

Welcome to the March 6, 2007 issue of Theory and Practice. We publish every two weeks, examining recent events and offering opinions on key trends in manufacturing, wholesale, and retail processes. Please feel free to forward this newsletter to colleagues or others who might find it relevant.

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## Early Results from Manufacturing Insights' 2007 Global Supply Chain Survey

**Kimberly Knickle, Pierfrancesco Manenti, and Buck-Seng Ng**

Manufacturing Insights kicked off the year with a global supply chain survey to identify supply chain priorities on a global and regional basis within manufacturing and retail industry segments. With more than 800 responses, the survey should provide insights into how companies expect their supply chain to contribute to overall business objectives, where companies expect to focus supply chain strategies and process improvements, and supply chain IT investments. We have summarized some of our early results.

### *The Supply Chain is a Major Factor in Managing Costs and Improving Customer Satisfaction*

Our first pass of the data reveals a common thread around the world – manufacturers and retailers consider their global supply chain performance to be a major factor in two business objectives:

- Reducing overall cost and/or improving productivity and
- Increasing quality and customer satisfaction.

### *Business Maximization and Optimization Are Functions of Market Development and Maturity*

A closer look at the data reveals that business maximization and optimization are functions of market development and maturity. In less established markets, firms continue to put more attention to maximizing market share, increasing revenues, and expanding in new markets, while more mature markets focus on business optimization – balancing cost and productivity pressures with profitable growth.

For example, manufacturers and retailers in the mature regions of North America, Western Europe, and Asia Pacific all focused on reducing costs. North American manufacturers also selected increasing revenues and/or exploiting new markets in its top two business objectives impacting supply chain performance, reflecting ongoing efforts to globalise; Western European manufacturers selected innovation in new or existing products or services.

The importance of quality and customer satisfaction as a prerequisite to market growth was highly evident in our results. Eastern Europe, China, and Asia Pacific manufacturers and retailers all picked increased quality and customer satisfaction as a top business objective linked with the supply chain. China's retailers also selected innovation, and China's manufacturers opted for increasing revenues or exploiting new markets.

### *Where Does Innovation Play?*

Surprisingly enough, innovation in new or existing products and services was rarely selected among the top business objectives impacting supply chain performance over the next 2 years – once by Western European manufacturers and once by retailers in China. However, innovation should have an important impact on global supply chain performance. Our results may indicate that manufacturers in mature regions are still struggling in winning the global competitive match, and therefore many of them are still prioritizing cost-cutting initiatives vs. funding product innovation. Comparing different low-cost manufacturing areas such as Eastern Europe and China, retailers in China already acknowledge the importance of innovation, but Eastern Europe is more focused on balancing low-cost manufacturing opportunities with increasing quality and customer satisfaction. We expect more regions to recognize supply chain performance can and should be tightly interwoven with innovation priorities.

### *The Top Priority for Supply Chain Strategies Is Reducing Costs, But Responsiveness and Collaboration Remain Key*

Around the globe, the top priority among manufacturers in supply chain strategies is reducing material, manufacturing, transportation, and/or logistics costs. Retailers globally say the same, but North America ranks establishing deeper collaboration with suppliers as its top supply chain strategy, and Western Europe puts collaboration as a close second to reducing costs.

As a whole, it does appear that manufacturing firms surveyed are still looking at a cost strategy in their supply chains as opposed to focusing on speed, flexibility, or service-enhancement. Also, with high scores in "being more responsive to changes in the marketplace" across the board as the second pick of top supply chain strategies, it does point to the reality that retailers and manufacturers are aware of the need for more intelligent decision making in supply chain management. Global competitiveness is pushing manufacturers to become more agile to better handle demand variability. For manufacturers in less mature regions, we also see both collaboration with trading partners and responsiveness ranked highly. This could indicate a desire to catch up with other regions and become more competitive, not just on pricing in the short-term, but also on collaborative development and better customer service.

### *More Results on the Supply Chain Survey*

Our review of the data is in its preliminary stages, and we expect to draw more conclusions on how supply chains will help companies compete more successfully. We'll keep you up to date on our survey results as the analysis is completed. Clients should look for our global summary, as well as break outs for results in North America, Europe, and Asia Pacific over the next month.

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## Next Generation Product Lifecycle Management

**Joe Barkai and Jay Holman**

Market globalisation and trends in manufacturing and outsourcing are changing the design and manufacturing landscape. Designers and manufacturers continue to face new challenges as they struggle to remain competitive and profitable.

