

Searching Databases

Getting the best from databases

Analyse the topic

What are the main concepts, and what are the useful related terms, synonyms, and broader and narrower terms?

E.g. “performance appraisal in the car industry”.

The word “industry” is superfluous. Entering “car industry” means that only articles containing exactly that phrase will be retrieved. Entering the word “car” or “cars” alone should identify useful articles. Many American articles would be about “automobile(s)” and the Financial Times and Economist always have surveys on “automotives”, so entering “automo” with the wildcard or truncation symbol on the end (automo* usually) should retrieve both.

Performance appraisal is related to employee development, incentives, job evaluation, job satisfaction, payment systems, etc.. It is also related to organisational behaviour, and is part of personnel management and human resource management. Looking at a dictionary of human resource management or an encyclopaedia of management in the Quick Reference section of the library will help you to find other related terms and synonyms, and sort out in what contexts all these different terms are used.

Free text versus keyword or subject or index searches

In a **free text** search you search for the words you enter through every part of the record, including the publication and article title, the abstract, or even the full text. A free text search may be helpful if you are having difficulty in finding information about a topic and are desperate to find any reference to it, or if a new term has been adopted. For example, “hot desking” is a phrase used when many people share the same desk at different times, which has not yet entered general usage, and is not used by the indexers yet. However, entering a term such as “personnel management” as a free text search may find thousands of articles that mention the phrase in passing, and are not focused on the subject. In these instances you would do an index search below.

In a **keyword, subject or index** search you search only through the indexing fields, where terms which express the focus of the content of the article, chosen by indexers, have been entered. **Look at the example of the abstract below.** Searching in the indexing fields produces more relevant results. Usually the terms have been chosen from a specific list called a **thesaurus** so that the indexers use the same terms consistently. This is why they may not use a term such as hot desking; it would not be added to the thesaurus until it was clear it was commonly used. Often the thesaurus (list of indexing terms) can be viewed on the database to ensure that you use the same terms. Sometimes, the number of articles to which the term is assigned is given.

Place and time

Like the subject index terms above, indexers usually assign geographic terms in a separate indexing field, and it is usually possible to search by publication date too, since this is a basic piece of bibliographic information always included.

Wildcards and truncation

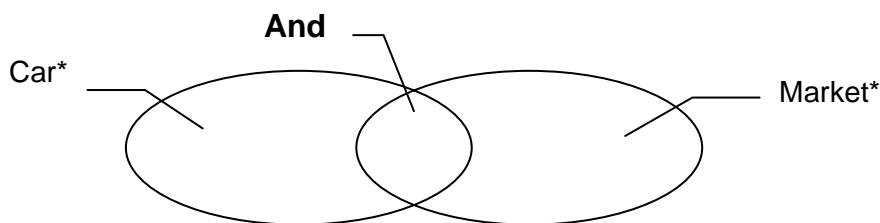
The * symbol can be added to word stems to find every variation of the word, e.g. **market*** finds **marketed, marketing, markets**, etc. The * within a word acts as a wildcard and finds every spelling variation, e.g. **Labo*r** finds **labour** and **labor**.

Boolean Logic

Refine your search using Boolean operators **AND, OR, NOT** (the ABI database uses AND NOT, and Helecon uses WITHOUT), in either a free text or index search.

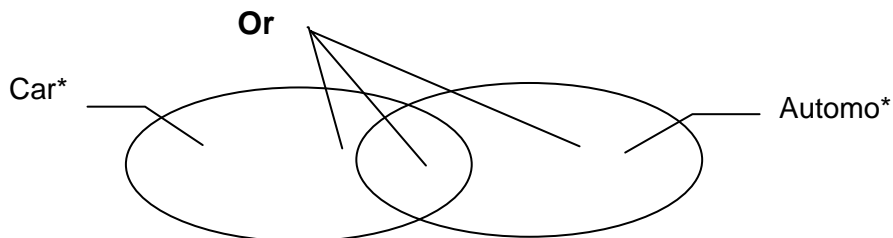
And narrows your search because the record must contain both search terms:

*Cars **and** marketing*



Or broadens your search because the record could contain either or both of two search terms (**Or** statements must be in brackets in some databases):

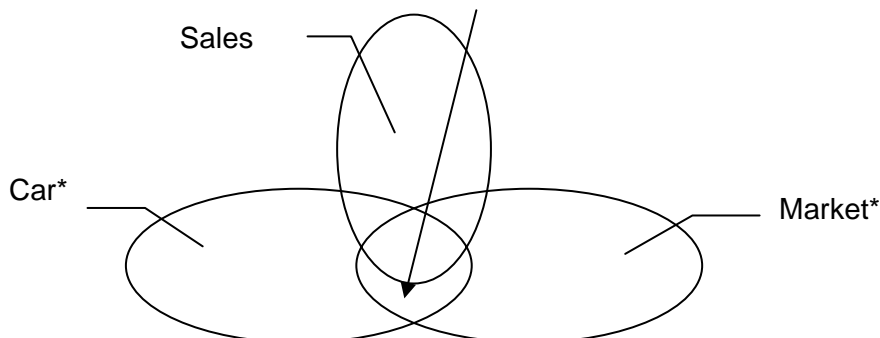
*(Cars **or** automobiles **or** automotives)*



(* use truncation to find alternative endings or spellings for a search term)

Not cuts out one particular aspect which is not of interest:

*Cars and marketing **not** sales*



(Use **not** carefully, it may eliminate useful records)

Generally, when using Boolean Algebra, do not construct long or detailed searches; keep searches simple and try many different variations you feel you are not retrieving any new records.

Citations, abstracts, full text, and facsimile

Sometimes databases provide citations and abstracts only. Citations are the basic bibliographic details giving authors, the title and publication details only, as at the top of the example below. An example of an abstract is given below. The associated indexing terms are included to show how they summarise the content of the article. This illustrates the points made about benefit of index searches as opposed to free text searches made in the paragraph above. The abstract is a paragraph that is a summary of the article. It is intended to be enough to decide if you want to read the original or not; except in the case of the Predicasts Prompt database, it is not meant to be a substitute.

Example:

Toyota's principles of set-based concurrent engineering
Sloan Management Review; Cambridge; Winter 1999; Durward K Sobek II; Allen C Ward; Jeffrey K Liker;

Subject Terms:

Product development
Product design
Automobile industry
Studies
Production management

Geographic Names:

Japan

Companies:

Toyota Motor

Abstract:

The design and development system of Toyota Motor Corp. contributes greatly to the firm's remarkably consistent growth in market share and its enviable profit per vehicle. This article, which extends the author's previous study of the Toyota product development system, reports on further data collection in Japan and at the Toyota Technical Center in Michigan. Findings substantiate the authors' previous claims about the product development system and lead them to conclude that Toyota is set-based in its approaches. Set-based concurrent engineering (SBCE) begins by broadly considering sets of possible solutions and gradually narrowing the set of possibilities to converge on a final solution. The SBCE idea is developed through 3 principles that guide Toyota's decision making in design: 1. simultaneous mapping of the design space according to functional expertise, 2. integration by intersection of mutually acceptable functional refinements introduced by the design and manufacturing engineering groups, and 3. establishment of feasibility before commitment.

Full text

Hopefully, many of the articles retrieved will be full text, i.e., the whole text is included. It might be scanned in as plain ASCII text, or the whole article may be provided in **facsimile** or exact copy, which makes it possible to obtain a print that looks like a photocopy of the original.

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