PROFILE

P.1 Organization Description

Branch-Smith Printing Division is one of two divisions within Branch-Smith, Inc. They are co-located in one building to facilitate communication and to share critical services such as Information Technology Services (ITS), Human Resources (HR), and Accounting. A third business operation, Real Estate Magazines, Ltd. (REML), is a separate entity controlled by Branch-Smith, Inc., but managed externally. As Printing Division customers, the Publishing Division and REML together account for less than 20% of printing sales.

P.1a Organizational Environment
P.1a(1) Products and/or services

The Branch-Smith Printing Division specializes in creating multi-page, bound materials with services ranging from design to mailing for our specialty customers. We produce publications, magazines, catalogs, directories, and books, as well as some general commercial printing, typically in quantities generally less than 20,000. We offer a complete array of turnkey services to customers, including design, image scanning, electronic and conventional prepress work, printing, binding, and mailing/delivery.

P.1a(2) Organizational context/culture

Branch-Smith, Inc. is a fourth-generation, family business founded by Aaron Smith. Born into a loving family who helped instill self-dependence, self-confidence, and determination, Aaron Smith knew how to overcome a handicap. He was born in 1868 without arms, and learned to excel at play, school, and business by creatively using the gifts God gave him. "From the time I was 12," he wrote, "I had been giving serious consideration to a life of self-support, encouraged by mother and father, whose ideas of how it might be done were limited, but whose faith in God's power to do all things was unlimited. When I got into office work and the business world, I learned to write with a pen in my teeth, but my right foot is still my hand and I can use a pencil better with it than in my teeth."

Smith began his professional life by earning an attorney's certificate in 1889, after reading law in a country lawyer's office. Desiring to make a difference in the world, he embarked on a career as a journalist and spent time as a newspaper editor before setting up Smith Printing on the east side of the Tarrant County Courthouse in 1910.

Smith's daughter, Carrie Beth, and her husband Oscar Branch, eventually joined him in the business. By the 1930's, the printing and publishing concerns moved just south of downtown Fort Worth, and Oscar and Carrie Beth's son James joined the business. It was incorporated as Branch-Smith, Inc. in 1954. James' three children,

Aaron Smith
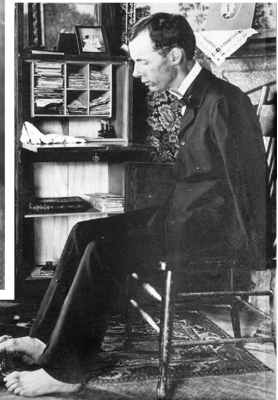
Mike, David, and Beverly, lead the company today. We are reminded of Aaron Smith's personal strength and perseverance, which remain a guiding force today, giving us our "can-do" attitude.

In the spirit of our founder, our values are expressed through our corporate Values Statement, which reads:
- *To honor God in all that we do,*
- *To pursue excellence with integrity and commitment,*
- *To help people develop as individuals and as a team,*
- *To grow profitably by committing ourselves to our customers' success.*

Within the Printing Division, we set the context of our business through our Vision Statement:
"Market Leading Business Results through an Expert Team providing Turnkey Solutions to Customer Partners."

This vision expresses our desire to produce strong and sustainable results through balanced performance improvement. It creates success for our long-term customers and rewards for our expert employees who bring solutions to bear on our opportunities.

To carry out this vision, this statement defines our mission:
"The mission of the Branch-Smith Printing Division is to provide expert solutions for publishers."

This purpose guides us in meeting our customers' needs on their own terms. Publishers work with us because we focus in serving their niche requirements for printing as well as offering the vertically integrated value added services that result in lower costs, reduced cycle times, and on-time delivery. An important component of the solution we provide is easy accessibility for the customer, and timely and appropriate information. This is also expressed in our Quality Policy, which states:
"Branch-Smith Printing will seek to continuously improve results for all stakeholders through the application of its Innovating Excellence™ Process."

P.1a(3) Employee profile
We employ 68 full-time, non-union employees in positions such as management, professionals (accounting, human resources), sales, maintenance, art, and skilled equipment operators. Six employees have less than a high school education, 21 have high school diplomas, six have technical school training, 26 have some college hours, eight have Bachelors degrees, and two have Masters degrees. Our demographics closely mirror the local workforce. Approximately 69% are Caucasian, 21% are Hispanic, four percent are Asian, one percent American Indian, and four percent are African-American. Workforce age groups are also diverse with 12% from 21 to 30, 39% from 31 to 40, 33% from 41 to 50, and 16% over the age of 50. Special safety requirements for employees include safe equipment utilization, chemical handling, and forklift safety.

P.1a(4) Technologies, equipment, facilities
Branch-Smith Printing Division occupies approximately 45,000 square feet (75%) of a 60,000 facility in Fort Worth, Texas that is shared with the Publishing Division and ITS.

We offer complete design and digital prepress capability using Macintosh PCs. The heart of outputting graphics for print is the rastering image processing for which we were early adopters of industry-leading Rampage software. We operate under Windows NT on Dual Pentium machines.

Besides proofing on monitors, digital proofing enables rapid capability for high quality output for customer approval prior to printing. For this purpose, we have two proofer printers that present full press sheet coverage. Subsequent to proof approval, we utilize the Cymbolic Sciences Platejet8 Digital Platesetter to output final plates directly from these same files without the need for film.

A small amount of "legacy" film exists for efficiency in a conventional analog workflow. For this, we also have a conventional plate frame for proofing and making plates from a light source. Due to the efficiencies of a fully digital workflow, we "copydot" scan furnished film to create digital files. Over 95% of our prepress work is fully digital.

Our printing functions are accomplished with four multi-color, sheet-fed Heidelberg offset presses capable of printing up to 28" x 40" sheets. We use light densitometers to measure the ink film density to determine adjustments. We also have a drying system with variable wavelength capability based on ink characteristics installed on one eight-color press and an ink pumping system with lines to all four presses from drums of ink for each process color.

We use buckle folders and a knife folder for clean and accurate folds. In some cases, a computerized guillotine cutter is first used to break the sheet into two or more stacks.

For inline collating, wire staple binding on the spine or soft cover glued "perfect" binding, and trimming the three unbound edges, we use a Saddle Binder or a Perfect Binder and heavy-duty, three-knife trimmers, depending on the job.

We have an inkjet mailing operation to direct mail products for customers using their address files, saving them postage and delivery time. We also recycle about 58 tons of paper each month with vacuum scrap collection system.

Our ITS infrastructure is a key advantage in management of the Printing operation. Among the responsibilities of ITS are the management of strong and reliable networks in support of file archiving and processing, email, hosting our own web and FTP sites, as well as support of telephony.

The Division is managed using Printer's Software, Inc. (PSI), business application software. It is fully integrated from shop floor data collection of time and materials through accounting. Customer estimates are converted into job specifications and transmitted as electronic job tickets.

P.1a(5) Regulatory environment
The printing industry is regulated for air quality and hazardous waste resulting from chemicals, solvents, and ink. Concern for air quality requires tracking output of volatile organic compounds (VOC) by the Texas Air Quality Control Board. We have reduced VOCs to about six tons per year, which is a VOC reduction of over 31% over four years. We have reduced our hazardous waste to less than 100 kilograms per year, and so are identified by the state as a conditionally exempt generator, meaning that reporting is not required. We must otherwise comply with OSHA and other general business regulations, including fair accounting practices.

P.1b Organizational Relationships
P.1b(1) Key customer groups and markets
Our customers generally represent memberships or reader circulation distributed nationally to limited, special interest groups with magazines that contain national advertising. We maintain special, close working relationships with approximately 50 customers who provide over 80% of sales. Normally, their printing needs are repetitive and menu-priced, allowing us to produce virtually all of their work.

At the highest level, we have targeted customers who have lower volume runs and require an array of services to fulfill their projects. We chose this market niche because our sheet-fed printing allows us to best meet their needs and because they remain an "underserved" population.

Within this target market, we segment our customer base into three groups: Magazine, Books, and Directories/Catalogs. Our largest major customer segment is magazine publishers. These are generally trade journals that are

nationally distributed to a limited audience of subscribers or association members. Our magazine segment sales currently make up 63% of total sales.

The second major customer category is book publishers. Books are categorized as being for the enjoyment of a final user but not periodical in nature. These may be short-run books of a spiritual or self-help nature. Book customers currently account for 23% of sales.

The third major customer category is producers of catalogs or directories. These may feature products of a wide variety for order or a reference document such as membership lists. Directory/Catalog customers account for nine percent of sales. The remaining five percent of sales are "commercial" in nature and most often are provided as a special service to existing customers.

The publishing industry is very competitive, requiring us to understand and serve customer requirements better than competitors. Our customer survey is used to determine the level of importance of customer requirements. These are shown in ranked order below, for all customer groups.

1. Product quality
2. Reasonable prices
3. Reliability
4. Responsiveness
5. Interpersonal relationship
6. Added value

P.1b(2) Suppliers, dealers, partners
Supplier partnering is very important in meeting our customers' cost and delivery requirements. Therefore, we focus on minimizing the number of suppliers. Our major types of purchase are paper (79% of outside purchase), prepress items such as plates, film, and proofing materials (9%), and ink (6%). As a practical matter, paper, prepress supplies, and ink are manufactured to national tolerances and several local distributors are available for each. Reputable service providers make up the remaining six percent of outside purchases needed, such as hard cover binding or special cover finishes. Through partnerships with two vendors, we minimize inventory while maintaining our volume pricing.

Although we purchase paper in bulk, our vendor meets our needs by cutting mill rolls to appropriate size sheets (known as "sheeting") for our sheet-fed presses. This is particularly helpful since our most efficient paper size is not the same as the industry standard and, therefore, not stocked by local paper distributors. The paper is uniquely placed on individual skids for direct entry into our press feeders as "press ready." We maintain inventory on our floor on consignment to minimize our carrying cost.

We installed "roll sheeting" technology on two sheet-fed presses thus far, which enables us to purchase paper less expensively in rolls and cut them to sheets during printing.

All of our prepress materials (film, plates, proofing materials) are purchased on consignment inventory in our facility. We have no cost until it is consumed. By using the same manufacturer of film, plates, and proofing materials, we receive a substantial rebate. We frequently meet with the manufacturer to discuss our particular issues.

Ink is purchased in drums and pumped directly to the presses for 98% of our use. This ink is manufactured to our specifications in terms of drying characteristics and tackiness. Ink left in drums is returned and repurposed into black ink for our future use, so there is no waste stream.

Our supplier of industry information systems, PSI, is a key partner in developing improvements to our application software. Modifications to suit our needs were made prior to purchase and continue based on our progressive ideas.

P.2 Organizational Challenges
The printing industry is very competitive with numerous companies competing for market share. We stand out among competitors based on our approach for identifying and serving a specific niche, focusing on development of long-term relationships, partnering with suppliers, and involvement in standard defining industry associations.

P.2a Competitive Environment
P.2a(1) Competitive position
The printing industry is one of the largest in the nation in terms of the number of establishments, with about 45,000 companies. There are 3,100 in Texas with 1,100 in the DFW area. Most are very small, with 80% having fewer than 20 employees. We effectively compete for magazines against general commercial printers in the region. However, true price competition comes from specialist plants owned by major international printing operations.

Our projected sales are small relative to the three billion dollars in commercial print shipments reported for the DFW area ($155 billion in the U.S.). The industry tracks nationally very closely to gross domestic product and averages about five percent growth per year.

P.2a(2) Competitive success factors
To ensure our competitive position, we focus on serving a select market niche that most other printers have difficulty serving well. Many competitors focus on attracting jobs with greater quantity outputs because of the limitations of their equipment. They charge much higher prices for the shorter runs, thus giving us advantage in this market.

Our equipment and technologies are directed to cost-effectively serve this niche through sheet-fed press versus the popular web printing. Our technology allows for faster changeovers from one type of print to another and process automation offers cost savings. We enhance this factor by

offering turnkey services to provide a one-stop solution to customers' printing needs. Our primary approach to capitalize on this competitive advantage rests with our key contact points, i.e., our strong and accessible customer service personnel. Our customer service staff develops relationships with our customers and develops solutions.

The Internet greatly facilitates our exchange of information, particularly file transfer to our FTP site. We use customer relationship management software to track pricing, ISO plan, email history, and contact information.

P.2b Strategic Challenges

Structurally, within our competitive markets, the number of printing plants is declining and the size of each increasing. There are fewer small startups and better businesses have grown larger. Small to medium size companies are being squeezed out by small outlet chains and larger competitors. Organizations of this type must find a niche to survive, as did we. Growth is important to create economies of scale and the critical mass to invest in new technologies. The high cost of labor and capital forces a strong focus on productivity, capacity utilization, and automation.

These factors created a few years of industry consolidation that has since slowed down, as more focus is on strategy rather than financial driven deals. There were three major companies that purchased dozens of smaller companies and attempted to bring economies of scale to their operations with total sales of over $500 million each.

The Internet is a recent issue on the print supply chain horizon. There are many new startups with different value propositions for major customer companies, printers, or general consumers. These entrants are best suited for commodity orders capable of online proofing and fulfillment and they do not cost-effectively serve our base of customers. The Internet is very beneficial to our strategy to create strong electronic customer communication solutions for large files through the FTP site we host.

According to a PIA future market study, our core markets will all grow at a pace exceeding that of the industry average. Even the growth of electronic books and directories will only supplement the traditional growth in these markets. In any event, digitalization is the future and we are strongly positioned to move into a print-on-demand or other scenario as technology develops.

P.2c Performance Improvement System

To pursue excellence and satisfy our customers, we are committed to continuous improvement of our processes and people. Our key mechanism to accomplish organizational focus on continuous improvement is through our Innovating Excellence™ system (*Figure P.2A*).
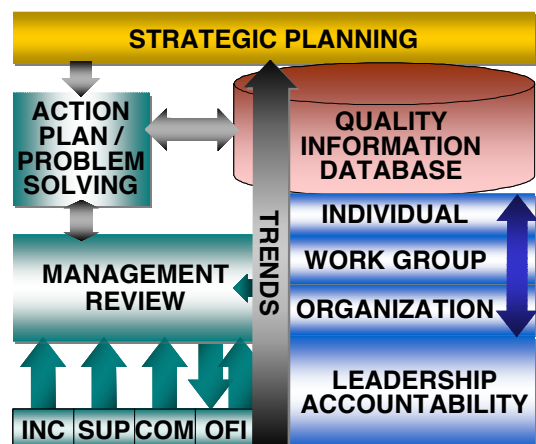

Figure P.2A – Innovating Excellence™ System

This approach focuses on building, sharing, and applying information to empower the organization. The model consists of four subsystems, each with its own focus:

Strategic Planning (*Fig. 2.1A*) – creating value
Leadership Accountability (*Fig. 1.1A*) – developing results
Management Review (*Fig. 1.1B*) – driving agility
Quality Information (*Fig. 4.1B*) – accessing knowledge

Figure P.2B depicts the deeper refinement of the Innovating Excellence™ approach by showing the systems relationships as a communication flow. Within this structure, processes and approaches are regularly evaluated and addressed. Employees actively review and improve their approaches through our continuous improvement process shown in *Figure 6.1B*, which is taught to employees as a part of our Quality Training. Employees follow this process to determine root causes, solutions, cost/benefit optimization, and plans for implementation.

Figure P.2B – Innovating Excellence™ Approach Systems Relationships

As a part of our management review, all inputs relative to quality are considered and acted upon. This includes trends in Price of Non-Conformance (PONC) or complaints, issues

with the leadership system, employee suggestions (OFIs), strategic planning initiatives, etc. We maintain exposure to trends through industry peer groups and associations.

Beyond the printing industry, we participate in local Performance Excellence roundtables and use input from our TAPE and Baldrige applications as invaluable feedback for our ongoing strategies for improvement.

Changes in technology and the ability to provide for our customers' needs demand that we proactively improve our way of doing business. Our approach is to shorten communication links, streamline and enhance processes, actively manage our future, and empower trained and motivated employees to work effectively together for the good of the customer, the company, and themselves.

LEADERSHIP

1.1 Organizational Leadership
The team structure of senior leadership is designed to enable and empower our organization to respond quickly to change and provide guidance and support to employees. From the directions of the Board of Directors and Corporate Leadership Team (CLT), the Print Leadership Team (PLT) aligns our purpose and focus to corporate direction. This team is composed of ten people, each with defined roles to ensure efficiency, consistency, and teamwork.

1.1a Senior Leadership Direction
1.1a(1) Senior leaders set and deploy values
Organizational values and stakeholder expectations are set at multiple levels of the organization. At the top level, the Board of Directors and CLT created the Corporate Values Statement (shown in the Preface) to focus all divisions on the needs of our customer, employees, owners, and society. This mission is embraced and affirmed by the PLT and used as a foundation for the Division Mission Statement.

From the Corporate Values and Division Mission Statements comes our focus on the importance of quality and a Division-wide focus on meeting customer and stakeholder needs. This is described in our Quality Policy (see the Preface), and is embodied in our Division Objectives, which are our highest-level directions and performance expectations. These Division Objectives are:
o Continuously Improve Business Results,
o Become the Partner of Choice for Our Customers, and
o Become the Employer of Choice.

We review organizational values, expectations, and directions for alignment each year during our strategic planning process. From those, we develop more detailed short- and longer-term directions and expectations of our organization and our employees based upon input collected

from all stakeholders. A summary of these directions are shown in *Figure 2.2A* for 2002. During the year, through the Management Review Process and PLT decisions, we continue to update directions through Action Plans (AP) and Quality Improvement Process (QIP) activities.

Deployment of our values, directions, and expectations to all employees begins with a communication meeting following strategic planning. We introduce the directions for the year and their roles in achieving these directions. This meeting is followed by communication meetings in each department facilitated by the leaders of those groups.

Each team/department works through an understanding of their role in the organization's success and creates a mission statement that describes its role in fulfilling the Division mission. This gives each employee a sense of accountability and a feeling of contribution to our success. Based on their particular mission, each team develops strategies that support the Division Objectives and Strategies. Process owners include Action Plans and an appropriate indicator to support the strategies and determine if progress is being made. Each area is then able to display a goal sheet that spells out its mission, the Division Objectives and Strategies, and its own QIPs or APs.

To further deploy directions and expectations, all employees develop work objectives to support Division and department directions. This drives the focus on all stakeholder needs down throughout the organization. These work objectives are created with the assistance of managers who help employees set and achieve these results.

Values and expectations of employee responsibility and productive work are communicated and reinforced to our employees through our employee handbook, job descriptions, and ISO work instructions.

1.1a(2) Senior leaders create the environment
We encourage and motivate employees to engage in innovation and continuous improvement through our expectation that they actively participate in performance improvement activities after receiving training in quality and problem solving. All employees receive training in the meaning of quality, elements of teamwork, and problem solving skills when they begin with the company. The Quality Manager along with departmental QIP teams deliver ongoing training. The Quality Manager also oversees the use of SPC and continuous improvement tools.

We utilize our OFI system to provide a conduit for new ideas and process improvements by employees. This system awards employees with points for approved ideas, which in turn are used to buy merchandise. To provide agility and a focus on learning, we offer cross-training opportunities and have required training events each year as

part each employee's annual performance appraisal. Foundational to our culture is that each employee is empowered to be responsible for quality. Consequently, employees do not need approval before "running" a job or stopping a non-conforming job. They take responsibility for product quality and perform the expected task within the guidelines of their work instructions.

Other approaches to encourage ongoing learning are our involvement in numerous trade/business organizations and our association with external experts. These avenues offer opportunities to regularly share best practices and learn of changing trends and directions.

1.1b Organizational Performance Review
1.1b(1) Senior leaders review performance
Figure 1.1A shows our structured, comprehensive approach to performance review. Reviews are ordered consecutively with individuals and teams first reviewing their work and results, and then rolling results up through the organization in consecutive meetings. This bottom-up approach ensures accurate information, involvement, broad communications, and accountability at all levels.

