Britton Lee, Inc.

EVOLUTION

For centuries past, the evolution of communications and information management has profoundly affected social and commercial progress. We are on the threshold of a business revolution where decision-making may truly be supported by efficient data management. The impact on the profitability of business operations will be immense...

1450 A.D. 1850 1945

The Renaissance developed from the knowledge spread by the great writers, and printers such as Gutenburg and Caxton. In three months, they produced literature that would have required fifty-five scribes to work for two years to equal.

Steam-powered presses and linotype machines made printing inexpensive, and sparked the Industrial Revolution by making information available to the masses.

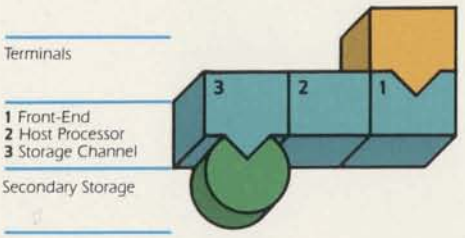
New technology in electronic tabulation was implemented by progressive business leaders to build many of today's most successful companies.

Britton-Lee's technical achievements have created the Intelligent Data Base Machine, oriented to managers who know the value of a responsive information system. Truly user-oriented—even to people without programming knowledge—the IDM 500 provides some remarkable advantages. Imagine how the features described inside can improve YOUR company's information productivity...

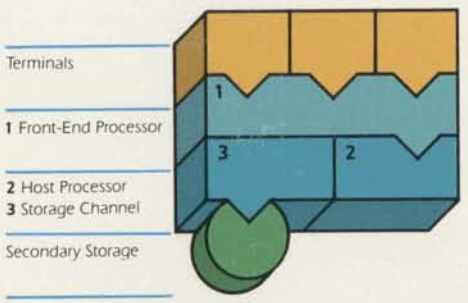
NOW

The IDM 500
A Logical Development

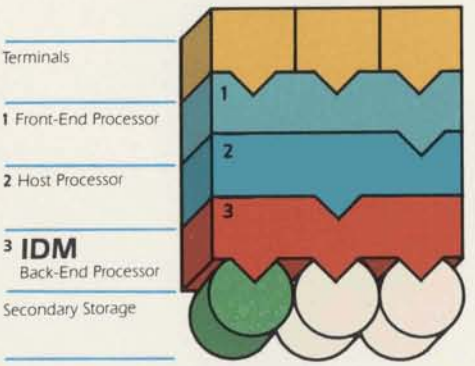
As data systems have evolved, the presence of special-purpose elements has become increasingly important, as these diagrams will illustrate:



In the 1960's, a single central processing unit (CPU) was required to monitor time-sharing among terminal users; to batch process computing tasks, and to control the access to stored data.



Through the development of front-end communication processors, the workload on the CPU was reduced. It was then able to perform its basic task of data processing much more efficiently. But the task of managing the data base was still imposed upon it.



Now Britton-Lee's IDM 500 special-purpose, back-end data-base processor brings full efficiency to the host computer and intelligent terminals, so that they can properly perform their correct functions.

Britton-Lee's technical foresight has produced a special-purpose **hardware** system that will provide much more than the best software-based data management systems, and at lower cost. This valuable new and powerful resource is for those who know the value of a centralized, functionally complete data base management system that will operate with any host computer, or with intelligent terminals.

Productive Data Base Management

It will provide your managers with impromptu access to electronic data **without** complex procedures. Specify what you want to know, and the IDM 500 will figure how to get it.

Complete system integrity is provided, including total protection from power failure, disk failure and other common system problems.

Your entire data base can be employed—even with complex transactions—at high-performance 1500 per minute rates.

Complex queries may be stored for subsequent ease of use and rapid access. The high-level query language does not require previous programming capability.

