Business Day

TUESDAY, SEPTEMBER 12, 2000

The New York Times

BUSINESS Digest

Documents Show Ford Knew About a Faulty Part

When thousands of car owners complained in the 1980's and 1990's that their Fords unexpectedly stalled, top executives repeatedly assured regulators that there was no way to know what might be causing the problem.

But throughout the period, Ford documents show, the company's engineers, safety officials and even its board were aware of growing problems with one particular part — a computerized ignition system attached to the engine's distributor — that would shut the engine down if it overheated. [Page A1.]

Tighter Control of Firestone Vowed

In his first public appearance since the recall of 6.5 million Firestone tires, Yoichiro Kaizaki, the president of Firestone's Japanese parent, Bridgestone, acknowledged that the company had not paid proper attention to quality control. He said the company would exert stronger control over its American subsidiary. [C12.]

While Ford has resisted a higher pressure for Firestone tires on Explorers in the United States, it switched to a different Firestone tire with higher pressure for Explorers in Venezuela during the 1999 model year. [C12.]

Big Brands Avoid 'Dr. Laura' Show

The premiere episode of the Dr. Laura Schlessinger syndicated television series clearly suffered from protests by advocates for gays and lesbians as well-known advertisers mostly shunned the show. Only a handful of recognizable brand names were spotted among the sponsors of the initial episode. Protesters, complaining about remarks made by Dr. Schlessinger about gays and lesbians on her syndicated radio program, urged mainstream advertisers to steer clear of her foray onto TV. Stuart Elliott: Advertising. [C10.]

Sears Names New Chief Executive

Sears, Roebuck has named Alan J. Lacy, a financial trouble-shooter, to succeed Arthur C. Martinez as chief executive. [C2.]

Stocks Slide on Profit Concerns

Stocks slumped on worries about sagging corporate profits after an analyst lowered expectations for I.B.M. because of the strong dollar. The Nasdaq composite index fell 82.06 points, or 2.1 percent, to 3,896.35. The Dow Jones industrial average also moved lower, falling 25.16 points, or 0.2 percent, to 11,195.49, while the broader Standard & Poor's 500-stock index fell 5.24 points, or 0.4 percent, to 1,489.26. [C14.]

Hewlett Confirms Consultant Talks

Hewlett-Packard and PricewaterhouseCoopers confirmed they were discussing the sale of PricewaterhouseCoopers' management and information technology consulting practice to the computer maker for $17 billion to $18 billion in cash and stock. [C6.]

Goldman Sachs Shares Rise on Deal

Goldman Sachs Group confirmed that it planned to make its most expensive acquisition by paying as much as $7.4 billion to buy Spear, Leeds & Kellogg, the biggest trading firm on the floors of the nation's stock and options exchanges. Buying Spear, Leeds would give Goldman a much bigger presence in some businesses it seemed to have written off. Shares of Goldman rose $8.06, to $132.31. [C2.]

G.M. to Replace 268,000 Air Bags

The driver-side air bags on 268,000 Oldsmobiles and Buicks are vulnerable to inflating when the car is started or during normal driving condition, General Motors said. The carmaker has not recalled the vehicles because it does not have the parts, but it plans to begin replacements by the end of the year. [C7.]

Frankfurt Exchange Puts Off Vote

The Frankfurt stock exchange's parent company decided to postpone a shareholder vote meant to ratify a planned merger with the London Stock Exchange. [C4.]

Glaxo-SmithKline Merger Delayed

Glaxo Wellcome and SmithKline Beecham said that their merger into one of the world's largest pharmaceutical companies was again facing delays as United States regulators examine their smoking cessation products. [C4.]

YESTERDAY

Dow industrials	11,195.49	▼	25.16
Nasdaq composite	3,896.35	▼	82.06
30-yr. Treasury yield	5.72%	▲	0.02
The euro	$0.8578	▼	0.011
The dollar	106.02 yen	▼	0.19

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U.S. Approves Formation of Supply Web Site for Automakers

By CHRISTOPHER MARQUIS

WASHINGTON, Sept. 11 — Federal antitrust regulators approved today the establishment of an online venture that would allow five major automakers — including the top three in America — to buy supplies through a single Internet portal.

The Federal Trade Commission approved the formation of Covisint, the business-to-business Web site, which proponents said would streamline the annual purchase of as much as $300 billion in parts for the **Ford Motor** Company, the **General Motors** Corporation and **DaimlerChrysler** A.G.

On the proposed site, automakers are expected to list parts they seek from suppliers, who will then offer bids to secure a contract. The procedure is commonly referred to as a reverse auction.

In addition, automotive suppliers, who spend $500 billion a year, could turn to the site for everything from engine parts to office supplies, the proponents said.

The **Nissan Motor** Company of Japan and **Renault** of France are also parties to the exchange, as are two information technology companies, **Commerce One** Inc. and the **Oracle** Corporation. The **Toyota Motor** Corporation is negotiating to join the joint venture, Covisint officials said.

American automakers praised the F.T.C.'s long-awaited ruling in favor of Covisint, which they said would enhance efficiency and yield significant savings by streamlining the procurement process.

Brian Kelley, Ford's head of electronic commerce, said the exchange would ease online price quoting and collaboration on product designs, which in turn will "drive productivity throughout our supply network."

The F.T.C. decision ended a six-month investigation in which regulators explored concerns that the exchange might enable the big automakers to collude to force down the prices of suppliers.

The commission — which voted 4 to 0 in

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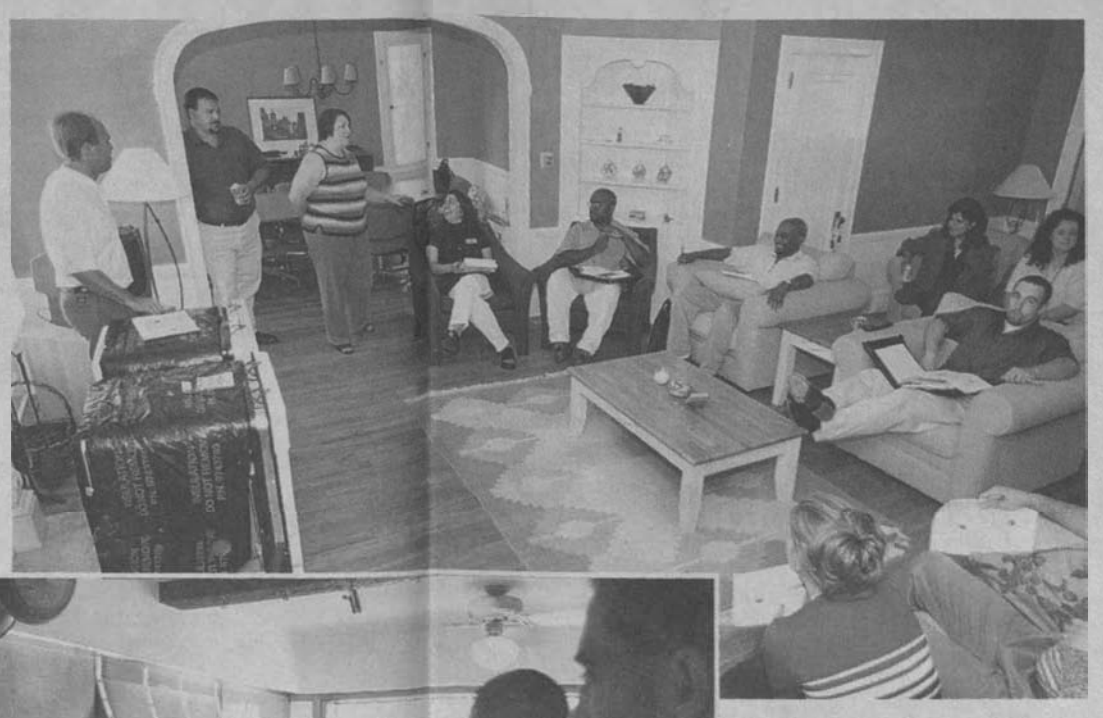
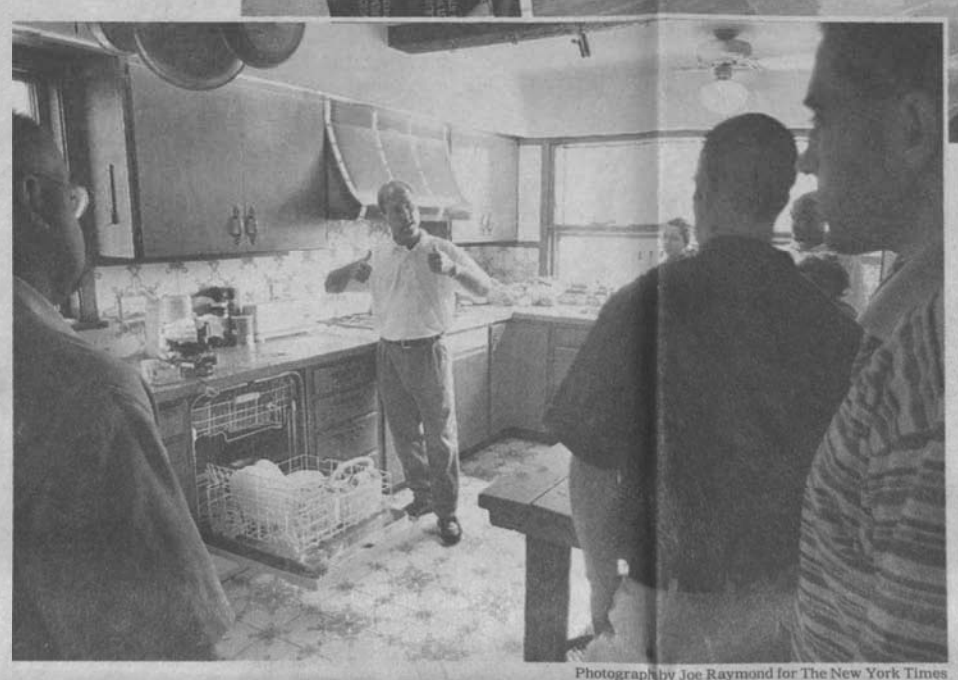


A group of new Whirlpool employees, right, gathered in the living room of a house in Michigan where they lived for two months this summer. Kurt Gersonde, below, a training manager, explained the house's dishwasher to the trainees.



Photograph by Joe Raymond for The New York Times

Living and Learning At Dishwasher U.

Whirlpool Trainees Prepare for Real World

By DAVID BARBOZA

BENTON HARBOR, Mich. — Tony Barbee has never enjoyed household chores. Even in college, he regularly brought his laundry home to Mother, and he shunned the stove in favor of the local Burger King or Kentucky Fried Chicken.

Indeed, he knew so little about what goes on in the kitchen that when he applied for a job at **Whirlpool**, one of the world's largest makers of household appliances, he checked off the box that indicated the lowest level of cooking expertise: Hamburger Helper.

But for two months this summer, Mr. Barbee, now 30, and six other young recruits took part in an unusual training program that might be considered the corporate equivalent of realty-based television.

Hoping to create a better work force, Whirlpool essentially sentenced a group of new hires to live together in a large house, where during the course of their stay they prepared more than 900 plates of food; washed no fewer than 120 bags of laundry; and performed countless hours of loading and reloading of the company's refrigerators, dishwashers and dryers.

They smear white bags with mustard, relish and other stain-generating condiments, just to see if they can bleach them out; they prepare three times as much pasta as they need, simply to see how cooking in microwave and convection ovens differs from that in traditional ovens.

With breaks for only a couple of weekend trips home, the learning experience is intense. Who knew, for example, that one of the company's newest dishwashers was so powerful that when an entire carrot cake was set among the dishes — as it was during an experiment — the cake would entirely evaporate and the dishes would still come out clean.

"Company retreats have been around a long time, but two months living in a house, I've never heard of that," said Sonia Marciano, who teaches management and strategy at the Kellogg Graduate School of Management at Northwestern University. "I guess there are some people who are going to say this is a way cool thing, especially when you're dealing with something as unsexy as appliances."

Company executives, however, insist that the reality-based training program is not a gimmick. Rather, they say, it is a

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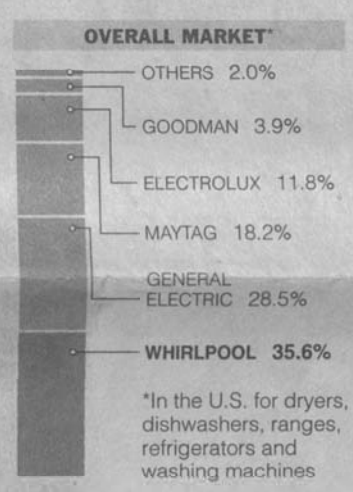
Leader of the Pack

Whirlpool leads the market for major home appliances, but it faces stiff competition in many of its product categories. Share and rankings are based on shipment data.



*In the U.S. for dryers, dishwashers, ranges, refrigerators and washing machines

INDIVIDUAL MARKETS

MICROWAVE OVENS

Shipments in '99: 11,682,085	MARKET SHARE	RANK IN '95
Sharp	31%	1
Samsung	21	2
Matsushita	11	3
Whirlpool	**10**	†
Sanyo	9	6

WASHING MACHINES

Shipments in '99: 7,508,200	MARKET SHARE	RANK IN '95
Whirlpool	**53%**	**1**
Maytag	21	2
General Electric	15	3
Electrolux	7	4
Goodman	4	5

DISHWASHING MACHINES

Shipments in '99: 5,711,200	MARKET SHARE	RANK IN '95
General Electric	38%	2
Whirlpool	**37**	**1**
Maytag	17	3
Electrolux	8	3
Others	§	5

†Less than 1 percent so not ranked
§Less than 1 percent

Source: Appliance Magazine The New York Times

Market Place

Option Boards Are Censured By the S.E.C.

Regulators Say Markets Manipulated Pricing

By FLOYD NORRIS

The Justice Department and the Securities and Exchange Commission said yesterday that the four major options exchanges agreed for years to restrain competition by not seeking to trade options already traded on other exchanges.

The exchanges — the **Chicago Board Options Exchange**, the **American Stock Exchange**, the **Pacific Stock Exchange** and the **Philadelphia Stock Exchange** — signed a consent decree with the Justice Department and accepted a censure by the S.E.C. but did not admit any wrongdoing.

The existence of the investigations, coupled with the entry of another competitor, the **International Securities Exchange**, had already broken down the barriers that the regulators complained about, and most major options are now traded on multiple exchanges. It is not yet clear, however, whether that competition is benefiting investors or just the brokerage firms that send orders to the exchanges.

Joel I. Klein, the assistant attorney general in charge of the antitrust division, said that the agreement by the exchanges not to compete with one another's listings "harmed consumers by depriving some investors of better prices, lower transaction fees and higher quality services."

The S.E.C. and the Justice Department painted a picture of an active conspiracy that went on for years after the S.E.C. ended legal bars to multiple listing of options in 1990. As part of that conspiracy, exchange officials used "threats, intimidation and harassment" when some exchange members tried to promote competition, the Justice Department said.

But having set forth assertions of a long-lasting conspiracy that harmed many investors, the S.E.C. and the Justice Department stopped short of penalizing the exchanges by imposing fines.

Instead, the exchanges, which are self-regulatory organizations responsible for monitoring the conduct of those who trade on the exchanges, agreed to spend more money on surveillance and the enforcement of trading rules. The four exchanges agreed to spend a total of $77 million on such activities over the next two years, which the S.E.C. said represented about a 50 percent increase.

"The $77 million will provide what we believe to be real concrete benefits to investors," said Richard Walker, the S.E.C.'s enforcement director, when asked why there was no fine. "We've structured the settlement to put the money where it counts."

While no fines are to be paid, the Chicago and American exchanges said they had reached tentative settlements of a class-action suit covering the same issues but did not elaborate.

A person briefed on the agreements said they called for the Chicago exchange to pay $16 million and the American exchange to pay $14 million.

In addition, market makers at the vari-

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Despite OPEC Decision, Home Heating Oil Reaches 10-Year High

Associated Press

Ministers of the OPEC nations, meeting over the weekend in Vienna, voted to increase oil production by 800,000 barrels a day.

By JONATHAN FUERBRINGER and NEELA BANERJEE

The price of home heating oil surged to a 10-year high yesterday as traders discounted the impact of a decision over the weekend by the Organization of Petroleum Exporting Countries to increase crude oil production by 800,000 barrels a day.

In trading on the New York Mercantile Exchange, the price of heating oil for October delivery jumped 5.49 cents, or 5.5 percent, to $1.0498 a gallon, its highest since October 1990, after the Iraqi invasion of Kuwait. The price of crude oil rose $1.51, or 4.5 percent, to $35.14, just below the 10-year high it reached last Thursday.

At its current price in the futures market, home heating oil is now 51 percent higher than the average for last fall and winter and is likely to become a bigger issue in the presidential election, especially if October is cold.

"We welcome the reports that OPEC member governments will increase oil production by 800,000 barrels per day," Energy Secretary Bill Richardson said Sunday. "Whether such an increase will stabilize the market remains to be seen." He also said the administration was still considering releasing oil from the Strategic Petroleum Reserve.

The American Petroleum Institute, an industry group, urged consumers last week to fill up their home heating oil tanks early, instead of waiting for the first cold weather. More and more analysts have said that this increase in OPEC production — and any further increase OPEC may approve at its next meeting on Nov. 12 — will arrive too late to help. It takes about six weeks for the crude oil to get to the United States and another week or 10

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Goldman Sachs to Acquire Top Firm on Trading Floors

By PATRICK McGEEHAN

The **Goldman Sachs Group** confirmed yesterday that it planned to make its most expensive acquisition to date by paying as much as $7.4 billion to buy **Spear, Leeds & Kellogg**, the biggest trading firm on the floors of the nation's stock and options exchanges.

Goldman, one of the biggest securities firms on Wall Street, said it will pay $4.4 billion in stock and $2.1 billion in cash to acquire Spear Leeds from its 54 partners. Goldman also will set aside another $900 million of its stock to retain Spear Leeds employees after the purchase, which Goldman expects to complete by the end of the year.

Buying Spear Leeds would give Goldman a much bigger presence in some businesses it seemed to have written off. Less than a year ago, Goldman officials were pushing for a restructuring of United States stock markets that would have hurt Spear Leeds, and just a few months ago a Goldman executive called one of Spear Leeds' main functions "unsustainable."

But now, Goldman's most senior executives are saying that Spear Leeds will put Goldman Sachs at the forefront of a global boom in stock trading, no matter which direction the markets take. "We think it's got the best technology," said Henry M. Paulson, Goldman's chairman and chief executive. "We're assuming the markets are going to keep changing and we're assuming that the U.S. market is going toward more electronic trading."

That trend has been in place for many years as trading on the all-electronic Nasdaq Stock Market has exploded, raising doubts about the future of auction markets like the one housed in the New York Stock Exchange's cavernous building at the corner of Broad and Wall streets in lower Manhattan. Late last year, Mr. Paulson himself called for changes in the way stocks are priced and traded that would have threatened the existence of auction markets and the firms that keep them running.

Spear Leeds, one of the biggest private partnerships on Wall Street, is the biggest specialist, or operator of trading posts, on the floors of the New York and American stock exchanges as well as on the major options trading floors. In the non-stop auctions at those exchanges, specialists are charged with maintaining orderly markets by matching up traders who want to buy certain securities with those who want to sell them.

About one-third of Spear Leeds' operating profit comes from making markets on those trading floors, according to Goldman Sachs. But, in a cover story in Forbes magazine in May, Duncan Niederauer, a Goldman executive, described specialist-based auctions as "unsustainable" in an era of low-cost electronic communications.

Goldman officials have not recanted those statements. But they clearly think there still is plenty of profit to be made in trading the old-fashioned way until it becomes clearer how and when the markets will change.

"There is no such thing as a real bargain" among the best financial companies, Mr. Paulson said, adding that Goldman "wanted to pay a full and fair price."

Some analysts applauded the deal as a smart strategic move for a firm that is committed to being a leading provider of financial services to big customers.

Joan Solotar, an analyst at Donaldson, Lufkin & Jenrette, was not concerned that the deal will increase Goldman's dependence on trading. "They're not running the firm to smooth earnings," she said. "If an investor wants a smooth earnings stream, he shouldn't invest in brokerage stocks."

Investors also seemed to approve of the transaction: Goldman's shares rose $8.06 to $132.31.

Mr. Paulson said that Goldman might buy other specialist firms. He also said that Goldman would consider purchases that would add heft to its money-management operations. But he said the firm had little interest in acquiring either a brokerage firm, such as Charles Schwab Corp., or another investment bank.

Goldman has always prided itself on its culture and Mr. Paulson said that Spear Leeds was a close cultural fit, despite its history of violating the rules of the exchanges on which it trades. Spear Leeds has repeatedly been fined and censured by exchanges and securities regulators for assorted transgressions, including failing to file timely reports of its short positions, or securities that it had sold but did not own.

In one case in 1998, the National Association of Securities Dealers fined a unit of Spear Leeds $950,000 and censured it after finding that the unit had intentionally delayed reports of some trades "to secure a competitive advantage, protect its interests and maximize its profits or minimize its losses," according to N.A.S.D. records.

Andrew Cader, a co-chief executive of Spear Leeds, said that it was "not surprising that we have fallen short of perfection," given the size of the firm's trading businesses, But he said the firm's management was "very proud of regulatory record and we assume our new partners are."

Mr. Paulson expressed no concern. "We feel very comfortable with the people and their standards," he said.

Don Hogan Charles/The New York Times

Henry Paulson and John Thain, left, chief executive and president of Goldman Sachs, shook hands with Andrew Cader and Gary Goldring, right, co-chief executives of Spear, Leeds & Kellogg.

Formation of Supply Web Site for Automakers Is Approved

Continued From First Business Page

favor of the exchange — warned that it will remain vigilant against such anticompetitive maneuvers and said it "reserved the right to take such further action as the public interest may require." Commissioner Thomas B. Leary did not take part in the vote.

"Because it is not yet operational, and because its founders represent such a large share of the automobile market, the commission cannot say that implementation of the Covisint venture will not cause competitive concerns," the F.T.C. said in a statement.

Thomas T. Stallkamp, an expert on automobile industry purchasing, said today's ruling was a "good step forward" for the formation of the site. But he added, "There is still a long road to getting Covisint up and running."

Mr. Stallkamp, a former president of Chrysler, said the developers of Covisint would have to demonstrate their "true neutrality," so the exchange is accepted by suppliers and not seen as weighted in favor of the major purchasers.

He urged the developers to grant suppliers some ownership in the Internet site. Automakers have so far ruled that out, attempting to lure dozens of suppliers into the network by offering them the chance to link their sites to the portal's vast revenue pool.

By sharing equity, the automakers may allay concerns that they might use Covisint "as a cost-reduction tool against suppliers, rather than a communications tool for the suppliers," said Mr. Stallkamp, who now is chief executive of **MSX International**, a Michigan company that helps businesses hire engineers.

Covisint officials have yet to name a chief executive, define who will own the portal's data — a potentially valuable trove of purchasing information — or devise safeguards to protect suppliers' proprietary information.

The exchange also must still receive approval from Germany's antitrust regulatory agency, which is expected soon. Alice Miles, Covisint's interim co-chief executive, predicted the electronic marketplace will be operational within a month of that final approval.

In remarks to reporters, Ms. Miles, a Ford employee, said Covisint might pursue an initial public offering next year after at least two quarters of operation.

"Covisint is poised to create a leading global e-business trading exchange," Ms. Miles said. "The completion of the F.T.C. review represents a significant milestone in our efforts to establish a transformational business-to-business entity."

Covisint is the first business-to-business venture to be reviewed by the F.T.C. Such Internet sites are seen as a boon to global trade with implications that reach to all sorts of industries.

Business-to-business electronic marketplaces "offer great promise as means through which significant cost savings can be achieved, business process can be more efficiently organized and competition may be enhanced," said Robert Pitofsky, the F.T.C. chairman.

He cautioned, however, that his agency would scrutinize additional ventures to ensure they "are organized and implemented in ways that maintain competition."

Boeing Plan for St. Louis

SEATTLE, Sept. 11 (Bloomberg News) — The **Boeing** Company said today that it would invest as much as $250 million in upgrades at its St. Louis military-aircraft division and sell some other facilities to the St. Louis Airport Authority to cut costs. Boeing, the second-largest defense contractor in the nation, plans to build a new hangar for flight tests and expand another building for assembly work. It will sell 1.8 million square feet of facilities to the operator of the adjacent St. Louis airport, cutting the amount of space it uses by 20 percent. The plan is part of a continuing consolidation of Boeing's operations. The company said in June that it planned to sell a 1,700-worker parts-fabrication unit in St. Louis. Boeing is also shutting some rocket facilities in California. The new operations are scheduled to open in mid-2002.

Other points of view on the Op-Ed page seven days a week. The New York Times

Financial Trouble-Shooter Named New Chief at Sears

Title of Chairman To Be Added Soon

By MILT FREUDENHEIM

Sears, Roebuck & Company has named Alan J. Lacy, a financial trouble-shooter, to succeed Arthur C. Martinez as president and chief executive, effective Oct. 1.

Mr. Lacy, 46, who climbed the executive ladder after he stanched losses in the company's credit card business, will add the title of chairman when Mr. Martinez, 60, retires in December. Mr. Lacy told analysts yesterday during a conference call that he would build on Sears's core strengths in retail, after-sale service and credit by "doing fewer things better."

He will take over at a time when the big retailer hopes to exploit the departure of the Circuit City chain from the home appliance business. Analysts said Sears, based in Hoffman Estates, Ill., already had 38 percent of the home appliance market. Appliance sales helped Sears gain 5.6 percent in sales at stores open at least a year in August, a lackluster month for many retailers as clothing sales faltered.

Wall Street analysts, who became familiar with Mr. Lacy when he was chief financial officer at Sears in the mid-1990's, praised the company's choice of an insider for the top position. "He is an excellent, realistic person," said Michael Exstein, a retailing analyst at Credit Suisse First Boston. "He has seen the consequences of overreaching in the credit and service businesses at Sears and he has been able to right many of those mistakes."

Sears ran into trouble by joining the rush to sign up credit card customers who, in many cases, were unable to pay their bills. It has written off losses and tightened its cardholder requirements, Mr. Exstein noted. In the service business, Sears can try to attract former customers of Circuit City while mainly attending to its own appliance customers.

Richard Church, an analyst at Salomon Smith Barney, said Sears would "continue to lead with their best punch, the home area." The goal is to attract young women and young families to the stores by emphasizing home furnishings, appliances, home electronics, tools and children's clothes. Sears is experimenting with home goods specialty stories that it calls The Great Indoors, but analysts said it was too soon to forecast their prospects.

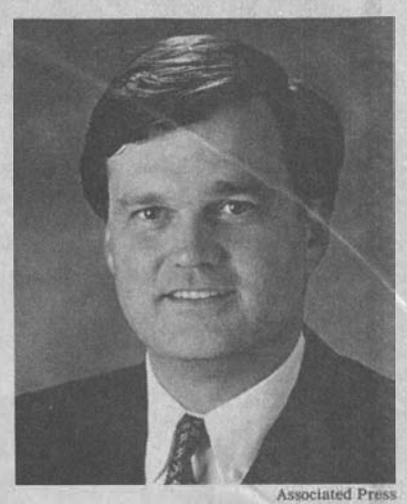
Sears is the third big retailer this summer to announce a new chief executive. On May 31, **Kmart** selected Charles Conaway, who had been president of the **CVS pharmacy** chain. On July 27, **J. C. Penney** announced the appointment of Allen L. Questrom, chief executive of Barneys New York and former head of Federated Department Stores.

Mr. Lacy joined the company in 1994 as a senior vice president after holding finance and strategic planning jobs at **Philip Morris** and its Kraft General Foods unit. He was chief financial officer and executive vice president of Sears from 1995 to 1997, then president of the credit unit for two years, before adding responsibility for home services, customer responses and Internet business as president of services.

Mr. Martinez, who has been chairman and chief executive since 1995, announced his retirement plans last March. A former executive at Saks Fifth Avenue, he joined Sears as head of its troubled retail operations in 1992. Investors applauded as he cut costs, discontinued the famous but money-losing Sears catalog, closed 100 stores and eliminated 50,000 jobs. The company now has 860 department stores and 2,100 specialty stores.

But Sears stock began to slide in mid-1998 as **Wal-Mart, Target** and other discount stores offered low prices on household goods, and clothing chains like **Gap** and **Ann Taylor** captured apparel customers.

Sears, which has lost almost half its stock value over the last two years, rose 50 cents yesterday, to $35.25, on the New York Stock Exchange.



Associated Press

Alan J. Lacy has been chosen to be the president and chief executive of Sears, Roebuck.

COMPANY INDEX

This index lists businesses mentioned in The New York Times today. It omits companies mentioned in passing and it does not cover statistical tables. Page numbers refer to the beginnings of articles. A dagger (†) denotes a parent company not directly mentioned in an article about a subsidiary.

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Viacom C10
Vodafone AirTouch C4

W
Wal-Mart Stores C6,C14
Walker Digital C6
Whirlpool C1
Wisconsin Energy C14
WPP Group C10

Z
Zilo Networks C10
Zoesis Studios C6

BG
7/F3

BURTON GRAD ASSOCIATES, INC.
7 WHITNEY STREET EXTENSION
WESTPORT, CONNECTICUT 06880
(203) 222-8718 FAX: (203) 222-8728
E-MAIL: BURTGRAD@AOL.COM

Date: July 18, 2000

To: John Flavin

From: Burton Grad

Subject: Additional Information from Review of Future Three Operations

As promised, I have prepared three attachments which are in addition to the Product Development Assessment from BGAI:

Attachment 1	Subjects which deserve special executive attention
Attachment 2	Interview Notes
Attachment 3	References to materials which should receive further examination by F3 management

Thanks again for your cooperation and that of your staff.

Additional Subjects for Executive Review

1. Need to review the "deferred" projects (Windows mapping, Jwalk, Tools) and determine which, if any, should proceed. All key managers involved should contribute to the analyses and be informed of the results.

2. Set firm schedules and funding for selected AS400 product initiatives incorporating recommendations and insights from consulting, customer service and support as well as from development and sales and from customers.

3. Remind marketing/sales not to be too absolute in its positions and to provide some flexibility to adjust to changes which cannot be averted, even by good planning.

4. Decide whether there is a significant international market for the AS400 products and the Eclipz services. Use Synapz staff knowledge to help make this decision, and then fund and schedule it properly if you decide to proceed.

5. Carefully lay out the plans for strategic partnerships and affiliations. Ensure that these do not become simply tactical sales channels, but meet strategic industry goals.

6. Systems strategies need to be thought through. It is not clear whether there is anyone on board with the technological skill and imagination needed to structure the new products and services for both the automotive industry and potential related market opportunities.

7. The current personnel involved in business planning and product management need much better training and leadership to avoid the twin problems of weak processes (not knowing how to do the planning) and weak implementation (not knowing how to execute the plans).

8. With the new financial software from SoftTrax, an effective set of budgeting and cost management tools should be put in place to measure revenues and profits for each product and service offering (new sales, maintenance, consulting, trading partners, etc.).

9. The roles and responsibilities of the consulting organization need to be spelled out and staffed appropriately to the mission. There are currently far too many people for the level of revenues, and there is inadequate sales effort to increase the revenues sufficiently.

10. Support still suffers from a lack of tools and a clear way to eliminate unnecessary backlog elements. This organization is probably over staffed.

11. Documentation is leaderless with no focus nor a clear set of priorities. Do you really want and need computer based training? If so, it must be staffed and supported early in the development cycle because it is a long, arduous process.

12. Customer Service is a complex organization with lots of measurements and reports, but not a clear picture of what they are doing and why. Is this primarily a revenue-producing, profit-making organization? If so, the nonrevenue-producing elements should be taken away and the focus should be on adequate sales efforts, effective pricing and timely execution.

13. Does program management have any authority or accountability? How is it supposed to relate to business planning and to development? Who determines the specifications and the business cases?

14. The internal Information Technology function gets no respect and is not a serious player in determining or supporting the business processes.

15. Quality Assurance appears to be quite weak, with little attention paid to its concerns and recommendations. It does not have enough in the way of formal procedures and testing processes. It is used mostly as a release clearance group. It does not provide the quality planning and framework role to avoid making errors in the first place, but rather, simply tries to stop the mistakes from getting to the customers. This uses a substantial number of people who, to some extent, give development an excuse for not adequately testing their products before saying that they are ready for release.

