
DICTIONARY OF e-BUSINESS

A Definitive Guide to Technology and Business Terms

Second Edition

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PREFACE

This dictionary defines important terms and phrases relating to e-business in the context of design, development and usage. It addresses the many milestone decisions, implementation processes and technologies along the migration paths that lead to e-business sites, as well as those along the paths that lead away from them. These deliverables via the Internet or World Wide Web provide a borderless world with geographically insensitive marketing, advertising and selling channels. Wall Street's response to this most contemporary of 'gold rushes' sees company revenues sky rocket as Web sites make the transition from specialist entities to global successes. Virtual stores, search engines, information services, and the many other Internet-related terms now grace the vernacular of Internet Investors and analysts the world over.

A myriad of migration paths to e-business Web architectures exists as the surrounding technologies develop at a pace, and as new and advancing methodologies dictate change. A notable change is the emergence of 3rd generation (3G) mobile networks that are poised to advance the application of m-commerce (mobile commerce) where users may make purchases using mobile handsets or phones

In spite of the seemingly singular medium that is the World Wide Web, CD-based applications continue to play a role with DVD variants offering high quality MPEG-2 video and an attractive medium for POI or E-catalogues. Hybrid CD-ROM and DVD-ROM multimedia productions may provide the local delivery of high quality video as well as present hyperlinks to e-business Web sites for on-line ordering and for transaction processing.

E-business is another important chapter in the evolution of the role of technology in commerce. It is shrouded in a multiplicity of questions that this dictionary seeks to address through an in-depth study of the technologies, the services, their acquisition, migration paths, investment strategies and comparative advantages. More than a glossary or dictionary with scant definitions, it includes informative essays that address key issues.

It is hoped that you find this text a useful source of information.

Francis Botto

INTRODUCTION

E-business is an awesome, fast changing subject, driving multiple paradigm shifts that are as radical as those that splintered from the industrial revolutions with all their recorded social, economic and technological impacts. For the first time virtual stores may provide advertising and selling channels leading to the global market.

The benefits of e-business have been the focus of numerous papers, publications and conferences for some time, and far outweigh the much-publicised potential pitfalls that include security and the threat of larceny resulting from illegally obtained customer payment details, and the threat of an exodus of traders from the high street.

Industry's response to the security issue has proved technically complex with numerous solutions having been driven into obsolence in what seems like a fleeting moment. Standardisation and advancements in security – that continue to exhibit minor flaws – see today's secure e-business sites win the confidence of consumers, banks and notable credit card companies including Visa and MasterCard. E-business technology and the Web in general is shaped by the:

- constantly updated developer's workbench that includes Microsoft Visual Studio.NET
- advancing operating systems (OSes) like Windows, Mac OS X, Linux and Unix
- evolving programming languages such as Java, JavaScript, XML, HTML, DHTML, C++, C#, Objective-C, Visual Basic and VBScript
- developing *Object Web* with its standard components and building blocks
- constantly updated mainstream Web site development tools from software publishers that include Microsoft, Asymetrix and Macromedia.

The aforementioned technologies are driving change, and are being driven themselves by underlying hardware advancements including:

- new processors primarily from Intel (and other chip makers)
- client/server architectures that use server technologies like SMP, NUMA, and MPP

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- advancing peripheral devices including modems
 - the vast network that supports the Internet, including physical or wireless digital pathways and mobile networks
 - more efficient protocols.

Access technologies like ISDN and cable are part of the English language, with many people enquiring of their existence when buying or renting a property. To the vast audience currently benefiting from e-business, these are as transparent as the methodologies and the multiplicity of complex processes and sub-processes that constitute the development life cycles of Web sites. The same may be said of the development life cycle required to produce the tools and technologies themselves, where the levels of granularity and technical detail are incomprehensibly fine for all but those directly involved with their creation.

Everyday e-business terms and phrases are entering the English language at a pace, and are beginning to frequent dictionaries of a general nature; terms that are prefixed by *on-line* are widespread, including *on-line shopping*, *on-line banking*, *on-line share dealing*, *on-line travel agencies* etc. E-business is yet another feature of modernity driven by the Internet and by technology as a whole, and is a new specialisation for analysts, and for industry professionals such as Web site designers, developers, researchers and technologists. Many new technologies, software enhancements and development tools are now prefixed by the term e-business, and it drives new global markets in the effort to capitalise on the swing of consumer shopping habits towards the Internet.

Coordination is a key feature pinned to that ubiquitous growing entity that has come to be known as the Internet or to some, the Information Superhighway. More than ever, standards organisations including the Object Management Group (OMG), ITU, ISO and SET provide makers with the opportunity to develop compatible products and at the same time reduce wasted resources and expended energies while attempting to forge proprietary standards. Not that major manufactures will ever be relieved of this effort, but the growing transparency of hardware platforms from a Web-based e-business application viewpoint introduces stability and reassurance for those investing in such implementations and services.

E-business implementations used to address the mass market are at the heart of the current revolution, but more specialist impacts such as those in banking, stock markets, and money markets might be considered more significant as they are influential in determining the performance of an economy. A country's IT infrastructure, as well as those of its enterprises, drives trade at home and abroad.

Selling via the direct channel off the page or over the telephone or via TV shopping is meant to offer the consumer savings, but the theoretical price differential does not always favour the direct seller. Some of the consumer electronics giants favour high street and out-of-town stores with lower prices

as they prefer to win consumer confidence by allowing them to experience their products at first hand. Furthermore shopping in conventional stores is perceived as a leisurely experience to many consumers. Whatever arguments are presented, it seems that it is most probable that numerous sales channels will serve consumers, giving more choice, but the price differentials that exist between them will eventually subside as a slightly imperfect equilibrium takes hold.

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