

## *Focal points on major challenging topics*

Up to this point we have focused on what might be called state-of-the-art event processing practice. Event processing applications are being developed successfully using the patterns and approaches that we have discussed, but the application developers should be aware that there are some challenging topics that are not fully resolved within the current-state-of-the-practice. These topics might not have any bearing on your particular application, but you should consider their implications to see if they raise any issues that you need to avoid.

The purpose of this chapter is to make the reader aware of these challenges. In this chapter we discuss three topics: temporal semantics of event processing, inexact event processing, and event processing causality and retraction. The thing that they all have in common is that current state-of-the-practice typically treats them in a simplified manner. We will take you through each topic, explaining the problem and outlining some possible solutions and their implications.