



## Kinaxis, T3Ci, SAP/Lighthammer, and New Ariba CMO

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My first meeting with **Kinaxis** was nearly 15 years ago. At the time, the company was known as **Cadence Computer**. It was founded by a team of clever electrical engineers at a telecom company who had been put on their company's Manufacturing Resource Planning (MRP II) implementation project. The first time they ran the new software, it took eight hours (maybe longer—hey, it was 15 years ago). Convinced that there was a bug in the program, the engineers rewrote the MRP II logic on a separate UNIX server. When they were done, the company was able to run Material Requirements Planning (MRP), Master Production Scheduling (MPS), and Capacity Requirements Planning (CRP) applications in minutes.

They left that telecom company and started Cadence. Over time, they were able to recreate the MRP II logic from a wide array of systems from *COPICS* to *MANMAN* to a heavily customized *MAC-PAC/D*. Runs that used to take 24 hours (or more) could be compressed to hours, sometimes minutes. As a result, Cadence was able to create a whole suite of custom simulation applications to answer questions such as how to best meet a customer request for 1,000 units when demand greatly exceeds supply or plan, or the best time to introduce a new engineering change in order to minimize excess and obsolete inventory.

Kinaxis still performs some of the core Cadence operations from the 1990s. For example, the Kinaxis server still extracts key data from the transaction system (Enterprise Resource Planning [ERP], not MRP II), including all bills of material, suppliers, policies, routings, demand forecasts, and the like. The difference is that it only needs net change data versus the full extraction. Thanks to advances in computing technology, many customers have data that is 15 minutes old, at best, versus week-old batch data.

The most significant change is the switch from a single user system (i.e., most companies only had a few planners trained on the Cadence software) to a collaborative application shared by thousands of employees, suppliers, and customers.

In addition to the server software, Kinaxis has three other components in its *RapidResponse* line. The first is *Active Spreadsheets*. Kinaxis has developed a role-based approach to providing information to participants. While the spreadsheet metaphor will remind you of *Microsoft Excel*, there are several significant differences. For one, Kinaxis has embedded some of the logic or analytics in the cells. These include netting, constraint capacity management, and full-level pegging. In addition, Kinaxis overcomes some of the data limits and also allows true collaboration—a change in one cell can permeate across the spreadsheets of other planners or suppliers.

The second component is the *Resolution Engine*. Going back to the earlier example of meeting unexpected demand or the phasing in of a new engineering change, this engine can alert you to supply or demand changes and automate your options for resolution.

The third piece is the *Live Scorecard*. This is interesting. The danger in any planning application is that you can optimize one part of the operation or process at the expense of several others. Here's an example: the marketing department at a cosmetics company decides that the hot color is mauve, and proceeds to push through a series of engineering changes. This change ripples through the *Live Scorecard*. The requested change indicates a huge surplus of excess and obsolete inventory, a lack of customer demand, and a potential revenue downfall. The request is denied, thanks to the 360-degree view provided.

Over the last few weeks, I've had several meetings with the Kinaxis team. Last decade, its technology became overshadowed by the cool stuff that **Intellection/i2 Technologies** could do. This time, the company has the chance to leap ahead of others in the Advanced Planning and Scheduling (APS) market by focusing on solving unexpected, real-time issues.

The company has some ambitious targets. For one, CEO Doug Colbeth wants to have 2,007 sites by 2007. That qualifies as a "big, hairy, audacious goal" when you consider that the number of sites now is just shy of 325. Mr. Colbeth is also looking to cut the average go-live time in half to six weeks. I don't know if Kinaxis will hit the 2007 target, but I will be watching the user count. The single-user Cadence system has been replaced by a new architecture capable of supporting thousands of concurrent users. A conservative estimate is that 50,000 people use the system every day. That could be a million by the end of the decade.

### T3Ci: Applying MES concepts to RFID

At the risk of making this *Alert* another trip down Memory Lane, let me acknowledge that I've known Dr. Jonathan Golovin, founder and CEO, **T3Ci**, for 10 to 15 years, too. We met when he was running **Consilium**, the first big Manufacturing Execution System (MES) vendor and the first to be publicly traded, too.

