Tenth International Conference Programme

25-29 October 1987
Munich

BUTLER COX
FOUNDATION

CONTENTS

The Tenth International Conference

Today, managers responsible for systems in large organisations face a changing situation.

Ten years ago a multitude of new technologies were becoming available such as videotex, digital communications, and relational database. At the same time the focus of systems management was inward looking, concerned with improving efficiency and clerical productivity. Managers were preoccupied with absorbing the technology and making it work.

Now the situation has changed. Technologies are much better understood. The emphasis for systems management is on how to exploit technology not on how to make it work.

This places new demands on systems management. Today's managers need imagination, creativity and an understanding of strategic issues.

John Imlay, Chairman and Chief Executive of MSA will address this requirement in the keynote presentation.

Realising the potential

The first aim of this conference is to ensure that managers responsible for systems recognise the opportunities presented by Information Technology and fully understand why it is becoming an increasingly widely used instrument of competitive strategy. To address this issue our speakers include Professor Charles Wiseman, who has developed methods of defining strategic targets for information systems and two leading practitioners John Leighfield, the Chief Executive of ISTEL and Siegfried Höhn the Director of Strategy and Investment Planning of Volkswagen.

Keeping pace with the new technology

Secondly, there are major new developments in the technology itself and in its application about which organisations need to be aware. As with the new technologies of the late 1970s some will develop much more slowly than is widely supposed whilst others will advance rapidly. New application opportunities will have the same characteristic.

Therefore the second task of the conference will be to brief members on the technologies and novel applications that merit close attention over the next few years.

Our speakers on this theme are Dr Craig Fields, Chief Scientist of the US Defense Research Agency (DARPA) which has the world's largest budget devoted to identifying and developing future technologies, and Professor Nicholas Negroponte the director of MIT's media laboratory – acknowledged world leaders in innovatory uses of information technology.

Further details of the agenda and speakers are included on the following pages.

Your Agenda

Conference

Sunday 25 October

Welcome Cocktail Party

Monday 26 October

The information technology industry

John P Imlay Jnr
Chairman & Chief Executive Officer
Management Science America Inc

Communications and competitive edge

John Leighfield
Chief Executive
ISTEL Limited

Finding and exploiting competitive edge
opportunities

Professor Charles Wiseman
Columbia University, New York

Tuesday 27 October

Technology and Europe's competitive position

Siegfried Höhn
Director of Strategy and Investment
Planning
Volkswagen AG

A progress report on new technologies

Dr Craig Fields
Chief Scientist
Defense Advanced Research Projects
Agency

Novel applications of IT

Professor Nicholas Negroponte
Professor of Media Technology
Massachusetts Institute of Technology

Industry tour

Wednesday 28 October

Visits to:

Audi AG
Siemens AG

Thursday 29 October

Visits to:

Bayerische Motoren Werke AG
Nixdorf AG

The IT industry in perspective

John Imlay has worked in the computer industry for close to 30 years. In the last 16 years he has led MSA from revenues of $3,000,000 to over $190,000,000 in 1986. MSA is the world's largest independent supplier of applications software for mainframe computers.

John Imlay is widely regarded as a major influence on the development of the computer industry. He holds a number of key industry posts and has served as President of ADAPSO and remains a director of that body. In this position he has been chief negotiator with IBM on behalf of the software industry.

In his keynote presentation John will review the IT industry today and give his assessment of tomorrow's winners and losers. He will also examine the factors to take into account in forming strategic alliances with vendors and examine the implications for IT planning arising from the emergence of IT as a competitive weapon.

John P Imlay Jr, Chairman and Chief Executive Officer, Management Science America Inc.

Telecommunications and competitive edge

Many of the new opportunities to use information technology as a competitive weapon have only been possible because of the development of both widespread reliable communication networks and of applications which target vital aspects of the operations that go on between trading partners.

Such applications can help organisations redefine the geographic scope of their operations, compress timescales and get better use from key resources in the business. Used to maximum effect they are the source of a much closer relationship between supplier and customer with strategic consequences for both parties.