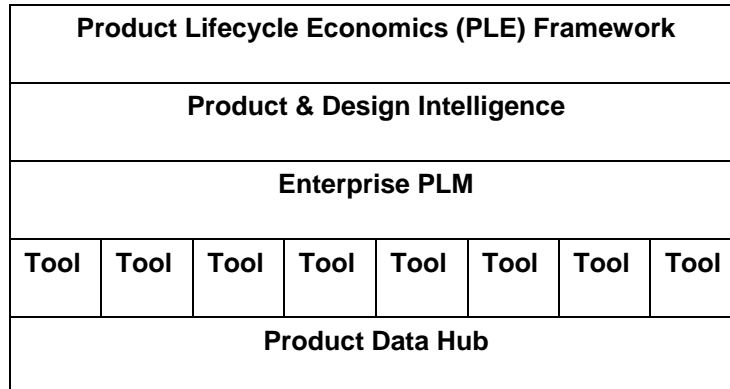
For example, manufacturing companies are increasingly pressured to bring products to market faster, at lower cost and with higher quality. As companies improve their product development processes to address these pressures, they must invest wisely, as investments in tools and methods that do not address the entire product lifecycle can result in frustration and inability to achieve business goals. Organizations need to be able to determine when to add incremental investments in technology in order to achieve specific business initiatives and true competitive differentiation.

Traditionally, PLM tools have evolved around the technology-centric tasks and functionality required by individual knowledge workers (primarily designers and engineers). The slow, incremental evolution of these tools has created a fragmented environment that has limited their ability to enable effective collaboration and the easy and safe sharing of data. Tools for collaboration within the design and engineering community have improved, but obstacles remain for providing knowledge workers outside of design and engineering areas with access to product information.

Another challenge for PLM is that market consolidation and elongated design networks are forcing product development teams to leverage data from multiple systems. This means that designers must be able to deal directly with legacy data from heterogeneous PLM tools and then unify that data into a single view. For example, during the design and manufacturing phases product data is primarily captured in the bill of material (BOM), and the challenge for systems is to generate a BOM that is complete, accurate, and up-to-date. This is opposed to the earlier phases of requirement management and ideation, before a BOM has been developed, and when product information is primarily captured in unstructured representations of product functionality and specifications. As we can see from these examples, the process of unifying and stratifying information is highly dependent upon the information sources, the producers and consumers of this information, and the tools and practices they employ.

The next generation PLM environment must overcome these obstacles by merging and blurring the lines between traditional product lifecycle phases across the entire product value chain. This will allow PLM to support product development strategies that enhance business value throughout the product value chain, from ideation to end of life. Additionally, next generation PLM must provide a flexible product architecture and agile business process environment using service oriented architecture (SOA). Using this approach, PLM composite applications interconnect PLM tools as well as facilitate a robust integration with other enterprise tools such as supply chain management (SCM), ERP, and customer relationship management (CRM). Manufacturing Insights refers to this approach as "Enterprise PLM".

The diagram below shows Manufacturing Insights' framework for enterprise PLM, which includes a product data hub as its foundation and the "single source of truth" for product data used throughout the entire product lifecycle. A multitude of performance enhancing, task-specific tools sits above this product data hub, above which sits the enterprise PLM layer that integrates data from all of those tools. Above that layer, this environment implements embedded analytics for product intelligence, such as portfolio management and optimisation, dashboards for design maturity and new product launch readiness, compliance risk assessment and end of life (EOL) planning.



Manufacturing Insights sees this federated environment as a way to democratise PLM – bringing together local and global communities of practice and knowledge workers across the extended enterprise using common knowledge repositories: BOM, computer-aided design data, compliance data, and so on. This framework provides intelligence and complete context for optimising product lifecycle decisions and improving partner collaboration. One of the cornerstones of PLM has been the ability to make design decisions and see design changes reflected in the broader product scope. Manufacturing Insights believes that this approach will further enhance the productivity of PLM tools by broadening the context in which these decisions take place.

In addition, this is a scalable and extensible approach to support activities that are not traditionally associated with PLM but are gaining recognition as critical enablers for success, such as:

- Ideation
- New product introduction (NPI)
- End to end product compliance management
- Product portfolio management decision
- Further adoption of DFX – Design for supply chain, for manufacturability, for serviceability, and so forth

A more detailed examination of the details and benefits of Manufacturing Insights' framework for next generation PLM will be published at the end of March. If you would like to participate in an executive interview in exchange for a complimentary summary of the report, please contact Joe Barkai at [jbarkai@manufacturing-insights.com](mailto:jbarkai@manufacturing-insights.com).