The Management Review (*Figure 1.1B*) is the core meeting of senior leaders. The meeting is designed to ensure we have full current situation and future outlook knowledge as it affects our strategic position and direction. The senior leaders have comprehensive knowledge of business and industry activities because of their external involvement and the most up-to-date knowledge of our current position because of their roll-up meetings with departments and functions. Our process for this key review is shown in *Figure 1.1B*. The primary driver of the meeting is our Quality Improvement Database (QID) (*Figure 4.1B*), which outlines measures and actions reviewed.
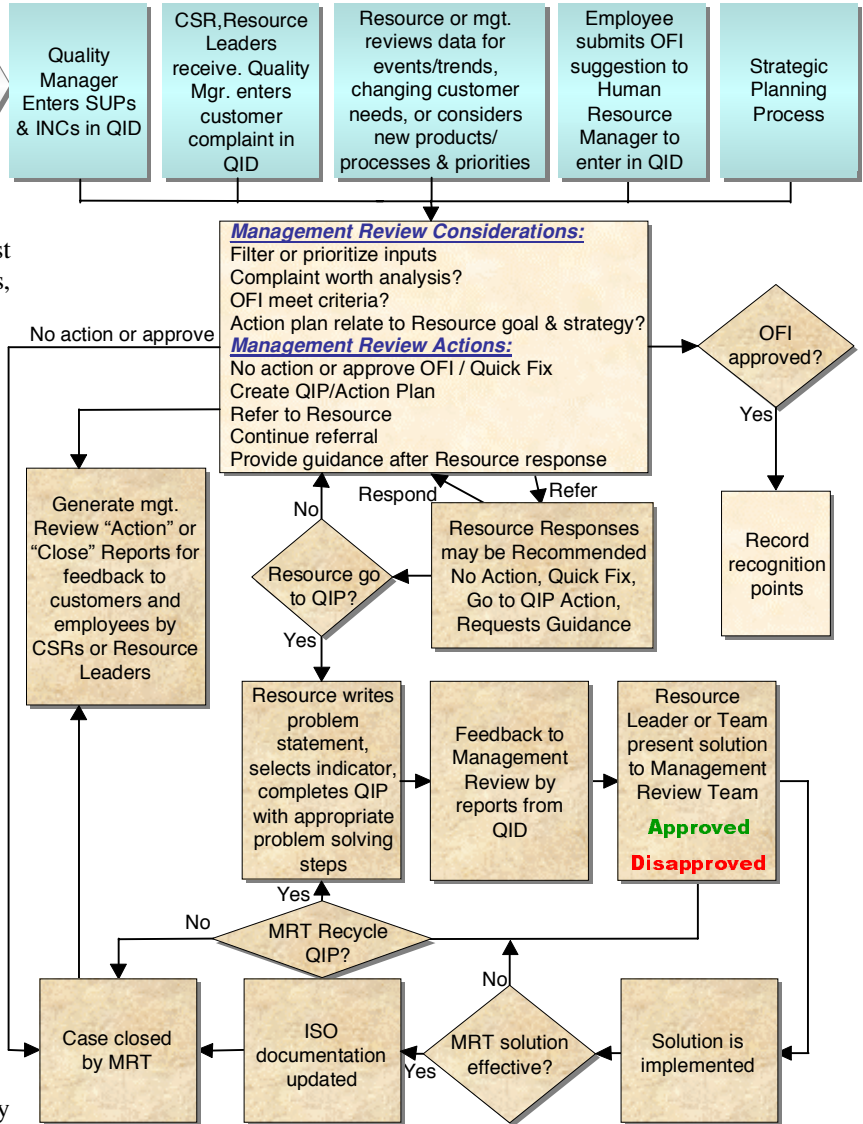
All customer complaints, supplier non-conformances, internal non-conformances, productivity, progress toward department and Division goals, and other quality data are entered into this system by the area leaders based on the outcomes of their reviews. Progress against goals for each team is reported through "Resource performance charts" and reviewed at that level in monthly meetings and posted as bar charts on their bulletin board. Progress made by QIP teams is also reported into the QID and reviewed by the MRT at this meeting.

Meeting	Leader/Attendees	When	Review Purpose
Production Review	Production Mgr/ Prod & Cust. Serv. Leaders	Daily	Review jobs and capacity for on time delivery
Individual Review	Prod. Supervisors/ Production operators, Accounting Mgr./ Acct staff	Wednesday	Checklist for individual, process performance, & equipment concerns, QIP/AP status
Production Leader Review	Production Mgr./ Production Supervisors	Thursday	Checklist for team, process performance & equipment concerns, QIP/AP status
Quality Review Team (QRT)	Quality Mgr/ President, VP, Sales Mgr., Prod Mgr., HRM	3rd Monday	Quality Management System review to ISO Management Review guidelines
Plan Review Team (PRT)	President/ VP, Sales Mgr., Production Mgr.	4th Monday	Review actual performance against budgeted plan
Management Review Team (MRT)	VP/ President, Sales & Cust. Serv. Mgr., Production Mgr., Quality Mgr., HRM	Mondays	Status of QIP/APs, refer COMs, INCs, and SUPs, approve and refer OFIs
CEO Review	President/ VP	Friday	Overall organizational performance
Department Review	Sales/CS Mgr/ Sales team & Customer service team, Prod. Sups/ Production teams	2nd Tuesday, 2nd Monday, 2nd Thursday	Each team's performance measures, COMs, and QIP/AP status. Sales meeting additionally reviews competition.
Manager Review	VP/ Sales Manager, Production Manager, Accounting Manager, Quality Manager, HRM	Daily – one dept per day	Department performance & QIP/AP status
Print Leadership Team (PLT)	VP/ President, Managers & Supervisors	2nd Monday	Monthly results and improvement progress
Division Review	VP/ All hands	2nd Tuesday	Monthly division level results and vision
Corp. Leadership Team (CLT)	President/ VP, HRM, Info Tech President, Publishing President	2nd Wed	Corporate policies and issues
Information Tech. Services (ITS)	ITS Supervisor/ Info Tech Pres., VP, Pub Rep., ITS staff	Tuesday	Review ITS performance and future IT needs

Figure 1.1A – Leadership Accountability Process

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The QID automatically performs a Division-level roll-up of the data for review at the Management Review (MR). This database ensures that all vital performance information is available to assist senior managers' analysis for prioritization and action.

The output of this review is a weekly status list of all open or closed events, including QIPs, which are posted on the PLT bulletin board and circulated to all departments.

In addition, we conduct a series of reviews for our annual strategic planning meetings. These result in the culmination of the prior year performance results and dictate actions for the coming year and beyond.

Previous year key findings have driven extensive growth actions. In 1998, as a result of external price pressures that drove sales prices down and masked the real growth of production volume, we had less capacity to expand sales than previously thought. We also found that certain watershed-type technology breakthroughs, such as automatic make-ready on press and digital plate imaging, could limit our ability to compete in future markets if we did not embrace them.

The challenge of emerging consolidators also focused our need to grow to overcome the issues of the rising cost of capital equipment and improving economies of scale. As a result, the plant layout was reconfigured, major new equipment installed, and new technology implemented that has already grown value-added sales by 62% over the following two year period.

Figure 1.1B – Management Review Process Approach

Our most current review meetings have resulted in findings concerning effects of the 9-11 tragedy on our industry. We have carefully monitored our sales, and the sales of our customers, to track the trend of the economic downturn. Several initiatives were enacted through Action Plans to reduce costs and improve sales.

1.1b(2) Review findings translated

Through our MR process, every customer complaint, supplier non-conformance, employee suggestion (OFI), and open QIP or AP, Internal Nonconformance (INC), and On-time delivery (OTD) issue are reviewed for status, prioritized for action, or reviewed for closure or referral to a team or individual. These involve the establishment of QIPs - the central problem solving, implementation, and evaluation mechanisms in our management system. QIPs link to a specific Objective and Strategy. Open QIPs related to the current plan are posted on the PLT bulletin board. Before closure, QIP owner(s) rate QIP effectiveness against its selected indicator, and an effort may be initiated to improve the solution's effectiveness.

1.1b(3) Senior leader improvement

Our culture of responsibility and accountability carries over into the MR approach as an evaluation of the effectiveness of our individual leaders and our leadership system. Leaders hold responsibility for performance of all indicators shown in *Figure 4.1B*.

Additionally, employees provide direct, focused input about the effectiveness of direct leaders and senior leadership through our annual employee satisfaction survey. When issues are identified, we conduct focus

groups to further define the issues and identify areas for improvement in leadership performance. Another mechanism for employee input on leadership effectiveness is through communication exchanges about direction at monthly meetings.

During the SPP, in Step 1 of *Figure 2.1A*, we evaluate the effectiveness of the leadership structure and approaches. Action Plans for training, organizational structure, and leadership practices are included in the plan for that year.

Leadership issues identified through all these approaches are addressed through Action Plans. Individual leaders include their specific improvement actions in their performance review and development process.

1.2 Public Responsibility and Citizenship
In keeping with our corporate mission, we instill integrity into everything we do. This includes our approach to areas such as environmental and legal compliance and ethical conduct. We reinforce these ideas by displaying our Values, and espousing fairness and an open door/open book policy in our employee handbook and dealings.

1.2a Responsibilities to the Public
1.2a(1) Address impacts on society
We have made great strides in staying abreast and ahead of what is required for environmental issues. We work closely with our suppliers to identify ways to decrease emissions and waste. In 1988, we were early adopters of an alcohol substitute in press solutions, which totally eliminated isopropyl alcohol as a waste. As a 100% VOC, isopropyl alcohol accounts for the single highest source of VOCs at printing plants. VOC emissions from alcohol are reported to the Texas Air Control Board along with partial VOCs, such as ink, processing chemistry, and solvents. The use of aqueous chemistry in our PrePress area has eliminated those sources of VOCs as well.

Since our conversion to automated ink pumping from drums, unused ink is returned to suppliers and re-purposed as black ink for our future use. The very small amount of remainder ink is collected in drums and transported as required but, instead of disposing of it in a landfill, we have contracted with a company to convert the ink to waste fuel, resulting in clean incineration.

Our plate and proofing chemistry is composed of primarily water and detergent and is not hazardous waste. Plates are not hazardous and are sold as scrap aluminum. As we went to fully digital workflow via computer-to-plate (CTP) technology, film chemistry has disappeared.

Paper waste and trimmings are collected into a bailing system and sold to a recycler. In 1993, one of our Safety and Work Environment employees implemented the recycling of all office paper waste, plastic containers, and aluminum cans using the same recycler. We reduced the number of non-recyclable trash pickups from two to three per week to one per week for our entire operation.

In 1994, the 3M Corporation and Printing Industries of America (PIA) sponsored audits for compliance with all environmental and safety regulations and communication requirements. We were the only printing company in the PIA of Texas to be certified and one of a 100 in the U.S.

1.2a(2) Anticipate public concerns
Future regulations are monitored and affected by our industry associations at the state and national levels and we are able to anticipate concerns through these associations. We also attend such conferences as the Fort Worth Water Quality Conference and the 2001 PIA Government Affairs Conference. When an emerging area to which we need to respond arises, we initiate a response through the MR process and launch an AP to prepare.

1.2a(3) Ethical business practices
The belief in honesty and integrity runs deep within our leadership system and our employee base. In our Corporate Values Statement, ethics holds a key role in, "To honor God in all we do", and "To pursue excellence with integrity and commitment". Involvement in best practice learning groups continuously causes us to examine ourselves and to be examined in light of others' experience. This is truly an ongoing commitment to ensure that all stakeholders can take pride in Branch-Smith as a quality organization.

As with all of our policies and values, they are more clearly detailed in the employee handbook. Our sales force is also governed by policies on gifts.

1.2b Support of Key Communities
It is our obligation to contribute a portion of our time and resources for the betterment of society and the community. Industry and civic organization involvement is used for learning and creating an impact by joining with others in forming the direction of business practices. The win/win nature of sharing experience with friendly competitors, other businesses, industry consultants, and association executives cannot be overstated.

We focus on selected local civic or charitable activities in which we can most strongly contribute and that provide employees an opportunity to participate in volunteer efforts important to them. We also select participation opportunities we believe will help advance our industry.

To that end, David Branch has served as a Texas Award for Performance Excellence (TAPE) Examiner, a Baldrige examiner, and also as an officer and/or board member for

many industry and civic groups, such as PIA-Texas, NAPL, Rotary, Fort Worth Clean City, the Boy Scouts, and the Quality Texas Foundation. He and other employees have presented at industry seminars and conventions, such as the Joint Congress of the PIA and Graphics Arts Technical Foundation (GATF), on facets of TQM, ISO 9000, and family-owned businesses. Our Vice President served on the PIA Disaster Recovery Task Force and on the board of the PIA-Texas credit union. He also speaks at a variety of forums such as the Greater Fort Worth Manufacturing Association, the Fort Worth Chapter of APICS, the 2000 NAPL Sheet-Fed Pressroom conference, the Hogan Quality Consortium, and a 2002 CIN GATF conference.

Involvement by all leaders and employees in the community is strongly encouraged. One of our strongest involvements is the United Way. The company and employees have given over $15,000 to the United Way campaign since 1995, and earned Gold Awards for our level of participation. We hold a blood drive on site, participate in Corporate Cleanup with a Keep America Beautiful affiliate, and provide employees flexibility to support causes of their choice. We donate in-kind printing to support organizations such as NAPL, the American Red Cross, Quality Texas Foundation, and the Fort Worth Leadership Prayer Breakfast. This year, we participated for the first time in a work place mentoring program with a local Junior High School.

STRATEGIC PLANNING

2.1 – Strategy Development

Our strategic planning process (SPP) is a key tool used to visualize our ideal future and create strategies and plans to achieve it, and to incorporate improvement opportunities into prioritized Action Plans. Strategic planning occurs formally each year with updates and tracking conducted monthly during our management reviews. Ongoing updates throughout the year allow us to correct direction or to proactively respond to risks and opportunities. *Figure 2.1A* represents the full strategic

planning, deployment, and review process. This planning approach is based upon the Baldrige program criteria and uses a Plan-Do-Check-Act orientation.

2.1a – Strategy Development Process
2.1a(1) – Strategic planning process

Approximately one month prior to the formal planning meetings, research assignments are made to ensure appropriate information is collected and reviewed for decision-making. The formal planning activity is conducted during the fall of each year by the PLT through a series of meetings on and off site.

Step 1 of *Figure 2.1A* ensures that lessons learned and improvement cycles are built into the SPP. The PLT analyzes the effectiveness of the overall planning and deployment process to determine and implement improvements. We also evaluate the effectiveness of the leadership system, and determine areas for improvement for the coming year. These improvements are documented as potential actions for the strategic plan.

In Step 2, we review our vision, mission, and values to ensure they still reflect our environment. We then review and revise objectives, which are intended to communicate to employees and all stakeholders what we expect to accomplish in the next three- to five-years.

In Step 3, we conduct an operational review to analyze the results of our organization's key performance measures for the prior year. We review and incorporate information from our annual Baldrige-based assessment either from self-evaluation or from external review feedback. This analysis provides an understanding of our key strengths and weaknesses for the SWOT (strengths, weaknesses, opportunities, and threats) analysis in Step 5.

In Step 4, we conduct a business analysis to evaluate our external environment to forecast changing trends and gain market requirements. This analysis includes those elements described in 2.1a(2) including market conditions, customer and stakeholder requirements, business and community risks and issues, competitive
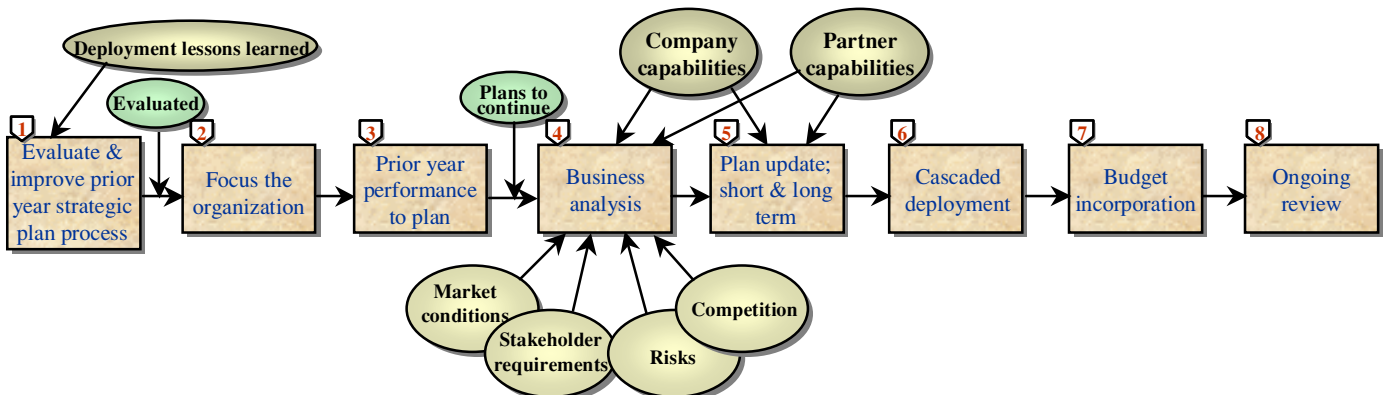

Figure 2.1A – Strategic Planning Process

analysis, and supplier and partner capability information. PLT members bring forward defined inputs, including literature and studies for scanning our environment and identifying new opportunities for products, services, competitive advantage, marketing, and technology approaches. From the review of this information, the PLT develops a list of potential opportunities and threats for each environmental element.

In Step 5, we conduct a SWOT analysis based upon the issues identified in Steps 1, 3, and 4. SWOT elements are used to identify and prioritize key areas to address. Based upon the SWOT review, we develop short- and longer-term strategies and actions to move us toward our vision and objectives. We add in APs that are still in work from the prior year to allow them to be prioritized with new actions. We set appropriate measures and goals for objectives and strategies and sort and prioritize APs.

APs are assigned to PLT members to develop (or update) steps, timelines, resources, costs, and measures of success. These plans are entered into the QID for review and tracking. A final balancing meeting is held to review the plan as a whole and make needed adjustments to timing of plans and financial and human resource requirements to balance the plan to resource constraints.

In Step 6, we create documents and methods to support deployment of the plan. Results of strategic planning are first communicated to employees through a deployment meeting. They are then discussed by leaders with their departmental teams or other appropriate members during follow-up sessions. Teams and individuals update goals and mission statements for their departments that support the Division plans thus aligning actions, measures, and goals throughout the organization.

Other stakeholders receive a variety of communications to detail our plans and strategies for informational and planning purposes. For example, we held a supplier appreciation luncheon to provide a more direct opportunity to present our plans to key supplier partners and receive feedback on their plans and needs.

In Step 7, financial resource requirements to accomplish of APs are rationalized into our short- and longer-term budget projections. Then, in Step 8, we conduct ongoing tracking of APs through monthly management review of overall progress to plans and key measures. Throughout the year as needed, the strategic plan is updated with new or modified APs to reflect the changes to the environment.

2.1a(2) Planning addresses key factors
A month prior to strategic planning, assignments are made to PLT members to research information needed for strategic decision-making. The assignment list includes

28 specific areas for understanding organizational and supplier/partner capabilities, market conditions, stakeholder input and requirements, competitive information, industry issues, and risks.

Customer/market needs and competitive environment – We gather information through our customer survey, lost revenues, and complaints to identify customer needs and their importance, trends and directions of the printing industry, and market requirements from industry association networking. Involvement in the NAPL, the National PIA, PIA-Texas, The Peer Group, and the Independent Printers Worldwide buying group, provides industry knowledge and benchmarks concerning customer needs and competitor actions, including emerging tools and competitors. Trade magazines and discussions with key suppliers provide additional input about customer needs, competitor directions, and supplier capabilities.

Technological and other key changes – Trends and directions in technology and other environmental changes are identified through involvement with trade associations and external benchmarking groups, and through general understanding of the business climate gained through newspapers, journals, and periodicals. As Vice Chairman of NAPL, David Branch is very involved with the most progressive source of industry information in the country. As members or attendees at NAPL Top Management Conferences, board meetings, major trade shows, seminars, and peer group meetings, members of the PLT learn from leading experts as well as the shared experiences of other industry participants.

The ITS group is also very progressive in the identification of new technologies appropriate to our industry through involvement in computer industry associations and publications. Our key supplier partners and other vendors of equipment and systems also provide input about potential changes and advances in technology.

Human and other resources capabilities – One important source of information for strategic planning regarding human resource needs and capability is our annual employee survey. Human resource and operational capabilities are identified through review of aggregate measures of performance and productivity, which are enhanced with feedback from our scheduled ISO audits that identify processes in need of improvement.

Primary inputs on process efficiency and capability come from our in-process productivity measures, revenue lost due to complaints, and our PONC measures, which are spoilage cost, frequency, and reason. These are recorded daily through electronic, shop-floor data collection. Analysis of production volume as compared to our

capacities is also reviewed to adjust where the market is telling us to invest in production capacities.

Supplier/Partner capabilities – Strategic partnerships with key suppliers allows us to gather information about availability of materials and supplier growth plans to help determine their capabilities to meet our changing needs. This information is incorporated into our SWOT analysis, supported by information that we track concerning supplier non-conformances and performance.

Financial, societal, and other risks – Part of the annual operational review involves understanding our current financial position and trends in profitability and utilization. We compare this to external economic conditions to identify areas of potential risk and opportunity over the short- and longer-term. We gain information about societal needs and directions from industry associations to retain a leadership position in protection of our environment.

