September 24, 1985

Mr. Sterling Williams
Sterling Software, Inc.
8080 N. Central Expressway
Suite 1140, LBS 3
Dallas, Texas 75206-1895

Dear Sterling:

Enclosed is the completed report that you asked us to prepare
covering the financial valuation of all of the acquired Informatics
Software products. The key findings are summarized in the
Executive Summary and detailed analysis and support materials are
included in the report. BGAI has additional information in its
files that was submitted by Informatics in support of the
assessment procedures.

The financial valuation has been performed in accordance with
guidelines from Sterling Software and Arthur Young & Co.
specifically related to cost of money calculations and amortization
rules.

The work enclosed represents the best judgment of BGAI and its
Associates based substantially on information provided by
Informatics regarding product history, status, plans and previous
financial results.

If you have further questions regarding interpretation or analysis
of these findings, please contact me directly. Please thank the
key people at Informatics for their generous cooperation in spite
of their extremely busy time schedules. Without their help, the
work could not have been done on schedule.

Sincerely,
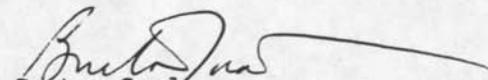
Burton Grad

BG:221B
cc: Phil Moore
    Don Morris
    George Ellis
    Elizabeth Virgo

Informatics Products

VALUATION REPORT

Prepared for: Sterling Software, Inc.
8080 N. Central Expressway
Suite 1140
Dallas, TX 75206

Prepared by: Burton Grad Associates, Inc.
570 Taxter Road
Elmsford, NY 10523

                            Burton Grad
                            Elizabeth Virgo
                            Art Kranzley
                            Mike Marcus
                            Mike Uretsky

Date: September 20, 1985

Table of Contents

Executive Summary

<u>ATTACHMENTS</u> : Financial Analysis Report

Attachments are arranged by product or product family.
Each includes the following items as applicable:

- projected financial summary
- maintenance analysis
- product valuation
- maintenance valuation

1. Mark IV
2. Mark V
3. ANSWER/PR
4. ANSWER/IR
5. ANSWER/EXTRACTOR
6. ANSWER/Micro
8. Shrink
9. Smart DASD
10. LTMS
11. Word Processing
12. Accounting Pro
13. Property Pro
16. Examiner
17. Group-Comm
19. CIMS
22. Systems for Retailing
23. Systems for Distribution
25. Composition System V

EXECUTIVE SUMMARY

Informatics has a wide ranging set of software products which it
has developed over many years and sells into a variety of markets.
In some cases, these products are sold on a standalone basis; in
other cases, they are sold in conjunction with computer hardware.
Since the BGAI assignment was to produce a software valuation, it
was necessary to separate the packaged software component from all
other offerings. Therefore, we specifically excluded all
professional services activity, whether independent or in support
of software products, excluded all equipment sales and eliminated
all processing services activities.

We included all international revenues for the software products at
full revenue figures. We adjusted for the differences in
profitability through the computed profit margins.

Based on our operating definition, we included only those software
products which are currently being actively marketed and for which
we could foresee a significant number of new unit sales over the
next five years. This also meant excluding those "products" which
were customized prior to delivery (e.g., they did not represent a
package sale) or those which were not yet ready for delivery to
clients.

Furthermore, we have constructed the forecast for each product
assuming no inflation (or deflation) over the valuation period and
not incorporating the development of replacement products to extend
the life of the offerings in a particular marketplace. We have
recognized this assumption from the cost side by reducing the
development cost where appropriate, particularly in the latter
years of the product's active marketing life.

In the maintenance projections, we took into consideration a
sharply lower marketing and sales expense as well as a decline in
development cost as the product goes into a maintenance only cycle.

In constructing the profit margins to be used for each product, we
examined historic data, but also included consideration of specific
changes which have been announced by Sterling and those industry
trends which are applicable.

After looking at each of the products which remained to be valued,
and given the fact that each of them was in an active marketing
status including support of product functionality and currency, we
have used a five-year active marketing life for each and an
eight-year active maintenance life. This seems reasonable based on
extensive industry experience and the nature of the markets being
served.

A number of the eighteen product areas which were valued consisted
of multiple programs or related products. We consolidated these
products as noted in the text and adjusted for this consolidation
through adjusting the effective prices for the products.

For each product we prepared a unit forecast for new sales and a
separate forecast for maintenance-years. These unit figures were
multiplied by the applicable prices to produce product and
maintenance revenues. Next, each of these figures were multiplied
by the projected profit margin (for each year) to obtain pre tax
profit. After an iterative process using assigned cost of money
figures, we determined the effective asset value over the economic
life for products and maintenance.

The net result of these calculations shows a net present value of
the assets acquired as follows:

Product	$15,102,000
Maintenenace	17,745,000
TOTAL	$32,847,000

SECTION I. OVERVIEW

A.   Objectives

As of August 7, 1985, Sterling Software, Inc. (Sterling) has
acquired Informatics General Corporation (Informatics), a data
processing professional services, software products and turnkey
systems company headquartered in Woodland Hills, California.

As part of the purchase, Sterling acquired various software
products some of which had not been previously recorded as assets.
However, these items represent significant asset values if disposed
of to a third party or acquired independently in the marketplace.
There are a number of individual products involved, each of which
has to be separately examined.

Burton Grad Associates, Inc. (BGAI) has been requested to use its
experience in performing product and asset valuations to prepare a
report establishing the current capitalizable value and economic
life for each of these Informatics assets.

B. Consultants

Burton Grad, president of BGAI, has been providing strategic
planning and new business consulting to software products
companies during the past seven years after his eighteen years
as IBM's Director of Development for software products. He
was responsible for organizing the procedures to be followed
in this study and for establishing the valuation criteria to
be used. He was also responsible for estimating the useful
life and the marketability of the products. Lastly, he edited
and produced the final report. His biography is in Appendix
A-1.

Elizabeth Virgo, an economist with twenty years of experience
in management consultancy, with emphasis on financial and
marketing analyses and studies, was reponsible for the
detailed financial analyses underlying this report and the
calculations for revenue, cost and net present value. Her
biography is in Appendix A-2.

In addition, other consultants were used in specific business
areas to review product history, market opportunity and
operating costs so as to prepare initial product forecasts for
unit sales, revenues, and profits covering new sales, upgrades
or feature sales and maintenance contract renewals.

- Art Kranzley analyzed the Distribution products; his
  biography is in Appendix A-3.

- Mike Marcus analyzed selected Corporate Systems products
  along with the Legal and Publishing products; his
  biography is in Appendix A-4.

- Mike Uretsky assisted in the analysis of the Business
  Management products; his biography is in Appendix A-5.

C. Valuation Methodology

To determine the value of the software products, it was
decided to project the pre-tax earnings stream for each from
new product sales and separately for maintenance contract
renewals. From these profit projections, net present values
and predictable economic lives were established.

For the product valuations, there were five primary steps
involved in creating a net present value of the profit streams
generated by each:

1. Establish the Available Market Opportunity

    Discussions were held regarding the current and future
    market opportunity for the products as acquired. Other
    independent sources were also contacted and data and
    trends obtained. Competitive products were reviewed in
    terms of their penetration of the existing and likely
    future markets.

2. Prepare Product Unit Forecasts

    Using management information and financial records as a
    basis, the sales history of the product or product family
    was examined. Maintenance history was obtained. Analyses
    were subdivided as needed by individual programs or
    features within a product or product family, by U.S.
    versus international sales, and software was
    differentiated from related hardware or associated
    services revenues.

    From this work, a profile of the Informatics product sales
    and maintenance renewals was built and used as a basis for
    forecasting. This was overlaid with the data derived from
    the market opportunity analysis to make realistic but
    conservative future sales unit projections. Forecasts on
    maintenance years were then made, using the product unit
    forecast, the relevant historic data and the probable
    ratio of those customers buying a package who would take
    (and continue) maintenance.

3. Estimate Revenue

    Historic and current prices were assessed and, where
    different prices existed (e.g. U.S. versus international,
    by number of terminals, by type of computer or operating
    system), a weighted price was calculated to reflect the
    different licensing arrangements. Historic and expected
    discounts for multiple system, site or product licenses
    were examined and incorporated in the projected price.
    Maintenance year prices were calculated separately.
    Revenue streams for each revenue source were then computed
    for the expected economic life.

4. Project Operation Costs and Pre-Tax Profits

    The company's management and financial accounts were
    examined to analyze historic costs and then projections
    made for future costs in the light of industry experience
    and historic company patterns. Consideration was given to
    specific changes in cost structures for the various
    divisions and for the Corporation as a whole. Another
    major factor was the reduction in development and
    maintenance cost as the product comes to the end of its

marketable life. Adjustments were then made to reflect
the radically reduced marketing and sales expenses when
the new sales stop and the product revenues are all from
maintenance renewals.

5. Compute Net Present Value After Tax Liability

These calculations are based on the use of a 9.2%
after-tax cost of money for the first five years and a
7.9% rate for the sixth through eighth years, adjusted to
the investment being made at the midpoint of each year.
The figure selected was based on an analysis by Sterling's
auditors of the effective cost of obtaining the funds
needed to acquire Informatics and then deducting the
perceived inflation rates. This constitutes a reasonable
approach to the cost of money since we are using constant
1985 dollars in all revenue projections and, therefore,
excluding the effects of inflation.

The marketable economic life for each product was
analyzed, based on the market opportunity, sales history
and experience, product currency, competition and expected
technological developments. Since Informatics has been
spending substantial money to maintain product currency,
all products have a similar new sales and maintenance
life.

The NPV calculations were made based on projected profits
considering the tax benefit over the projected revenue
period. Net present value and hence amortizable asset
value were projected separately over the economic life for
new product sales and for maintenance renewals.

Section II.   Informatics Operations

The following notes describe Informatics as it was prior to the
acquisition by Sterling.

Informatics is one of the seven largest independent software
companies in the United States. It develops, markets and maintains
industry specific applications and systems software and provides
professional software services. Informatics markets its products
and services through a 105 person sales force located in 45
domestic offices and 13 offices abroad. To augment its marketing
effort, the company also utilizes 84 independent sales agents and
distributors.

Informatics has acquired several small software companies over the
past few years. It has maintained these operations as independent
units operating under the acquired management and compensated such
management in accordance with their unit's contribution to
earnings. Accordingly, the units have retained their employees and
maintained an entrepreneurial environment.

Informatics has experienced good growth during the last five
years. For the five year period ended December 31, 1984, the
Company's revenues have grown from $100.7 to $187.6 million and
operating income has grown from $8.0 million to $14.4 million.
Informatics has a solid balance sheet, with over $90.0 million of
equity, no long-term debt and over $10.0 million in cash.

Informatics was organized in 1962 as a subsidiary of Data Products
Corporation. Subsequently, it became a subsidiary of The Equitable
Life Assurance Society. In 1980, Equitable sold its interest in
the common stock of Informatics pursuant to a public offering.
Informatics maintains its executive offices in Woodland Hills,
California.

Applications Software

Informatics is a leading provider of software systems to several
industry markets including the legal, public accounting, property
management, retail, distribution, construction and group insurance
industries:

    •   Legal Informations Systems. Informatics is the leading
        provider of legal office automation software. It offers
        office automation software for financial accounting, word
        processing, time-keeping, billing, document indexing and
        information retrieval. Informatics markets turnkey
        systems that operate on a full range of Wang
        minicomputers. Informatics has installed over 220
        systems, more than twice that of its next largest
        competitor, and provides systems and services to 140 of
        the top 300 law firms in the United States. A typical
        system sells for $120,000.

Because of its advanced word processing systems, Wang holds a leading position in the office automation market and is installed in the majority of law firms nationwide. IBM has not been a major factor in this market to date. Informatics is the largest value added reseller of Wang equipment in the United States and benefits from the maximum discount offered by Wang.

- <u>Distribution and Retail Systems</u>. Informatics markets software systems to the distribution and retail industry. These systems are for inventory control, goods movement tracking and business management.

- <u>Business Management Systems</u>. The business management systems group includes the following segments:

    Public Accounting - Informatics is the leading supplier of software to public accounting firms to assist them in managing and providing accounting services to their clients. These products include general ledger and related reporting software, tax accounting practice management and auditing worksheets. Software is designed to work on IBM microcomputers and minicomputers. The installed base of public accounting firms is over 6,000.

    Property Management - Informatics is also the leading software supplier to property managers, a new and emerging market. The company licenses Property Pro to commercial and residential property managers. This product was introduced in 1983 and is currently installed in about 400 customer sites.

    Construction - Informatics recently acquired a series of software systems for the construction industry called The Power Tools. This full range of software products provide management and control reports tailored especially for contractors and developers.

<u>Systems Software</u>

Systems software is used to increase the efficiency of a computer system or the productivity of programmers. Informatics develops, markets and supports proprietary software systems for large organizations worldwide. Products include the following:

    Mark IV - This product is one of the most successful software products of all time with revenues of over $100 million. MARK IV has been installed throughout the world in over 3,000 computer centers. MARK IV increases programmer productivity by automatically performing certain common program functions and reduces the level of expertise required to develop certain complex program functions. Mark V provides a higher performance product with certain additional language capabilities.

Answer/DB - Answer products link microcomputers to mainframes to extract information residing in the mainframe computer. The Answer/Micro series works with popular programs such as dBase II and Lotus 1-2-3 so that users can manipulate the data retrieved.

Resource Management - Shrink and Smart/DASD products improve the utilization of direct access devices (disk drives) by compressing the information to be stored and by determining the optimum placement of data.

Informatics also has substantial professional services operations in both the commercial and government marketplace. These areas have not been considered in this report since they do not market software products.

For convenience, each of the significant product areas is described within its operating business unit. The reference numbers relate to the attachments which are coded to individual products or product families.

A. Corporate Systems Products

1 and 2. Mark IV and Mark V

Purpose - Mark IV is a general purpose software system for the design, implementation and operation of data processing applications. Designed as an adjunct or alternative to COBOL or PL/1, it enhances programmer productivity by cutting development and maintenance cost by 60%-90%. Its extensive use of automatic functions and complete data independence have made it a standard language in many installations. Mark V is a non- procedural language compiler for developing IMS/DB or DL/1 applications. Designed as an alternative to conventional programming languages, Mark V allows the data processing professional to realize significant productivity gains in the development and maintenance of major high volume production IMS/DC and CICS applications. These products greatly reduce the need for IMS and CICS programming skills.

