Entrepreneurs Use a Balanced Scorecard to Translate Strategy into Performance Measures
by Andra Gumbus and Robert N. Lussier

Although 50 percent of Fortune 1000 companies currently use a balanced scorecard (BSC), few small businesses are using a BSC. A review of the literature finds no BSC papers in leading small business/entrepreneurship journals. This article begins with a discussion of the BSC and why a small business should use it. Three small to medium-sized enterprise (SME) case studies are presented, with a copy of their BSC, to illustrate how Hyde Park Electronics, Futura Industries, and Southern Gardens Citrus use a BSC to set strategy and align operations to achieve breakthrough results. Implications are, that like large businesses, SMEs can also benefit from using a BSC. Entrepreneurs of SMEs can use the case studies to develop their own BSC to improve performance. Implications for practice and research are discussed.

Introduction

The balanced scorecard (BSC) is one of the most highly touted management tools today (Staff 2002; Atkinson and Epstein 2000; Frigo and Krumwiede 2000), and Fortune 500 companies are increasingly using it. A survey found that approximately 50 percent of Fortune 1000 companies in North America and 40 percent in Europe use a version of the BSC (Kaplan and Norton 2001a). The editors of the *Harvard Business Review* (*HBR*) identified the BSC as one of the most significant management ideas of the past 75 years (PR 2003). The BSC is now being listed as a value methodology along with cost–benefit analysis and return on investment (Field 2000); it is being used to help change organizational culture (Simpson and Cacioppe 2001); and several companies have reported improved operational efficiency and profitability as a result of using the BSC (Atkinson and Epstein 2000; Gumbus, Bellhouse, and Lyons 2003).

Researchers have clearly stated that companies of all sizes are good at developing mission statements and strategies but poor at implementing operational strategies to achieve them, and that they are poor at measuring whether they are achieving their mission and strategy. The BSC addresses this problem by linking

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the mission to strategy and then translates the strategy into operational objectives and measures. The BSC can be used with five or 5,000 employees working toward the same goals (Gumbus and Johnson 2003; Green et al. 2002). However, a review of the literature, from January 2000 to September 2003, of the *Journal of Small Business Management, Journal of Business Venturing, Entrepreneurship Theory and Practice, International Small Business Journal*, and the *Journal of Small Business Strategy* resulted in no papers with BSC in the title. A general BSC search throughout entire articles also did not find any of these journals, nor any other small business/entrepreneurship journals, including the topic of the BSC. Thus, this empirical case study of three small to medium-sized enterprises (SMEs) using the BSC fills a gap in the literature while addressing management practices in small enterprises and entrepreneurship. Clearly, large businesses are benefiting from using a BSC, and small businesses can also benefit from using a BSC, as supported by three case studies presented in this paper.

Methodology

The primary methodology is case study. Research was conducted through personal interviews with executives at Hyde Park Electronics, Futura Industries, and Southern Gardens Citrus (SGC). The U.S. Small Business Administration defines small business as having fewer than 500 employees. In Europe the term *small to medium-sized enterprise* is frequently used to define both small firms, with a maximum of 50 employees and medium-sized companies with a maximum of 250 employees. All three case study firms have fewer than 250 employees and are therefore considered small in the United States and an SME in Europe.

Because of the lack of literature in the small business/entrepreneur journals, the paper begins with a discussion to explain what the BSC is and why small businesses should use it. Then, three SME case studies of firms using the BSC are presented to illustrate how entrepreneurs are currently using the BSC to improve performance. Each case study includes a copy of the firms' BSC as an aid for other SME to develop their own BSC.

What Is a BSC and Why Should Small Businesses Use It?