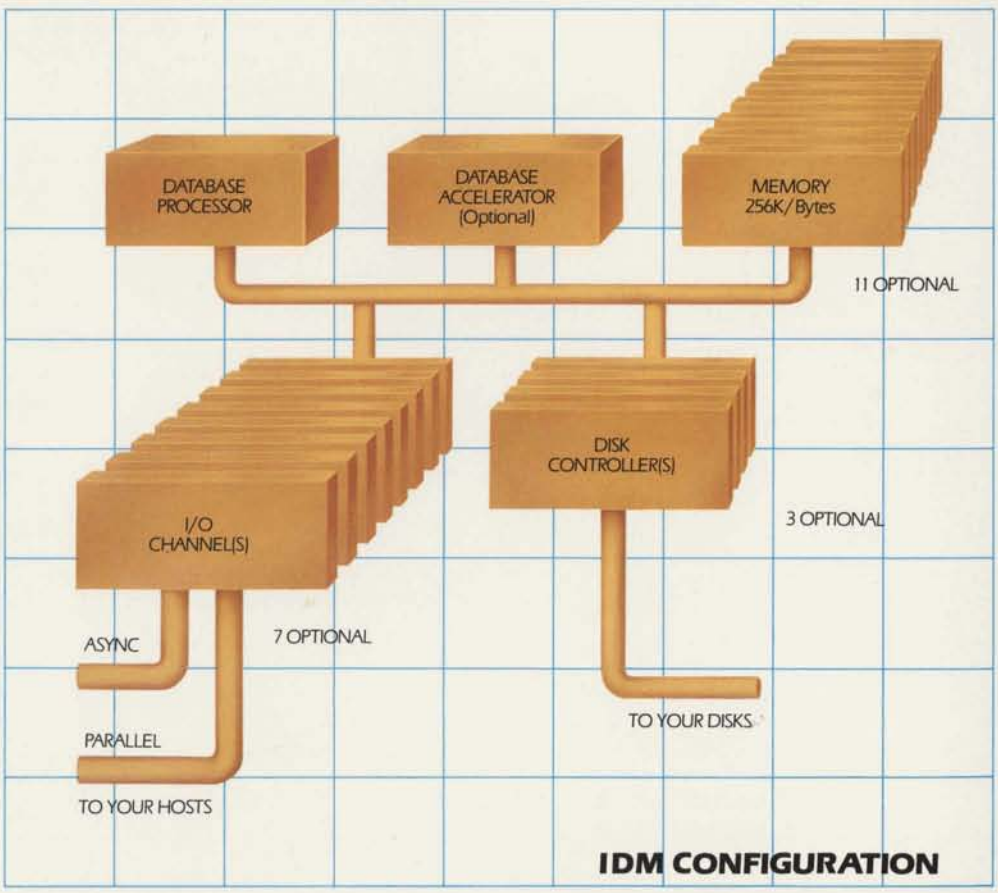
Your data base may be restructured at any time without expensive changes in applications programs.

The IDM 500 has enormous capacity. It will support 32 million-byte data bases if necessary.

It permits the use of simple, low maintenance data base management using an easy-to-understand relational data model.

With independence from host computer configuration, the IDM 500 provides easy interface with all application software.

...and all this at lower cost than software-based data base management systems!



IDM CONFIGURATION

ABOUT BRITTON-LEE...

"At their best, at their most creative, science and engineering are attributes of liberty..."

General Robert Sarnoff

Innovative product development, based on a thorough understanding of new technological dimensions, is the goal of Britton-Lee people. Through this commitment, they are intent on making a significant contribution to the company, the American economy and the free world.

Our talented people, drawn together by the synergism of exciting ideas to thrust into new dimensions of technology, believe that private enterprise can preserve our world leadership in the data sciences with worldwide economic benefit.

We are challenged by the potential to build upon our knowledge to create new jobs, new markets and new opportunities. For those with foresight among us, there lies the ability to create a rebirth — a renaissance of our society.

