

Criterion Marketing Program

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I believe that with what you have seen today of the Criterion, you can begin to sense some of the excitement we feel about it. We set out, very simply, to give the medium-to-large scale user everything he might want in a system. We have succeeded in providing a combination of all of the best in current, proven, state-of-the-art technology.

The corporate marketing strategy for the Criterion is two-pronged. First, it is to satisfy the needs of our current user base. Second, it is to attract new users within those markets we serve.

The cornerstone of this strategy is price-performance. Very basically, the Criterion offers a great deal more performance for a little more money. This price-performance advantage is as appealing to current NCR users as it is to users of competitive equipment.

At the same time, we will continue to actively pursue the smaller user and the first time user with highly competitive offerings like the 299 and new 499 Data Processing Systems, the Century 8200 Minicomputer, the recently announced Century 75 and the more powerful Century 101 and 151 systems.

You have already seen some of the features of the Criterion that are at the basis of our claim to superior performance.

A few competing systems may use ECL; others may employ interleaved MOS memory with error detection; a few make limited use of firmware, some may approach the internal speeds of the Criterion; the bus architecture is used in some minicomputer systems; larger systems may boast of virtual machine capabilities or extensive diagnostics or on-line program development.

However, no system has combined so many of the latest, proven state-of-the-art features as the Criterion.

Taken by itself, the Criterion, will indeed establish a standard by which the systems of the late 70's and early 80's will be judged. From a technological point of view, it is clearly the system to beat.

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However, the Criterion should not be considered separately. Superior technology, no matter how attractive, does not sell systems. Solutions to problems sell systems. In this regard, the Criterion is only a part - an attractive and important part - of the solution-oriented NCR marketing effort.

The exciting point about the Criterion is that it brings its highly attractive and highly marketable combination of features to an already existing, total systems offering, an offering that is based on our knowledge of the customer's operations and problems; an offering that is based on a comprehensive library of proven applications that address those problems; based on our ability to talk the customer's language, our ability to support and maintain the system, and our commitment to compatibility and the development of better ways of doing things.

Consider, for example, an order for a Criterion that crossed my desk last week. This was from a leading manufacturer of computer peripheral equipment, an IBM System 3 Model 10 user which had outgrown the system. As you know, converting from the System 3 to an IBM 370 system involves a good deal of work. In the eyes of the user, it would be just as easy to convert to another vendor's equipment as it would be to stay with IBM.

To solve their problem, they looked at a full range of competing equipment.

For example, they said they looked at the new DEC system. One officer told me it was a highly attractive system from a price-performance point of view. But, he said, they did not have the application programs. The Criterion, on the other hand, has a complete series of modular, manufacturing-oriented application programs, mature, proven, seasoned programs that can be implemented immediately.

Other vendors, he said, spoke in general systems terms. Our industry specialist, a man who spends all his time in the manufacturing sector, however, talked about production scheduling, about inventory material requirements, sales forecasting - topics that struck a responsive chord, displaying a knowledge of the industry that to this very sophisticated customer was far more impressive than the technology of the Criterion.

The customer's summary of the selection process ran something like this.

Before they had heard NCR's initial presentation, we were number seven on their list. After they had been introduced to the Criterion, we moved up to the top three. After they had seen our application programs, we were number one.

This sale not only serves to illustrate the impact of selling total systems with full service support, but the impact of the vocationalization effort. Our salesmen are now more knowledgeable about the needs of the customer and NCR total systems to solve problems; they are more mature from an industry and a system point of view, and they will be more successful.

So yes, the Criterion is a highly attractive piece of gear, but it is only when it is considered within the context of the complete NCR marketing effort that its true potential can be judged.

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That total marketing effort includes industry specific programs, and extensive support and maintenance capabilities. Within that context, the Criterion's combination of better performance, attractive price, and compatibility, plus our service and support capabilities will enable us to offer more to our current user base and enable us to add new users to that base.

Our approach to the current NCR user base, which includes over 5,000 Century system users, emphasizes compatibility.

Most existing files, application programs and peripherals can be used without modification on the Criterion. As a virtual Century machine, the Criterion runs existing Century programs faster and more efficiently. For example, in our pilot installation at Dart Warehouse Corporation, a leading Los Angeles based distribution services firm, installation of a Criterion processor resulted in a 16-23 percent increase in throughput. They are using the same programs and same peripherals, but they are getting more performance.

Improvements in throughput will, of course, depend on the nature of the current system. If the current system is peripheral bound, for example, the improvement will not be as dramatic as the increase experienced in a CPU oriented application.

Our goal is to make the transition to the new system as smooth as possible.

To accomplish this, it is our policy not to release new hardware and new software together. In doing this, we will first prove to the user that the hardware does what we say it will do; we will give the user experience with the system and then the user will have the option of moving into newer, more sophisticated environments such as virtual storage and the COBOL Virtual Machine at his convenience.