Development History and Ownership - The Mark IV product was built starting in about 1965 and has grown through ten major revisions to today's offering. Parts of the Mark IV engine are used in the Answer/Extractor product. Mark V was also an internally developed product begun in 1978 and completed in 1982.

Installation and Sales History - Mark IV has been on the marketplace for nineteen years and was one of the first non-procedural languages and application development tools. Most new sales come primarily from multiple site licenses to existing customers. Mark V has sold several hundred copies. It has been most successful in its IMS/DC versions, selling with the IBM IMS Data Base System. The CICS version of this product has a host of competitors including Oxford, Cincom, IBM, Pansophic and others.

Environments - Mark IV runs in all major IBM environments including DOS/VSE, VM/CMS, TSO, MVS, CICS and IMS/DC. Mark V runs only under the IMS/DC and CICS systems.

Technical Considerations - Both Mark IV and Mark V run only on IBM and IBM compatible operating systems. They tend to be sold to medium and large installations rather than to the smaller 4300 computer sites.

Support Available - The recent acquisition of SSI, a professional services firm which specializes in generating Mark IV and Mark V applications programs, has expanded the amount of support available from Informatics. Informatics offers a full range of consulting, professional, and educational services with hotline service available twelve hours per day.

Dependencies on Other Products/Training - Mark IV and Mark V are dependent upon the standard IBM software systems. They require significant training because they are different languages from COBOL, Assembler or other computer languages.

Market - The number of new IBM 4300 and up sized computer sites continues to expand at a 10% annual rate. IMS data base systems growth appears to be quite low, thus limiting the sales potential for Mark V/IMS. The CICS version of Mark V has a larger marketplace, perhaps some 12,000 sites worldwide. However, this is a very competitive market.

Sales Strategy - Current sales tactics are to identify locations with application development needs and sell them a package of professional services and the use of Informatics' tools. In addition, the current maintenance base is being protected by increased services, education and attention. The intent of this division is to keep the maintenance base for as long as possible while continuing a limited increase in new sites.

Sales Terms and Conditions - The Mark IV product sells for $40,000-$120,000 for a first site installation. Mark V CICS sells for $18,000-$45,000; Mark V IMS for $60,000-$150,000. Maintenance fees range from 10%-15% of the current purchase price.

Competition - Mark IV competition comes from report writers, most particularly Pansophic's Easytrieve system and Sterling's Dylakor. Mark IV has always been a top of the line, full-featured and full-priced system. As a result, Informatics has captured a large number of the big, sophisticated users. Pansophic and other report writers sell simplicity and are more successful in smaller installations. Pansophic's Easytrieve system has 6,000 or more users. Mark V competes against a number of other program generation tools. Each of the data base vendors has its own set of development tools that compete very effectively against Mark V when that particular vendor's data base is used. Cullinet's ADS On-line and Software AG's Natural product do very well with their own data base customers. ADR's Ideal system and Cincom's Mantis sell well into their data base user sites. Other competition for Mark V in the CICS arena comes from Oxford Systems' UFO and Pansophic's OWL. Competition for new product sales is very intense and is becoming even more difficult because of high market penetration.

Forecast/Directions - Informatics is perceived to have a relatively weak position in new sales of 4th generation application development tools. While it has a large customer base, it is believed to be behind competition on technical grounds. Because of this, it is likely that the new sales of these products will continue to decline.

Organization - Through a recent reorganization, the Mark
IV/Mark V product lines have been separated from the Answer
Series. There is now a general manager in place who manages
his own sales, development and marketing teams.

International - The international operation for Corporate
Systems Products sells products into 44 countries. In most
areas, dealers or agents are used; however, the company
maintains direct sales offices in the U.K., France, Germany,
Japan and Brazil. Total revenues from international sales
products approximate $10 million per year.

Informatics considers International to be a stronger performer
than the domestic sales team with the capacity to take on more
products and effectively sell them. Products are sold from
both the Mark and the Answer divisions and compensation is
received in the form of internal royalties by each of those
two divisions. While the profitability of the International
operations has varied, development, marketing and divisional
overheads are covered.

3,4,5 and 6.   Answer/PR, Answer/IR, Answer/Extractor
                and Answer/Micro

Purpose - Answer/PR is an on-line reporter system and
Answer/IR is an inquiry system which allow users to enter
their own natural language report statements at a terminal and
generate reports or obtain information interactively in both
an on-line and a batch mode. These tools are also used by
programmers to do simple and complex batch reporting.

The Answer series also includes micro/mainframe products which
provide a connection between the user at his microcomputer and
the corporate data bases. This tool will interface
automatically with a wide range of personal computer
productivity tools including Lotus 1-2-3, Symphony, dBase,
Framework and VisiCalc. It allows a user with no knowledge of
data processing or file structures to access shared corporate
data bases and retrieve necessary information.

Development History and Ownership - The original Answer was a
report writer built using the base engine of Mark IV. It was
developed to compete with Pansophic's Easytrieve system.
After its original announcement, Answer then moved to an
updated version called Answer/DB which was recently split into
separate reporter and inquiry systems. The Answer/Extractor
product was announced in September 1983. However, it did not
have enough functions to sell successfully until mid-1984. It
was built internally using part of the Mark IV engine as its
data extraction tool. Accompanying the mainframe product were
specific Answer/Micro products.

Installation and Sales History - Answer/DB and its predecessor
Answer 2 have sold 300-400 copies each. Answer/DB first was
first delivered in 1980-1981. The Answer/Extractor product,
though announced and available in 1983, was not sellable until
March of 1984. Since that time, 125-130 host link products
have been sold as well as several thousand micro products.

Environments - The Answer series runs under IBM DOS/VSE and
OS/MVS operating systems and covers such communications
monitors as IMS/DC, CICS and TSO.

Support Available - Product training is given as a part of the
purchase price. Hotline support is available for all products
and professional services are available through the SSI
Division.

Market - Informatics has historically sold to the MVS operating systems with larger users. It has not been very successful penetrating the DOS marketplace. The MVS site marketplace is growing at 10% per year, making dramatic revenue expansion difficult. Competition is very intense and increasing every year.

Sales Strategy - The division has been reorganizaed recently and separated from the Mark series. It is expected that this concentration will cause a sharper focus on sales. Informatics believes that the communications link marketplace will be a very rapidly growing one and will provide an opportunity to build a substantial installation base.

Sales Terms and Conditions - The Answer products sell for $30,000 to $60,000 depending on the operating system it supports and the various options included. The product is offered for purchase or under a financial lease. The Answer/Extractor product sells for $25,000 per site and the micro products like Lotus/Answer or dBASE/Answer sell for $400-$700 per copy depending upon quantity discounts.

Competition - The Answer/DB reporter and inquiry line competes with Easytrieve, OWL On-Line, Dylakor and other report generators. Competition has been significantly more successful in selling units to the low end of the market. The communications products compete with On-Line Software International's Omnilink and the products of several smaller companies. Cullinet has twice announced a universal link product; it has yet to deliver one, however.

Organization - The Answer series products are managed by a general manager. Underneath him is a sales team, marketing team and product development team in a parallel structure to the Mark division.

International - These products are also sold through the International division as are the Mark products.

8 and 9. Shrink and Smart/DASD

Purpose - Shrink is a program which is designed to save space on direct access storage devices by compressing data. Smart/DASD provides better management of search and store functions on direct access storage devices.

Development History and Ownership - Shrink is a product owned by an outside author which encrypts and compresses data to be stored in mass storage devices. It sells for $35,000-$50,000 and can easily save that amount in less than one year by reducing the need for disk drives in a large installation. There is one major competitor which sells for approximately one-half the price of Shrink. Its compression ratios, however, are not quite as good.

Smart/DASD, a product acquired in 1983, optimizes contention between disks. Its price is $15,000-$25,000 and has had limited success to date. It seems to be a good companion product to the Shrink offering.

Installation and Sales History - Shrink has always generated revenues in the several million dollar a year range and should be an excellent candidate for sales by a direct telephone sales force like SMM. The OS/IMS version has sold particularly well; the DOS version has not sold well and could be better exploited than it is.

Sales Strategy - The Shrink and Smart/DASD products are sold by both the Answer and Mark Sales forces. They are maintained and enhanced by the Answer Division.

B.   Legal Services

10 and 11.   Law Office Automation Products: LTMS and word
             processing

Purpose - Informatics offers a series of products which
automate financial and administrative functions and provide
word processing capabilities for law firms and legal
departments of large corporations. Offerings include turnkey
systems consisting of software, Wang hardware, and attendant
support services; just software and attendant support are
sometimes offered to clients who already have the requisite
computers.

Development History and Ownership - Informatics acquired
Professional Software Services (PSS), a privately held,
Phoenix, Arizona based firm, in 1981, which had developed and
marketed legal products.

Installation and Sales History - It is estimated that there
are currently 160 installations of these products, mostly in
the 500 largest law firms.

Functions - Financial:
- Time Management
- Billing
- Disbursements Interface
- Accounts Receivable
- Accounts Payable
- General Ledger
- Management Reporting

Administrative:
- Docket/Calendar Management
- Adverse Party (Conflict of Interest)

Word/Document Processing Facilities
(Enhancements to Wang word processing):
- Automatic Footnoting
- Repagination
- Page and Paragraph Numbering
- Automatic Document Backup
- Automatic Hyphenation
- Redlining

Environments - These products run under the standard (i.e.,
unmodified by Informatics) Wang VS operating system on models
45 through 300. A version was recently announced for the
Model 15. The products are compatible with Wangnet and can
operate in conjunction with other application software
provided by Wang or third parties.

<u>Technical Considerations</u> - COBOL (Wang Standard)

<u>Support</u> - Informatics provides consulting and training
services for installation and use of the software and
maintains its software. Wang supports the hardware.

<u>Dependencies</u> - The entire product line is obviously
dependent on Wang's hardware and on the system and
application software Wang provides. As a general rule,
application products that take advantage of Wang's screen
management and similar system software cannot be easily
ported to other environments without advanced preparation in
program design.

<u>The Market</u> - The market for Informatics legal office
products consists of three segments:
- Turnkey systems
- Software-only
- Hardware add-on

Most large legal organizations and many of the medium sized
ones already have computer systems on-site, most of which
are not so old as to be candidates for replacement. This
partially eliminates them as turnkey prospects in the near
term. Those with Wang computers are candidates for
software-only sales, particularly for the word/document
processing products.

Organizations that do not have computers will increasingly
be, as time goes on, smaller and smaller. Many of them will
have introduced the use of microcomputers, and a large
percentage of these will be of the IBM/PC type. Their
easiest migration path can be expected to be to larger,
compatible machines and networks of micros. Informatics'
prospects will, in many cases, be tied to how well Wang does
in the microcomputer field and its strength relative to IBM
in networking, communications and other specific issues that
potential clients will be anxious to address.

<u>Sales Strategy</u> - Informatics sells its products through a
dedicated sales force and takes advantage of opportunities
and exposure derived from its other legal products and
services.

Sales Terms and Conditions - Prices for the following software modules are based on the number of "timekeepers" in the organization as indicated below:

Software Module	1 - 45	46 - 90	Above 91
Timekeeping and Billing	$15,500	$29,000	$39,000
Disbursements Interface	6,000	8,000	10,000
Accounts Receivable	5,500	8,500	10,500
Accounts Payable	5,500	8,500	10,500
General Ledger	4,500	5,500	6,000
Extended General Ledger* (*not yet released)	7,500	12,500	20,000

The following modules are priced as indicated below:

Docket	$ 3,000
Adverse Party	3,500

The word/document processing enhancements are priced at $20,000 if purchased as a unit, but can be purchased in modules as follows:

Footnoting, page renumbering, paragraph numbering and other miscellaneous features	$5,000
Automatic document backup	5,000
Automatic hyphenation	5,000
Redlining	7,500

Competition - A recent survey of the legal market listed twelve competitors whose products, for the most part, offer comparable functions, among them: Alpine, using Digital Equipment hardware; Aptech, using Wang; Barrister, the largest, using Data General; Compute-R-Systems, using Digital Equipment; and Financial Software, using IBM 34/36. Many other competitors exist and their number can be expected to grow as microcomputers proliferate and increase in power.

Organization - The Legal Office Management Division is part of Legal Information Systems and Services, as is Litigation Management. The Division is headed by a General Manager, has approximately 100 people, and is headquartered in Phoenix. It has modern office facilities and Wang computers on-site for software development and maintenance.

C. Business Management

12. CPA Accounting - Accounting Pro

Purpose - To offer a full line of accounting and management
tools to help the CPA manage his practice and provide
accounting services for his clients.

Development History - These products were originally built for
the IBM System 3 and Burroughs systems and have migrated to
the System 34/36, System 23 and PC/XT. The product is owned
by Informatics and is in its seventh version.

Installation and Sales History - Informatics claims to have
over 6,000 CPA firms as clients of Accounting Pro. The
products sell from $2,400 to $7,500 on the PC/XT and cost
$9,000 to $20,000 for the System 36.

Functions - General Ledger, Accounts Payable, Accounts
Receivable, Inventory, Tax Accounting, Practice Management,
and Auditing Worksheet are offered. The products though
functionally rich are easy to use and install.

Environments - IBM Systems 3, 23, 34, 36 and PC/XT (or PC/AT).

Support Available - Products self install. Training is
available in the Atlanta offices. Customers have use of
toll-free support lines. No product modifications are offered
and supporting supplies - diskettes, W-2's, 1099 forms and
furniture - are available

Market - There are approximately 55,000 CPA firms in the
U.S.A. and Canada and about 40,000 independent public
accountants as well.

Sales Strategy - Products are sold by phone sales people aided
by seminars and advertising for lead generation. Dealers have
been used to supplement sales in areas of weak coverage.
Products install easily and can be self-demonstrated with
phone assistance from the sales person. A large customer base
makes reference selling easy.

Sales Terms & Conditions - A 30-day trial period is offered.
Payment is expected in advance.

Competition - Informatics dominates this marketplace and its
largest competitor, Digital Systems (UCCEL) is now out of
business. Other competitors including Timberline, Cyma, and
Basic 4 have sprung up. No one competitor has been a
significant threat for the last two to three years.

13. Property Management - Property Pro

Purpose - A set of accounting and business management products sold to support commercial and residential property managers.

Development History - The products were developed as an offshoot of the Accounting Pro Series, with as much as 75% of the code and documentation being identical. The products are owned by Informatics.

Installation and Sales History - The first products were delivered to customers in February-March of 1983. Informatics states that there are now 1,000 sites.

Functions - General Ledger, Accounts Payable, Accounts Receivable, Payroll, Rent Rolls, Cash Reconciliation, Deposits, Billing. The product also gives partnership and management reports.