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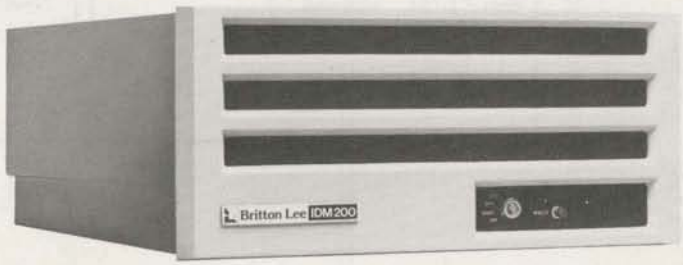
Britton Lee

IDM 200
RELATIONAL DATABASE MANAGEMENT SYSTEM

The IDM 200 Intelligent Database™ Machine is the second member in the growing first family of database machines from Britton-Lee. It is a complete relational database management system based on hardware designed exclusively to execute database management functions at extremely high speeds.

The IDM 200 can be used as a stand alone system supporting multiple intelligent terminals or as a centralized database resource for one or more mini or microcomputers. Located between the disks it manages and the computers it serves, the IDM 200 is ideally suited for medium to large scale database management applications.



A COMPLETE RELATIONAL SYSTEM

Unlike many systems which claim to be relational, the IDM is a complete relational database management system based on the rigorously defined but simple to understand relational data model.

The powerful adhoc query capability provided by a relational system allows programmers and users non-procedural access to data. This eliminates the need to navigate through complex database structures and allows queries which can retrieve data from an entire database.

Because relational database commands are extremely powerful, much of the work previously done by application programs is now done within the IDM 200, resulting in programs which are smaller, faster to develop, and easier to maintain.

The IDM 200 provides those features found in the best database management systems including full concurrency control, transaction management, security, database backup, and crash recovery.

The IDM 200 also provides a fully integrated data dictionary implemented as relations within each database. Combined with the IDM 200's self documenting and stored command features the data dictionary provides powerful tutorial and self-help tools.

The IDM 200 also provides features not found in most database management systems. Its dynamic or "live" backup facility allows a database to be dumped while it is being used. Complex or frequently used commands can be stored in an IDM 200 database in a preprocessed form which provides increased performance and convenience. An audit logging and retrieval feature provides a complete record of database changes including user, time and date information. A random access file system provides for storage of programs and text to stand alone systems and a common file system to multiple computers.

A TRUE DATABASE MACHINE

The power and flexibility provided by relational database management has previously been available only from large software packages running on general purpose computers. Because software packages make use of general purpose operating and file management systems they run slowly—especially in multi-user environments. The IDM 200 was specifically designed to overcome these limitations.

Unlike general purpose backend processors, the IDM 200 has been custom designed to execute relational database management tasks at extremely high speeds. By off-loading the task of database management into the IDM 200, the general purpose computer is free to run application programs in parallel with the database machine. Operating as a centralized database resource, the IDM 200 can offer multiple dissimilar computers access to common databases.

A HIGH PERFORMANCE, HIGH CAPACITY SYSTEM

The IDM 200 offers performance and capacity not achievable with conventional database management systems. Multiple processors working in parallel combined with a high performance memory system provide the high throughput required by most applications. In addition, the IDM 200 efficiently manages its resources by providing optimized disk control, overlapped seeks and intelligent scheduling.

Because the IDM 200 is a high performance system, it can support a large number of users, and large amounts of cache memory and disk storage. In fact, the IDM 200 can support up to 128 users accessing up to 8 billion bytes of data. For those applications requiring more performance or capacity, the more powerful IDM 500 is available.

DEPENDABILITY BACKED BY SERVICE

The bottom line in database management is dependability. The IDM 200 was designed to guarantee data integrity and to minimize system downtime. This helps reduce the cost of ownership. System integrity features include: error detection and correction for disk and main memory subsystems, self-diagnostic hardware, and software consistency checks.

Servicing is simple with Britton-Lee's built-in board level fault isolation and board level repair policy. In addition, the IDM 200 is fully supported by Britton-Lee's nationwide sales and service organization.