Another important source of input that covers these areas of risk is feedback from the TAPE and, more recently, from the Baldrige program examiners concerning our key areas of strength and opportunities for improvement. This information is closely analyzed and input into the SWOT analysis for planning ongoing improvement.

2.1b Strategic Objectives
2.1b(1) Key strategic objectives
The output of the planning process is our longer-term Division Objectives with multi-year strategies and actions, as shown in *Figure 2.2A*.

Our current objectives and strategies are:

1) *To continuously improve business results through:* a process improvement focus, partnership with our suppliers, and strong financial performance.

2) *To become the partner of choice for our customers through:* a targeted marketing plan, excellent execution to customer requirements, and relationship development. To become the partner of choice, our value package must be continually improved.

3) *To become the employer of choice through:* a caring, involved culture; continually improving training systems; providing growth opportunities; and industry leading compensation, benefits, and reward and recognition systems. We extend the same quality environment to coworkers as we extend to customers.

2.1b(2) Strategic objectives address challenges
Our strategic objectives naturally consider all aspects of importance to the organization due to their stress on the key elements of our business model. Specific concerns are addressed in Strategies and actions. Following is a summary of our key challenges and the approach used to address them through our current strategic plan.

Competitive market: We compete in a highly fragmented, multi-billion dollar industry with many potential customers who use general commercial printers. We address this threat by focusing on a specialized niche, which yields us a price and service level advantage when compared to the typical local commercial printer. Our objectives and strategies capitalize on this through actions to reduce cost, increase productivity, create a strong brand and quality services, and partner with our customers.

Another key issue relative to the competitive environment is the need to continue growing to provide the critical mass required to invest in technology to survive. Many competitors have achieved this critical mass through consolidation. We chose to achieve this level of growth solely through customer acquisition. The "face" of our competitor base has changed significantly due to our growth. We now face head-to-head competition with some of the largest printing organizations in the world, which has also required changes to many of our customer relationship approaches. Prior year plans focused on instituting an outside sales force, increasing our customer contact personnel, upgrading our capabilities, and investing in technology to drive our efficiencies. Current plans continue to focus on technology integration and human resource development to further drive success.

Use of technology: The upgrade of technology in our industry is progressing all the time. Through careful monitoring, we can rapidly evaluate and incorporate these new opportunities continuously, throughout the year. Our current longer-term approach to incorporation of specific technologies into our business is addressed through the objective of "Continuously Improve Business Results", where we focus on the migration to new technologies.

Another area we consistently monitor and incorporate rapidly is the Internet. From a competitive perspective, a few potential Internet-based competitors have emerged. These competitors have proven to be inappropriate vehicles for the needs of our specific customer base. Our data, and industry data, strongly conclude that the Internet will actually be a contributor to a more efficient digital workflow for printers like us to enable more people to access the medium of print. Print in our market sectors has grown even more with the growth of the Internet.

Other Internet-based companies emerged as our customers' competitors by publishing books, magazines, and catalogs electronically. As their newness began to wane, so did their effectiveness and profits, as well as the advertising revenue source of our customers. For a time,

Internet advertising appeared to be a significant threat to publishers' revenue as their sponsors opted to funnel dollars to this new medium. But this form of advertising has also significantly waned and advertisers are flocking back to the more traditional printed medium. The Internet now is a very effective supplement for our customers to their publications and advertisements.

Digital workflow: The Internet has become an enabler rather than a competitor. The improved tools that have emerged aid our relationships with customers through better communication mechanisms and file transfer capabilities. Collaboration with customers has reduced cycle times as a true digital workflow is now enabled.

2.2 Strategy Deployment

During Step 6 of the SPP, following the development of the division strategic directions, deployment begins with communication of directions and goals to employees, followed by department alignment meetings. This ensures that all employees understand their influence and roles in achieving the longer-term vision for the company.

2.2a Action Plan Development and Deployment
2.2a(1) Develop and deploy action plans

Group and team leaders develop actions and QIPs for their teams based on the Division plan. These actions or QIPs are for all areas where our current performance shows a gap from our desired performance or where improvement opportunities exist. Required resources are identified and approved as part of this activity. Using the Leadership Accountability Process, we review progress and verify alignment of actions to goals. *Figure 2.2A* shows a summary of current-year, company-level APs, which are a roll-up of the leaders' individual plans and the teams' plans. Throughout the year, leaders track the progress of APs through the MR process. As priorities shift or performance levels indicate the need for improvement, these plans or their priority are modified.

At the overall Division level, key human resource, financial, equipment, and other requirements are identified as a part of a five-year financial plan to achieve growth objectives. Resources are allocated to strategic objectives based on their value and return. Financial plans may indicate paybacks for an individual QIP, but Division five-year financial plans are more concerned with a vision of the overall system value, including capital improvements. When appropriate, purely financial gain may be sacrificed in the short term to move us to higher levels of performance or in response to a shift in customer direction. We made such a decision going into 1999, to move into a position of competitive advantage for the future. Based on the plan, we made significant investments in equipment, facilities, and human resources to meet our growth objectives.

2.2a(2) Short- and longer-term plans

Our key longer- and short-term actions and QIPs are represented in *Figure 2.2A*. These actions are in place at various levels of the organization.

2.2a(3) Key human resource plans

Most human resource plans, such as safety and employee satisfaction, are addressed under our strategic objective of "Becoming the Employer of Choice". Training plans ensure employees remain current in skills and training goals. We outline staffing needs in our five-year financial plan to help the HRM plan training and hiring activities.

2.2a(4) Key performance measures

Each QIP has defined measures that enable the team and the PLT to track performance and success. Each strategy also maintains higher-level measures to ensure QIPs are having the desired effect on performance. From this, departments and teams establish goals to support the Division plan. This approach to plan measurement ensures organizational alignment with key directions.

2.2b Performance Projection

For each strategy in support of the three major objectives, current and projected goals are established. These projections are set based upon prior year trends with incorporation of planned improvement expectations.

For the longer term, we anticipate that in "Continuously Improve Business Results", we will far exceed the performance of our competitors due to our focus on a specific product niche and a continuous improvement culture. We anticipate achieving high levels of asset utilization and much lower operating costs than most printing companies. This is based on the projected growth our industry associations forecast, as well as the further deployment of our sales model, which produces a more advantageous cost-to-sales ratio than traditional models in our industry. We have set process performance standards rarely matched by anyone in our industry.

In the objective area of "Become the Partner of Choice", we expect to continue to improve cycle times and customer satisfaction through the strategic use of technological advancements and appropriate responses to customer needs. In satisfaction levels, we remain a leader in our industry. This gives us a strategic edge in knowing what our customers want. Our commitment to a digital workflow has already placed us ahead of most of our competitors – a lead we expect to continue enhancing.

In "Become the Employer of Choice", we will become the printing company of choice to work for. Our focus on this objective and the many activities we provide to support employees is very unusual in this industry.

Division Goal (Objective)	Strategy / Key Actions and QIPs	Measure
Continuously Improve Business Results through:		**ROA%**
	Strong financial performance	ROA%
	Improve controls for Credit and Collection Process	
	Partnership with our suppliers	Conformance %
	Continuously improve tracking performance	
	A process improvement focus	ISO Cert.
	CSI direct to plate system migration from conventional process	
	Further reduce paper spoilage	
	External validation feedback on operations for ongoing improvement	
	Improve the sample process	
	Automate bindery operations to reduce expenses	
Become the Partner of Choice for our Customers through:		**Weighted Sat.**
	Relationship development	% VA of sales
	Determine common customer information and activity communication	
	Improve customer introduction approach	
	Excellent execution to customer requirements	PONC%
	Improve process for getting supplied materials back to the customer	
	A targeted marketing plan	VA Growth %
	Creating a strong brand image	
Become the Employer of Choice through:		**% Agree**
	Industry leading compensation, benefit, and reward and recognition systems	Fair pay %
	Track market rates of pay and benefits	
	Improving training systems and growth opportunities	Effect. training %
	Improve employee training and career development tracking system	
	Enhance division training plans with aggregated performance appraisal	
	A caring, involved culture	Overall agree %
	Improve communications between departments and language barriers	
	Increase participation in OFI system and awareness	
	Restructure CSR activities for house accounts	
	Reduce back strain by adding lifts to folders	

Figure 2.2A – Summary of Key Action Plans and Measures in the Strategic Plan

We continue to exceed industry safety benchmarks. We provide competitive salaries and benefits and provide employees with strong involvement in the company and improvement of their work, and we annually survey our employees to listen to their perspective. These and other factors create low turnover, which provides a great advantage over competitors. Informal feedback data from potential candidates for employment and other industry networking confirms that we have created an environment for retaining top talent, essential for building and sustaining competitive advantage.

CUSTOMER and MARKET FOCUS

3.1 Customer and Market Knowledge
Our customer focus and commitment differentiates us as a company. The key element of this differentiation is that we focus our energies on identifying customers who can best be served by our capabilities and directions.

3.1a Customer and Market Knowledge
3.1a(1) Determine target customers and segments
A key characteristic of successful printers includes understanding of the specific business niche they would serve. With this in mind, we selected a very specific customer niche to which we are best suited to provide outstanding service. The core of this niche is our mission, which is to provide "*...expert solutions to publishers.*" To further define this niche, we focus on customers who want turnkey solutions through our wide range of services.

As a final breakdown of our niche, we have selected three primary product groups to serve: Magazines, Books, and Directories/Catalogs. Printed work that does not fall into these groups is considered commercial. Although our extensive capability generally allows us to profitably produce such work, it normally is only accepted to accommodate the broader needs of a customer to solidify the relationship, as a relationship starter for new customers, or as short-term filler during open capacity.

Customers of competitors are addressed when selecting these target groups based upon a determination of what groups are being underserved by these competitors and through periodic bid processes.

We identify and target specific customers within our market niche through a prospecting process that includes:

1) **Identify** suspects through research of lead sources including Chambers of Commerce, phone books, industry trade shows, Internet searches, association memberships/rosters, call-ins, referrals, and networking.

2) **Qualify** them by establishing fit with our capabilities based on their basic purposes, history, and demographics.

3) **Allocate** the resulting prospects to sales staff through our database where they are input into the sales process.

3.1a(2) Listen and learn from customers
Our niche calls for us to pursue and retain customers who require our product/services. We achieve this by offering value through competitive cost with excellent service and high quality. We listen and learn of these key customer requirements and importance through ongoing customer relationship activities, surveys, and buying behavior analysis. We have ongoing customer contact through our outside Sales representatives and our Customer Service Representatives (CSR). Outside Sales is responsible for initial contact, securing business, and ongoing pricing for customers. CSRs are made accessible to customers to maintain communication and relationships.

We hold regular meetings between a Division officer and key customers to listen and learn their requirements. Key product and service requirements and their importance are measured through our annual customer survey. This survey allows us to identify the key areas of concern for customers and asks them to rank satisfaction with our performance, the performance of our competitors, and the importance of those elements. Segmented results of the importance levels of these requirements are in *Figure 3.1A*.

One of our key measures is the overall customer-weighted satisfaction, which is computed based upon satisfaction levels weighted by these importance scores. This weighted result is the most essential indicator of customer satisfaction against competitors. To validate that the elements addressed are the most significant, customers also rate the survey in terms of how well the questions address their most important areas of satisfaction with us.

We also use this survey to poll customers concerning new or emerging issues and their importance. We have asked about the importance of CTP capability, electronic scanning and film output, sorting and bar-code mailing, and FTP capability. Through this mechanism we are able to detect and prepare for customers' changing needs.

Data relative to customer behavior, such as complaints, sales success, bid analyses, and lost customer reports are also used to determine the significance of actions and requirements on customer satisfaction. Our estimating and sales functions determine customer requirements

Attribute	Requirement	Importance (1-10)					
		All	Pubs	Book	Dir/C	CTP	Design
Product	Quality of product or service	9.6	9.7	10	9.0	9.6	9.3
Added Value	Ideas, information, knowledge	8.2	8.8	10	8.1	6.7	7.4
	Range of capabilities/products/services	8.3	8.6	10	7.7	7.6	7.7
	Clear and helpful quotes and proposals	8.7	8.7	10	8.0	8.8	6.4
	Clear and helpful invoices	7.9	7.9	9.3	7.3	7.4	7.0
Reliability	Shipments match orders and specs	9.3	9.2	10	8.7	9.6	8.0
	Meets deadlines (on-time delivery)	9.5	9.7	10	9.4	9.3	8.9
	Accurate invoice amounts	9.1	8.9	10	8.0	9.3	7.7
Responsiveness	Prompt quotes, estimates, proposals	8.8	8.5	10	8.4	9.2	7.4
	Prompt shipments	9.1	9.3	10	8.4	9.2	7.4
	Prompt problem solving	9.0	9.3	10	8.4	8.4	8.6
	Readily accessible people, information	9.2	9.3	10	8.7	9.2	9.0
Interpersonal	Understands customer's business	8.3	8.7	10	7.4	7.6	7.7
	Enthusiastic about customer's business	7.9	8.3	10	6.9	7.2	7.7
	Competent people	9.3	9.4	10	8.1	9.3	8.7
Market Interest or Performance	Changing & investing with chg needs	8.3	8.2	10	7.4	8.6	7.1
	Provides expert solutions to Publishers	7.7	7.7	10	7.5	6.5	7.7
Validation	Doing bus. w/Branch-Smith in 5-years	N/A	N/A	N/A	N/A	N/A	N/A
Overall	Reasonable pricing, charges	9.5	9.5	10	9.0	9.6	8.7

Figure 3.1A – Customer Requirements and Importance

through requests for estimates from customers and prospects, and the subsequent feedback we receive on competitive pricing. Using our PSI data, we produce weekly sales reports that measure number of estimates, orders entered, and orders billed. We determine our success rate of sales to estimates produced as a percentage. Verbal communication is used to learn from new and existing customers the reasons for not choosing us. This data is regularly aggregated and reviewed against measures in the Department Review for input to product or service features and customer directions.

3.1a(3) Keep listening and learning current
Our approach to listening and learning from our survey remains current by outsourcing the process to a third-party that specializes in customer surveys for the printing industry. This firm stays abreast of new and current survey methodologies and works closely with us to ensure all of our needs are addressed in the survey instrument.

We also have a relationship with a NAPL marketing consultant to assist us with a marketing plan to enhance our focus with current and prospective customers. This consultant is assisting our marketing effort with approaches and tools, information related to our "unique selling position," promotional and collateral materials, seminars and training, web page content, improvement recommendations in approaches, and integrating our customer database into marketing functions.

Peer group meetings with noncompetitive companies and industry and association management conferences, such as NAPL and PIA, also provide benchmarking opportunities for listening and learning approaches.

Approaches are also improved based on feedback from the TAPE and Baldrige feedback, and ISO site visits.

3.2 Customer Relationships and Satisfaction
Our Division Mission Statement focuses us on providing *"...expert solutions to publishers"* to help them be successful; and our Quality Policy and Division Objectives are focused toward customer partnership in all that we do. Customer success and satisfaction are focused, driving forces in our operations.

3.2a Customer Relationships
3.2a(1) Building relationships
We focus on building relationships in our product niche by providing customers personalized service that centers on a full-service approach to meet their product needs. The customer relationship process is primarily the responsibility of our CSRs, who are in almost daily contact with customers. However, the CSR is supported by a strong team, which includes Sales, Estimating, Department Supervisors, and the Quality Manager. Clear

specifications, close attention to details, the configuration of the organization around a product niche, and well-trained people help ensure strong customer satisfaction and long-term relationships. CSRs maintain a "Customer Plan" to assist them and any other employee in personalizing service to our larger customers.

When more technical help is required than can be handled by telephone, a CSR or support team member may visit the customer to discuss the issue. We encourage customers to become acquainted with our technical personnel and to contact them directly as necessary.

Customer relationships are enhanced and developed through visits to key customers. At least annually, a senior manager meets with the customer to assess their needs, satisfaction level, and ensure that we are aligned with their strategic goals and objectives. This allows us to become more focused on their changing environments and ensures that we remain aligned with them and their future purchase intentions. Our Sales personnel speak with every customer contact about the potential for referrals to new customers. This discussion is also generally used to determine customers' future purchase intentions and directions, which we use in our planning.

To provide progressive technical help, a customer newsletter is sent to former, current, and potential customers four times a year. This newsletter contains information beneficial to graphic design or production operators and offers a Help Desk email address. It is also used to share updates from the Division about company progress or new customer opportunities.

3.2a(2) Determine key customer contact requirements
Accessibility preferences and contact requirements are determined and analyzed through two methods. CSRs maintain a Customer Plan on our key customers to better understand customers' specific needs and expectations. Plans are ISO documents included in work instructions and contain general account background, service preferences, schedule information, and production notes. These plans document particular expectations for easy reference and enable other employees to assist in the absence of the CSR. Additional information on customer preferences is available through account histories located in our PSI system and through specific job tickets.

Our customer survey also includes specific questions that address the importance of interpersonal, accessibility, and knowledge factors and our performance in those areas.

We provide direct telephone numbers to customers so that appropriate personnel may be contacted without going through a switchboard. For those outside our area, a toll-free number is provided with access to the same

extensions. Voice mail provides a convenient means to leave messages or, where urgent, the operator may be reached to locate the person desired. Email and web exchanges are also routine methods of access.

CSRs are instructed to respond to email and voicemail requests within two to four hours. For vacations, illnesses, or other out-of-office events, customers are notified of alternate contacts, and email and voicemail is rerouted or checked periodically during the absence.

Expectations for customer contact are deployed primarily through detailed job descriptions, work instructions, and review of customer survey feedback. Performance to these expectations is tracked through annual performance evaluations against Division Objectives and individuals' goals. Measures to goals include CSR price of non-conformance (PONC), increase value-added percent, number of customer complaints, and customer survey scores in the area of on-time delivery, estimate response times, communication, and customer service levels.

3.2a(3) Complaint management
The CSR or Sales Rep normally are the first to receive customer complaints and are responsible for providing resolution options to the customer within 48 hours. Resolutions include an explanation of the problem and rework or credit options, as appropriate. The CSR or Sales Rep is also responsible to record the complaint and deliver it and any necessary materials to the Quality Manager. The Quality Manager records the complaint information in the QID and includes the date, job and customer, PONC code, rework performed and/or credit issued, and the date we responded. The Quality Manager then determines the department responsible for determination of the cause. If it is a procedural failure in the work instructions, a meeting is held with that individual or group to review the work instructions and possibly conduct retraining. If the cause falls outside the work instructions, they are reviewed and modified.

During the weekly MR meeting, we ensure that we have adequately responded to each complaint and directly to the customer. Monthly reports aggregate complaints by number of occurrences to the corresponding internal failure cost to arrive at the overall cost by PONC code.

3.2a(4) Keep relationship approach current
Approaches to customer relationship building are evaluated and improved through a variety of formal and informal activities. Customer surveys are our primary method of evaluating our approaches. Questions are specifically directed to understand the importance and satisfaction of customers with our relationship building approaches, such as accessibility, understanding their business, and prompt problem solving.

As with our listening and learning approaches, we also have significant opportunities to benchmark relationship building approaches through peer groups, conferences, and networking. These inputs are used to develop action plans for improvements. Approaches are also improved based on TAPE and Baldrige feedback, ISO site visits, and discussions with our marketing consultant.

3.2b Customer Satisfaction Determination
3.2b(1) Determine customer satisfaction
Our primary formal method of determining customer satisfaction and dissatisfaction is an externally administered annual survey. We use a firm that specializes in customer satisfaction determination within the graphic arts industry to administer this survey, which we use to find out customer perceptions of our performance. Customers rate us on a ten-point scale on a series of questions, including an importance rating, concerning satisfaction with our performance and satisfaction with our competitor or the customer's best perceived alternative. After each survey, the President sends a letter to the customers describing our progress and plans in response to their input.

In the survey, we segment our customers by market to determine differences and various needs in each market. Responses are compared with certain industry profiles suggested by our survey company. We also segment our customers into "full range" or "core range" use. Our niche customers use our "full range" of services including page design, image scanning, outputting to CTP, printing, binding, and mailing. Some customers use only our "core range" of capabilities, including outputting to CTP, printing, and binding. This segmentation allows us to analyze satisfaction, strengths, and weaknesses in both the "full" and "core" services with input by the entire group.

Results are used to spot proficiencies or deficiencies and are also useful in "market interest" or "performance validation" areas. Our survey firm provides us competitive comparisons with companies that our customers identified as competitors and also comparisons to their entire base, which represents a large collection of progressive printing companies. Survey results are used immediately as input into our management reviews to identify areas in need of improvement. Survey results are also a key input into our annual SPP to identity areas of strength and weakness to be addressed at a strategic level.