John Leighfield will review the developments in this field with reference to case studies in which ISTEL have been involved. These cover a number of industry sectors.

ISTEL is part of the Rover Group and a major provider of value added network services (and manufacturing systems) in the UK. Their customers are in the automotive industry (particularly Rover Group companies) general manufacturing, distribution, finance, travel and the health sector.

John Leighfield is a member of the British Computer Society; Vice-President of the Institute of Data Processing Management; a member of the UK Government FOCUS Committee on Standards; and a member of the Board of the Information Technology Users' Standards Association.

John Leighfield, Chief Executive ISTEL Limited.

Finding and exploiting competitive edge applications

Two recent publications by Professor Wiseman have made a significant contribution to the understanding of IT and competitive edge. His book *Strategy and Computers: Information Systems as Competitive Weapons* (1985) developed the work of Porter et al into a methodology for defining strategic targets for information systems. His follow-up paper *"Information Systems for Competitive Advantage: Implementation of a Planning Process"* (which describes a major implementation of this methodology) was the winner of an industry-wide competition.

Prior to his present position Professor Wiseman worked in information systems planning with the American Can Co and with Mathematica. He has taught at a number of universities in the USA and elsewhere.

In this presentation, Professor Wiseman will examine the possible approaches to identifying and exploiting competitive edge opportunities. He will do this with reference to case studies that illustrate both the benefits of success and the penalties of, and reasons for, failure.

As well as discussing the methodology-related issues, Professor Wiseman will review other important elements such as company culture, attitudes, and 'institutionalising' the process for exploiting IT for competitive purposes.

Professor Charles Wiseman,
Columbia University, New York
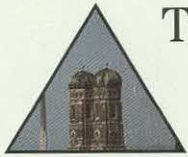
Technology and Europe's competitive position

Volkswagen AG is committed to the exploitaton of technology to sustain a global competitive position in its products, in its design and production facilities, in its logistics systems and in the management of a global network of facilities and resources.

Against the background of experience at Volkswagen AG, Siegfried Höhn will review the various competitive forces that European organisations must address – both locally and globally. He will explain the challenges that European companies face over the next decade and the role of technology in sustaining and improving their competitive position.

Siegfried Höhn is a long-serving director of Volkswagen AG having joined the company in 1951. He has worked primarily in the fields of administration, finance and corporate planning, including a period as a Board member of Volkswagen of America.

Mr Höhn's current role is primarily concerned with strategic projects of the Volkswagen Group in Europe and overseas. He is active in cultivating relations between academia, education and industry and is the author of numerous publications on corporate strategic planning.

*Siegfried Höhn, Director of Strategy and Investment Planning, Volkswagen AG*

Fast developing technologies
– a progress report

The Defence Advanced Research Projects Agency (DARPA) has a total research budget of $800 million per annum. Approximately a quarter of this budget is spent on advanced computer science projects making it easily the largest research organisation of its kind in the world. Dr Fields is responsible for the direction and management of computer science projects.

Dr Fields has been with DARPA since 1974. Prior to that he was at MIT, Rockefeller University and Harvard. He has played an important role in the US national effort to develop and harness information technology. His responsibilities have included the management of ARPANET, of the DATA COMPUTER project, and of programmes in biocybernetics, very large databases, and man–machine relations and image–based systems.

Some technologies are developing very swiftly with potentially radical consequences for business users. Others are 'stalled' and have little prospect of providing exploitable opportunities in the next few years.

Dr Fields will review the pace at which a variety of technologies are developing and highlight the implications for member organisations. The aim of the presentation will be to identify those technologies – and their possible applications – that members should follow closely over the next years.
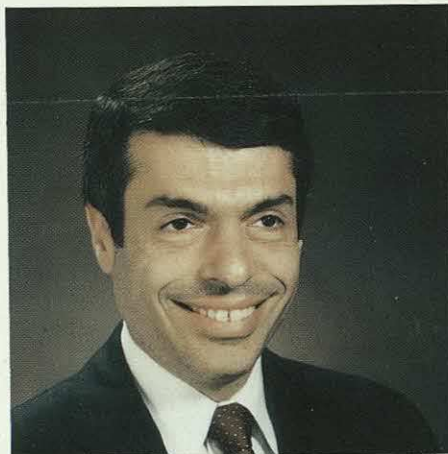
Dr Craig Fields, Chief Scientist Defense Advanced Research Projects Agency

Novel applications of IT

Professor Negroponte founded the Architecture Media Group at MIT in 1967. In 1985 the group moved to The Media Lab.