Environments - IBM System 36 with a smaller system for a single apartment complex which runs on the PC/XT and performs Site Accounting, General Ledger, Accounts Payable and Payroll. A scaled-down version of the System 36 version of Property Pro for the IBM PC/XT will be available in the fourth quarter of 1985.

Market - There are about 100,000 potential clients for Property Pro. A large percentage of the market is represented by very small firms which are not yet educated as to the value of computers. Thus, a good deal of missionary selling will be required for the low end product.

Sales Strategy - Phone salespersons sell the product in a similar fashion to Accounting Pro.

Sales Terms & Conditions - The full System 36 sells for $26,000 but starts at under $10,000. The Tenant Management System on the PC runs from $2,750 to $7,500. All systems have a 30-day return policy.

Competition - There are a number of small product competitors and processing services vendors.

Organization - A phone sales team separate from accounting sells the product.

D.   Group Insurance

16.   The Examiner

Purpose - The Examiner is an on-line, real time claims
adjudication package running under CICS, written in Command
level COBOL and designed to run on IBM or IBM-compatible
mainframe hardware and software.

Development History - The Examiner was acquired by Informatics
in September 1983 through the purchase of Automated Health
Services. Informatics has invested heavily in development and
marketing this product in 1984-85.

Functions - The Examiner system keeps all calculations
consistent; therefore, claim costs are controlled because all
plan maximums and limits are automatically applied. On-line,
real time processing saves clerical time and reduces
processing errors. There is immediate access to accurate
information, the EOB messages reduce the number of inquiries,
and adjusters can handle a number of claims rapidly.

The Examiner uses supporting plan information to automate
claims processing. The plan information applies to all types
of coverages and with this information in The Examiner, staff
personnel can effectively perform all functions of claims
adjudication.

Market - The market for The Examiner is primarily insurance
companies and Third Party Administrators. The total market
for The Examiner could be as many as 4000 systems in the U.S.
with present penetration estimated at less than 500 systems.

Competition - Competition is becoming more aggressive and the
prices for the products marketed by the three main competitors
are being lowered to meet those of The Examiner:

*   Erisco -   over 50 sales in the past four years; a
                     mature and well respected claims and
                     adjudication system. Recently purchased by
                     Dun & Bradstreet and expected to become a
                     more significant competitor.

*   Dyer, Wells -   part of Information Science, this system
                     runs on Wang minicomputers. It has made
                     around 50 sales.

* ASA - customized systems typically costing $1 million or more for each. There are approximately 50 installations. They are constructing CAPS II which may be a more direct competitor of The Examiner and may be more aggressive in the smaller company marketplace.

Sales Strategy - The Examiner is expected to sell well in this environment for the next five years. This limit on new sales is based on two market forces which could impact by then:

- a change in machine environment as customers and potential customers will gradually move to mini and supermini computers from mainframes.
- changes in the nature and structure of benefit plans, requiring significant new programming.

A few international sales are expected to be made, but these have been assumed to be small and ignored (only two have been made so far).

Support - Maintenance plays an important role for The Examiner as it is critical for customers to maintain currency with legal and information requirements. Maintenance is forecast to continue past the point when no new sales are made. It will be offered free for the first year and then on an annual renewal basis.

Sales Terms and Conditions - The Examiner sells at a list price of $225,000. Multi product discounts are possible through sales linking this product with Group-Comm and The Casewriter ($350,000 from a total of individual prices of $530,000). However, this is not expected to occur often. Maintenance is priced at 12.5% of the current product price.

17. Group-Comm

Purpose - Group-Comm is an on-line software package that
automates and consolidates all areas of group insurance
administration including new business and policy maintenance,
billing and collection, and commission calculations and
reinsurance. Comprehensive reporting helps to plan and manage
the business.

History - Group-Comm was first sold in 1981 and then
reintroduced in 1983.

Functions - Group-Comm simplifies the payment reconciliation
and premium allocation by providing automatic calculations
from a simple payment process. When the premium is
successfully allocated it is then distributed for commission
calculation, experience is updated and accounting detail
reports are created.

Market - The market for Group-Comm is primarily insurance
companies and Third Party Administrators. The total market
for Group-Comm could be as many as 2,500 systems in the U.S.
with relatively low penetration at present.

Competition - Competition, when Group-Comm was first marketed,
was limited to a Prime hardware solution offered by Apex Data
Systems. Informatics expects that two major competitors will
come through in late 1986:

*   Erisco using the Logic Application Product
*   ASA's Cogena of Montreal product which is being translated
     from French to English

Sales Strategy - Group-Comm should continue to sell steadily
for the next five years. Sales techniques will have to change
based on two market forces:

*   A change in the way insurance companies and Third Party
     Administrators sell plans to companies
*   A change in the machine environment as customers and
     potential customers will gradually move to mini and
     supermini computers

A few international sales are expected (there have been two,
so far) but have been ignored in the calculations.

Support - Customers appear anxious to have their systems
maintained and 100% of all sales made have taken maintenance
service. This is expected to continue. Erosion has been
built in to reflect mergers, amalgamations and migration to
other hardware systems. The company offers maintenance free
for the first year and then on an annual renewal basis.

<u>Sales Terms and Conditions</u> - The Examiner sells at a list price of $225,000. Multi product discounts are possible through sales linking this product with Group-Comm and The Casewriter ($350,000 from a total of individual prices of $530,000). However, this is not expected to occur often. Maintenance has been priced at $20,000 a year.

19,20 and 21. CIMS - Stock and Bond Mortgage Loan

Purpose - The Stock and Bond products are sold to insurance
companies forthe purpose of keeping track of their portfolio
and making portfolio evaluations. Approximately 75 insurance
companies are currently clients and some new sales are made
each year. The older product line primarily lives on
maintenance and customer requested enhancements.

The new Securities product has not yet taken hold, but it is
expected to grow as prospects become more aware of the
business opportunities from this on-line product

The Mortgage Loan system keeps track of mortgage loans for
insurance companies. It's competitive with a product called
OSCAR but like Stock and Bond sells only a few systems each
year and primarily lives from maintenance and enhancements.

Stock and Bond - Functions, Environment and Installations -
CIMS: Stock and Bond completely automates insurance
investments: tracking market activity, maintaining the
investment portfolio, and performing the accounting
functions. Because the stock and bond information is entered
on-line, investment personnel spend less time recording the
acquisition and disposition of investment portfolios.

Features of CIMS:Stock and Bond

On-Line Edit/Inquiry - Keeps you up-to-date on investment
activity needed in the fast-changing securities market.

Multi-Company Portfolios - With today's frequent
acquisitions and mergers, the system handles multiple
company portfolios for greater productivity. The data
files are consolidated for each company within a single
processing cycle.

Portfolio Segmentation - The segmentation capability of
the system allows one to divide a portfolio based on such
things as line of business, product and/or location.

Pricing - The system ensures that stock and bond market
pricing is up-to-date and accurate.

Investment Reports - CIMS:Stock and Bond produces
investment management, accounting and data base management
reports.

As a subsidiary ledger, CIMS:Stock and Bond provides full
double entry accounting for each transaction and records
all security accounting transactions.

CIMS:Stock and Bond is run on an IBM mainframe or
IBM-compatible. There were 55 units sold (life to date)
as of June 30, 1985, with 18 currently on paid-for
maintenance.

<u>Securities - Functions, Environment and Installations</u> -
CIMS:Securities is on-line, real-time portfolio management,
improving control in accounting, investing and productivity.
The system manages even the most complex portfolio. Investors
processing stock options with CIMS:Securities are able to add
(open) and close puts, calls and straddle positions taken.
Because the system in on-line, investors have immediate use of
acquisition and diposition commitment information.

Features of CIMS:Securities

> <u>Portfolio Segmentation</u> - This feature supports complex
> reporting needs and provides more versatile portfolio
> management.

> <u>Asset Valuation</u> - CIMS:Securities accepts pricing from
> several services and others can easily be added. Pricing
> can be done on an individual security basis through an
> on-line prompted screen. Pricing history is easily
> maintained.

> <u>Current Inventory</u> - Investors enter commitment information
> once, eliminating re-entry when it is time to exercise the
> commitment. Investors can enter trades as "inventory
> only" items, leaving financial transactions for the
> accounting area.

> <u>Underlying Credit Information</u> - Gives you the ability to
> identify investment exposure in any one company.

CIMS:Securities is run on an IBM mainframe or IBM compatible.
There were 49 units sold (life to date) as of June 30, 1985,
with 46 units on maintenance as of June 30, 1985

<u>Mortgage Loan - Function, Environment and Installations</u> -
CIMS:Mortgage Loan is an on-line mortgage loan management and
accounting system. This is the only system specifically
designed for the insurance industry. It efficiently processes
commercial and farm loans, as well as conventional and
residential loans, and has many features to accommodate
different loan structures.

Features of CIMS:Mortgage Loan

> <u>Edit/Inquiry Capabilities</u> - CIMS:Mortgage Loan enables you
> to call up specific mortgage accounts and review and enter
> updates on-line. Mortgage activity can be viewed
> on-line. The current status of a portfolio is available
> by loan.

> <u>Asset Segmentation</u> - Investors can track the source of
> applied funds and interest rates. This information can be
> used for reporting purposes or future investment
> decisions.

IRS Reporting - CIMS:Mortgage Loan keep the investment department in compliance with the 1984 Tax Reform Act by producing the necessary information for this reporting requirement.

Escrow - CIMS:Mortgage Loan provides complete control over escrow funds.

Billing - A number of billing methods are available to accommodate special loan processing.

Repayment - In addition to the normal constant principal and interest installments, the system supports the more complex types of schedules.

CIMS:Mortgage Loan is run on an IBM mainframe or an IBM-compatible. There were 41 units sold (life to date) as of June 30, 1985, and 32 units on maintenance as of June 30, 1985.

Market - Insurance companies, banking industry, pension funds, money managers, state and government agencies. It is estimated that for these different products there are about 1000 to 1500 qualified customers/prospects with about 10-30% penetration.

Sales Strategy - Direct sales force and telemarketing.

Support - Professional services and processing services.

E.   Distribution

22. Systems for Retailing

Purpose - The Creative Data Systems products, SFR, provide a
full range of accounting and management computing for the
retail distributor. These applications run on a Wang VS
computer and are provided as a turnkey system.

Development History and Ownership - The SFR products came to
Informatics in the 1983 acquisition of Creative Data Systems.
The Distribution division which acquired Creative Data had
experience with distributors, but did not have the same kind
of understanding of the retail marketplace. It was,
therefore, decided in 1984 to integrate the SFD products with
Columbus leaving the retail products for development,
marketing and sales in Cleveland. The original management
team of Creative Data Systems is running this part of the
business.

Installation and Sales History - The SFR product came out of
an adaptation of the SFD product. The basic accounting
systems and management reports were modified to be more
effective in the retail environment; gradually over time, the
product is becoming less and less similar to SFD. Some 25-30
SFR systems have been installed today.

Functions - Systems for Retailing (SFR) is a product grouping
of application modules which is suitable for any retailer with
multiple stores (ideally from 6 to about 50 stores) but not
necessarily chains, with sales of $6 to $10 million. The
purchaser is likely to be a first time computer user. Retail
customers will usually be in ticket type retailing (clothes,
soft goods, etc.).

It is designed to provide home office capability in inventory
control, replenishment, point of sale collection, sales or
posting, accounts payable, accounts receivable and general
ledger. It is normally sold as a complete data processing
system to satisfy the needs of both merchant and financial
personnel in a retail chain. For example, inventory and sales
reporting can be in both units and dollars while vendor
replenishment is on a calendar basis.

SFR, an on-line system with associated batch functions, has
certain features which are attractive to the potential
customers:

*   Flexible sales reporting to allow the customer to specify
    his needs.

*   Daily flash reporting of store sales from eith POS data or
    through daily cash control reports and register totals.

- Facilities for interstore or central-to-store transfers.

- Store inventory ledgers can be produced on demand at a customer selected level.

- Easy comparison of stores' Profit and Loss performance through "side-by-side" operating statements.

- Multi-company, multi-division, multi-profit center support.

Environments - SFR runs on Wang VS equipment usually on a VS 90 or VS 100.

Support Available - Programming, education and consulting services are provided with these packages. The company's policy is to offer a maintenance contract to any new customer beginning six months after installation and normally running for one year. Maintenance covers enhancing the product to keep it current and competitive as well as correcting the product to fix deficiencies. It does not include any major new developments which could be separately priced.

Market - The number of potential customers for SFR products is large. The number of retail stores is shown below, broken by size of sales, excluding the specific SIC codes for stores, automotive dealers and gasoline service stations, eating and drinking places..

Number of Retail Establishments with Annual Sales of (M Dollars)

	$1-5	$5-10	$10-25	$25-50	Total
General Merchandise*	1,005	1,156	131	57	2,349
Building Materials,etc.**	6,086	477	152	44	6,741
Apparel/Accessory	3,047	265	131	32	3,475
Furniture, etc.***	7,793	514	216	60	8,583
Miscellaneous****	7,793	514	216	60	8,583

* Department store, variety store and miscellaneous general merchandise store.

** Hardware, garden supply stores; mobile home dealers.

*** Home furnishings and equipment stores.

**** Drug stores, proprietory, liquor and jewelry stores; mail order houses; fuel and ice dealers.

Source: International Data Corporation

The penetration of in-house systems was also measured and reported on in the International Data Corporation Report "Small System Use by Industry" published in December 1982. With the exception of the category Miscellaneous Retail (see footnote to the previous table for a more detailed definition), where the penetration was much higher in every size category, the patterns were very similar in each category of retailer type.

Penetration was much lower in the sales size of $1 to $5 million (4% to 6%) improving as the revenues by organization grew to $10 to $25 million (20% to 21%). This suggests sizeable market opportunities still exist (although some of the retailers may already be using computer based solutions supplied by service bureaus).

Miscellaneous Retail

	# with In-House System	Total # of Establish.	%**
Annual Sales ($M)			
$1 - $5	1,183	7,793	15.2
$5 - $10	113	514	22.0
$10 - $25	81	216	37.5
$25 - $50	30	60	50.0
	1,407	8,583	16.4

Specified Other Retail Organizations

	# with In-House System	Total # of Establish.	%**
Annual Sales ($M)			
$1 - $5	792	17,913	4.4
$5 - $10	284	2,410	11.8
$10 - $25	129	630	20.5
$25 - $50	52	193	26.9
	1,257	21,146	5.9

*   General merchandise, building materials, etc. apparel/accessory, furniture, etc. as defined in the footnote to the previous table.