Our most rapid and frequent determination of customer satisfaction or dissatisfaction comes through ongoing feedback to our CSRs and Sales Reps. Due to their close and continuing relationships, prompt and actionable feedback from customers is a daily experience. Concerns related to specific quality or service issues are brought into the appropriate process rapidly through customer complaints entered into the QID, thus preventing

repetitive problems and helping us establish optimal processes for all customers. Complaints are aggregated in our QID for analysis during regular reviews.

Our daily production scheduling meeting spreads communication to each department and gathers feedback about how to balance immediate needs for overall customer satisfaction. On-time delivery and quality measures are customer satisfaction indicators and aggregated in the QID. This is used during management reviews to determine appropriate actions.

We also track win/loss percent as it relates to projects estimated through the weekly sales reports generated from PSI. We track lost customers through a report describing reason for loss. Both reports can be broken down by product segments, sales representative, and customer to further identify trends and market direction. We track customers' buying levels and behavior as an indicator of potential future business.

Several less formal, yet valuable sources of satisfaction attribute determination are: one-on-one discussions, feedback to customer contact personnel, discussions at conferences, annual meetings with our top customers, input from suppliers, referrals, and other similar sources.

3.2b(2) Follow-up with customers
CSR and Sales Representatives are responsible for immediate follow up after completion and delivery of a job. This includes determination of whether we met expectations of timeliness, service, and quality. Because many of our products are received via mail service or truck, a follow-up is conducted after delivery to include delayed understanding of unmet expectations once their customers receive the product.

3.2b(3) Comparative satisfaction
Satisfaction relative to competitors and other perceived options is gathered through our customer survey. For each area of requirement, customers rate our performance and the performance of our competitors.

An additional indicator of competitive performance is the verbal feedback we receive from customers, prospects, suppliers, and new hires. Our ongoing contact with customers and prospects allow for direct input to our performance in many categories. CSRs and Sales Reps share this information through regularly scheduled meetings such as monthly Sales or CSR meetings.

Suppliers provide comparisons relative to raw material order levels our competition is requiring. New hires and interviewees also provide informal input to gather useful comparisons of changes, weaknesses, and volume levels.

3.2b(4) Keep customer satisfaction approaches current
Keeping approaches to customer satisfaction current is a function of aggregating and acting on several inputs. These inputs include, but are not limited to, the customer survey, annual relationship meetings, information from our marketing consultant, biannually updated customer plans, our complaint management system, and almost daily ongoing customer contact by CSRs and Sales. We also use evaluation of Division-level measures as a key indicator of customer approach success, such as increasing revenue, win/loss percent, or decreasing PONC. These measures provide us leading indicators of customer relationship issues or company issues that could affect customer satisfaction. Another important source is our ongoing benchmarking with peer groups, industry associations, various external improvement groups, and regular external evaluation by TAPE, the Baldrige program, and ISO audits.

INFORMATION and ANALYSIS

4.1 Measurement and Analysis of Performance
Key drivers for success in our business are reflected in our Division Objectives. This involves profit and market, performance system, customer, and employee measures and goals. Data is selected and managed in order to provide status toward the achievement of these goals. *Figure 4.1A* shows the Information and Analysis Process and its relationship with strategic planning and the QIP.

4.1a Performance Measurement
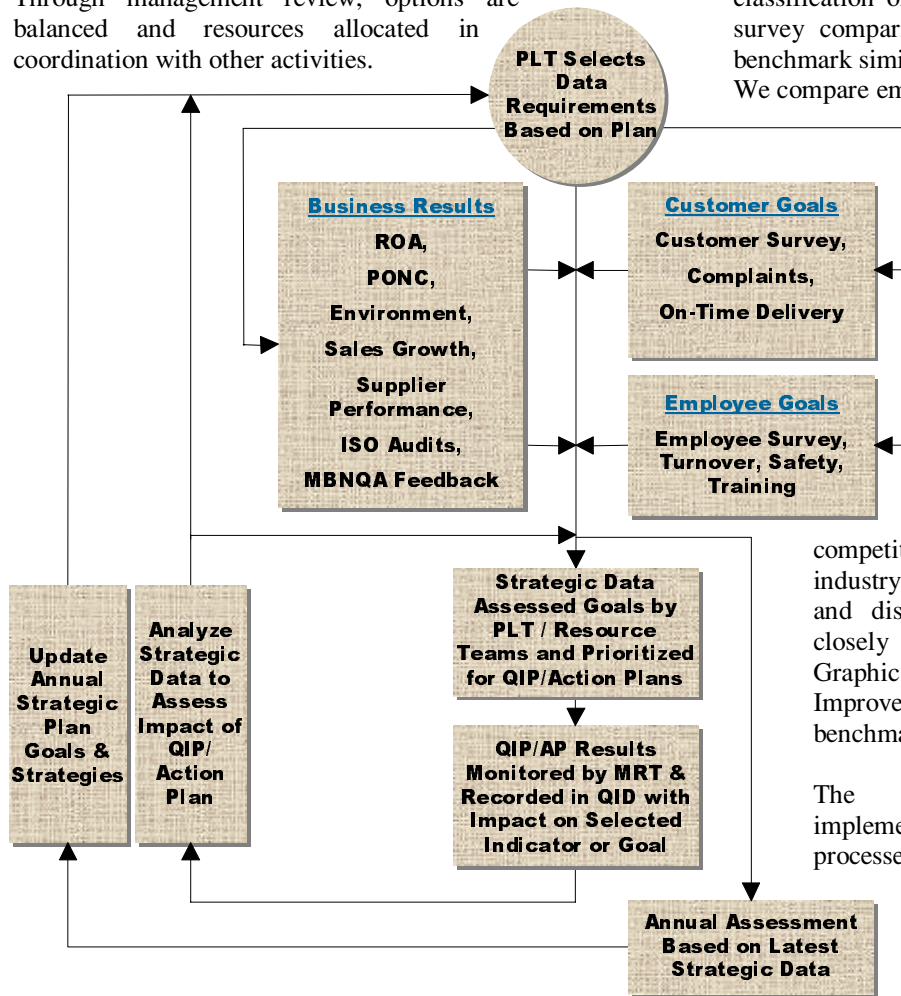### 4.1a(1) Support decision making
Information management for our manufacturing operations is critical to providing excellent customer service at the lowest cost. Operations are facilitated through printing management software (PSI) designed to capture shop floor data throughout the day for process management and productivity analysis reports. Time and material for jobs are estimated in the system to design the electronic job plans to manage workflow. As employees do their work, they enter the process being performed, the quantity produced, the materials used, and whether it is customer-chargeable, PONC, or other non-chargeable activity. The integration of our measurement systems ensures that job information flows directly into invoicing, inventory management, and financial systems for cost tracking by job, customer, and cost center. Utilization by cost center and productivity by process are aggregated and analyzed during the Leadership Accountability reviews to identify improvement opportunities.

Productivity and other customer and employee data are tracked using our QID. *Figure 4.1B* shows the types of data housed in this database, which is used in ongoing reviews. Customer surveys, ISO 9000:2000 internal and

registrar audits, and the TAPE and Baldrige feedback reports provide external sources of data, which may be entered into the QID for tracking or used for analysis purposes. The data is entered prior to department and divisional review. The QID system automatically aggregates this data in a format for making decisions and evaluating improvement options.

All improvement options are evaluated based on cost/benefit analyses as appropriate to the project. Types of analysis are taught to every employee during quality training to allow them to participate in QIP activities. Through management review, options are balanced and resources allocated in coordination with other activities.

At the daily operational level, departments and functions establish plans and measures to support organizational direction. This ensures operational tracking is aligned between groups and to the Division for decision making.

4.1a(3) Select and use comparative
We select comparative data as a part of the annual assessment in the SPP. For all available critical measures, we identify data and sources to compare ourselves to others of our size in our industry as well as external "best-in-class" sources. We use the PIA Financial Ratio Studies for average and "profit leaders" comparative data by classification of product or process. We use customer survey comparisons from our survey administrator to benchmark similar manufacturers and overall participants. We compare employee satisfaction to industry association statistics, Texas Worker's Compensation safety modifiers, and our Quality Roundtable participants.

We use a "plan, do, check, act" approach to benchmarking processes and approaches. We "plan" by identifying targeted groups of companies who perform similar processes and have outstanding performance. We are members in The Peer Group, a set of progressive companies that are active in the NAPL, and its Best Managed Printing Company competition. We meet three times a year with our industry peers to share key industry best practices and discuss confidential matters important to closely held businesses. We attend the annual Graphic Arts Technical Foundation Continuous Improvement Conference to network and benchmark with other printers.

The "do" phase involves discussing implementation issues and analysis of our own processes to identify required changes. Action plans or QIPs carry out the necessary changes. The "check" activity involves tracking actions to ensure performance attains expected levels. The "act" phase is regular process tuning based on results.

Figure 4.1A – Information and Analysis Process

4.1a(2) Select & align measures
Key data used for organization decision-making (*Figure 4.1B*) support key performance indicators for the Division for each strategy and action plan. These were selected to ensure complete review of organizational performance to areas of greatest importance. Measures are selected during our SPP to provide appropriate information for decision-making and tracking accomplishment of directions.

The Quality Roundtable consists of various local companies that share training and discussions of issues and approaches. One member is a past Baldrige recipient and source of our benchmark for customer complaints and on-time delivery. Others include past Baldrige recipients as well as several TAPE recipients. These award-winning companies provide a broad base of "best-in-class" organizations with which we benchmark practices. We

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Figure 4.1B – Quality Information Database

Source Types
- **ISO – ISO 9001**
- **OTD – On-time Delivery**
- **COM – Customer Complaint**
- **PIA – PIA Financial Ratios**
- **PONC – Price of Non-conformance**
- **SUP – Supplier**
- **CSV – Customer Survey**
- **ESV – Employee Survey**
- **INC – Internal Non-conformance**
- **OFI – Opportunity for Improvement**
- **REC – Recognition Data**

on QIPs/APs or process improvements, corresponding updates are made to ISO documents and the measurement system.

4.1b Performance Analysis
4.1b(1) Analyses to support review & planning
The SPP is our annual review and analysis of performance for planning. Trend analysis, employee and customer survey analysis, and SWOT analysis are our primary approaches to analysis. This information is aggregated into charts for review prior to the November review in preparation for strategic planning and again during the planning process for purposes of goal setting.

Senior leaders and Accounting prepare a monthly analysis of key financial indicators for review in the Plan Review Team (PRT) meetings. Results are compared against previous years, current goals, and budget forecasts.

4.1b(2) Communicate results of analysis
Results from each management review are posted for all employees. Department-specific analysis results are communicated each month through posting of the "Resource Performance Charts" in all functional areas. Employees use these for information, evaluation, and improvement of processes. These charts include the department or group goals, performance levels, and the relationship of goals to Division strategies.

Production supervisors meet weekly with individuals to review performance results from the previous week. Non-production employees meet individually with supervisors either weekly or monthly to review results or progress on their measures and QIPs/APs.

4.1b(3) Align results of analysis with direction
The use of our strategic priorities and directions as the foundation of measurement selection at all levels ensures alignment occurs throughout the organization. Analysis of those measures provides a focused view of our performance to those areas important to our success.

The results of these regular trend analyses, taken together with planned activities and anticipated environmental influences provide a basis for projections of performance. Linear progressions are used as a foundation for the projection with adaptations made based on plans.

4.2 Information Management
Information availability, accuracy, and reliability are central to empowering our employees by having access to information needed to do their jobs and meet customers' needs and expectations.

also talk with suppliers about trends in the industry, pricing forecasts, competitor news, and new products.

We use comparative data in our SPP to set stretch targets for improvement. We ensure effectiveness of that data through MR meetings. Ineffective data is identified and we either seek new sources or remove that comparison.

4.1a(4) Measurement system kept current
Evaluation and improvement of organization performance measurements occur during our SPP. At a more detailed level, whenever changes are required to processes based

4.2a Data Availability
4.2a(1) Data and information availability

With the fully integrated PSI system, employees have immediate access to job ticket information. Supervisors have access to the QID and can update data and run reports as needed. Computers provide access to email for transferring or communicating information. Divisional and departmental performance information is displayed on bulletin boards and discussed in monthly meetings.

Sales, CSRs, and supervisors use GoldMine software for customer relationship management. Information on customers and communications is tracked, along with data on suppliers and competitors. It is also used for all email, calendars, notes, scheduling appointments, and keeps important customer information available to everyone.

Suppliers, partners, and customers are provided information such as quotes, work orders, non-conforming performance, purchase orders, or delivery schedules by phone, email, and fax according to work procedures and depending on their needs, preferences, and requirements.

We hold annual Supplier/Partner Appreciation Luncheons to thank suppliers, communicate overall performance measures for the company and their performance, and to communicate our goals and objectives. Discussions provide the opportunity to strengthen relationships.

4.2a(2) Data and information integrity & reliability

To ensure production data and information integrity and reliability, shop floor data collection information goes through a four-step manual process. Daily production information is 1) input, inspected, and approved by the employee, 2) reviewed and edited by their supervisor, 3) verified by accounting personnel, and 4) inspected by the Quality Manager before the PSI end of month closing. Feedback on its accuracy flows from the supervisor to the employee, the accounting personnel to the supervisor, and the Quality Manager to the accounting assistant.

During regular reviews of financial results by the President, VP/GM, and the Accounting Manager, areas above or below normal ranges are investigated to ensure accuracy of financial statements. Information such as our ISO documentation is protected by folder lockouts and controlled by the Quality Manager. Password protection ensures internal security and confidentiality of data.

Externally, to ensure security of data and information, firewall software protects us from interference or data corruption. PSI and GoldMine have additional access security levels. We maintain current virus checking software on all systems and run nightly incremental backups and full backups weekly, which are stored off site to further assure data security.

4.2a(3) Data mechanisms kept current

Data and information availability approaches are kept current by ongoing input and requests from users of the data and QIP activities. Benchmarking with Peer Group members, trade shows, conference networking, and review of trade publications help us keep current with approaches for ensuring appropriate availability and security. Through partnership with PSI and the development of user-friendly systems, we ensure that access and reliability are addressed quickly in our environment to meet our changing needs.

The ITS manager is involved with technical support groups and receives information about viruses, upgrades, and enhancements to machine and network performance for proactive management of our systems.

4.2b Hardware and Software Quality
4.2b(1) Reliability and user friendly

System reliability is maintained through the ITS Division, which provides all backups and other maintenance services on a work order basis through internal charge-back. ITS improvement needs are assessed in the weekly ITS Team meeting, made up of our Division's VP/GM, the Information Group President, and the MIS Manager, who heads ITS. The team establishes priorities and integrates divisional needs with the capabilities of ITS.

Partnering with PSI allows us to address software integrity, reliability, and user-friendliness issues with rapid software updates and corrections when necessary. Improvement ideas are submitted to PSI when identified and we get quarterly updates on their status.

Server uptime is protected with redundant power supplies and hard drives. Two servers have two identical mirrored drives so that if a device on the primary fails, we can remove one of the drives and install it in the sister machine, and have the server operating again in just minutes. In 2001, the server had a 99.67% uptime; with most of the downtime for scheduled upgrades.

4.2b(2) Systems kept current

As with our approaches to keep data management systems current, we keep software and hardware systems current through research with industry and vendor options, partnerships with our hardware and software suppliers, and benchmarking with other organizations.

New technologies, system performance, software upgrades and other performance issues are reviewed weekly by ITS and our VP/GM. Through monthly random performance checks, ITS is able to predict server expansion requirements and upgrade before needed.

HUMAN RESOURCE FOCUS

5.1 Work Systems

Our organization is committed to becoming the employer of choice through providing a safe, growth-focused environment for our employees. Our approach to work design is based on the belief that each employee must be well trained, fully informed, and know the expectations for their individual job performance.

5.1a Work Systems
5.1a(1) Organize and manage work and jobs

Each department, team, or functional position has its own mission statement that describes its role in fulfilling the Division mission. Thus, each employee has a sense of accountability and feeling of contribution to our success. We have no "quality inspector" to approve work produced. Instead, each employee is responsible for his or her output and understands job responsibilities through clearly defined job descriptions and ISO documentation.

Employees who perform the tasks document all processes to ensure ownership and commitment to following the work instructions. We created process maps for departments and major processes in preparation for our ISO 9000:2000 certification achieved March 2002. The work system is designed through work instructions that include key interfaces to ensure cooperation and communication between functions. Work instructions are not simply a system/process documentation approach – they direct and manage all process performance.

Production employees are organized into functional area departments including Art, PrePress, Press, Bindery, and Fulfillment. Employees are cross trained to perform multiple processes across multiple functions to give us flexibility in responding to business needs and to improve efficiency and effectiveness through better understanding.

QIP activities offer employees the opportunity to contribute within a team. Problem solving teams are formed within and across departments based upon the problem statement and subject matter. Employees can be involved in QIP activities once they have completed quality training. Departmental QIP activities and training by the Quality Manager reinforce skills. Solutions reached by QIP activities are incorporated into work instructions and process maps. Innovation, creativity, and above and beyond support of others are recognized.

Our monthly Division meeting is used to facilitate communication between departments and share knowledge, skills, status of the company, financial reports, new customers, technology advances, new equipment, HR training events, quality related activities,

and to introduce new employees. After these meetings, departmental meetings are held to review their mission, goals, QIP, action plans, and performance. This improves communication between department leaders and employees and provides time to conduct QIP activities and recurring training.

5.1a(2) Motivate employees to develop

Our primary method of motivating employees to develop is through our performance appraisal approach. Employees and their supervisors discuss current performance, training plans, and career goals that include future leadership opportunities and skill development.

Opportunities for job specific training to improve or gain new skills are available through internal cross training, external industry associations, and area vendors. Educational assistance is available to employees working towards a degree at an accredited education institution to obtain career-related objectives. To increase participation in our educational assistance program, we increased the number of allowable hours and provide prepaid tuition.

All open positions are initially posted in-house to provide employees the opportunity to express their interest and openly discuss advancement opportunities.

5.1a(3) Performance management system

All employees participate with their supervisors in annual performance appraisals and quarterly "report cards" to evaluate progress. The foundation of the performance evaluation is based upon an employee's performance in areas important to the company (department goals and Division Objectives) and to their personal goals. This ensures employees are aligned to the directions of the company and maintain focus on key stakeholders. During the evaluation, the employee and supervisor jointly develop a training plan and adjust the employee's goals.

Our competitive approach to compensation based upon market standards ensures that compensation supports high performance to company directions.

Our bonus plan is tied to a Return on Value-Added Sales. The bonus pays an equal share to each employee with relative multipliers for leadership levels and alignment to key goals of the company. The bonus plan was initiated at the same time that "open book" management was introduced to involve employees, communicate the impact of improvement, and share results.

We also support high performance through various recognition approaches. Our "Caught in the Act" award recognizes co-workers who go above and beyond their usual job duties to help another employee or prevent errors. Special events, bulletin boards, and our newsletter

provide venues for recognizing employees and teams for other accomplishments. Our OFI program rewards individuals who contribute ideas to reduce costs, improve quality or reliability, improve customer service, improve processes, increase customer or employee satisfaction, or save money. We recognize our employees' long-term commitment by presenting service awards of increasing value on one and then five-year anniversary increments.

Validation from our employee survey shows that the most important and effective recognition approach is through informal "pats-on-the-back" from leaders for a job well done. To encourage this, supervisors have budgets for recognition of their employees, as they deem appropriate.

Regular improvements are made to the reward and recognition approaches based on input from the employee survey and benchmarking of other organizations. These improvements are addressed through our SPP and QIPs.

5.1a(4) Succession planning
The Branch family members provide leadership as a Board of Directors that oversees ownership and culture alignment for the company. They recently used consultants in the area of family-owned business planning in an effort to create a process for providing an appropriate level of education and identify criteria required for future involvement.

We are concerned with opportunity and professional growth of all employees. We focus on both internal development of employees and attracting capable management personnel to assure our strong future. By establishing key skills, abilities, and education of our current leadership team, we are able to design specific leadership training plans. We identify potential future leaders internally through the performance appraisal process. The HRM reviews each employee's completed appraisal to assure congruence with his or her career goals, performance, and training plans. As a key development approach, many future leaders are promoted to key support roles where they are mentored and share in responsibilities of leading their department.

5.1a(5) Recruit, hire, and retain employees
We use written job descriptions to specify the set of skills required to perform the job. Sources of recruitment for open positions include internal job postings, newspaper ads, referrals, educational institutions, and industry association job postings. Jobs are posted internally to allow employees to be considered for open positions. Candidates are screened with a set of questions designed to assess their skills to perform the job functions as defined in the job descriptions. We use behavior-based questions to assess whether they have the characteristics to excel in our team-based, quality-focused environment.

