BPMI ThinkTank: CEP with BPMS for Agility

Enterprise view of Event Processing
Intro: CEP Role in Processes

Complex Event Processing [CEP]
- Situation awareness
- Track and Trace
- Sense and Respond

Business Process [BPM]
- Process Task

IT Service [SOA]
- Service

Simple Event Processing

Continuous Event Processing
Intro: Event Processing Components

Event Filtering / Detection (CEP)
- Event Filtering
- Event Pattern Detection
- Event-based Decisions

Human Event Processing
- Business Monitoring (BAM)
- Workflow (BPM)
- Business Reporting (BI)

Conventional Event Processing
- Services (SOA)
- Decision Services (BRE)
- Data Services (DB/DW)

Events
- Event Distribution
  - e.g. MOM, WS-

- Complex event processing
- Simple event processing
- Simple event processing

Includes Event Stream Processing
Intro: CEP Role in Detailed Processes

Many process-driving events are in reality abstract events

*CEP can handle these based on collections, time, etc*

Many exceptions are “cross process” and based on patterns of multiple events

*CEP can monitor process exception events across processes / process instances*

Many process diagrams cannot easily handle complexities such as case-management, cross-process inference rules, etc

*CEP can usefully “drive” BPM*

Monitoring process events for business monitoring is essential for process improvement

*CEP can monitor process runtime events across processes / process instances*
1. Need to monitor / measure processes + performance, across different process levels and vendors

   ➔ CEP can provide real-time BAM / reporting / oversight / control capabilities for BPM (+ SOA)
     - To support necessary Prevention, Detection, Correction

2. Enterprise Architecture view needs to view events, processes as more abstract than BPMN and Event Patterns

   ➔ CEP modeling not yet mature / standardized [see PRR et al]

3. How does CEP add “agility” to BPM?

   ➔ Event-driven rules across / driving Processes / Process instances + Real-Time decisions close to event occurrence / detection
Roundtable Issues & Resolutions

4. CEP may be overkill for some processes
   ➔ Indeed CEP is currently not part of any COTS BPMS (although some vendors provide CEP + BPM usable together)

5. Operational Intelligence overlaps with “Knowledge Management”
   ➔ Future convergence?