Chapter X

The USE IT Model Case Studies:
IT Perceptions in the Multiple Sclerosis, Rheumatism and Stroke Healthcare Chains

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Abstract

In the previous two chapters, the determinants and theoretical background of the USE IT model is discussed. In this chapter, the application of the USE IT model in three cases are described to show the value and benefits of the USE IT model in practice. The USE IT model has four determinants: resistance, relevance, requirements, and resources. It can be used ex ante and ex post. The USE IT model is applied ex ante to find relevance and appropriate choices to overcome resistance for an ICT support of the multiple sclerosis (MS) healthcare chain and the rheumatism care guide,
and as well ex ante as ex post in a local stroke service to measure the feasibility of a mobile device for general practitioners. The USE IT model proved to be very helpful not only in revealing the most urgent and relevant problems but also in discovering the crucial obstacles and prerequisites for implementing a solution to these problems. By that, the USE IT model served as a strong tool to decide whether healthcare processes should be supported by ICT and, if so, what processes should be used and how.

**Introduction**

As was explained in the previous chapters, the USE IT model comprises four determinants: resistance, requirements, relevance, and resources to measure the factors in the social and technology domain that influence the diffusion and adoption of information systems and technology (see Table 1).

The instrument to measure the determinants is a structured interview with the (intended) end users of the innovation. The interview questions are rubricated in five sections: process, requirements, relevance, resistance, and resources (see Chapter IX). A prerequisite to adoption of an innovation is that the innovation fits with the actual working process. We agree with Brender (1999) that the kernel point of assessment is that of understanding the business processes. For this reason, the section process is added to the interview list.

Chapter VIII and IX showed how the USE IT model is able to explain afterwards (ex post) the lack of diffusion of an innovation in healthcare. In this chapter we will present another three case studies in which the USE IT model is used ex ante to reveal the factors that would influence the success of an intended innovation and to give an advice on the conditions and prerequisites the innovation had to meet to be accepted and used by the end users.

The case study of the MS chain was set up to investigate the feasibility of ICT support and resulted in an advice to first organize the healthcare chain and then

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<td><strong>USE IT model</strong></td>
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