Interview Notes

Business Overview

I. Flavin, Ternes, Winkelmann
II. Kingery, Alderson, Toufar
III. Templeton
IV. Broccardo

Financials and Internal Services

V. Ternes
VI. Marchi

Consulting, Support and Services

VII. Littlepage, Trela
VIII. Winkelmann
IX. Jazowski, Parker, Vogrin
X. Parker
XI. Parker

Synapz Marketing and Sales

XII. Marsolais, McGee, LaLiberte, Pittman
XIII. McGee, LaLiberte
XIV. Paul

Development, Documentation and Quality Assurance

XV. Nissimov, Parker, Hart
XVI. Jensen, Proctor
XVII. Kormos
XVIII. Nissimov
XIX. Bridson

I. Flavin, Ternes, Winkelmann (June 26, 2000)

Dates Hired

John Flavin, 8/2/99 (at meeting)
John Ternes, 8/2/99 (at meeting)
Mark Winkelmann, 11/99 (at meeting)
Klaban, V.P. Development, 11/99-5/00
Bob Paul, 2/00

Product

RPG AS400 250 customers
- Tier 1 = 150
- Midwest = 80%
- Small east coast/west coast sales
- 240 trading partners (maybe 1/3 are customers)
- Up to 22 different transactions

Market

15-20 OEMs
Tier 1: primary auto
Tier 2: primary auto
Tier 3: smaller/mixed

UNIX AutoRelease	Home grown	Trinary: full function
	Harbinger: translations	Radley: full function
	Sterling: translations	Brain: full function + AS400 (German company)

Actions

- Canceled IPA (Progress)
- Introduced Moore structure ("Crossing the Chasm")
- AS 400 enhancements:
  - Windows mapping
  - J. Walk: screen scraper
  - Tools application

  These have been postponed

Process

- Proposal sent by Business Development (LaLiberte, McGee) to Executive Steering Committee
- If go, then assigned to Program Management to lay out work
- 700 new product initiatives for AS400; may be 22 key items needed
- Synapz: sales, marketing and business planning

II. Kingery, Alderson, Toufar (June 26, 2000)

Pat Toufar

International standards bodies; establish F3 recognition outside U. S.
Odette, Edifact
Launch international business
More small suppliers
Not a lot of EDI

Jessie Alderson

Technology watch in the auto industry
ANX: Automated Network Xchange
SAIC: owns subsidiary for ANX
Commercialization of Internet
Authentication and encryption were key issues
Bandwidth was critical; some states do not have adequate point of presence
Internet service providers had to agree to set up points of presence
Extranet: transaction community
XML: message structure for application use
OAG: developing XML
Putting together framework for handling tags (attributes)

Vic Kingery

Developing XML as a standard in auto industry
Identify components which F3 does not have
Develop value proposition for partners (with business development)
Examples: ASP: selected CSC
Technology partner: ICI
Internet development: Java, XML
Web bar coding:
Freight Optimization
Internet based quality system: ERP
Supply chain management: i2, Manugistics; i2 partnering with IBM and Ariba

Covisint (Collaborative Visibility Integration): Consortium owned by Ford, GM, Daimler-Chrysler with Commerce One and Oracle

Strategy: Oracle, then DB2, SQL
Industry trade exchange/digital marketplaces
Vital to maintain trading partners/transaction sets

Vic Kingery helping to introduce new strategic planning and program management processes
Need for rapid education of people to build up skills
May need separate plans for different businesses
Migration Plans for AS400 products and customers
Internationalization for AS400

III. **Templeton** (June 27, 2000)

Morale has improved, stabilized
No longer an exodus
More structure and discipline
Recruiting process for executives, technology, sales, etc. is now in place
Some walls still exist between functions

IV. **Broccardo** (June 28, 2000)

Relation of Business Plan to Program Management Plan
Program Manager
- Specification
- Estimating effort
- Authority
- Accountability

V. **Ternes** (June 27, 2000)

8/99 joined company
Financial Planning process
Bottoms up for expenses based on manager projections of headcount

Estimated new headcount for new areas
Limited input from ex-development manager
Should separate legacy business from startup business

Asked for 1999 business results less five aborted projects
Asked for 2000 business results less Eclipz revenue and costs
Produce plan to reduce AS400 operations costs

Need for business case for Eclipz V1 and V2 over 18-month period
- 2H2000 and CY2001
- And accumulated cost to date

CSC: $18k/month for ASP

VI. **Marchi** (June 28, 2000)

Using NT on servers
Purchased SUN UNIX boxes
Acquiring SoftTrax
IT functions:
- Support of development
- Support of operations

VII. Littlepage and Trela (June 27, 2000)

Consulting projects: Implementing AutoRelease and VendorRelease
Auto Release is primary business
Vendor Release: initial suppliers 90-120 days
Cost $35k-$50k
Charge $180-$200/hour ($1500-$2000/day)
Problem was fixed price without a well-defined box for work to be performed

Debbie: Responsible for people management; also some internal programs
Jim: Strategic responsibility for VendorRelease and Eclipz
Ed Stutzman is responsible for AutoRelease; essentially those are cleanup projects

ANX

- Ford has been pushing its suppliers off of SOLMIS and onto ANX.
- Can run FTP (Ford Only) in AutoRelease.
- Do not have directions for GM and Chrysler
- 170 Ford customers for F3, expect 64 projects by YE00
- Typical project $10k services, 5 days/project

External Education

- At F3, AutoRelease, VendorRelease, etc. based on course materials from Cathy Jensen
- $350/charge per seat, 6-8 people onsite per class yields $2,250/day
- Target: $200k
- 100 one-day classes/year; 80% on AutoRelease

Supplier Peak Performance

- Review customer employee/project operations and recommend what needs to be done
- 3 days @ $2k/day. This has failed so far.

Trading Partner Implementation

- Quick path assistance; little success; could consider Trading Partner sponsorship

AutoMap Education

- 1 day for engine training at $350/seat
- 3 days for tool training at $1200/seat
- 1st class now
- Need to give input to development on improvements to AutoMap
- Setting up round table on specific products to discuss functionality
- Will need formal modification and extension release level procedures as well as version level enhancement procedures (ala Chasm)
- $4.5m revenue target for consulting
- Commission structure does not encourage sales reps selling consulting
- Eclipz: Plan for alpha consulting
- Eclipz: Plan for beta consulting
- R&D relations are weak; no forum for market input for Eclipz or AS400

- How should consultants learn new products?
- Now involved in beta
- Where is documentation?
- 25%-30% utilization of consultants

VIII. **Winkelmann** (June 27, 2000)

4% commission for consulting
6-8% on product sale with 12% when exceed quota
No commission on renewals
Would like to have own sales reps
Purpose of consulting: install what sales sells, supply chain consulting, auto release
$6m consulting revenue needed to keep 20 consultants busy
About 70 people total in the Support, Services and Consulting organization
Enhanced Communications needed for AS400
ANX for AS400
Trading Partner Business

IX. **Jazowski, Parker, Vogrin** (June 26, 2000)

AS400:

- Makes changes for urgent items only
- All customer problems come to help desk
- But 200-300 problems per month are logged outside of help desk
- Significant bugs in AutoMap
- AutoScan not functionally complete
- From Support to Developer if new update
- From Support to CS Development if non-critical
- From Support to Urgent Problems group if critical
- OEM-specific changes in programs
- Maintenance responsibility
- Need tools
- Need correct organizational structure

X. **Parker–Customer Service** (June 20, 2000)

Auto Release
Vendor Release
AutoMap
AutoScan

- New trading partner development
- OEM mandates: changes, new transaction sets
- OEM's: manufacturers
- Trading Partners: direct suppliers to OEM's
- Suppliers: provide materials and parts to Trading Partners
- Research Office: Identify changes needed from Trading Partners and Suppliers

- Create business requirement definitions and conceptual design
- For each trading partner, identify set of transactions and design
- Transaction set is one type of transaction like an 830
- Change processes: receipt and actions
- Support fixes: Level 1 support and urgent fixes
- Services: normal fixes and enhancements
- Development: new products only
- QA tests all
- Walls between groups
- Good relations with Support
- Better relations than before with consulting, but consulting siphons off resources
- Poor relations with development

XI. **Parker** (June 28, 2000)

Trading Partner: manufacturer of components and manufacturer of autos
Each F3 customer identifies trading partners; who do they do business with:

- Specifications
- Transaction sets

12-step process established 10/99
AutoMap design is not a user's tool
Can it be changed to make it easier to use?
Multiple screen users cannot be on at same time

XII. **Marsolais, McGee, LaLiberte, Pittman** (June 26, 2000)

Roll-out of Eclipz V1
Eclipz development team meetings
Schedule for all pieces

McGee and LaLiberte

Business case for Eclipz V1 and V2: Are they still needed?
Todd Meek and Smolinski: Developed plans for VendorNet
Need for CTO or Systems Architect

Pittman

Continues AIAG leadership role

XIII. McGee, LaLiberte (June 27, 2000)

No compelling reason to implement VendorRelease, except for Eclipz

Migration

- AS400 to go to Eclipz
- AutoRelease functionality
- Equivalent Trading Partner capability (AutoMap or alternative)
- VendorRelease function (if currently using)
- AutoScan
- And only if customer wants to migrate from AS400
- Otherwise, F3 would have to force customer across the bridge
- Need technology adviser/consultant; need technical direction
- AutoMap translation is not sufficient for migration
  - Keyword facilities also needed
  - Reports, inquiries
  - Shipping functions variations
  - Invoicing variations
- Where is the business plan outline?

XIV. Paul (June 27, 2000)

Sales force had disappeared
Better market opportunity in supplier communication
Phase I: Stabilize personnel
Phase II: Listen to marketplace
Phase III: Create the strategy

Goal: replace of AutoRelease would have taken until 1Q01

Initial delivery of Eclipz in 8/00 will be a proof of concept

Internal Training
Application training, support, quality: new technology
New product training: support

Getting on board early is needed

Who should do the specifications for new products?

Market "pain" is in Tier 2 and below

- Expect to get a product to market earlier
- Access to new piece of market not currently accessible
- Tier 1 to Tier 2 through TierT N: more pain, simplified problem
- Choice of ICI because of
  - Scalability
  - Interoperability
  - Performance
  - Deal with multiple platforms

XV. Nissimov, Parker, Hart (June 26, 2000)

AS400:

AutoRelease
VendorRelease
AutoMap
AutoScan

Is there a new sales future for AutoRelease?

Ben Hart went to Java team (Bridson) for Joy Blair
3-person staff

Should be focused on architectural enhancements to AS400

Process which should be followed:

- Specifications
- Market value
- Design
- Cost/schedule
- Project authorization:
  - Prioritization
  - Programming
  - Unit Testing
- Integration testing
- System testing: should include regression testing
- Release Plan: weekly using ESS
- People need to learn Java and object-oriented approach
- Issue is with defects and OEM changes
- Multiple programmers may be working on changes to the same program (core programs)
- Feasibility of meeting time lines imposed by OEMs
- OEM requirements affects many aspects of programs

F3 has only used AutoMap for new transactions

- Translation of EDI messages
- Maintenance of EDI messages
- Changing data in EDI messages
- Value is the fact that F3 performs whole range of functions
- Do ICI rules modeling capabilities cover data changes in transactions?
- Could AutoMap be rewritten in Java so as to reuse all current AutoMap transactions?
- Should "all" RPG transactions be rewritten in AutoMap?
- This should be reviewed as a strategy.: could AutoMap be used as a translator only for new and current trading partners, leaving only maintenance functions in RPG?

XVI. **Jensen, Proctor** (June 26, 2000)
Documentation is in paper form
Not notified on new projects

Customer presentation of field names is inconsistent, and too much information on screen (ASN's)
Cleaning up existing documentation and preparing for on-line access
Computer Based Training
Started in Fall 1999
Intended for distribution with Eclipz V1 (1 on board and 1 person authorized)

Customer Training done by Consulting
Developing courses by Documentation/Training group

XVII. **Kormos** (June 22, 2000)

Eclipz VI Development

Background

- In 7/99-8/99, started concept of VendorNet based on marketing/sales input
- Expected to have whole application outsourced because internal staff was too busy
- Used IPA team to staff the VendorNet team in Fall 1999 -- planned to use Java
- In Winter 2000, made "time schedule" for May delivery a primary objective
- Was to be "bolt on" to Vendor Release...to sell both product and service
- To be a service offering primarily
- CSC platform was target

1. **Organization and Training of Development People**
   Formal Training: two weeks of class for Mormos and Byrd, but no object-oriented training; would have liked to make some changes in approach. Kormos and Byrd started in October 199; manager (Jan Gillespie) left. Do not feel well skilled in Java.

2. **Development Methodology**
   Broccardo involved since April 2000 as program manager

3. **Scheduled Enhancements/customer Commitments**
   1.1 and 1.2 are planned enhancements
   1.1 customer site user interface (host only)
   1.2 Credit card processing (customer and host site)

4. **Current Maintenance Activities**
   Maintenance experience (document to Broccardo)

5. **Current Development Projects**
   See #3

6. **Testing and Quality Assurance Procedures**
   Jeri Hart: August 1999 doc. Has it been modified?

7. **Effort and Cost Records for Development**
   Historic effort level (doc to Broccardo)

8. **Product Release and Update Procedures**
   QA will set release plan; John Marchi to deploy Java code to AS400 Vendor Release customers

9. **Installation Procedures**
   To be developed jointly with CSC

10. **Availability and Procedures for International Usability and Service in Non-automotive Industries and Internationally**
    No current international requirements

11. **Use of Third-Party Developers**
    Three outside contractors from CSC started in 1/00 for design, programming and unit testing
    +1 Oracle DBA from CSC (April)
    Relationship with CSC has been great
    CSC has added five new people on ASP
    Contractors have done almost all programming; performance has been good
    Contractors are Indian; some communication problems

12. **Detailed Review of Schedule and Progress for New Product Releases**
    Broccardo will review schedule
    July 31, 2000 is target for CSC ASP operation; this is a makeable date per Kormos
    Worked with Vendor Release development
    Worked with QA (Johanna Milz)
    Orientation for tech sales and doc (May 2000)
    Demoing product since March for customers and sales and business partners

Other Comments

- Objected to Oracle database choice because of high cost, but in retrospect, it will turn out well because it can handle much larger volumes (would have selected Progress database)
- Looking forward to joining Eclipz V2 team and enhancing Java and XML skills
- Eclipz V1 is reasonably well-documented

XVIII. **Nissimov** (June 14, 2000)

AS400 Development

- Vendor Release does not handle:
  - X.12 parsing (in Eclipz)
  - supply chain for Tier I...
  - receiving side is weak

- Vendor Release sales have not been very successful
- Auto Release functionality: not in Eclipz V1 or V2
- Enhancements for AS400
  - How much?
  - When?

- ERP Systems are taking over; not as open for interfacing
- EDI and Release Accounting, Queue Management
- Maintenance
  - Some in Parker area; also some in development and some in Jazowski area
- AS400 product needs XML Java add-ons

XIX. **Bridson**

Where are requirements for Eclipz V3 and V4?
Initial Eclipz V2 market is ASP but could also be Tier I and OEM direct usage
Where is program plan for all other functions to support Eclipz V1 and V2

Reference Materials

Many useful items were sent to BGAI to assist in the analysis. Appendix B-2 in our report lists all of the items which we received. Obviously, the Executive team should be familiar with most of these items as part of their managerial assignments. However, certain of these items may be outside the normal reporting stream, and it may be fruitful for you to get copies for review in conjunction with the suggestions in Attachment 1 and the Interview Notes in Attachment 2.

Listed below are the items which I think would be particularly helpful. For each item, I have provided the reference number in Appendix B-2 and the name of the person who gave us the material:

21. Maintenance Trend Analysis and Maintenance Revenue Recognized (Ternes)

22. New Customers/New Sales Analysis (Ternes)

24. Operating Plan with Cost Analysis: FY00 (Ternes)

25. Consulting Services Budget and Utilization (Winkelman)

32. Eclipz Program Plan (Broccardo)

34. New Development Projects Plan (Nissimov)

45. Eclipz V2 Development plan (Bridson)

46. Documentation Materials and Plans (Jensen)

47. Customer Services Development Process Flow (Parker)

48. Support Monthly Stats and Service performance by week (Jazowski)

54. Future Three Market/Product Plan Structure (LaLiberte and McGee)

56. Pro Forma Statement of Operations: AS400 and Eclipz for 2000 (Ternes)

57. Headcount Actuals with Terminations and New Employees (Templeton)

63. Program Status: Technology, People, Product, Tools (Broccardo)

64. Information Technology Internal Programs (Marchi)

Materials Received — Future Three

1. Sample Project Status Report Consulting Services, 5/24/00
2. Newspaper Article: Future Three...Supply Chain Software
3. Executive Profiles: Paul, Winkelmann, Ternes, Flavin
4. Beta Test Best Practices: David Broccardo, 4/27/00
5. Program Management Best Practices Guide, 5/30/00
6. Project Status Report: Eclipz Phase II Beta 5/19/00
7. Organization Chart
8. CEO Reports: John Flavin, 4/6/00, 2/16/00, 1/28/00
9. Eclipz Phase II Beta: Software Requirements, 5/8/00
10. VendorNet Enablement: CSC Technical Design, 4/20/00
11. User Group Conference Survey, 6/99
12. Customer Satisfaction Survey, 1/99
13. Customer Services Development: Various Reports, 1H00
14. Customer Services: Support Line Statistics, 6/00
15. In-Process Customer Satisfaction Survey, 6/00
16. Eclipz Version 1: Product Planning Guide, 6/9/00
17. Marketing Materials: Products, Services
18. Sales Pipeline, 6/12/00
19. Software, Maintenance and Consulting Services Price List, May 2000
20. Strategic Network of Alliances and Partnerships (Kingery)
21. Maintenance Trend Analysis (Ternes)
22. New Customers/New Sales Analysis (Ternes)
23. Headcount by Department (Ternes)
24. Operating Plan: FY00 (Ternes)
25. Consulting Services Budget and Utilization: FY00 (Winkelmann)
26. Supplier Peak Performance Program (Winkelmann)
27. Education Services Course Catalog (Winkelmann)
28. Consulting Services for Auto Suppliers (Winkelmann)
29. Competitive Analyses (Marsolais)
30. Supply Chain Linking: Web Enablement Design Document (Broccardo)
31. Proposed CSC Eclipz Web Hosting Statement of Work (Broccardo)
32. Eclipz Program Plan (Broccardo)
33. Standards Plan for Eclipz GUI (Bridson)
34. New Development Projects: 5/15/00 (Nissimov)
35. Future Three Product Architecture (Nissimov)
36. Vendor Release 5.0 Plans including Vendor Release System Plan (Nissimov)
37. Auto Release Interface Testing (Nissimov)
38. Automap Flow Diagrams and Interfaces (Nissimov)
39. VendorNET (Eclipz I): Impact Analysis to Vendor Release 5.0 (Kormos)
40. Customer Services: Priority 1 Issue Procedure

41. Twelve-Step Process: Customer Support/Service
42. Summary Statement of Operations 1Q98-4Q00 ~~(with maintenance analysis)~~
43. ANX Project Overview 6/16/00 with ANX descriptions
44. Automotive Supplier Report--XML and EDI: The Next Generation Format of Business Information Transfer
45. Shipper Prototype Plan: Eclipz II (6/19/00)
46. Documentation Department and Education Services: Course Materials/User Manuals
47. Customer Services Development Process Flow
48. Other Support Stats 2000
49. Customer Support: AS400
50. Quality Assurance Project Status Information
51. Quality Assurance VendorNET Test Plan (Eclipz I)
52. Eclipz Network Diagram
53. Future Three Executive Summary (Business Description)
54. Future Three Market/Product Plan Structure
55. Consulting Services P&L (2000) and Utilization
56. Future Three Pro Forma Statements for Eclipz and AS400 (2000)
57. Employee Head Count Changes with Terminations and Hires
58. Additional Quality Issues (Hart)
59. Analysis of Backlog of Projects
60. Eclipz Marketing Plan Summary
61. Product Defect Procedure
62. Eclipz Revenue and Cost Projection Model
63. Eclipz Program Status

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7 WHITNEY STREET EXTENSION
WESTPORT, CONNECTICUT 06880
(203) 222-8718 FAX: (203) 222-8728
E-MAIL: BURTGRAD@AOL.COM

Date: July 6, 2000

To: John Flavin

From: Burton Grad

Subject: Preliminary Product Development Report on Future Three

Enclosed are five copies of the report from BGAI covering F3's product development and related functions. I have only included one copy of the appendices to reduce the volume of paper being sent.

We would appreciate any feedback to correct any substantive errors or to clarify our comments and recommendations.

Unfortunately, in any project of this magnitude, many subjects can only be given short shrift and many topics have to be ignored in order to focus on the highest priority items. I plan to send you a letter identifying some of these other matters which were brought to my attention, but which I did not have time to deal with. You may wish to have your executives review these areas and take appropriate corrective actions.

I will enclose with this letter an edited copy of my interview notes and refer to specific materials sent to me which may be useful for your personal review.

Also enclosed is a final invoice for this project.

Enclosures
5293

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Future Three Software, Inc.
41780 Six Mile Road
Northville, Michigan 48167

Invoice #2989

July 6, 2000

Attention: John Flavin

Project: 237-3

INVOICE

Project: Review and Analysis of Future Three's Product Development and Related Operations

Consulting Services:	June 2 - July 6, 2000		
Burton Grad	5 days @ $2,800/day		$14,000.00
Sid Dunayer	5 days @ $1,600/day		8,000.00
Total Fees			**$22,000.00**
Expenses Incurred:	June 25 - 28, 2000 on site at Future Three		
Burton Grad: Westport, CT to Livonia, MI and return			
Airfare		$ 248.00	
Hotel (2 nights)		236.70	
Meals		145.64	
Local travel and parking (NY area)		172.00	
Rental car		188.00	
Miscellaneous, tips		10.00	$1,000.34
Sidney Dunayer: New York, NY to Livonia, MI and return			
Airfare		$580.00	
Hotel and meals (3 nights)		420.00	
Local transportation		50.00	$ 1,050.00
Total Expenses			**$ 2,050.34**
Total Fees and Expenses			**24,050.34**
Less Advance Payment			**(5,000.00)**
Total Invoice			**$19,050.34**

Payment Is Due Within 15 Days of Receipt of Invoice

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July 6, 2000

Mr. John Flavin
Future Three Software, Inc.
41780 Six Mile Road
Northville, Michigan 48167

Dear John:

Enclosed is the Burton Grad Associates, Inc. report regarding Future Three's product development activities with additional findings and suggestions about other related business activities.

These conclusions and recommendations are based on a review of materials which Future Three provided to Sid Dunayer and me and on a large number of interviews with Future Three executives, managers and senior employees. Nevertheless, this was a relatively short-term assignment and there may be errors (factual or interpretive) in our findings. Therefore, these suggestions and recommendations should serve as a starting point for internal analyses and discussions in order to assess their applicability, appropriateness and practicality.

This was a most interesting assignment since I had previously examined Future Three on three other occasions (in 1992, 1993 and 1998); I was quite excited by the new market and new application opportunities that the Future Three management team has identified and is pursuing.

I have included as appendices to the report a variety of resource materials provided by F3 which I considered particularly relevant to the findings.

Please thank your staff and all participating Future Three employees for their cooperation and openness. They made the assignment both interesting and rewarding.

Sincerely,

Burton Grad

Enclosure
BG:5283
cc: Sidney J. Dunayer

Assessment of Product Development Status and Plans as of June 2000

Prepared for:

Future Three Software, Inc.
41780 Six Mile Road
Northville, Michigan 48167

Prepared by:

Burton Grad Associates, Inc.
7 Whitney Street Extension
Westport, Connecticut 06880

Burton Grad
Sidney J. Dunayer

Date: July 6, 2000

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EXECUTIVE SUMMARY

Based on a somewhat limited review of Future Three's current and planned products and their related operations other than sales and finance, BGAI has the following principal findings, concerns and recommendations:

Principal Findings

- F3 has two quite diverse businesses:
  - A traditional legacy software business for automotive suppliers using IBM's AS400
  - A start-up Web-enabled business for tier 1 automotive suppliers to communicate with their suppliers on an electronic basis

- F3 has an entirely new management team which still needs to hire development and sales executives.

- F3 has essentially discontinued all of its previous development projects and has focused on the new supply chain linking capability.

- F3 just has a small internal development staff and is dependent on using contractors from CSC and ICI to carry out their new development projects.

- F3 has a large number of customer support and services employees and a substantial number of quality assurance and documentation/training materials preparation employees, almost all of whom are focused on AS400 work.

- The AS400 product line has been profitable, but not at the level one would expect from a 17-year-old product line.

- The current operations processes are people intensive with little use of computers to track transactions or improve productivity.

- The employee culture is very much of an 8-5 mentality with some walls still up between certain departments.

- There is still no strong team spirit evident in the new Synapz/Eclipz product/service business.

Principal Concerns

- There is not yet a strategic plan for the new supply chain linking business, although a first version of a business concept has been drafted.

- There is no plan for the AS400 product line other than continuing in response mode making mandated trading partner transaction changes and making priority 1 program fixes.

- The high dependency on the ICI technology (which is not yet proven commercially) for Eclipz V2 is of serious concern, particularly since Eclipz V3 which may need these tools more fully is neither defined nor specified.

- The heavy use of CSC programmers for Eclipz V1 may have put F3 in a weak position for maintenance and extension.

- The lack of integration between Eclipz V1 and V2 may lead to significant transition problems.

- The third-party costs for Eclipz V1and V2 are quite large and may limit F3's ability to hire and train its non-development staff.

- The target dates for initial customer tests and general availability for Eclipz V1 is somewhat too ambitious and for Eclipz V2 is much too early.

Principal Recommendations

- Focus on retaining the AS400 customer base, holding/increasing AS400 revenues, improving client support/services and sharply reducing costs by use of AutoMap and then introduction of computer supported processes.

- Focus on defining and implementing the Eclipz ASP system for trading partner/supplier networks including target market selection (tier 1 manufacturers), functions needed, performance requirements and use of ICI technologies for efficient development/maintenance.

- Focus on defining and determining the business case for another Synapz product line to serve OEM direct suppliers (front end EDI/XML) with modified Auto Release System functionality. This may well use the same ICI tools as Eclipz and reuse some of the Eclipz software

- Focus on reorganizing the company into a business unit oriented structure, separating all AS400 operations functions from Synapz related functions.

- Focus on improving mid-level management, particularly in development and on strengthening communications: down, up and sideways.

- Focus on substantially enhancing internal information systems capabilities so as to be able to more productively plan, execute, measure and manage all operational functions.

SECTION I. Objectives and Work Plan

Objectives

Future Three (F3) requested Burton Grad Associates, Inc. (BGAI) to perform an independent study to determine whether F3's product development and maintenance plans are technically sound and appropriately scheduled and resourced, and to be sure that there are no serious organizational, technical or support issues which would significantly impact F3's strategic plans or projections of future profits.

Specifically, BGAI identified the following objectives:

- Assess product development and maintenance status and plans
- Assess product related operations and processes
- Analyze expectations and relations between product development and other business functions
- Recommend actions to be taken to improve product and business performance

Work Process

1. BGAI requested certain information from F3 for the areas to be examined. The request list is attached as Appendix B-1. F3 provided the documents listed in Appendix B-2.

2. BGAI conducted primarily on-site and a few telephone interviews with key executives, managers and senior employees of F3 and met or spoke with two significant third-party suppliers as shown in Appendices B-3 and B-4.

3. BGAI analyzed F3's materials and interview notes to identify areas of concern and any potential issues in the assigned areas. BGAI identified what it believed to be the principal opportunities and risks and referenced any problems it saw in implementing F3's future plans.

4. BGAI provided an on-site review of its initial findings and recommendations.

5. BGAI prepared a report for F3 on its findings, concerns and recommended actions about F3 development projects and technical plans as well as other operational and organizational matters.

The project was managed by Burton Grad, president of BGAI, with BGAI Associate Sidney J. Dunayer and Grad as the consultants. The assignments are noted below:

Business and Development Analysis: Industry and competitive directions, F3 strategic plans, limited financial review, organization structure and management capabilities, development and operations processes and measurements – Grad

Technical Analysis: Technical assessment of current products, technical analysis of new products and plans, review of ASP plans and development staff assessment – Dunayer

Professional profiles for the BGAI consultants are enclosed as Appendices A-1 and A-2.

SECTION II. Overview of Future Three Software, Inc.

F3 has been an EDI supply chain software vendor to automotive suppliers since 1983. In the past, F3 has focused exclusively on producing RPG software running on IBM AS400 computers. Over the past few years, F3 has tried to enter the UNIX computer marketplace which represents almost 70% of the target automotive suppliers. Unfortunately, these development efforts did not produce a deliverable product in a timely fashion.

With a new executive team in place, a whole new direction has been formulated to put F3 into the automotive supply chain networking business. This involves providing a services-based offering which permits all smaller suppliers to be electronically linked to the tier 1 suppliers for order fulfillment activities.

In order to reduce time to market and to avoid or delay the heavy buildup of an internal development team, F3 has used design and programming resources from CSC and ICI to help develop these new products. CSC has also been selected to be the application system provider for the new service.

Organization

During 1999, there was a complete turnover in executive management: a new CEO; a new business management executive (president of Synapz); a new CFO; a new VP of Support and Services. Still to be filled are the positions for: VP of Development (the 1999 appointed manager was released in early 2000); a national sales manager. The current organization chart in shown as Appendix C-1.

The current staff level is at 158 people, with almost all product and customer support personnel (excluding development) assigned to AS400 products and customers. Appendix C-2 shows the June 2000 headcount by department with backup information on employee turnover.

Products

F3's current product line consists of AutoRelease, AutoMap and AutoScan, all of which are RPG programs used on the AS400 and all involved in helping tier 1 and equivalent direct suppliers to OEMs to process orders, shipping notices, invoices, etc. in accordance with OEM required formats and business rules. In addition, F3 has produced VendorRelease to enable tier 1 suppliers to communicate with their suppliers using EDI protocols. Appendix C-3 provides brief, marketing descriptions of these AS400 products.

Currently under development are two versions of a new ASP-based service called Eclipz V1 and Eclipz V2. These are to be the first steps for F3 to provide a supply chain networking facility available to all automotive tier 1 suppliers to communicate with their suppliers. Both of these offerings are scheduled to be delivered in 2000. Appendix C-4 provides a functional description of Eclipz V1 and Appendix C-5 provides a description of Eclipz V2.

These new capabilities will be delivered through an Application Service Provider; F3 has chosen to use CSC to perform this service and has signed an agreement with CSC to that effect.

Appendix C-8 is a copy of the draft business plan which the Synapz team has been preparing to build a foundation for a strategic plan and a formal business case.

Markets and Competition

F3 has been the leader in its niche (automotive suppliers using AS400 computers). But this market has not been growing. The remaining AS400 prospects (those who do not use F3 products) use offerings from three other companies or have in-house developed solutions.

The complexity of the relationship with the OEMs (automobile manufacturers) relates to the different format standards and decision rules required by each OEM for each type of transaction needed for EDI communication. F3's strength has been its knowledge of these format standards and decision rules and its ability to implement changes rapidly and accurately so as to enable its customers to deal with many OEMs and other automotive suppliers (trading partners). This unique set of automotive requirements has limited entry into the automotive supplier EDI market by the larger EDI companies like Sterling Commerce.

The other part of the automotive supplier market (70%) are users of UNIX-based computer systems. There are no dominant EDI vendors in this marketplace, although the larger EDI companies have their translator products and VAN capabilities used extensively.

The dynamics of the automotive supplier marketplace appears to be changing. OEMs wish to do business with fewer direct suppliers and have those tier 1 suppliers manage the parts and assembly inventories to give the OEMs cost-efficient, just-in-time deliveries. In turn, there is a trend toward consolidation of the tier 1 suppliers in order to achieve greater cost and schedule control.

F3 needs to determine whether it should continue to try to penetrate the tier 1 UNIX market with AutoRelease functions as well as trying to establish the new service to connect these tier 1 companies with their suppliers. In the supply chain linking market, they will need to interface closely with new ERP and supply chain management partners (Oracle, SAP, i2, etc.) and may well face new ASP competitors.

Financials

Since being acquired by Summit Partners in 1998, F3's financial results have been marginal. The 1999 financial results are shown in Appendix C-6. While the F3 business has been profitable (5.6% operating income in 1998 and 8.4% in 1999), it had little year-to-year revenue growth between 1998 and 1999 (and practically no new customers). The bulk of the AS400 profit has been eroded by R&D costs to build new products for the UNIX AutoRelease marketplace; this effort was discontinued in late 1999 with no deliverable and little to show for more than two years of development work.

Also, in late 1999, F3 geared up a new development effort to produce what was then called VendorNet (now called Eclipz V1) to provide ASP connections between tier 1 companies and their suppliers.

Various other smaller development projects were put on hold or canceled in late 1999 and early 2000 so that all new development efforts could be focused on Eclipz V1 and later on Eclipz V2 which was developed originally as an effort to build a new AutoRelease product for the UNIX and NT marketplace and potentially for migration of the AS400 users.

The financial projections for 2000 are shown in Appendix C-7. There is virtually no revenue shown for the Eclipz services, but the costs for the Eclipz development have a major impact on the operating profit projections. Note that the operating income for the AS400 business is projected at 24.3%, but at only 3.0% for F3 as a whole.

The current financial projections were not constructed on a solid bottoms-up basis for the new Eclipz products and essentially reflect a business-as-usual plan for the AS400 revenues and costs.

SECTION III. Organizational Structure and Responsibilities

F3 is caught in a typical revolutionary dilemma in its product development and support activities. On the one hand, it is fully engaged in trying to maintain and make necessary modifications to its AS400 AutoRelease product line. On the other hand, it is trying to develop and introduce a major new offering on a totally new platform to both existing customers and new prospects. Much of the business planning has been done on the fly without a clear vision of the future or a solid sense of direction.

However, credit must be given to the new executive team which has been willing to initiate a new plan and to make necessary mid-course corrections. The team appears to be evolving a longer-term strategy while moving forward with interim product developments.

The following relatively brief discussions try to highlight the status of the principal development and support activities related to the AS400 and Eclipz products.

A. AS400: Auto Release, AutoMap, AutoScan, VendorRelease

The AS400 products are written in a combination of RPG3 and RPG4 and contain 3,300 programs with about 1.2 million lines of code. AutoRelease is the foundation product and requires a lot of work to make fixes and to respond to OEM changes.

F3 built AutoMap in order to simplify the translation process, but F3 has never spent the time and effort to convert the existing RPG code which handles transactions for General Motors, Ford and Daimler-Chrysler.

AutoScan is used for bar code reading.

VendorRelease is focused on connecting F-3's customers to their lower tier suppliers. While almost 80 of F3's 250 customers have acquired VendorRelease, less than ten of them are actually using the product. One of the benefits to F3 of the Eclipz V1 (VendorNet) plan will be to require customers to install VendorRelease so as to provide on-line Web-based access for their lower tier suppliers. Note, however, that Eclipz V2 eliminates this requirement and provides direct interface to many ERP and supply chain management systems in addition to the VendorRelease interface.

Because of historic organizational roles, the development and maintenance responsibilities are split among three organizations: Development (4 employees); Support Line Urgent Issues (6 employees); Customer Service Development AutoRelease (8 employees), VendorRelease (6 employees) and EDI (8 employees). All of these organizations have open replacement position authorizations.

The organizational responsibilities are confusing. Supposedly, Development produces new programs (e.g., enhancements); Support Line makes those temporary fixes needed to keep the customers running until formal corrections can be made; and Customer Service Development makes the formal corrections and implements the trading partner and transaction set modifications.

While there has been substantial progress over the past few months in reducing the number of open problems and backlog of OEM mandated changes, the numbers are still quite large, representing delayed responses and a major catch-up task.

The AS400 products have not changed significantly since BGAI reviewed them in October 1998 as part of the due diligence review for Summit Partners. A copy of Sid Dunayer's 1998 technical due diligence report is enclosed as Appendix D. The comments regarding IPA in that report have not been eliminated since some of these are, in fact, still applicable to the Eclipz development projects and to any future AutoRelease type of UNIX/NT-based product.

