Information Technology

TRENDS AND APPLICATIONS IN SCIENCE AND BUSINESS

C. K. Ayo

Concept Publications

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TRENDS AND APPLICATIONS IN SCIENCE AND BUSINESS

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Dedication

To my God for the talents given to me.

And my late parents

Mr. Timothy Aiyemoro Ayo & Madam Margaret Oyinlola Ayo
for getting me educated at all cost.

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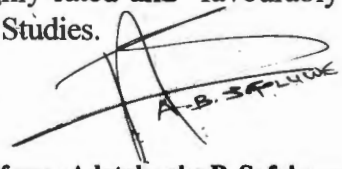
Foreword

THIS book deals with several relevant fundamental concepts in Information Technology. The author in his presentation assumes that the reader has very little or no prior knowledge of the various topics discussed. If and when the reader is not a total novice, the presentation is such that the book will serve as a good revision text. Otherwise, the book builds up its contents gradually from very simple to the most complex.

The range of topics covered is in the broad region of Software, Hardware and Peopleware. The presentation is such that the topics covered are very current and quite contemporary. It is very difficult to achieve this objective since Information Technology is dynamic and is daily emerging and changing. Consulting on appropriate websites reflects this.

The inclusion of Review Questions for the reader at the end of each chapter helps the student in self-assessment. The book is highly rated and favourably recommended to students of Science and Business Studies.



Professor Adetokunbo B. Sofoluwe
Professor of Computer Science and Dean of Faculty of Science
University of Lagos,
Akoka, Lagos.
February 2001.

Preface

THE book, *INFORMATION TECHNOLOGY: Trends and Applications in Science and Business,* presents to the general public, professionals and non-professionals alike, the rudiments of information technology. It explains in simple language the various computing terminologies and new technologies.

The book is arranged in a logical order to arouse the interest of the readers. It covers trends in hardware and software; the millennium bug is examined for the benefit of the young generation of computer users.Some items discussed in the book are multimedia systems; hazards resulting from the use of computer; networking and internet; Windows operating system (95,98 and 2000); MS Word and Excel; computer security, crimes and fraud; the application of IT in financial institutions; general systems concepts; systems theory; operational information system; management information system; systems' analysis and design; database management system; number system, and the impact of computer on the society.

This book is primarily intended to educate the general public on the computer as an indispensable tool in the modern business operations. This is the information technology age, it has changed drastically the ways we carry out our jobs. Consider the information superhighway, electronic funds transfer, internet banking, electronic wallet, among others, in modern terminology.

Information Technology: Trends and Applications in Science and Business, is a good companion for students at all levels. It is a particularly good study material for postgraduate students of management for the Management Information System (MIS) course, just as first-time learners will find it a good menu.

The contents are made easy to digest with the inclusion of generous illustrative diagrams of most component parts, as well as software interfaces of the various applications discussed. Further still, there are revision questions at the end of each chapter to check the reader's or learner's understanding.

Acknowledgements

THIS book came into reality as a result of the immeasurable contributions from institutions, professionals and individuals. Therefore, I will like to acknowledge the following institutions, IT specialists and several other individuals.

The author interacted with staff and students in the following institutions in the course of this write-up, in order to provide coverage for some of their courses that are IT-related. They are:

(i) Lagos City Polytechnic, Ikeja- Lagos
(ii) Ladoke Akintola University of Technology, Ogbomoso (Lagos Centre).
(iii) University of Calabar (Ikeja, Lagos Centre).
(iv) Ondo State University, Akungba (Iyana Ipaja, Lagos Centre).
(v) Nnamdi Azikiwe University (Lagos Centre).
(vi) Delta State University, Abraka (Lagos Study Centre).

The following IT Specialists have been especially helpful: Prof. Adetokunbo Sofoluwe, Dean of Faculty of Sciences, University of Lagos; Mr. T. Agbana, IT Department, Chevron, Lagos; Mr. S. Adeyeoluwa, Head, MIS, Nigerite, Lagos; and Engr. S. Fawunmi, DPMS, Lagos.

I am also grateful to these people for their love and generous assistance: Chief E.T.Abraham, Mr. E. O. Oshobu, Mr. S. A. Hundeyin, Mr. D. Isaiah, Mrs. Falana, Miss A. Eweje, Mr. E. Oyeniran, and Mr. O. Ayo. I appreciate the interaction of the entire staff and students of the Department of Computer Science and Secretarial Administration, Delta State University, Lagos Study Centre.

Also, I wish to acknowledge the deep interest of my publisher, Mr Oladele Oladunjoye in quality book development. His team's creative and professional approach to production and apparent pursuit of excellence in editing and design added to the much improved content and format of this book.

I am deeply indebted to my family members for their solid cooperation: My wife, Moji and children – Juwon, Tola, and Kenny.

Thank you all for making meaningful contributions to this intellectual project.

C. K. Ayo, Ph.D.
June 2001

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