Kaplan and Norton first introduced the BSC in 1990 through a one-year study of 12 companies. The results were reported in the *HBR* in 1992 (Kaplan and Norton 1992). These researchers concluded that financial measures alone were not sufficient to measure performance. Other factors in the new economy such as competence and knowledge, customer focus, and operational efficiency and innovation were missing from traditional financial reporting. They reported the highly successful results of Rockwater and FMC Corporation's use of BSC (Kaplan and Norton 1993). In 1996, Kaplan and Norton published *The Balanced Scorecard: Translating Strategy Into Action* to explain how to develop and use the BSC (Kaplan and Norton 1996a) and two more papers in the *HBR* (Kaplan and Norton 1996b, 1996c).

Over the years, Kaplan and Norton and others have conducted research supporting their statement that financial measures are not enough. The BSC has been successfully used to increase performance in large organizations and reported in journal papers in the profit sector by the U.S.-based Pitney Bowes (Green et al. 2002), Coors Brewing Company (Walker 1996), and White Lodging Services (Denton and White 2000), as well as by European-based ABB Industrie A.G. (Ahn 2001), and in the nonprofit sector by the city of St. Charles, IL (Maholland and Muetz 2002) and a

cardiology unit of a hospital (Oliveira 2001). By implementing the BSC model, Duke University's preoperative services department has "evaluated, balanced, and improved patient satisfaction by decreasing surgical delays, improving physician satisfaction, enhancing elective case minutes within the surgical block, and increasing volume while also decreasing overall cost per case" (McLean and Mahaffey 2000). The National Women's Health Quality Initiative Advisory Council commented on the contribution of the BSC, stating that it is the most effective tool that can be applied across the health-care industry. They credit the power of the card with organizing multiple stakeholders around a shared mission, communicating and managing outcomes, and most importantly for its unique balanced approach (Inamdar et al. 2000).

The BSC has evolved from management reporting to a strategic tool used by executive teams to set strategy, align operations, and communicate with internal and external stakeholders (Gumbus and Lyons 2002; Gumbus, Lyons, and Bellhouse 2002; Schatz 2000). The framework of the four perspectives of the BSC helps to translate strategy into objectives and measures. The four perspectives are financial, customer, internal process, and learning and growth (Kaplan and Norton 1996a). The critical success factors created in each of the four perspectives are balanced between long term and short term, as well as internal and external factors that contribute to the business strategy. The BSC not only translates the strategy to operational terms but also aligns the organization to the strategy by focusing employees on their role in accomplishing the company mission (Frigo and Krumwiede 2000).

The BSC is a management tool that provides a framework for translating strategy into action. It provides a set of metrics that track a firm's progress against goals and objectives to meet company strategic initiatives. Motivating managers and employees and measuring their performance are key challenges to any enterprise (Denton and White 2000). The organization as well as individuals can monitor progress and use the card as a map to achieve business success. Starting with strategic initiatives, a company cascades departmental and individual objectives that correspond to the strategy. Reporting on these measures allows the firm to monitor progress and easily course-correct if problems are identified. Many firms use a red, yellow, and green traffic light reporting system to indicate targets not met, in danger of not being met, and those met. Companies that have used the card for many years are applying it to compensation, employee performance appraisal, and capital budgeting as well.

The BSC enables a focus on long-term growth versus a short-term focus on quarterly results. It also expands the traditional short-term financial metrics by including customer, operational efficiency, and employee learning and growth measures. The card provides a balance between short- and long-term goals and also balances what gets measured—financial plus quality and consumer and employee satisfaction dimensions. All dimensions of the card are equally important and results relate to one another. For example, the *financial* dimension answers the question, "How do our shareholders view our performance?" The *customer* dimension answers the question, "How must we be viewed in the eyes of our consumers?" The *operational efficiency* dimension answers the question, "Which processes are working well and which needs to be fixed in order to meet our internal and external customer demands?" Finally, the *learning and growth* dimension answers the question, "What kinds of people do we need to hire and retain, and what sort of company culture do we promote to achieve our vision?" The objectives and

measures create focus for the future, not a simple measure of the past. A successful BSC program should be a change process, not a "metrics" project (Kaplan and Norton 2001b). In summary, the BSC helps an organization in the following six ways:

(1) *Promotes growth*—due to focus on long-term strategic outcomes, not just short-term operational results.
(2) *Tracks performance*—individual and collective results can be tracked against targets in order to correct and improve.
(3) *Provides focus*—when measures are aligned to a few critical strategies, the BSC provides focus on what is important to the company.
(4) *Alignment to goals*—when you measure what is truly important to success, the measures become linked and support each other. Alignment occurs across the organization.
(5) *Goal clarity*—the BSC helps respond to the question, "How does what I do daily contribute to the goals of the enterprise?"
(6) *Accountability*—individuals are assigned as owners of metrics in order to provide clear accountability for results.