B. Eclipz V1

This new product is the result of the VendorNet planning and design activity. The plan is to run the product on an ASP platform, although a few tier 1 customers may choose to set up their own Intranet (for their divisions) and extranet for their suppliers. However, if suppliers serve more than one tier 1 company, then it may be awkward for them to use different procedures to communicate with each supplier.

The specifications for Eclipz V1 are quite extensive; they were prepared by F3 employees. Appendix C-4 provides a basic functional description. Appendix E-1 shows the principal tasks to be completed in order to deliver a working program to CSC for them to set up as an ASP for use by Uniboring as an "alpha" site. After bringing on a limited number of Uniboring suppliers, the system will then be released for extended use by Uniboring and for use by other tier 1 companies and their suppliers. The CSC ASP plans are described in Appendix E-2.

Virtually all of the programming has been done by CSC personnel and for whatever reasons (style, lack of sufficient supervision, short schedule), there are practically no program comments or internal maintenance documentation.

F3 needs to gear up to take over the completion of the programming, prepare the internal documentation and conduct solid program testing.

All of the other support functions also need to get on board so as to be able to conduct comprehensive quality assurance, prepare user documentation and training materials and train customer support personnel. Trading partner/transaction preparation may not be vital for Eclipz V1, but consulting services for lower tier suppliers may be a real opportunity.

The greatest concerns with Eclipz V1 lie in the very short target dates. BGAI does not believe that these dates can be met with a quality, satisfactory performance product. This schedule should be reexamined to put in the proper time for testing and validation prior to general release.

C. Eclipz V2

This is effectively a new product designed to provide full XML functionality for tier 1 companies and their suppliers. It also opens the door for prospects who are on UNIX platforms by interfacing directly with their ERP or supply chain programs.

From an early stage, this has been a joint project with ICI, a three-year-old professional services firm which has recently started to construct a set of system building and Web-enabling tools. The original project goal was for F3 to use these tools to build an AutoRelease-like product to run on UNIX and NT platforms at tier 1 and other OEM direct suppliers.

However, in April 2000, F3 switched direction and decided to focus on the tier 1 communications with their suppliers and broaden the Eclipz V1 market base. At that time, F3 asked ICI to prepare a new planning document (see Appendix C-5) which would specify how the ICI tools could be used to produce what then became known as Eclipz V2.

Again, this has become a very intense development effort involving a number of people from F3 as well as a substantial number from ICI. Appendix F shows the current work schedule for development. Since the ICI tools have not been completed, each team is working relatively independently and the capability of the new product will not be evident until the pieces are put together.

There is no solid data yet to give to CSC so that they can plan for the necessary ASP facilities. And since Eclipz V2 depends on reusing some Eclipz V1 programs, there are many uncertainties in the transition to Eclipz V2 from Eclipz V1.

The support functions are just now being advised that they will need to support this offering. It will take substantial time to select and train the documentation, training, quality assurance and support personnel. The role of customer service development is not clear and if they need to write decision rules for new trading partners and transactions, then they will need to learn the ICI tools.

The current dates are far too aggressive; the sooner they are revised, the better. With reasonable dates, all of the various organizations can be brought on board and the current tension and confrontation can be reduced.

If ICI tools do not work properly, F3 could probably implement Eclipz V2 using Java and various commercially available products. However, the future plan for Eclipz may well require the power of the ICI tools or some equivalent set of capabilities.

SECTION IV. Research and Development: AS400

A. Findings

As a result of the extensive interviews, BGAI established what it considers a basic set of technical findings which accurately reflect the current development situation at F3.

These product development technical findings are described in the following categories:

- AS400
  - AutoRelease
  - AutoMap
  - AutoScan
  - VendorRelease
- Eclipz V1
  - VendorRelease interface
  - Enhanced GUI
  - Credit card processing
- Eclipz V2
  - XML
  - Interface with ERPs, etc.

1. Technical Findings – AS/400

- Core programs represent about 15% of the total RPG code base. The remainder of the code is primarily in the OEM libraries.

- The AutoMap code contains a communications interface, EDI translation and a data maintenance function. Most problems with this code appear to be with the data maintenance function.

- Most OEM libraries have not been converted from RPG to AutoMap. In particular, Ford, Chrysler and GM, which represent about 50% of the OEM code, have not been converted.

- The development staff was unable to produce copies of any functional specs, design specs or system documentation.

- Certain fields in the database reportedly need to be expanded in order to handle future expected growth in the number of trading partners. Due to the large amount of RPG code, the expected effort and cost to perform such modifications are very high.

- The AS400 RPG products are difficult and expensive to maintain, modify or extend.

2. Technical Findings – Eclipz V1

- Eclipz V1 contains about 15K lines of Java code and 11K lines of JavaScript code.

- Three contract programmers from CSC primarily wrote the code. There is also an indication that much of the actual implementation design was performed by these programmers. In addition, there is a contract DBA, also from CSC, who is setting up the Oracle database.

- There are no copyright notices in any of the code.

- While the code is structured and easy to read, the almost total lack of comments makes it difficult to understand.

- There are detailed functional and design specs for Eclipz V1. However, the actual implementation, while functionally correct, appears to implement more functionality in the client (browser) than is acceptable for thin client designs. I anticipate some potentially significant performance impact as a result.

- While the code appears adequate for an in-house application, it does not appear to be of industrial strength nor written to the higher standards required of commercial applications.

- The demonstrated system did not appear to perform well. In addition, QA also reports that response time was not always good. Development could provide no reasons for the slow response.

- The QA plan for Eclipz V1 does not appear to adequately test the product. In particular, there are no plans to perform either performance testing or stress testing of the system. This is reportedly due to insufficient time being allotted for QA testing.

- There are no user documentation or training materials currently available.

- There are no formal support plans for Eclipz V1 at this time.

- Since contractors performed most of the programming work, Future Three will need to be assured that they have all rights to the code and that no outside code was used in the product.

- While the CSC plans for hosting Eclipz V1 appear to be sound, much of the capacity planning is based upon estimates by Future Three. If the estimates prove to be low, then there is the possibility that insufficient resources will have been allocated by CSC for this task. Furthermore, as no performance testing is scheduled by QA, there is no way of knowing how well the applications or database processors will handle the anticipated volumes.

3. Technical Review – Eclipz V2

- Eclipz V2 is designed to enhance Eclipz V1 value by removing the dependency on Vendor Release and providing for XML capability.

- Future Three intends to achieve this goal by utilizing tools supplied by ICI and some new Java code that is under development at Future Three.

- There are no functional specs or design specs for Eclipz V2. The only document available is a high-level design document produced by ICI in early May. ICI indicates that this design is the result of a change in direction by Future Three.

- There are technical issues between Future Three and ICI that still need to be resolved. The most notable one is in the outbound side of Eclipz V2.

- The process for transferring data into and out of Eclipz V2 appears to be more complex than is necessary at this time.

- The OPSJ rules engine, selected by ICI, is reportedly difficult to use. Furthermore, the company that produces OPSJ may not survive. ICI is investigating alternative products or the possibility of a source code escrow arrangement for OPSJ.

- No data is currently available to allow CSC to adequately determine the infrastructure requirements for Eclipz V2. Much of this data will not be available until after ICI delivers their tools.

- The ICI tools are a work in progress and ICI will require time to complete the development and necessary testing.

- There is no QA plan in place for Eclipz V2.

- There are no user documentation or training materials currently available.

- The ICI licensed materials (JDBC Elf, Java Elf, Java Gnome and XML Monk) are delivered as binary executables only. There appears to be no provision for either source code access or some form of escrow arrangement for F3. There is no apparent way to determine the quality of the ICI code in advance of its delivery to F3.

In addition, we reviewed various operational processes and organizational responsibilities. The following lists the principal areas covered without any specific findings or comments.

4. **Processes**
   - AS400 development
   - Eclipz development
   - QA
   - Documentation
   - Training materials
   - Support
   - Maintenance
   - Trading partners/transaction sets
   - Consulting and training courses
   - Program management
   - Business development
   - Information systems

5. **Organization**
   - Executive management
   - Team managers
   - Development staff
   - Morale
   - Culture/effort level
   - Relations
   - Communications

Concerns

After examining the current business operations, BGAI identified a number of concerns regarding development and other related operations:

1. **Organization, Management and Resources**

   - There are far more customer support and service personnel than development people
   - Consulting services are not integrated with development
   - There is a new management team: CEO; Synapz president (Sales and Marketing and Industry Relations); Support, Services and Consulting VP; Finance, Administration, Human Resources and Legal CFO. There are still key two missing players: Sales VP and Development VP
   - Lack of second-level management in Development and QA
   - Expensive, but probably valuable, senior staff (Pittman, Alderson, Kingery)
   - In general, all those interviewed felt that communications within the company had improved. However, information still does not always reach the lower levels (or even first line managers) in a timely fashion.

2. **Strategy and Direction**

- What is the future direction for AS400 Auto Release, Vendor Release, AutoMap and AutoScan programs and customers? Need growth and migration strategy for AS400 products and customers

- New market plan is almost entirely ASP oriented. This would imply that the market need is different for the two separate offerings (EDI and Supply Chain)?

- Need long-range strategy for Eclipz product line

3. **Marketing and Sales**

- Does F3 understand and have the skills to be a strong supply chain competitor in automotive?

- Is the shared database transaction vision really appropriate using a third-party ASP or is it more appropriate for OEM and tier I manufacturer installations

- Are tier 1 customers establishing customized requirements (like OEMs)?

- Marketing plans for Eclipz V1 and V2 need to be articulated

- Effect and integration of XML and ANX with current and planned offerings

4. **AS400 Development and Support**

- Development is not responsible for trading partner and transaction set programming

- Customer support and service are making enhancements and changes to AS400 programs

- There still seems to be a serious backlog on open maintenance and customer services projects, but much improved from earlier in 2000 and previous years.

- Where are the product and development standards? Where are the other process descriptions and monitoring? Where is the training of the people to use these standards?

- The AS/400 product is a mature product. However, the cost to maintain it is unusually high. Part of this is due to the large amount of RPG code still being carried in the OEM libraries. Any effort that significantly shrinks this code base will result in decreased maintenance costs.

- AutoMap implements both the translation and the data maintenance functions. While the translation part seems to work well, the data maintenance part does not. By splitting the process into two parts, Future Three could simplify the overall process, provide a more useable user interface and allow a customer to use an alternate EDI translator.

5. Eclipz Development

- Development is heavily dependent on third-party analysts/programmers for Eclipz V1 and V2

- Need clear program management responsibility for Eclipz V2 along with project management development

- Documentation, Education, Customer Support and Services, Consulting Services and QA do not appear to be well-prepared for Eclipz V1 or V2 releases

- Tight release schedules have precluded effective documentation of programs, and comprehensive tests for Eclipz V1 and for specifications and documentation of design, programs and tests for Eclipz V2

- Tight schedules and inadequate planning may limit effectiveness of QA and Beta test for Eclipz V1and V2

- Limiting release to ASP only for Eclipz V1 and V2 may limit technical exposure, but use of a third party may still make maintenance and modification relatively difficult

- Custom sales proposals to GM and others may interfere with Eclipz V1 and V2 and follow-on development

- Where are the market requirements and the competitive analyses for the Eclipz products?

- Eclipz V2 is almost totally dependent on ICI technology. Is there any backup plan?

- Eclipz V1 and Eclipz V2 are being treated as two separate products, each with its own development team. While there are historic reasons for this structure, it will lead to future problems, since Eclipz V2 is clearly dependent on the code from Eclipz V1. While the input and output formats are different, the underlying application is the same.

- The contract programmers working on Eclipz V1 may not have had adequate supervision during the development cycle. Furthermore, it appears that they may have had too much influence in actual implementation decisions.

- The lack of adequate functional specs for Eclipz V2 and knowledge of the ICI tools has prevented the formulation of a comprehensive QA plan.

- There was a general feeling that Eclipz V1 was being rushed to production. Indeed, the current dates are unrealistic, as they do not provide for adequate testing.

- The Eclipz V1 code will probably need modifications to move more of the functionality from the client to the server. It's not clear from the documentation whether the fatter client was by design or as a result of implementation decisions. Whatever the reason, the implementation will need a more detailed review.

- There was notable stress between the Future Three Eclipz V2 development team and the development team at ICI. The Future Three staff feels that the ICI developers do not fully understand the logistics of the automotive industry and hence are not sensitive to their needs. In addition, the Future Three staff indicates that they have been requested to make changes to their code on several occasions in order to accommodate the ICI tools.

6. Financial

- Is there sufficient investment money available to build new product line and maintain/enhance existing product line? The development and support plan appears to be constrained by the amount of cash available from AS400 profits.

- Isn't the investment for supply chain management and for EDI partially "wasted" by just being automotive focused. The technology should also be usable in many other industries.

SECTION V. Action Recommendations

Based on analyzing the materials received, interview notes, findings and concerns, BGAI believes that a number of significant business actions are needed to obtain full value from both the current customers and products and from the new market opportunities with their associated product development activities.

We have organized the action recommendations into the following categories:

- AS400 development
- Eclipz V1 and V2 development
- AS400 operations
- Eclipz operations
- AS400 business planning
- Synapz business planning
- Organization structure
- Other Action Recommendations

A. AS400 Development

- AS400 AutoMap should be overhauled to:
  - Separate translation from data management
  - Make screens usable by users not just programmers
  - Provide opportunity to have customers use other translators

- Initiate an aggressive project to convert all significant OEM RPG libraries using AutoMap to:
  - Reduce maintenance and modification effort/time
  - Permit making database modifications
  - Reduce new trading partner implementation effort required

- Produce and update necessary system documentation to provide a solid base for future product plans

B. Eclipz V1 and V2 Development

- Combine into one development team
- Focus principally on Eclipz V1 for timely, quality delivery
- Commit to achievable delivery dates for Eclipz V1

- Bring all support functions into the process now to ensure customer satisfaction on initial delivery
- Perform full function and performance quality assurance testing
- Establish complete program objectives and plans for Eclipz V2

- Integrate ICI components with F3 Eclipz V2 programs
- Work out Eclipz V2 implementation plan with CSC
- Commit to new schedule for beta test and phased release for Eclipz V2

C. AS400 Operations

- Operations plans and integrated management should include specifically the functions of program development, program maintenance, customer support, documentation, quality assurance, training (materials and courses), new trading partner/transaction development and modifications, and consulting services regardless of how currently organized.

- Each of these AS400 operations should be analyzed in terms of purpose, processes, staffing, structure, tools and performance.

- Team efforts should be organized with representatives from each relevant organization led by designated individuals; each should have specific performance and cost improvement targets with explicit date objectives for various process changes.

- An appropriate reorganization and restructuring of all of the AS400 operations functions should be proposed to ensure accountability, concentration of skills and efficient execution of processes.

- A comprehensive information processing system should be designed and put in place to plan and track all projects (new, modification or maintenance) from initiation through closure.

D. Eclipz Operations

- Starting with a clean slate, all of the operations needed to produce an ASP-based start-up business should be defined and structured for near and longer term.

- Processes and procedures should, where possible, be modeled after updated AS400 systems and practices so as to reuse information systems capability and minimize retraining.

- The number of managers should be kept to a minimum until volumes dictate staff increases and separation of functions.

- Establish teamwork pattern from beginning with strong cooperation with sales and marketing.

E. AS400 Business Planning

- The F3 AS400 AutoRelease market needs to be reexamined to determine the future needs of the current customers. The goal is to be able to retain and possibly grow each customer through add-ons, upgrades, new functions, enhanced pricing or premium services, training and consulting services, interfaces to Eclipz and additional trading partners or transaction sets.

- The remainder of the U. S. automotive AS400 market needs to be reexamined to determine if there is any likelihood for penetrating these prospects who are currently using home grown solutions or using competitive products. What additions or changes to the F3 AS400 products would be needed to enable these prospects to justify switching to the F3 AutoRelease System?

- The market potential for F3 AutoRelease System outside of the U. S. should be examined again to size the market and its structure and the projects which would be required in order to make a significant penetration into this marketplace.

- Using realistic cost estimates based on the product improvement plans described in SectionV.A. and the process improvement plans described in Section V.C., business cases can be formulated to determine the most profitable strategy to follow to exploit the large inherent value in the current F3 AS400 products and its installed customer base.

F. Synapz Business Planning

The Synapz business has identified one major new opportunity to use modern Internet-based, Web-enabled technology to establish tier 1 to supplier linkage. But this is just the first concept to come from taking a fresh, startup view of the automotive order fulfillment management activities and how the new standards and implementation technologies can open doors for other products and services:

- The Eclipz business plans should be focused exclusively on providing efficient, effective ASP capabilities for tier 1 companies to integrate even their smallest suppliers into an Internet-based electronic order fulfillment system.

- A fresh, current business case should be built for Eclipz V1and V2 together for VendorRelease and general ERP interfaces operating on an ASP basis by CSC and appropriately using the ICI developed tools.

- A full-scale business plan should be created for Eclipz (Supplier Networks) which goes beyond V1and V2 to establish F3 as a leader in the ASP marketplace and for possible use on Intranets and Extranets by large tier 1 companies.

- A new strategy and business plan should be constructed to address the following opportunities:
  - Providing AutoRelease-like functionality to tier 1 companies using UNIX for their OEM order management activities
  - Providing a migration path for F3 AS400 AutoRelease customers who wish to move to other platforms
  - Providing a technical capability to serve other target industries for order management

G. Organization

In order to effectively plan, organize, implement and measure the two separate F3 businesses, BGAI recommends that the following business-unit oriented structure be considered, reporting to the F3 CEO:

- AS400 Business Unit
  - Development
  - Maintenance
  - Documentation
  - Training materials
  - Quality Assurance
  - Architecture/standards
  - Consulting/training courses
  - Trading Partners/transactions
  - Sales

- Synapz Business Unit
  - Marketing
  - Sales
  - Alliances
  - Industry relations
  - Business development
  - Program management
  - Consulting and training
  - Trading Partners/transactions

- Eclipz Development and Support
  - Development
  - Maintenance
  - QA
  - Support
  - Documentation and training materials
  - Architecture/standards

- Finance and Administration
  - Accounting
  - Administration
  - Human resources
  - Information systems
  - Legal

H. Other Action Recommendations

There are certain other areas where F3 can act to further improve business performance:

1. Employee Participation/Communication

- Keep managers and employees abreast of product and marketing plans so that resource planning and employee retraining can keep pace with operational needs.
- Establish programs to obtain employee commitment to current and new business directions; commitment relates to productivity, quality and team effort.
- Executives must lead in elimination of departmental walls through personal interaction and the attitudes communicated to their managers and employees

2. Business Operations Measurement

- For each manager, suitable performance measures need to be established and incorporated in the elements considered for personnel rating recognition and reward.
- Financial results should be analyzed by product and process and compared to business targets and objectives frequently.
- Business plans should be built bottom up with inputs and projections from each manager as well as top down using input from the operations executives.

3. Internal Investment and Acquisitions

- A clear investment plan needs to be formulated with Summit Partners as to their position regarding the ability to invest fresh money (besides AS400 product earnings) in the new supply chain networking business.
- A make and buy strategy needs to be formulated to establish the basis for identifying and selecting potential acquisitions and partnerships to fill product, service and marketing gaps for F3 to be able to become a premier supply chain networking provider.
- F3 needs to examine how to obtain extra value from its investment in networking through appropriate partnerships or technology licensing for other industries.
- In setting up what is effectively an automotive B2B portal, F3 needs to capitalize on its unique trading partner/ transaction knowledge to limit competitive entry by larger, multi-industry companies
- Explicit business cases should be produced for each major development or proposed acquisition, justifying the investment proposed.
- With an effective business unit type organization and sound measurements and financials for each business unit, F3 and Summit Partners can decide what approach to take for realizing long-term value through continued integration of the business, sale of either part of the business or an IPO of the supplier chain network business.

Burton Grad

Professional Summary

Burton Grad, President of Burton Grad Associates, Inc. (BGAI), has a long record of significant contributions to the computer software and services industry. He has experience both as a user and developer of application and systems products and as consultant, innovator, businessman and leader in the computer software and services industry.

Since 1978 he has been a consultant to companies providing software products, software professional services, processing services and other computer software and services offerings:

- Strategic planning, management and organizational consulting, and product analysis, evaluation and review
- Company and product acquisition studies including due diligence and valuation for financial capitalization and write-off purposes
- Planning, assessment and analysis of business operations including quality and productivity measurements

Work is performed personally or with the assistance of experienced specialists in market analysis, customer services, systems programs and industry applications on mainframe and departmental computers as well as on client/server and personal computer systems.

This is a partial list from the more than 175 BGAI clients:

Broadview Associates
Budgeting Technology, Inc.
CIBER, Inc.
DA Consulting Group
Decision Consultants, Inc.
Discount Investment Corporation
Elron Software, Inc.
Geocapital Partners
Grace Consulting and Technologies
i2 Technologies, Inc
Infosafe
Keane, Inc.
Mediware, Inc.
Platinum Technology
SPSS, Inc.
Sterling Commerce, Inc.
Sterling Software, Inc.
TSI International

Work Achievements

Burton Grad Associates, Inc. (1978 - Present)

* Strategic planning, management and organizational consulting, and product analysis, assessment and review

* Company, product and technology valuation studies for financial, tax, capitalization and acquisition purposes

* Due diligence studies on acquisitions of computer software/services companies

* Business assessment studies and implementation projects for product strategy, development, quality management and customer service

Customer Care, Inc. (1992 - 1996)

* Published ***CustomerCare Newsletter*** and ***CustomerCare Survey*** directed at software companies' customer services activities: support, documentation, training and product-related consulting

* Provided consulting on customer service processes, and training for customer service personnel

Heights Information Technology Service (1979 - 1983)

* Performed professional services for applications and systems development
* Used professionals on a remote, work at home basis with effective project management

International Business Machines Corporation (1960 - 1978)

* Definition, design and implementation of application development systems strategy resulting in release of IBM's development management systems
* Development of application programs for every major industry

* Establishment of joint planning and programming development with European operations
* Announcement, development and initial support of CICS
* Management of application development for small business and process control systems

* Responsibility for the production, release and maintenance of almost 200 programs
* Conception of approach to and programs for text processing and office automation systems
* Development and expansion of computer based training systems

* Development of management science and scientific programs
* Participation in the structuring and unbundling of IBM program products
* Creation of the Study Organization Plan for specifying and designing application systems

General Electric Company (1949 - 1960)

* Programming of the first commercial computer (Univac I in Louisville)
* Development of discrete simulation techniques for manufacturing planning and control
* Invention of decision tables

* Study of automated factory design and implementation
* Initiation and use of advanced techniques for production, inventory and quality control

Other Professional Activities

1972-1996 **ITAA**

* Computer Software and Services Trade Association

* President, Treasurer and Board member of American Software Association Division of ITAA

* Member of ITAA Board

* Chair and member of various committees (Industry Relations, Software Capitalization, Software Openness, Technology Information Services, Quality Management)

* Executive Committee of Information Technology Foundation (Project Office)

1968 and 1979 Principal author of ***Management Systems***, published by Holt, Rinehart and Winston. Used for colleges and businesses for computer application system methodology and design.

1950-Present Speaker and chair at conferences and workshops and contributor to professional journals on various information technology subjects including decision tables, quality control, systems engineering and software capitalization.

Burton Grad Associates, Inc.
101 Post Road East
Westport, Connecticut 06880
(203)222-8718
(203) 222-8728 FAX

EDUCATION

1949 — Bachelor of Management Engineering
Rensselaer Polytechnic Institute
Troy, New York

POSITION HISTORY

1978-Present — **Burton Grad Associates, Inc.**,
Founder and President
Consultants to computer software and services companies

1992-1996 — **CustomerCare, Inc.**
Chairman
Publisher and Consultants for software company customer services

1978-1984 — **Heights Information Technology Services, Inc.,**
Founder and President
Professional software services

1960-1978 — **International Business Machines Corporation**
Consultant - IBM Research Lab
Director of Development - Data Processing Division (DPD)
Manager - Development Services and Scientific
Application Programs (DPD)
Manager - Technical and Scientific Development (DPD)

1949-1960 — **General Electric Company**
Consultant - Advanced Application and Systems Development,
Production Control Services
Manager - Production Control Operation - Large Steam Turbine Division
Manufacturing Training Program

Professional Profile
Communications and Network Related Projects

Major International Chemical Manufacturer

Requirements analysis and design of the global network connecting the various product design centers worldwide. The network is currently implemented using Token-Ring and Ethernet local area networks connected via private TI/T3 service, Fiber links, Asynchronous and Synchronous dial connections, X.25 packet connections and SAA connections to the mainframes. Through this network, the chemists worldwide can share data and work together on new creations. The actual mechanism used to route any given "transaction" is dependent on the required response time for that transaction. Those that are "urgent" or require a timely response are routed via an appropriate network connection. The lower priority data replication messages are batched and sent using a cheaper network route.

Software Products Company

As part of a strategic planning study, analyzed various current and proposed message/document interchange models to establish requirements for an integrated messaging system, including analysis of transport mechanisms and use of available communications software packages.

Major Software Products and Services Company

As part of a study to determine whether to centralize company development and processing services, prepared requirements statement for installing an integrated communications network to cover development, processing services and corporate administration as well as telephone and fax services.

Network Services Provider

As part of a technical due diligence for an acquisition, performed an analysis to determine possible methods for connecting the newly acquired customers to the client's VAN. Analysis included the possibility of connecting the VAN to the packet network used by these customers. In this way, the packet service could reroute the customer transactions to the VAN. As customers were migrated from the packet network to the VAN, service on the packet network would decrease and eventually would cease, at which time the connection to the packet network would no longer be required.

Major Financial Institution

Designed and implemented a corporate-wide customer service network including the use of small computers (replacing mainframes), leased lines, dial-in backup units and other interconnect facilities for regional processing centers.

Information Request List

A. General

1. Organization chart and staffing levels
2. Business strategy and operation plans
3. Profiles of senior managers

B. Sales

1. Revenue and unit history by product line, geographic territory and types of revenue
2. Mix of new sales, maintenance, add-ons, upgrades and services
3. Backlog and current pipeline
4. Pricing and discount plans
5. Win/loss records and analyses

C. Marketing

1. Major customer analysis with revenues for 1998 and 1999
2. Resellers, alliances and partnerships
3. Product and service descriptions
4. Principal competitors
5. Auto Network Exchange (ANX) and its market impact

D. Customer Service and Support

1. Outstanding customer problems
2. Past year history of problems and time to resolve
3. Statistics and reports on product reliability and support requirements
4. Any customer satisfaction surveys or data
5. Customer base with historic growth and erosion

E. Professional Services

1. Customer requirements for professional services
2. Past year history of professional services activity (customers, activities, revenues, direct costs).
3. Pipeline for professional services

F. Development: Current Products; New Products

1. Organization and training of development people
2. Development methodology
3. Scheduled enhancements/customer commitments
4. Current maintenance activities
5. Current development projects
6. Testing and quality assurance procedures
7. Effort and cost records for development
8. Product release and update procedures
9. Installation procedures
10. Availability and procedures for international usability and service in non-automotive industries and internationally
11. Use of third party developers
12. Detailed review of schedule and progress for new product releases

G. Technical Review: Current Products; New Products

1. Supported platforms and systems for each product
2. Major features of the products -
   - functions performed
   - ease of installation and use
   - maintainability
   - audits and controls
   - security
3. Development languages and special tools used
4. Number of programs per product and lines of code
5. Provenance of all program modules (where did code come from)
6. Inclusion of proprietary notices in source and object modules, both current and previous releases
7. Method of change control
8. Volume and magnitude of change history
9. Number of product releases being supported
10. Architecture of the programs
11. Internal system documentation level and updates
12. Documentation of specifications and design
13. Prerequisites for running the products
14. Examination of source code
15. Access to usage/demo of operational code
16. Unit and system test cases

Materials Received — Future Three

1. Sample Project Status Report Consulting Services, 5/24/00
2. Newspaper Article: Future Three...Supply Chain Software
3. Executive Profiles: Paul, Winkelmann, Ternes, Flavin
4. Beta Test Best Practices: David Broccardo, 4/27/00
5. Program Management Best Practices Guide, 5/30/00
6. Project Status Report: Eclipz Phase II Beta 5/19/00
7. Organization Chart
8. CEO Reports: John Flavin, 4/6/00, 2/16/00, 1/28/00
9. Eclipz Phase II Beta: Software Requirements, 5/8/00
10. VendorNet Enablement: CSC Technical Design, 4/20/00
11. User Group Conference Survey, 6/99
12. Customer Satisfaction Survey, 1/99
13. Customer Services Development: Various Reports, 1H00
14. Customer Services: Support Line Statistics, 6/00
15. In-Process Customer Satisfaction Survey, 6/00
16. Eclipz Version 1: Product Planning Guide, 6/9/00
17. Marketing Materials: Products, Services
18. Sales Pipeline, 6/12/00
19. Software, Maintenance and Consulting Services Price List, May 2000
20. Strategic Network of Alliances and Partnerships (Kingery)
21. Maintenance Trend Analysis (Ternes)
22. New Customers/New Sales Analysis (Ternes)
23. Headcount by Department (Ternes)
24. Operating Plan: FY00 (Ternes)
25. Consulting Services Budget and Utilization: FY00 (Winkelmann)
26. Supplier Peak Performance Program (Winkelmann)
27. Education Services Course Catalog (Winkelmann)
28. Consulting Services for Auto Suppliers (Winkelmann)
29. Competitive Analyses (Marsolais)
30. Supply Chain Linking: Web Enablement Design Document (Broccardo)
31. Proposed CSC Eclipz Web Hosting Statement of Work (Broccardo)
32. Eclipz Program Plan (Broccardo)
33. Standards Plan for Eclipz GUI (Bridson)
34. New Development Projects: 5/15/00 (Nissimov)
35. Future Three Product Architecture (Nissimov)
36. Vendor Release 5.0 Plans including Vendor Release System Plan (Nissimov)
37. Auto Release Interface Testing (Nissimov)
38. Automap Flow Diagrams and Interfaces (Nissimov)
39. VendorNET (Eclipz V1): Impact Analysis to Vendor Release 5.0 (Kormos)
40. Customer Services: Priority 1 Issue Procedure

41. Twelve-Step Process: Customer Support/Service
42. Summary Statement of Operations 1Q98-4Q00 (with maintenance analysis)
43. ANX Project Overview 6/16/00 with ANX descriptions
44. Automotive Supplier Report--XML and EDI: The Next Generation Format of Business Information Transfer
45. Shipper Prototype Plan: Eclipz V2 (6/19/00)
46. Documentation Department and Education Services: Course Materials/User Manuals
47. Customer Services Development Process Flow
48. Other Support Stats 2000
49. Customer Support: AS400
50. Quality Assurance Project Status Information
51. Quality Assurance VendorNET Test Plan (Eclipz V1)
52. Eclipz Network Diagram
53. Future Three Executive Summary (Business Description)
54. Future Three Market/Product Plan Structure
55. Consulting Services P&L (2000) and Utilization
56. Future Three Pro Forma Statements for Eclipz and AS400 (2000)
57. Employee Head Count Changes with Terminations and Hires
58. Additional Quality Issues (Hart)
59. Analysis of Backlog of Projects
60. Eclipz Marketing Plan Summary
61. Product Defect Procedure
62. Eclipz Revenue and Cost Projection Model
63. Eclipz Program Status
64. Information Systems Internal Applications

Interviews Conducted
June 26 - 28, 2000

Jessie Alderson
Dave Bridson
Dave Broccardo
Paul Byrd
John Flavin
Jeri Hart
Jamie Herman
Chantel Jazowski
Cathy Jensen
Vic Kingery
Kevin Kormos
John LaLiberte
Debbie Littlepage
John Marchi
Richard Marsolais
Bill McGee
Johanna Milz
Ralph Nissimov
Angie Parker
Bob Paul
Lee Pittman
Sue Proctor
Debbie Templeton
John Ternes
Pat Toufar
Jim Trela
Nancy Vogrin
Mark Winkelmann

ICI Representatives: Tony Stirtzinger, Kent Bimson

CSC Representative: Philip Thies

Interview Schedule
June 26 - 28, 2000

Monday A. M.		**BGAI**
Kickoff	Flavin, Winkelmann, Ternes	BG, SD
Business Presentation	Flavin, Winkelmann, Ternes	BG, SD
Alliances	Kingery, Alderson, Toufar	BG
Marketing, Business Development and Industry Relations	Marsolais, McGee, LaLiberte, Pittman	BG
Eclipz V1Technical Review	Byrd, Broccardo, (Kormos, telephone)	SD
Monday P. M.		
Eclipz V2 Technical Review	Bridson, Herman	SD
QA: Eclipz V1and Eclipz V2	Hart, Milz	SD
AS400 Development, Maintenance and QA	Nissimov, Hart, Parker	BG
AS400 and Eclipz Customer and Support Services	Jazowski, Vogrin, Parker	BG
AS400 and Eclipz Documentation and Education	Jensen, Proctor	BG
Discussion & Planning	Flavin, Paul, Winkelmann, Ternes	BG, SD
Tuesday A. M.		
AS400 Technical Review	Nissimov, Parker	SD
AS400 and Eclipz Transaction Sets and Trading Partners	Parker, Bridson, Nissimov, Broccardo	SD
Financials: Revenues, Costs, Measurements	Ternes	BG
Consulting Services	Littlepage, Trela	BG
Human Relations	Templeton	BG
Consulting & Support Services	Winkelmann	BG
Tuesday P. M.		
Third Parties and Development Tools		
ICI (Eclipz V2)	Stirtzinger, Bimson	SD
CSC (ASP)	Thies	SD
AS400 Migration	McGee, LaLiberte	BG
Synapz Business Overview	Paul	BG
F3 Business Overview	Flavin	BG, SD
Wednesday A. M.		
Trading Partners	Parker	BG
Program Management	Broccardo	BG
Information Systems	Marchi	BG
Preparation of Presentation and Preliminary Report		BG, SD
Wednesday P. M.		
Presentation and Discussion	Flavin, Paul, Winkelmann, Ternes	BG, SD