A smooth transition for the user also means a smooth transition for NCR. It is a more manageable and a more profitable approach because it obviates many of the growing pains that normally accrue to both user and vendor when too much that is new is released at one time.

Our strategy for the current user of NCR equipment also stresses the Criterion's ability to grow in small modular increments and its flexibility to accommodate change. Criterion is a forward looking system which nicely matches the needs of an industry that is moving more deeply into distributed processing, on-line processing and data base management systems.

Reliability is rarely mentioned in a sales presentation. It is usually assumed that one computer is as reliable as another. However, a very strong selling point for the Criterion in any communications-based environment is its reliability. Most hardware failures are mechanical connection failures such as cables and plugs. Through the use of high density circuits and packaging, the number of connections has been dramatically reduced resulting in extremely high reliability.

In addition, the Criterion automatically runs comprehensive system diagnostic tests at the start of day, the time when most failures occur. An added level of protection is provided through the use of remote diagnostic techniques which can enable an engineer

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here in Rancho Bernardo to actually operate and test a Criterion anywhere in the United States.

As communications based systems move into vital areas of the customer's operations, up-time is no longer simply a percentage figure, it is an absolute necessity.

Up-time for on-line systems in hospitals for example must be 100 percent.

Our MEDICS 'systems requires twin Century processors so that one is available for back-up. The reliability of the Criterion is such that it may eliminate the need for a back-up processor.

What the Criterion can mean to a current NCR user can perhaps be best illustrated by reviewing one of the first Criterion orders we received from a hospital. St. Anthony's is one of the largest hospitals in Denver. It is a twin campus, 700-bed facility, employing about 2,800. You may recall that its "Flight for Life" helicopter rescue unit received national attention earlier this year for its role in evacuating victims of a gondola car accident at a Colorado ski resort.

The hospital has been using a Century 200 system and is currently operating two full shifts a day in their EDP center. They are running a full complement of NCR batch hospital application programs.

The Criterion 8570 that they have ordered will triple their processing power with a cost increase of only 60 percent. They will be able to cut back to a single shift and they will be able to add new applications including on-line capabilities using NCR terminals. They will be able to run existing programs with modification, they will have gained added power, and in the Criterion's features, they will have a foot in the future so that at their option they can grow into some of the more powerful processing techniques. The hospital, for example, is now in a position to realistically consider our MEDICS on-line communications systems. This would not only increase our computer revenues, it would mean additional sales of approximately 100 terminals that would be needed by a hospital the size of St. Anthony's.

It is that type of situation, plus the combination of very strong product, software and support features that we believe will enable the Criterion to play a major role in first retaining and then expanding our current user base.

We believe that NCR's commitment to compatibility is just as appealing to non-NCR users as it is to our own user base.

For example, the approximately 20,000 users of IBM System 3 Model 10 and 15 systems face several upgrading problems if they wish to grow into larger IBM Systems. They are not compatible. It means that it is just as easy for them to convert to Criterion as it is to stay with IBM - only they get a better machine for their money, they get a continuing, proven commitment to compatibility and they get industry specific programs that address their specific problems.

To a certain extent, this upgrade problem exists with many other sites using other types of competing equipment. They have reached the end of the line with their systems and

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they are in the market for a more powerful system. They owe it to themselves to see what the Criterion is all about.

Another strong selling point for the Criterion is its ability to accommodate change. With the convenient and efficient internal transfer bus, growth and change are as simple as adding or replacing circuit boards. The flexibility inherent in firmware is also a warranty for the user that when new concepts are developed or new standards adopted, the Criterion can adapt to those changes, easily and inexpensively.

There is one more important general trend in EDP I would like to touch on before describing how the Criterion fits into each of our markets. That is the trend toward the rising cost of software. Many EDP sites are rapidly approaching, or have already reached the point where software costs are exceeding hardware costs as a percentage of their total budget.

How does NCR approach this challenge? First, in our selected markets, we have concentrated our resources on total systems development. We have the software. It is modular, which means that it can be implemented in stages, one part at a time. Each module complements and adds to other modules so that a group of modules comprise a closely integrated, total system with interaction between modules.

The existence of these programs and the way in which they are designed will constitute increasingly attractive selling points as the cost of software development for the user continues to accelerate. In this vein, the on-line program development feature of the Criterion is also very appealing. It means quick access to the system for compiling and debugging; it means sizeable reductions in the cost per line of coding.

One of the most gratifying developments with the Criterion has been the internal speeds we are getting in the COBOL virtual mode. The speeds on executions of standard mixtures of COBOL commands are comparable to those of super-class systems. This will mean fast compiles, fast execution, reduced program size and the facility for run time error checking.