Two additional assessments are given to candidates who meet the first criteria. One is a pre-employment screening tool for assessing the attitudes of job candidates regarding integrity, responsibility, and work ethic. The second uses advanced technology to predict job suitability and matches people with the job for which they are applying.

Employee retention begins the first day on the job. New hires attend New Employee Orientation that offers an overview of the company structure, culture, policies, quality tools and approaches, job performance requirements, and safety training. We provide an interpreter during the New Employee Orientation to relay the information in other languages and answer questions. Interpreters also review documents such as employment policies, work instructions, and the employee survey.

An initial training plan is developed using an Employee Qualification Statement filled out by new employees and their supervisor to identify gaps in skills and education. To ensure employees are an appropriate fit both functionally and culturally, we closely evaluate their performance over the first 90 days.

Retention efforts include a balance of equitable compensation, recognition, and learning opportunities that link employee performance and company success. Our team-based approach to quality improvement is designed to foster loyalty by capitalizing on the unique experiences and talents of our diverse workforce.

5.2 Employee Education, Training, and Development
Our training approach consists of seven training elements:
1) New Employee Orientation, including job-specific introduction to safety and ISO work instructions.
2) Division-wide annual safety training.
3) Specific Career Training with required training events to facilitate acquisition of the skills needed to excel in one's job and to meet organizational goals.
4) QT for new employees along with involvement in QIP teams and departmental QIP activities.
5) Monthly departmental meetings with focus on issues related to new or revised ISO work instructions, broad safety issues, or new equipment or software training.
6) Indirect Career Training to prepare for a more challenging role (includes leadership training).
7) Degree Plan Educational Assistance to encourage employees to pursue formal education.

5.2a Employee Education, Training, and Development
5.2a(1) Education and training support organization
At the higher strategic level, needed skills and abilities for the company to achieve its goals are identified through the SPP. The printing industry is moving rapidly into the

digital world, which has created a need for an employee base skilled in computer technology and software. To fill these technical positions, we focus training efforts to assist employees who have extensive knowledge of our customer base and business style. To support our movement toward rapid growth, we also focus considerable energy on development and training to increase leadership capability and responsibility in all employees. To support our aggressive growth plans, consistent training approaches are defined for integration of new employees into their jobs and our culture.

Management reviews actions plans and aids resource leaders in determining when additional training may be required to accomplish goals and objectives. Our HRM creates annual training plans for the Division to meet our current business needs and support future directions. This is used to create and track each employee's educational events. We evaluate short- and long-term employee needs at monthly QRT meetings and quarterly meetings with senior leadership. Plans are adjusted as required.

More specific employee training plan needs come from the performance appraisal process or the Employee Qualification Statement filled out by new employees. At least two training events are assigned for meeting or exceeding Division goal objectives, thus linking individual performance goals to the success of the company. Additional training is incorporated when QIP action plans result in a change to workflow or equipment.

5.2a(2) Input on training and delivery
The primary means for employees and their supervisors to provide input on education and training needs is through the performance appraisal process when a training plan is developed. Other approaches to gain employee input on training needs is through their weekly individual reviews, scores on the adequacy of training opportunities on the employee survey, and the resulting focus group meetings.

5.2a(3) Training for key organizational needs
Key development and training needs are defined to ensure all areas important to our success are identified and addressed. Industry resources such as "peer" groups and associations assist in projecting the future of the printing business. As changes are projected, we research department needs to meet these challenges and review our strategic plan to accommodate the training required.

Internal and external trainers conduct a variety of training events for management and leadership development. These include employment law updates, proper documentation of counseling, effective communication, and leadership development. A significant source of training for leaders is gained through attendance at conferences, seminars, or involvement in associations.

New Employee Orientation is designed to provide a comfortable transition to our climate, our priorities, and the work a new employee will be performing. The orientation includes safety and hazardous chemical training, a review of the safety manual that lists policies and standards for each level of employee, and the procedures to be followed to maintain a safe environment.

Performance measurement and improvement training is addressed through mandatory training for all employees in our QT and in ISO work instructions and process map training. The QT focuses on empowering employees to solve problems, change ineffective processes, and stop production processes when quality is in question.

All employees are instructed on the fundamentals of effective communication and diversity training. To support our specific diverse workforce, we offer English as a Second Language to improve communications. Equal opportunity through job postings and language translations for training enable us to communicate effectively to capitalize on the value of diversity.

5.2a(4) Deliver education and training
Training delivery options are determined as training plans are developed. In-house training includes various facilitator-led courses delivered by classroom, demonstration, and hands-on approaches when new equipment is installed or as a part of service agreements. Lecture, on-the-job-training, and hands-on approaches are provided for ISO work instructions, skills training in manufacturing processes, basic safety, and specific training such as forklift safety.

We contract with local computer training suppliers and use some video-based training to fulfill our software training needs. For general study, the HRM keeps a library of books and tapes on a variety of quality, management, leadership, and personal enrichment topics.

Training and other time spent on quality related efforts are recorded through our PSI data collection software and in the QID. Quarterly, the HRM meets with the QRT to report on training effectiveness. The sources for evaluation include PONC, customer complaints, accidents, employee performance, INCs, and survey results. During the weekly supervisor/employee meeting, production goals are assessed in the context of training completed to evaluate short-term improvements and success. This is also reviewed for the longer-term results at the next annual performance appraisal. At the Division level, annual reports of organizational performance and training results are reviewed by the HRM and during the SPP to analyze training effectiveness.

5.2a(5) Reinforce knowledge and skills

Training is reinforced through inclusion of new approaches in ISO documentation, enabling internal and external audits to reinforce behaviors. Training is also reinforced through the monthly review of performance charts. Supervisors provide individual attention to support employees through weekly individual reviews, Quarterly "Report Cards", and annual performance appraisal meetings. Department reviews of QIP activities help reinforce quality tool utilization. Quality skills are additionally reinforced through teams and departmental improvement activities.

5.3 Employee Well-Being and Satisfaction

In keeping with our Division Objective, "To Become the Employer of Choice," satisfaction, safety, and health are important performance improvement factors. We maintain goals in these areas deployed through HR APs.

5.3a Work Environment

To provide a safe and healthy work environment, we utilize safety consultants, OSHCON, and our Safety Committee to continually strive for improvement. We perform inspections of our facilities and safety programs to identify deficiencies. Safety issues include industry related OSHA regulations for printers such as lock-out/tag-out, machine guarding, personal protective equipment, hazard communications, emergency procedures, and driving of industrial trucks. Our goal in all of these areas is 100% compliance and zero accidents.

Policies described within our employee manual outline rules for safety. These are based on types of positions and work environment, such as job-specific procedures for lock-out/tag-out and forklift safety. General safety rules and our evacuation plan are also included, as are our requirements for new hire drug screening and drug and alcohol testing following an injury or accident on the job.

Supervisors assess their department to determine if potential hazards exist that would require use of Personal Protective Equipment (PPE). Each employee receives PPE training that coordinates with his or her work. Our Safety Coordinator (SC) works with the HRM to facilitate our Safety Program and related training. The SC and a safety committee establish goals and objectives for employee safety and health. Members of the safety committee conduct quarterly safety and health self-inspections for the entire facility. A comprehensive inspection checklist is used to perform inspections and is evaluated and updated with hazards identified during the inspections. The inspection report is used in trend analysis and record keeping. By maintaining effective record keeping, we identify trends and deficiencies in our safety program.

When these inspections reveal a need for training or a change in work instructions, the team recommends these changes to the QRT. Employees are also encouraged to complete a Safety Hazard Concern and Correction form if they identify an area that needs attention. The follow-up is completed and reviewed in the monthly Division or department meetings, with appropriate training.

Our workers' compensation insurance carrier provides a comprehensive safety and health audit on an annual basis, with a specific emphasis on ergonomics. These audits identify existing and potential hazards and non-compliance issues. The findings and recommendations for corrective actions are discussed with the HRM.

5.3b Employee Support and Satisfaction
5.3b(1) Well-being, satisfaction & motivation factors

Factors affecting employee satisfaction were originally determined through benchmarking with other quality-oriented companies through our quality peer group. Over time, open-ended questions and focus group results following annual employee surveys have led the PLT to select indicators for satisfaction measurements that are based on areas of key concern by employees. In 2001, we added an importance ranking by question to our annual employee survey to allow employees to identify key areas of concern. We also added the ability to collect demographic data, allowing us to analyze importance and satisfaction by diverse category of employee.

Importance of work factors to employee satisfaction is also determined through numerous meetings and communications. We emphasize our "open door" policy in orientations and monthly meetings to give employees the opportunity to speak with their supervisors, managers, or HRM about any issue. The HRM is a resource for problem solving and general policy guidance. Monthly Division meetings are used to share information pertaining to new opportunities for company and individual growth as well as a "report card" on how the company is doing. A question and answer session gives employees the opportunity to express opinions about what is important to them. They also make suggestions through our OFI program, which is an additional opportunity for input on the importance of issues in improving the environment and satisfaction.

5.3b(2) Company support of employees

We support our employees' satisfaction through many benefits and services. We have a strong benefit program by sharing in the cost of the health insurance premiums and by offering short-term disability, life, and dental insurance. We encourage participation in physical fitness activities by sharing 50% of membership dues to the YMCA. We offer a flexible spending account that creates a tax-advantaged way to assist employees with benefits.

Our 401(k) plan has an on-line service for employees to view their account balance, make changes in their investment options, and gain access to fund performance reports. In response to our employee survey, the plan is documented in English and Spanish. Another important benefit is our "open book" management approach, which gives employees a sense of ownership and allows them see how their work affects the bottom line.

Our benefits are regularly evaluated and improved through input from the employee survey and the annual PIA benefit survey, which allow us to benchmark to others in our industry. The HRM works with employee volunteers to review our benefits and make recommendations for health insurance, short-term disability, and our life insurance programs, all in the best interests of our diverse workforce.

Our annual United Way campaign provides a way for employees to participate in community activities with the option of visiting an agency or participating in projects to support community efforts. A team of employee volunteers arranges an event to educate and encourage employee support of our community. Materials are provided in English and Spanish.

The primary objective of our newsletter is to improve communication by covering information about our service to external and internal customers, safety training, benefit utilization, and departmental spotlights. We also use our quarterly newsletter to recognize employees on a personal level, celebrating such things as the birth of child or grandchild, graduations, awards, or special trips.

Amenities enhance the satisfaction of employees such as free parking, free coffee, an attractive lunchroom, and a landscaped patio to enjoy during breaks. Other special opportunities involve several celebrations and a holiday luncheon that includes family members. Our quarterly corporate meetings involve recreation and teamwork through random grouping of trivia teams to develop rapport among employees and management. Prizes provide recognition and satisfaction among the group. Teams of volunteers from both divisions work with the HRM to plan and orchestrate the quarterly meetings with communication and satisfaction as key goals.

To support our diverse workforce, we provide training in work instructions through interpreters in each department. We provide safety instruction in Spanish. We have also initiated an English as a Second Language course. Due to different national holidays and traditions in our workforce, we accommodate our employees in allowing them to use their vacation or have additional time off to celebrate or be with their families. This flexibility increases our employees' satisfaction.

5.3b(3) Satisfaction assessment methods
Our primary formal method of determining employee satisfaction is through our employee satisfaction survey. The survey addresses communication, management, customer focus, quality, job responsibility and training, procedures and processes, teamwork, and overall satisfaction. Employees rate their agreement with 50 statements in these categories as Strongly Agree, Agree, Disagree, or Strongly Disagree. Statement ratings of less than 60% agreement are given particular focus for improvement. Results are broken out by department to provide feedback to specific supervisors and to senior management for their performance. This provides upward feedback to leaders in conjunction with their normal performance evaluation. The data is shared with all employees in department and Division meetings.

Demographic information is gathered as part of the survey to determine well-being and satisfaction among our diverse workforce and to ensure no major gaps between ethnic, age, gender, or tenure groups exist. Employees also rate the importance of each issue to determine level of concerns. Focus groups, which allow employees to express concerns, ask questions, or make suggestions, provide more specific responses about problem areas. Results are used to create QIPs and as input into the SPP.

The second major approach to determine employee satisfaction is voluntary employee turnover. Reducing turnover is a Division goal and is measured for each department. Our established goal is reducing voluntary turnover to 10%, which is below the average of the Fortune 100 Best Places to Work for in America. Employees that leave voluntarily are given exit interviews to provide feedback in job satisfaction and dissatisfaction.

Monthly Division meetings are an open forum to express specific concerns as well as our "open door" style of management. Concerns that affect all employees are reviewed in the monthly CLT meeting. Concerns that affect the Division are reviewed in the monthly PLT. QIPs are used to review and follow up on areas necessary.

5.3b(4) Assessment finding relative to business results
Through analysis of cause and affect of the relationship between customer satisfaction, employee satisfaction, and business results, we determine key priorities for improvement as part of our SPP. Positive results from the customer survey reveal quality products and services from our employees, indicative of a highly satisfied and well-trained, empowered employee base. Customer satisfaction results show that commitment to employee satisfaction and training affects customer satisfaction directly. Our employee survey results continue to indicate that our employees know who their customers are and understand goals for meeting their needs.

A training plan is developed for each employee to improve skills and grow within the company. This plan, along with reduced turnover and increased satisfaction, is related to the positive growth in Value Added Sales, etc.

Several important QIP improvements have impacted our bottom line. Due to low scores in communication on the 1999 employee survey, a QIP implemented a solution that involved better department schedules, monthly department meetings, and bulletin boards tracking performance and goals. Better communication has helped reduce PONC and brought satisfaction to employees by connecting them personally to our goals. QIP teams continue to enhance our quality focus and improve our processes, hence creating the business results desired.

Our most compelling evidence of effectiveness of our HR approach is the impact of our appraisal and training method on employee satisfaction and productivity. In early 2001, we implemented our full system of roll-up reviews, linking individual employee performance goals to the goals for their work group, department, and the Division. The employee establishes performance goals in his/her annual review activity along with required training for the year. Performance to those goals is reviewed weekly and adjustments are made to the training plan. Aggregate results are reviewed quarterly as a department. Roll-ups continue through the organization on these measures. Results of satisfaction scores in many areas reflect the improved satisfaction of employees with their work as a result of the improved communication with supervisors, and satisfaction with training and the performance review. These improvements correlate closely with the accelerated improvements in 2001 results for individual process effectiveness.

PROCESS MANAGEMENT

6.1 Product and Service Processes

Our customers want to devote their attention to their own core competencies such as editorial, design, advertising sales, and circulation. Our organization is designed to provide these customers with the most cost-effective ways to provide all the activities related to printing production. We provide the required turnkey production environment at our one location in order to control cycle time and cost.

We have been ISO certified since January 1996. As part of our conversion to the new ISO standards, we created over 40 process maps to show procedures and process flows. Our production processes are conducted in accordance with these procedures and all personnel are trained and audited according to the process documentation. *Figure 6.1A* shows a high-level view of our production process.

6.1a Design Processes
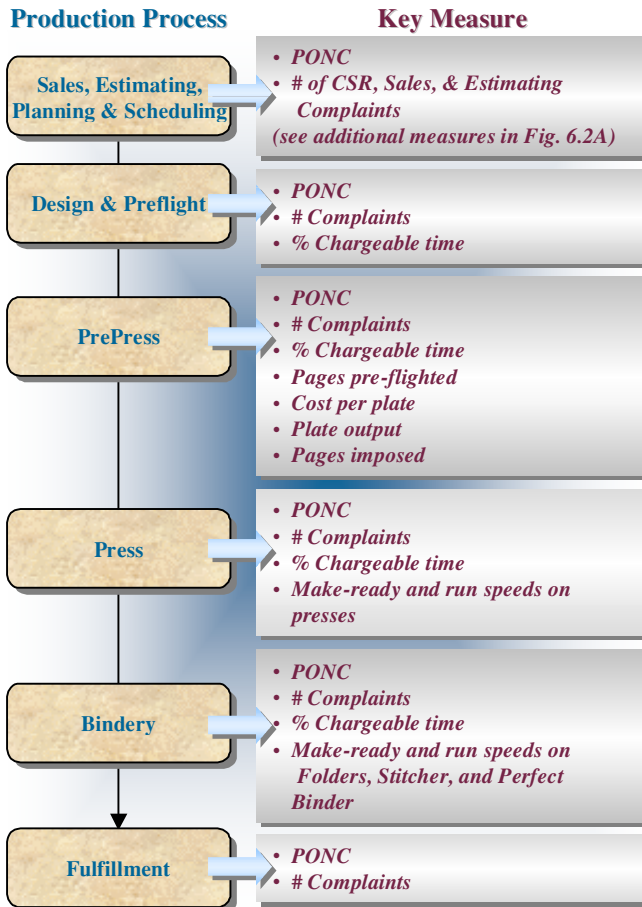
6.1a(1) Design process

Fundamentally, we do not design products from an original engineering standpoint. Our market focus and understanding of market requirements has led us to configure standard industry supplier technology and equipment to best serve the customers' needs; making us a "job shop," where every order is individually designed and created. The design of each order is accomplished through a defined, coordinated process shown in *Figure 6.1A*. The first two steps of our overall production process are considered design for individual orders.

Sales, Estimating, Planning, and Scheduling – Customer requirements are gathered by a salesperson or CSR and translated into production requirements through a computerized form. An estimator creates an actual job ticket based on performance standards for each process with necessary material cost added. During the creation of the estimate, capability is verified for all required production processes. Plant personnel submit estimates to the customer for approval after which they are converted into an on-line, computerized job ticket. The job ticket is the most critical vehicle for communicating exact specifications of final product to the production process.

Design and Preflight – For those customers requiring any level of design activity, the second step involves the creation of page design in the Art department. Customers are provided with black and white or color laser page proofs to review for accuracy and aesthetics. An accompanying approval form is used to indicate whether proofs are good "as is" or whether they need corrections. Once approved the hardcopy proofs are passed on to the PrePress department. Jobs where the customer provides computer files needing no design are also "preflighted" to ensure all elements necessary to complete the job are in place prior to processing digital contract proofs.

6.1a(2) Incorporate changing customer requirements

For the design of specific customer orders, requirements are identified through our CSRs or sales representatives. Standard order forms are used to identify and record all key elements of requirements. The on-line job ticket becomes the design of the production process with the steps and specifications necessary to meet the needs of the customer. If a customer requests a change to their order prior to production, the CSR modifies the order, which provides updated requirements directly to the production process. If a customer requests a change after production begins, the CSR stops production on the job and reviews the change. If the change requires a new estimate, the CSR gets the new estimate, notifies the customer of the cost, and acts on the customer requests.

Production Process   **Key Measure**

Production Process	Key Measure
Sales, Estimating, Planning & Scheduling	• *PONC* • *# of CSR, Sales, & Estimating Complaints* *(see additional measures in Fig. 6.2A)*
Design & Preflight	• *PONC* • *# Complaints* • *% Chargeable time*
PrePress	• *PONC* • *# Complaints* • *% Chargeable time* • *Pages pre-flighted* • *Cost per plate* • *Plate output* • *Pages imposed*
Press	• *PONC* • *# Complaints* • *% Chargeable time* • *Make-ready and run speeds on presses*
Bindery	• *PONC* • *# Complaints* • *% Chargeable time* • *Make-ready and run speeds on Folders, Stitcher, and Perfect Binder*
Fulfillment	• *PONC* • *# Complaints*

Figure 6.1A – Production Process

6.1a(3) Incorporate new technology

We actively identify new technologies through benchmarking, trade shows, industry literature, and other sources. These new technologies are incorporated into products and services through evaluation of their viability in our environment, extensive testing, supplier-provided training, and incorporation into our ISO documentation.

Once identified, incorporation of new technologies for individual order design is accomplished automatically by changing ISO procedures and the automation of our Sales, CSR, Estimation, and Art department processes. Employees in these areas review procedure changes and receive required training to incorporate new technology.

6.1a(4) Address quality, cycle time, etc.

Efficiency and effectiveness of the design process are addressed through standardized procedures and our PSI software. This approach assures the quality of design by ensuring employees perform their functions fully, the same way every time. Cycle time is likewise addressed by ensuring the system is optimized and automated for efficiency. Additionally, customer plans are maintained in our ISO documentation to reduce cycle time.

When new technology for design becomes available through hardware, software upgrades, or improved methods, it is incorporated into procedures and the automated system. Employees are trained on the modifications prior to implementation. Productivity and efficiency gains resulting from new technology are measured by customer complaints, on-time delivery, and a set of production standards recorded into the data collection system throughout the process.