SMEs can benefit in these six ways. As discussed, financial measures are not enough for any business, as the BSC can be used with five or 5,000 employees working toward the same goals (Green et al. 2002). In fact, measuring customer, operational efficiency, and learning and growth all contribute to the bottom line (Kaplan and Norton 2001c). A review of the accounting and finance literature includes BSC papers (Ittner, Larcker, and Meyer 2003; Kaplan, Norton, and Witzel 2003; Kerr 2003; Fisher 2002; Frigo and Krumwiede 2000) and so does the operations literature (Kleijnen and Smits 2003; Walker 1996).

Entrepreneurs should develop objectives, measures, targets, and initiatives to guide improvement in all four perspectives of the BSC. Objectives are the end results/outcomes that entrepreneurs want to achieve by a specific future date. Measures determine if objectives are being achieved. Targets are quantifiable, measurable performance outcomes that entrepreneurs target within each objective. Initiatives are the strategies and tactics (plans) to achieve specified targets and objectives. The objectives and measures (or metrics) create focus for the future, not a simple measure of the past. A successful BSC program should be a change process, not a "metrics" project (Kaplan and Norton 2001b).

Is your SME achieving its mission/vision? If you do not have a quick measurable answer, besides financial, you need a BSC. If your team is without a scorecard, it is not playing the game; it is only practicing (Maholland and Muetz 2002). The BSC plays to the well-known management adage—if you want to manage it, you have got to measure it, and you get what you measure and reinforce. So if you are not measuring your financial, customer, process, and learning and growth, you and other stakeholders really do not know how well you are performing.

The following three case studies support why SMEs should use a BSC, and they explain how firms use a BSC to increase financial, customer, operational efficiency, and learning and growth performance. A copy of the three BSCs are included as a guide to SMEs in developing their own BSC. To provide confidentiality, the actual performance figures that are on the firm's BSC are not included in their BSC in this paper.

Case Study of the BSC at Hyde Park Electronics

Data were collected through personal interviews with Vincent C. Lewis, chief executive officer (CEO) of Hyde Park Electronics. Hyde Park Electronics is a

manufacturer of ultrasonic proximity sensors based in Dayton, Ohio. It is a family business started 39 years ago by the father-in-law of Vincent Lewis. Lewis became CEO in 1999 and led the company in the implementation of a balanced approach to measuring company performance. Hyde Park Electronics employs 42 people with a management staff of eight that designed the BSC. Their journey included many changes and has been an evolutionary process for the company that culminated in a breakthrough year in 2001. The company had its most profitable year since 1995 in a weak economy. Lewis attributes this success to the BSC.

Lewis likes to draw stick figures on a balance beam during his management meetings. He uses this visual to continually remind his staff that their business must remain balanced in an environment where it is easy for measures to tip the scale and take priority (particularly financial metrics). "I draw a balance beam with stick figures so we don't fall to one side, and are constantly looking for off-setting measures to balance our business." The story of their BSC journey, sample metrics and how they were selected is discussed in the succeeding paragraphs.

Hyde Park Electronics transitioned from a low volume company that sold custom machine controls to a narrow customer base with three field sales representatives, to a company that sells several high volume sensor lines through a distribution channel to a wide range of customers. A breakthrough design in ultrasonic technology changed the focus of the business and became the savior product of the company. Today this single product accounts for over 80 percent of sales. The emphasis on ultrasonic proximities resulted in a slow shift to a different business model. With the introduction of the ultrasonic proximity product, the company strategy shifted to a penetration sales model, product

development became a focus, and a new plant facility was constructed. These changes occurred during a change in management as Lewis assumed the role of running the company from his father-in-law. Lewis credits the BSC with providing a needed focus on how to run the business in a period of tumultuous change.

