

Is There a Commercial Need for a Quantum Leap in CEP Technology?¹

by
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CEP has come in for some criticism in the Bloggosphere recently. “CEP is just marketing hype”. I predicted some time ago this would happen– and it is quite understandable. The technical principles of CEP² have been “fuzzed up” by the marketeers, and some products with little CEP technology have been over-hyped and over-sold. However, these bloggers seem to think there is no technology basis for CEP and there is no market for it – despite Forrester and other research companies reporting on the size of the CEP market for 2007. So one can safely conclude they don’t know what they are talking about. Unfortunately, they will not be ignored. So, what’s the true story?

Let’s start with the products. CEP products on the market today contain more sophisticated technology than they did a year or two ago. The graphical dashboards, always a strong point, are getting fancier and more user friendly. But the under the hood technology is improving too. They can detect a richer variety of patterns of events. The features for defining event patterns have improved, although I do wish some of them would shovel SQL below decks and provide higher level event pattern definition languages! The predefined libraries of patterns are growing. Performance of the pattern matchers – i.e., the event processing engines – has improved to the stage where it is no longer the foremost concern of many customers, and thus no longer a talking point.

There’s also an iceberg aspect to the development of CEP applications because several of the larger potential customers are building their own, often secretly to hide their activities from their competition. So we don’t know everything that’s going on in the development of applications of CEP.

So, are we reaching a technology plateau where we don’t need to worry about the “hype” accusation any more? Far from it, there’s still a way to go!

Is there a market for CEP? You bet there is! Forrester’s estimate for 2007 was \$100 million in sales of CEP products and services, indicating a market in the early stage of development.

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² “A Brief Overview of the Concepts of CEP”, <http://complexevents.com/?p=399>

“Forrester expects the CEP market to continue to grow and even accelerate as business analysts begin to realize how many *non-traditional* events are available for CEP analysis. This acceleration will be driven by the breadth of usage of CEP across a wide range of applications and industries.”³

Gartner’s estimates for 2007 are in the same ballpark⁴, a little lower, but they estimate that the 2008 sales figures grew by 50% over 2007. Also there’s other market intelligence out there too, such as the 2008 sales figures for some of the CEP vendors. Can the market support only 3 or 4 vendors, which is what one of these bloggers thinks? Well, it *is* an “emerging market”, so it has attracted a lot more vendors than it will eventually support – that’s the usual “gold rush” aspect of new markets. Gartner counts 16 vendors in the high end CEP market at the moment, and another 70 in related markets where CEP is part of a larger offering. Certainly those numbers will decrease as the market shakes out and matures. Today 3 major vendors compete in the relational DBMS market. The number of vendors doesn’t indicate the viability of the technology.

Like most markets, this CEP market is *sales driven*. Put yourself in a vendor’s position. If your CEP product can solve the customer’s problem of the moment, and therefore you can sell it, why improve it? Wouldn’t that be money you don’t need to spend? In fact, do you know what next piece of CEP will be needed? And do you have the engineers in-house that know how to build that improvement? If you did come out with a quantum leap in CEP technology offering, would the market for it be ready, and if it was, how many customers or consultants would be capable of applying the new technology? Would potential customers be willing to budget for, and try the new technology?

There’s a herd instinct built into most markets. Companies need time to see how a technology works out, perhaps with competitors, before management is willing to approve a budget. Sales momentum doesn’t come overnight regardless of how good the technology might be.

All these questions and many more, act as brakes on making major improvements in the CEP capabilities of the products. The visible CEP market isn’t clamoring for new technology at the moment. Or if it is, it has to shout louder – with money! And we don’t know what’s going on below the waterline in the iceberg developments. This means that the “hype” accusation may be around for a while longer.

The answer to the “hype” accusation lies in improving the technology in CEP products and demonstrating value in solving an ever wider range of business

³ “CEP Adoption Is Broader, Deeper, And More Business-Driven Than IT May Expect” by Charles Brett, Forrester Research, January 2008.

⁴ I am indebted to Roy Schulte for making Gartner’s figures available.

problems. And that's what Forrester predicts will happen. There are some obvious improvements that will appear in the next couple of years – e.g., more powerful event pattern construction features at the user level, more control over search strategies and more user friendly dashboard features. But unfortunately the *sales-driven* aspect of the market means that a quantum leap in CEP technology probably isn't going to appear any time soon.

“Oh yes”, say the bloggers, “but what would a quantum leap in CEP technology consist of – if it did happen”? “There isn't any new technology, right”?

Wrong! See the next article.