Last winter, we asked *Alert* readers to nominate their picks for the first annual AMR Research Innovation Awards. T3Ci won in the small vendor category. The company has developed an interesting set of analytics for managing

all of the Radio Frequency Identification (RFID) data.

When we caught up at The Phoenician during our spring conference, Dr. Golovin opened the conversation by talking about applying the control-monitor-respond principles of MES to RFID. He said, "I think I've figured out how we can proactively avoid stock-outs," a plague in the Retail industry. He added that he could help retailers and their suppliers to develop best practices for individual stores. He also noted that he could use other demand signals besides RFID, too.

One of the first challenges was getting retailers to allow suppliers to give the data to T3Ci for analysis. This has been resolved by masking the data. T3Ci doesn't care about the individual item. Rather, it is looking at why the item is not on the shelf. Like MES, it wants to ensure consistency in the process.

Today, T3Ci is run as "Analytics-as-a-Service," instead of as a packaged software offering. It looks at inputs such as standard order policies, orders placed to distribution centers, actual orders received, and standard replenishment policy, and can provide output on missed replenishments, unplanned demand, missed orders, low orders, or product misplaced (e.g., in the backroom, not on the shelf). The cool thing is that it can isolate the data by store, shift, group of stores, or other parameters. "Blink" intuition is great, but there's no substitute for actual information.

During our last call, we joked that his next product might be "SimCity for Retailers." For example, instead of stock-outs, we may model the effect of promotions on new product introductions. That may be closer than we think.

### **SAP/Lighthammer: Great news for MES vendors and their investors**

This week's announcement that **SAP** was acquiring **Lighthammer** was not a surprise. Lighthammer was one of SAP's first *xApps* partners, having signed on 18 months ago. The two companies had always enjoyed a very close relationship, sharing over 100 customers between them. According to one SAP executive, acquisition talks started about six months ago.

I'll leave the details of the analysis to AMR Research's Alison Smith and Simon Jacobson. I did want to add some additional spin, though. In my view, this is great news for MES vendors and their investors. As Lighthammer CEO Russ Fadel told me after the deal, his product bridges the "Middle Earth" between ERP and real-time plant data.

This is the play for MES vendors. Take **Visiprise**, for example. A manufacturer could reach into Visiprise's operational data stores and extract key data for the Lighthammer dashboard. While Visiprise focuses on MES functionality (i.e., controlling and coordinating manufacturing processes), Lighthammer puts control of the processes in the hands of the operator via Lighthammer and/or SAP.

If I'm an investor in Visiprise (or one of its competitors), I like having SAP making one of its few acquisitions in this space. It proves the viability of MES and hints at a potential exit option if SAP decides to move closer to the real-time world. This could happen as managing all master data becomes a top priority for large manufacturers. It's already making an impact on supply chain decisions. Stay tuned.

### **Ariba: Unkeless in as new SVP, Global Marketing**

Late this week, we had a conference call with **Ariba** to discuss some new management changes. Mike Schmitt is stepping down as Chief Marketing Officer. He will be replaced by Lou Unkeless. Mike had been commuting to Sunnyvale from his home in Southern California. After four and a half years, he decided he wanted to spend more time with his family and less time on airplanes and in rental housing. Mike is a class act. We've known him since his years running marketing for **J.D. Edwards**, prior to joining Ariba. He's not completely leaving Ariba—he will join Ariba's advisory board.

We have known Lou Unkeless for a decade or so, too, beginning with his tenure in Oracle's application group. Along the way, Lou has held senior marketing spots with **RightWorks** (later acquired by i2 Technologies), **Agile Software**, and **Datasweep**. He is a very worthy successor to Mike.

### **Coming next week: wide open**

Somehow I sense that next week I will be addressing some of the companies or ideas talked about today. Please contact me if you want to talk about *RapidResponse*, the convergence of RFID and MES, SAP's next acquisition, changes at Ariba, or the tightening race for the American League East—brichardson@amrresearch.com. As always, I welcome your feedback.