It was during this time of transition that CEO Lewis attended the Harvard Business School's Owner/President Management Program and was first introduced to the BSC. Lewis embraced the concepts of a balanced approach at the suggestion of an advisory board member in the last quarter of 2000. At the time, the company had an abundance of reports and data but little usable information. The board requested a metric system, and Lewis wanted a simplified method of measuring the company that could help him run the business. His management team gathered to discuss the measures that were important to their business. Lewis used a unique approach of counter-balancing each measure with an offsetting measure that continually balances the metrics so one dimension never outweighs the other.

The management team gravitated to the financial metrics first because the company was strong in this area and had a great number of controls already in place. They were good at cash management, tracking sales, number of days outstanding in receivables, sale versus budget, operating income, net income, current ratio, and distributor sales prior to discussions of the BSC. The team felt these measures were all short-term focused and Hyde Park lacked measures that contribute to the long-term success of the business. They searched for proactive measures to steer the business forward, as opposed to after-the-fact financials that could not be controlled. Next is a discussion of the measures in the four perspectives of the BSC (see Appendix for a copy of the Hyde Park BSC).

Financial

The financial metrics are sales, new product sales, operating income, receivables outstanding, and a series of product development measures, as 80 percent of company profits come from their new product. These controls are particularly important because costs to develop a new sensor family are more than a quarter million dollars and development time can be six to eight months.

Operational Quality

Product development issues pivotal to the success of the company are time to market and quality measures, such as warranty failures in the field and customer returns. Another key driver of quality is product delivery. Lewis and his team wanted to know how efficient they were in meeting the customer request for delivery of product. Metrics created to monitor delivery were: same-day delivery, delivery within five days, and on-time delivery. On-time delivery has increased from 89 percent a year ago to a current rate of 96 percent.

Manufacturing/labor efficiency emerged as the most critical measure of success for Hyde Park. The labor efficiency standard is critical because a flaw in the standard build time could get repeated over 5,000 units or 5,000 times. Final assembly time is the metric used to bill the customer, so how long it takes to make the product determines price. With the customer price based on time to build, it is crucial that the company takes 20 minutes to assemble and not 30 minutes. In December 2000, manufacturing efficiency was at 60 percent, a number that alarmed management and drove required changes in labor and process to increase that number to 81 percent as of June 2002. "We can't use quality as an excuse for NOT meeting other customer expectations, such as price and delivery," said CEO Lewis. "The BSC forced us to look at efficiency issues and showed us the over capacity problem we faced at 60 percent efficiency. We were not utilizing our staff well and needed to reduce our workforce to get efficiency in line."

Another metric that surfaced during this time frame was a problem with high levels of scrap. Manufacturing efficiency needed to be balanced with a measure to offset the focus on assembly time (which produced high scrap levels) with a focus on scrap. The company started measuring scrap per line, overall scrap, and the cash drain produced by scrap. This was an interesting lesson on the need to offset one metric with a balancing metric. Lewis and his management team gave special emphasis to offsetting measures when they created the BSC. Examples of offsetting measures are as follows:

(1) Sales are offset by income and income is offset by sales. The company could drive sales by overspending on marketing and cutting prices on risky programs. They could drive income by aggressively shaving expenses that risk long-term growth. Sales growth is an indicator of long-term survival; income is an indicator the company is doing everything else well.

(2) New product sales is a measure of development effectiveness. Hyde Park tracks what they are spending on new product development and time to market. New product sales are an indicator of whether those investments are paying off.

(3) Welfare per employee offsets labor efficiency measures. If rapid declines in employee welfare occur and the company experiences corresponding increases in income and efficiency, then that could be a precursor to an unhappy workforce.