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Acquisition Roundup – Building Integrated Decision Suites – ILOG, RedPrairie, Optiant, Oracle, and SAP

**Bob Parker and Kimberly Knickle**

One of our most popular reports last year was our analysis of intelligent decision models for supply chain performance. Industrial firms are looking to improve the speed and accuracy of their decision-making and to better link strategic, tactical, and operational decisions. We observed that, due to a lack of integrated

decision suites, there was a large services opportunity and that both large enterprise software vendors and providers of point supply chain analytic applications would look to build out their capability. Recent activity points to progress on the acquisition front.

The month kicked off with **ILOG's** announced plans to acquire supply chain network design vendor **LogicTools** for approximately \$15 million. **LogicTools** has used ILOG's optimization technology in its products for more than five years, but the combined product set will give ILOG a bigger story to offer its customers in the consumer goods, retail and manufacturing markets. ILOG with its Optimization Decision Management System is working toward supporting intelligent decision models, but the acquisition of **LogicTools** should bring more of a supply chain focus to the company and its applications.

On February 21<sup>st</sup>, TMS vendor **RedPrairie** announced the acquisition of **GEOCOMtms**, a fleet management software vendor, just one of several acquisitions RedPrairie has made since 2004. RedPrairie will integrate **GEOCOMtms** into its E2e product to strengthen multiple-stop daily delivery scheduling for customers in international geographies primarily using fleet for transportation. RedPrairie is building a comprehensive integrated decision management for global supply chains.

Just days later on February 23<sup>rd</sup>, supply chain planning and inventory optimization vendor **Optiant** announced the acquisition of **SLIM Technologies**, supply chain network design technology vendor. **SLIM** and **Optiant** have an overlapping customer base, but **SLIM** also gives **Optiant** the opportunity to expand into retail, where **SLIM's** big name customers include retailers Canadian Tire and IKEA. Early data from our forthcoming report on supply chain innovation shows inventory optimization as the number one area for technology investment, but **Optiant** is already looking beyond this primary market to address tactical and strategic supply chain requirements, adding **SLIM's** strategic capability of supply chain network design.

**LogicTools** and **Optiant** are both relatively small; **LogicTools** has 43 employees, and **Optiant** combined with **SLIM** is still under 70 employees. While company size isn't indicative of product value, it is an accurate reflection of how relatively new this category of supply chain functionality is. These vendors are usually walking into environments with larger, more established vendors, such as **SAP**, **Oracle**, and even **i2** and **JDA**, depending on the industry segment. For example, **LogicTools** became SAP's software partner for supply chain network design in early 2004, and its products are closely integrated with SAP's supply chain products. The changing dynamics from the acquisitions give each of the supply chain vendors a chance to strengthen their own relationships with the big players and potentially shake up ones with competitors in the supply chain market. **SLIM** brings **Optiant** competing functionality to **LogicTools**, but **ILOG's** larger footprint (more than 700 employees) could bring more long-term stability. In contrast, **Optiant's** growing size could attract more attention away from its competitor **SmartOps**. At this point, it's all theory, but it does serve as a reminder that companies investing in these products should know exactly how and when they can contribute to the intelligent supply chain.

And speaking of those large enterprise vendors, on March 1<sup>st</sup> Oracle announced it will buy Business intelligence vendor **Hyperion Solutions** for approximately \$3.3 billion. The acquisition gives Oracle yet another product that is well established in accounts that may also have SAP (see Siebel, PeopleSoft HR, et al). More importantly, **Hyperion's** strength in all phases of financial analysis (e.g. activity based costing, financial consolidation, budgeting/planning) provides a unique opportunity as a basis for integrating decision making across the enterprise. By linking the **Hyperion** financial analytic data models to **Demantra**, **Oracle Transportation Management**, and their other supply chain optimization applications, Oracle can offer customers linkages between decisions made in the sales and operations planning process and their financial impact. Combined with the dashboard capability they picked up in the Siebel acquisition, Oracle is building a strong case for 'decision fusion'.

For its part, **SAP**, although not as splashy, is also making some moves in this area. On February 20<sup>th</sup> they acquired **Pilot Software**, a company that specializes in applications that automate the management

of strategy. SAP will use the acquisition to establish the magnetic north of integrated decision models by establishing an ability to manage the strategic development process and link the output to their tactical and operational business intelligence portfolio, which is growing through development and acquisition. The announcement didn't generate a lot of fanfare, but we may look back on it as a key event in SAP asserting itself in this area.