**   Penetration

Once again, computer penetration is not as high as might be expected, given the attractiveness of applications such as order entry and inventory control. It is likely that this will be remedied over time as organizations endeavor to manage to greater levels of efficiency and cost effectiveness.

Retailers will also see a great many changes and developments in structure in the next decade. Chains have certainly grown historically at the expense of the small independent. This is the fast growth area at present, and already accounts for a sizeable proportion of retail sales and, in some cases, the majority of sales. As a chain grows, it generally changes from buying direct from manufacturers and local wholesalers to establishing its own distribution center. This should provide SFR with new market opportunities.

Sales Strategy - A separate sales team managed out of Cleveland and a group of dealers is used to sell this product line.

Sales Terms and Conditions - The price of an SFR system ranges between $150,000 and $450,000.

Competition - SFR's market has already been dominated by IBM hardware products and to a lesser extent by NCR and Burroughs hardware. In terms of software, the most important competitor is IBM itself, which has been marketing a comparable product developed by Island Pacific. It is believed that IBM now accounts for roughly half the installed systems in retailing. The balance of installed retailing systems is supplied by a wide range of sources -- turnkey houses, small systems houses, etc. There is not a clear second competitor. The SFR offering benefits in this competitive arena by the Wang relationship which provides a popular, accepted hardware solution which is typically less expensive than the IBM 36 and 38 competitive versions.

Organization - The SFR organization is run by one of the two original founders of Creative Data Systems. There is a small high energy team associated with him that should do well in this marketplace.

23. Systems for Distribution

Purpose - The systems provide general accounting and management functions to wholesale distributors. This particular offering is delivered in the form of turnkey on-site systems to augment its other offerings of remote timesharing and distributed data processing services.

Development History and Ownership - Distribution Division, originally known as Management Horizons, was acquired by Informatics from Citicorp in 1976. At that time, the division provided IBM mainframe-based processing for wholesale distributors. From 1981, a Honeywell Level 6-based distributed data processing was merged with the remote site processing capability. In 1983, a turnkey system to be used standalone in the client's installation was acquired. That company, Creative Data Systems, had products for both retail and wholesale distributors.

Installation and Sales History - There are 50-75 processing accounts still active on the Distribution IV system. Some 25-30 clients use a combination of Distribution IV and local Honeywell Level 6 hardware supported by Informatics. 40 to 50 clients are also using the Creative Data Systems SFD product which is now supported and sold by the Distribution Division.

Functions - Systems for Distribution (SFD) is a product grouping directed toward any distributor who has sales of less than $20 million or even larger distributors that still have manual operations. Typical customers will be in wallpaper, sporting goods, computer equipment, electrical supply and soft goods distribution.

SFD deals with the purchaseing of goods, receiving of goods, receiving customers' orders, back order control, invoicing, inventory control, sales reporting, accounts receivable, accounts payable, financial reporting, fixed assets, and payroll.

SFD, an on-line system with associated batch functions, has certain features which are attractive to the marketplace:

. It is oriented to solving business problems.

. Its ease of use allows quick installation and operation by non-DP personnel.

. New month processing can be carried out without the prior month having to be arbitrarily closed.

. It offers an Automatic Back Order subsystem

- It can consolidate for multiple companies, profit centers and warehouses.

- It has alpha look-up capability for both customers and items.

Written in modular form using primarily Wang VS COBOL, the programs are large. The SFD grouping includes 11 primary programs (accounts payable, general ledger, fixed assets, payroll, etc.) split into approximately 500 modules.

Environments - SFD executes on a Wang VS system. Smaller distributors can run on a Wang VS 45; most systems, however, are configured on a VS 90 or VS 100.

Support Available - Field installation support is provided with any of the sales of SFD. Programming services are available as well as consulting services to help advise the client as to the proper techniques of inventory control and scientific buying. The company's policy is to offer a maintenance contract to any new customer beginning six months after installation and normally running for one year. Maintenance covers enhancing the product to keep it current and competitive as well as correcting the product to fix deficiencies. It does not include any major new developments which could be separately priced.

Market - The number of potential customers for SFD products is quite large. It is believed that SFD is most effectively marketing to wholesalers with turnover under $20 million.

Merchant Wholesalers in 1977

Number of First With Sales of	Durable Goods	Non-Durable Goods	Total
Up to $2 million	113,123	69,038	182,161
$2 - $5 million	15,701	12,927	29,628
$5 - $10 million	5,238	5,686	10,924
$10 - $20 million	2,221	2,659	4,880
$20 million and over	1,528	2,050	3,578
	137,811	93,360	231,171

Source: U.S. Department of Commerce. 1977 Census of Wholesale Trade.

It has been suggested that a number of structural changes will take place in the wholesale distribution industry in the 1980s. A report was published in October, 1982, "Future Trends in Wholesale Distribution: A Time of Opportunity" by the Distribution Research and Education Foundation, in conjunction with Arthur Anderson. This report forecasts that:

- By 1990, the number of "small" wholesale distribution firms will decrease by 25% of their estimated number in 1980 to approximately 38% of the total number of companies.

- "Medium" companies are expected to increase significantly to approximately 32% of the total number of companies.

- "Large" companies will increase to approximately 30% of the total number of companies.

This report also states: "Technology will be a growth facilitator in the 1980s...The use of computer information systems and new telecommunication tools will enable wholesalers/distributors to achieve growth rates much greater than in the past. Many constraints of distance, human resources and physical space availability can be overcome through the use of these tools.

"Small Systems Use by Industry," a research report published in December, 1982, by International Data Corporation, provides information on the level of in-house system penetration in smaller-sized firms, including wholesalers.

This report confirms that the level of penetration of in-house systems is particularly low among the smaller-sized companies, which form the strongest market for SFD. The table below summarizes that data in the report (bearing in mind that some of those not using in-house systems are using a service bureau).

Wholesalers in Durable and Non-durable Goods in 1982

Annual Sales With Sales of	# with Installed In-House Systems	# of Establishments	Percentage Penetration
$1 - $5 million	6,815	78,999	8.6
$5 - $10 million	1,501	13,771	10.9
$10 - $25 million	1,358	7,173	18.9
$25 - $50 million	629	1,767	35.6
	10.303	101,710	10.1

The penetration is far lower than might have been expected, since the order entry and inventory control applications appear ideal for this industry. It is possible that the smaller firms in particular feel that at the present time they could not cost justify the purchase of a system. Once there is more packaged software available which will significantly lower the cost of a system, major inroads into this category can be made by a small systems manufacturer.

<u>Strategy</u> - Sales are accomplished through seminars and a field sales force that makes calls on and develops proposals for distributors. The Creative Data Systems product, SFD, has been integrated into the Columbus operation and is sold as a part of the total Distribution IV offerings.

<u>Sales Terms and Conditions</u> - Small users of Distribution IV on a remote processing basis pay as little as $1,500 to $2,000 a month processing and service fees. Larger customers run in the $35,000-$40,000 range. Distributors employing a mix of the distributed Honeywell system and mainframe processing will spend $200,000-$400,000 for Honeywell equipment and processing fees of a $5,000-$10,000 a month range. The SFD system, including Wang hardware, sells in the $125,000-$250,000 range. Software maintenance is provided for a yearly fee of 12%.

<u>Competition</u> - It seems reasonable to assume that SFD will be sold into a marketplace where in-house system penetration is relatively low at present and will undoubtedly increase. As costs rise, more retailers and wholesalers will use computerized controls to maximize profitability. The Wang relationship provides a popular and ubiquitous hardware component as an alternative solution to typically more expensive IBM systems.

SFD's main competition is from turnkey houses. In the case of larger systems, they are usually DEC or Hewlett Packard based. In smaller situations, there can be a multiplicity of software houses and other vendors. There are five to ten small companies in the $2 - $10 million range who are the most activite competitors.

<u>Organization</u> - The Distribution and Retail Division is broken into three parts: The retail side of the business is managed out of Cleveland, the original location of Creative Data Systems. Columbus houses the distribution side of the business as well as the Ordernet operation.

F.   Publishing Services

25.   InfoPage

Purpose - Informatics' Publishing Services Division offers
photocomposition services and sells InfoPage, a full-page
photocomposition system, on either a turnkey basis, or a
software product-only basis for clients who already have the
requisite Wang computer system.

Development History and Ownership - Informatics purchased an
IBM-based batch pagination system from Autocomp in 1977,
converted it to run under IBM's OS operating system, enhanced
it, and introduced it as CS-III for use on a service basis.
The software continued to be enhanced and was released as a
succession of products: CS-IV for IBM, CS-V, and most
recently, InfoPage, for Wang VS environments.

Installation and Sales History - The Division provides
photocomposition services to clients for publication of
catalogs, parts and price books, technical documentation,
etc. The service has as clients large aerospace companies,
automobile manufacturers, government agencies, etc. More than
750,000 pages were produced in 1983.

InfoPage is a full-page photocomposition system intended for
the in-plant (as opposed to commercial typographer) market.
It is based on CS-V which was developed by Informatics in 1980
to operate on Wang VS computers. Pratt & Whitney Aircraft
Group of United Technologies was the initial customer. Other
customers include: Sikorsky Aircraft, Matthew Bender, Callahan
Publishing, Federal Express, Boeing Aircraft and AT&T
Communications.

Functions - The Division utilizes its composition and
pagination software (described below) and in-house computer
facilities to provide full-page composition services. Clients
can provide machine-readable material (e.g., files generated
on a word processing system or graphics terminal) or
typewritten material which will be used to create new
documents or update existing ones. The material is typeset,
proofs are provided for the client's approval, and final copy
is delivered to the client. Informatics prides itself on fast
turnaround and the ability to handle the complexities
associated with the kinds of documents named above.

InfoPage is a batch composition system; it accepts, as input,
files created by Wang or other word processing software.
These files can be created and edited interactively; the
output files of InfoPage, i.e., composed material, cannot be
edited interactively. InfoPage facilities make it possible to
recompose only those pages that are changed and any following
ones affected by the change. The batch approach and
Informatics' two-step processing - converting the input file
markup to generic markup codes and then converting that to
specific typesetter driver commands - are what make InfoPage
fast and flexible.

Environments - Informatics has acted as a system integrator to provide a turnkey system that will handle graphics as well as text, and will support laser printing. It has, for example, interfaced a Camex sub-system for interactive make-up and image handling, a preview screen from Compugraphic and a laser printer from Imagen.

Technical Considerations - InfoPage is a four level offering:

- Level 1 consists of the composition and pagination software and Wang word processing software.

- Level 2 adds data base management facilities for coded and full-text retrieval, and writers' aids such as a spelling checker.

- Level 3 permits the handling of vector graphics generated on Auto-trol, Computer Vision and IDI CAD systems.

- Level 4 adds the Camex sub-system.

Support - Informatics provides consulting and training services and the maintenance required to install and support its software. Wang supports the hardware.

Since InfoPage operates as an application program on Wang VS, any benefits of Wang or third-party software are available to InfoPage clients who have such software. In particular, enhancements to Wang's word processing and data communications facilities will be of interest. Obviously, Informatics is dependent on Wang for system software support.

Market - The need to produce technical documentation, catalogs, parts books, etc. can be expected to grow. Electronic delivery of such material is still in the future. The market for services and in-plant systems for publication can therefore be expected to grow.

Any marketing disadvantage of being closely tied to Wang, which may be a factor in other applications, is not very significant in InfoPage's case since the publication departments that constitute the potential client base have historically been independent of "Data Processing" and other influences and are accustomed to purchasing standalone systems for special purpose or dedicated use.

Sales Strategy - Informatics' strategy appears to be to focus on delivering services and systems which integrate the text, graphics, make-up, and production capabilities needed by large organizations that need complex types of documents.

Sales Terms and Conditions - A four workstation Wang VS-65 with fixed disk, printer and tape drive and the Level 1 InfoPage software sells for approximately $120,000. A 12 workstation Wang VS-85 with fixed and removable disks, printer and tape drive plus the Level 1 InfoPage software sells for approximately $224,000.

Competition - Competition in both the services and system products markets is keen and can be expected to increase. The line between publication activities such as composition and typesetting on the one hand, and other corporate information processing, on the other, was until recently, clearly drawn. That line has fast been eroding. The widespread use of microcomputers and introduction of composition software for them is accelerating the erosion.

Organization - The Division is headquartered in Rockville, Maryland and employs about 100 people with its own General Manager. It has access to both the IBM and Wang computer systems required to perform the services and develop and maintain the software.

Section III.   Financial Valuation

The following material summarizes The financial asset valuation for
the currently marketable products which Sterling Software, Inc. has
obtained as part of its acquisition of the Informatics General
Corporation.

We have included a valuation for each product which, based on our
revenue and cost projections, can generate a significant profit over
the next five to eight years.   These products are listed in Appendix
B; products which have been omitted, together with the reason for
omission, are also noted in Appendix B.

For each product we have separated the revenue, profit and its
amortizable value into two areas:

- product asset value

- maintenance asset value

The amortization for each of these values is allocated over the
expected revenue period on a revenue ratio basis.

These amortization totals are shown in the following table:

AMORTIZATION SUMMARY

($000)	1986-90	1991-93	TOTAL
Product	15,102	--	15,102
Maintenance	10,933	6,812	17,745
TOTAL	20,035	6,812	32,847

($000)	1986	1987	1988	1989	1990	1991	1992	1993	TOTAL
Prod	3360	3463	3383	2776	2120				15,102
Maint	1667	1958	2242	2470	2596	2570	2311	1931	17,745
TOTAL	5027	5421	5625	5246	4716	2570	2311	1931	32,847

Appendix C consists of a detailed financial analysis summary
covering each of the products (C-1 covers sales and C-2 covers
maintenance calculations. There are extensive attachments which
provide a more detailed backup for each product.