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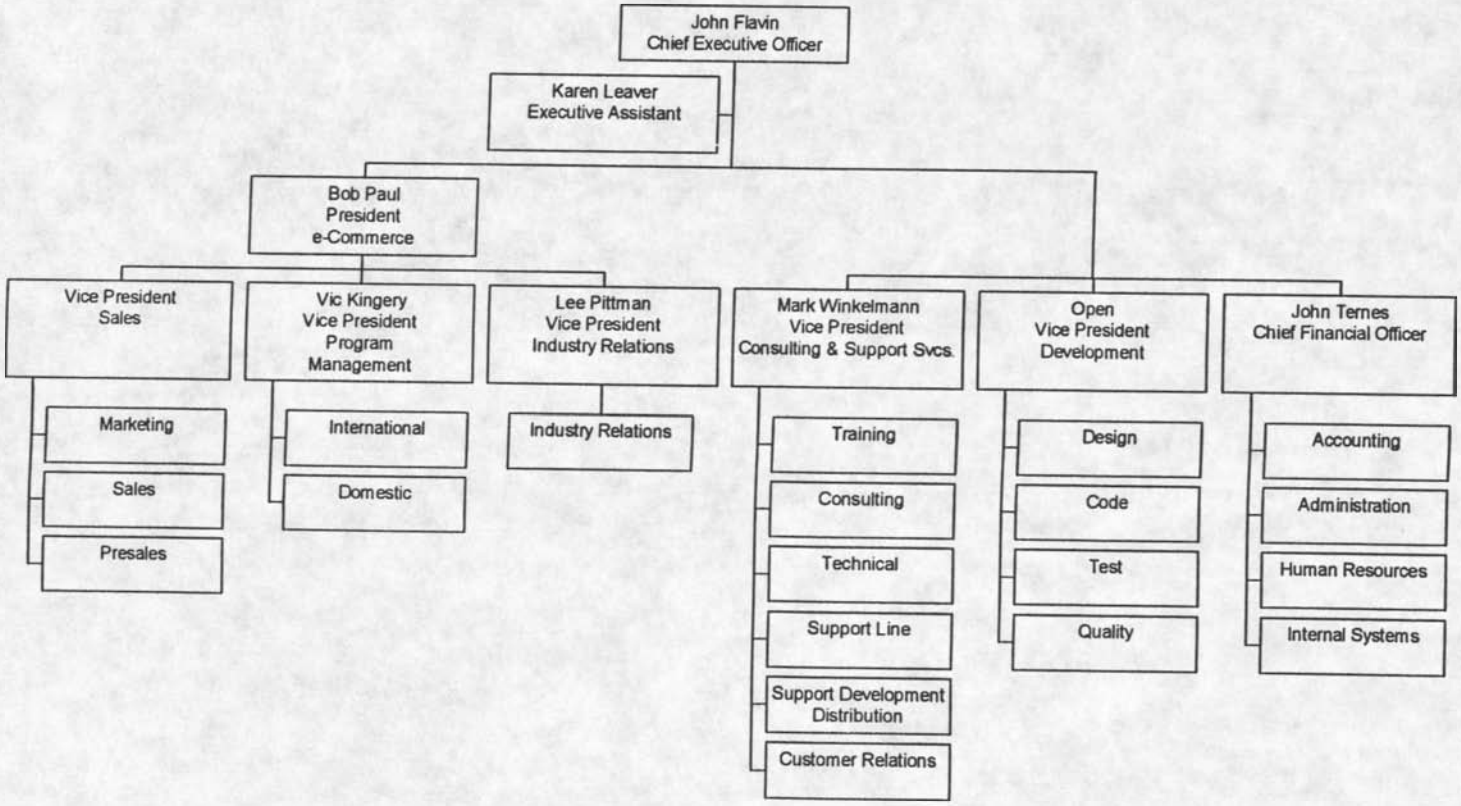

6/7/2000

Appendix C-1
(6 pages)

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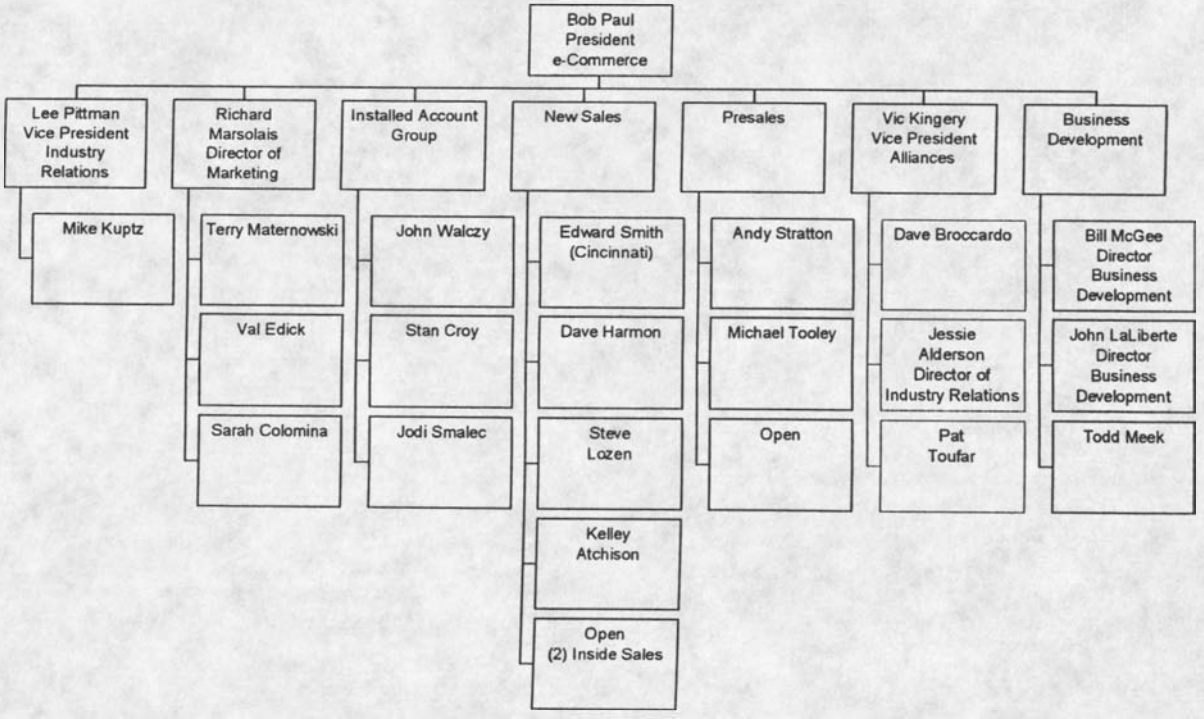
e-Commerce



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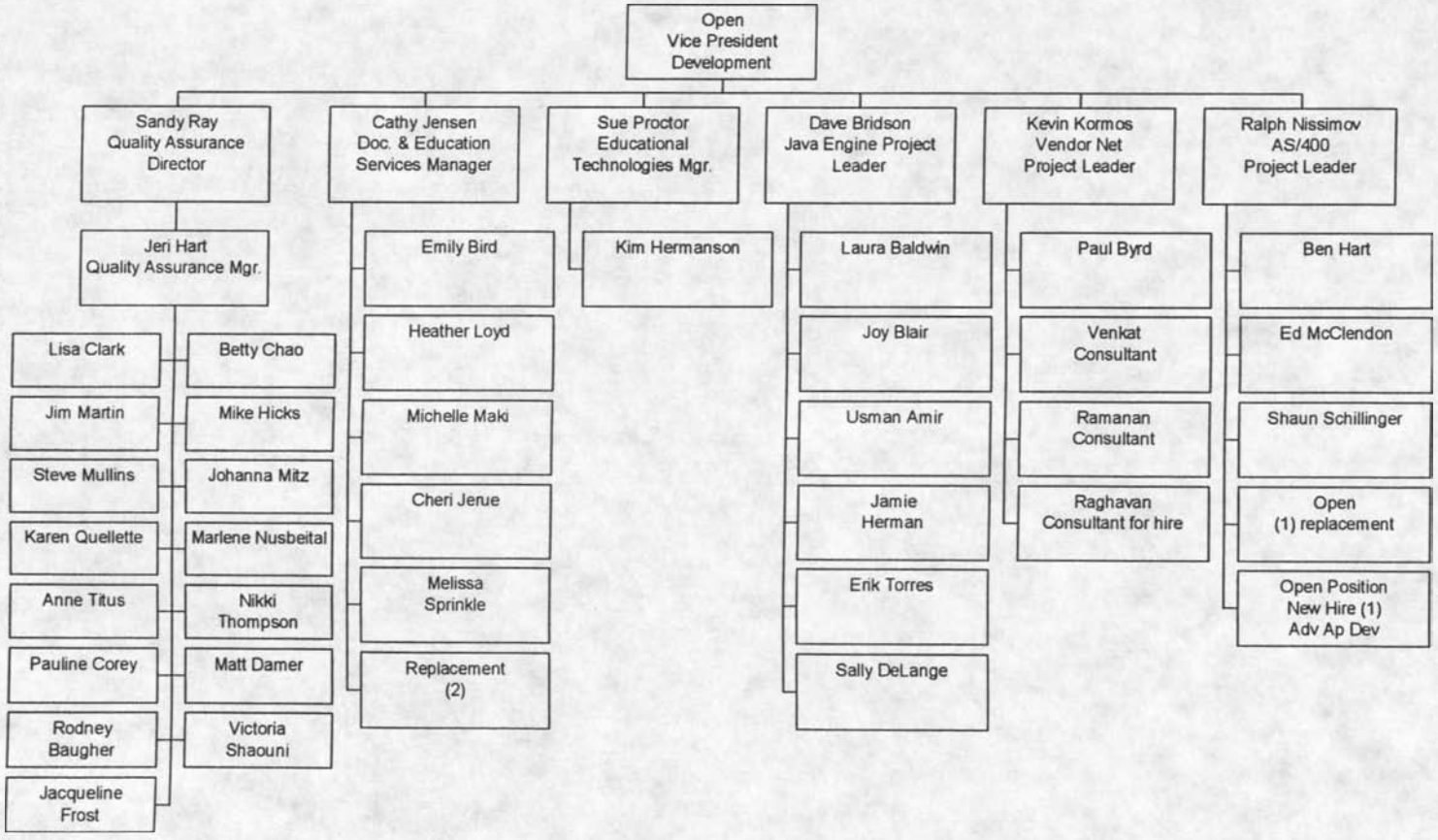
Development



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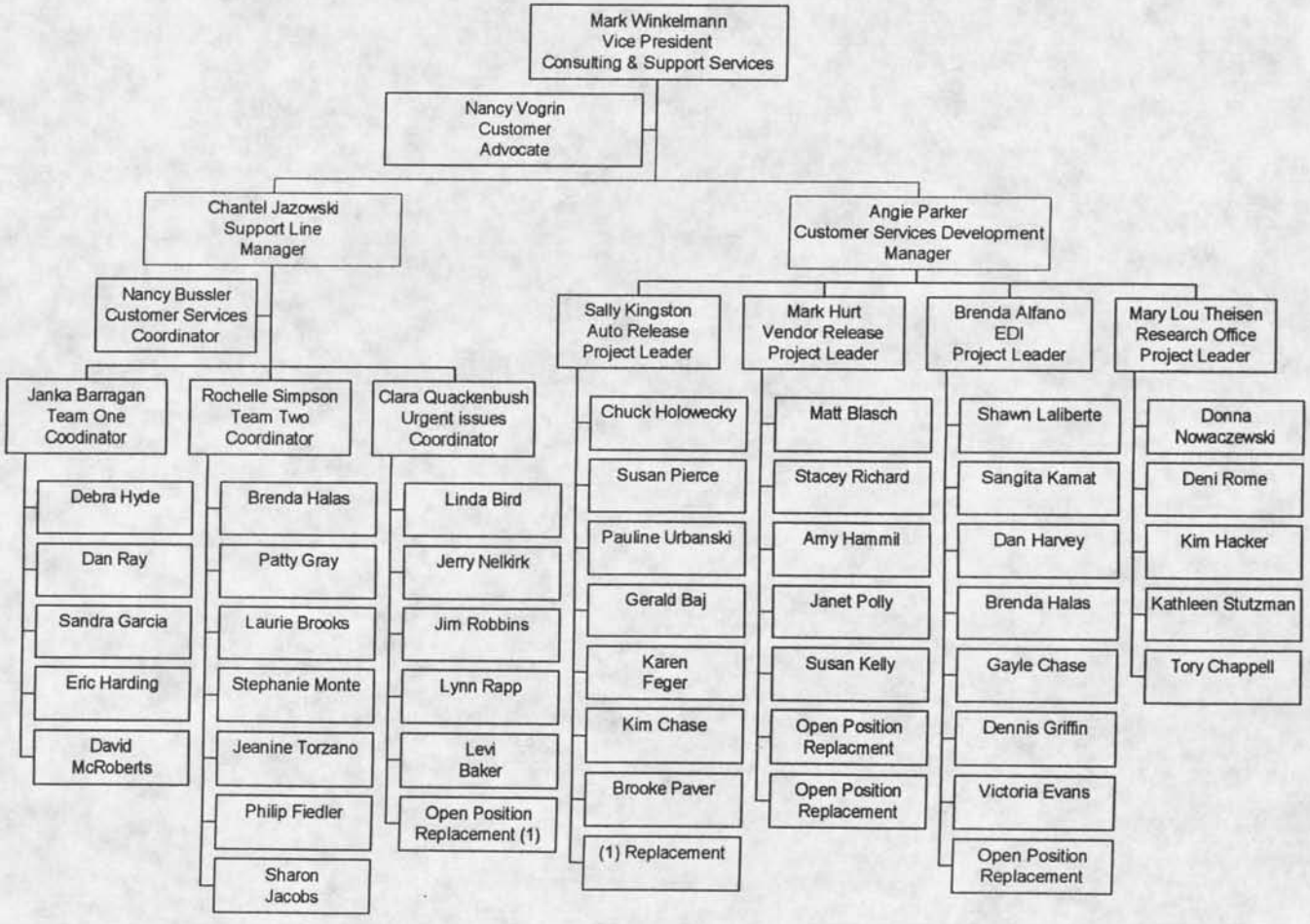
Customer Service



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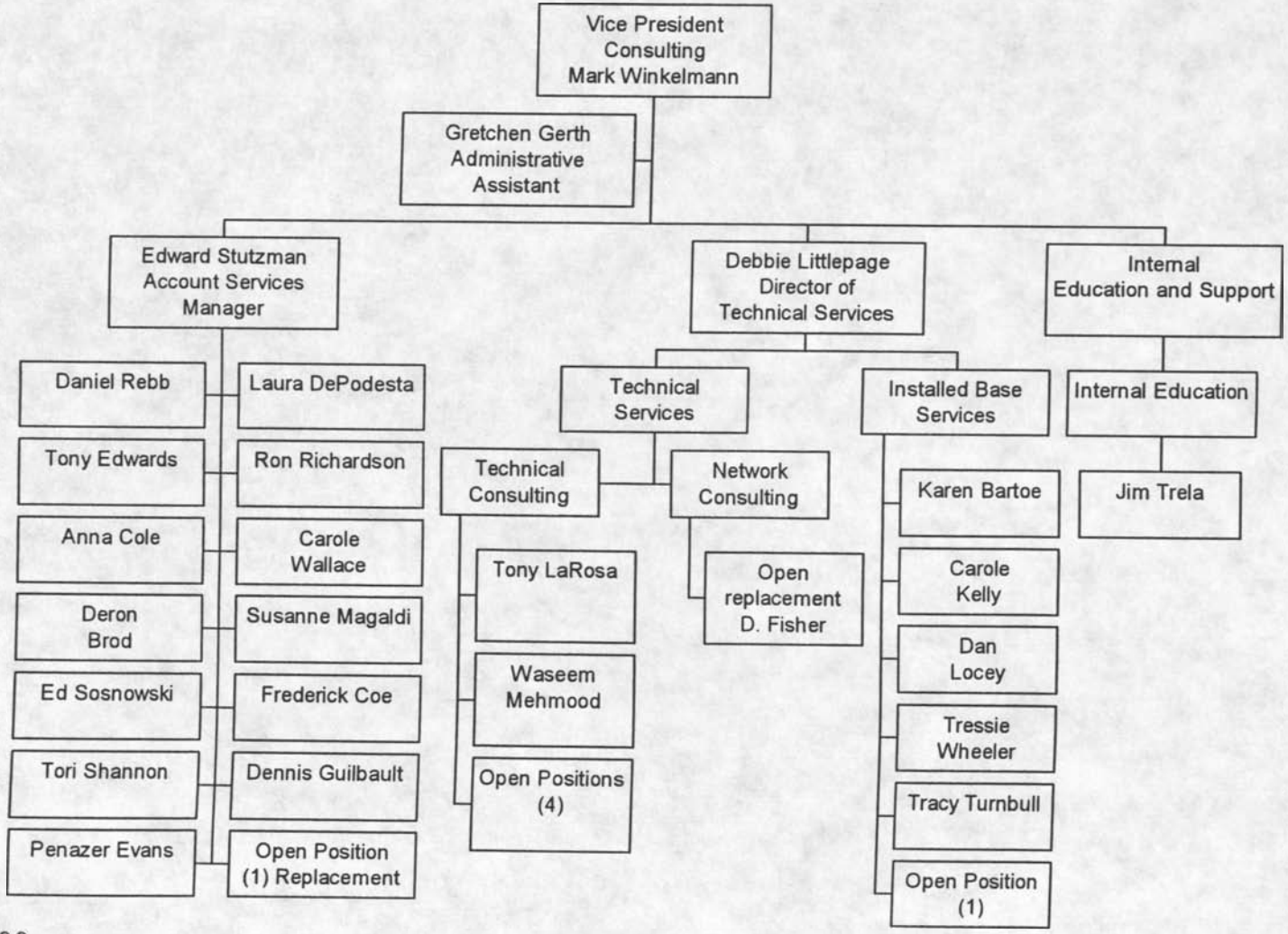
Consulting Services



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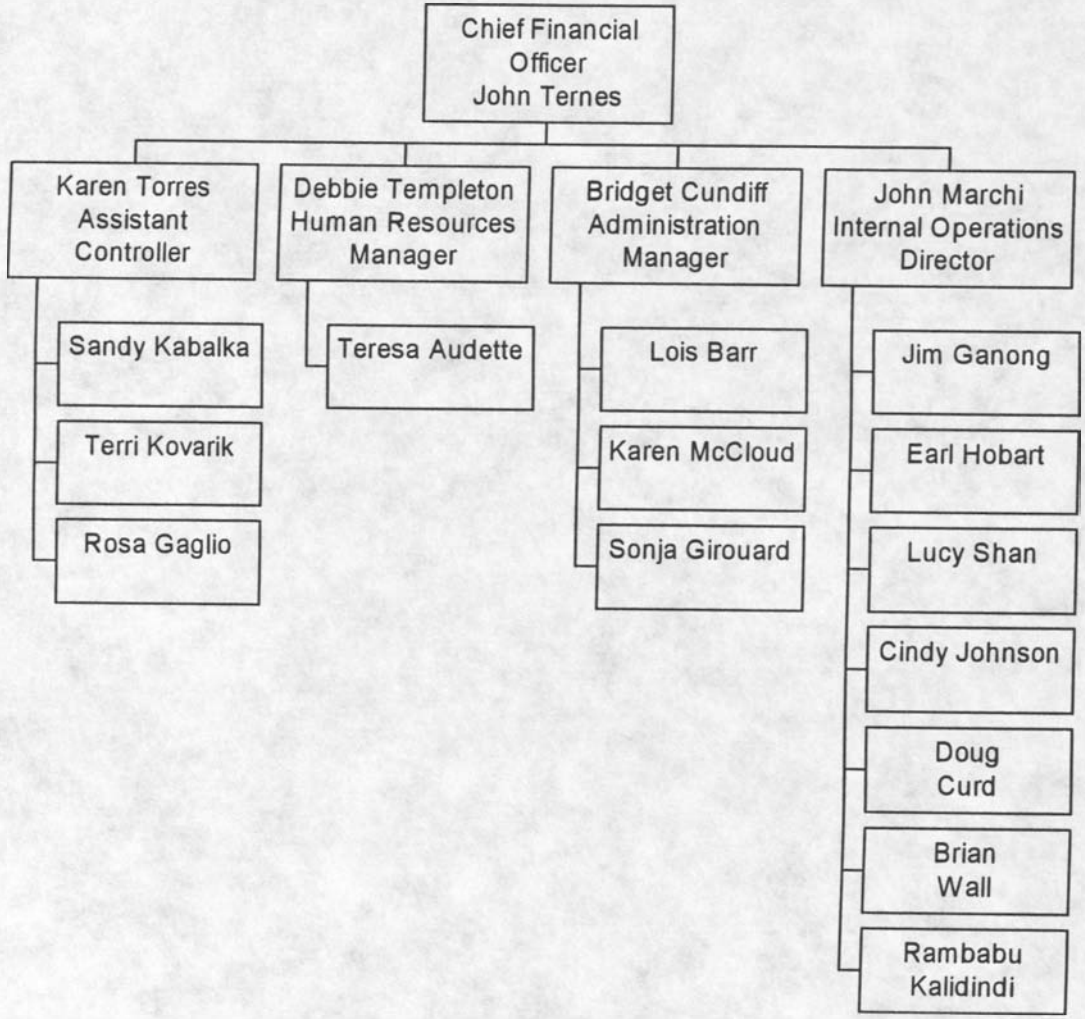
Finance


Chief Financial Officer
John Ternes
Karen Torres
Assistant Controller
Debbie Templeton
Human Resources Manager
Bridget Cundiff
Administration Manager
John Marchi
Internal Operations Director
Sandy Kabalka
Terri Kovarik
Rosa Gaglio
Teresa Audette
Lois Barr
Karen McCloud
Sonja Girouard
Jim Ganong
Earl Hobart
Lucy Shan
Cindy Johnson
Doug Curd
Brian Wall
Rambabu Kalidindi

Employees by Organization
Budget June 2000

Customer Support	21
Customer Service	30
Consulting Services	23
Product Development Development: 13 + 3 consultants Documentation and Education: 8	23
Quality Assurance	16
Sales	11
Marketing	4
Channels	7
Industry Relations	2
Internal Systems	8
Finance and Administration	13
Total	**158**

Future Three, Inc.
Headcount by Department
FY.00

	Dec.98	Jul.99	Sept.99	Dec.99	Mar.00 Budget	Apr.00 Budget	May.00 Budget	Jun.00 Budget	Jul.00 Budget	Aug.00 Budget	Sept.00 Budget	Oct.00 Budget	Nov.00 Budget	Dec.00 Budget	99 v 00 Change
Customer Support	21	20	22	22	20	20	21	21	21	22	24	24	24	24	2
Support Development	26	32	31	30	28	28	29	30	30	32	33	33	33	33	3
Services	28	24	24	25	22	23	23	23	24	27	27	27	27	27	2
Product Development	23	26	26	22	19	19	20	23	27	35	36	36	36	36	14
Quality	12	16	13	13	14	15	16	16	16	16	16	16	16	16	3
Sales	6	8	8	10	10	10	11	11	14	14	14	14	14	14	4
Marketing	3	4	4	4	3	3	4	4	5	5	5	5	5	5	1
Channels	1	2	2	2	5	5	7	7	8	8	8	8	8	8	6
Industry Relations	3	3	3	3	2	2	2	2	2	2	2	2	2	2	(1)
Internal Systems	6	7	6	5	8	8	8	8	8	8	8	8	8	8	3
Administration	9	14	14	14	13	13	13	13	13	13	13	13	13	13	(1)
	138	156	153	150	144	146	154	158	168	182	186	186	186	186	36

Future Three, Inc.
Employee Headcount Changes
March 31, 2000

	Employees at monthend							Activity for Quarter ended May 31, 2000				
Department	Jun-99	Dec.99	Jan.00	Feb.00	Mar.00	Apr.00	May.00	Hires	Terms	Out	In	Turnover
Development	36	22	23	22	20	21	17	5	(9)	(1)	-	33.3%
Quality	16	13	12	13	13	14	16	4	(1)	-	1	5.9%
Customer Support	20	22	20	22	22	23	24	5	-	(3)	-	0.0%
Suport Development	16	31	31	32	31	31	30	2	(5)	-	2	15.2%
Services	31	24	26	24	26	27	26	9	(6)	(1)	-	18.2%
Sales	11	14	14	9	10	11	14	5	(6)	-	-	31.6%
Marketing	5	4	4	4	3	3	3	-	(1)	-	-	25.0%
Industry Relations	3	3	3	3	2	2	2	-	-	(1)	-	0.0%
Channels	1	2	3	3	5	5	5	1	-	-	2	0.0%
Internal Systems	7	5	5	7	7	7	8	1	-	-	1	0.0%
Administration	17	14	14	15	12	12	12	2	(4)	-	-	25.0%
	163	154	155	154	151	156	157	34	(32)	(6)	6	17.0%

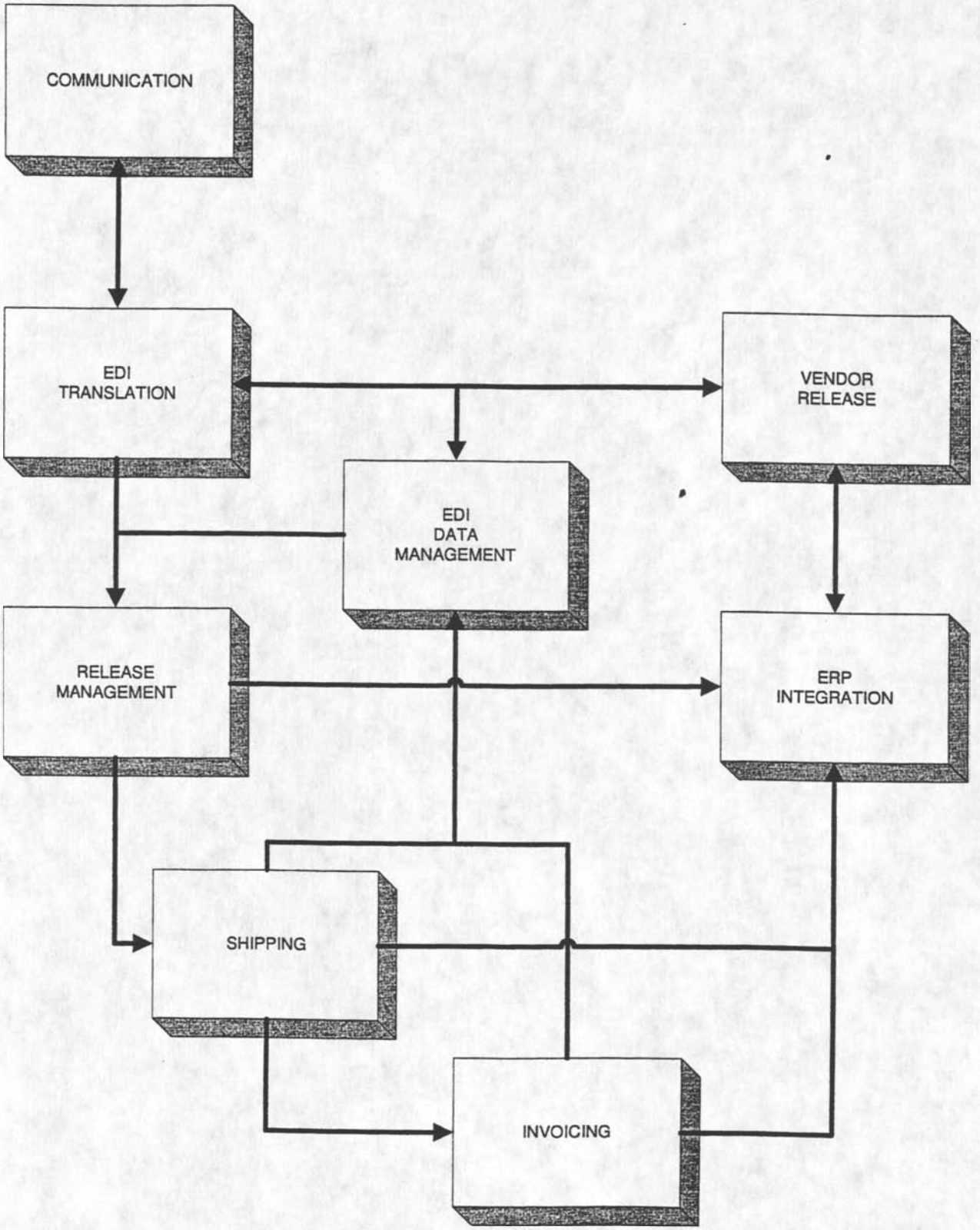
Future Three, Inc.
Employee Terminations
2000

		Hire Date	Term Date	Name	Title	Dept
1	1	08/16/99	01/07/00	R. Potasnik	Training Consultant	Services
2	2	06/01/99	01/14/00	L. Player	Accounting Manager	Admn
3	3	03/23/98	01/14/00	K. Sparks	HR Assistant	Admn
4	4	03/17/97	01/31/00	G. Rutkowski	Quality Assurance Analyst	Quality
5	5	08/09/99	01/31/00	J. Gillespie	Director of Development	Dev
6	6	01/10/00	01/31/00	J. Bost	Adv Developer	Dev
7	1	09/21/88	02/02/00	B. Lewis	VP of Sales	Sales
8	2	11/19/90	02/02/00	B. McGee	Sales Manager	Sales
9	3	06/28/99	02/02/00	K. Schmenke	Sale Representative	Sales
10	4	01/01/94	02/11/00	J. Oehlers	Sales Representative	Sales
11	5	12/13/99	02/11/00	C. Jones	Sales Representative	Sales
12	6	11/04/91	02/11/00	J. Smolinski	Director of Consulting	Services
13	7	07/13/84	02/11/00	D. Maiorana	President	Sup Dev
14	8	10/23/95	02/25/00	C. Hechtman	Application Consultant	Services
15	9	10/23/95	02/25/00	D. Ellis	Consultant Services Sales Rep	Services
16	10	10/15/90	02/28/00	B. Nowak	IPA Director	Dev
17	11	04/13/98	02/29/00	E. Fanelli	AS/400 Manager	Dev
18	12	05/07/90	02/29/00	R. Bouchard	Receptionist	Admin
19	13		02/29/00	W. Keyes		Admin
20	1	09/13/90	03/10/00	P. Fenwick	Marketing Director	Marketing
21	2	03/23/98	03/03/00	K. Zamboni	Internal Trainer	Development
22	3	04/04/96	03/24/00	M. Durham	Sales Representative	Sales
23	4	04/09/91	03/24/00	T. Petrey	Application Analyst	Supp Dev
24	1	04/19/99	04/20/00	M. Medlen	Training Consultant	Services
25	1	06/05/95	05/05/00	J. Callahan	Project Leader	Support Dev
26	2	12/14/98	5/19/00	James Maynard	Advisory Application Developer	Support Dev
27	3	01/12/98	5/16/00	Glenn Puro	Project Leader/Integrated Prod	Support Dev
28	4	06/14/99	5/19/00	Bill Ciegla	Technical Writer I	Development
29	5	10/19/98	5/19/00	Jennifer Gaffan	Training Design Specialist	Development
30	6	03/09/98	5/12/00	Dave Fisher	Training Consultant	Services
31	7	10/25/99	5/16/00	Tom Klaban	VP of Development	Development
32	8	02/15/99	5/19/00	Rick Elliott	Application Developer	Development
33	1	04/17/00	6/1/00	Jeff Warren	Application Developer	Development
34	2	04/19/99	6/8/00	Robin Tamm	Training Consultant	Services

Future Three, Inc.
New Employees
2000

	Hire Date	Name	Title
1	01/03/00	G. Gerth	Admn Assistant
2	01/10/00	J. Bost	Adv Developer
3	01/26/00	D. Littlepage	Tech Services Director
4	01/24/00	C. Kelly	Implementation Consultant
5	01/24/00	J. Trezano	Custome Support Level II
6	01/24/00	U. Amir	Snr Developer
1	02/07/00	T.Turnbull	Implementation Consultant
2	02/07/00	C. Jerue	Technical Writer
3	02/21/00	P. Correy	Quality Assurance Analyst
4	02/28/00	K. McCloud	Receptionist
5	02/28/00	L. Barr	Administrative Assistant
1	03/07/00	E. Torres	Adv Developer
2	03/09/00	B. Paul	E-Commerce President
3	03/13/00	P. Fiedler	Customer Support Rep
4	03/13/00	D.Locey	Consultant
5	03/16/00	K. Atchison	Snr Sales Executive
6	03/27/00	T. Wheeler	Implementation Consultant
7	03/27/00	W. Mehmood	Implementation Consultant
8	03/27/00	S. Croy	Sales Representative
1	04/03/00	D. Brod	Implementation Consultant
2	04/10/00	C. Wallace	Implementation Consultant
3	04/17/00	L. Baker	CSR Level I
4	04/17/00	J. Warren	Development
5	04/17/00	V. Shaouni	Quality Assurance Analyst
6	04/24/00	B. McGee	Director of Bus Developmer
1	05/01/00	V. Evans	Application Analyst
2	05/01/00	S. Lozen	Senior Sales Rep
3	05/01/00	J. LaLiberte	Director of Bus Developmer
4	05/01/00	R. Kalidindi	RPG Programmer
5	05/15/00	S. Jacobs	Snr Customer Support III
6	05/22/00	R. Mersolais	Direct of Marketing
7	05/22/00	R. Baugher	Quality Analyst
8	05/22/00	J. Frost	Quality Analyst
9	05/30/00	K. Feger	Advisory Application Analys
1	06/05/00	M. Sprinkle	Technical Writer
2	06/05/00	S. DeLange	Application Developer
3	06/19/00	S. Davis	Technical Writer

FUTURE THREE PRODUCT ACHITECTURE - AS400



AutoRelease

Engineered for Automotive Suppliers

AutoRelease is designed specifically for your company's needs in a changing automotive supplier environment.

AutoRelease, via EDI, automatically pulls releases and JIT schedules from your customers, processes them to the exact specifications for each trading partner, and tracks your CUMs while feeding net demand into your manufacturing system.

AutoRelease features:

- release accounting
- shipping control
- configurable interface
- EDI maintenance
- archiving

At ship time, net requirements are compared with availability in finished goods inventory. The shipper, ASN and other shipping documents are prepared automatically.

Bar code labels can be scanned to verify the shipment, or to create the shipping paperwork. AutoRelease then updates your inventory, accounts receivable and general ledger modules.

AutoRelease

Future Three's fully integrated demand management solutions have helped automotive suppliers since 1983. Future Three seamlessly integrates EDI, automotive release accounting and shipping control systems, and continues communication down the supply chain with our vendor demand application. A configurable interface works with numerous MRP, inventory and financial applications. Users automatically receive enhancements and OEM updates; a bar code label and scanning application speeds shipping. Future Three also offers comprehensive training, education, customer service, and consulting services.