This boils down to improved programmer efficiency and a generally higher level of productivity. It also points the direction for future software development at NCR. It means that as our applied software effort moves more and more toward COBOL, we will be moving into an environment in which we have a very strong competitive edge. I should note here that the Criterion in no way constitutes an across the board, frontal assault on every other computer system in existence.

Under our vocational organization, we have chosen not to be all things to all people. We have chosen to concentrate our resources on select markets. These are markets to which we can bring something unique, a combination of things no one else can match. In these select markets, which are some of the most rapidly growing in the EDP industry, we do offer a total system approach. In retailing, for example, the Criterion represents a significant enhancement to our total systems effort. That effort includes the more traditional EDP role as well as the merging communications based POS systems.

The Criterion, with a front-end communications processor, can act as the application controller for the NCR Online Retail Credit Authorization and Communications System

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which controls the granting of all credit sales and monitors and supervises the credit collection function.

Distributed processing, requiring both the communications and data base capabilities of the Criterion is also coming into its own in retailing. An example of this type of application is our Purchase Order Management System now under development. It is designed to control the retailer's most critical asset - his inventory. It will control the movement of merchandise from the time a purchase order is written by a store until that merchandise is finally sold.

As you will be hearing from Mr. Ben-Yehuda in a few moments, NCR is very much in the data communications business, particularly in the network control business. The Criterion is ideally suited to serve as the central application controlling device in such large networks.

One of the most significant advantages that the Criterion can bring to these communication's applications is its reliability.

In many cases the system will be interacting directly with the customer at the point of sale. It will not only record and process data - it will participate in the actual event, speeding the transaction. The retailer's primary concern in going to these new systems is reliability. There is very little margin in the retailer's mind for downtime on a busy Saturday sale day. The reliability features mentioned earlier will have a strong appeal for the retailer.

Trends in NCR's second major market, the financial services industry, also demand a highly efficient, powerful system with extensive data base and communications capabilities.

The financial services industry is becoming more competitive, as both commercial banks and thrift institutions vie for the individual customer's deposit funds. One means to attract these funds is through offering a greater variety of services - in effect bringing customers and their deposits closer together through the convenience of electronic funds transfer systems. At the basis of all these new electronic services is a data base management system. Through its Central Information File System for commercial banks, and its on-line real-time loan and savings systems for the thrift industry, NCR has pioneered such concepts.

The Criterion offers compatibility with these programs, which represent a tremendous investment on the part of financial institutions. And for the new NCR user, the Criterion can provide an immediate entry into EFT with ready and proven industry application software.

As part of a complete systems philosophy, Criterion uses the full range of NCR financial terminals, including the newly released Modular Terminal System - a microprocessor based transaction processing system that ranks second in importance only to the Criterion in terms of important new products we will be releasing this year.

Given my review of the CI/MEG markets earlier, there is no need to discuss the advantages the Criterion lends these markets, except to emphasize that the Criterion release could not have been timed more opportunely. It caps several years of intensive

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software systems development, which has provided NCR with a complete family of manufacturing applications; the finest series of application programs for wholesale distributors in the industry; a strong position in the healthcare field; leading edge installations in the transportation field, comprehensive recordkeeping and instructional systems for educators, and carefully tailored systems for governmental agencies and municipalities.

If anything, I believe we may have underestimated the appeal of the Criterion as a machine. We knew it would be good, we knew it would be a highly attractive piece of equipment; but the reaction to date, the interest and excitement both inside and outside the company has exceeded our expectations.

Speaking as a salesman, what the Criterion gives us in a very powerful one-two punch: an exciting new system, backed by a total systems effort.

I cannot help but think that we will be seeing a pattern develop along the lines of those specific Criterion orders I mentioned earlier.

No one thinking about a computer can ignore a 56 nanosecond processor, ECL, MOS memory, bus architecture, firmware, COBOL Virtual Machine, compatibility, on-line program development or diagnostics. The combination is just too powerful a drawing card.

It establishes a highly favourable presence, a more willing and receptive ear:

- and then we begin talking about the customer's problems in a language he understands,
- about solutions to problems, that he may have just left sitting on top of his desk,
- about industry applications that address these problems, applications that are on the shelf, proven at hundreds of sites, ready to be quickly and economically implemented,
- about 20,000 field engineers - one in every four NCR employees to service and maintain his equipment,
- about a highly sophisticated communications capability,
- about an R&D budget that has doubled in the last five years and will double again by 1980.

That approach is working today and it will continue to work - to the extent that I believe that upward adjustments in our forecasts are going to become a way of life.

Much of what I have discussed has either implied or explicitly mentioned data communications as an important part of our future.

It is my pleasure to introduce Mr. Ben-Yehuda, General Manager, Special Systems Division, who will offer you an insight into our activities in this area.