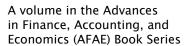# Techno–Social Systems for Modern Economical and Governmental Infrastructures

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Chapter 8
Mathematical Modeling of Information Warfare in Techno-Social Environments

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ABSTRACT

The chapter discusses a number of mathematical models of information battle in techno-social environments. Some models take into account such battle factors as the mass information media's incomplete coverage of the society, the individuals' acquisition of the information only after receiving it twice, the individuals' forgetting the information, a priori bias to support a party to the battle, and polarization of the society. For simpler models, the results are described in brief. For more complicated ones, mathematical research has been conducted with the sociological interpretation of the results.

INTRODUCTION

The value of information for both an individual and the society had been realized long before the very word emerged. Many technological achievements and inventions were adapted by people for storing or spreading the information in this way or another