M/M/1 Model
Exponential/exponential with one server. The queueing model that assumes an exponential distribution for inter-arrival times, an exponential distribution for service times, and a single server. (Guster et al., 2005)

M-Business: See Mobile Business.

M-Commerce: See Mobile Commerce.

M-CLIP
A structured, expanded profile of information needs, used in conjunction with specialized templates to aid in the identification of critical intelligence needs, an expansion mechanism to help ensure that no key concepts are overlooked, and an adaptive mechanism to remove ineffective topics. (Parker & Nitse, 2006)

M-CRM
Interactions between a company and its customers for marketing, sales, and support services through the mobile Web and wireless channel. (Chan & Fang, 2005)

M-Government: See Mobile Government.

M-Learning: See Mobile Learning.


MA: See Multiple-Access.

MAC: See Medium Access Control; Mandatory Access Control.

Machine Interactivity
Interactivity resulting from human-to-machine or machine-to-machine communications. Typically, the latter form is of less interest to most human-computer studies. (El-Gayar et al., 2005)

Machine Learning
1: A computer-embedded capability of data analysis with the purpose of acquiring selected characteristics (attributes, patterns, behavior) of an object or system. (Nabuco et al., 2006)

2: A discipline in computer science, generally considered a subpart of artificial intelligence, which develops paradigms and techniques for making computers learn autonomously. There are several types of learning: inductive, abductive, and by analogy. Data mining integrates many techniques from inductive learning, devoted to learn general models from data. (Hernandez-Orallo, 2005)

3: A discipline that comprises the study of how machines learn from experience. (Lodhi, 2005)

4: A field of computer science concerned with the question of how to construct computer programs that automatically improve with experience. The key algorithms that form the core of machine learning include neural networks, genetic algorithms, support vector machines, Bayesian networks, and Markov models. (Pantic, 2005)

5: A research area of artificial intelligence that is interested in developing solutions from data or in an interactive environment alone. (Kayacik et al., 2005)

6: A study of how computers can be used automatically to acquire new knowledge from past cases or experience, or from the computer’s own experiences. (Liu, 2005)

7: A sub-field of artificial intelligence. The idea is that a computing system could perhaps learn to solve problems in much the same way that humans do, that is to say, by example. A program is needed that learns the concepts of a domain under varying degrees of supervision from a human teacher. In one approach, the teacher presents the program with a set of examples of a concept, and the program’s task is to identify what collection of attributes and values defines the concept. (Hamdi, 2005)

8: An area of artificial intelligence involving developing techniques to allow computers to learn. More specifically, machine learning is a method for creating computer programs by the analysis of data sets rather than the intuition of engineers. (Denoyer & Gallinari, 2005)
goal of which is to build computer systems that can adapt and learn from their experience. (Tzanis et al., 2005) 10: Artificial intelligence methods that use a dataset to allow the computer to learn models that fit the data. (Cunningham & Hu, 2005) 11: Sub-area of artificial intelligence that includes techniques able to learn new concepts from a set of samples. (de Carvalho et al., 2005)

**Machine Learning System**
An information system that mimics the human learning process and delivers the knowledge to users. (Forgionne, 2005)

**Machine Learning Technique**
One of several techniques that can automatically improve computational models based on experiences. (Wen et al., 2005)

**Machine Translation (MT)**
1: A computer program to translate text written in one natural language into another. (O’Hagan, 2005) 2: Using special software programs to translate passages of written text from one language to another. (St.Amant, 2005e)

**Machine Vision**
A field of computer science concerned with the question of how to construct computer programs that automatically analyze images and produce descriptions of what is imaged. (Pantic, 2005b)

**Machine-Readable Cataloging Record (MARC)**
A standard for the representation and communication of bibliographic and related information in machine-readable form, developed by the Library of Congress. (Hänisch, 2005)

**Macro-Ecology of Information**
The study of information (cognition) as a whole, and concerned with aggregates across nations and markets. (Targowski, 2005)

**Macromedia Flash™**
Vector-based animation software program produced by Macromedia Corporation. (Szabados & Sonwalkar, 2005)

**Macropayment**
Any payment typically over $20. (Karnouskos & Vilmos, 2006)

**Magic Lantern**
An e-mail containing an attachment that, if opened, would insert a “Trojan horse” that is activated upon launch of the popular encryption program, Pretty Good Privacy. Then it sends all the keystrokes the unwitting user types. (Friedman, 2005)

**Magic Set**
Given SQL query with a correlated, nested subquery, the magic set is the set of values that are relevant for the computation of the subquery as parameters. This set is obtained by computing all conditions in the outer query, except the one involving the subquery. (Badia, 2005a)

**Magic Set Technique**
Binding propagation technique based on the rewriting of the source query, with respect to the query goal, into an equivalent query which simulates top-down evaluation by bottom-up query computation engines so that irrelevant facts are not considered. (Greco & Zumpano, 2005b)

**Magnitude Response**
1: Absolute value of the complex frequency response. (Jovanovic-Dolecek, 2005c) 2: The absolute value of the Fourier transform of the unit sample response. For a real impulse response digital filter, the magnitude response is a real even function of the frequency. (Jovanovic-Dolecek, 2005a)

**Mail Client**
A software process that moves mail from a message store and presents it to a user. (Horiuchi, 2005b)

**Mail Server**
A software process that receives mail from other mail systems and manages the message store. (Horiuchi, 2005b)

**Mail Survey**
A traditional survey technique in which a multi-part survey questionnaire is mailed to a randomized sample of individuals (within a larger population) who are asked to complete the questionnaire and return it to the survey researcher for tabulation and analysis. (Baim, 2005)

**Main Distribution Frame (MDF)**
The apparatus in the local concentrator (exchange) building where the copper cables terminate and where cross-connection to other apparatuses can be made by flexible jumpers. (Chochliouros et al., 2005c)