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   2. WHO SHOULD BE USING MIR TUTORIALS?

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2.1   Table of users and benefits
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   FOR WHOM?   BENEFITS

   Directors of   >   Outstanding quality
   Information Services   >   Speeds up standards process
            >   User learns a single interface for all data searches
            >   Open architecture

   Custom software   > Cuts customization time, costs
   providers   through engine-independent
techniques

   Information publishers >Reduces costs through applying own expertise
to data

   Government information >   Massive quantities of data can
   distributors   be searched in record time

   Educators and trainers >   World class, "copyleft"
            >   R & D contributions welcomed

   Programmers   >   Pride of participation
            >   Expanded capabilities
            >   Builds reputation through sharing improvements

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2.2   Directors of Information Services
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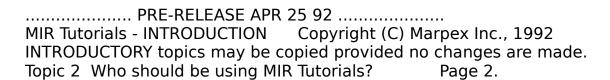++

        In large organizations, MIR Tutorials and software are directed in the first instance to the person with responsibility for corporate direction of information management. The job title may be Director of Information Services, or Vice-President in charge of Information Services, or an equivalent position. The reason for aiming toward the top of the organization is that high speed search technology has management implications:
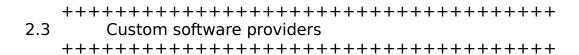
        >   Progressive management puts priority on service and people-oriented skills. When business empowers its people to source information for themselves, individual creativity and job satisfaction increase, and there is a reduction in supervisory levels and costs.

        >   An increasing portion of staff are information workers. Time for these people to learn and relearn a wide range of search and retrieval methods are sapping time from the needs of the organization.

        All software embodies beliefs about people. A tell-tale sign is found in the error messages embedded within a program. We are all familiar with techno-centered software which is written by technical people to please other technical people, and the end user is treated as a naive inconvenience (or a necessary evil). If there are to be truly user-driven or market-driven information services, there must be a concerted push from the top to make it happen. Implementation of new retrieval and pattern-search systems will be delegated to lower echelons. But the user focus must have support from the top.

        The table at the beginning of this topic lists a variety of benefits to the large firm. Performance quality is important because the large organization is more likely to handle massive databases, and is more prone to system degradation through inefficient software. Standards are relevant because too much of data processing budgets are consumed by incompatibilities stemming from lack of standards. MIR technology ties in with the current drive to make it possible for users to learn a single interface for all data searches; the benefits in convenience and reduced re-education will be substantial. Closed architecture hardware and proprietary software elevate
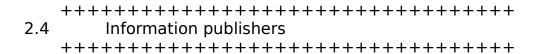
costs; here we provide source code and techniques that may be freely used and shared. This kind of <u>open architecture</u> approach reduces your dependence on suppliers.


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2.3        Custom software providers
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Organizations that provide "custom" computer programs and support to others make their profit through selling variations of the same software as many times as possible. Their competitive advantage stems from high quality support and timely delivery more than from the software itself. Further on we will look at <u>engine-independent</u> techniques. They help by reducing substantially the time and cost required to customize indexing and retrieval software. More resources can therefore be directed toward user education and support.

The firm selling off-the-shelf software is not as likely to benefit from MIR software. This is because of the "copyleft" requirement that programs embodying MIR techniques must be accompanied by source code without restriction on copying. Proprietary secrecy is a common means of preserving a competitive advantage. We believe that in the long run the market is better served by technical excellence coupled with access to source code and high quality support services. The software firm that shares these commitments need not fear disclosure of source code, and can benefit from the technology and method offered here.


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2.4        Information publishers
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Here we address the needs of organizations that have large quantities of data that they wish to make accessible to many people.
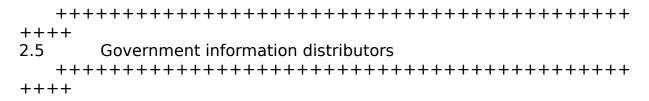
The challenge of <u>in-house communication</u> sometimes overwhelms people in a two-person organization (marriage, for example). In the context of 2,000 or 20,000 employees, it's even tougher. Examples of these organizations include:

>	a public accounting firm that produces audit standards and procedures for internal use;

>	a bank using 30,000 pages of manuals that must keep several hundred branches up to date;

>	a regional real estate board servicing thousands of agents with detail on current listings.

The more rapidly the data changes and the more geographically dispersed the people, the more difficult the task.

CD-ROM publishers have multiplied in recent years. For example, an aircraft manufacturer may wish to supply maintenance manuals to every buyer and to every airport at which the particular aircraft type may touch down. CD-ROM publishers have diverse interests ranging from financial trends or hazardous commodities to bible study materials and telephone directories.
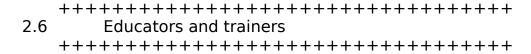
The common factor in in-house communication and external publishing on CD-ROM is expertise concerning, and access to, large databases. Each stands to gain by being equipped to apply its expertise to its own data. The publisher can format the data; it often has particular knowledge of how people have made use of the data in the past. Even if a service bureau or consulting firm is brought into the picture, the organization can reduce its costs. Some service bureaus (such as Innotech, a partner in the MIR project) offer substantial discounts to customers that process data into a standard form and/or set up uniform field indexing files prior to sending the data to the service bureau for CD-ROM publishing.

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2.5	Government information distributors
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Government records can grow to massive proportions. Consider the millions of tax returns filed each year, the task of tracking immigration, military procurement programs dealing with millions of different parts, medical care of veterans, and so forth. Automated indexing and high speed

retrieval is essential, whether the information is for government use or for distribution to the public. There is considerable software on the market that can handle reasonably well databases with perhaps a hundred thousand records. But many government databases have millions of records; for them, a better class of software is essential.

Government also stands to gain if search and retrieval methods move in the direction of shared standards. Discussion of standards receives strong impetus from open architecture software.

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2.6   Educators and trainers
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Material in the public domain on indexing and retrieval tends to be either obscure or effective only for limited size data sets. In the MIR project, we have set aside the proprietary approach, to the direct benefit of teachers and students. Courses in management information systems and in computer science can use the techniques and software here... discuss them, improve them, extend their applications. The interactive publishing technique is a variation on the exchange of ideas through academic journals. Your research and development inputs are most welcome.

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2.7   Programmers
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You may be any, all, or none of the above. But you love computer programming... the ultimate in problem solving where you can see the results of your creativity. You didn't invent what is here, but once you see the software, you may see ways in which you can improve on it. The best software emerges, not from tidy development groups, but from public "skunkworks" in which people go at the task for the shear love of it. The EMACS editor is a lovely example. There is pride in having taken something good and making it better. And reputations are built through hacking at a popular project and getting one's name associated with innovative improvements. This project is built around "free" software. So, go at it. And have fun!