Meet customer requirements

AutoRelease provides support for over 120 trading partner requirements and their transaction sets in automotive, heavy truck, and manufacturing industries. AutoRelease is coded specifically for each OEM's unique requirements and updated for every change made to transaction sets. AutoRelease keeps you current with customer's business practices.

Save time with integrated business application

Interface with a wide variety of popular manufacturing software applications. AutoRelease works with your choice of MRP, scheduling, inventory, accounts receivable, general ledger, sales analysis and repetitive modules. The interface is configurable, allowing you to tie it into a customized system regardless of hardware platforms.

Save time retrieving information

Archive history of your releases/requirements, bar code labels, shipping and invoice documents, and ASNs, allowing you complete access to all this information on-line.

Easily manage your customer business

Track cumulative year-to-date shipping and requirement figures for the model year by customer, part number, and shipping destination. AutoRelease makes it easier for automotive suppliers to reconcile CUMs with manufacturing customers.

Flexible processing of JIT or weekly releases

Use any combination of requirement-bearing transaction sets by destination to provide flexibility for both your production scheduling and shipping needs. The system monitors your current demand schedule, tracking whether you are ahead or behind schedule in shipping. Adjustments are made automatically in AutoRelease to accommodate demand discrepancies.

Save time creating invoices

Automatically create invoices from shipments made. Invoice information is immediately passed to update your business system and ensure quick payment for deliveries.

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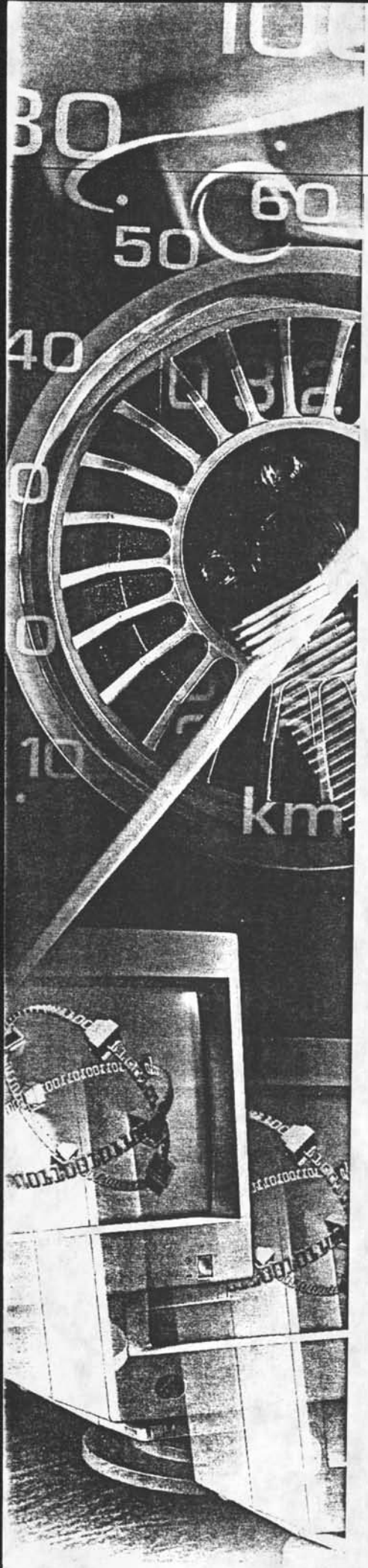

AutoMap

Future Three's Powerful Mapping Tool Engineered for Automotive Suppliers

Automotive suppliers now have the power to map routine transaction sets of standard business practices using their own in-house expertise. Future Three's AutoMap Configuration Tool provides the capability to efficiently create and manipulate specific EDI maps to meet the requirements for automotive trading partners.

The AutoMap Configuration Tool addresses the majority of major transactions sets within set parameters, including Daily Production Requirements (862), Material Releases (830), Purchase Orders (850), Advance Ship Notices (856), PO Acknowledgements (860), Text (864) and Functional Acknowledgments (997).

With the Tool, users enter and maintain their own EDI maps directly into Future Three applications. The maps translate EDI data to and from Future Three database files.

Designed to maximize flexibility and efficiency, AutoMap Configuration Tool puts the power to develop and modify specific EDI maps in your own hands. The Tool eliminates the need for programming modifications when maintaining maps, and integrates requirement data directly with Future Three applications. This gives you a flexible, consolidated and efficient approach to EDI communications.

AutoMap

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Flexibility and Control
Suppliers needing to develop routine trading partner requirements gain flexibility. Choose the AutoMap Configuration Tool to map your own routine transaction sets. Future Three still delivers its maps through Electronic Support System (ESS), which you simply apply as you would any other Update. Future Three developed-maps coexist with customer-created maps in the same AutoMap Engine.

Service and Support
While the AutoMap Configuration Tool is most appropriate for those organizations with in-house expertise, Future Three provides instruction, support and documentation on the usage of the tool. Future Three Consulting Services also offers a wide range of services to help suppliers maximize the benefits of the AutoMap Configuration Tool. Services include comprehensive EDI and database education programs and trading partner research.

Complete Integration and Maintainability
Communications developed with AutoMap are fully integrated with Future Three applications. The tool also offers complete transaction set maintainability.

Ease of use
All trading partners defined in the AutoMap Configuration Tool are managed through one intuitive menu option. AutoMap contains a built-in diagnostic tool to verify the setup of both inbound and outbound transaction sets. This provides on-line viewing of processing and error messages.

Standard Templates
Standard templates are available to develop tier-to-tier transactions. These can be used as a starting point for map creation and then simple "key words" will further manipulate data. Templates can also be created from scratch.

Map Comparison Utility
To assist in comparing two maps when copying or changing, the Configuration Tool features a built-in utility that will list all differences between two maps.

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AutoScan

Engineered for Automotive Suppliers

AutoScan is Future Three's bar coding application that allows you to meet trading partners' label scanning and printing requirements, while speeding up the shipping process and increasing accuracy and flexibility.

Beginning with label generation, Future Three supplies your company with all OEM mandated label templates for all major printers. We create label specifications exactly to your trading partners' requirements, and continue to maintain those templates if and when changes become necessary. AutoScan also includes an easy to use, Windows-based, label design tool.

Printing labels with AutoScan is as easy as one keystroke. Because Future Three stores all in-bound EDI data necessary for the label, and combines it with additional AutoRelease data, there is no need to key in any label information. Examples of additional flexibility include printing labels without requirements and regenerating lost or damaged labels from history files.

Users have the option to either scan-to-create or scan-to-verify shipments. By capitalizing on radio frequency technology, users are instantly notified with real time messaging as to the details and accuracy of all scans. Consequently, scan-to-verify routines only allow users to scan exact items and quantities created on the previously built shipper, increasing shipping accuracy. The ASN is created when scanning is completed, automatically including the precise serial numbers to ensure timely payments.

AutoScan

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Record data faster

AutoScan automatically creates labels from requirements, avoiding timely processes of keying label data into other databases. By harnessing the power of Smart Labels, scanning time is reduced by only scanning one field. You'll also speed up operations through pallet staging, which allows "pre-association" of single containers to a master label, reducing the number of scans at ship time. Our scan-to-create routine quickly and automatically creates the bill of lading, eliminating several shipping steps.

Increase accuracy of information

Increased accuracy of shipping and ASN information results from the elimination of manually keyed data. AutoScan's automatic routines prevent users from making mistakes ranging from transposed and missing numbers to miscommunication. AutoScan also eliminates errors when printing labels. Because label data is automatically pulled from files and merged with bar-code label templates, it is unnecessary for users to input any label data. Similarly, serial numbers are not keyed in to the ASN.

Organize data more effectively

AutoScan's archived and history files are on-line and instantly accessible for changing or reprinting shippers, or retransmitting ASNs with bar code data. Producing clear data at your finger tips results in a streamlined, organized shipping process.

Make your processes more cost-effective

By reducing the efforts associated with manual scanning and paper handling, you can accomplish tasks more quickly while freeing up staff for other duties. Also, AutoScan does not require an investment in third party printing. Plus, many AutoScan users report that by increasing the accuracy of ASNs, they receive more timely payments.

Meet your customers' business requirements

AutoScan allows you to meet bar code processes mandated by your trading partners. Take, for example, many recent changes by trading partners such as the General Motors B-10 label, Subaru's two dimensional labels, and Honda Star and Delta requirements. Future Three's dedicated participation in the automotive industry keeps your company ahead of upcoming developments and specification changes.

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VendorRelease

Engineered for Automotive Suppliers

VendorRelease allows suppliers to continue the benefit of electronic communication down the supply chain.

The VendorRelease system was developed to allow automotive suppliers to automate the ordering and receiving process by creating and sending material releases and JIT shipping schedules to their suppliers and receiving electronic Advanced Ship Notices (ASNs) in return.

Because it integrates seamlessly with AutoRelease through your business system, VendorRelease provides a complete solution for supply chain information management.

VendorRelease features:

- industry compliance
- inventory control
- shipment tracking
- configurable interface
- data maintenance

VendorRelease

Future Three's fully integrated demand management solutions have helped automotive suppliers since 1983. Future Three seamlessly integrates EDI, automotive release accounting and shipping control systems, and continues communication down the supply chain with our vendor demand application. A configurable interface works with numerous MRP, inventory and financial applications. Users automatically receive enhancements and OEM updates; a bar code label and scanning application speeds shipping. Future Three also offers comprehensive training, education, customer service, and consulting services.

Meet manufacturers mandates
Many major auto manufacturers are requiring integrated EDI throughout the supply chain. VendorRelease provides integrated business system processing along with reports and inquiries.

Save time tracking shipments
Suppliers can use your releases for their MRP systems, and send you ASNs with the EDI system of their choice.

Save time figuring purchasing requirements
VendorRelease can automatically create shipping releases based on your MRP schedule, or directly from your purchasing system.

Improve purchasing and inventory control
Reduce the time spent manually calculating vendor requirements. Instant visibility of late, delayed or partial shipments helps avoid the expense of rush delivery and reduces the need for "just in case" stock.

Monitor suppliers' performance
Easy-to-read reports and inquiries allow you to identify shipping variances and ASN discrepancies on all your suppliers.

Save time sending releases
VendorRelease prepares the releases/shipping schedule in print, fax, or EDI formats and transmits them to your suppliers.

Reduce administrative costs
Eliminate time spent manually creating, updating, printing, faxing and filing suppliers' orders.

Save time confirming orders
VendorRelease notifies you that releases have been received by your suppliers.

Save time monitoring inventory levels
In-bound ASNs are reviewed on the shipping dock and can be automatically processed into your business application to update inventory.

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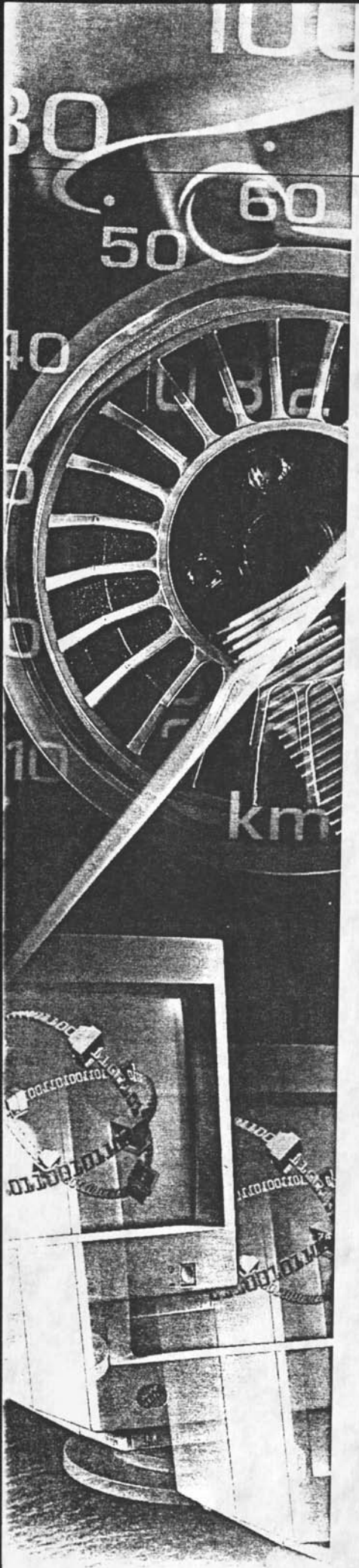

Future Three Toolset

Engineered for Automotive Suppliers

Future Three's ToolSet is a base grouping of powerful tools for use with all Future Three applications. The ToolSet gives you enhanced capabilities for forms printing and menu creation, all within a common interface for simple navigation. The components of Future Three's ToolSet are as follows:

- Window Menu Engine
- JetForm Engine
- Future Three's Electronic Support System (ESS)
- Version Control

Future Three Toolset

Engineered for Automotive Suppliers

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Window Menu Engine

A menu generation tool that will replace all hard coded menus within AutoRelease, VendorRelease, AutoMap, and AutoScan. Window Menu will enable Future Three users to join separate applications like AutoRelease and any ERP system. Other features include built-in date, time and day of week security; user, menu and menu option security; history tracking of usage by user, menu, and menu option; it also enables identification of security breach conditions. As an added function, the Window Menu *Designer* is capable of maintaining all user specific menu and menu option changes.

JetForm Engine

To enable users to print base forms included with AutoRelease on a laser printer. Base forms include: Shipper, Invoice, Commercial Invoice, Pool Bill, Hazardous Material, and other import/export documents. The JetForm Designer can be added to allow custom form development. Application data is merged with an electronic form. No programming is required to make formatting changes. Page size; font type; line spacing; justification; logos; bar codes, etc. are all specified within the form itself, which is independent of the application sending the data.

Future Three's Electronic Support System (ESS)

Now included in the ToolSet. All Future Three users will continue using ESS to receive updates to all Future Three applications.

Version Control

Future Three's emphasis on version control of new products, in which all changes will be issued and applied to separate libraries from the production libraries. Once a new version production library is released, it will be locked from further changes. All modifications will be issued as Updates and applied to a separate library. This gives greater control over application variances. Documentation is always coordinated with the latest version of software.

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FUTURE THREE

Appendix C-4
(9 pages)

Product Information

Product Overview

The Eclipz™ Product Line is a web-based solution that allows both Future Three and non-Future Three customers to publish their requirements on the Web, where their suppliers can access, view and print their individual requirements. The suppliers can also enter shipping information, and that information is automatically flowed back to the customer to notify them of the shipment.

Product Name

Official Name

The official name of this product is **Eclipz**. Version 1 of Eclipz™ shall be called **Eclipz™ Version 1**.

Proper use of the Future Three trademark

All documents, screens, help text and correspondence *must* refer to the product using the correct name, with the correct capitalization, in order to protect our product. Always include ™ or the characters "(TM)" immediately after the name Eclipz™. This helps Future Three protect its products, and makes it more difficult for a competitor to release another product with the same or similar name.

Hint: In Microsoft Word, when you type **(TM)** and press the spacebar, Word should convert it to the superscript letters TM automatically.

Internet Web Address

We have registered the domain name **www.SynapzITE.com** for future use.

Key Contacts

Contact	Role	Phone/Extension
Bob Paul	Executive Steering Committee Representative	3413
Dave Broccardo	Program Manager	3217
Kevin Kormos	Project Manager, Eclipz™ 1 Development	3215
Sandy Ray	Project Manager, Eclipz™ 2 Development Quality Assurance Project Manager, E1 & E2 Alpha Test Project Manager for Uni Boring	3368
Tony Stirtzinger	ICI Project Manager (Eclipz™ 2)	

Contact	Role	Phone/Extension
Jim Trela	Uni Boring Implementation Consultant (Eclipz™ 1)	3210
Dave McRoberts	Services Project Manager	3358 3359
Andy Stratton Mike Tooley	Presales Consultants	3259 3260
Sue Proctor	CBT Project Manager	3264
Cathy Jensen	Documentation Project Manager	3295
Bridget Cundiff	Administration Project Manager	3333
Rich M	Marketing Project Manager	
John Marchi	Internal Operatinos Project Managers / Credit Card Billing	3267

Changes from Previous Version

Not applicable.

Product Strategy

Version 1 of Eclipz™ is designed to work directly with VendorRelease Version 4. Our customers currently running VendorRelease in a live production environment are prime candidates for quickly implementing Version 1 of Eclipz™.

Future versions of Eclipz™ will incorporate our unique new business rules engine, allowing us to leverage our 10,000 business rules. This will also allow Eclipz™ to interface with *any* business application to present demand and accept shipping information, not just VendorRelease customers.

We plan to add significant product enhancement on an aggressive schedule throughout 2000 and 2001. Some of these features include printing shipper forms, barcode scanning, and vendor managed inventory. Suggestions on what we should include in future versions should be directed to Bill McGee in our Business Development Group.

Change Control Process

Synapz has adopted a stringent change control process to manage the flow of changes to the program. Developers are not authorized to deviate from the design documents. *All* changes must be reported on the designated form (see Appendix B) and submitted to the Executive Steering Committee for review. This process helps ensure that "scope creep" does not impact the project.

Known Risks

Loss of key developers or other resources

Delay in development

Delay in signing CSC hosting contracts

Delay in GUI development and retrofit

Unknown performance issues when solution is scaled up

Version Levels & Features

Due to our aggressive go-to-market strategy, we are phasing in features for Version 1 of Eclipz™. We expect to be at Version 1.2 at product launch.

Eclipz™ Version 1.0

Eclipz™ Version 1.0 will be available in mid 2000. It extends the requirements and shipping notification functions of Vendor Release from the AS/400 to the web. Suppliers will be able to register with the Eclipz, and view and enter requirement and shipping data. The application will automatically synchronize data between the Customer's AS/400 and the host site.

This version will not have the ability to accept credit card payment processing.

The new user interface recently approved by the Business Development group will be in place only for the Vendor screens. The remaining screens will be the standard development versions of the screens.

We plan to perform limited testing in-house. Our first beta test customer (Uni Boring) is extremely enthusiastic about the opportunity to be our first customer on Eclipz™. We are currently preparing Uni Boring for a beta test in June.

Eclipz™ Version 1.1

This version completes the UI for the remaining parts of the application: Customer Administration and Future Three Administration. This version affects only the host site; no changes are required to VendorRelease. This change will be made several weeks after the alpha at Uni Boring.

Eclipz™ Version 1.2

This version adds reoccurring credit card processing to Eclipz™, permitting vendors to subscribe using a credit card and be billed monthly. This feature will require changes to the Future Three *Customer Connect* web site, along with limited changes at the host site.

Detailed Feature Matrix

See Appendix A for a complete table of features supported in Version 1.

International Usage

Version 1 of the application will not support international configuration by the customer or supplier.

Testing

Internal Test Plan

TBD

Alpha Test at Uni Boring

Uni Boring has been selected as our first test site. Chuck Mick understands that this is a new product, and that some rework may be needed. He has selected 10 suppliers that he wants to get up on Eclipz™.

Implementation Consultant

Jim Trela is the implementation consultant for the Uni Boring implementation. He is responsible for the overall project plan, customer relations, and project implementation, drawing on other resources at Synapz as needed.

Alpha Test Lead

Sandy R is the technical lead for the duration of the Alpha test. She will be coordinating resources to ensure a successful alpha test.

Support Issues

While the exact support process is not yet defined, in general, all support calls from Uni Boring regarding Eclipz™ or Vendor Release will be directed to the development area, where Sandy R will put in place a defect tracking system to track all calls. Once the product is released, the Customer Support staff will provide support.

Test Plan Overview

Application Updates Required for Testing

The development and QA groups have identified several Updates that each customer must apply to their VendorRelease, ESS, and Configurable Interface applications. When finalized, the specific Updates will be listed here.

Product Launch

Integration Issues

Eclipz™ Version 1 uses the Configurable Interface on the AS/400 to extract relevant demand data and format it for transfer to the host site. The Configurable interface is also used to process inbound shipment messages into the standard VendorRelease ASN files.

Default maps for both outbound demand and inbound shipping messages will be supplied as part of the Eclipz™ product offering. The default maps may be customized by the customer, or by Synapz representatives for a additional charge.

A Java application is used on the AS/400 to perform the actual data transfer to and from the host site.

Non-Future Three Integration

Version 2 of Eclipz™ will support a integration with non-Future Three applications, such as QAD or SAP. Details to follow in the *Eclipz™ 2 Product Planning Guide*.

Hardware & Software Requirements

Customer

- AS/400 at V4R4 of the operating system, up to date with all PTFs from IBM, with the following no-cost IBM licensed programs installed prior to implementation:

Licensed Program	Product Option	Description
5769JV1	*BASE	AS/400 Developer Kit for Java
5769JV1	1	Java Developer Kit 1.1.6
5769JV1	2	Java Developer Kit 1.1.7

  Note: It is imperative that customer *reapply* the latest PTF cum package from IBM after installing the products listed in the table above.

- Direct, non-dial up connection to the internet that can be accessed by the AS/400
- At least on PC capable of running Microsoft Internet Explorer 5.0, with a connection to the Internet. The screen resolutions should be 1024 X 768 to reduce the need to scroll the images on the screens left and right.
- Enhanced Communications Module

Supplier

- At least on PC capable of running Microsoft Internet Explorer 5.0, with a connection to the internet, with direct or via a dial up connection.

Host Site

Hosting Partner

CSC has been selected as our first hosting site. CSC is responsible for maintaining the physical hardware in a secure location, as well as providing our application access to the Internet and ANX.

Host Site

CSC is hosting two servers, one as a web server, and one as a database server running Oracle 8i. All hardware is hot-swappable, that is, failed hardware can be removed and replaced while the system is in use. At this time, only one site in Southfield is used for hosting; future plans are for data to be mirrored at other location to prevent a disaster in Southfield from affecting operations.

Disaster Recovery

At this time, CSC has detailed disaster recovery processes in place for their data center. We will have more information as to the restore time we have contracted for at a later date.

Data Security

The link between the customer's router and CSC router is secured with IPSec6, the latest security technology to create a virtual "pipe" within the network for the duration of the connection.

Support

Alpha & Pre-Release

During the alpha, beta, and pre-release phase of Eclipz™ 1, the development group will be directly supporting our customers. This means that all development will be handling all calls from customers until the product is released.

Support at General Release

Synapz will provide standard telephone customer support to Synapz Vendor Release customers for issues regarding usability and technical issues during normal support business hours.

At this time, Synapz does not offer additional support options in the event the Customer wants Synapz to field calls directly from their suppliers. We continue to review this, and may offer this support in the future.

Pricing

Note: The pricing plan described below is subject to change.

Customer

Each customer will be charged a license fee that is tiered based on the number of suppliers they will be using with Eclipz. There will also be a yearly maintenance agreement fee (SSA), as well as an implementation services fee.

We envision Synapz being involved with customers to configure and test with a customer first set of "pilot" suppliers, then turning over the process of bringing up the remaining supplier to a third party.

Supplier

Each supplier will be charged a monthly fee for access based on the following criteria:

- Number of parts
- Number of seats
- Number of applications / features being used

Exact pricing has not yet been established.

One Supplier, Multiple Customers

TBD

Administration

Administration will be required to review the pricing strategy and ensure that all necessary systems are in place to support it on product rollout.

Configuration

Development will document any configuration required during the alpha test so that the information is available for product launch.

Documentation

TBD

Marketing

Bob Paul is developing a Business Plan that will incorporate a marketing plan for Eclipz™.

Services

Consulting and Implementation

The services area has responsibility for creating an initial Uni Boring implementation plan, as well as a generic template to be used for later implementations of Eclipz™ Version 1.

Jim Trela has been selected as the Project Manager for our first alpha test at Uni Boring. Jim is responsible for managing the overall customer experience and project plan.

Training and Education

This area of Services is responsible for determining the type of education plans we plan to offer to our customers and their suppliers.

Business Partners (SNAP)

Strategic Partners

Deloitt & Touche

Customer Migration

As all customers are at Version 4 of VendorRelease, there are no migration plans necessary to go live with Eclipz™ 1. (This does not include Updates that require ESS to copy data to new file formats.)

Application Updates

Future Three is responsible for changes to the host application. The customer is responsible for receiving, compiling and applying all Vendor Release updates.

Product Enhancements

Please refer any suggestions for product enhancements to Bill McGee or John LaLiberity, not to the developers.

Delivery

We expect to deliver the updates to Vendor Release via ESS, including the Java component used to send and receive data from the host system. Changes that cannot be sent via ESS will be distributed via CD.

Application Availability -

Host Site Maintenance

Our hosting partner requires a 4-6 hour window Sunday morning each week for system maintenance and testing. During our alpha and beta tests, the exact time window for maintenance will vary depending on the needs of Synapz development and QA groups.

As we move into a production environment, the exact hours the website will be unavailable to customers and suppliers will be posted on the Eclipz™ homepage. During this time, customers will not be able to publish or retrieve information, and suppliers will not be able to access their demand nor enter shipping information.

Internet Congestion

Customers and suppliers need to be aware that events outside of Synapz and CSC's control can limit, reduce, or prevent access to the Eclipz™ website. Both customers and suppliers should have backup processes in place in the event the Internet becomes unavailable or the performance becomes unacceptable.

Customers using the ANX to connect with CSC should contact their ANX CSP with any concerns regarding network availability or performance.

Internet Failures

Random cable cuts or other failures of the internet may prevent customers and suppliers from accessing Eclipz™ for extended amounts of time.

I. ECLIPZ Phase II BETA Overview

A. Architectural Drivers

The ECLIPZ Phase II beta is being designed and developed in an attempt to satisfy the following architectural drivers:

1. ECLIPZ Phase II beta shall be designed and implemented such that the ECLIPZ Phase I software can operate in a platform independent manner without sacrificing existing ECLIPZ Phase I features.
2. Internet/Intranet enabled product – Applications and Future Three "knowledge" should be accessible via World Wide Web (WWW) and browser technologies.
3. Component based architecture – Future Three products should be designed and implemented as components in order to leverage component application architectures becoming available via Commercial Off The Shelf (COTS) packages (i.e. Transaction Processors (TP), Database Management Systems (DBS) and Enterprise Java Beans (EJB). Component based architectures also provide for the ability to roll out products in an incremental fashion without affecting the development of future components.
4. Loose coupling of components – All Future Three components should be designed and implemented using loose coupling techniques as opposed to embedded systems or tight bindings. This will provide Future Three with the ability to replace components in the future with minimal cost and design impact.
5. More visibility into Future Three Intellectual Property (IP) – Future Three products should be designed and implemented in a way to emphasize the business knowledge (tacit, implicit and declarative) that Future Three has acquired through years of experience in the automotive supply chain management industry. Identification of the Future Three IP will provide more flexible feature packaging options and provides greater market opportunities.
6. Easier maintenance of rules – Cycle time for configuring the Future Three products to include new Trading Partners and suppliers, and the new behavior implied by the addition of these entities, should be minimized.
7. Separation of parsing, implementation, Trading Partner and supplier rules – All rules in the Future Three products should be properly categorized and isolated to increase the maintainability and modifiability of the rules.
8. Extensibility with respect to Enterprise applications – Future Three products should be designed and implemented with an emphasis on providing solutions for the entire Enterprise. Early versions of the architecture should provide the extensibility and scalability for the Future Three products to integrate with Enterprise Applications and/or provide solutions to Enterprise problems.
9. Time to market – Future Three marketing opportunities are greatly influenced by how quickly new products and features can be demonstrated and deployed to the target customers. Future Three product architectures will be designed and implemented in a manner that decreases the product development life-cycle leveraging reuse and components where applicable.

B. Functional Architecture

Figure 1.1 illustrates the functional view of the ECLIPZ Phase II beta architecture. All requirements and scheduled tasks are traced to these functional components.

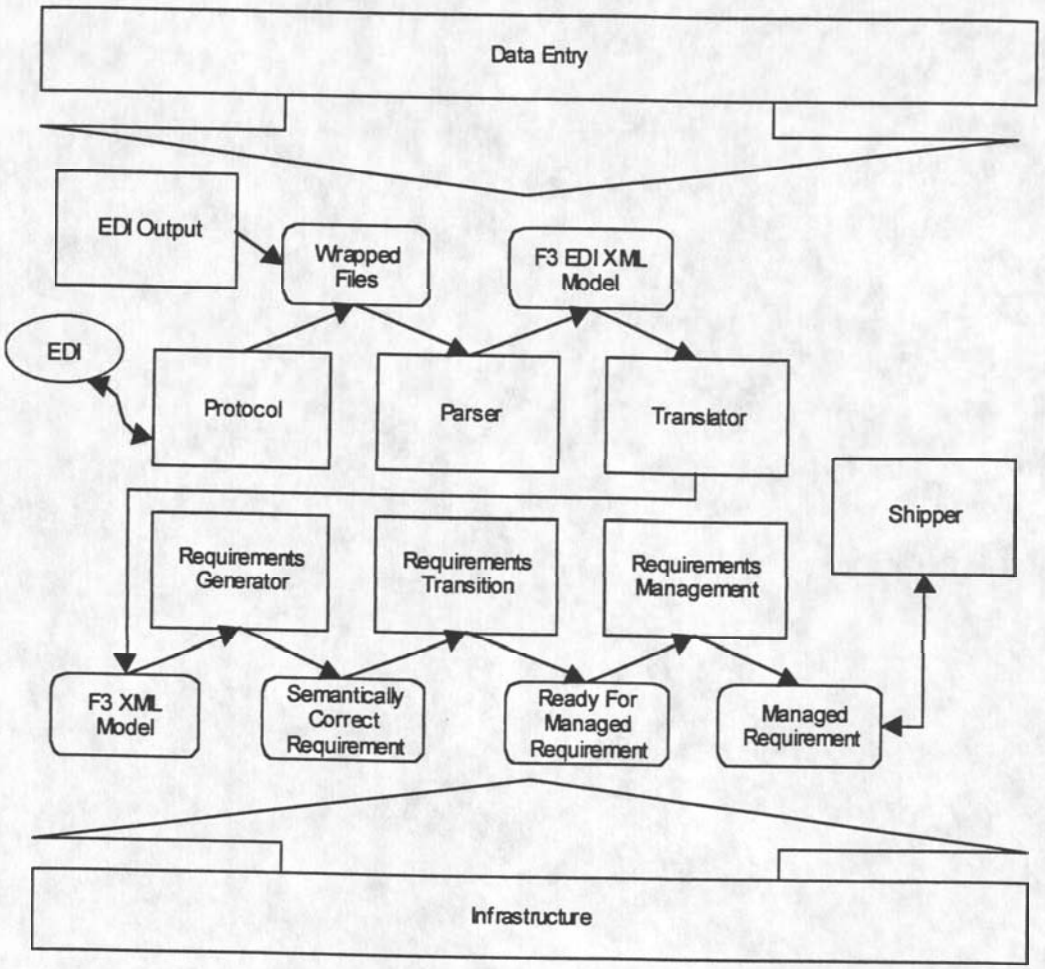


Figure 1.1 Functional Architecture Components

C. Process Architecture

Figure 1.2 illustrates the process view of the ECLIPZ Phase II beta architecture. The Future Three ECLIPZ Phase II beta shall be developed within the constraints of this process architecture.