6.1a(5) Design of production/delivery systems

Production and delivery processes for each job are designed through the PSI system based upon customer requirements. As orders are entered and estimated, the system generates a job ticket, which defines the path the job will take through the production process. Detailed specifications for each process are defined, such as colors or type of paper to be used. As the job enters each production process, employees use the job ticket to define the parameters of their process.

6.1a(6) Coordinate and test design

Coordination and test of design for specific orders are done in Preflight. During this step, when we are designing the order, electronic files are processed and designed to check for missing elements and resolution quality. Files are also inspected for compliance with the job ticket. Also during this step, we check all jobs, whether or not we assist in design, to ensure we have all customer, supplier, and internally supplied elements to complete the job to the customer's specifications. As a handoff to the production process, the production manager reviews new jobs to ensure capacity is available to meet the customers' expectations. Daily production meetings track jobs through the process.

6.1b Production/Delivery Process
6.1b(1) Key production/delivery processes

Relative to *Figure 6.1A*, our production and delivery processes include the key activities of PrePress, Press, Bindery, and Fulfillment. These processes have defined key requirements within their ISO documentation in the broad categories of timeliness, cost, and productivity.

PrePress – Jobs that have completed the Preflight step proceed directly to PrePress. For photos to be reproduced, they must be scanned and viewed for accuracy of size, cropping, color, etc., and then inserted into the electronic document. Document pages are prepared within our design software for either film or CTP output. Projects are not plated or printed until the PrePress team receives the customer-approved proofs.

If the files are completely digital with no advertisements, the job will not require film and is produced CTP. Digital proofs are produced for customer approval before printing. Corrections may be made electronically and reproofing done

easily rather than repeating the film and analog proof steps. CTP technology greatly reduces cost and cycle time.

Press (printing) – Press operators verify requirements for pagination, color, and corrections made through make-ready sheets prior to printing against the proofs. The press run is monitored for color levels and consistency by reading light reflection and density from a test strip. CTP allows for cleaner plate results for printing and better registration fit due to direct digital imaging process.

Bindery – Completed press runs are cut, folded, counted, identified, and stored for the binding process. After all folded press runs are complete, an integrated binding process takes place so that all folded runs are collated, bound with wire or glue, and trimmed. When possible, binding and inkjet mail addressing are conducted in-line so that the final product is labeled, sorted, and placed in postal sacks and carts to roll onto our truck for delivery to the bulk mail center. If not conducted in-line, this process may take place off-line through a hopper-fed system.

Fulfillment – Fulfillment is responsible for sorting mailing lists from customer-furnished files to accurately comply with postal regulations. Our address database is updated quarterly with the most recent postal information to create bar-coded lists. Fulfillment is also responsible for delivery and/or shipping of final product and timely closing out of job tickets for invoicing.

6.1b(2) Day-to-day operations
Our production management software, PSI, facilitates the day-to-day operations of our production processes to meet the key performance requirements of the process and the individual orders based on the job ticket. Data are collected throughout the day by touch-screen technology for every production process in order to ascertain whether performance requirements are being met by individual job produced, process performed, material used, and cost center utilized. The four major processes of Design, PrePress, Press, and Bindery contain 21 cost centers with over 200 different processes that might be charged to a job. Each process has performance requirements in terms of productivity and acceptable tolerance.

In daily production meetings, all projects are reviewed to ensure customers' requirements are met and delivered on time. Production supervisors and CSRs attend to review schedules, job status, priorities, and capacity utilization.

6.1b(3) Key performance indicators
Key performance measures are shown in *Figure 6.1A*. These are monitored and used throughout the process and represent both in-process and end-of-process measures to control the process and measure success. They also align directly to the performance measures aggregated for the

Division key measures, which are reviewed in management reviews for overall performance monitoring.

Customer and supplier input is provided at specified points in the production process to gather requirements and receive approval as needed. This interaction includes proofs signoff, verification contacts, and customer approval of in-process work. Suppliers interface during the design process concerning any special requirements needed for the order.

6.1b(4) Inspections, tests, and audits
Through tight process control and automation, we have eliminated the need for a quality control type of audit. Our production processes contain a series of carefully defined and executed early tests and audits to ensure the absolute quality of the final order. These inspections and tests occur primarily in the design and early phases.

6.1b(5) Improve production/delivery systems
To evaluate and improve all production and delivery processes, data gathered through PSI and tracked in the QID are used as input and feedback to each functional area. PONC and complaints are tracked to help ascertain and prioritize opportunities for process improvement. Any employee may initiate a QIP to address improved processes. The QIP process, shown in *Figure 6.1B*, is our structured methodology for continuous improvement. Employees use tools and approaches from our QT course to systematically evaluate issues, determine root cause, and design, plan, implement, and track solutions.
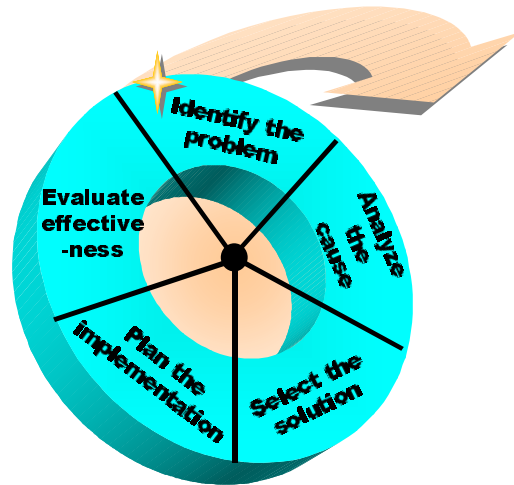
Figure 6.1B – QIP Process

Initiatives to improve production processes also come about through the SPP. Improvements and opportunities are shared across the organization through reports produced each week from the QID and through changes to ISO documentation. QID reports are distributed to all departments and posted on the quality bulletin board.

6.2 Business Processes

We have a strong strategic plan for growth and business development for the next several years. To accomplish this growth, the approach of business processes is focused on achievement of our very specific goals and directions.

6.2a Business Processes

6.2a(1) Key business processes

Three key business processes are critical to our growth and success: Management Review Process, Sales and Marketing, and the Supplier Partnering Process (*Figure 6.2A*).

Management Review Process - The weekly management review meeting covers status of COMs (customer complaint), QIP/APs, SUP (supplier non-conformance), INCs (internal non-conformance), OTD (on-time delivery), and OFIs. The meeting is driven by information in the QID and is also used for SP update.

To better accommodate the new ISO 9000:2000 standards, a monthly QRT meeting reviews status on actions from previous reviews, non-COM customer feedback, process and product improvement, overall Quality System effectiveness and changes, audit results, recommendations for improvement, and resource needs.

Sales and Marketing Process - The Sales and Marketing Process is responsible for locating, qualifying, and securing new customers, maintaining accounts, and growing business with existing customers.

Supplier Partnering Process - The Supplier Partnering Process focuses on building strong relationships with suppliers of key procurement items to enhance production processes and ensure optimum quality and service.

6.2a(2) Key business process requirements

Management Review Process – Key requirements for the management review are determined from the senior

leaders. Through identification of their needs for effective leadership, they developed the key requirements shown in *Figure 6.2A*. Leaders also use this simple but effective method to gather and aggregate data and information from throughout the company to review performance in anticipation of strategic planning.

Sales and Marketing Process – As part of the design process, the sales function has certain key requirements for effectiveness of design as shown in *Figure 6.1A*. As a key business process, most key requirements and measures (*Figure 6.3A*) are focused toward attainment of the high-level requirement to reach a stretch sales goal.

Supplier Partnering Process - *Figure 6.3A* lists this processes' requirements. Additional requirements are developed as needed to support goals in our SPP.

6.2a(3) Design and perform business processes

Management Review Process - The review is designed through the database, which drives the meetings. This design is created to meet the leaders' requirements by ensuring that all needs are built into the system. This database provides a tool to focus the agenda, aggregate organizational data, report progress, and provide feedback to the departments and teams. This allows leadership to keep their thumb on the pulse of the company in a singular, regular meeting that covers key elements of the business.

Sales and Marketing Process - This process is designed using a standardized process known as the "Selling Wheel." Sales Reps use standardized forms and scripts throughout the process to ensure it is conducted according to requirements. Marketing provides the direction and tools to assist sales personnel in achieving desired results.

Supplier Partnering Process - This business process design consists of a series of expectations (requirements) and recommended approaches to achieving these

Key Business Process	Key Requirements	Performance Measures
Management Review Process	Ensure an employee emphasis on process improvement	% Agree key to BSI success
	Ensure employees are informed as to the status of operations	% Agree informed
	Provide prompt resolution of customer issues	% Agree prompt resolution
	Meet obligations to our supplier partners	Supplier rating of us
Sales and Marketing Process	Effective approaches to marketing, prospecting, qualifying, making presentations, pricing, and securing new customers	Decrease % of Key accounts
		Value Added % of sold jobs
		# and $ of Win Ratio
		# and $ of Invoices
		Average Invoice Amount
		# and $ of Estimates
Supplier Partnering Process	Suppliers receive clear requirements for performance	% Conformance
		Paper inventory days
	Development of win-win relationships	Supplier rating of comm.

Figure 6.2A – Key Business Processes, Requirements, and Measures

expectations. For example, visits by our leadership to the supplier are conducted to reinforce the partnership and review each other's needs and processes to identify better ways to serve each other. Commitments by both parties to achieve specific requirements, such as providing quality products or paying bills on time, develop trust.

6.2a(4) Key performance indicators
Management Review Process – Specific key indicators of this process are shown in *Figure 6.2A*; however, success of this process is overall organizational performance. We experienced a 62% growth in value added sales over two years, reorganized our facilities, added new technologies, and increased our capacities.

Sales and Marketing Process - Sales and marketing key indicators are shown in *Figure 6.2A*. Weekly reports from our PSI system include performance levels to these measures. This report allows Sales to evaluate their effectiveness, profitability, and create work plans. The customer survey measures our customers' perception of pricing, charges, and overall value. Ongoing customer / prospect feedback gives immediate indicators of success in the sales process and is used to adjust the process to achieve the greatest success. Results from each of these indicators are shared with the Sales and Customer Service teams, senior management, and in Division meetings.

Supplier Partnering Process – One key indicator for evaluating partner relationships is our supplier survey. Our suppliers gave us an overall 4.5 rating on a 5-point scale as compared to their average customer with a 3.25 rating. But we ultimately measure the effectiveness of our partnering process through our suppliers' performance. Two such supplier-related performance indicators are increasing percent of supplier conformance and reduction in investment in paper inventory. Non-conformances are reported to vendors immediately and our three critical suppliers receive quarterly reports. We also report overall supplier results at our annual supplier luncheon.

6.2a(5) Minimize overall costs
Management Review Process - The QID Management Review process is not subject to any audits or tests as such. However, the review of performance measures and action plan status provides a determination of its success. The meeting is held weekly and kept brief by focusing on the identified key areas of measurement for the organization.

Sales and Marketing Process – The sales and marketing process is also not subject to regular audits or tests. Costs of incorrect approaches or poor performance are minimized through regular review of performance. This allows rapid determination of concerns and corrective action before situations escalate. Overall associated costs are minimized through activities such as providing Sales

Reps system links via laptops. The estimating and proposal portions of the process are streamlined through PSI, which also improves efficiency and effectiveness.

Supplier Partnering Process – Because of our close relationships with our suppliers, we do not conduct detailed inspections of primary consumables. Paper and prepress supplies are viewed for damage and verified against POs. Product non-conformances are so few, breaking moisture seals for inspection is not justified.

6.2a(6) Improve business processes
Management Review Process – Senior leaders make improvements to the review process as new needs or new approaches are identified. The addition of the monthly QRT meeting was the result of our ISO conversion, and it also provides an approach to continuously review the Management Review Process for improvement. Another important approach to evaluation of the review process is feedback from employee and customer surveys.

Sales and Marketing Process – This process is evaluated based on feedback from informal input and through the customer survey. Review of this information and the performance indicators reveal improvement areas. Sources of improvement opportunities also include information from industry associations and peer groups.

Supplier Partnering Process – This process is kept current and improved by monitoring performance results, soliciting feedback from suppliers, and marketplace awareness gained from trade information sources. An example of improvement of this process resulted from our 2001 Baldrige effort. We began an annual Supplier / Partner Luncheon where we expressed our appreciation for contributing to our success and outlined our strategic plans. Over 25 people from eleven different companies including paper, ink, and prepress vendors; equipment suppliers; repair services; bankers; and CPAs attended.

For all three processes, improvements are conducted through workgroup or QIP teams. These changes are shared with other organization units via communication at Division meetings or departmental meetings. Procedural changes are communicated through modification to ISO instructions and training to affected employees.

6.3 Support Processes
6.3a Support Processes
6.3a(1) Key support processes
Our key support processes are defined as accounting functions, information technology services, and human resource functions. *Figure 6.3A* shows these key processes, their primary requirements, and measures of their performance.

Key Support Process	Key Requirements	Performance Measures
Accounting		
Accounts receivable	Timeliness of billings	Days to invoice
	Accuracy of billings	Defective billings
Data to accounting	Timeliness	% on-time
Monthly statements	Timeliness	Days to close
Information Technology		
System performance	Systems availability	System up time
	Systems issue response timeliness	Response time (new measure)
Human Resources		
Safety	Low occurrence of safety incidents	# Accidents
Development	Provide regular performance feedback	Satisfaction with feedback
Recruitment & Retention	Retention of employees	Voluntary turnover
Training	Provision of effective training when it is needed	Training satisfaction scores

Figure 6.3A – Key Support Processes, Requirements, and Measures

6.3a(2) Key support process requirements

Support process key requirements have been determined through identification of needs of each of the process stakeholders. Internal stakeholders' needs are determined through interfaces with their processes defined in ISO documentation or through defined inputs to ensure proper functioning of the entire system. As an example, requirements of Accounts Receivables come primarily from the need to produce invoices quickly to improve cash flow. Human Resource requirements come from our need to have qualified, satisfied employees and from needs of employees to have a safe, comfortable work environment.

6.3a(3) Design support processes

Support processes are designed to meet the requirements of each activity. These designs are created through the standardized forms or entry screens used to execute the process, thus ensuring their compliance requirements. They have been designed over time by modifying these structures based on changing needs and directions.

6.3a(4) Day-to-day operation of processes

The same industry-specific software directs day-to-day management of our accounting process as our production operations. This enables direct interface with Production, Inventory, Job Costing, and Sales to receive information necessary for posting invoices and making entries into the general ledger based on actual work performed. This system ensures our process meets key requirements.

Our information technology services are managed by the ITS Team, which is responsible for establishing priorities and providing necessary resources to maintain our systems. ITS receives work requests by email or phone and establishes priorities for the daily task. The daily work task schedule is posted outside of ITS. Issues and workload are discussed at weekly meetings with ITS.

Human Resource processes are conducted through defined procedures and policies to ensure consistency of operations. These definitions are supported by forms and computer entry screens to facilitate consistent execution.

6.3a(5) Key performance indicators

Key performance measures for each support process are identified in *Figure 6.3A*. These measures are used in day-to-day operations to ensure the process is meeting the defined requirements for performance. Where required and appropriate, customer interactions are built into the process to ensure effective execution of the process.

6.3a(6) Minimize inspection overall costs

Inspections and audits for our Accounting function include regular internal audit of accounting practices. For Human Resources, audits include review of regulatory compliance. In both departments, costs of inspections are minimized through systematic collection and reporting of the data and information via the day-to-day functioning of the systems to ensure we do not have to make special efforts to report and evaluate audit requirements. This also ensures we proactively identify emerging issues.

Our Accounting department serves as a PSI test site for their accounting software development. This gives us the opportunity to test and implement improvements much more efficiently. With our partnership with PSI, the development cost is spread over their customer base, giving us customized software without typical programming costs. In ITS, suppliers work with us to thoroughly test new hardware and software prior to implementation to help reduce costs.

6.3a(7) Improve support processes

Each support process team has regular methods to evaluate their performance and identify improvement needs, including changes required to meet directions. Accounting identifies improvement opportunities through

regular gathering of requirements from internal and external customers. Where possible, they then work with PSI to customize our software to meet those needs and requirements. Our corporate CPAs also keep us informed of current and changing tax and accounting regulations.

ITS meets weekly with the Division leaders to discuss the needs of each Division and how technology can be used to improve efficiency and productivity. HR uses data from the employee survey and focus groups to keep current with employees' changing needs. The HRM stays current on safety procedures, training, and staffing needs.

BUSINESS RESULTS

7.1 Customer Focused Results

The success in achieving our Division Objective to "Become the Partner of Choice" is measured through the satisfaction of our customer base.

7.1a Customer Results
7.1a(1) Customer satisfaction

We collect data and respond to customer satisfaction and dissatisfaction with an annual customer survey conducted by eKG Research Associates. Comparative data include the overall eKG database of progressive printing companies as well as the scores of those companies that our customers consider our direct competitors. The survey has 15 standard questions and three custom questions rated on a ten-point scale with '10' being best.
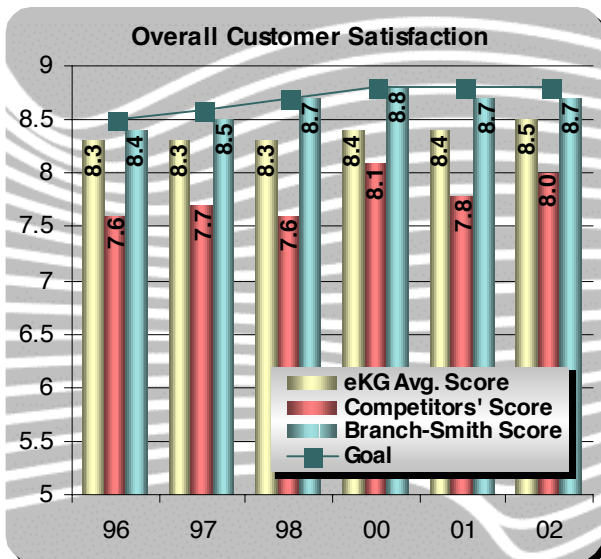
Figure 7.1A – Overall Customer Satisfaction Attribute

Figure 7.1A shows customers' overall satisfaction with Branch-Smith, competitors, and all respondents. Here, as in most areas of the survey, we can see the effect of many of our improvement actions on our customers. In 1998,

we significantly widened the gap between our competitors and us as a result of implementing our new PSI software.

We also analyze overall satisfaction results weighted by importance rating. This measure, called Weighted Customer Satisfaction (*Figure 7.1B*), is an important gauge of customer satisfaction because it indicates our performance in areas of greatest impact to customers in their buying decisions.
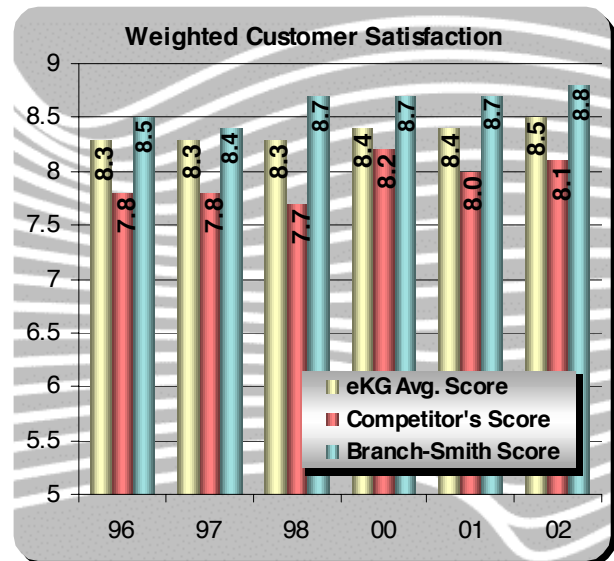
Figure 7.1B – Weighted Customer Satisfaction

We regularly track complaints as an indicator of customer satisfaction. Our leadership reviews this key measure and negative indications are aggressively addressed. *Figure 7.1C* shows our 73% reduction in complaints since 1997.
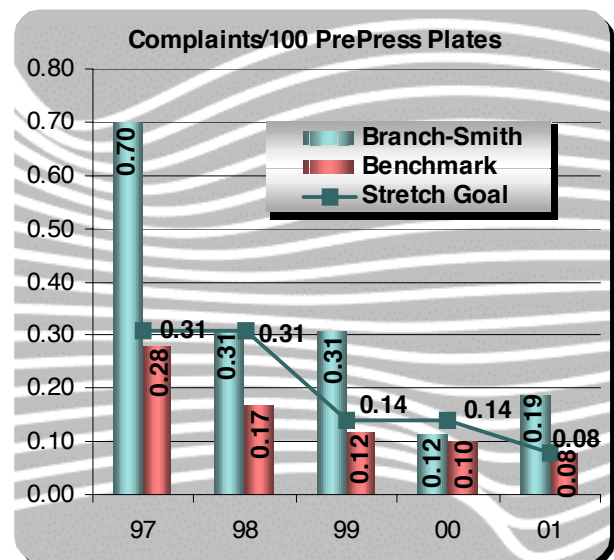
Figure 7.1C – Complaints per 100 PrePress Plates

The results of this indicator are significant in that they represent the capability to continue the growth of our organization and customer base without sacrificing customer satisfaction and service.