INFORMATICS PRODUCT LIST

Included/Omitted (reason)

A.   Corporate Systems

      1. Mark IV   x
      2. Mark V   x
      3. ANSWER/PR (formerly ANSWER/DB)   x
      4. ANSWER/IR   x
      5. ANSWER/Extractor (Micro/mainframe)   x
      6. ANSWER/Micro   x
      7. dBase/ANSWER   included in 6
      8. Shrink   x
      9. Smart DASD   x

B.   Law Office

      10. LTMS II (includes GL, AP)   x
      11. Word Processing   x

C.   Business Management

      12. Accounting Pro (S/36 and PC)   x
      13. Property Pro (S/36 and PC)   x
      14. Construction Pro   low sales, no profit
      15. Legal Pro   low sales, no profit

D.   Insurance

      16. Examiner   x
      17. Group Comm   x
      18. Case Writer   low sales, no profit
      19. CIMS Products   x
      20. Securities   included in 19
      21. Mortgage Loan   included in 19

E.   Distribution/Retail

      22. System for Retail (Wang VS)   x
      23. System for Distribution (Wang VS)   x
      24. DDPS (Honeywell Level 6)   low sales, no profit

F.   Publishing

      25. Composition System V (Wang VS)   x

G.   Other Products

            ANSWER/2   maintenance only
            Inquiry IV   "
            Trans IV   "
            TAPS
            BASIS   marketing license

Product Amortization

($000)

Ref. #	Product Names	1986	1987	1988	1989	1990	TOTAL
1.	Mark IV	212	212	212	106	107	849
2.	Mark V	290	290	237	211	159	1187
3.	ANSWER/PR	145	145	133	109	87	619
4.	ANSWER/IR	39	55	63	63	49	269
5.	ANSWER/Extractor	147	192	250	269	229	1087
6.	ANSWER/Micro	88	147	177	157	121	690
7.	dBase/ANSWER						
8.	Shrink	257	257	234	187	142	1077
9.	Smart DASD	60	74	74	60	50	318
10.	LTMS II	108	91	35	42	51	327
11.	Word Processing	84	84	75	61	39	343
12.	Accounting Pro	1107	1107	1107	830	557	4708
13.	Property Pro	180	210	240	210	183	1023
14.	Construction Pro						
15.	Legal Pro						
16.	Examiner	182	182	182	146	112	804
17.	Group Comm	109	109	109	91	57	475
18.	Case Writer						
19.	CIMS	118	95	73	62	33	381
20.	Securities						
21.	Mortgage Loan						
22.	System for Retail	47	45	35	35	26	188
23.	System for Distribution	82	84	74	74	64	378
24.	DDPS						
25.	Composition System V	105	84	73	63	54	379
	TOTAL	3360	3463	3383	2776	2120	15102

Maintenance Amortization

($000)

Ref. #	Product Names	1986	1987	1988	1989	1990	1991	1992	1993	TOTAL
1.	Mark IV	560	517	478	436	398	359	305	178	3231
2.	Mark V	106	129	150	163	173	177	158	139	1195
3.	ANSWER/PR	79	94	109	121	128	132	122	109	894
4.	ANSWER/IR	1	7	15	24	33	38	35	35	188
5.	ANSWER/Extractor	42	86	144	215	271	312	290	250	1610
6.	ANSWER/Micro	0	0	0	0	0	0	0	0	0
7.	dBase/ANSWER									
8.	Shrink	173	194	214	230	238	240	223	193	1705
9.	Smart DASD	13	20	28	36	41	45	41	40	264
10.	LTMS II	64	78	84	85	87	85	79	72	634
11.	Word Processing	36	53	67	78	84	82	76	69	545
12.	Accounting Pro	282	369	449	500	518	485	420	347	3370
13.	Property Pro	54	82	111	136	154	150	135	119	941
14.	Construction Pro									
15.	Legal Pro									
16.	Examiner	52	73	92	113	125	130	120	111	816
17.	Group Comm	21	33	47	59	66	68	63	60	417
18.	Case Writer									
19.	CIMS	79	86	92	94	90	83	75	62	661
20.	Securities									
21.	Mortgage Loan									
22.	System for Retail	34	41	48	51	51	47	43	26	341
23.	System for Distribution	21	33	43	52	59	60	55	53	376
24.	DDPS									
25.	Composition System V	50	63	71	77	80	77	71	68	557
	TOTAL	1667	1958	2242	2470	2596	2570	2311	1931	17745

October 29, 1986

BURTON GRAD ASSOCIATES, INC.

570 TAXTER ROAD
ELMSFORD. NEW YORK 10523
(914) 592-4700

Mr. George Ellis
Sterling Software, Inc.
8080 North Central Expressway
Suite 1140, LB53
Dallas, Texas 75206-1895

Dear George:

Valuation of IG Products as of July 31, 1985

We have now carried out the reexamination of the IG products which
have not been disposed of since the acquisition date (see my letter
to Kevin Smith of September 23).

We have reexamined selected products to establish a more solidly
based amortization analysis than the SEC submitted study prepared
at the time of the acquisition. This has allowed us to make use of
more detailed history than it was possible to collect in August
1985 and to spend time discussing the strategies then in place.

We have also evaluated additional products or processing services
which were not done in August 1985:

    Distribution IV
    Ordernet

We enclose the following documentation:

    .   A summary report showing the changes between the two
        valuations

    .   A summary of the tax amortization by year for all products

    .   Backup documentation and printouts for each product

We have not examined certain other products which may have
capitalizable value:

    THIS
    DDPS
    Inquiry IV (DYL/Inquiry)
    Answer/2

We appreciate the assistance of Don Annala, Steve Shiflet, Newton Parkes and the others who have provided input to our assessment.

Sincerely,
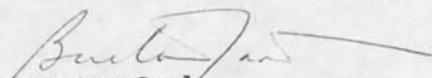
Burton Grad

Enclosures
BG:878D
cc: Mr. K. Smith
    Ms. E. Virgo

Note: Numbers in the various reports may not cross-add
      because of rounding adjustments.

Change in Capitalization

Product	Original Product	Original Maint.	Original Total		New Product	New Maint.	New Total	Variance
1. Mark IV	830	3096	3926		1049	4042	5091	1165
2. Mark V	1347	1116	2463		675	668	1343	-1120
3. ANSWER/PR	720	834	1554		610	876	1486	-68
4. ANSWER/IR	335	180	515		190	122	312	-203
5. ANSWER/Extractor	1593	1503	3096		1020	506	1526	-1570
6. ANSWER/Micro	695		695		695	0	695	0
8. Shrink	1060	1628	2688		1282	1782	3064	376
9. Smart DASD	317	251	568		190	170	360	-208
22. System for Retail	228	361	589		220	358	578	-11
23. System for Distribution	480	368	848		434	356	790	-58
25. Composition System V	372	581	953		148	285	433	-520
Subtotal	7977	9918	17895	0	6513	9165	15678	-2217
Distribution IV					1120		1120	1120
Ordernet					3045	0	3045	3045
TOTAL	7977	9918	17895	0	10678	9165	19843	1948

Tax Amortization by Year

	1986	1987	1988	1989	1990	1991	1992	TOTAL
1. Mark IV – P	209	209	209	209	213			1049
– M	808	808	808	809	809			4042
2. Mark V – P	135	135	135	135	135			675
– M	133	133	133	134	135			668
3. ANSWER/PR – P	122	122	122	122	122			610
– M	175	175	175	175	175			876
4. ANSWER/IR – P	38	38	38	38	38			190
– M	24	24	24	24	26			122
5. ANSWER/Extractor – P	204	204	204	204	204			1020
– M	101	102	101	101	101			506
6. ANSWER/Micro – P	139	139	139	139	139			695
– M								0
8. Shrink –P	256	256	256	256	258			1282
–M	356	356	356	356	358			1782
9. Smart DASD – P	38	38	38	38	38			190
– M	34	34	34	34	34			170
22. SFR – P	44	44	44	44	44			220
– M	71	71	71	71	74			358
23. SFD – P	86	86	86	86	90			434
– M	71	71	71	71	72			356
25. CSV – P	29	29	29	29	32			148
– M	57	57	57	57	57			285
Subtotal	3130	3131	3130	3132	3154	0	0	15678
Distribution IV	224	224	224	224	224			1120
Ordernet	609	609	609	609	609			3045
TOTAL	3963	3964	3963	3965	3987	0	0	19843

Backup Documentation and Printouts

for Each Product

TABLE OF CONTENTS

Product __MARK IV__

October 1986

PRODUCT - New Sales	1986	1987	1988	1989	1990	1991	1992		TOTAL
Units - U.S./Intl	20	20	20	10	10				
- Upgrades	20	20	20	10	10				
PRICE (K$) - New Sales	65	65	65	65	65				
- Upgrades	65	65	65	65	65				
Revenue (K$)	2600	2600	2600	1300	1300				10,400
Margin (%)	13	14	15	16	16				
Profit (K$)	338	364	390	208	208				1,508
Amort. (K$)									1,049

MAINTENANCE

	1986	1987	1988	1989	1990	1991	1992		TOTAL
Maint. Years	795	732	674	623	569	520	468		
Price (K$) Combined new sales + upgrades	8	8	8	8	8	8	8		
Revenue (K$)	6360	5856	5392	4984	4552	4160	3744		35,048
Margin (%)	13	14	15	16	16	33	33		
Profit (K$)	827	820	809	797	728	1373	1236		6,590
Amort. (K$)									4,042

CLIENT: sterling 10/86   PRODUCT: mark iv

Units on Maintenance at start:	807
Units on free Maintenance at start:	86
Maintenance Conversion Rate:	80 %
Free Maintenance Period:	12 months
Erosion rate (default):	10 %

TABLE 1 — Number of New Units on Maintenance
Arising from New Sales

Year	New Unit Forecast	% taking Maint.	New Maint. Customers	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7
0		80		69						
1	20	80	16	0	16					
2	20	80	16		0	16				
3	20	80	16			0	16			
4	10	80	8				0	8		
5	10	80	8					0	8	
6		80	0						0	0
7		80	0							0
8		80	0							
9		80	0							
Total	80		64	69	16	16	16	8	8	0

TABLE 2 — Net Maintenance Units

	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7
Base at start	807	795	732	674	623	569	520
Erosion Factor	10	10	10	10	10	10	10
Eroded Base	726	716	658	607	561	512	468
Gross FYE from Table 1	69	16	16	16	8	8	0
Net Maintenance Year Equivalence	795	732	674	623	569	520	468

1a

			($000s)

Number of Years for Projection: 5
Initial Total Amortization Value: 1049
Amortization Calculation Formula: 0
(0=Straight Line; 1=Revenue; 2=FASB)
Profit Margin, if Constant:
Tax Rate, if Constant: 50.00
Cost of Money: 9.20
Initial Year for Projection: 1986
Client Name: sterling 10/86 mark iv product

($000s)

	Total	1986	1987	1988	1989	1990
Revenue	10400	2600	2600	2600	1300	1300
Profit Margin		13.00	14.00	15.00	16.00	16.00
Net Profit						
– Pre Amortization	1508	338	364	390	208	208
Amortization	1049	209	209	209	209	213
Net Profit						
– After Amortization	459	129	155	181	–1	–5
Tax Rate		50.00	50.00	50.00	50.00	50.00
Tax	230	65	78	91	–1	–3
Cash Flow after Tax	1279	274	287	300	209	211
NPV Factors		0.958	0.877	0.803	0.736	0.674
NPV	1049	262	251	241	153	142

Number of Years for Projection:			7					
Initial Total Amortization Value:			4042					
Amortization Calculation Formula:			0					
(0=Straight Line; 1=Revenue; 2=FASB)								
Profit Margin, if Constant:			%					
Tax Rate, if Constant:			50.00 %					
Cost of Money:			%	RO Factor:	1.000			
Initial Year for Projection:			1986					
Client Name:			sterling 10/86 mark iv maintenance					

($000s)

	Total	1986	1987	1988	1989	1990	1991	1992
Revenue	35048	6360	5856	5392	4984	4552	4160	3744
Profit Margin		13.00	14.00	15.00	16.00	16.00	33.00	33.00
Net Profit								
– Pre Amortization	6590	827	820	809	797	728	1373	1236
Amortization	4042	808	808	808	809	809	0	0
Net Profit								
– After Amortization	2548	19	12	1	–12	–81	1373	1236
Tax Rate		50.00	50.00	50.00	50.00	50.00	50.00	50.00
Tax	1274	9	6	0	–6	–40	686	618
Cash Flow after Tax	5316	817	814	808	803	769	686	618
NPV Factors		0.958	0.877	0.803	0.736	0.674	0.625	0.579
NPV	4042	783	714	649	591	518	429	358

Product __MARK V__

October 1986

PRODUCT - New Sales				Y E A R S						TOTAL
	1986	1987	1988	1989	1990	1991	1992			
Units	35	35	30	25	20					
PRICE (K$)	65	65	65	65	65					
Revenue (K$)	2275	2275	1950	1625	1300					9 425
Margin (%)	8	10	11	12	13					
Profit (K$)	182	228	215	195	169					989
Amort. (K$)										675

MAINTENANCE

Maint. Years	108	129	148	162	170	174	160			
Price (K$)	65	65	65	65	65	65	65			
Revenue (K$)	702	839	962	1053	1105	1131	1040			6 832
Margin (%)	8	10	11	12	13	30	30			
Profit (K$)	56	84	106	126	144	339	312			1 167
Amort. (K$)										668

Units on Maintenance at start:	82
Units on free Maintenance at start:	38
Maintenance Conversion Rate:	85 %
Free Maintenance Period:	12 months
Erosion rate (default):	8 %

TABLE 1 — Number of New Units on Maintenance Arising from New Sales

Year	New Unit Forecast	% taking Maint	New Maint. Customers	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7
0		85		32						
1	35	85	30	0	30					
2	35	85	30		0	30				
3	30	85	26			0	26			
4	25	85	21				0	21		
5	20	85	17					0	17	
6		85	0						0	0
7		85	0							0
8		85	0							
9		85	0							
Total	145		123	32	30	30	26	21	17	0

TABLE 2 — Net Maintenance Units

	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7
Base at start	82	108	129	148	162	170	174
Erosion Factor	8	8	8	8	8	8	8
Eroded Base	75	99	119	136	149	157	160
Gross FYE from Table 1	32	30	30	26	21	17	0
Net Maintenance Year Equivalence	108	129	148	162	170	174	160

2 a

Number of Years for Projection: 5
Initial Total Amortization Value: 675
Amortization Calculation Formula: 0
(0=Straight Line; 1=Revenue; 2=FASB)
Profit Margin, if Constant: %
Tax Rate, if Constant: 50.00 %
Cost of Money: 9.20 % RO Factor: 0.916
Initial Year for Projection: 1986
Client Name: sterling 10/86 mark v product

($000s)

	Total	1986	1987	1988	1989	1990
Revenue	9425	2275	2275	1950	1625	1300
Profit Margin		8.00	10.00	11.00	12.00	13.00
Net Profit						
– Pre Amortization	989	182	228	215	195	169
Amortization	675	135	135	135	135	135
Net Profit						
– After Amortization	314	47	93	80	60	34
Tax Rate		50.00	50.00	50.00	50.00	50.00
Tax	157	24	46	40	30	17
Cash Flow after Tax	832	159	181	175	165	152
NPV Factors		0.958	0.877	0.803	0.736	0.674
NPV	675	152	159	140	122	102