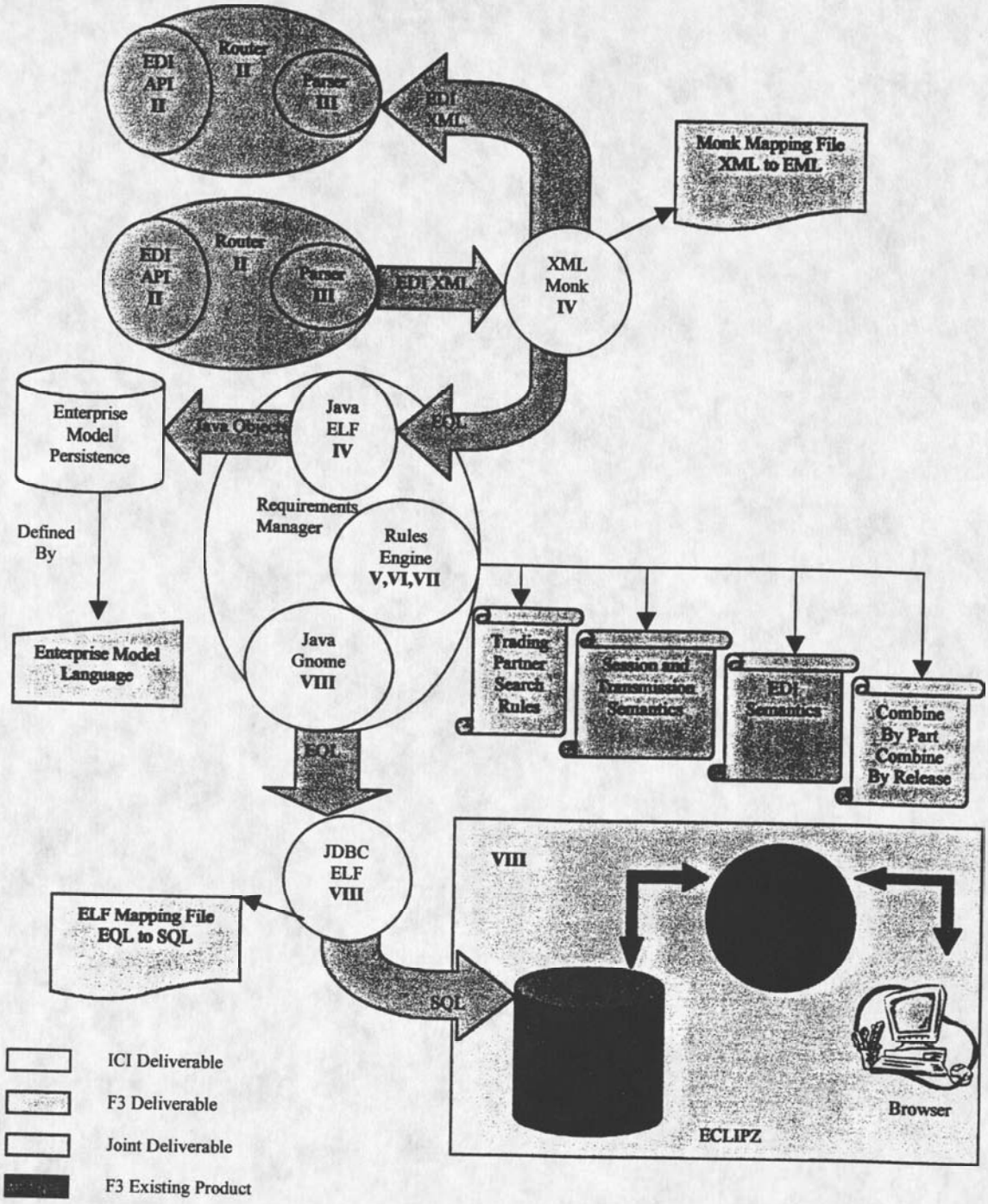


Figure 1.2 Process Architecture

Future Three, Inc.
Summary Statement of
($000's)

	1998	1999	2000
Revenue:			
License	$ 5,646	$ 3,762	$ 4,529
Eclipz			1,225
TP Modules	991	1,258	986
Maintenance	8,398	9,579	10,845
Services	2,986	3,062	3,343
Total Revenue	18,021	17,661	20,927
Total Expenses	17,008	16,174	20,309
Income from Operations	1,013	1,487	618
Operating Margin	5.6%	8.4%	3.0%
Growth rate vs same period prior year	30.2%	-2.0%	18.5%

Appendix C-6
(2 pages)

Future Three, Inc.
Statement of Operations
($000's)

	Q1.98	Q2.98	Q3.98	Q4.98	Q1.99	Q2.99	Q3.99	Q4.99	1998	1999
Revenue:										
License	$ 1,849	$ 1,164	$ 1,511	$ 1,122	$ 1,020	$ 501	$ 1,109	$ 1,131	$ 5,646	$ 3,762
Add on Modules	62	171	97	661	325	604	204	125	991	1,258
Maintenance	1,987	2,069	2,205	2,137	2,204	2,295	2,537	2,542	8,398	9,579
Consulting	96	145	248	167	251	199	346	254	656	1,051
Training	395	632	671	635	550	575	435	452	2,333	2,013
Total Revenue	4,389	4,181	4,732	4,722	4,351	4,175	4,632	4,506	18,024	17,663
Expenses:										
Payroll Expense	1,696	1,968	1,943	2,044	1,977	2,109	2,232	2,426	7,651	8,744
Commission Expense	357	194	251	286	118	20	303	145	1,088	587
Payroll	2,053	2,162	2,194	2,330	2,095	2,129	2,536	2,571	8,739	9,331
Payroll Taxes	180	158	140	135	197	170	167	164	613	698
Employee Benefits	194	228	225	225	223	250	273	299	872	1,044
Travel and Ent	163	190	97	133	158	118	123	84	583	483
Communications	72	78	82	95	80	96	103	70	327	348
Other Services	509	1082	931	516	419	537	329	240	3,038	1,525
Depreciation & Amort	88	102	115	107	126	145	161	177	412	610
Rent	138	136	139	137	153	158	162	158	550	631
Repairs & Maint	50	65	60	56	26	39	33	(11)	231	87
Supplies	188	143	100	91	44	46	18	16	522	124
Marketing Programs	18	65	75	33	67	55	104	40	191	266
Cost of Revenue	10	9	6	6	40	98	89	150	31	377
Leased Equipment	12	12	12	12	12	12	12	0	48	36
Insurance	24	14	55	7	19	28	39	40	100	127
Other Taxes	5	17	37	6	8	18	5	8	65	39
Miscellaneous	11	7	7	661	52	64	29	(232)	686	(87)
Total Expenses	3,715	4,468	4,275	4,550	3,718	3,965	4,183	3,773	17,008	15,639
Income from Ops	674	(287)	457	172	632	209	449	733	1,016	2,024

Future Three, Inc.
Operating Plan P/L
FY.00 ($000's)

	Q1.00	Q2.00	Q3.00	Q4.00	2000 Budget			% of Sales	
	Actual	Forecast	Budget	Budget	Revised	Original	Variance	Revised	Original
Revenue:									
S/W license	$ 1,320	$ 1,109	$ 1,050	$ 1,050	$ 4,529	$ 5,600	$ (1,071)	21.6%	23.9%
Eclipz	-	14	400	811	1,225	-	1,225	5.9%	0.0%
TP modules	172	334	240	240	986	960	26	4.7%	4.1%
Maintenance	2,630	2,655	2,728	2,835	10,849	11,838	(990)	51.8%	50.5%
Services	690	711	970	972	3,343	5,040	(1,697)	16.0%	21.5%
Total	4,812	4,823	5,388	5,908	20,931	23,438	(2,507)	100.0%	100.0%
Cost of Revenue:									
Customer Support	335	316	344	352	1,348	1,532	(184)	6.4%	6.5%
Support Development	524	492	540	546	2,102	2,396	(294)	10.0%	10.2%
Cost of Services	541	582	644	643	2,411	3,089	(678)	11.5%	13.2%
Product Costs	55	30	206	301	591	394	197	2.8%	1.7%
Total	1,455	1,420	1,735	1,842	6,452	7,411	(959)		
Gross Profit	3,357	3,403	3,653	4,067	14,479	16,027	(1,548)		
Operating Expenses:									
Product development	756	1,015	1,091	838	3,701	2,800	901	17.7%	11.9%
Quality	207	238	244	244	933	890	43	4.5%	3.8%
Sales	475	488	664	763	2,390	2,484	(94)	11.4%	10.6%
Marketing	120	189	450	290	1,049	710	339	5.0%	3.0%
e.Commerce	240	380	444	444	1,509	856	653	7.2%	3.7%
General & Admin	996	1,038	1,062	1,085	4,180	4,143	37	20.0%	17.7%
Total	2,795	3,348	3,955	3,664	13,761	11,883	1,878	65.7%	50.7%
Operating Income	562	55	(302)	402	718	4,144	(3,426)	3.4%	17.7%
Interest Income (Expense)	(225)	(229)	(229)	(229)	(913)	(851)	(62)	226.7%	-42.6%
Income Before Taxes	337	(174)	(531)	173	(195)	3,293	(3,488)		
Income Tax Expense	157	51	-	-	208	1,298	(1,090)		
Net Income	$ 180	$ (225)	$ (531)	$ 173	$ (403)	$ 1,995	(2,398)		
Gross Margin	69.8%	70.6%	67.8%	68.8%	69.2%	68.4%			
Operating Margin	11.7%	1.1%	-5.6%	6.8%	3.4%	17.7%			
Support Margin	69.3%	73.0%	70.2%	70.8%	70.8%	69.3%			
Services Margin	21.6%	18.1%	33.5%	33.9%	27.9%	38.7%			
Services Profit	148.9	128.8	325.1	329.4	932.2	1,951.0			
Revenue/Employee	$ 131	$ 128	$ 125	$ 127	$ 125	$ 128			

Future Three, Inc.
Operating Expense Comparison
99 v 00 ($000's)

TOTAL COMPANY	Operating Expenses 1998	1999	2000	Change 1999 vs 2000 Inc(Dec)		
Wages	7,651	8,472	10,010	1,538	18.2%	A
Car allowance		91	108	17	18.7%	
Profit sharing			166	166	#DIV/0!	
Bonus		65	607	542	833.9%	B
Commission	1,088	707	878	171	24.2%	
Payroll	8,739	9,335	11,769	2,434	26.1%	
Payroll taxes	612	694	863	169	24.3%	
Employee benefits	798	933	1,025	92	9.8%	
401k Match	75	82	186	104	126.4%	C
Travel & entertainment	583	499	442	(57)	-11.4%	
Training & seminars		95	252	157	165.3%	D
Employee relations		60	91	31	50.8%	
Recruiting		383	438	55	14.5%	
O/S Services/Consultants	3,037	1,067	1,619	552	51.8%	
Communications	326	377	351	(26)	-6.8%	
Depreciation	412	590	584	(6)	-0.9%	
Rent	598	589	621	32	5.4%	
Repairs & maintenance	232	119	130	11	9.3%	
Supplies	521	141	66	(75)	-53.0%	
Marketing programs	190	275	740	465	169.2%	
Cost of revenue	30	332	591	259	78.1%	
Leased equipment		91	129	38	42.1%	
Insurance	98	110	100	(10)	-9.4%	
Other taxes	66	37	40	3	7.3%	
Miscellaneous		38	88	50	132.1%	
Other	658	303	77	(227)		
	16,975	16,150	20,203	4,053	25.1%	

NOTES:

A 25 new hires add $1.3 million; full year of 1999 hires adds $400,000; balance due to 5% ave pay increase

B Increase $210,000 for Services bonus plan, balance due to new exec bonus plans

C Increase 401(k) match to 2% of pay

D Java and Sales training plus approx $1,000/head for others; little training done in 1999

Future Three, Inc.
Pro Forma Statement of Operations
($000's)

	Total 2000 Forecast	Eclipz Forecast	AS/400 Forecast	
Revenue:				
S/W license	$ 4,529	$ -	$ 4,529	
Eclipz	1,225	1,225	-	
TP modules	986	-	986	
Maintenance	10,845	-	10,845	
Services	3,343	-	3,343	
Total	20,927	1,225	19,702	
Cost of Revenue:				
Customer Support	1,348	50	1,298	> Hired 2 support reps in Q3.00
Support Development	2,102	-	2,102	
Cost of Services	2,411	-	2,411	> Assumes no services revenue from Eclipz
Product Costs	591	426	165	> CSC hosting fee, ICI royalty, credit card transaction fee
Total	6,452	476	5,976	
Gross Profit	14,476	749	13,727	
Operating Expenses:				
Product development	3,701	2,705	996	> 12 FTE's; $600 for ICI; $519 for CSC
Quality	933	143	790	> 2 FTE's
Sales	2,395	514	1,881	> Assume half of sales effort for 2H.00
Marketing	1,049	400	649	> Program spending in excess of prior year level
e.Commerce	1,509	1,159	350	> Toufar, Alderson and 1 BDM in AS/400, rest in Eclipz
General & Admin	4,270	-	4,270	
Total	13,856	4,921	8,935	
Operating Income	620	(4,172)	4,792	
Gross Margin	69.2%	61.1%	69.7%	
Operating Margin	3.0%	-340.6%	24.3%	
Support Margin	70.8%	n/a	71.3%	
Services Margin	27.9%	n/a	27.9%	
Services Profit	932.2	n/a	1,586.8	
Revenue/Employee	$ 125	$ 51	$ 138	
FTE	167	24	143	

Future Three, Inc.
Eclipz Business Model
($000's)

		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q1.00	Q2.00	Q3.00	Q4.00	2000	
Revenue:																
Alpha	1 V1			$ 14	$ 14	$ 5	$ 5	$ 5	$ 5	$ 5		$ 14	$ 24	$ 15	$ 53	
Beta	4 V1				56	56	10	20	20	20		-	122	60	182	
GA	4 V1					80	80	10	20	20		-	160	50	210	
	4 V1						94	94	12	25		-	94	131	225	
	4 V1							108	108	15		-	-	231	231	
	4 V1								108	108		-	-	216	216	
	4 V1									108		-	-	108	108	
		-	-	$ 14	$ 70	$ 141	$ 189	$ 237	$ 273	$ 301	$ -	$ 14	$ 400	$ 811	$ 1,225	
Direct Expenses:																
Royalty	15%			2.1	10.5	21.2	28.4	35.6	41.0	45.2	-	2.1	60.0	121.7	181.7	
App Hosting					24.0	24.0	24.0	24.0	24.0	24.0	-	-	72.0	72.0	144.0	
Transaction fee	3%			0.4	2.1	4.2	5.7	7.1	8.2	9.0	-	0.4	12.0	24.3	36.3	
Customer Rebate	5%			0.7	3.5	7.1	9.5	11.9	13.7	15.1	-	0.7	20.0	40.6	60.6	423
Development - ICI		20.0	100.0	200.0	200.0	75.0	150.0	150.0	150.0	150.0	40.0	320.0	425.0	450.0	1,235.0	
Development - CSC&Other		50.0	75.0	70.0	70.0	25.0	25.0	25.0	25.0	25.0	217.0	195.0	120.0	75.0	607.0	
		70.0	175.0	273.2	310.1	156.4	242.5	253.5	261.8	268.2	257.0	518.2	709.0	783.5	2,264.5	
Contribution		$ (70.0)	$ (175.0)	$ (259.2)	$ (240.1)	$ (15.4)	$ (53.5)	$ (16.5)	$ 11.2	$ 32.8	$ (257.0)	$ (504.2)	$ (309.0)	$ 27.5	$ (1,039.5)	
Contribution Margin		n/a	n/a	n/a	n/a	-11%	-28%	-7%	4%	11%	n/a	n/a	-77%	3%	-85%	
Margin Before Devel Exp						60%	64%	67%	68%	69%	n/a	n/a	59%	68%	66%	

Future Three

Executive Summary

Future Three provides next-generation Demand Management and EDI systems with a broad range of professional services for automotive suppliers. From its inception in 1983, the company has grown substantially through focusing on delivery of software products and services that automate the order management, delivery and procurement process that is unique to the automotive industry. Today, Future Three is the recognized leader in this market segment with over 250 automotive customers, including a third of the largest 150 suppliers as defined by Automotive News. Future Three is now poised for explosive growth by launching the industry's first trade exchange for production part procurement. With the deployment of hosted applications that have been built with the experience and domain expertise developed over 17 years, Future Three can now deliver web based low cost solutions to the entire automotive supply chain. The complexities involved in delivering these systems and meeting all the industry compliance mandates also mean that the barrier to enter this segment of the digital market is very high. The combination of the unique positioning Future Three enjoys in the market and the leverage that the existing customer base and revenue model brings, dramatically increase the likelihood of meeting and overachieving the company objectives laid out in this plan.

The Market Opportunity

Compliance:

The automotive industry has always been recognized as a leader in using innovative technologies to gain operational excellence. For over 3 decades, automotive original equipment manufacturers (OEM's) such as The Ford Motor Company and General Motors, have led the industry by taking advantage of information technology to optimize delivery performance across the supply chain. Electronic Data Interchange (EDI) has been the methodology through which high volume orders, shipment information, quality issues, engineering drawings, etc. have been communicated. Although EDI standards are continually being established through industry organizations such as the Automotive Industry Action Group (AIAG) there are significant variations in how each OEM or trading partner uses the standards in their EDI deployment. The differences exist in communication protocols, network infrastructure, transaction definition, and data definition just to name a few. Each OEM also has different EDI standards within their own divisions. The challenge to the suppliers is further compounded when more compliance issues such as bar coding and the unique ordering methodology known as cumulative accounting or release accounting is added to the delivery process. This means that each supplier must spend sometimes millions of dollars in technology and resources just to keep up with these mandates. The supplier community usually solves these problems through a combination of internal staffing and relying on third party software and service providers. The software and service providers must be committed to not only help meet the compliance standards but to keep up with the perpetually changing standards. On average each OEM division or trading partner has atleast one significant change per month. The penalty for not meeting the standards can be significant and can threaten a

supplier's existence if the problems are repeated. The pain that the supplier has in meeting the compliance issues are significant and the associated value in solving this problem is substantial.

Competition:

Many industries are now facing the threat of offshore competition. The North American automotive industry has been fighting this battle for over 20 years. The fierce competition has put extreme pressures on the automotive supplier community to increase operational efficiency, get product to market faster, while reducing costs. The OEM's are also continually putting more of the responsibility of manufacturing the vehicles on the suppliers, while passing on the associated costs. The OEM's are also continually looking to reduce the number of overall suppliers thereby creating a 'super tier' supplier. This will force many traditional suppliers to be acquired, to go out of business, or to become a supplier to the 'super tier'.

These trends can be seen in many formal initiatives. The OEM's have mandated to their suppliers global price cuts annually ranging from 2 to 5%. The OEM's are also requiring many suppliers to ship parts in lower quantities and more frequently, so as parts arrive they are being used. In effect, this passes the inventory carrying cost down the supply chain. The OEM's have also announced the concept of the 10 or 8 day car from order to delivery. This will require great agility across the supplier community if component inventories are to remain the same.

All these trends are requiring the automotive suppliers to think differently about how they make and deliver parts. In most cases they are looking to information technology to help them become more efficient. The OEM's have gained significant benefits from the implementation of EDI with their suppliers. Those suppliers that have gone beyond just complying and actually integrate the EDI information in to their business systems have also gained significant value. It allows them very quickly to make decisions throughout the organization based upon rapidly changing demand. In order to achieve this, these suppliers have implemented a combination of EDI and Demand Management systems that are tailored for the automotive industry. A 1996 study by AIAG reported that approximately 1.14 billion dollars would be saved with the implementation and integration of EDI processes.

A second trend is for the suppliers to take advantage of the benefits of EDI by implementing it with their suppliers. To date this has been done with marginal success. The lower tiered suppliers find that effective implementation of EDI is too costly and too complex. The benefits of EDI to the lower tiered suppliers are either not enough or in some instances not understood. In most cases, the first tier suppliers do not 'carry the weight' that the OEM's do to force compliance. Until now, the technology has not allowed the entire automotive supply chain to embrace automated EDI and Demand Management.

Technology:

Electronic Data Interchange is now being done direct from computer to computer over dedicated or dial-up telephone lines. This includes large data transmissions over closed networks. In most cases there is a 'Value Added Network' (VAN) in place which serves as a clearinghouse for the OEM to send the information and the supplier to pick up the data. With the advent of the Digital Market era, significant benefits can be achieved.

1) A hosted web site where order and delivery information can be shared graphically can replace the VAN. This means information can be seen from customer to supplier more quickly and the immediate impact of supply and demand decisions can be seen.

2) The deployment of a hosted web site with EDI-like information is substantially less costly. This means the traditional benefits of EDI can be achieved throughout the supply chain. Rapid adoption of this technology is expected in the automotive industry.

3) A web environment allows information to be shared in a controlled environment. It opens up the information to other systems so that collaboration is possible. Collaboration allows for software and service providers to work together to increase the overall value provided to the industry. Examples of this would be web-based bar coding, quality management systems, or freight optimization.

4) Object oriented technologies allow systems to be much more scaleable and interoperable. This means that a single instance of software and hardware can handle massive amounts of data and work with other disparate applications. In this case a hosted application can process very quickly massive EDI-like transactions and pass the appropriate data directly into existing business systems.

Market Summary:

Intense global competition is rapidly changing the landscape of the automotive supply chain. In the unique position that the OEM's have, they are forcing the rest of the supply chain to cut costs and become more efficient. This has resulted in complex mandates that have been costly to meet and maintain. In order for the suppliers to succeed if not survive, they are looking to information technology to meet the compliance requirements and provide business value. Over the last 10 years most of the suppliers have spent money in becoming more efficient inside the four walls of the company. They now are looking for ways to become more efficient outside of the company across the supply chain. An example of this can be seen in the rapid growth of Enterprise Resource Planning (ERP) companies over the last decade. The ERP industry is now in a slow down period as the B2B industry takes off. As the suppliers look for increased supply chain optimization, they will find the potential of new technologies that can drive incredible value at much lower cost.

Products and Services

Future Three, 92% owned by Summit Partners L.L.P., is headquartered in Northville, Michigan. Future Three offers EDI and Demand Management systems with a wide range of consulting and technology services built around the implementation of the core product sets. Over the last 17 years, the company has typically grown between 20 and 30% per year to become the largest solutions provider in this space. Future Three's target customers are tier 1, 2, and 3 automotive suppliers. There are now two major product strategies. Since the company's inception, the 'AutoRelease' product series has been developed and sold on the IBM AS400 platform. Future Three has also now deployed the first Industry Trade Exchange for production part procurement. The trade exchange is called Eclipz and is being sold under a division of Future Three called Synapz.

AutoRelease:

The 'AutoRelease' product series can be broken up into three primary areas.

- EDI translation, mapping, and business rule processing
- Demand Management and Delivery Performance
- Supplier Management

Within these three areas, Future Three offers software products, professional consulting services, and data integration services.

The software products include:

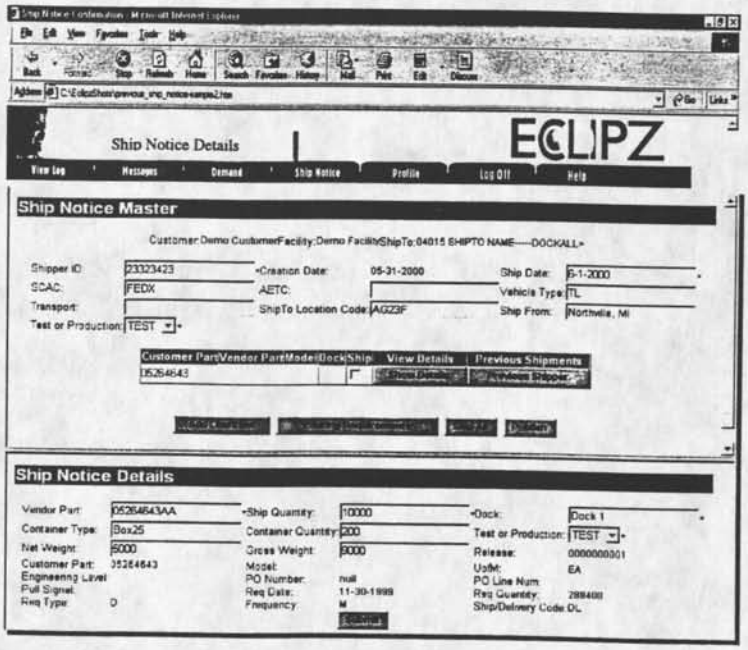
- **AutoRelease:** EDI and Demand Management
- **AutoScan:** Bar coding label design and printing
- **AutoMap:** End user mapping for EDI integration
- **VendorRelease:** Outbound EDI for procurement with suppliers

This product series is designed to allow automotive suppliers to collaborate with any customers and supplier electronically using formal EDI X.12 and/or Edifact standards. The software supports over 240 different trading partners and 22 different transaction sets. More significantly the software handles on average 10-12 different business rules per transaction set which equates to tens of thousands of business rules supported. This is important to our customers so that they can review, process and ship against consolidated information in a single application without having to work through raw data. The system handles all the compliance issues of their trading partners including integrated bar coding, automated shipping, and cumulative accounting controls. The product also allows companies to send high volume orders to their suppliers using the same standards. The product series includes interface modules to highly used AS/400 business systems such as Mapics, JD Edwards One World, and JBA's System 21.

Market Strategy: On average the AutoMap product series sells for approximately $250,000. New sales are steady and no increase in sales rates are expected. Resources will be used to keep up with compliance issues and create 'one-off' enhancements. In most cases Future Three receives 40% annual maintenance of the product list price due to the amount of changes required to keep up with the industry standards. Limited marketing will be done as we meet new significant industry requirements such as the new OEM –ANX requirement.

Eclipz:

Eclipz is not so much a product as it is a service. Eclipz is a hosted application with three major releases scheduled. Eclipz is the first of its kind 'Industry Trade Exchange' for the Automotive Market. The service allows an automotive supplier to receive orders, confirm shipment, and send orders to suppliers on the Internet. Eclipz handles all OEM compliance issues dealing with production part procurement and all the complex business rules associated each trading partner. The service will also protect the automotive suppliers from any future compliance changes. The hosted service allows our customers to also send their time phase orders (demand) to their suppliers via the web. The deployment schedule is as follows.



Phase 1: June 1st Hosted web site that will handle procurement for all production parts down the supply chain. The information is being fed from the VendorRelease product, which is installed at customer site.

Phase 2: August 22nd The same web site with identical functionality that can be driven from any existing procurement system

Phase 3: October 1st The same web site with EDI and Demand Management support for the top 10 trading partners. The site can process information coming from formal EDI transaction sets or from any new XML exchange. The web site will also have partner hosted applications for bar coding, quality management, and freight optimization.

Eclipz has a controlled rollout designed to make sure that the first 6 customers are strong references. Uniboring is the company that has been selected for alpha deployment. They plan on having 132 of their suppliers on line using the system. The first of their suppliers is JNB who will come on line mid July, with the balance of the suppliers using the exchange by the second week of August. The next 5 beta customers after Uniboring will all start implementation in mid July with their suppliers coming on line throughout August and September. We plan on having 32 customers signed up by year-end with over 3000 suppliers. The first two implementations of this product will effectively double our customer base from 250 to 500 customers. Synapz, as a division of Future Three, will also be positioned as the first entrant to this sector and market leader. Presently we have 37 qualified leads for the Eclipz service

Market Strategy: The announcement to the automotive industry of the Eclipz launch is significant. Formal marketing campaigns including advertising, mailings, Email blitz, and trade shows are already underway. The response to date has been extremely successful. The need to solve the supply chain problems and the need to have an E-Commerce strategy in our target market is real.

The pricing for Eclipz will include an initial customer license fee, a customer annual maintenance fee, a supplier subscription fee, and implementation services. There will also be a 'performance incentive' given back to the customer which will be a percentage of the supplier subscription fee collected. In effect, the more suppliers the customer gets online, the more revenue the customer gets back. Also if the supplier can get their suppliers on line, then they could start to offset the cost of the original investment.

Eclipz phase 1 launch is aimed at providing all lower tiered suppliers the benefits of EDI with a low cost web based solution. With the beta program we will be validating pricing strategies, ROI metrics, and implementation methodologies. The adoption rate of Eclipz is expected to be rapid for the following reasons.

1) Clearly defined and proven value proposition for Customers
2) Customers can increase their supplier ratings from the OEM's with this service
3) Clearly defined value proposition for the suppliers
4) Customers can make it a compliance issue for their suppliers to be online and therefore strongly encourage them
5) Low cost of entry for both customers and suppliers
6) Pricing strategy encourages customers to help get suppliers online due to 'performance incentive'
7) Pricing strategy encourages the suppliers to get their suppliers online due to 'performance incentive'
8) Eclipz was developed with domain expertise that was built from over 17 years of industry experience. The expertise was used to solve the complex business rules associated the automotive supply chain. The barrier to compete in this space is high and this should be perceived by the market as the only valid solution.

Customers and Prospects

Future Three has over 250 accounts in the Automotive Industry, including over one third of the largest automotive suppliers.

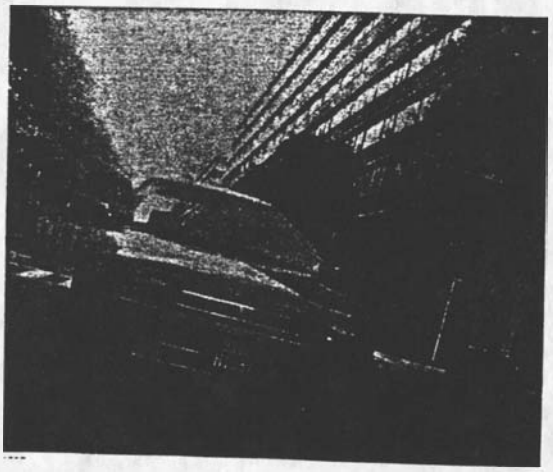
Some of the sample customers include:

Magna International Inc.
Robert Bosh Corp.
TRW Inc.
Denso International America Inc.
Eaton Corp.
Meritor Automotive Systems
Yazaki North America Inc.
Valeo Inc.
Textron Automotive Co.
BorgWarner Automotive Inc.
Collins & Aikman Corp.
Federal-Mogul Corp.
GKN Automotive Inc.
Alcoa Fujikara Ltd.
Autoliv North America Inc.
Arvin Industries Inc.
Dura Automotive Systems Inc.
Takata Corp.
Aisin World Corp. of America
Oxford Automotive
TG North America Corp.
Delco Remy America, Inc.
ASC, Inc.
Harvard Industries

Future Three prides itself in high customer satisfaction and delivery of all services with the highest quality of consulting in an under-budget, on-time fashion. Due to of the use of advanced tools in the delivery of its services, Future Three and Synapz can perform rapid implementations of the new exchange. It is a defined goal to be able to have a customer and a majority of their suppliers up and running within 30 days. This will increase our ability to gain market share rapidly. Access to these suppliers will also drive a wide array of additional consulting services.

Future Three's pipeline consists of over 120 automotive suppliers with a weighted pipeline of over $31million.

Organization and Coverage



Future Three has 165 employees primarily based in Northville, Michigan with strong automotive industry expertise. The sales coverage is exclusively through direct sales today. Due to the potential of significant services associated with Eclipz, we are currently under negotiations with three international consulting firms that could be potential channels partners to resell the Eclipz service. We are also exploring the opportunity with each of these firms to attack other industry segments and geographies. There is a search currently underway to find a firm in Europe with an automotive presence.

Currently Future Three's direct sales force includes 5 new account sales reps, 4 installed base reps, and 1 inside sale rep who is focused on customer care. They are supported by 3 presales consultants, 2 business development directors, and a VP of Strategic Alliances.

Strategic Alliances

Future Three believes that alliances and partnerships will be of great importance to the overall success of Synapz. A formal alliance program has been deployed with a dedicated management structure to insure the success of the overall program. The program is titled 'Strategic Network of Alliances and Partnerships' (S.N.A.P.). The objective of the program is to provide an overall framework so that each defined partner …

- Fits within the strategic direction of the organization
- Has the appropriate levels of resources dedicated
- Meets all business/contractual criteria
- Has defined performance objectives

The business objectives behind each partnership generally fall into three categories.

1) Bandwidth-to assist in our ability to provide full service capabilities and sales/marketing coverage
2) Credibility-by partnering with larger more recognized organizations, we are perceived to have lower risk to our target market
3) Value Proposition-the web brings opportunities for collaboration in which we can increase the value offered to the target market

The partnerships are defined into four categories

1) Strategic-Critical component to Whole Product Strategy-managed by Senior Executive
2) Solution-important but not mandatory component to Whole Product Strategy-Executive approval required-managed by VP of Alliances and Sales executive
3) Marketing Partner-typically involved in lead sharing and limited marketing campaigns
4) Referral-commodity partner that will be referred to if inquired about by customer.

Examples of key partnerships include:

Strategic Alliances:

Cisco: (June) Provide network/infrastructure that will assist in suppliers in deploying E Commerce strategy. Synapz provides Cisco leads in return for finders fees. Joint Sales/Marketing also in place

Oracle: (May) Provide ERP business systems for Automotive. Synapz is part of Oracle Partner Program with joint sales/marketing agreements in place.

Commerce One: (May) Provide B2B exchanges. Synapz has been announced as key content provider for Commerce 1's automotive strategy. Our products have been presented to Covisint (Auto Exchange) as part of their strategy Commerce One's solution inside the exchange.

Deloitte & Touche: (May) International consulting firm that will provide value added services around Eclipz implementation. They will run the QAD alliance practice for us.

March First: (May) International consulting firm that will provide value added services around Eclipz implementation program. They will provide much greater geographic sales coverage and may become a channels partner.

Solution Partners:

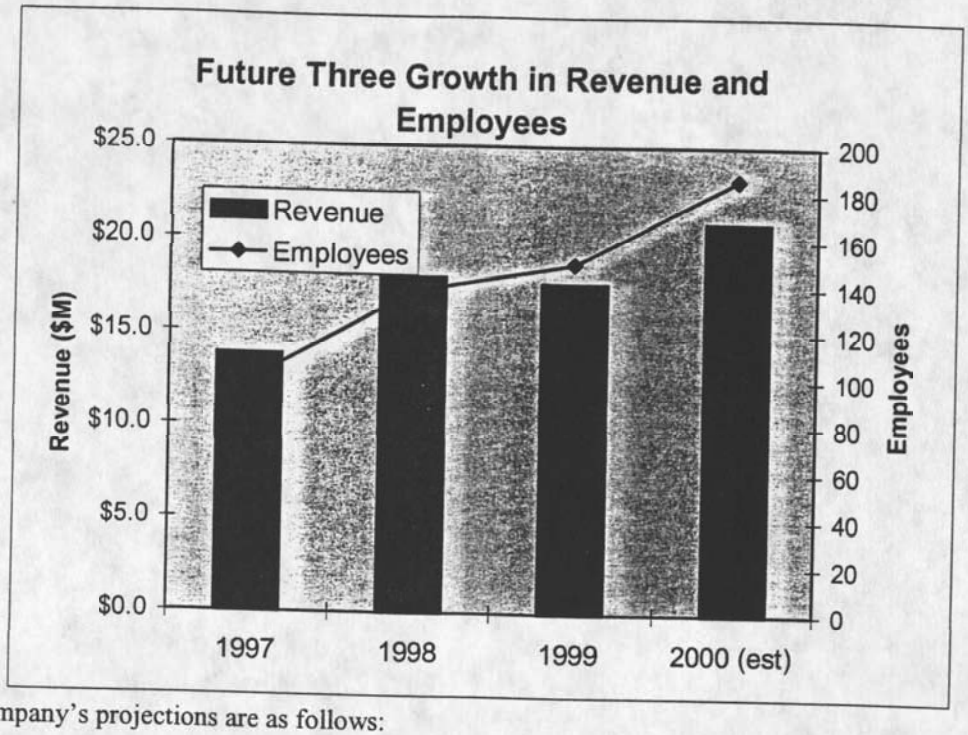
E-supplylink: (May) Web-based bar coding systems. Will become part of exchange and have over 600 customers to jointly sell to in Automotive sector.

IQS: (May) Web-Based quality management systems. Will become part of exchange and also have strong penetration into automotive market.

Nistevo: (May) Web-based freight optimization system that has strong value proposition for automotive sector. Will become part of the exchange as demand for product increases.

Financial Performance

Future Three's revenue has grown at an average rate of approximately 30% per year. The company is forecasting over $20 million in revenue for fiscal year 2000, an anticipated growth of 18% year-to-year. The following chart shows historical growth in revenue and number of employees:



The company's projections are as follows:

Consolidated Proforma Income Statements

All numbers in thousands

	1998 actual	1999 est.	2000 est.	2001 est.	2002 est
Revenue					
Software License	$ 5,581	$ 5,020	$ 5,515	--	--
Eclipz	--	--	1,225	--	--
Software Maintenance	9,394	9,579	10,849	--	--
Professional Services	3,047	3,063	3,343	--	--
Total Revenue	$ 18,022	$ 17,662	$ 20,932	--	--
Cost of Revenue	N/A	N/A	6,452	--	--
Gross Profit	18,022	17,662	14,480	--	--
% Gross Profit	--	--	69%	--	--
Operating Expenses	17,009	16,174	13,761	--	--
Operating Income	$ 1,014	$ 1,488	$ 718	--	--
% Operating Margin	6%	8%	3%	--	--

Summary

Future Three and the Synapz division are uniquely positioned in the digital market to build upon the industry leading position and successful penetration into the automotive sector. With the deployment of the industry's first trade exchange for high volume production parts, automotive suppliers can now realize the value that has previously only been achieved through costly EDI implementations for much lower costs and in a much shorter implementation time frame. They can also use our products and services to solve additional supply chain challenges that will be critical to the success and survival in their competitive market through collaboration on the Internet. This poises Future Three for dramatic growth that will be difficult to challenge due to the complexity of the business systems and the unique domain expertise that has been developed in the company.