(4) Quality, labor efficiency, labor utilization, scrap, and direct versus indirect labor all work together to help measure one of the core

competencies—manufacturing. Too much focus on one can result in upsetting the system balance.

Customer Satisfaction

The management team felt that measures of customer satisfaction are increased sales and increased income that would result from product acceptance and the generation of repeat customers. Other key customer metrics that drive customer satisfaction are related to product shipment and whether the customer gets the product on the date they requested.

Marketing efforts are measured by tracking data from the web portal created for the distribution channel partners. Items tracked are use of the site, orders online, and the effect of direct-mail marketing and advertising on lead generation and portal activity.

Learning and Growth

Lewis admits that this is the hardest area to quantify. The management team asked one basic question to determine what to measure: "Are we making employees happy?" This simple question drove creation of the metrics for this quadrant. Hyde Park has many employee welfare programs such as benefits, profit sharing, training, and employee communication and employee activities. It decided to measure money spent on training per month, and money spent on employee programs in this dimension of the BSC.

Programs consist of monthly town hall meetings that showcase a department, quarterly state of the business meetings, small-group conversations with the CEO, and various parties and celebrations. For example, Hyde Park has been celebrating, for 39 years, when it hits shipment goals, by closing the manufacturing plant on Friday afternoons at 3:30 p.m. for a pizza and beer party.

The company has long-term employees whose average tenure is 17–22 years; so at this point they do not focus on turnover or vacancy rates. Lewis is contemplating whether performance reviews are on time in a future version of the BSC.

Lessons Learned

Employees who are not used to being measured can be threatened when the results of their work are posted for all to see. This public display of data on the manufacturing floor created concern about how the data might be used by management. Employees initially felt that management was trying to get them to work harder by measuring efficiency of manufacturing. Lewis explained to his employees that, yes, that *is* the case and the duty of responsible management is to focus on efficiency.

A gain sharing program was launched in 2001 that took four of the BSC measures and attached a goal and gain-sharing award according to these targets. When all the following measures are met, employees receive a lump sum bonus amount: (1) operating profit—financial metric target 15 percent; (2) cumulative warranty return—customer metric target 1.7 percent; (3) delivery on time—customer metric target 90 percent; and (4) scrap per line—financial metric target 1.8 percent.

Employees at Hyde Park are becoming more comfortable with measurement and are questioning metrics and how they are used to guide the business. Lewis welcomes the questions and increased comfort level in public measurement of company employees. Results of the BSC are posted on the company intranet and are used to guide advisory board meetings.

Lewis is convinced that the use of the BSC, the increased use of metrics and general awareness of measures have directly contributed to the greatest profit generated at Hyde Park in seven years—the 2001 results. Everyone at Hyde Park can be proud of the changes made on the journey to a BSC.

Comparison of Hyde Park to Large Organizations Using the BSC

Hyde Park used the BSC to balance financial measures with customer and operational measures and achieved their greatest profit in seven years with its 2001 results. Large organizations such as Bridgeport Hospital have also achieved impressive results attributed to the implementation of a BSC. After using a BSC for four years, Bridgeport Hospital reported in 2001 that patient satisfaction and customer preference increased, and time to admit a patient decreased as well as number of hours on emergency department diversion were below target. Volume and market share were at goal with targeted services above goal. The number of full-time equivalent employees were below target, and supply chain savings in excess of $750,000 were reported. Senior Vice President (VP) for Planning and Marketing Dorothy Bellhouse attributes the hospital's success to the BSC that provides alignment and monitoring of daily operations to strategic goals (Gumbus 2003). The City of Charlotte, NC was one of the first to adopt a BSC approach to performance measurement, and it has reaped many positive results from the implementation of a BSC. The city adopted the traditional quadrants to fit its culture and emphasize the customer perspective rather than the financial as a public-sector organization. The city uses the BSC to articulate strategy and cascades objectives, measures, targets, and initiatives from their strategy. It has simplified the number of measures over the years and delineate four types of measures: activity, input, output, and outcome (Niven 2003). These are tracked across a corporate BSC as well as key business unit (KBU) scorecards. For example, the city-level scorecard may have a customer objective to provide public transportation and measure users of public transportation. The KBU scorecard for the transportation department might measure details such as available modes of transport, repair time, frequency of on-time arrivals, and other measures of customer satisfaction with public transportation. The city links the BSC to budgeting in order to allocate resources to strategic initiatives. Benefits cited by the city include awareness and understanding of strategy, linkage to budgeting, enhanced teamwork, improved management decision-making, and the ability to report outcomes to the community (Niven 2003). At Hyde Park, Lewis has achieved similar increases to customer base and enhanced awareness of company strategy.