Ongoing acquisitions in the supply chain application market reveal a work in progress. As supply chains become increasingly complex, the ubiquitous spreadsheet can't keep up. Take your pick -- fluctuating energy and raw material costs, high transportation costs, globalization, increasing regulatory and security requirements, and more, combined with competitive pressures to maintain prices on finished goods. The bottom line is that supply chain productivity has to improve, bringing the intelligent supply chain and requiring a new generation of supply chain tools, beyond traditional planning and business intelligence applications.

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## Noteworthy

- **Atalum Wireless S.A.**, a software provider for ZigBee networks announced GREENtool, a Windows application with the feature set necessary for commissioning ZigBee networks. Users can perform network scans, select networks, register devices, recover device information as well as define relationships (e.g. close curtains, dim lights if entertainment system turns on). GREENtool saves the commissioned network settings in exportable .xml format. The GREENtool package includes Atalum's GREENmesh 3rd party extensions. A device can be enabled with gateway-like functionality for use between GREENtool and ZigBee networks as well as 'announcement' functionality providing on-site verification of the device's identity.
- JohnsonDiversey, a leading global provider of cleaning solutions with over \$3.3 billion in annual sales, has chosen **Novell** to help secure and manage the company's network access, assets and information worldwide. With 10,000 employees in over 100 locations around the globe, JohnsonDiversey needed a consistent identity management solution to tie together its distributed workforce, as well as centralized desktop management to reduce IT costs. Novell will help the company centrally manage user identities and assets, reduce administration costs, and meet regulatory requirements.
- **Inovis and FullTilt Solutions**, a provider of enterprise Product Information Management (PIM) software, announced a new strategic partnership through which each organization will co-market integrated solutions for improved supply chain communication and PIM. For Inovis the FullTilt relationship expands the reach of its data pool, data synchronization platform, and information management capabilities by adding FullTilt's PIM and Master Data Management (MDM) processes and expertise. With the relationship, FullTilt will be able to offer its rapidly growing base of enterprise customers access to Inovis' Value-Added Network (VAN), software and data synchronization services.
- **CoCreate Software**, a provider of 3rd generation PLM software for high-tech electronics and machinery, and **LightWork Design** announced that CoCreate has licensed LightWorks for use within CoCreate OneSpace Modeling 2007. The partnership with LightWork Design brings a new rendering environment to CoCreate's product development platform. LightWorks' catalogue of real-world materials, light sources and rendering schemes is now embedded inside CoCreate OneSpace Modeling, making high-end rendering directly accessible to users within the 3D design environment. With LightWorks' rendering capabilities, CoCreate users easily create photo-realistic images in advance of physical product. As a result, companies cost effectively create imagery as early as

needed in the development cycle, meeting the needs of new product launches or other downstream needs.