The unprecedented changes taking place in the world of information technology present impressive opportunities for Future Three. The technology strategy of deploying an industry trade exchange as an application server provider using Java, XML, and Network Business Objects mean that the most powerful information technologies are being uniquely deployed to solve the remarkable challenges that face this industry. Future Three has been able to manage its own expansion through internal growth from existing business models while preparing the company to be a market leader well into the next decade. Through the diligent selection of the channels strategy the company will also be moving into global markets and additional industry segments in 2001.

Technical Due Diligence of Future Three

Sid Dunayer – October 12, 1998

This report summarizes information obtained during an onsite visit to Future Three (F3) on October 1-2, 1998. I held interviews with Nancy Vogrin, Bruce Nowak, Enzo Fanelli, Jessie Alderson, John Smolinski, Sandy Ray, Jeri Hart, Dave Broccardo, Sue Proctor, Pat Toufar, Cathy Jensen and Vic Kingery. In addition, source code for both the AS/400 and new IPA products was inspected and a demo of each was also performed. A brief telephone interview was held with John Marchi on October 8, 1998 to discuss internal information systems.

In general, I found all involved to be cooperative and open. Unfortunately, I did not get the sense that information flows smoothly in the development organization. Much of this may be due to the unique way that F3 manages projects. Its matrix management approach to development projects is complex, questionably efficient and has extra levels of management that are not usually seen in software development. I could get very little information about how the various areas would handle the addition of IPA to the product set. While the IPA development staff moves forward, no substantial effort has been made to bring the other areas, like training, testing and documentation, up to speed on this new product and no clear plans exist as to how and when this will happen.

Development

- F3 has a large number of active and outstanding changes to the AS/400 product. The majority of these deal in EDI mapping changes required by the various OEMs.

- F3 has started to develop better testing and quality assurance procedures. The proposed QA procedures appear to be sound and should help to achieve a better quality product. The testing procedures are hindered by the lack of any historical testing library. F3 is in the process of attempting to build a testing library, but this will take time. Also note that a library of testing cases for IPA will need to be built.

- None of the managers interviewed had knowledge of the cost of running their respective departments. This makes it difficult to establish accurate cost records for the development process and related activities.

- F3 has well documented procedures for installing and maintaining the AS/400 product and performs extensive user training. No installation or training plans were available yet for IPA.

- The AS/400 product does not currently contain international support, although they are reportedly working on this. It was unclear as to whether or not IPA had the necessary support.

- F3 utilized the services of five outside developers for the IPA product, three from Progress and two independents. These developers are now getting ready to leave and five F3 developers who have worked with them will perform the work. It is not possible to assess how this will impact future IPA development, but I would expect that there will be some, hopefully minimal, effect.

- IPA is scheduled to be ready for alpha testing by October 23. The IPA development staff feels that the actual date will be about a week later. This version is expected to have all the core functions of the AS/400 product, but many of the "features" or "bells and whistles" will be missing. The feeling is that this version will be used to prove out the core functionality and the GA version will contain the omitted features. At that point, extensive testing will be required. There is no way of knowing what will happen once the alpha testing begins. I expect some number of problems that will require development time to correct. While the testing progresses, development work will be needed to implement the missing features and these will then need testing. In the best possible scenario, this full process will take not less than six to nine months to complete. If major problems arise or the missing features prove difficult to implement, this process could take up to 15 months.

Technical

- The AS/400 product runs on the AS/400 platform only. The IPA product will run initially on Windows/NT with eventual support planned for UNIX.

- The AS/400 product is a supply chain management software system that utilizes EDI for information transfer. The IPA product is designed to perform the same functions.

- The AS/400 product is written in a combination of RPG3 and RPG4 and consists of about 3300 programs with 1.2 million lines of code. IPA is written using the Progress database and its associated 4GL. It consists of about 450 programs each containing about 350 lines of code. In addition, IPA utilizes PaperFree, from PaperFree Software, for its EDI translation, and VSView, from VideoSoft, for its printer and report components. Someone should verify that F3 has the necessary licenses to distribute the runtime components of these packages.

- The AS/400 product was written at F3 and contains all the necessary proprietary notices. IPA was also written at F3, but the use of outside programmers may have introduced code to which F3 may not have the proper licenses. There are no proprietary notices in the actual Progress code, but a copyright message is displayed as part of the "Help About" screen.

- Change control is done manually for the AS/400 system. For IPA, F3 uses the RoundTable product from Progress.

- F3 supports, at most, two releases of the AS/400 product.

- There are some internal system design documents for the AS/400 software, but they are reportedly out of date. There is much documentation on the design and implementation of the IPA software, but only a detailed review would indicate how complete and accurate it is.

- The AS/400 product requires that the user have an RPG compiler available as F3 distributes source code for much, if not all, of the product. IPA will require the user to have a Progress runtime and a PaperFree runtime, which will be part of the standard installation materials.

- F3 has some unit and system test cases for both products, but they are not extensive and for the most part are being generated from recent incidents. There is no formal regression-testing library.

- F3 has received outside certification that the AS/400 product is Y2K compliant. As IPA is still a work in progress, it has not undergone any such certification. F3 considers IPA to be Y2K compliant, but outside certification will be necessary.

- F3 plans to support ANX in both products.

Observations

- The internal systems used by F3 do not seem robust enough to support future anticipated growth and will need replacing which will be expensive.

- The AS/400 product is a mature product and uses a character based interface. There were indications that the customer base would prefer a newer GUI look and feel. This is evidenced by the fact that F3 is preparing to utilize a product called NewLook to achieve this goal. NewLook is a program that can take character-based screens and display then in a GUI format. While this is a quick fix to the task at hand, it is probably not the best long-term solution.

- F3 chose to use Progress for the IPA development. Progress runs only on Windows/NT and certain UNIX machines. Progress does not run on the AS/400 and they have not announced any plans to do so. Given that there is a desire for a more modern look and feel in the AS/400 product, I fail to understand the logic behind going with Progress rather than with tools, such as those from Synon, that would run not only on Windows/NT and UNIX, but also on the AS/400. This would have allowed IPA to become the logical successor to the AS/400 product. In addition, there is little doubt that Progress applications will run on Windows/NT and UNIX, but there is no way of knowing how efficiently they will run without extensive performance testing. Such testing is necessary to specify the minimum system requirements for running the application for different customers.

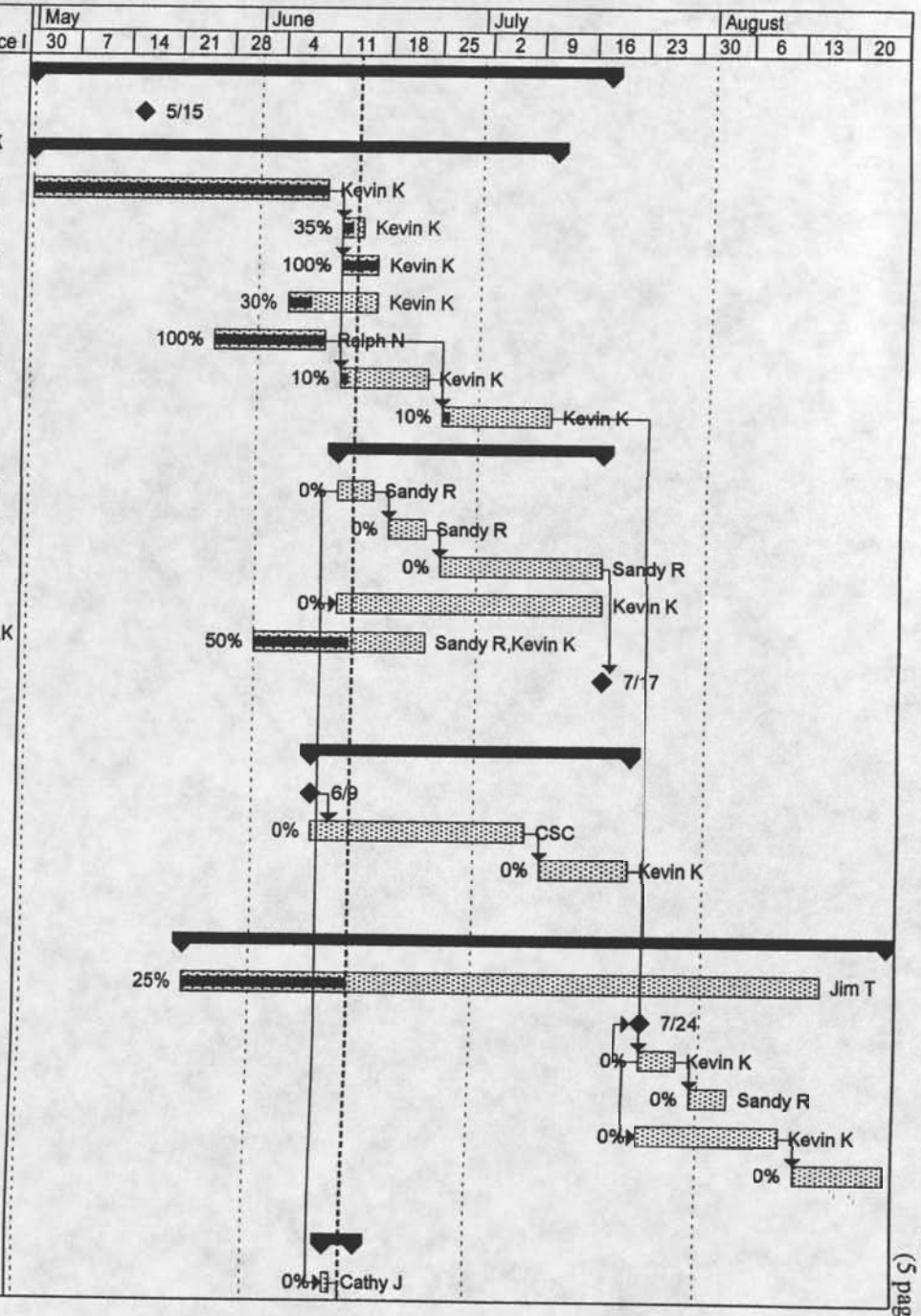
- IPA utilizes third-party components for EDI translation, printing and reporting. This is a good approach as it allows F3 to concentrate on its core functions, supply chain management. The EDI translation in the AS/400 product has previously been programmed directly into the RPG source code. This is by no means a desirable situation. F3 has recognized this and they have created a new product for the AS/400 called AutoMap that will simplify the mapping process. I don't understand the need to write such a product when third-party mappers are available for the AS/400. In addition, since this was an issue on the AS/400, F3 should have taken that into consideration when they chose a mapping component for IPA. The product used in IPA, PaperFree from PaperFree Software, only runs on Windows/NT and certain UNIX machines. Therefore, it is not suitable for use on the AS/400 and a separate solution was needed.

- IPA is a bare bones implementation of the AS/400 functions. Much of the feature set from the AS/400 product is not implemented at this point. While this does not make IPA an unusable product, it does make it much more difficult to use than the AS/400 product. John Smolinski has a laundry list of features that are missing in Version 1. These will be implemented in Version 2, which Smolinski feels will be the GA release. Unfortunately, there is no definitive project plan in place for Version 2. Version 1 is also an untested product. We have no way of knowing if it will hold up under extensive testing. Assuming the best possible case, it might be possible to have a totally functional Version 1 in six months, but there is still the need to write documentation and get the necessary support functions in place. Furthermore, there is the need to begin development on Version 2 as soon as a stable Version 1 is realized. If we assume that the first GA release is Version 2, then we will probably add another three to six months before the GA release.

- Progress uses a two-tier approach to client/server implementations. That requires that the database server have sufficient horsepower to handle expected peak transaction volumes. This also means that more work is performed on the client machine and that larger amounts of data may need to be transported over the network. New client/server development is typically done using a three-tier approach, or the so-called "thin client". While I am not saying that the two-tier approach is bad, it may not be suitable for an application with large transaction volumes, no matter how good the database server is.

ECLIPZ PROGRAM PLAN Wed 6/14 2:29 p

ID	Task Name	Dur	Start	Finish	Predece	Resource I
1	**Eclipz 1.0 -- Partial GUI**	**54 d**	**Mon 5/1**	**Mon 7/17**		
2	Formal Sales Deployment	0 d	Mon 5/15	Mon 5/15		Bob P
3	**Version 1.0 Development**	**49 d**	**Mon 5/1**	**Mon 7/10**		**Kevin K**
4	Java Development	29 d	Mon 5/1	Fri 6/9		Kevin K
5	Java Contact Maintenance	3 d	Mon 6/12	Wed 6/14	4	Kevin K
6	Java Ship Notice	5 d	Mon 6/12	Fri 6/16	4	Kevin K
7	Java Bkgnd Proc.-Not needed for bet	10 d	Mon 6/5	Fri 6/16		Kevin K
8	Vendor Release 4.0 Development	10 d	Fri 5/26	Fri 6/9		Ralph N
9	*?? Vendor UI Rework*	*10 d*	*Mon 6/12*	*Fri 6/23*	*4*	*Kevin K*
10	System Integration Testing	10 d	Mon 6/26	Mon 7/10	8,9	Kevin K
11	**Preliminary Testing**	**25 d**	**Mon 6/12**	**Mon 7/17**		
12	User Interface, Demand	5 d	Mon 6/12	Fri 6/16		Sandy R
13	User Interface, Demand, Shipping	5 d	Mon 6/19	Fri 6/23	12	Sandy R
14	Integration Testing	15 d	Mon 6/26	Mon 7/17	13	Sandy R
15	*?? Fix defects found during QA*	*25 d*	*Mon 6/12*	*Mon 7/17*	*12SS*	*Kevin K*
16	Install new QA Server	17 d	Thu 6/1	Fri 6/23		Sandy R,K
17	Eclipz 1.0 Pre-Beta	0 d	Mon 7/17	Mon 7/17	14	
18						
19	**CSC**	**30 d**	**Fri 6/9**	**Fri 7/21**		
20	CSC Contracts Signed	0 d	Fri 6/9	Fri 6/9		John F
21	CSC Site Preparations	4 w	Fri 6/9	Fri 7/7	20	CSC
22	*?? Install Eclipz at CSC/Test*	*10 d*	*Mon 7/10*	*Fri 7/21*	*21*	*Kevin K*
23						
24	**Uni Boring Implementation**	**67 d**	**Tue 5/23**	**Fri 8/25**		
25	Project Management	60 d	Tue 5/23	Wed 8/16		Jim T
26	VR 4.0 Updates	0 d	Mon 7/24	Mon 7/24	27SS	
27	Test Uni Boring / CSC	5 d	Mon 7/24	Fri 7/28	22,10	Kevin K
28	Beta Test with JNB	5 d	Mon 7/31	Fri 8/4	27	Sandy R
29	*?? Fix defects found at Beta*	*15 d*	*Mon 7/24*	*Fri 8/11*	*27SS*	*Kevin K*
30	Beta Test Suppliers 2-7(?)	10 d	Mon 8/14	Fri 8/25	29	Jim T
31						
32	**Help Text & Documentation**	**4 d**	**Mon 6/12**	**Thu 6/15**		**Cathy J**
33	Research	1 d	Mon 6/12	Mon 6/12	12SS	Cathy J

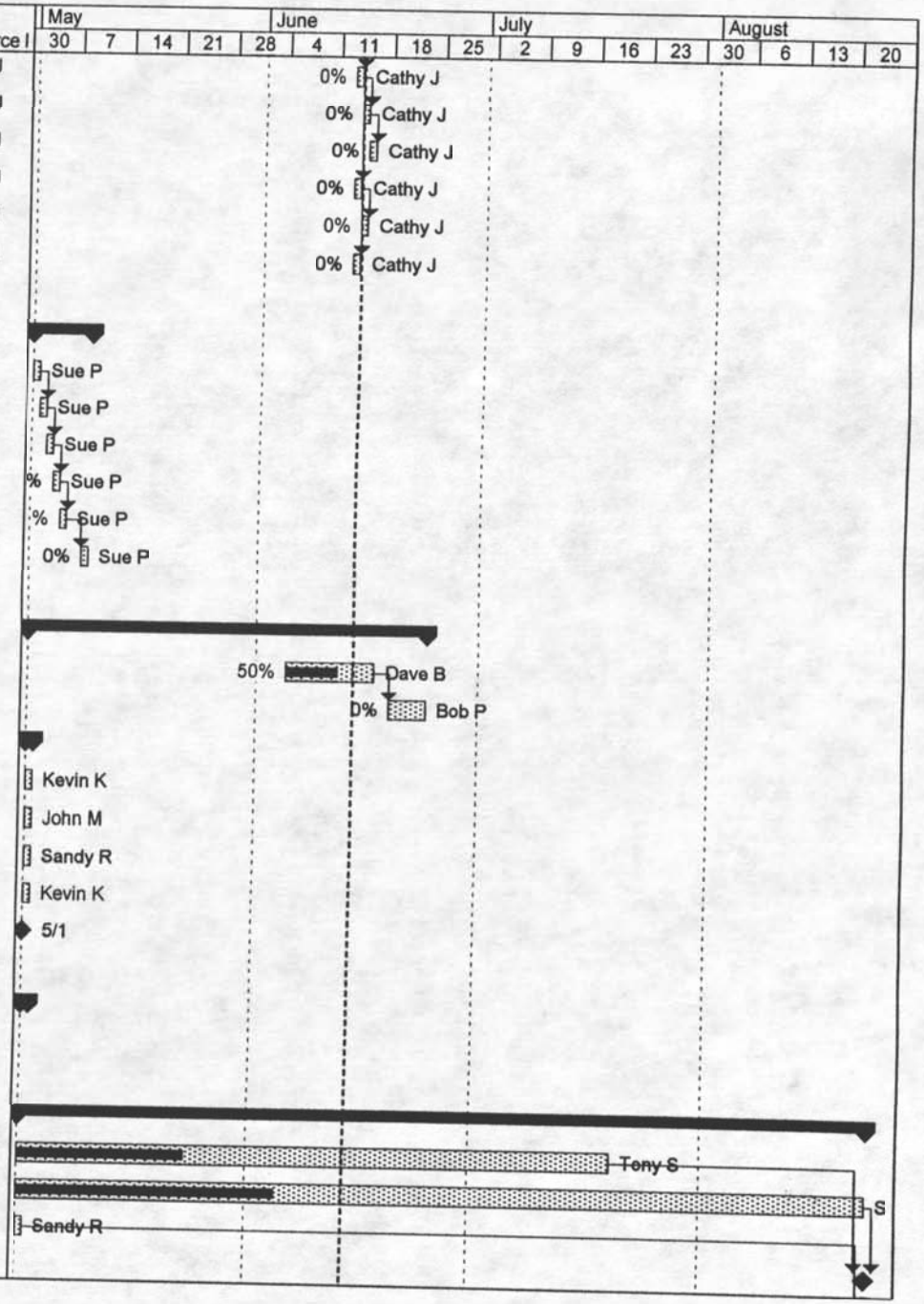


Tasks in RED indicate highly variable task duration that is subject to change.

ECLIPZ PROGRAM PLAN

Wed 6/14 2:29 p

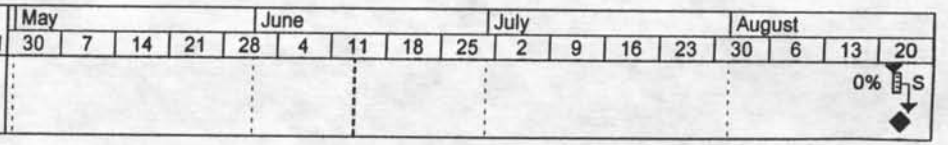
ID	Task Name	Dur	Start	Finish	Predece	Resource I
34	Create Help Text	1 d	Tue 6/13	Tue 6/13	33	Cathy J
35	Polish Help Text	1 d	Wed 6/14	Wed 6/14	34	Cathy J
36	Integrate Help Text into Eclipz	1 d	Thu 6/15	Thu 6/15	35	Cathy J
37	Create VendorRelease Documentation	1 d	Tue 6/13	Tue 6/13	33	Cathy J
38	Polish VendorRelease Documentation	1 d	Wed 6/14	Wed 6/14	37	Cathy J
39	Standardize Screen Standards	1 d	Tue 6/13	Tue 6/13	33	Cathy J
40						
41	**Computer Based Training**	**6 d**	**Mon 5/1**	**Mon 5/8**		**Sue P**
42	Storyboard Design	1 d	Mon 5/1	Mon 5/1		Sue P
43	Deployment Plan	1 d	Tue 5/2	Tue 5/2	42	Sue P
44	Data Preparation	1 d	Wed 5/3	Wed 5/3	43	Sue P
45	Development	1 d	Thu 5/4	Thu 5/4	44	Sue P
46	Test	1 d	Fri 5/5	Fri 5/5	45	Sue P
47	Deployment to Server	1 d	Mon 5/8	Mon 5/8	46	Sue P
48						
49	**Eclipz 1.1 - Credit Card Processing**	**39 d**	**Mon 5/1**	**Fri 6/23**		
50	Define Requirements	10 d	Mon 6/5	Fri 6/16		Dave B
51	Executive Signoff	5 d	Mon 6/19	Fri 6/23	50	Bob P
52	**Version 1.1 Development**	**1 d**	**Mon 5/1**	**Mon 5/1**		
53	Java Development	1 d	Mon 5/1	Mon 5/1		Kevin K
54	Operations Development	1 d	Mon 5/1	Mon 5/1		John M
55	QA Testing	1 d	Mon 5/1	Mon 5/1		Sandy R
56	Install Upgrade at CSC	1 d	Mon 5/1	Mon 5/1		Kevin K
57	Eclipz 1.1 GA	0 d	Mon 5/1	Mon 5/1		
58						
59	**Eclipz 1.2 - Full GUI**	**1 d**	**Mon 5/1**	**Mon 5/1**		
64						
65						
66	**Eclipz 2.0 - Development to Alpha Test**	**80 d**	**Mon 5/1**	**Tue 8/22**		
67	ICI Development	56 d	Mon 5/1	Wed 7/19		Tony S
68	Synapz Development	80 d	Mon 5/1	Tue 8/22		Sandy R
69	QA Testing	1 d	Mon 5/1	Mon 5/1		Sandy R
70	Formal Sales Deployment	0 d	Tue 8/22	Tue 8/22	67,68	Bob P



Tasks in RED indicate highly variable task duration that is subject to change.

ECLIPZ PROGRAM PLAN Wed 6/14 2:29 p

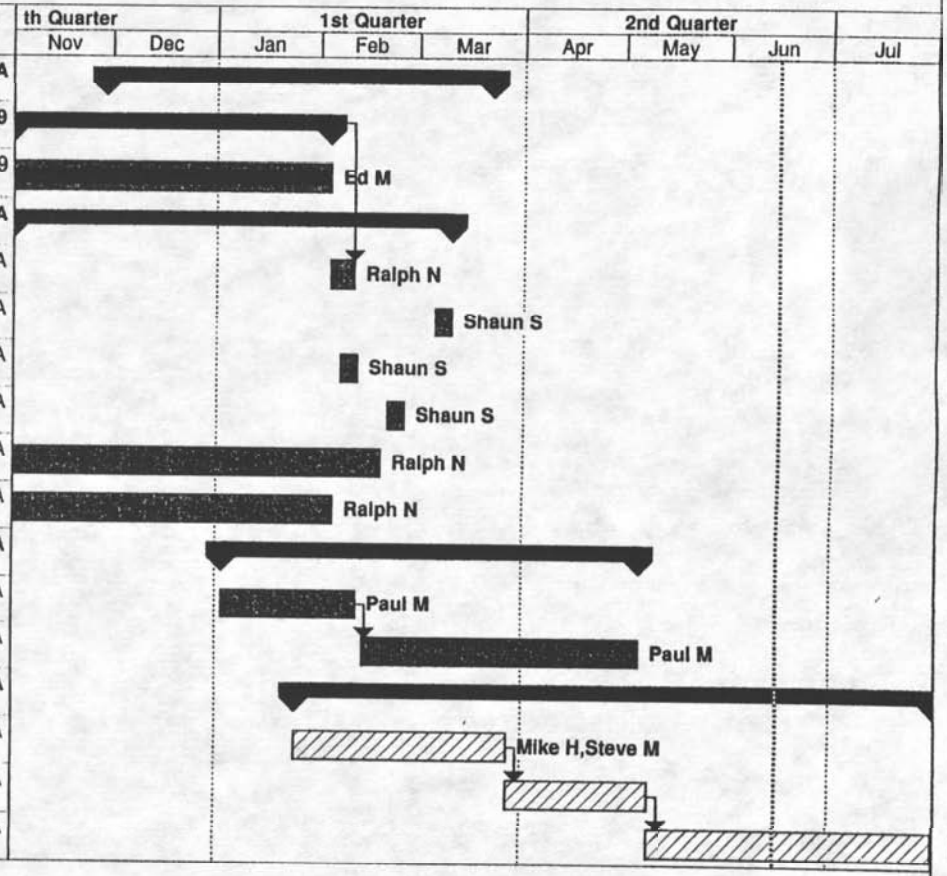
ID	Task Name	Dur	Start	Finish	Predece	Resource I
71	Alpha Test	1 d	Tue 8/22	Tue 8/22	69	Sandy R
72	Eclipz 2.0 Available for Beta Test	0 d	Tue 8/22	Tue 8/22	71	



Tasks in RED indicate highly variable task duration that is subject to change.

New Development Projects

ID	Task Name	Start	Finish	Actual Start
30	**Version Control**	**Mon 11/29/99**	**Wed 3/22/00**	**NA**
33	**Communication**	**Mon 11/1/99**	**Thu 2/3/00**	**Mon 11/1/99**
34	OUTQ	Mon 11/1/99	Thu 2/3/00	Mon 11/1/99
35	**VendorRelease**	**Mon 11/1/99**	**Fri 3/10/00**	**NA**
36	Communication	Fri 2/4/00	Thu 2/10/00	NA
37	Application Security	Mon 3/6/00	Fri 3/10/00	NA
38	Menu Tool	Mon 2/7/00	Fri 2/11/00	NA
39	Version Control	Mon 2/21/00	Fri 2/25/00	NA
40	AutoMap	Mon 11/1/99	Fri 2/18/00	NA
41	Interface	Mon 11/1/99	Fri 2/4/00	NA
42	**ANX Connectivity**	**Mon 1/3/00**	**Fri 5/5/00**	**NA**
43	E5 version 1	Mon 1/3/00	Fri 2/11/00	NA
44	E5 version 2	Mon 2/14/00	Fri 5/5/00	NA
45	**Jwalk**	**Tue 1/25/00**	**Mon 7/31/00**	**NA**
46	AutoRelease + 10 TPs	Tue 1/25/00	Mon 3/27/00	NA
47	VendorRelease	Tue 3/28/00	Mon 5/8/00	NA
48	Remaining TPs	Tue 5/9/00	Mon 7/31/00	NA

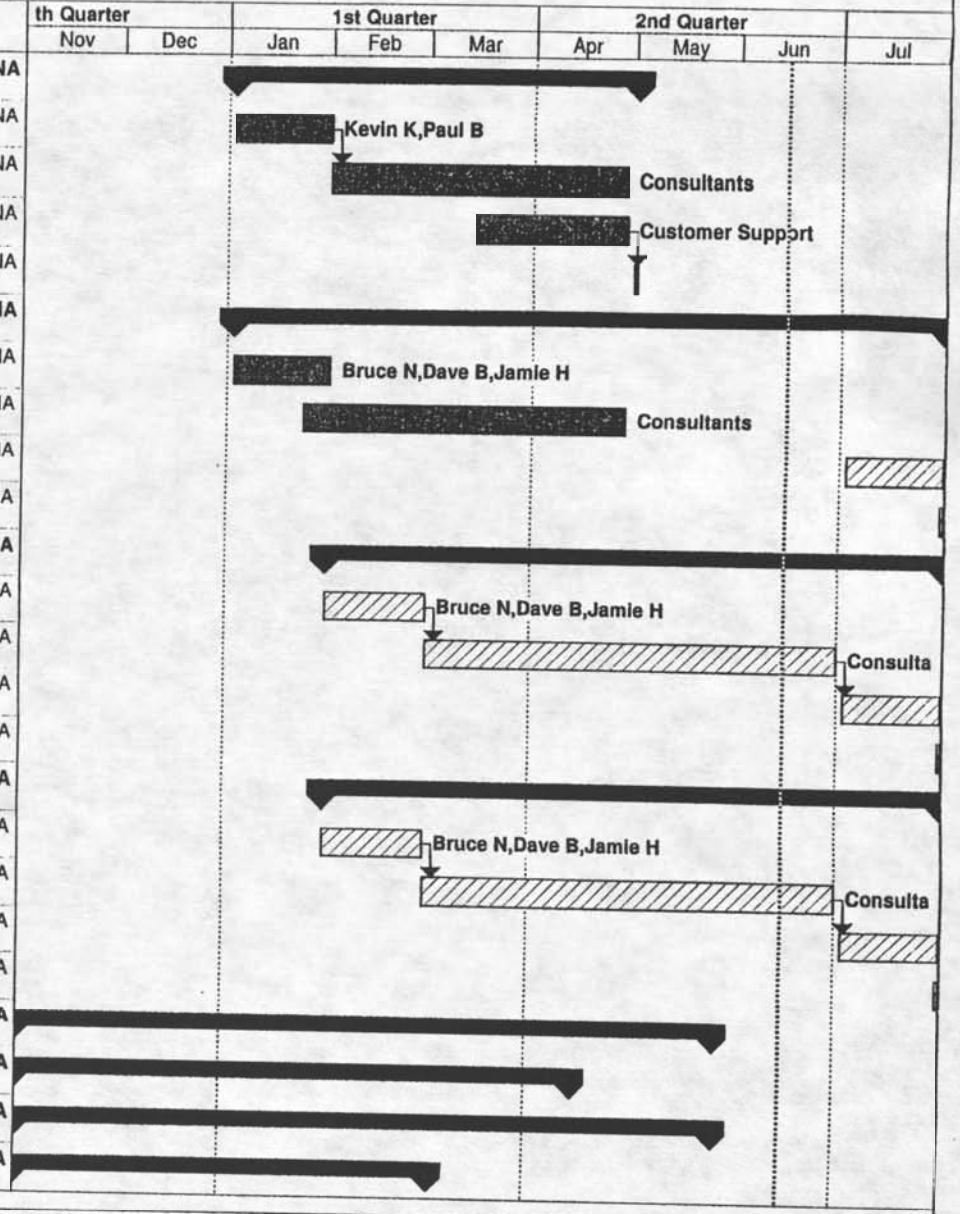


Project: New Development
Date: Thu 6/15/00

Task
Critical Task
Progress
Milestone
Summary
Rolled Up Task
Rolled Up Critical Task
Rolled Up Milestone
Rolled Up Progress
Split
External Tasks
Project Summary

New Development Projects

ID	Task Name	Start	Finish	Actual Start
1	**VendorNET(TM)**	**Mon 1/3/00**	**Mon 5/1/00**	**NA**
2	Design	Mon 1/3/00	Mon 1/31/00	NA
3	Code Development	Tue 2/1/00	Fri 4/28/00	NA
4	Beta	Wed 3/15/00	Fri 4/28/00	NA
5	Rollout	Mon 5/1/00	Mon 5/1/00	NA
6	**Rules Engine**	**Mon 1/3/00**	**Mon 7/31/00**	**NA**
7	Design	Mon 1/3/00	Mon 1/31/00	NA
8	Code Development	Mon 1/24/00	Fri 4/28/00	NA
9	Beta	Mon 7/3/00	Mon 7/31/00	NA
10	Rollout	Mon 7/31/00	Mon 7/31/00	NA
11	**Middleware**	**Mon 1/31/00**	**Mon 7/31/00**	**NA**
12	Design	Mon 1/31/00	Tue 2/29/00	NA
13	Code Development	Wed 3/1/00	Fri 6/30/00	NA
14	Beta	Mon 7/3/00	Mon 7/31/00	NA
15	Rollout	Mon 7/31/00	Mon 7/31/00	NA
16	**Knowledge Agents**	**Mon 1/31/00**	**Mon 7/31/00**	**NA**
17	Design	Mon 1/31/00	Tue 2/29/00	NA
18	Code Development	Wed 3/1/00	Fri 6/30/00	NA
19	Beta	Mon 7/3/00	Mon 7/31/00	NA
20	Rollout	Mon 7/31/00	Mon 7/31/00	NA
21	**Toolset**	**Mon 11/1/99**	**Fri 5/26/00**	**NA**
22	**Jetform**	**Mon 11/1/99**	**Fri 4/14/00**	**NA**
25	**Menu Tool**	**Mon 11/1/99**	**Fri 5/26/00**	**NA**
28	**Application Security**	**Mon 11/1/99**	**Fri 3/3/00**	**NA**



Project: New Development
Date: Thu 6/15/00

Task
Critical Task
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Rolled Up Critical Task
Rolled Up Milestone
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Split
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Future Three Corporation

VendorNet Web Enablement

CSC Technical Design Document

PRESENTED: APRIL 20, 2000

Executive Overview

Future Three is in the process of implementing a supply-chain application referred to as VendorRelease™. A component of VendorRelease™ is VendorNet™. The VendorNet component of VendorRelease™ is primarily responsible for data transfer between a distribution of database engines, as well as data transfer between primary database engines and web publishing components. As well, the VendorNet™ product allows for dynamic, web-based interaction between various data components and various suppliers and/or customers, facilitating a dynamic, interactive, data-based environment which automates the process of supplier/customer order interaction and product delivery – a vast improvement over current manual/labor-intensive processes.

Implementation of the "Web Enablement" portion of VendorNet™ will allow Future Three to fully develop and implement its supply-chain product(s) currently and in the future. In addition, the Internet connectivity and security portion(s) of this project will secure Future Three's ability to compete successfully with its supply-chain/automation product(s), and maintain/expand its current market position.

The CSC design strategy for the Web Enablement portion of VendorNet is comprised of the following components: Hosting, Publishing, Connectivity, Security, and Management. This is a full-service, managed solution which will meet/exceed Future Three's design requirements, while also providing for future scalability. A brief explanation of these components follows.