For the past 20 years Professor Negroponte and his research teams have investigated media technologies and their application. This work has embraced such fields as defence, industry and commerce, education, healthcare and leisure.

The Lab is concerned with innovations in communications and in the media. It has groups covering such diverse project areas as 'individualised' publishing; computers and education; speech research; three dimensional forms; sense (gesticulation, gaze, expression and voice) directed systems; new channels of human communication; computer graphics, and animation.

Professor Nicholas Negroponte,
Professor of Media Technology
Massachusetts Institute of Technology

Professor Negroponte has held a number of external posts including Executive Director, World Centre for Personal Computation and Human Development. He is the author of a number of books and papers.

In his presentation, Professor Negroponte will review some of the past and current work of the Media Lab explaining the potential impact of the research work on many aspects of life in the 1990s.
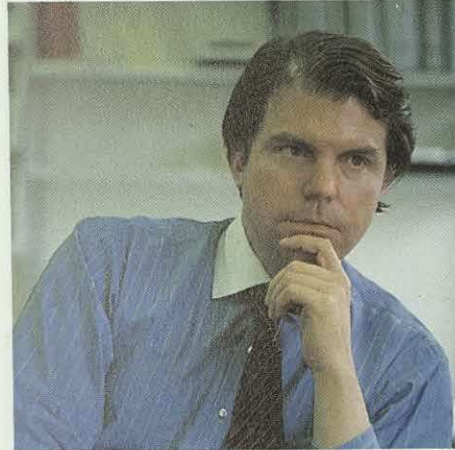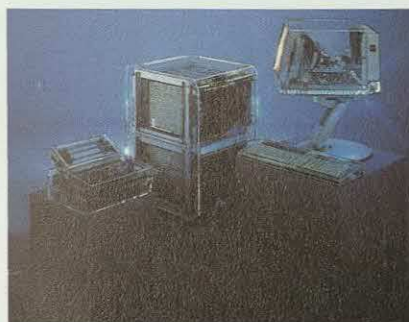
Industry Tour

Audi AG

Siemens AG

BMW AG

Nixdorf AG

An innovation for this conference is a two-day post-conference tour of leading technology vendors and users based in the Munich region – West Germany's centre of information technology research and development – its equivalent of 'Silicon Valley'.

We have arranged visits to a number of locations – each of them chosen because of their noted leadership in one or more specific aspects of information technology and its application.

For logistical reasons the places on the tour will be limited to the first 50 registrations.

Audi AG
Wednesday 28 October – Morning

The headquarters of Audi AG are at Ingolstadt – about 100 kilometres from Munich.

During the course of the morning visit delegates will:

— Tour the Audi 80 production facility (which was installed in 1986). This tour will include a description of a variety of new techniques included in the facility, including advanced transportation systems and robotics. The impact of technology on product quality and on working conditions will be described.

— Hear a presentation on Audi's approach to logistics, and the use of information technology in this aspect of the business.

The visit will conclude with lunch during which there will be an opportunity to meet and question senior Audi executives.

Siemens AG

Wednesday 28 October – afternoon

Measured by revenue, Siemens is one of the world's six largest manufacturers of electrical engineering and electronic products and is the largest computer manufacturer with headquarters in Europe.

Siemens is one of the world's leading manufacturers of electrical engineering and electronic products and systems, and plays a leading role in sectors such as PABXs, telex terminals, communication networks and inkjet printers.

The emphasis of research and development is in the innovative and growing marketplaces of office and manufacturing automation, communication technology, and microelectronics.

Among Siemens many achievements was the presentation in 1984, of the world's first universal ISDN communication sytem to international standards.

