

## PREFACE

The concept "Business informatics" became popular about twenty years ago when the usual concepts had lost their generality, abstractness and actuality. Concepts such as "automation of the company's management", "information service of the decision making", "information modeling of the micro-economical processes", and so on, had caused theoretical rationalizing of the whole information basics and searching of a new unified concept.

The traditional understanding of the concept "Business Informatics" is as an interdisciplinary discipline, which is aimed to study information structures, operations and processes that are inherent to the business and support their automation. Building of adequate information models of business activities, based on common theoretical foundation, leads to more clear and deep understanding of these activities and thence to their optimizing and automating. The concept of "Business Informatics" we may define as a science about the unity of Business Information, Business Information Subjects, and Business Information Interaction.

**Business Information:** Important task of the Business Informatics is to propose relatively complete investigation and classification of the business information. The development of the different companies as well as of the changing of the business environment on principle does not allow complete description. As a rule the scientists are contented by the systematizing of the formally defined information which is used by the community structures - taxation authorities, statistics, etc. Usually out of consideration are types of information created by the company in the environment and vice versa – by the environment in the company. Very important scientific area of business informatics is discovering regularities in the large volumes of stored data. This is well known area of Data Mining and Knowledge Acquisition as well as of the corresponded knowledge discovery and knowledge-based intelligent systems;

**Business Information Subjects:** One and the same business information can be perceived in a different manner from different business subjects. In general the business information subjects may be divided in two main groups – which belong to the company and the rest, which belong to the environment: partners, clients, rivals and neutrals, which in given moment may change their type. The concepts which cover this variety of type are Intelligent Agents and Multi-agent Systems, Decision Making Support, etc.

**Business Information Interaction:** The investigation of the business information subjects is determined by the necessity of provide qualitative automated service of their interaction. The important information need to be collected, stored, processed and distributed to corresponded decision makers in appropriate mode suitable for quick and non-vague perceiving, in one hand, and ensuring correct information interaction in the frame of the company as well as in the environment, from other hand. Considerable role in this area has the Natural Language Processing.

It is clear, in the practice we could not separate the parts of business informatics. Every intelligent application has to contain elements that cover and to serve all of them. In addition, the developing intelligent and information systems is closely connected with many theoretical and engineering disciplines. It is impossible here to point all of them but several are outlined.

We express our thanks to all authors of this monograph as well as to all who support its publishing.