The Hosting portion houses the raw data which drives the Publishing component. Data is warehoused in an Oracle database, and bi-directionally queried by local Publishing and remote VendorRelease™ components. Connectivity is achieved via the Internet and secured using highly-evolved security methodologies and equipment – currently incorporating a firewalling component coupled with multiple intrusion detection points/technologies. The Management function monitors and controls security functions, as well as availability for the various Hosting, Publishing, Security, and Connectivity components.

All of these components are described in greater detail later in this document.

Future Three Design Requirements

Design Overview -
To quote the *Future Three Design Document, Supply Chain Linking, Web Enablement – VendorNet™* document, "VendorNet™ is a two-part web application that would partially web-enable (provide a thin-client, cost-effective browser based solution) the Supply chain Linking process, and provide an alternative to the requirement processing and shipment notice generation using fax machines."

The VendorRelease™/VendorNet™ product(s) are components of a Supply Chain Linking system which is implemented within a distributed database model and accommodates customer/supplier access via standard Internet browsing technology. Disparate databases are "linked" by way of the Internet, and updated by application-controlled "publish" and "receive" operations. These publishing and receiving activities are initiated by customers/suppliers via "thin clients" utilizing standard Internet browsing technology.

Requirement Components –
Future Three is looking for CSC to provide the following key components to facilitate its VendorNet™ solution:

- Hosting – While disparate VendorRelease™ databases (hosted on the IBM AS/400 platform) are located at various customer sites, there is a need to centrally house specific data for the purpose of a common, Internet accessible communication point. This database is referred to as the Web Host Database. Per the current VendorNet™ design documentation, this is an Oracle database, accessed from a Web publishing server via JDBC queries.

- Publishing – Data housed in the Hosting portion of VendorNet™ is made available to Internet clients by way of a Java Web Server generically available on the Internet. Common browsing technology is employed (IE/Netscape 4.0 or greater). There is a need to reasonably protect this information as it traverses the Internet as well.

- Connectivity – Per the current design, all connectivity is over the Internet. There are two primary 'flavors' of connectivity specified in the VendorNet™ design: 1) connectivity between VendorRelease™ databases located at various customer sites and the central VendorNet™ Web Host Database, and 2) connectivity between the VendorNet™ Web Host Database and various suppliers. There are between 30-100 customer-VendorRelease™ locations, with potentially a thousand or more supplier locations. These locations are currently national, with potential for international/global exposure.

- Security – Data passing between the VendorRelease™ databases and the Web Host Database, as well as data passing between the Web Host Database and supplier thin clients (browsers), must both be protected. Suppliers will need to be authenticated.

- Monitoring – The entire solution (housed in the CSC Southfield Datacenter) must be monitored, and automated notification technology/procedures implemented.

- Process – Methods of periodic communication, contacts, escalation, and change control procedures will need to be put in place.

- Pilot Deployment Assistance – Future Three will need technical and operational assistance at all levels (hosting, publishing, connectivity, security, etc.) getting the first pilot deployed. The initial pilot is to involve the Uniboring Corporation, and potentially five selected Uniboring suppliers.

- General Deployment Assistance – Future Three will require ongoing assistance connecting additional VendorRelease™ sites to the VendorNet™ components located at CSC. This may come in the form of simple inter-firewall key exchanges and tunnel setup, or providing a full connectivity/security setup for a customer site. There is also a potential that a customer site may wish to have CSC remotely manage their firewall.

- Support – While Future Three will be first-line support for all VendorNet™ issues, they will occasionally require assistance resolving hosting, publishing, connectivity, and security-related issues. Support will be substantially greater during the pilot and customer-startup phases of the project.

- Maintenance – Future Three will want CSC to maintain the VendorNet™-related equipment located within its Datacenter. This would include hardware break-fix, hardware upgrades, software upgrades (excluding VendorNet™ application code/software), or other patches/fixes to keep the systems current and operational.

- Thin Client – Future Three has decided to use a 'thin client' at the supplier site, comprised of little more that a standard Internet browser (IE/Netscape 4.0 or greater). This was an intentional effort to reduce the burden on a supplier wishing to connect to the VendorNet™ product. Future Three views the supplier as a potential revenue stream, and may market additional products there in the future.

- Remote Support – Future Three personnel will need to have limited access to the VendorNet™ Web Enablement solution from their Northville office, as well as potentially from other remote locations (home, etc.).

In summary, Future Three is looking for CSC to install, configure, and maintain the hosting, publishing, connectivity, and security platform on top of which the Web Enablement portion of VendorNet™ will reside – exclusive of the application itself.

The CSC Solution

In light of the previous requirements, the following components are suggested:

Data Hosting –
VendorNet™ data will be hosted on an HP 9000 D-Class host running HP/UX v11. This host will be equipped with HP 'Auto RAID', which will be configured for combined RAID5/RAID0+1, serviced by 2 SCSI controllers with 96MB cache RAM each. This configuration will be fully hot-swapable and be pre-configured with 1 hot-spare. In addition, the host will have dual PA-RISC 160 MHz 64-bit processors, with 1.5 GB of RAM. An internal DDS3 tape drive with OmniBack software will provide system backup. CSC will acquire and configure the hardware to the OS level and provide assistance with the installation of Oracle (and other components) as needed.

Web Publishing –
Web Publishing will be provided by a Sun Enterprise 220R Server running Solaris 2.7 with Java Web Server 2.0. The server will be configured with one 18 Gig SCSI hard drive, 512 MB RAM, and 2-450 MHz UltraSPARC-II processors. CSC will acquire and configure the hardware to the OS level and provide additional assistance with the web hosting and data access components as needed.

> *Note: This platform was chosen for its ability to meet/exceed current publishing load requirements, as well as its ability to scale well into the future. Additional 220R's can be added and load-balanced directly from the firewall. An added indirect benefit would be 'implicit high availability' (if one 220R were to fail, the firewall would route all traffic to the remaining 220R).*

Internet Connectivity –
Connection to the Internet will be provided by AT&T via dedicated Internet connection. AT&T will serve as the ISP, providing connectivity and DNS services.

Initial bandwidth will be 1.544 Mbps (full T1 pipe). While this will be more than sufficient for the initial pilot (and for some time to come), it may be necessary to implement some sort of bandwidth allocation solution in the future (e.g. CheckPoint's 'Floodgate' product). This will prevent inter-host 'publish' and 'receive' operations from dominating the Internet connection, and significantly degrading/impairing Web publishing performance to the suppliers.

The following chart indicates expected 'publish' and/or 'receive' times (in seconds), given the following sizing parameters, for 1, 5, or 10 simultaneous operations, at various bandwidth sizes from 128Kbps to 1,544Kbps (full T1). It should be noted that while these calculations are good for comparative purposes, actual times will vary due to Internet performance as well as supplier browsing competing for bandwidth.

Parameters –

- 3000 bytes/records
- 1000 records/publish
- 1 publish/day/client
- 100 clients

Kbps / Simultaneous	128	256	384	512	768	1024	1544
1	23.44	11.72	7.81	5.86	3.91	2.93	1.94
5	117.19	58.59	39.06	29.30	19.53	14.65	9.72
10	234.38	117.19	78.13	58.59	39.06	29.30	19.43

Note: It is assumed that an IP address and/or domain name has already been reserved for VendorNet™ Web Enablement. If not, this will need to be completed as well.

Security –

Security will be accomplished via a number of strategies:

- A Sun Netra running Solaris 2.7 and CheckPoint Firewall-1 (v4.0) will serve as the primary firewall. A separate management station will store the rulebase, objects, etc. as well as store firewall logging information.
- A Sun Netra running Solaris 2.7 and CheckPoint Real Secure will serve as a pre-firewall intrusion detector. This will monitor traffic in front of the firewall, giving a clear picture of 'friendly' and 'hostile' traffic. This box will report to a central management station, and will alarm if any 'attack signatures' materialize.
- A Dell Appliance running Linux and a hand-picked set of intrusion-detection/snooping tools will monitor traffic post-firewall. This device will 'promiscuously' monitor all traffic behind the firewall, including inter-hosting/publishing traffic.
- VPN (Virtual Private Network) 'tunnels' will be established between all VendorRelease™, VendorNet™ and Web Enablement components (firewall to firewall). These tunnels will be 3DES and/or CAST, with MD5 or SHA-1 digests.
- Connections between suppliers and the Web Enablement publishing component will use SSL encryption endemic to the browser.
- A 'two-phase' security methodology will be in place. That is to say that Future Three will have exclusive administrative capabilities with regard to the VendorNet™ application code and its data – while CSC will have exclusive 'root' access to all VendorNet™ hosting, publishing, connectivity, and security components housed within its Datacenter at OS and security levels. This prevents either entity from having eminent control of both the 'front and back doors' to/from VendorNet™ and provides for mutual accountability regarding stability- or performance-impacting activities.

Note: It will be necessary to clearly define a procedure for dealing with an immediate intrusion threat. Specifically, if a malicious intrusion is detected, is CSC permitted to manually/automatically terminate that (or all) connection(s) to preserve data integrity?

Monitoring –
The entire solution will be monitored by a Dell 2450, dual proc. server running firewall, intrusion, and hardware monitoring/availability/reporting applications. Any anomalies will generate appropriate log entries and pager notifications. This will provide 24x7 monitoring of the VendorNet™ component(s) located within the CSC Datacenter. At Future Three's option, CSC can provide limited remote VendorNet™ security/connectivity monitoring to the Future Three Northville office.

Process –

- *Communication* – Selected Future Three and CSC personnel associated with the VendorNet™ project will meet on a weekly basis (if not more frequently, as needed) to discuss project status, open items, or any other project anomalies. These meetings may be face-to-face, or via teleconference, but MUST happen at least weekly up until the time the first pilot has been in stable operation for at least one month – at which time a more lenient, mutually agreed-upon communication policy can be implemented. Either party (Future Three or CSC) can call a meeting at any time deemed necessary.

  Significant effort should be put forth by both Future Three and CSC personnel to return communications (phone calls, emails, etc.) within a 24-hour period (or sooner) if at all possible. While not a mandate, this should be the goal.

  Primary and secondary and/or backup contacts must be defined (Future Three and CSC) along with various phone numbers, pager numbers, and email addresses.

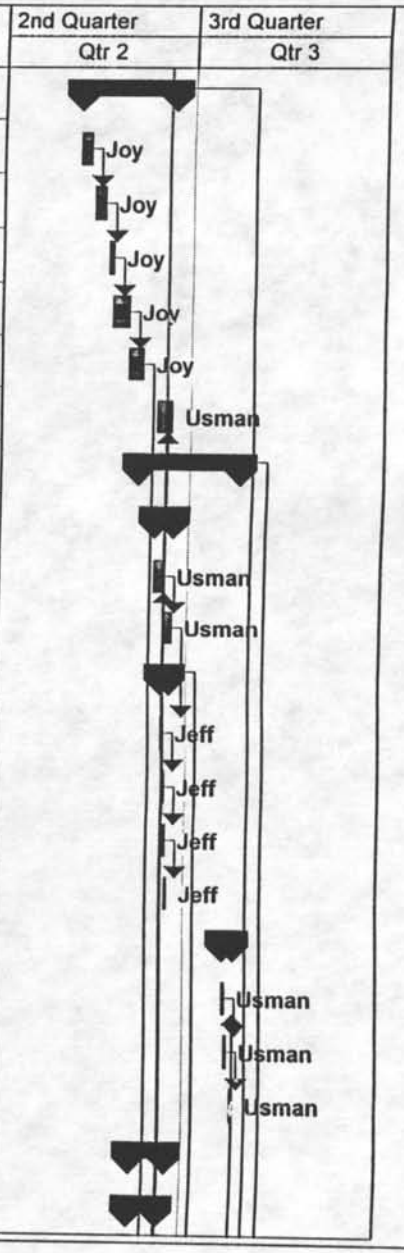
- *Contacts* - The following Future Three contacts are formally identified:

  Kevin Kormos (primary F3 project/technical contact)
  Application Developer
  Future Three
  41780 Six Mile Road
  Northville, MI 48167
  248.697.3200 (Main)
  248.697.3215 (DID)
  248.697.3201 (Fax)
  KevinKormos@future3.com

  David Broccardo (administrative contact)
  Director, Advanced Technologies
  Future Three
  41780 Six Mile Road
  Northville, MI 48167
  248.697.3200 (Main)
  248.697.3217 (DID)
  248.697.3201 (Fax)
  DaveBroccardo@future3.com

ECLIPZ II

ID	Task Name	Duration	Start	Finish	Predecessors	Resource Names
1	**DTD and XML Modeling**	**32 days**	**Mon 5/8/00**	**Wed 6/21/00**		
2	Define the DTD for the EDI XML Message	5 days	Mon 5/8/00	Fri 5/12/00		Joy
3	Define DTD/Model for the F3 XML Message	5 days	Mon 5/15/00	Fri 5/19/00	2	Joy
4	Incorporate ICI Comments	2 days	Mon 5/22/00	Tue 5/23/00	3	Joy
5	Define DTD/Model for the Semantically Corr	5 days	Wed 5/24/00	Wed 5/31/00	4	Joy
6	Define DTD/Model for the Managed Require	5 days	Thu 6/1/00	Wed 6/7/00	5	Joy
7	Define DTD/Model for Outgoing Messages	5 days	Thu 6/15/00	Wed 6/21/00	110	Usman
8	**Protocol Segment**	**33.5 days**	**Tue 6/6/00**	**Mon 7/24/00**		
9	**Define FTP/communications**	**7 days**	**Thu 6/15/00**	**Fri 6/23/00**		
10	Define FTP/Comm system	3 days	Thu 6/15/00	Mon 6/19/00	110	Usman
11	Implement FTP/Comm System	4 days	Tue 6/20/00	Fri 6/23/00	10	Usman
12	**Integrate COTS EDI Protocol Product**	**4 days**	**Mon 6/19/00**	**Thu 6/22/00**		
13	Identify COTS EDI Protocol Product	1 day	Mon 6/19/00	Mon 6/19/00	11	Jeff
14	Identify Required Configuration Informa	1 day	Tue 6/20/00	Tue 6/20/00	13	Jeff
15	Design Configuration Acess	1 day	Wed 6/21/00	Wed 6/21/00	14	Jeff
16	Implement Configuration Acess	1 day	Thu 6/22/00	Thu 6/22/00	15	Jeff
17	**Integrate With ECLIPZ Infrastructure**	**3 days**	**Thu 7/20/00**	**Mon 7/24/00**		
18	Support Startup	1 day	Thu 7/20/00	Thu 7/20/00	104	Usman
19	Support Shutdown	1 day	Fri 7/21/00	Fri 7/21/00	18	Usman
20	Support Restart	1 day	Mon 7/24/00	Mon 7/24/00	19	Usman
21	**EDI Output Grammar Rules**	**13 days**	**Tue 6/6/00**	**Fri 6/23/00**		
22	**Define Rules**	**10 days**	**Tue 6/6/00**	**Tue 6/20/00**		



Project: F3ShipperPrototypePlan
Date: Mon 6/19/00

Task
Split
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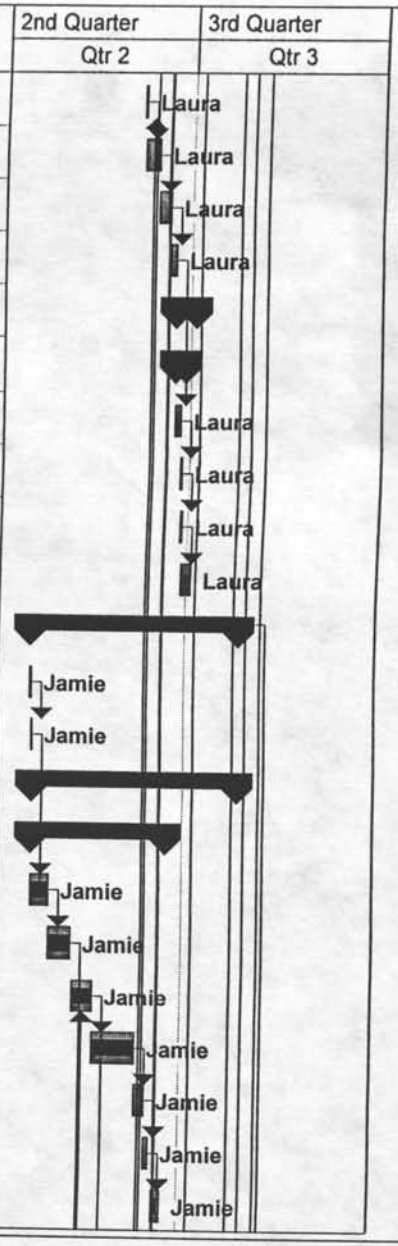
Rolled Up Progress
External Tasks
Project Summary

ID	Task Name	Duration	Start	Finish	Predecessors	Resource Names
23	AS/400 Program Research	1 day	Tue 6/6/00	Wed 6/7/00	95	Laura
24	Trading Partner Specification Rese	5 days	Wed 6/7/00	Wed 6/14/00	23	Laura
25	Business Practice Research	4 days	Wed 6/14/00	Tue 6/20/00	24	Laura
26	Write Rules	3 days	Tue 6/20/00	Fri 6/23/00	25	Laura
27	**VAN Output Grammar Rules**	**6 days**	**Fri 6/23/00**	**Mon 7/3/00**		
28	**Define Rules**	**3 days**	**Fri 6/23/00**	**Wed 6/28/00**		
29	AS/400 Program Research	1 day	Fri 6/23/00	Mon 6/26/00	26	Laura
30	Trading Partner Specification Rese	1 day	Mon 6/26/00	Tue 6/27/00	29	Laura
31	Business Practice Research	1 day	Tue 6/27/00	Wed 6/28/00	30	Laura
32	Write Rules	3 days	Wed 6/28/00	Mon 7/3/00	31	Laura
33	**Parser Segment**	**70.5 days**	**Mon 4/17/00**	**Thu 7/27/00**		
34	Research/Select DTD/XML Tools	1 day	Mon 4/17/00	Mon 4/17/00		Jamie
35	Incorporate ICI Comments	0.5 days	Tue 4/18/00	Tue 4/18/00	34	Jamie
36	**Parser Process**	**69 days**	**Tue 4/18/00**	**Thu 7/27/00**		
37	**Input Parser**	**45.5 days**	**Tue 4/18/00**	**Thu 6/22/00**		
38	In Parser Process Analysis	6 days	Tue 4/18/00	Thu 4/27/00	35	Jamie
39	In Parser Process Design	7 days	Thu 4/27/00	Mon 5/8/00	38	Jamie
40	In Parser Process Design #2	6 days	Tue 5/9/00	Fri 5/19/00	68	Jamie
41	In Parser Process Implementation	12 days	Fri 5/19/00	Fri 6/9/00	40	Jamie
42	In Parser Process Retrofit for Monk	3 days	Fri 6/9/00	Wed 6/14/00	41	Jamie
43	In Parser Process Retrofit System	2.5 days	Wed 6/14/00	Fri 6/16/00	42	Jamie
44	In Parser Process Test/Integration	3 days	Mon 6/19/00	Thu 6/22/00	43	Jamie



Project: F3ShipperPrototypePlan
Date: Mon 6/19/00

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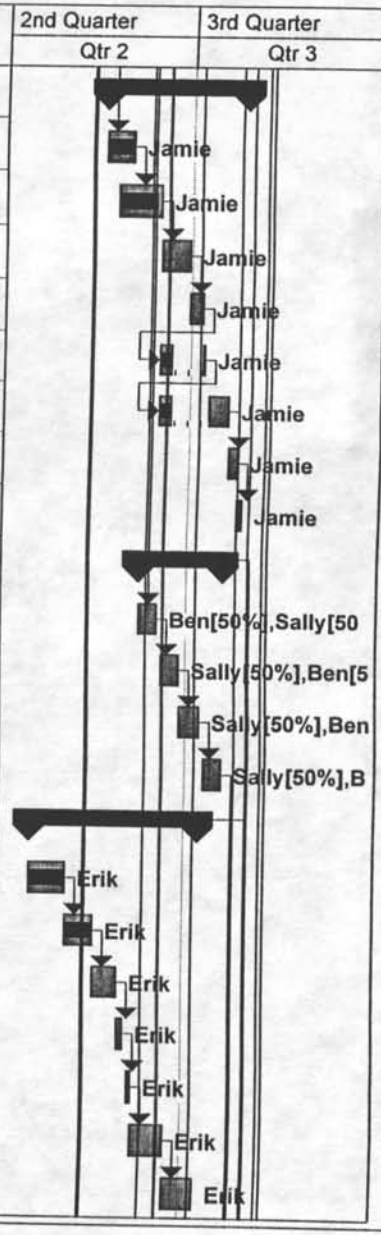
Rolled Up Progress
External Tasks
Project Summary

ID	Task Name	Duration	Start	Finish	Predecessors	Resource Names
45	**Output Parser**	**46.5 days**	**Fri 5/19/00**	**Thu 7/27/00**		
46	Out Parser Process Analysis	7.5 days	Fri 5/19/00	Fri 6/2/00	40	Jamie
47	Out Parser Process Design	12 days	Fri 5/26/00	Thu 6/15/00	46	Jamie
48	Out Parser Process Implementatio	9 days	Fri 6/16/00	Thu 6/29/00	47	Jamie
49	Out Parser Process - Wrapper	3 days	Fri 6/30/00	Thu 7/6/00	48	Jamie
50	Out Parser Process - XML File sen	4 days	Fri 6/16/00	Fri 7/7/00	49	Jamie
51	Out Parser Process - Binder	10 days	Fri 6/16/00	Wed 7/19/00	50	Jamie
52	Out Parser Process - ICI Integratio	2.5 days	Thu 7/20/00	Mon 7/24/00	51	Jamie
53	Out Parser Process Test/Integratio	3 days	Mon 7/24/00	Thu 7/27/00	52	Jamie
54	**Translator Segment**	**28 days**	**Thu 6/8/00**	**Tue 7/18/00**		
55	Define Input Data Mapping Rules	7 days	Thu 6/8/00	Fri 6/16/00	6	Ben[50%],Sally[50%]
56	Design/Write input data mapping rules	7 days	Mon 6/19/00	Tue 6/27/00	55	Sally[50%],Ben[50%]
57	Define Ouput Data Mapping Rules	7 days	Wed 6/28/00	Fri 7/7/00	56	Sally[50%],Ben[50%]
58	Design/Write Output Data Mapping Rules	7 days	Mon 7/10/00	Tue 7/18/00	57	Sally[50%],Ben[50%]
59	**Define Router Mechanism**	**57 days**	**Mon 4/17/00**	**Fri 7/7/00**		
60	Router Analysis	13 days	Mon 4/17/00	Thu 5/4/00		Erik
61	Router Design	10 days	Fri 5/5/00	Thu 5/18/00	60	Erik
62	Router Implementation - Examiner	7 days	Fri 5/19/00	Tue 5/30/00	61	Erik
63	Router Implementation -XML report Doc	3 days	Wed 5/31/00	Fri 6/2/00	62	Erik
64	Router Implementation - XML Cfg Doc	2 days	Mon 6/5/00	Tue 6/6/00	63	Erik
65	Router Implementation - balance of router pa	12 days	Wed 6/7/00	Thu 6/22/00	64	Erik
66	Router Test/Integration	10 days	Fri 6/23/00	Fri 7/7/00	65	Erik



Project: F3ShipperPrototypePlan
Date: Mon 6/19/00

Task
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Rolled Up Split
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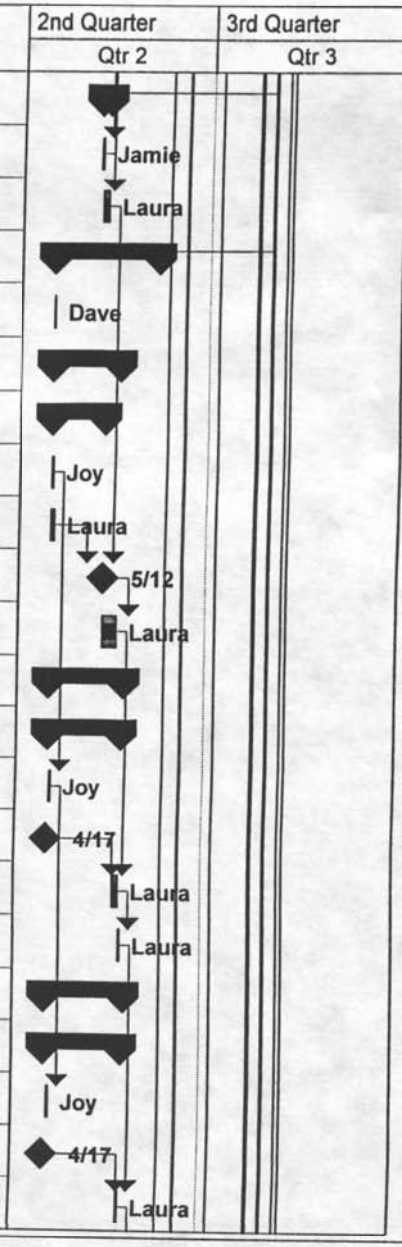
Rolled Up Progress
External Tasks
Project Summary

ID	Task Name	Duration	Start	Finish	Predecessors	Resource Names
67	**Generator Segment**	**4 days**	**Mon 5/8/00**	**Fri 5/12/00**		
68	Define Trading Partner Search Rules	1 day	Mon 5/8/00	Tue 5/9/00	39	Jamie
69	Write Trading Partner Search Rules	3 days	Tue 5/9/00	Fri 5/12/00	68	Laura
70	**Transition Segment**	**34.5 days**	**Mon 4/17/00**	**Tue 6/6/00**		
71	Identify Programs To Search	0.5 days	Mon 4/17/00	Mon 4/17/00		Dave
72	**Session/Transmission Semantics**	**23.5 days**	**Mon 4/17/00**	**Fri 5/19/00**		
73	**Rules Research**	**18.5 days**	**Mon 4/17/00**	**Fri 5/12/00**		
74	AS/400 Program Research	1 day	Mon 4/17/00	Mon 4/17/00		Joy
75	Trading Partner Specification Rese	2 days	Mon 4/17/00	Tue 4/18/00		Laura
76	Business Practice Research	0 days	Fri 5/12/00	Fri 5/12/00	75,69	Laura
77	Design/Write Business Rules	5 days	Fri 5/12/00	Fri 5/19/00	76	Laura
78	**Combine By Part**	**25.5 days**	**Mon 4/17/00**	**Tue 5/23/00**		
79	**Rules Research**	**24.5 days**	**Mon 4/17/00**	**Mon 5/22/00**		
80	AS/400 Program Research	1 day	Tue 4/18/00	Tue 4/18/00	74	Joy
81	Trading Partner Specification Rese	0 days	Mon 4/17/00	Mon 4/17/00		
82	Business Practice Research	1 day	Fri 5/19/00	Mon 5/22/00	81,77	Laura
83	Design/Write Business Rules	1 day	Mon 5/22/00	Tue 5/23/00	82	Laura
84	**Combine By Release**	**27.5 days**	**Mon 4/17/00**	**Thu 5/25/00**		
85	**Rules Research**	**26.5 days**	**Mon 4/17/00**	**Wed 5/24/00**		
86	AS/400 Program Research	1 day	Wed 4/19/00	Wed 4/19/00	80	Joy
87	Trading Partner Specification Rese	0 days	Mon 4/17/00	Mon 4/17/00		
88	Business Practice Research	1 day	Tue 5/23/00	Wed 5/24/00	87,83	Laura



Project: F3ShipperPrototypePlan
Date: Mon 6/19/00

Task
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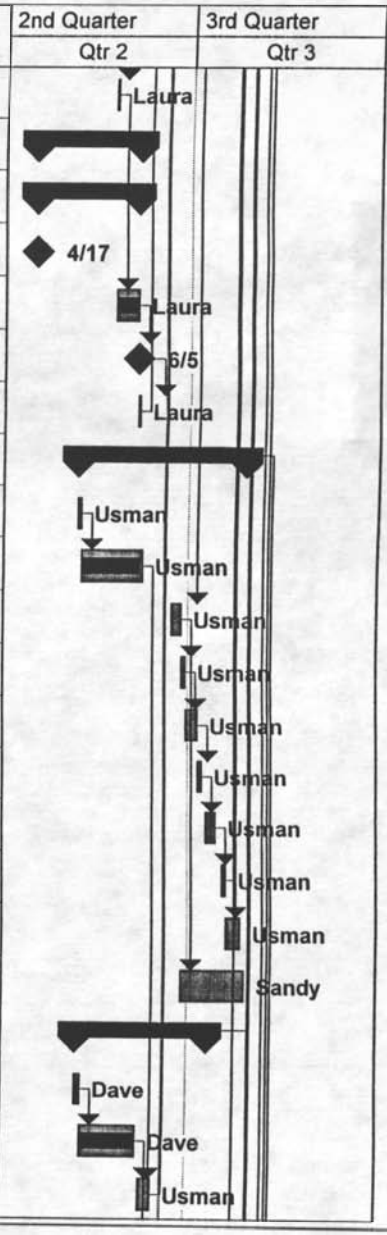
Rolled Up Split
Rolled Up Milestone
Rolled Up Progress
External Tasks
Project Summary

ID	Task Name	Duration	Start	Finish	Predecessors	Resource Names
89	Design/Write Business Rules	1 day	Wed 5/24/00	Thu 5/25/00	88	Laura
90	**Define EDI Semantic Rules**	**34.5 days**	**Mon 4/17/00**	**Tue 6/6/00**		
91	**Define Rules**	**33.5 days**	**Mon 4/17/00**	**Mon 6/5/00**		
92	AS/400 Program Research	0 days	Mon 4/17/00	Mon 4/17/00		
93	Trading Partner Specification Rese	6 days	Thu 5/25/00	Mon 6/5/00	89	Laura
94	Business Practice Research	0 days	Mon 6/5/00	Mon 6/5/00	93	Laura
95	Write Rules	1 day	Mon 6/5/00	Tue 6/6/00	94	Laura
96	**Manage Segment**	**58 days**	**Mon 5/8/00**	**Fri 7/28/00**		
97	Define Managed Requirement States	2 days	Mon 5/8/00	Tue 5/9/00		Usman
98	Define Enterprise Model - working	19 days	Wed 5/10/00	Thu 6/8/00	97	Usman
99	Design Web interface for customer setup	2 days	Fri 6/23/00	Tue 6/27/00	12	Usman
100	Define Web interface for supplier setup	2 days	Wed 6/28/00	Thu 6/29/00	99	Usman
101	Design Web interface for customer ASN/FA	2 days	Fri 6/30/00	Wed 7/5/00	100	Usman
102	Design Web interface for supplier ASN notice	2 days	Thu 7/6/00	Fri 7/7/00	101	Usman
103	JSP/Servlets designs	5 days	Mon 7/10/00	Fri 7/14/00	102	Usman
104	Design queries for JDBC ELF	2 days	Tue 7/18/00	Wed 7/19/00	103	Usman
105	Implement JDBC ELF queries	5 days	Thu 7/20/00	Wed 7/26/00	104	Usman
106	Implement Web interfaces and JSP/Servlets	20 days	Wed 6/28/00	Fri 7/28/00	99	Sandy
107	**Data Entry Segment**	**44 days**	**Mon 5/8/00**	**Mon 7/10/00**		
108	Define ECLIPZ Phase I Integration	3 days	Mon 5/8/00	Wed 5/10/00		Dave
109	Define ECLIPZ Schema Modifications	15 days	Thu 5/11/00	Tue 6/6/00	108	Dave
110	Implement ECLIPZ Schema Modifcations	3 days	Fri 6/9/00	Wed 6/14/00	109,98	Usman



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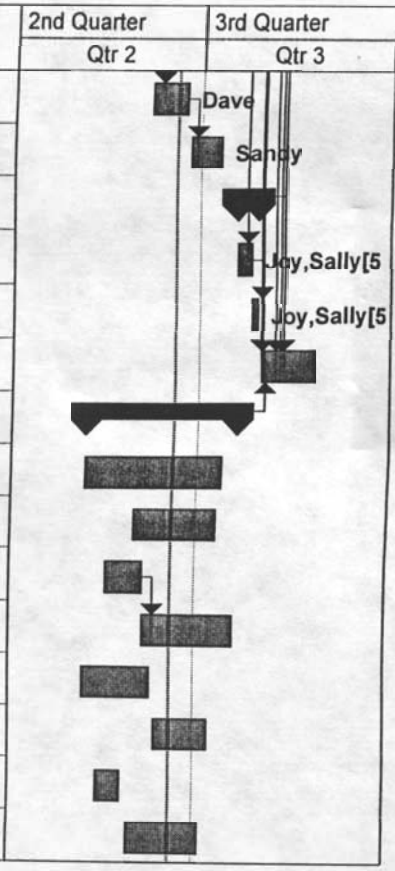
External Tasks
Project Summary

ID	Task Name	Duration	Start	Finish	Predecessors	Resource Names
111	Define Management Mechanism	10 days	Wed 6/7/00	Fri 6/23/00	109	Dave
112	Populate Relations	10 days	Mon 6/26/00	Mon 7/10/00	111	Sandy
113	**EDI Output Segment**	**8 days**	**Wed 7/19/00**	**Fri 7/28/00**		
114	Define Data Mappings	5 days	Wed 7/19/00	Tue 7/25/00	58	Joy,Sally[50%]
115	Write Data Mappings	3 days	Wed 7/26/00	Fri 7/28/00	114	Joy,Sally[50%]
116	Testing and Quality Assurance	20 days	Mon 7/31/00	Fri 8/25/00	1,8,33,54,59,67,70	
117	**ICI Tasks**	**51 days**	**Mon 5/8/00**	**Wed 7/19/00**		
118	Infrastructure Segment	46 days	Mon 5/8/00	Wed 7/12/00		
119	System Monitoring	27 days	Thu 6/1/00	Mon 7/10/00		
120	Rules Interface	11 days	Fri 5/19/00	Mon 6/5/00		
121	Requirements Manager	31 days	Tue 6/6/00	Wed 7/19/00	120	
122	XML Monk	24 days	Mon 5/8/00	Fri 6/9/00		
123	Java ELF	19 days	Mon 6/12/00	Fri 7/7/00		
124	JDBC ELF	10 days	Mon 5/15/00	Fri 5/26/00		
125	Java Gnome	25 days	Tue 5/30/00	Mon 7/3/00		



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