26

Number of Years for Projection: 7
Initial Total Amortization Value: 668
Amortization Calculation Formula: 0
  (0=Straight Line; 1=Revenue; 2=FASB)
Profit Margin, if Constant: %
Tax Rate, if Constant: 50.00 %
Cost of Money: %   RO Factor: 1.000
Initial Year for Projection: 1986
Client Name: sterling 10/86 mark v maintenance

($000s)

	Total	1986	1987	1988	1989	1990	1991	1992
Revenue	6832	702	839	962	1053	1105	1131	1040
Profit Margin		8.00	10.00	11.00	12.00	13.00	30.00	30.00
Net Profit								
− Pre Amortization	1167	56	84	106	126	144	339	312
Amortization	668	133	133	133	134	135	0	0
Net Profit								
− After Amortization	499	−77	−49	−27	−8	9	339	312
Tax Rate		50.00	50.00	50.00	50.00	50.00	50.00	50.00
Tax	250	−38	−25	−14	−4	4	170	156
Cash Flow after Tax	918	95	108	119	130	140	170	156
NPV Factors		0.958	0.877	0.803	0.736	0.674	0.625	0.579
NPV	668	91	95	96	96	94	106	90

Product _ANSWER/PR_

October 1986

PRODUCT - New Sales					Y E A R S					TOTAL
	1986	1987	1988	1989	1990	1991	1992			
Units - US + Intl.	60	60	55	45	35					
PRICE (K$)	30	30	30	30	30					
Revenue (K$)	1800	1800	1650	1350	1050					7650
Margin (%)	10	11	12	13	13					
Profit (K$)	180	198	198	176	137					889
Amort. (K$)										610

MAINTENANCE

	1986	1987	1988	1989	1990	1991	1992			TOTAL
Maint. Years	261	299	335	364	381	388	361			
Price (K$)	3.6	3.6	3.6	3.6	3.6	3.6	3.6			
Revenue (K$)	940	1076	1206	1310	1372	1397	1300			8601
Margin (%)	10	11	12	13	13	30	30			
Profit (K$)	94	118	145	170	178	419	390			1514
Amort. (K$)										876

Units on Maintenance at start:	178
Units on free Maintenance at start:	100
Maintenance Conversion Rate:	95 %
Free Maintenance Period:	12 months
Erosion rate (default):	7 %

TABLE 1 – Number of New Units on Maintenance
Arising from New Sales

Year	New Unit % Forecast	taking Maint	New Maint. Customers	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7
0		95		95						
1	60	95	57	0	57					
2	60	95	57		0	57				
3	55	95	52			0	52			
4	45	95	43				0	43		
5	35	95	33					0	33	
6		95	0						0	0
7		95	0							0
8		95	0							
9		95	0							
Total	255		242	95	57	57	52	43	33	0

TABLE 2 – Net Maintenance Units

	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7
Base at start	178	261	299	335	364	381	388
Erosion Factor	7	7	7	7	7	7	7
Eroded Base	166	242	278	312	339	355	361
Gross FYE from Table 1	95	57	57	52	43	33	0
Net Maintenance Year Equivalence	261	299	335	364	381	388	361

Number of Years for Projection:					5	
Initial Total Amortization Value:					610	
Amortization Calculation Formula:					0	
(0=Straight Line; 1=Revenue; 2=FASB)						
Profit Margin, if Constant:					%	
Tax Rate, if Constant:					50.00 %	
Cost of Money:					9.20 %	RO Factor: 0.916
Initial Year for Projection:					1986	
Client Name:					sterling 10/86 answer pr product	

($000s)

	Total	1986	1987	1988	1989	1990
Revenue	7650	1800	1800	1650	1350	1050
Profit Margin		10.00	11.00	12.00	13.00	13.00
Net Profit						
– Pre Amortization	889	180	198	198	176	137
Amortization	610	122	122	122	122	122
Net Profit						
– After Amortization	279	58	76	76	54	15
Tax Rate		50.00	50.00	50.00	50.00	50.00
Tax	139	29	38	38	27	7
Cash Flow after Tax	749	151	160	160	149	129
NPV Factors		0.958	0.877	0.803	0.736	0.674
NPV	610	145	140	129	109	87

Number of Years for Projection:					7			
Initial Total Amortization Value:					876			
Amortization Calculation Formula:					0			
(0=Straight Line; 1=Revenue; 2=FASB)								
Profit Margin, if Constant:					%			
Tax Rate, if Constant:					50.00 %			
Cost of Money:					%	RO Factor:	1.000	
Initial Year for Projection:					1986			
Client Name:					sterling 10/86 answer pr maintenance			

($000s)

	Total	1986	1987	1988	1989	1990	1991	1992
Revenue	8601	940	1076	1206	1310	1372	1397	1300
Profit Margin		10.00	11.00	12.00	13.00	13.00	30.00	30.00
Net Profit								
– Pre Amortization	1514	94	118	145	170	178	419	390
Amortization	876	175	175	175	175	176	0	0
Net Profit								
– After Amortization	638	-81	-57	-30	-5	2	419	390
Tax Rate		50.00	50.00	50.00	50.00	50.00	50.00	50.00
Tax	319	-41	-28	-15	-2	1	210	195
Cash Flow after Tax	1195	135	147	160	173	177	210	195
NPV Factors		0.958	0.877	0.803	0.736	0.674	0.625	0.579
NPV	876	129	129	128	127	119	131	113

Product _Answer 1R_

October 1986

PRODUCT - New Sales					Y E A R S						TOTAL
		1986	1987	1988	1989	1990	1991	1992			
Units US, Intl		25	25	25	25	20					
PRICE (K$)		20	20	20	20	20					
Revenue (K$)		500	500	500	500	400					2400
Margin (%)		10	11	12	13	13					
Profit (K$)		50	55	60	65	52					282
Amort. (K$)											190
MAINTENANCE											
Maint. Years		9	32	53	73	92	104	97			
Price (K$)		2.4	2.4	2.4	2.4	2.4	2.4	2.4			
Revenue (K$)		22	77	127	175	221	250	233			1105
Margin (%)		10	11	12	13	13	30	30			
Profit (K$)		2	8	15	23	29	75	70			222
Amort. (K$)											122

Units on Maintenance at start:	0
Units on free Maintenance at start:	9
Maintenance Conversion Rate:	95 %
Free Maintenance Period:	12 months
Erosion rate (default):	7 %

TABLE 1 - Number of New Units on Maintenance
Arising from New Sales

Year	New Unit Forecast	% taking Maint	New Maint. Customers	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7
0		95		9						
1	25	95	24	0	24					
2	25	95	24		0	24				
3	25	95	24			0	24			
4	25	95	24				0	24		
5	20	95	19					0	19	
6		95	0						0	0
7		95	0							0
8		95	0							
9		95	0							
Total	120		114	9	24	24	24	24	19	0

TABLE 2 - Net Maintenance Units

	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7
Base at start	0	9	32	53	73	92	104
Erosion Factor	7	7	7	7	7	7	7
Eroded Base	0	8	29	50	68	85	97
Gross FYE from Table 1	9	24	24	24	24	19	0
Net Maintenance Year Equivalence	9	32	53	73	92	104	97

4a.

Number of Years for Projection:			5			
Initial Total Amortization Value:			190			
Amortization Calculation Formula:			0			
(0=Straight Line; 1=Revenue; 2=FASB)						
Profit Margin, if Constant:			%			
Tax Rate, if Constant:			50.00 %			
Cost of Money:			9.20 %		RO Factor:	
Initial Year for Projection:			1986			
Client Name:			sterling 10/86 answer ir product			

($000s)

	Total	1986	1987	1988	1989	1990
Revenue	2400	500	500	500	500	400
Profit Margin		10.00	11.00	12.00	13.00	13.00
Net Profit						
– Pre Amortization	282	50	55	60	65	52
Amortization	190	38	38	38	38	38
Net Profit						
– After Amortization	92	12	17	22	27	14
Tax Rate		50.00	50.00	50.00	50.00	50.00
Tax	46	6	9	11	14	7
Cash Flow after Tax	236	44	47	49	52	45
NPV Factors		0.958	0.877	0.803	0.736	0.674
NPV	190	42	41	39	38	30

		Number of Years for Projection:	7				

Number of Years for Projection: 7
Initial Total Amortization Value: 122
Amortization Calculation Formula: 0
(0=Straight Line; 1=Revenue; 2=FASB)
Profit Margin, if Constant: %
Tax Rate, if Constant: 50.00 %
Cost of Money: % RO Factor: 1.000
Initial Year for Projection: 1986
Client Name: sterling 10/86 answer ir maintenance

($000s)

	Total	1986	1987	1988	1989	1990	1991	1992
Revenue	1105	22	77	127	175	221	250	233
Profit Margin		10.00	11.00	12.00	13.00	13.00	30.00	30.00
Net Profit								
– Pre Amortization	222	2	8	15	23	29	75	70
Amortization	122	24	24	24	24	26	0	0
Net Profit								
– After Amortization	100	-22	-16	-9	-1	3	75	70
Tax Rate		50.00	50.00	50.00	50.00	50.00	50.00	50.00
Tax	50	-11	-8	-4	-1	1	38	35
Cash Flow after Tax	172	13	16	19	24	28	37	35
NPV Factors		0.958	0.877	0.803	0.736	0.674	0.625	0.579
NPV	122	13	14	15	18	19	23	20

Product _Consumer Extractor_

October 1986

PRODUCT - New Sales	1986	1987	1988	1989	1990	1991	1992		TOTAL
Units	133	159	191	191	162	120	180		
PRICE (K$)	15	15	15	15	15	15	15		
Revenue (K$)	1995	2385	2865	2865	2430	1800	1200		15 540
Margin (%)	6	8	10	12	13	13	13		
Profit (K$)	120	191	287	344	316	234	156		1648
Amort. (K$)									1020

MAINTENANCE

	1986	1987	1988	1989	1990	1991	1992		TOTAL
Maint. Years	195	319	462	620	768	876	935		
Price (K$)	1.8	1.8	1.8	1.8	1.8	1.8	1.8		
Revenue (K$)	351	574	832	1116	1382	1577	1683		7515
Margin (%)	6	8	10	12	13	13	13		
Profit (K$)	21	46	83	134	180	205	219		888
Amort. (K$)									506

CLIENT: sterling 10/86   PRODUCT: answer extractor

Units on Maintenance at start: 51
Units on free Maintenance at start: 147
Maintenance Conversion Rate: 100 %
Free Maintenance Period: 12 months
Erosion rate (default):   0 %

TABLE 1 - Number of New Units on Maintenance
Arising from New Sales

Year	New Unit Forecast	% taking Maint	New Maint. Customers	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7
0		100		147						
1	133	100	133	0	133					
2	159	100	159		0	159				
3	191	100	191			0	191			
4	191	100	191				0	191		
5	162	100	162					0	162	
6	120	100	120						0	120
7	80	100	80							0
8		100	0							
9		100	0							
Total	1036		1036	147	133	159	191	191	162	120

TABLE 2 - Net Maintenance Units

	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7
Base at start	51	195	319	462	620	768	876
Erosion Factor	5	5	5	7	7	7	7
Eroded Base	48	186	303	429	577	714	815
Gross FYE from Table 1	147	133	159	191	191	162	120
Net Maintenance Year Equivalence	195	319	462	620	768	876	935

Number of Years for Projection: 7
Initial Total Amortization Value: 1020
Amortization Calculation Formula: 0
(0=Straight Line; 1=Revenue; 2=FASB)
Profit Margin, if Constant: %
Tax Rate, if Constant: 50.00 %
Cost of Money: % RO Factor: 1.000
Initial Year for Projection: 1986
Client Name: sterling 10/86 answer extractor product

($000s)

	Total	1986	1987	1988	1989	1990	1991	1992
Revenue	15540	1995	2385	2865	2865	2430	1800	1200
Profit Margin		6.00	8.00	10.00	12.00	13.00	13.00	13.00
Net Profit								
– Pre Amortization	1648	120	191	287	344	316	234	156
Amortization	1020	204	204	204	204	204	0	0
Net Profit								
– After Amortization	628	–84	–13	83	140	112	234	156
Tax Rate		50.00	50.00	50.00	50.00	50.00	50.00	50.00
Tax	314	–42	–6	41	70	56	117	78
Cash Flow after Tax	1334	162	197	246	274	260	117	78
NPV Factors		0.958	0.877	0.803	0.736	0.674	0.625	0.579
NPV	1020	155	173	198	202	175	73	45

Number of Years for Projection: 7
Initial Total Amortization Value: 506
Amortization Calculation Formula: 0
 (0=Straight Line; 1=Revenue; 2=FASB)
Profit Margin, if Constant: %
Tax Rate, if Constant: 50.00 %
Cost of Money: %   RO Factor: 1.000
Initial Year for Projection: 1986
Client Name: sterling 10/86 answer extractor maintenance

($000s)

	Total	1986	1987	1988	1989	1990	1991	1992
Revenue	7515	351	574	832	1116	1382	1577	1683
Profit Margin		6.00	8.00	10.00	12.00	13.00	13.00	13.00
Net Profit								
– Pre Amortization	888	21	46	83	134	180	205	219
Amortization	506	101	102	101	101	101	0	0
Net Profit								
– After Amortization	382	–80	–56	–18	33	79	205	219
Tax Rate		50.00	50.00	50.00	50.00	50.00	50.00	50.00
Tax	191	–40	–28	–9	16	39	103	109
Cash Flow after Tax	698	61	74	92	118	141	102	110
NPV Factors		0.958	0.877	0.803	0.736	0.674	0.625	0.579
NPV	506	58	65	74	87	95	64	63

5c

Product _Consumer/Micro_

October 1986

PRODUCT - New Sales	1986	1987	1988	1989	1990	1991	1992	TOTAL
Units	4500	7500	9000	8000	6000			
PRICE (K$)	.25	.25	.25	.25	.25			
Revenue (K$)	1125	1875	2250	2000	1500			8750
Margin (%)	10	11	12	13	13			
Profit (K$)	113	206	270	260	195			1044
Amort. (K$)								695

MAINTENANCE

Maint. Years

Price (K$)

Revenue (K$)   _No Maintenance_

Margin (%)

Profit (K$)

Amort. (K$)