The visit to the site in München Perlach will be concerned with:

— A presentation of Siemens work in the development of megachips (The Mega Project).

— An explanation of Siemens strategies and products for private communication systems and networks (such as ISDN, local area and corporate networks), and Siemens views on international standards issues such as ISDN and OSI.

In the evening Siemens will host a dinner for the tour delegates.

14

Bayerische Motoren Werke AG

Thursday 29 October – morning

The morning visit to BMW will have two main components.

Following an introduction to BMW there will be the opportunity to visit the Series 3 production facility which mixes some highly automated facilities (such as body construction) with a final assembly process that remains labour intensive. A feature of the final assembly process is the 'just in time' delivery of vehicle components.

The second half of the morning will be spent with the MIS management who will review the following:

–   The company's approach to strategic systems planning.

–   BMW's strategic application portfolio.

–   Office systems at BMW:
    –   Progress to date.
    –   Restrictions to further progress.
    –   Office applications.
    –   Networking issues.

The delegates will be the guests of BMW for lunch.

Nixdorf AG
Thursday 29 October – Afternoon

Uniquely among European information technology companies Nixdorf has been built into a highly profitable company (with 1986 revenues of DM2,800 million) without resort to mergers. Also, unlike many of its competitors it maintains a high level of both profitability and growth.

In order to maintain and improve its competitive position, Nixdorf has adopted business and technical strategies that are of great interest to Foundation members.

During the visit to Nixdorf, members will hear two presentations that are closely related to the company's strategy.

The first of these will review Nixdorf's decision to base its future software on Unix – it will cover both the reasons for this choice and the expected consequences.

The second presentation will review trends in information technology and the associated economic issues explaining the implications, as Nixdorf sees them, for both computer vendors and large user organisations.
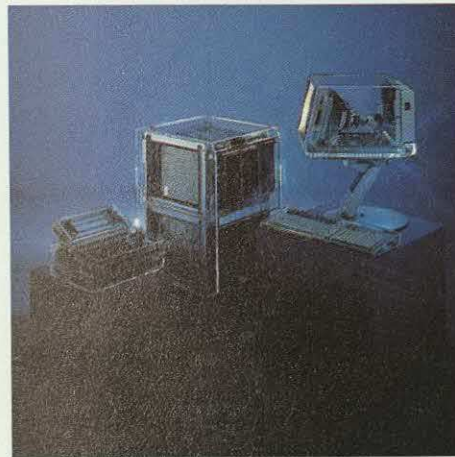
Butler Cox & Partners Limited
Butler Cox House, 12 Bloomsbury Square,
London WC1A 2LL, England
☎ (01) 831 0101, Telex 8813717 BUTCOX G
Fax (01) 831 6250

Benelux
Butler Cox BV
Burg Hogguerstraat 791
1064 EB Amsterdam
☎ (020) 139955
Fax (020) 131157

France
Butler Cox SARL
Tour Akzo, 164 Rue Ambroise Croizat,
93204 St Denis-Cedex 1, France
☎ (161) 48.20.61.64, Fax (161) 48.20.72.58

Germany (FR)
Butler Cox Deutschland Ltd.
Richard-Wagner-Str. 13
8000 München 2
☎ (089) 5 23 40 01, Fax (089) 5 23 35 15

United States of America
Butler Cox Inc.
150 East 58th Street, New York, NY 10155, USA
☎ (212) 486 1760 Fax (212) 319 6368

Australia
Mr J Cooper
Consultants (Computer and Financial) plc Australia
Level 5, 303 Pitt Street, Sydney 2000, Australia
☎ (02) 2870400, Fax (02) 2870450

Italy
SISDO
20123 Milano, Via Caradosso 7, Italy
☎ (02) 498 4651, Telex 350309, Fax (02) 481 8842

The Nordic Region
Statskonsult AB
Stortorget 9, S-21122 Malmo, Sweden
☎ (040) 1030 40, Telex 12754 SINTABS

Spain
Mr Sidney M Perera
Rosalía de Castro, 84-2°D, 28035 Madrid
☎ (91) 723 0995