Case Study of the BSC at Futura Industries

Data were collected through personal interviews with Susan Johnson and Tami Olsen, president and former human resource (HR) VP at Futura Industries, respectively. Based in Clearfield, UT, Futura is an international company witsh 230 employees and more than 50 years of experience in aluminum extruding, finishing, fabrication, machining, and design. Futura serves a high-end niche in a variety of markets such as original equipment manufacturer (OEM), floor covering trims, electronics, transportation, shower door, marine store fixture, and retail. Its mission, *Extraordinary Value through Extrusions*, is achieved by a focus on their business purpose—*meeting the changing needs of customers*. Futura attributes its success to a culture where every individual is expected to contribute to the success of the company as well as to the success of the customer.

Employee standards are: a sense of urgency, uncompromising integrity, trust, interdependence and individual contribution, and being the best. The BSC has enabled the company to focus on the key measures that determine business success. According to Johnson, "We believe the key to helping our business partners achieve success is by providing them with superior customer satisfac-

tion." Futura uses the BSC to focus on two competitive weapons that put it ahead in a saturated marketplace—their ability to hire and retain the best people and their devotion to the customer.

In 1995, Susan Johnson was recruited to run Futura based on her philosophy of putting the employee first. She is committed to the belief that employees make *the* difference in the marketplace, and Johnson walks the talk when it comes to employee work life initiatives. According to Johnson, "I hate anecdotal stories of what makes a company the best. In our industry we traditionally talk dollars per pound, but I believe we need a different kind of value for our customers. We had all the financial metrics, lots of customer measures, and got ISO accredited three years ago so we had internal processes focused on quality, but it is our employees that differentiate us from all other extrusion companies."

Johnson's belief that loyal employees' link to satisfied customers meant that the BSC was a natural progression to measuring the business. It puts the focus on people as the foundation for business success. *Utah Business Magazine* named Futura to the top 10 Family Friendly Employers in Utah for the fourth year in a row in 2003 and the top private employer in the state for 2001. The emphasis on the learning and growth dimension of the BSC is the foundation for Futura's state recognition and ultimate business results. Next is a discussion of the measures in the four perspectives of the BSC.

Learning and Growth

Futura has three main measures in the learning and growth that are linked to employee retention and development. They believe these are the cornerstones to the ability to attract and retain key talents in the local market. First, turnover is measured in the following two ways: (1) one year plus turnover, and (2) total company turnover. In an industry with

norms of more than 50 percent, the company's annual rate of 7 percent turnover last year substantiates that the company focus on employee satisfaction pays off. The company has not always had good turnover statistics—as recent as 1998, the company experienced a 43.7 percent turnover. The improvement can be partially attributed to a combination of many work life initiatives aimed at a corporate culture based on performance and employee commitment. In order to monitor many work life initiatives and continually improve the offerings of employee programs, Futura surveys employees annually to see what programs are truly valued.

Employee satisfaction is measured by the annual Leadership Review, which asks employees to evaluate their manager, and by a unique review called the Birthday Review, held during the month of the employee's birthday. Employees have a face-to-face meeting with HR representatives and are asked a series of questions about the company. After the verbal dialog, the employees are given an anonymous survey. Issues identified in the dialog are followed up with a Birthday Review that responds to identified issues or complaints. On a scale of 1–4, the target is 3.2 (they achieved 3.26 year to date [YTD]) for employee satisfaction. Futura modeled their questions on the work of the Gallop Corporation and asks questions about work climate, communication, and achievement.

