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Entity-Relationship Approach – ER '94

Business Modelling and Re-Engineering

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Foreword

Message from the General Conference Chair

Data modelling for database design, process modelling for software and business process engineering, requirements modelling for software systems, and knowledge engineering for expert system development are all activities which require the construction of symbolic representations of aspects of the real world, a task we often we call 'world modelling'. Moreover, the demand for such world modelling skills for the computer professional is growing, as we find that software systems need to be conceived right from the start as embedded systems in a complex, evolving organisational setting. The primary vehicles for world modelling have been symbolic, often graphical, notations that go by the name of 'conceptual models'. Of these, the Entity-Relationship Model proposed by Peter Chen in 1975 is by far the best known and most successful.

The Entity-Relationship Conference is the oldest international conference whose sole aim is to provide a forum for the presentation of research and the exploration of research directions on the topic of conceptual modelling. Since its first meeting in San Jose in 1979, this conference has grown in stature and prestige internationally and is now the most established international conference on conceptual modelling. This year's theme, 'Business Modelling and Re-Engineering', is a topic of tremendous interest to industry and one where technological advances in conceptual modelling can have a profound impact on how corporations are engineered and re-engineered to meet changing business objectives and cope with evolving operational environments.

October 1994

John Mylopoulos
General Conference Chair

Preface

The ER conference is the primary forum for researchers and practitioners in the field of conceptual data modelling. Since its inception, the ER conference has proved to be one of the major vehicles for exchange of research results and practical experiences using many different modelling approaches including variants of the ER model, object-oriented models, object-role models, rule-based models, temporal models, etc., as well as related technology aspects such as databases and knowledge bases.

The objective of the ER '94 conference was to offer a programme that provides a balanced view between research and practical experiences within the framework of *Business Modelling and Re-engineering*. Business modelling and re-engineering is a key challenging area as increasingly organisations strive to improve the co-ordination between systems and ultimately individuals. Improving the performance of large business processes, some of which may take place across different organisations, requires appropriate modelling techniques and infrastructure technology to assist in the management of the interaction between different agents participating in these processes. The papers appearing in this volume cover fairly comprehensibly the two areas of modelling and technology infrastructure addressing themes such as business process modelling, enterprise modelling, system evolution, object-oriented databases, active databases, CASE technology, reverse engineering, information system modelling, schema co-ordination, and re-engineering.

October 1994

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