7.1a(2) Customer perceived value and relationships
One indicator of customer perceived value is their perception of our price (*Figure 7.1D*). The fact that we are consistently lower in price than our competition and the eKG average is important to retaining our customers.
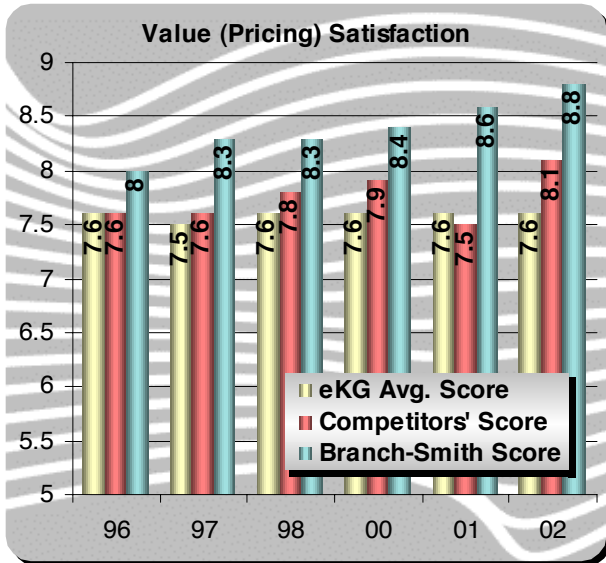
Figure 7.1D - Perceived Value (Pricing Attribute)
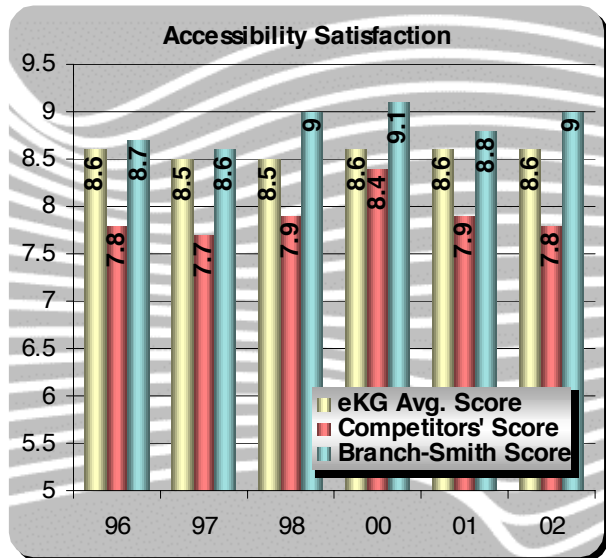
Figure 7.1E – Accessibility Attribute

We evaluate the appropriateness and effectiveness of our customer access mechanisms through our customer survey (*Figure 7.1E*). One question specifically asks about the ease of access to our people and needed information. The results show that this is one of our key

strengths, particularly when compared to our competitors. In 2001, new Customer Service staff became more familiar with our customers and re-stabilized these scores. This measure contributes to our Objective of becoming the partner of choice for our customers.

As a direct measure of our success in developing strong customer relationships, we track customer retention and growth (*Figure 7.1F*). We have very low customer churn, representative of their high levels of satisfaction.
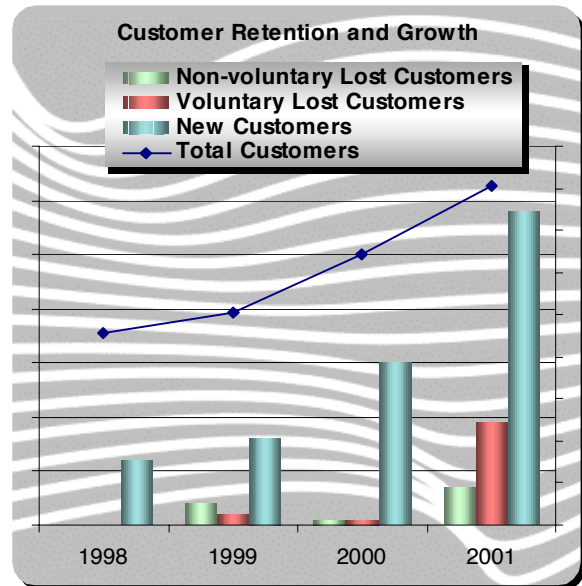
Figure 7.1F – Customer Retention and Growth

7.1b Product and Service Performance
Figure 7.1G shows the results of our customers' perception of the Product Quality attribute.
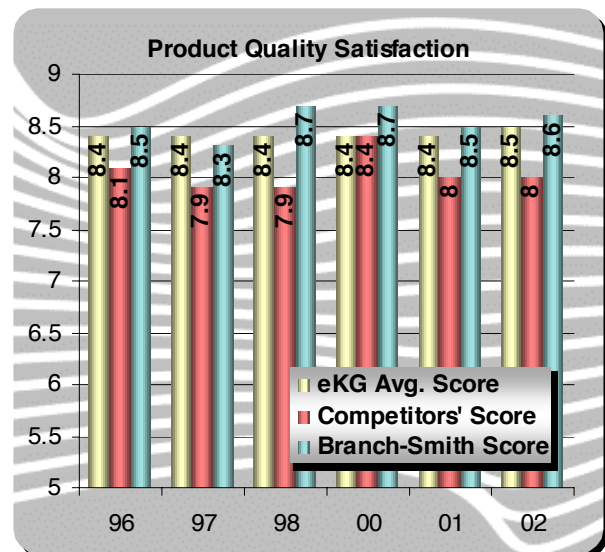
Figure 7.1G – Product Quality Attribute

The high quality levels of our products are a "trademark" of doing business with us and are a key differentiator in our competitiveness. The results of customer satisfaction in this question reflect minor variations in recent years due to our expansion and subsequent growth. We consistently outperform competitors in this area, with a widening of the gap in 2000 and 2001 due to new equipment and improved processes.

Figure 7.1H shows the satisfaction levels of our customers with our value that we add. This attribute is a composite of four customer factors: knowledge (of our employees), range of services, clear and helpful estimates, and clear and helpful invoices. Results show that prior to

Reliability Satisfaction

Figure 7.1I – Reliability Attribute

Added Value Satisfaction

Figure 7.1H – Added Value Attribute

2002, we consistently improved in provision of these services, while our direct competitors and the eKG average remained relatively flat or declined. We have action plans in place to address the slight decline in 2002.

The Reliability attribute (*Figure 7.1I*) is the composite of questions concerning matching orders and expectations, meeting deadlines, and invoices matching estimates. Our results show high performance over four years; consistently higher than our competitors and eKG.

Figure 7.1J shows the results of Meeting Deadlines; particularly important in our environment due to the tight schedules our customers face in the production and delivery of their final product. Significant improvements are shown in our performance over the most recent three years, with a significant widening of the gap between our competitors and us. These improvements reflect the progress in efficiency with new equipment and processes.

"Meets Deadlines" Satisfaction

Figure 7.1J – "Meets Deadlines" Question

The Responsiveness attribute, shown in *Figure 7.1K*, is composed of questions concerning prompt estimates and proposals, prompt work completion, prompt problem resolution, and being readily accessible. In this area, we significantly outperform our competitors by almost a full point. While our satisfaction ratings have improved over time, our competitors' scores have stayed relatively constant, which confirms the effectiveness of our quality improvement-oriented culture.

A key element of the Responsiveness attribute and a contributor to our outstanding results in complaint handling is our prompt problem solving. These results are shown in *Figure 7.1L*. We sustain high levels of satisfaction and continue to outperform competitors.

Responsiveness Satisfaction
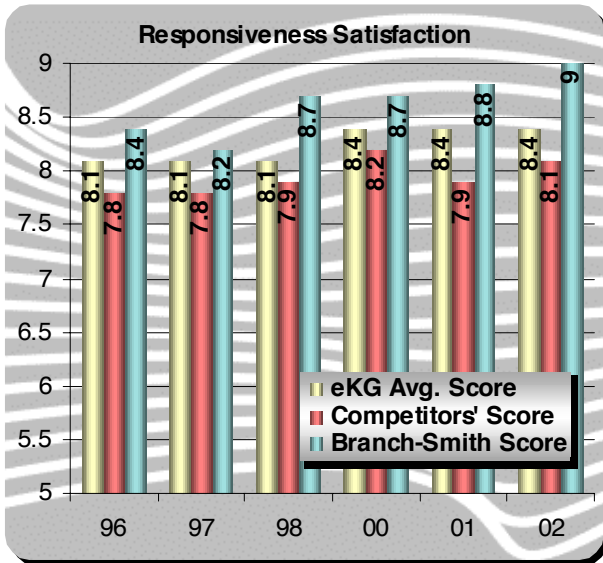
Figure 7.1K – Responsiveness Attribute

Prompt Problem Solving
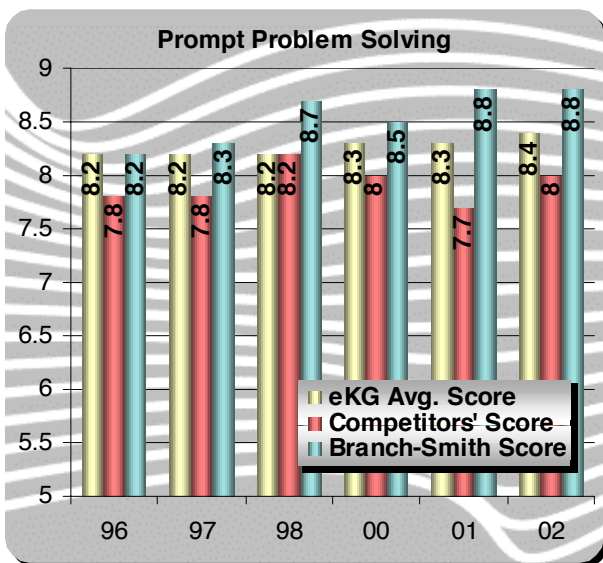
Figure 7.1L – Prompt Problem Solving

7.2 Financial and Market Results

A key Division Objective is to "Continuously Improve Business Results." We measure success in this goal through measures of financial and market performance.

The annual PIA Ratio Study allows us to look at ourselves in relation to benchmark comparisons by product and general process. This study is made up of voluntarily submitted, detailed financial data designed to permit competitive analysis. The study also identifies those companies in the highest quartile of profitability and averages them into a benchmark of "best-in-class" comparisons for the industry called Profit Leaders.

7.2a Financial and Market Results
7.2a(1) Financial performance
Figures 7.2A through *7.2C* tell the story of our growth, challenges, and success from a financial perspective. In 1998, we set an aggressive goal to double our sales in three years in order to achieve the critical mass necessary to excel in our market. We carefully planned and executed an "expansion project" to increase our capacity to support the growth. It called for extensive investment in equipment and the development of a strong outside sales force.

The slowing economy and the economic effects of the 9-11 tragedy caused us to fall somewhat short of our goal for 2001. Nevertheless, we grew overall by 72% between 1998 and 2001, significantly outperforming the growth rate of our industry (*Figure 7.2A*).

Total Sales % Growth (Total & VA Sales)
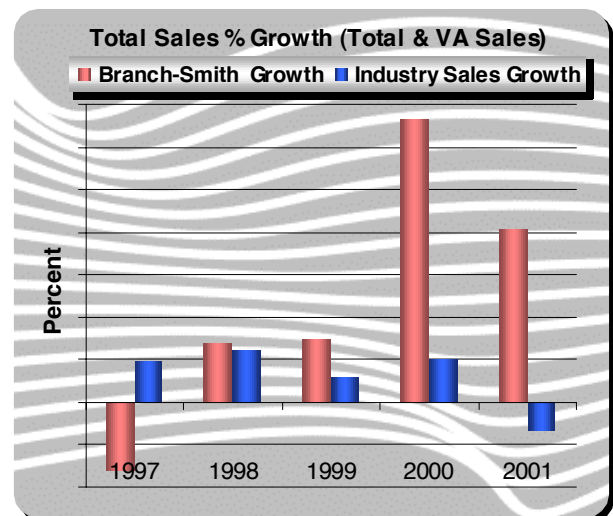
Figure 7.2A – Value Added and Total Sales Growth

Gross Profit on Value Added Sales
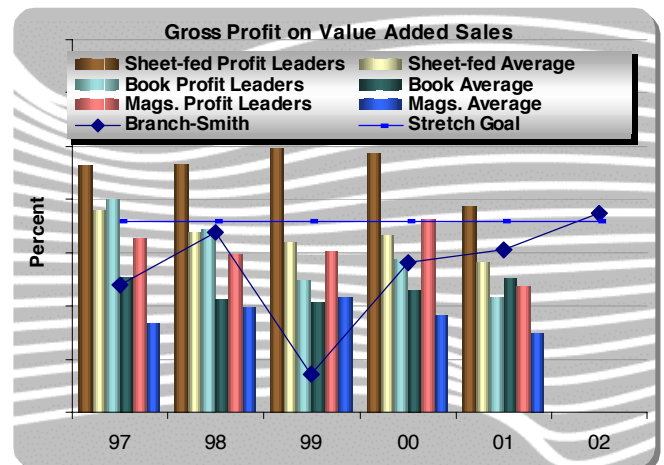
Figure 7.2B – Gross Profit on Value Added Sales

Understanding that the economic slowdown is temporary, we made a strategic decision to continue our expansion plan to prepare us to capitalize on the market when the economy returned to growth. This will put us ahead of

35

many of our competitors that have cut back capacities. Our gross profit (*Figure 7.2B*) goals following this expansion are to return to a more optimum prior level. We seek to achieve a gross profit percentage approaching that of commercial sheet-fed printers, with the reduced selling and administrative cost of magazine printers.

As a result of increased efficiencies and multiple shifts, we can leverage the EBIT with a higher Value Added Asset Turnover (*Figure 7.2C*) than our industry, both for Profit Leaders and Industry Average.
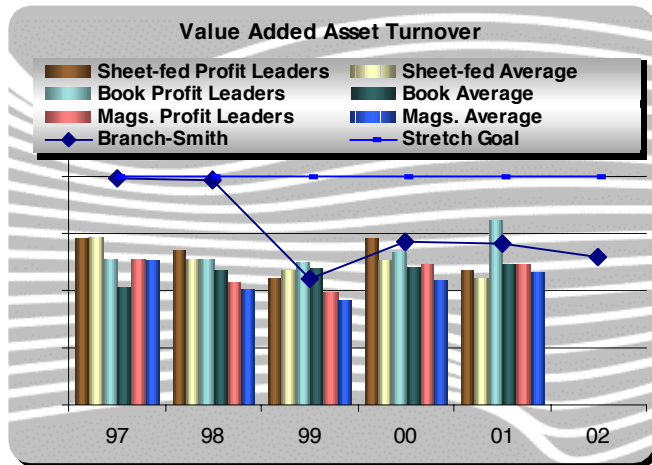
Figure 7.2C – Value Added Asset Turnover

7.2a(2) Market performance
To be successful in our industry, we focus on aggressively growing our business in our chosen niche market. *Figure 7.2A* shows our outstanding success in this effort to date with an estimated 72% growth over four years. Much of this was accomplished through stronger processes, better equipment, and incorporating technological advances.
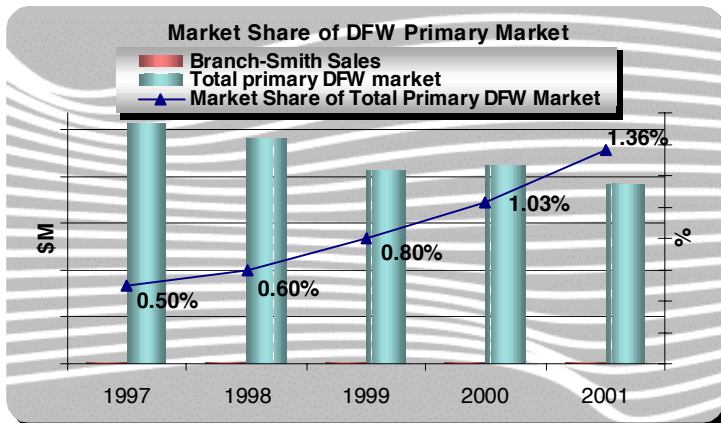
Figure 7.2D – DFW Market Share

Our market growth is also demonstrated in our customer retention and new customer acquisition. In 2000 alone we gained more new customers than in the previous two

years combined, while retaining our existing customer base. In 2001, we nearly doubled 2000's performance.

Our share of the primary print market in the DFW area is shown in *Figure 7.2D*. This market is composed of periodicals, book printing, and commercial printing. Our primary markets are less than one-third of the three billion dollars in commercial print shipments in the DFW area. While we hold a relatively small segment of the market due to the vast number of printers in the area, our share of this large market has grown significantly since 1998.

7.3 Human Resource Results
Our Division Objective to "Be the Employer of Choice" is addressed through the approaches described in Category 5. The effectiveness of these approaches is evident through the results shown in this Item.
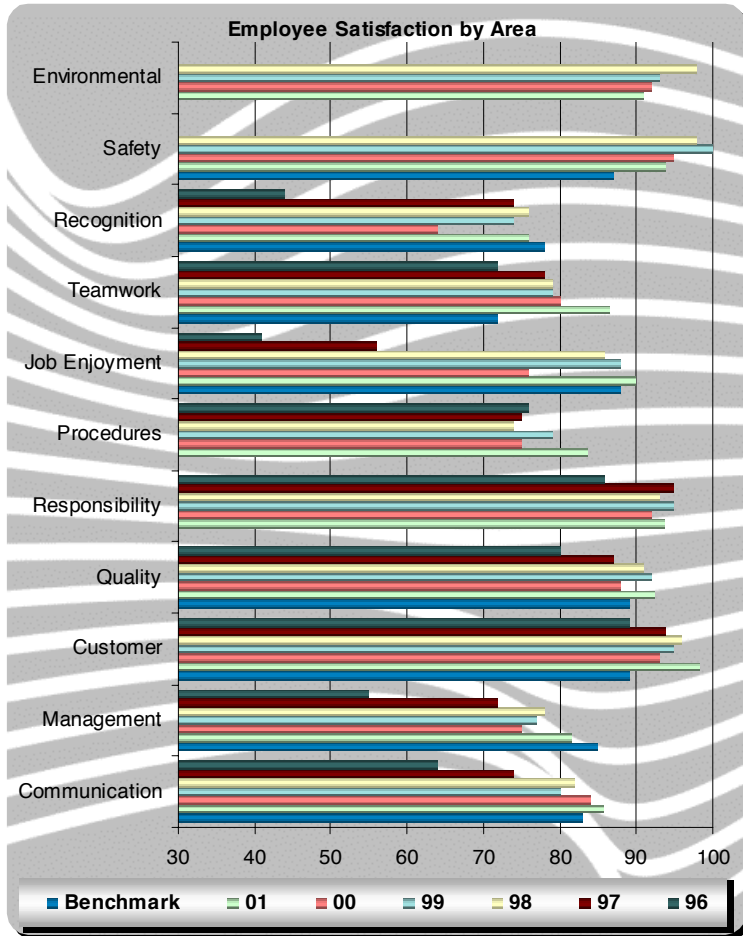
7.3a Human Resource Results
7.3a(1) Employee well-being, satisfaction
We conduct an annual employee survey to determine employee satisfaction levels in a number of areas. The survey is on a four-point scale. The results are presented in *Figure 7.3A* and *7.3B* in percentage of agreement, which allows us to compare to benchmarks. *Figure 7.3A* shows overall employee satisfaction results with high levels of satisfaction over time. The slight decline in 2000 was a reflection of the significant modifications to our systems and processes as employees became familiar with their new and/or modified responsibilities.
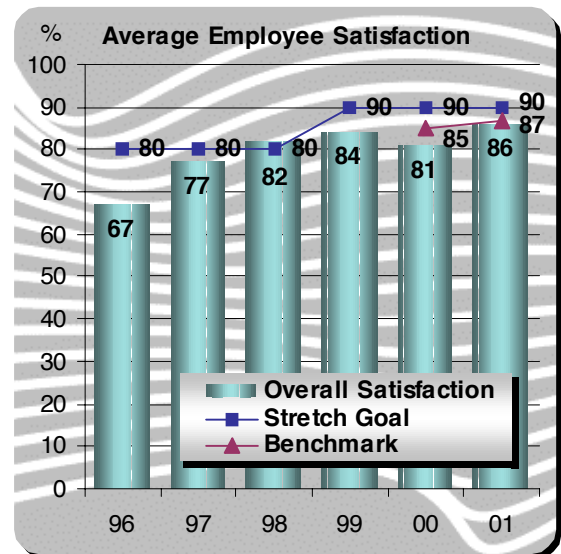
Figure 7.3A – Average Employee Satisfaction

