136.6	734	616	118	2.1	2.1	1.9	1.7	13.2	16.1	9.1	7.5	27.1	17.8	15.9
Descartes Systems Group Inc.	6.63	89.3	117.8	417	341	76	3.2	3.1	3.0	2.7	11.7	10.2	10.4	9.0	32.0	13.8	11.4
EasyLink Services International Corporat	4.81	98.6	235.8	147	236	28	1.7	1.2	2.2	2.7	7.0	5.1	NM	NM	8.4	18.3	22.2
American Software, Inc.	7.37	92.4	163.1	192	150	42	1.9	1.8	1.7	1.6	16.1	16.6	NM	NM	32.0	23.2	19.5
XATA Corp.	1.88	55.6	102.2	20	52	15	0.8	0.8	NM	NM	9.0	17.6	NM	NM	NM	NA	NA
Aldata Solution Oyj	0.68	73.5	104.5	46	35	12	0.3	0.3	NA	NA	11.5	12.0	NA	NA	NM	NA	NA
	Mean	83.8 %	151.1 %				2.3 x	2.2 x	2.7 x	2.6 x	11.0 x	12.6 x	13.1 x	10.5 x	23.7 x	20.8 x	18.2 x
	Median	87.5	140.7				2.0	1.9	2.0	2.2	11.5	12.0	9.8	8.2	27.1	18.1	17.7

Public Company EV/Revenue Multiples (LTM)



Source: Capital IQ as of June 13, 2011. Amounts in millions of U.S. dollars, except per share data.

Recent M&A Activity in Retail Supply Chain

Date	Target	Acquirer	Enterprise Value	Revenue	EBITDA	EV / Revenue	EV / EBITDA	Description
May 11	Epicor Software Corporation	Apax Partners LLP	$951.5	$453.3	$54.4	2.1 x	17.5 x	Enterprise application software solutions and services
May 11	Oco, Inc.	Deloitte Consulting	-	-	-	-	-	Business intelligence and analytics solutions
Dec 10	CMAC, Inc.	Decisionpoint Systems, Inc.	$3.7	$6.9	$0.1	0.5 x	25.8 x	Logistics consulting and systems integration company
Dec 10	AECsoft USA, Inc.	SciQuest, Inc.	$16.9	-	-	-	-	Supplier management solutions to manage supplier bases
Jul 10	iTradeNetwork, Inc.	Roper Industries Inc.	$525.0	$79.5	-	6.6 x	-	Supply chain automation solutions
Jun 10	Inovis, Inc.	GXS, Inc.	$279.2	$137.1	$44.6	2.0 x	6.3 x	On-demand business community management solutions
May 10	Sterling Commerce, Inc.	IBM Corp.	$1,400.0	$633.1	-	2.2 x	-	Integration solutions and supply chain applications
Apr 10	Porthus N.V.	Descartes Systems Group Inc.	$35.3	$31.7	$4.5	1.1 x	7.8 x	Global trade and supply management solutions
Mar 10	IBM (PLM software division)	Dassault Systemes SA	$600.0	$400.0	-	1.5 x	-	PLM solutions
Mar 10	Optiant, Inc.	Logility, Inc.	$3.3	-	-	-	-	Supply chain business intelligence solutions
Mar 10	Halifax Corporation of Virginia	Global Equity Capital, LLC	$6.7	$31.0	$1.3	0.2 x	5.1 x	Enterprise logistics and supply chain solutions
Feb 10	RedPrairie Holding, Inc.	New Mountain Capital, LLC	-	$265.5	$51.4	-	-	Enterprise logistics, supply chain and workforce solutions
Jan 10	i2 Technologies Inc.	JDA Software Group Inc.	$381.4	$231.8	$61.2	1.6 x	6.2 x	Supply chain management solutions
Dec 09	KSS Retail Ltd.	Dunnhumby Limited	$20.8	-	-	2.0 x	8.3 x	Price optimization solutions
Dec 09	Turnpike Global Technologies LLC	XATA Corp.	$12.5	$5.6	$0.9	2.2 x	13.9 x	Logistics intelligence solutions
Nov 09	Yunique Solutions Inc.	Gerber Technology	$6.0	$1.5	-	4.0 x	-	Product lifecycle management solutions
Nov 09	ILOG SA	IBM Corp.	$171.0	$157.7	$5.1	1.1 x	NM	Enterprise software and supply chain management solutions
Jun 09	Logility	American Software, Inc.	$55.7	$41.6	$9.2	1.3 x	6.1 x	Supply chain management solutions
Jun 09	I-many, Inc.	LLR Partners Inc.	$41.2	$36.8	-	1.1 x	-	Contract management solutions
					Mean for deals	2.0 x	11.0 x	
					Median for deals	1.9 x	7.8 x	

Source: Capital IQ as of June 13, 2011. Amounts in millions of U.S. dollars.