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Preface

During the past two centuries, the impact of technology on society has been more fundamental and far-reaching than any visionary, philosopher or science fiction author of the past could have ever imagined. The world as a whole and all its societies have been changing through the processes of developing, adapting and implementing very different kinds of technology. Particularly those enterprises engaged in transportation across national borders are highly complex systems in terms of specific dynamic interrelations between people, the organizations they work in, and the technology they work with. Furthermore they are embedded in very specific ways into these different societies which are taking advantage of transportation. Such enterprises are complex socio-technical systems. They need to continuously develop and redesign themselves in order to meet all the requirements of their tasks, under ever changing conditions. Introducing new transportation technology and new software tools into this market means instigating such fundamental change processes. These change processes are in themselves highly complex and need to be dealt with in a very conscious and multi-facetted approach.

These aspects are discussed in this book based on about 10 years of research which has mainly been funded by the German Federal Government and the European Union.

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