Number of Years for Projection: 5
Initial Total Amortization Value: 695
Amortization Calculation Formula: 0
(0=Straight Line; 1=Revenue; 2=FASB)
Profit Margin, if Constant: %
Tax Rate, if Constant: 50.00 %
Cost of Money: 9.20 %   RO Factor: 0.916
Initial Year for Projection: 1986
Client Name: sterling 10/86 answer micro product

($000s)

	Total	1986	1987	1988	1989	1990
Revenue	8750	1125	1875	2250	2000	1500
Profit Margin		10.00	11.00	12.00	13.00	13.00
Net Profit						
– Pre Amortization	1044	113	206	270	260	195
Amortization	695	139	139	139	139	139
Net Profit						
– After Amortization	349	–26	67	131	121	56
Tax Rate		50.00	50.00	50.00	50.00	50.00
Tax	174	–13	33	66	60	28
Cash Flow after Tax	870	126	173	205	200	167
NPV Factors		0.958	0.877	0.803	0.736	0.674
NPV	695	120	152	164	147	112

6a

Product _SHRINK_

October 1986

PRODUCT - New Sales	1986	1987	1988	1989	1990	1991	1992		TOTAL
Units	60	60	55	50	40				
PRICE (K$)	28	28	28	28	28				
Revenue (K$)	1680	1680	1540	1400	1120				7420
Margin (%)	25	25	25	25	25				
Profit (K$)	420	420	385	350	240				1855
Amort. (K$)									1282

MAINTENANCE

	1986	1987	1988	1989	1990	1991	1992		TOTAL
Maint. Years	263	299	332	358	378	388	360		2378
Price (K$)	4.2	4.2	4.2	4.2	4.2	4.2	4.2		
Revenue (K$)	1105	1256	1394	1504	1588	1630	1512		9989
Margin (%)	25	25	25	25	25	40	40		
Profit (K$)	276	314	349	376	397	652	605		2969
Amort. (K$)									1782

CLIENT: sterling 10/86   PRODUCT: shrink

Units on Maintenance at start:	225
Units on free Maintenance at start:	60
Maintenance Conversion Rate:	90 %
Free Maintenance Period:	12 months
Erosion rate (default):	7 %

TABLE 1 - Number of New Units on Maintenance Arising from New Sales

Year	New Unit Forecast	% taking Maint	New Maint. Customers	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7
0		90		54						
1	60	90	54	0	54					
2	60	90	54		0	54				
3	55	90	50			0	50			
4	50	90	45				0	45		
5	40	90	36					0	36	
6		90	0						0	0
7		90	0							0
8		90	0							
9		90	0							
Total	265		239	54	54	54	50	45	36	0

TABLE 2 - Net Maintenance Units

	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7
Base at start	225	263	299	332	358	378	388
Erosion Factor	7	7	7	7	7	7	7
Eroded Base	209	245	278	309	333	352	360
Gross FYE from Table 1	54	54	54	50	45	36	0
Net Maintenance Year Equivalence	263	299	332	358	378	388	360

					($000s)	

Number of Years for Projection: 5
Initial Total Amortization Value: 1282
Amortization Calculation Formula: 0
  (0=Straight Line; 1=Revenue; 2=FASB)
Profit Margin, if Constant: 25.00 %
Tax Rate, if Constant: 50.00 %
Cost of Money: 9.20 %   RO Factor: 0.916
Initial Year for Projection: 1986
Client Name: sterling 10/86 shrink product

($000s)

	Total	1986	1987	1988	1989	1990
Revenue	7420	1680	1680	1540	1400	1120
Profit Margin		25.00	25.00	25.00	25.00	25.00
Net Profit						
– Pre Amortization	1855	420	420	385	350	280
Amortization	1282	256	256	256	256	258
Net Profit						
– After Amortization	573	164	164	129	94	22
Tax Rate		50.00	50.00	50.00	50.00	50.00
Tax	286	82	82	64	47	11
Cash Flow after Tax	1569	338	338	321	303	269
NPV Factors		0.958	0.877	0.803	0.736	0.674
NPV	1282	324	296	258	223	181

Number of Years for Projection:	7
Initial Total Amortization Value:	1782
Amortization Calculation Formula:	0
(0=Straight Line; 1=Revenue; 2=FASB)	
Profit Margin, if Constant:	%
Tax Rate, if Constant:	50.00 %
Cost of Money:	% RO Factor: 1.000
Initial Year for Projection:	1986
Client Name:	sterling 10/86 shrink maintenance

($000s)

	Total	1986	1987	1988	1989	1990	1991	1992
Revenue	9989	1105	1256	1394	1504	1588	1630	1512
Profit Margin	25	25.00	25.00	25.00	25.00	25.00	40.00	40.00
Net Profit								
– Pre Amortization	2969	276	314	349	376	397	652	605
Amortization	1782	356	356	356	356	358	0	0
Net Profit								
– After Amortization	1187	–80	–42	–8	20	39	652	605
Tax Rate		50.00	50.00	50.00	50.00	50.00	50.00	50.00
Tax	593	–40	–21	–4	10	20	326	302
Cash Flow after Tax	2375	316	335	352	366	378	326	302
NPV Factors		0.958	0.877	0.803	0.736	0.674	0.625	0.579
NPV	1782	303	294	283	269	254	204	175

Product SMART DASD

October 1986

<u>Y E A R S</u>

PRODUCT - New Sales	1986	1987	1988	1989	1990	1991	1992		TOTAL
Units	25	25	25	20	15				
PRICE (K$)	10	10	10	10	10				
Revenue (K$)	250	250	250	200	150				1100
Margin (%)	25	25	25	25	25				
Profit (K$)	63	63	63	50	38				277
Amort. (K$)									190

MAINTENANCE

	1986	1987	1988	1989	1990	1991	1992		TOTAL
Maint. Years	47	66	84	101	112	117	109		
Price (K$)	1.5	1.5	1.5	1.5	1.5	1.5	1.5		
Revenue (K$)	71	99	126	152	168	176	164		956
Margin (%)	25	25	25	25	25	40	40		
Profit (K$)	18	25	32	38	42	70	66		291
Amort. (K$)									170

CLIENT: sterling 10/86   PRODUCT: smart dasd

Units on Maintenance at start:	35
Units on free Maintenance at start:	16
Maintenance Conversion Rate:	90 %
Free Maintenance Period:	12 months
Erosion rate (default):	7 %

TABLE 1 - Number of New Units on Maintenance
Arising from New Sales

Year	New Unit Forecast	% taking Maint	New Maint. Customers	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7
0		90		14						
1	25	90	23	0	23					
2	25	90	23		0	23				
3	25	90	23			0	23			
4	20	90	18				0	18		
5	15	90	14					0	14	
6		90	0						0	0
7		90	0							0
8		90	0							
9		90	0							
Total	110		99	14	23	23	23	18	14	0

TABLE 2 - Net Maintenance Units

	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7
Base at start	35	47	66	84	101	112	117
Erosion Factor	7	7	7	7	7	7	7
Eroded Base	33	44	62	78	94	104	109
Gross FYE from Table 1	14	23	23	23	18	14	0
Net Maintenance Year Equivalence	47	66	84	101	112	117	109

9a

					($000s)	

Number of Years for Projection: 5
Initial Total Amortization Value: 190
Amortization Calculation Formula: 0
(0=Straight Line; 1=Revenue; 2=FASB)
Profit Margin, if Constant: 25.00 %
Tax Rate, if Constant: 50.00 %
Cost of Money: 9.20 %   RO Factor: 0.916
Initial Year for Projection: 1986
Client Name: sterling 10/86 smart dasd product

($000s)

	Total	1986	1987	1988	1989	1990
Revenue	1100	250	250	250	200	150
Profit Margin		25.00	25.00	25.00	25.00	25.00
Net Profit						
– Pre Amortization	277	63	63	63	50	38
Amortization	190	38	38	38	38	38
Net Profit						
– After Amortization	87	25	25	25	12	0
Tax Rate		50.00	50.00	50.00	50.00	50.00
Tax	43	12	12	13	6	0
Cash Flow after Tax	234	51	51	50	44	38
NPV Factors		0.958	0.877	0.803	0.736	0.674
NPV	190	48	44	40	32	25

Number of Years for Projection: 7
Initial Total Amortization Value: 170
Amortization Calculation Formula: 0
(0=Straight Line; 1=Revenue; 2=FASB)
Profit Margin, if Constant: %
Tax Rate, if Constant: 50.00 %
Cost of Money: %   RO Factor: 1.000
Initial Year for Projection: 1986
Client Name: sterling 10/86 smart dasd maintenance

($000s)

	Total	1986	1987	1988	1989	1990	1991	1992
Revenue	956	71	99	126	152	168	176	164
Profit Margin		25.00	25.00	25.00	25.00	25.00	40.00	40.00
Net Profit								
– Pre Amortization	291	18	25	32	38	42	70	66
Amortization	170	34	34	34	34	34	0	0
Net Profit	121							
– After Amortization	121	-16	-9	-2	4	8	70	66
Tax Rate		50.00	50.00	50.00	50.00	50.00	50.00	50.00
Tax	60	-8	-5	-1	2	4	35	33
Cash Flow after Tax	230	26	29	33	36	38	35	33
NPV Factors		0.958	0.877	0.803	0.736	0.674	0.625	0.579
NPV	170	25	26	26	26	26	22	19

Product *System for Retail*

October 1986

PRODUCT - New Sales

		1986	1987	1988	1989	1990	1991	1992	TOTAL
Units	Direct	10	10	8	8	6			
	Indirect	8	7	5	5	2			
PRICE (K$)	Direct	425	425	425	425	42.5			
	Indirect	25	25	25	25	25			
Revenue (K$)		625	600	465	465	305			2460
Margin (%)		10	12	15	15	15			
Profit (K$)		63	72	70	70	46			321
Amort. (K$)									220

MAINTENANCE

	1986	1987	1988	1989	1990	1991	1992	TOTAL
Maint. Years	35	49	60	68	73	72	67	
Price (K$)	7.65	7.65	7.65	7.65	7.65	7.65	7.65	
Revenue (K$)	268	375	459	520	558	551	513	3244
Margin (%)	10	12	15	15	15	30	30	
Profit (K$)	27	45	69	78	84	165	154	622
Amort. (K$)								358

Units on Maintenance at start:	21
Units on free Maintenance at start:	14
Maintenance Conversion Rate:	95 %
Free Maintenance Period:	6 months
Erosion rate (default):	7 %

TABLE 1 - Number of New Units on Maintenance Arising from New Sales

Year	New Unit Forecast	% taking Maint	New Maint. Customers	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7
0		95		7						
1	18	95	17	9	9					
2	17	95	16		8	8				
3	13	95	12			6	6			
4	13	95	12				6	6		
5	8	95	8					4	4	
6		95	0						0	0
7		95	0							0
8		95	0							
9		95	0							
Total	69		66	15	17	14	12	10	4	0

TABLE 2 - Net Maintenance Units

	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7
Base at start	21	35	49	60	68	73	72
Erosion Factor	7	7	7	7	7	7	7
Eroded Base	20	32	45	56	63	68	67
Gross FYE from Table 1	15	17	14	12	10	4	0
Net Maintenance Year Equivalence	35	49	60	68	73	72	67

($000s)

	Total	1986	1987	1988	1989	1990
Revenue	2460	625	600	465	465	305
Profit Margin		10.00	12.00	15.00	15.00	15.00
Net Profit						
– Pre Amortization	321	63	72	70	70	46
Amortization	220	44	44	44	44	44
Net Profit						
– After Amortization	121	19	28	26	26	2
Tax Rate		50.00	50.00	50.00	50.00	50.00
Tax	50	9	14	13	13	1
Cash Flow after Tax	270	53	58	57	57	45
NPV Factors		0.958	0.877	0.803	0.736	0.674
NPV	220	51	51	46	42	30

226

Number of Years for Projection:				7				
Initial Total Amortization Value:				358				
Amortization Calculation Formula:				0				
(0=Straight Line; 1=Revenue; 2=FASB)								
Profit Margin, if Constant:				%				
Tax Rate, if Constant:				50.00 %				
Cost of Money:				%	RO Factor:	1.000		
Initial Year for Projection:				1986				
Client Name:				sterling 10/86 system for retail sfr maintenance				

($000s)

	Total	1986	1987	1988	1989	1990	1991	1992
Revenue	3244	268	375	459	520	558	551	513
Profit Margin		10.00	12.00	15.00	15.00	15.00	30.00	30.00
Net Profit								
– Pre Amortization	622	27	45	69	78	84	165	154
Amortization	358	71	71	71	71	74	0	0
Net Profit								
– After Amortization	264	–44	–26	–2	7	10	165	154
Tax Rate		50.00	50.00	50.00	50.00	50.00	50.00	50.00
Tax	132	–22	–13	–1	4	5	83	77
Cash Flow after Tax	490	49	58	70	75	79	83	77
NPV Factors		0.958	0.877	0.803	0.736	0.674	0.625	0.579
NPV	358	47	51	56	55	53	52	45

22 C

Product *System for Distribution*

October 1986

		1986	1987	1988	1989	1990	1991	1992		TOTAL
PRODUCT - New Sales					Y E A R S					
Units	Direct	39	40	35	35	30				
	Indirect	4	4	4	4	3				
PRICE (K$)	Direct	26.0	26.0	26.0	26.0	26.0				
	Indirect	10.4	10.4	10.4	10.4	10.4				
Revenue (K$)		1056	1082	952	952	811				4853
Margin (%)		10	12	15	15	15				
Profit (K$)		106	130	143	143	122				644
Amort. (K$)										434
MAINTENANCE										
Maint. Years		68	104	136	164	187	189	176		
Price (K$)		3.1	3.1	3.1	3.1	3.1	3.1	3.1		
Revenue (K$)		211	322	422	508	580	586	546		3175
Margin (%)		10	12	15	15	15	30	30		
Profit (K$)		21	39	63	76	87	176	164		626
Amort. (K$)										356

CLIENT: sterling 10/86   PRODUCT: system for distribution sfd

Units on Maintenance at start:	32
Units on free Maintenance at start:	37
Maintenance Conversion Rate:	95 %
Free Maintenance Period:	6 months
Erosion rate (default):	7 %

TABLE 1 – Number of New Units on Maintenance Arising from New Sales

Year	New Unit Forecast	% taking Maint	New Maint. Customers	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7
0		95		18						
1	43	95	41	20	20					
2	44	95	42		21	21				
3	39	95	37			19	19			
4	39	95	37				19	19		
5	33	95	31					16	16	
6		95	0						0	0
7		95	0							0
8		95	0							
9		95	0							
Total	198		188	38	41	39	37	34	16	0

