In this chapter, we discuss the design of a service concept and its underlying business model for a context-aware, we-centric service for Dutch police officers. We-centric services are meant to support people in their communication and collaboration in dynamic groups that may change or emerge over time. Typically, these kinds of services add value by locating colleagues, finding out who has relevant information on the user’s current situation and/or discovering which group members are available for direct communication. Designing business models for we-centric services is a novel area. As end-users can both consume and provide value for the service offering, unique business model issues emerge especially in the service domain.

In this case, the we-centric service called PolicePointer aims at facilitating the exchange of communication and knowledge between community police officers and emergency police officers. Service innovation within the Dutch police organization is a challenging affair. According to one stakeholder, it typically takes as much as 8 years to develop and implement a new service, largely due to the organizational complexity of the police force. Historically, the Dutch police was highly decentralized. Before 1993, each municipality had its own police force. The 200 forces were merged into 25 regional forces and one special, national force. The 26 ‘police regions’ operate relatively autonomously, without direct guidance from the national government. Over the years, each police region developed its own ICT systems. This led to problems concerning interoperability, as it was often difficult to exchange information between police regions. Because this situation was considered undesirable, in the late 1990s, a central ICT service organization was established, which now owns and manages the existing ICT systems, controls the access to police databases, and provides the mobile communication network C2000.

We begin with a brief description of the process involved in designing the service concept and business model of the PolicePointer. Next, we
apply the STOF model to the service concept and discuss the critical design issues in the business model underlying the PolicePointer.

9.1 Designing The Service and Business Model

The PolicePointer was developed in collaboration with the central ICT service organization, in a partly government-funded research and development project. Over a total period of 3 years, the service concept was developed, refined, prototyped and tested, in a user-centered design approach, i.e. the project team members sought interaction with future and potential end-users during the innovation project. As a result, many of the design choices are based on interaction with end-users.

Various steps were taken in the service concept design process, spanning from 2004 to 2006. First of all, a workshop was organized that involved police officers, from which lessons were drawn regarding area-bound work and existing communication, information and cooperation processes in which police officers are involved. Next, problems and opportunities were identified that may be solved through innovative mobile services. From the four opportunities which were articulated in this workshop, one was selected that was deemed to fit the we-centric concept best: the need for community police officers to communicate with other police officers, firemen or ambulance personnel, and with network partners, such as the municipality, social welfare workers or school headmasters. This meant that the design choice that was made at this stage was that the service should support community police officers in communicating and cooperating with network partners, i.e. others outside the police force.

Secondly, a so-called rapid ethnographic study (Millen, 2000) was conducted to observe and understand the daily work of police officers through their personal experience. During these observations, special attention was paid to how police officers communicate and cooperate with others, in different contexts and for different tasks. The observations were written down, and relevant and frequent events were then summarized into personas and storylines, describing a typical working day in the life of typical end-users. In a workshop, these observations were validated by community police officers. Based on the observations and the workshop, the scope of the service concept was narrowed by focusing on supporting community police officers to share their knowledge with emergency police officers specifically.