The third metric refers to average certification levels—a job wage skill classification attained by additional training and job skills. Factors such as corporate citizenship and cultural maturity are also monitored—with a goal of 80 percent of employees moving to the next level during their performance review. Compensation is not awarded based on tenure; it is based on the skill certification level attained and the completion of required training. This provides not only a guide to compensation but also a map

for employees to chart their course and future career progression with Futura. During 2003, Futura completely revamped its performance review system for plant employees with an even greater slant toward skill certification, flexibility, and improvement actions based on its ISO system. Futura believes this will help the company to develop greater capability to flex capacity up and down rapidly in the plant.

Customer Service

The management staff asked a basic question when determining customer metrics, "How do you give good customer service?" The answer was the ability to hire people aligned with Futura values and to retain people who perform. This dimension of the BSC was simplified to four key measures: customer satisfaction, customer hassle index, on-time delivery, and lead times.

Futura's approach to determining customer satisfaction involves placing calls to 20 randomly selected customers each month and posing seven questions about quality. They contracted a consultant to visit 50 customers to determine what was most important to them. These resulting customer survey questions were derived from actual customer concerns regarding quality, on time delivery, and fair value of product and services. Johnson determined that quarterly customer statistics were not frequent enough and conducts her monthly meeting around the results of the surveyed customers. The goal is 9.0 on a scale of 1–10. The highest score is 9.2 for responsiveness, the lowest score is for lead time at 8.6, and the overall score is 8.92. The final question on the survey asks the customer, "Futura Industries goal is to be a hassle-free supplier. On a scale of 1–10 how well would you say they are meeting this goal?" This exemplifies Futura's commitment to the customer and the timely resolution of customer issues and complaints.

The Link

All employees' incentive compensation is linked to the BSC. The hourly employees are linked to a plant performance card to drive individual incentives for employees. Employees are paid a base salary and have a quarterly formula for incentives based on hours worked times a point system that generates a financial award linked to the following three metrics: (1) on-time delivery, (2) company-wide first pass yield at 98.9 percent; and (3) safety and housekeeping.

"We have seen a 20 percent increase in plant productivity, our first pass yield levels are at 99 percent, and our worker compensation costs are dramatically reduced. In 2002, our free cash flow generation was twice our best year and payroll was not reduced to achieve this result," stated Johnson.

Internal Operations

Internal metrics focus on new product development as a percent of sales. Futura is expanding their top end customer base and has a target of 20 percent of sales from new customers. The current rate is 16 percent of sales derived from new products.

The most important metric on the BSC, according to Johnson, is safety, which drives ultimate productivity and profitability. Housekeeping and safety are given top priority at Futura, which benchmarks itself against national norms for safety. Numbers are tracked for total recorded incidents per 200,000 labor hours. TRIR nationally is reported at 10, for the total aluminum extrusion industry it is 9, and at Futura it is 2.5—three and a half times lower than the industry average. Seethe Futura Industries BSC (Figure 1) to review its measures.

Lessons Learned

Execution of strategy is the key to success. Johnson believes that the key to execution is all about 2 dimensions:

Figure 1
Futura Industries Balanced Scorecard—2002

Strategic Pillars: Prosper / Grow / Survive

- **Operational Excellence** — Speed, Quality; Planning & delivery - Deliver what we say when we say; Continually reduce our cost — Urgency & Responsiveness
- **Growth** — New Customers / Existing Customers; Intimacy - we know our customers' businesses and we use that knowledge to solve problems; Flawless new products planning & delivery; Identify new opportunities in products & processes — Urgency & Responsiveness
- Continually improve our competencies
- Provide a safe, challenging & enjoyable workplace
- Hire people aligned with our values