TABLE 2 – Net Maintenance Units

	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7
Base at start	32	68	104	136	164	187	189
Erosion Factor	7	7	7	7	7	7	7
Eroded Base	30	63	97	127	152	174	176
Gross FYE from Table 1	38	41	39	37	34	16	0
Net Maintenance Year Equivalence	68	104	136	164	187	189	176

		Number of Years for Projection:	5		

Number of Years for Projection: 5
Initial Total Amortization Value: 434
Amortization Calculation Formula: 0
  (0=Straight Line; 1=Revenue; 2=FASB)
Profit Margin, if Constant: %
Tax Rate, if Constant: 50.00 %
Cost of Money: 9.20 %   RO Factor: 0.916
Initial Year for Projection: 1986
Client Name: sterling 10/86 system for distribution sfd product

($000s)

	Total	1986	1987	1988	1989	1990
Revenue	4853	1056	1082	952	952	811
Profit Margin		10.00	12.00	15.00	15.00	15.00
Net Profit						
– Pre Amortization	643	106	130	143	143	122
Amortization	434	86	86	86	86	90
Net Profit						
– After Amortization	209	20	44	57	57	32
Tax Rate		50.00	50.00	50.00	50.00	50.00
Tax	104	10	22	28	28	16
Cash Flow after Tax	538	96	108	114	114	106
NPV Factors		0.958	0.877	0.803	0.736	0.674
NPV	434	92	95	92	84	71

Number of Years for Projection:	7	
Initial Total Amortization Value:	356	
Amortization Calculation Formula:	0	
(0=Straight Line; 1=Revenue; 2=FASB)		
Profit Margin, if Constant:	%	
Tax Rate, if Constant:	50.00 %	
Cost of Money:	%	RO Factor: 1.000
Initial Year for Projection:	1986	
Client Name:	sterling 10/86 system for distribution sfd maintenance	

($000s)

	Total	1986	1987	1988	1989	1990	1991	1992
Revenue	3175	211	322	422	508	580	586	546
Profit Margin		10.00	12.00	15.00	15.00	15.00	30.00	30.00
Net Profit								
− Pre Amortization	626	21	39	63	76	87	176	164
Amortization	356	71	71	71	71	72	0	0
Net Profit								
− After Amortization	270	−50	−32	−8	5	15	176	164
Tax Rate		50.00	50.00	50.00	50.00	50.00	50.00	50.00
Tax	135	−25	−16	−4	3	8	88	82
Cash Flow after Tax	491	46	55	67	74	80	88	82
NPV Factors		0.958	0.877	0.803	0.736	0.674	0.625	0.579
NPV	356	44	48	54	54	54	55	47

Product _Composition System V_

October 1986

PRODUCT - New Sales			YEARS						TOTAL
	1986	1987	1988	1989	1990	1991	1992		
Units	6	5	4	3	2				
PRICE (K$)	80	80	80	80	80				
Revenue (K$)	480	400	320	240	160				1600
Margin (%)	13	13	13	13	13				
Profit (K$)	62	52	42	31	21				208
Amort. (K$)									148

MAINTENANCE

	1986	1987	1988	1989	1990	1991	1992		TOTAL
Maint. Years	24	27	29	30	29	28	26		
Price (K$)	14	14	14	14	14	14	14		
Revenue (K$)	336	378	406	420	406	392	364		2702
Margin (%)	13	13	13	13	13	30	30		
Profit (K$)	44	49	52	55	53	118	109		481
Amort. (K$)									285

CLIENT: sterling 10/86   PRODUCT: composition system v

Units on Maintenance at start: 21
Units on free Maintenance at start: 0
Maintenance Conversion Rate: 90 %
Free Maintenance Period: 3 months
Erosion rate (default):   7 %

TABLE 1 – Number of New Units on Maintenance
Arising from New Sales

Year	New Unit Forecast	% taking Maint	New Maint. Customers	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7
0		90		0						
1	6	90	5	4	1					
2	5	90	5		3	1				
3	4	90	4			3	1			
4	3	90	3				2	1		
5	2	90	2					1	0	
6		90	0						0	0
7		90	0							0
8		90	0							
9		90	0							
Total	20		18	4	5	4	3	2	0	0

TABLE 2 – Net Maintenance Units

	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7
Base at start	21	24	27	29	30	29	28
Erosion Factor	7	7	7	7	7	7	7
Eroded Base	20	22	25	27	27	27	26
Gross FYE from Table 1	4	5	4	3	2	0	0
Net Maintenance Year Equivalence	24	27	29	30	29	28	26

Number of Years for Projection: 5
Initial Total Amortization Value: 148
Amortization Calculation Formula: 0
(0=Straight Line; 1=Revenue; 2=FASB)
Profit Margin, if Constant: %
Tax Rate, if Constant: 50.00 %
Cost of Money: 9.20 %   RO Factor: 0.916
Initial Year for Projection: 1986
Client Name: sterling 10/86 composition system v product

($000s)

	Total	1986	1987	1988	1989	1990
Revenue	1600	480	400	320	240	160
Profit Margin		13.00	13.00	13.00	13.00	13.00
Net Profit						
– Pre Amortization	208	62	52	42	31	21
Amortization	148	29	29	29	29	32
Net Profit						
– After Amortization	60	33	23	13	2	–11
Tax Rate		50.00	50.00	50.00	50.00	50.00
Tax	30	17	12	6	1	–6
Cash Flow after Tax	178	46	41	35	30	26
NPV Factors		0.958	0.877	0.803	0.736	0.674
NPV	148	44	36	28	22	18

Number of Years for Projection: 7
Initial Total Amortization Value: 285
Amortization Calculation Formula: 0
(0=Straight Line; 1=Revenue; 2=FASB)
Profit Margin, if Constant: %
Tax Rate, if Constant: 50.00 %
Cost of Money: %   RO Factor: 1.000
Initial Year for Projection: 1986
Client Name: sterling 10/86 composition system v maintenance

($000s)

	Total	1986	1987	1988	1989	1990	1991	1992
Revenue	2702	336	378	406	420	406	392	364
Profit Margin		13.00	13.00	13.00	13.00	13.00	30.00	30.00
Net Profit								
— Pre Amortization	481	44	49	53	55	53	118	109
Amortization	285	57	57	57	57	57	0	0
Net Profit								
— After Amortization	196	−13	−8	−4	−2	−4	118	109
Tax Rate		50.00	50.00	50.00	50.00	50.00	50.00	50.00
Tax	98	−7	−4	−2	−1	−2	59	55
Cash Flow after Tax	382	50	53	55	56	55	59	54
NPV Factors		0.958	0.877	0.803	0.736	0.674	0.625	0.579
NPV	285	48	47	44	41	37	37	31

Product *Ordernet*

October 1986

PRODUCT - New Sales	1986	1987	1988	1989	1990	1991	1992		TOTAL
Units									
Drug	216	253	286	313	336	353	366		
Hardware	212	272	327	372	407	432	447		
Grocery	20	45	80	125	175	220	255		
PRICE (K$)									
Drug	7.5	7.5	7.5	7.5	7.5	7.5	7.5		
Hardware	2.4	2.4	2.4	2.4	2.4	2.4	2.4		
Grocery	7.5	7.5	7.5	7.5	7.5	7.5	7.5		
Revenue (K$)	2279	2889	3530	4179	4810	5335	5731		28,753
Margin (%)	12	15	17	18	19	20	20		
Profit (K$)	273	433	600	752	914	1067	1146		5186
Amort. (K$)									3045

Number of Years for Projection: 7
Initial Total Amortization Value: 3045
Amortization Calculation Formula: 0
   (0=Straight Line; 1=Revenue; 2=FASB)
Profit Margin, if Constant: %
Tax Rate, if Constant: 50.00 %
Cost of Money: %   RO Factor: 1.000
Initial Year for Projection: 1986
Client Name: sterling 10/86 ordernet

($000s)

	Total	1986	1987	1988	1989	1990	1991	1992
Revenue	28753	2279	2889	3530	4179	4810	5335	5731
Profit Margin		12.00	15.00	17.00	18.00	19.00	20.00	20.00
Net Profit								
– Pre Amortization	5186	273	433	600	752	914	1067	1146
Amortization	3045	609	609	609	609	609	0	0
Net Profit								
– After Amortization	2141	–336	–176	–9	143	305	1067	1146
Tax Rate		50.00	50.00	50.00	50.00	50.00	50.00	50.00
Tax	1071	–168	–88	–4	72	152	534	573
Cash Flow after Tax	4116	441	521	605	681	761	534	573
NPV Factors		0.958	0.877	0.803	0.736	0.674	0.625	0.579
NPV	3045	423	457	485	501	513	333	332

Product _Distribution II_

October 1986

PRODUCT - New Sales	1986	1987	1988	1989	1990	1991	1992	TOTAL
Units	45	35	25	15	5			125
PRICE (K$)	80	80	80	80	80			
Revenue (K$)	3600	2800	2000	1200	400			10,000
Margin (%)	10	12	15	15	15			
Profit (K$)	360	336	300	180	60			1236
Amort. (K$)								1120

					($000s)		

Number of Years for Projection: 5
Initial Total Amortization Value: 1120
Amortization Calculation Formula: 0
  (0=Straight Line; 1=Revenue; 2=FASB)
Profit Margin, if Constant: %
Tax Rate, if Constant: 50.00 %
Cost of Money: 9.20 %   RO Factor: 0.916
Initial Year for Projection: 1986
Client Name: sterling 10/86 distribution iv

($000s)

	Total	1986	1987	1988	1989	1990
Revenue	10000	3600	2800	2000	1200	400
Profit Margin		12.00	15.00	20.00	20.00	20.00
Net Profit						
– Pre Amortization	1572	432	420	400	240	80
Amortization	1120	224	224	224	224	224
Net Profit						
– After Amortization	452	208	196	176	16	-144
Tax Rate		50.00	50.00	50.00	50.00	50.00
Tax	226	104	98	88	8	-72
Cash Flow after Tax	1346	328	322	312	232	152
NPV Factors		0.958	0.877	0.803	0.736	0.674
NPV	1120	314	282	251	171	102

Product: *MARK IV*

(9/85)

	Y E A R S										
)DUCT - New Sales	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	TOTAL
iits - US	20	20	20	10	10						
INTL	20	20	20	10	10						
{includes upgrades}											
:ice (K$) - US	70	——————————→									
(K$) INTL	60	——————————→									
venue (K$)	2600	2600	2600	1300	1300						10400
rgin % - US	10	11	12	13	13						
% - INTL	10	11	12	13	13						
ofit (K$)	260	286	312	169	169						1196
ort. (K$)	287	287	287	143	146						1150

NTENANCE

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	TOTAL
int. Years	740	645	564	496	429	373	298	224			
ice (K$)	8	——————————→									
venue (K$)	5920	5160	4512	3968	3432	2984	2384	1792			30152
rgin %	10	11	12	13	13	28	28	28			
ofit (K$)	592	568	541	516	446	836	668	502			4668
ort. (K$)	536	467	408	359	311	270	216	166			2733

informatics 1 markIV   PRODUCT:

Units on Maintenance at start:	851
Units on free Maintenance at start:	21
Maintenance Conversion Rate:	80 %
Free Maintenance Period:	12 months
Erosion rate (default):	0 %

TABLE 1 – Number of New Units on Maintenance Arising from New Sales

Year	New Unit % Forecast	taking Maint	New Maint. Customers	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8
0		80		17							
1	20	80	16	0	16						
2	20	80	16		0	16					
3	20	80	16			0	16				
4	10	80	8				0	8			
5	10	80	8					0	8		
6		80	0						0	0	
7		80	0							0	0
8		80	0								0
9		80	0								
Total	80		64	17	16	16	16	8	8	0	0

TABLE 2 – Net Maintenance Units

	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8
Base at start	851	740	645	564	496	429	373	298
Erosion Factor	15	15	15	15	15	15	20	25
Eroded Base	723	629	548	480	421	365	298	224
Gross FYE from Table 1	17	16	16	16	8	8	0	0
Net Maintenance Year Equivalence	740	645	564	496	429	373	298	224

Number of Years for Projection: 5
Initial Total Amortization Value: 849
Amortization Calculation Formula: 1
  '(0=Constant; 1=Revenue Dependent)
Profit Margin, if Constant: %
Tax Rate, if Constant: 50.00 %
Cost of Money: 9.20 %   RO Factor: 0.916
Initial Year for Projection: 1986
Client Name: informatics 1 mark IV product

			($000s)				
	1986	1987	1988	1989	1990		Total
Revenue	2600	2600	2600	1300	1300		10400
Profit Margin	10.00	11.00	12.00	13.00	13.00		
Net Profit							
— Pre Amortization	260	286	312	169	169		1196
Amortization	212	212	212	106	107		849 ·
Net Profit							
— After Amortization	48	74	100	63	62		347
Tax Rate	50.00	50.00	50.00	50.00	50.00		
Tax	24	37	50	32	31		174
Cash Flow after Tax	236	249	262	138	138		1023
NPV Factors	0.958	0.877	0.803	0.736	0.674		
NPV	226	218	210	101	93		849

Number of Years for Projection: 8 ✓
Initial Total Amortization Value: 2733
Amortization Calculation Formula: 1
  '(0=Constant; 1=Revenue Dependent)
Profit Margin, if Constant: %
Tax Rate, if Constant: 50.00 %
Cost of Money: %   R0 Factor: 1.000
Initial Year for Projection: 1986
Client Name: informatics 1 markIV maintenance

($000s)

	1986	1987	1988	1989	1990	1991	1992	1993	Total
Revenue	5920 ✓	5160 ✓	4512 ✓	3968 ✓	3432 ✓	2984 ✓	2384 ✓	1792 ✓	30152
Profit Margin	10.00 ✓	11.00 ✓	12.00 ✓	13.00 ✓	13.00 ✓	28.00 ✓	28.00 ✓	28.00 ✓	
Net Profit									
– Pre Amortization	592	568	541	516	446	836	668	502	4668
Amortization	536	467	408	359	311	270	216	166	2733
Net Profit									
– After Amortization	56	101	133	157	135	566	452	336	1935
Tax Rate	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	
Tax	28	50	67	78	68	283	226	168	967
Cash Flow after Tax	564	517	475	437	379	553	442	334	3700
NPV Factors	0.958 ✓	0.877 ✓	0.803 ✓	0.736 ✓	0.674 ✓	0.625 ✓	0.579 ✓	0.537 ✓	
NPV	540	454	381	322	255	345	256	179	2733