- **Tendril**, a provider of network operating platform software for building, deploying and managing ZigBee wireless sensor networks, has collaborated with **METERCONTROL** to develop and begin deploying a first-of-its-kind remote monitoring application that utilizes a ZigBee network to wirelessly monitor and manage printing devices. The application that Tendril and METERCONTROL have collaborated on streamlines and automates the process of remotely monitoring and managing copiers and printers in large-campus environments such as corporate facilities and educational institutions. Burnsville, Minn.-based METERCONTROL, which was founded three years ago solely for the development of a remote meter access solution, has collaborated with Tendril on this project through a customer agreement that allows METERCONTROL to leverage Tendril's technology and development services.
- DHL, the worldwide leader in international express and logistics services, selected the **Quintiq** real-time advanced planning & scheduling software to improve its dispatch process and customer service for the European Express business. Quintiq was chosen from a field of approximately 90 solutions. With the Quintiq implementation, DHL Express Europe will be able to streamline and standardize its dispatch process and activities, and reduce the workload of dispatchers and improve their productivity as well as tour efficiency. The Quintiq software is currently being implemented at DHL Express in the United Kingdom and is planned to go live in Q3 of 2007.
- **WorkForce Software**, a provider of workforce management software, announced Carlisle Tire & Wheel Company signed a contract for its web-based EmpCenter software suite and services. Carlisle Tire & Wheel Company licensed EmpCenter's Time and Attendance, Accruals and Absence Manager, FMLA Manager, Activity Based Costing, Employee Self-Service, and Biometric Terminal Servers to automate processes for up to 2,200 associates. The company is rolling out the system to 500 associates at the initial site, and then adding an additional 1,700 over the next year. Carlisle Tire & Wheel Company spent a year reviewing workforce management software, focusing on selecting a system to reduce operating costs and improve efficiency.
- Railex, LLC, a new division of Andrew and Sons Management, LLC, selected **Motek's** Windows-based Priya warehouse management system (WMS) for produce distribution. Railex's approach replaces trucks with rail cars that run from a 200,000 square foot warehouse in Wallula, Washington, to a 200,000 square foot warehouse in Rotterdam, New York. Priya's ability to support both third-party logistics functions and provide real-time inventory data has enabled Railex to successfully change the way produce is transported and distributed, ensuring stores and consumers receive the freshest produce possible with increased speed and accuracy. As trucks come into the warehouse, produce pallets are either cross-docked for lot sales or graded, selected, packaged, and labeled with store brands for resale as packaged goods. Produce is then immediately loaded onto trains for cross-country transport. While the produce is in transit, Priya provides real-time inventory data to sales teams who sell the bulk produce en route so it can be cross-docked immediately onto trucks in New York for direct delivery.
- **BEA Systems** announced the general availability of BEA AquaLogic Commerce Services (ALCS), a new product powered by **Elastic Path** eCommerce software. BEA ALCS is designed to help companies increase online sales by attracting and converting their customers profitably. Features include a search engine optimization system to deliver top rankings for buyer's detailed searches, an AJAX-based eCommerce system, and Web services to simplify the communication between eCommerce and other customer data systems. The initial release of BEA ALCS includes integration with both BEA WebLogic Server and BEA WebLogic Portal. Future releases will be designed to further exploit the advantages of a platform-based eCommerce system, including ease of integration and improved cross-channel visibility.

- **RightNow Technologies** announced that a number of clients -- including Activision, Toshiba, Pearson Technology Center, 170 Systems and the Minnesota State Colleges and Universities system -- are using RightNow 8, its new enterprise-class, on demand solution for service, sales and marketing. The company also launched RightNow Customer Community, an online community with tools, resources, an environment for customers to network, collaborate, and share best practices through forum discussions on product- and industry-specific topics and more.
- At EuroCIS 2007, **Wincor Nixdorf**, retail software provider, presented the first version of TPAalyze, which provides additional functionality to Wincor's TP.net, its retail software currently employed by 34 retail companies in 19 countries. TPAalyze will enable retailers to centrally administer store processes with greater transparency as well as access vital real-time information to help them manage their stores more efficiently. TPAalyze was developed using Microsoft Business Intelligence technologies, including Microsoft Office SharePoint Server 2007, SQL Server 2005 and Excel 2007 to offer three principle functions; a control centre for command of all company store systems, an analytic function to provide real-time analysis and reports of store data and a campaign analysis tool that enables retailers to monitor the real impact of promotional campaigns.
- **Cimatron Limited**, a provider of integrated CAD/CAM solutions for the toolmaking and manufacturing industries, announced that CimatronE version 8 would include advanced Automated Drill programming capabilities. Automated Drill is a user friendly drill programming application supporting 2.5-5 axis manufacturing as well as gun-drilling. Integrated with CimatronE NC, Automated Drill can automatically recognize hundreds of holes within seconds in either 3,4 or 5-axis. Advanced hole recognition algorithms take into consideration both geometric and non-geometric hole properties like threads and clearance. Holes are automatically sorted into groups and the system assigns the correct drilling sequence to each hole.
- **Astea International**, a provider of service lifecycle management (SLM) software, has introduced a Astea Alliance 8.0 for service-centric organizations. Built on the Microsoft .NET 2.0 platform and offering more than 200 web services for ease of integration and accelerated development, Astea Alliance 8.0 can provide companies with proactive insight to customer interactions, improved customer satisfaction and experiences, and lower total cost of ownership. New features and enhancements include: process-driven user interface, service-centric business intelligence, contract management capabilities, logistics enhancements, meter reading/leasing/billing features, professional services automation advancements and dynamic scheduling engine improvements.
- E-commerce vendor **GXS** announced the launch of GXS Trading Grid 2007, with a new high availability architecture, Trading Grid Ultra, improved service level commitments as well as greater speed, reliability, and security. Trading Grid 2007 also adds a new, multi-lingual, Web-based portal; additional Web forms capabilities; and a new messaging gateway enabling multi-protocol and enterprise resource planning (ERP)-system integration. The portal is a trading partner management console -- enables the instant modification and provisioning of trading partner networks, providing real-time insight and visibility into global supply chain operations. It also enables customers to expand trading partner networks dynamically through electronically-generated requests, to view historical reports of trading partner transactions (e.g., invoice response time, payment histories and shipment timeframes) and to accelerate trading partner adoption of B2B e-commerce initiatives.
- **Capital ID** announced that Royal Dutch beer brewery Grolsch will globally deploy its Marketing Resource Management software ID manager. ID manager offers the Grolsch marketeers a platform for fast and unambiguous production of marketing products. Grolsch seizes the international introduction of its' new bottle, in March this year, to employ ID manager. The software will support the marketing activities for that introduction. Capital ID's ID manager platform consists of different modules in which every marketing, brand and house style element of an organisation are centrally established. Locally, authorised employees or third parties can use all the available marketing