Figure 7.3B shows the survey results in other areas of significance to employees. Benchmark data from a Baldrige recipient are used to analyze our satisfaction levels to that of a world-class organization. In six of eight areas where comparison is possible, we compared very
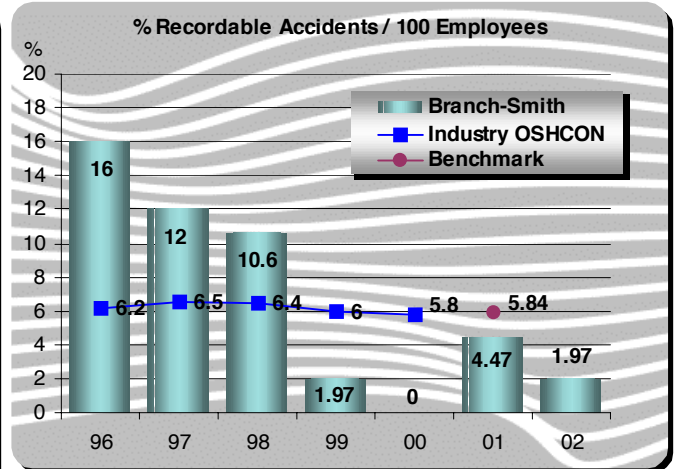
Employee Satisfaction by Area

Figure 7.3B – Employee Satisfaction by Area

% Recordable Accidents / 100 Employees

Figure 7.3C - % Recordable Accidents

% Voluntary Turnover
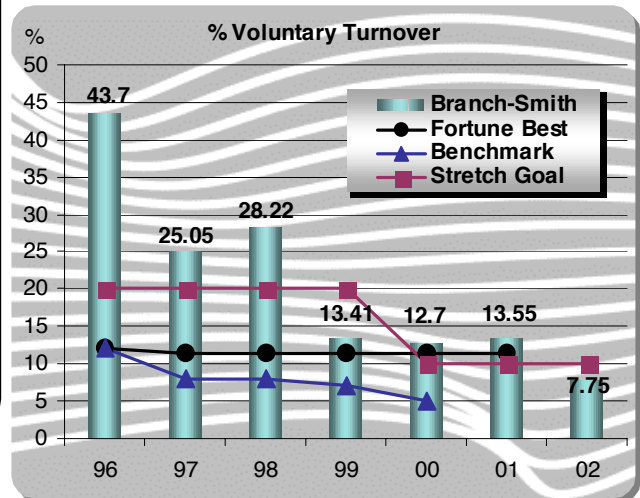
Figure 7.3D – Percent Voluntary Turnover

favorably. Satisfaction ratings in 2000 decreased in several areas due primarily to the effect of changing equipment and job functions throughout the plant. Focus groups and several focused actions for improvement were implemented to address these issues with the resulting positive effect on 2001 scores.

Employee safety efforts have been instrumental in initiating safety regulations in all areas. A goal for every department that rolls up into a Division total is the number of accidents that are recordable for OSHA due to lost work time. Our efforts have greatly improved this number (*Figure 7.3C*).

Another indicator of overall satisfaction is voluntary turnover as a percentage of total employees (*Figure 7.3D*). The effectiveness of our employee retention efforts has resulted in significant improvement in this measure. One comparison we use is average voluntary turnover from the top 15 companies from the *Fortune* magazine's list of Best Companies to Work for in America. Another is that of a Baldrige recipient. These results show us to be comparable to these benchmarks.

7.3a(2) Work system performance
The effectiveness of our work system and employee satisfaction approaches as they affect the company's performance is demonstrated through correlation of employee perceptions and results of process activities. *Figure 7.3E* shows part of this correlation analysis.

This analysis, when compared to the significant improvements in productivity and effectiveness of processes, shows the effect of employee satisfaction and communication channels on the productivity of the overall company. It shows that employee understanding of their job expectations improved through their performance appraisal process, which was enhanced in 2001. Employees also believe that they receive better/more appropriate training with the guidance of their supervisor. This approach also improves their perception of the fairness of their pay. And, employees are better able to accomplish their work effectively and efficiently when they are comfortable with expectations and jobs.
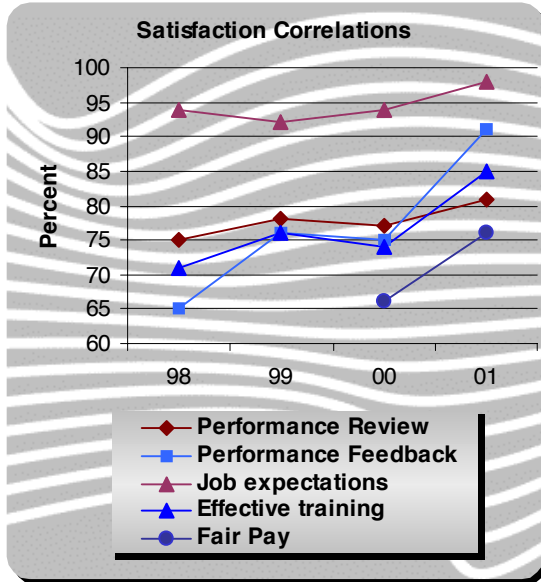
Figure 7.3E – Employee Satisfaction Correlations

The importance of training and development is stressed in our environment to ensure we have a well-prepared workforce to support our flexible and agile environment. Employees are encouraged to attend at least two training events each year and many have exceeded this goal. Because the duration of these events vary, so do measures of training hours per person as seen in *Figure 7.3F*.

Year	Branch-Smith # Hrs.	Benchmark # Hrs
1999	104	Not available
2000	80	Not available
2001	116	72.9

Figure 7.3F – Training Hours per Employee

7.4 Organizational Effectiveness Results
Part of our key Division Objective to "Continuously Improve Business Results" includes a focus on quality and process performance. The effectiveness of our operations is shown throughout this Item.

7.4a Operational Results
7.4a(1) Process operational performance
We analyze the level of Value Added Sales per Employee (*Figure 7.4A*) as an indication of the impact of our investments and improvements on employee productivity. After the transition in 1999, this measure improved to former levels in 2000, and exceeded prior levels in 2001.

Reduction in the Price of Non-Conformance (PONC) is one of our key goals. Our approach to measuring PONC is unique in that, in order to emphasize its importance as an opportunity for profit improvement, labor is calculated at fully burdened rates and reported as soft cost rather than at just direct labor cost.
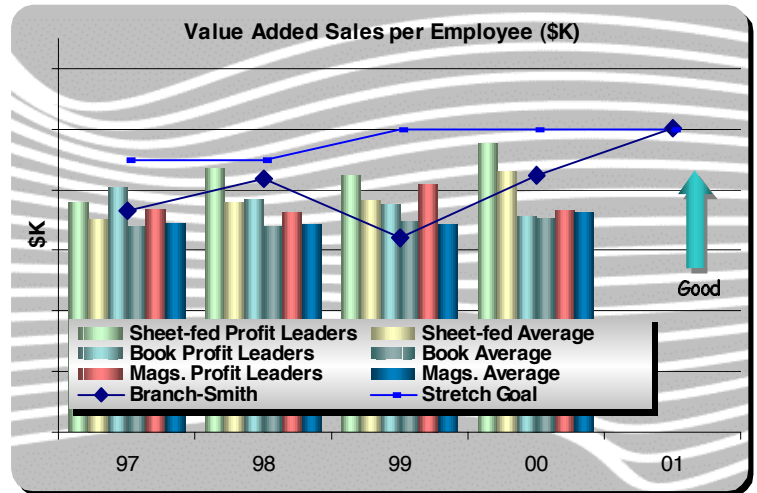
Figure 7.4A – Value Added Sales per Employee

The corresponding actual costs of any wasted material, outside purchases, or credits issued to customers are reported as hard costs and added in to reach an overall PONC percent of sales as shown in *Figure 7.4B*. PONC is tracked by source area and the nature of non-conformance, allowing us to quickly identify areas of high PONC for rapid correction.
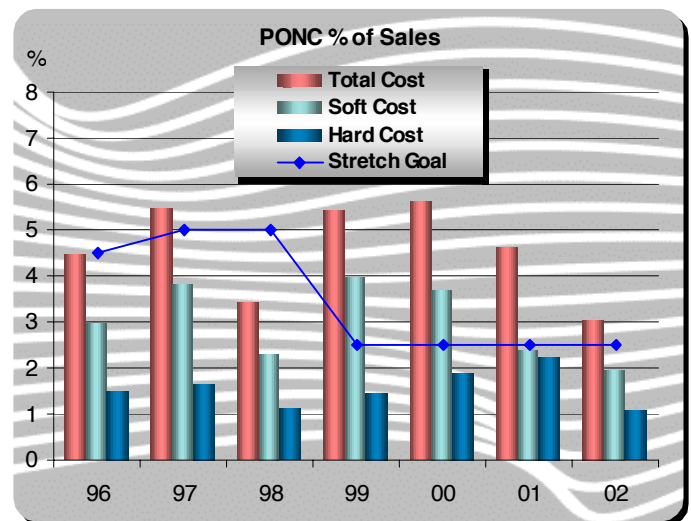

Figure 7.4B – Price of Non-Conformance % of Sales

Delivering work on time is a vital customer requirement. We use a database to track our performance for final delivery of each job with results shown in *Figure 7.4C*. After a brief downturn in 1999 resulting from our expansion, we are now at a performance level close to a benchmark Baldrige recipient and exceed the comparison of Industry Week businesses.
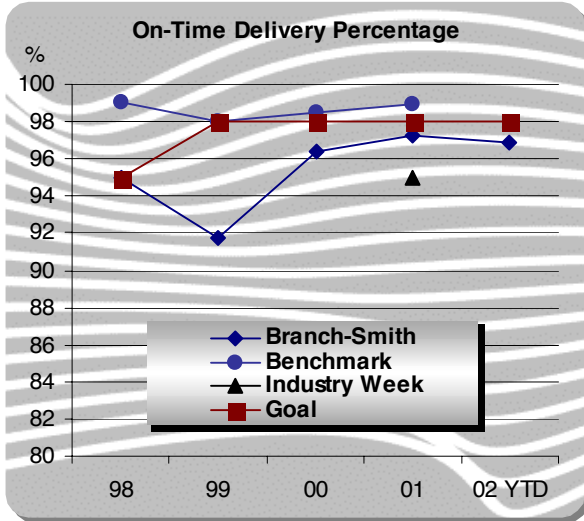
Figure 7.4C – On-Time Delivery

A key indicator of labor and asset utilization is the percentage of time charged to jobs by manufacturing employees versus non-chargeable time (*Figure 7.4D*). This gives us an indication of the opportunity available from reduced PONC rework, schedule imbalances, low sales, and efficiencies in performing required maintenance. Our sustained high levels of performance show our efficiency of operations, particularly as compared to our peer group.
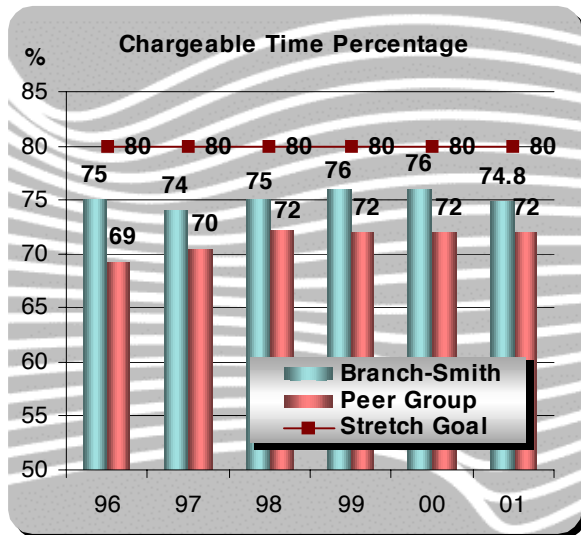
Figure 7.4D – Chargeable Time % (Productivity)

Cost effective improvements in electronic processes and equipment are important to our success. The cost to convert furnished materials to a finished plate is a productivity indicator made up of the total pre-press cost without allocation of department overhead. It includes the variable cost of labor and supplies, depreciation of technology investment, and directly charged materials.

Figure 7.4E shows required plate production has grown 114% over this period, while cost per plate has dropped almost 55%. This strongly impacts our competitive value position in terms of pricing and market growth.
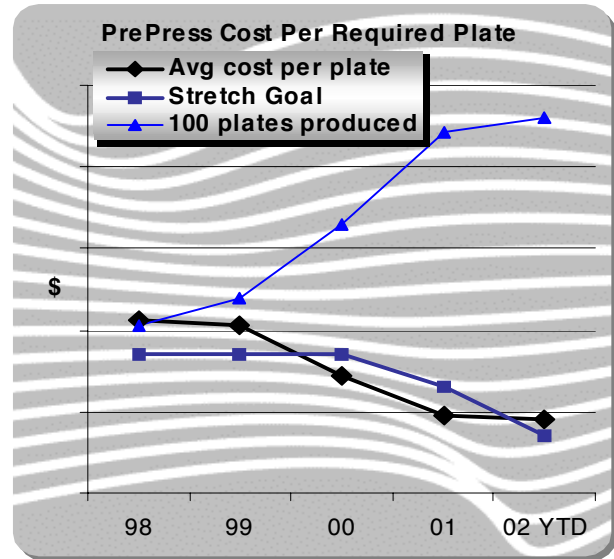
Figure 7.4E – PrePress Cost per Plate

Our strong commitment to supplier performance is also demonstrated in *Figure 7.4F* with the percentage of correct performance by reason categories.
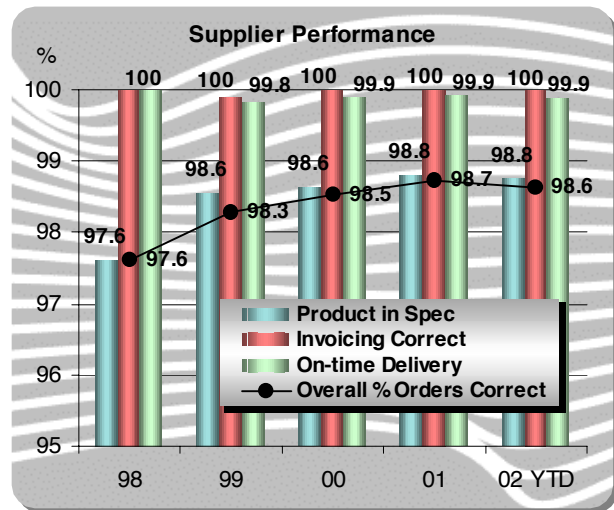
Figure 7.4F – Supplier Performance

7.4a(2) Organizational strategy accomplishment
Results of accomplishment to our strategies are shown throughout this Category. Our success in the Division Goal of "Continuously Improve Business Results" for rapidly preparing for growth is seen in every area as we absorbed two years of investment in 1999, to provide us a strong foundation for the future. Results have recovered in most areas. Success in technology transition is also

shown in improved efficiency and effectiveness. Success in customer growth and satisfaction is seen in outstanding satisfaction and retention results with new customers.

7.4b Public Responsibility and Citizenship Results
We have reduced our levels of VOCs emitted since 1988 from 13 tons to the current level of six tons. *Figure 7.4G* shows our results in level of absolute VOC emissions against the threshold for reporting, which allows us to be recognized as conditionally exempt from reporting. Also shown is our significant improvement in reducing VOCs per the volume of output, reflecting improvements from our process actions in protecting the environment.
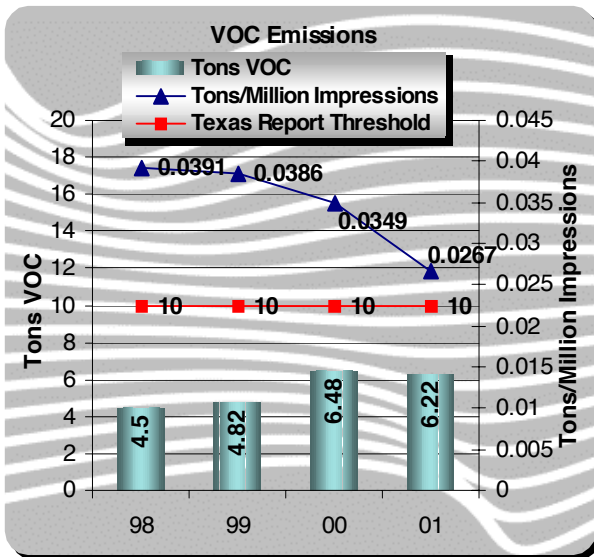

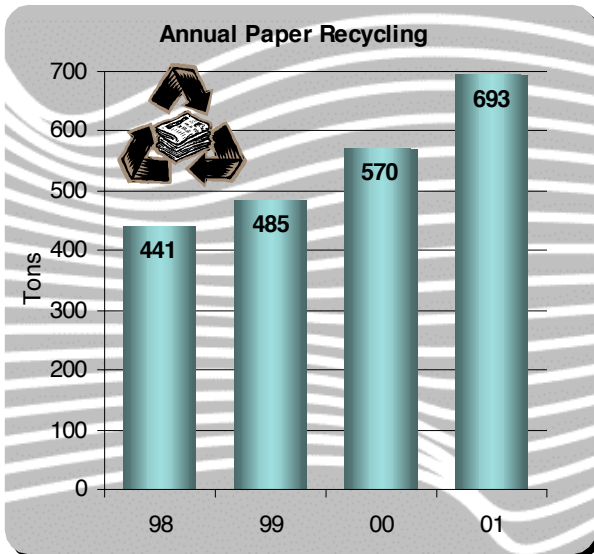**Figure 7.4G – VOC Emissions**

Figure 7.4H – Annual Paper Recycling

Our devotion to care of the environment is also robustly demonstrated through our commitment to improvements

in recycling of paper waste. We invested heavily in equipment and resources to facilitate the capture and recycle of our paper waste over time (*Figure 7.4H*). We have increased the amount of recycling committed to by almost 46% since 1998.

Involvement in the community is another important factor for us, for the good will of our employees, and because it is the right thing to do. Our largest single community involvement is with the United Way. *Figure 7.4I* shows our level of participation in this organization since 1997.
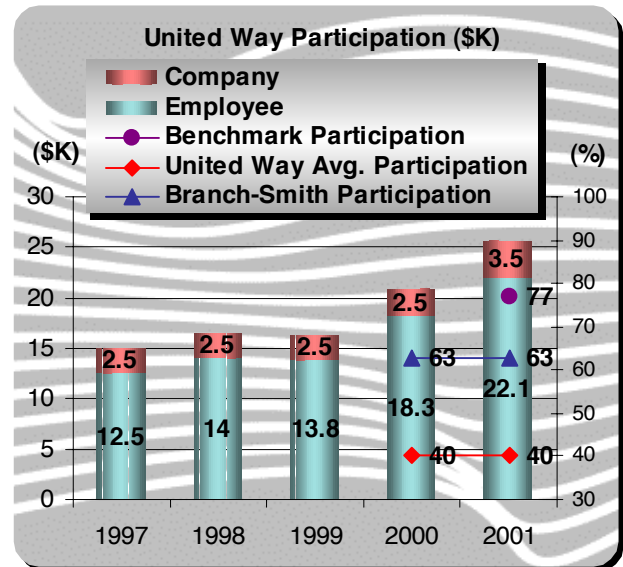

Figure 7.4I – United Way Participation

As external validation of our progress, we have been named as recipient of various external award programs. In 2000, Branch-Smith received the prestigious Family Business of the Year Award in the medium category of 50 - 250 employees by the Institute for Family Business at the John F. Baugh Center for Entrepreneurship affiliated with the Hankamer School of Business at Baylor University. The award honors outstanding family businesses that show concern for their family and its role in the business and community, demonstrate contributions to their industry and their community, and are role models for the family in business. In 1999, the Institute recognized us for Family Business in one of its special categories. The Family Values Award honors a business that demonstrates the greatest commitment to family values by nurturing healthy family relationships over successive generations.

We were also honored in 2000, as the Texas Business of the Year by The Texas Association of Business & Chambers of Commerce. This award recognizes excellence in providing economic opportunity through the free enterprise system.