programs, publications, promotions, materials and campaigns. Capital ID already deployed various international ID manager implementations.

- **Kurt Salmon Associates (KSA)**, global management consulting firm, announced the release of version 2.0 of its KSA SiteView Performance Management Software. KSA SiteView 2.0 augments the benefits of KSA's industry-leading performance management and incentive calculation software package with a new reporting system and enhanced coaching and incentive pay options
- **SEEBURGER Inc.** expanded its offerings for enterprises migrating to the SAP Exchange Infrastructure (SAP XI) with the addition of global Value-Added Network (VAN) services designed for companies that use the SEEBURGER SAP XI EDI adapter to automate supply chain communications with trading partners. The new service allows global businesses to consolidate all VAN contracts with a single provider, eliminating the need to negotiate and manage multiple VAN contracts while also reducing VAN fees by upwards of 50%. The extended VAN services support all global data formats including EDI, XML, RosettaNET and EDIINT as well as flat or proprietary files; all major communication protocols including HTTP, FTP and SMTP; and any kind of connectivity including dial-up, frame relay, AS2, leased line or Internet. These features allow the service to handle business document exchange in any country or region of the world. The service also offers easy on-ramping from other VAN providers, real-time delivery of ASNs and other time-sensitive documents, a choice of security protocols, complete online visibility into all electronic business transactions, rich reporting tools, and other features that help speed revenue collection and facilitate compliance.

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## Manufacturing Insights Latest Research

<http://www.manufacturing-insights.com/MI/research/getlist.jsp>

### **[Bob Parker](#), Vice President of Research**

Lean Six Sigma, 4Q06 Update: Lean Companies Continue to Outpace the Industry

Worldwide Manufacturing 2007 Top 10 Predictions

### **[Joe Barkai](#), Program Director, Product Life-cycle Management**

Discrete Manufacturing Industry Update, 4Q06

### **[Jay Holman](#), Research Program Manager**

High-Tech Manufacturing Industry Update, 4Q06

### **[Kimberly Knickle](#), Research Program Director**

Retail Industry Update, 4Q06

### **[Ng Buck-Seng](#), Associate Director, Asia/Pacific**

Asia/Pacific Supply Chains 2007 Top 10 Predictions

Worldwide Base Materials 2007 Top 10 Predictions

Worldwide High-Tech Manufacturing 2007 Top 10 Predictions

**[Pierfrancesco Manenti](#)**, Research Director, Manufacturing Insights, IDC EMEA

Worldwide Base Materials 2007 Top 10 Predictions

EMEA Supply Chain 2007 Top 10 Predictions

**[Ivano Ortis](#)**, Research Manager, Europe

European Retail Industry Pulse: October to December 2006

Worldwide CPG/Retail 2007 Top 10 Predictions

## In the News

- [Manufacturing Insights Advises Intellectual Property Protection Will Require Creative Approaches](#)
- [RFID Implementations Will Require Industry-Specific Expertise Manufacturing Insights Survey Reveals](#)
- [Manufacturing Insights Releases Asia/Pacific Supply Chains 2007 Top 10 Predictions Report](#)
- [Manufacturing Insights Releases EMEA Supply Chain 2007 Top 10 Predictions Report](#)

## Manufacturing Insights Upcoming Analyst Appearances

- [Warranty Chain Management Conference](#), March 13-15, 2007, Tampa, FL
- [Supply-Chain World North America 2007](#), March 19-21, Philadelphia, PA
- [AIAG - EWS/Warranty Conference](#), May 24, 2007, Novi, Michigan
- M2M United & Manufacturing Day, June 18-21, 2007, Chicago, IL

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