Perspective	MEASUREMENT	TARGET	ACTUAL-YTD (Through May 31, 2002)
FINANCIAL	* Income $/ %	$147K/1.9% 2Q	85K /1.7%
	* Free Cash ROTA	$600K/2.0% yr	251K/2.0%
		4.38 %	11.55 %
	* TRIR / Lost Time	0 / 0 (# of emp)	10 / 6
CUSTOMER PERSPECTIVE	* Customer Satisfaction	85%	86.4%
	* Customer Complaints	< 30 per month (360) yr	37.8 avg / 189ytd
	* On-Time Deliveries	95 %	80 % mo / 83% ytd
	* RMA's	<.25	.10% mo/ .13% ytd
	* Total Inventory Turnover	15	7.2
	* Total Finished Goods Turnover	25	12.2
	Market Composition:	**2nd Qtr**	**AVG**
	* Commercial	41.2%	43.3%
	* OEM Simple	12.8%	14.0%
	* OEM Complex	46%	42.6%
INTERNAL PERSPECTIVE	* % of Sales from New Products	13 %	18.4% ytd
	* Margins on NP, Std/Real/Net	21% / 10% / 8%	19.4% / 14% / 11.1% ytd
	* Quote Accuracy (runs 1-4)--------	+ 20% on first runs	6% ytd
	Cost of Quality:		
	Recoveries -------------------	80%	80.12% yr
	Plant Scrap ------------------	2%	2.56% yr
	Rework -----------------------	.4%	.32% yr
	* Total Production Cost/Std hr.	<$34.00 hr	$34.03 ytd
	* Pounds Packed/Person	>5000 lbs	5237 lbs.
	* $ Packed/Person	>$13,500	$13,822
LEARNING, INNOVATION & GROWTH	**Turnover**		
	* Key / Leadership Turnover	< 5%	0%
	* One Year + Turnover	< 7%	2.2% ytd 5.3% trend
	* Total Company Turnover	< 20%	6.2% ytd 14.9% trend
	Employee Satisfaction		
	* Leadership Survey	Avg 4.2 + (scale 1-5)	3.9
	* Birthday Reviews	Avg 3.2 + (scale 1-4)	3.27
	Average Cert. Levels	80% Advancement	

hiring the right people and communications. The BSC has enabled Futura to focus on hiring talent and retaining customers. Core competencies at Futura are the ability to hire and develop reliable and responsible people and the ability to communicate internally and externally. At Futura the BSC is viewed as a management tool and not a series of metrics. The company uses the BSC to guide operational decisions and link strategy to objectives.

Advice from Johnson includes the need to focus on information technology (IT) readiness. Does your company have the kind of IT people it needs and the IT capacity and system to support execution of strategy? Most companies have too many metrics to facilitate focus. Simplify measures. Most important is knowing what measures drive the business and that you are measuring the right things for business success. Finally, Johnson states that the BSC is not easy to implement, and that it is extremely important to link all employee pay to the BSC.

Futura Industries uses the BSC as a strategic tool to align values to company measures. The card provides company leadership with a one-page, simple yet powerful tool to capture measures that matter to the business. The BSC is the visual representation of the strategies and execution metrics, which are communicated to internal and external stakeholders.

Comparison of Futura to Large Organizations Using a BSC

Futura utilized a BSC to emphasize the learning and growth dimension as the cornerstone for measuring company results. Large organizations such as Mobil North America Marketing & Refining (NAM&R) also emphasized learning and growth with the following three objectives for their learning and growth dimension. Mobil stressed building core competencies and skills at both the employee and leadership levels, provid-

ing access to strategic information, and a climate in which employees are motivated and empowered to strive to achieve the vision (Kaplan and Norton 2001c). Both Futura and Mobil NAM&R utilized employee surveys and employee core competencies as the foundation for measurement. National Bank Online Financial Services (OFS) used a product leader strategy similar to Futura with an emphasis on increasing revenue per customer and deepening relationships with existing customers. Both companies used customer outcome measures to add and retain high-value and high-potential customers. Product availability and reliability targets were created to offer superior service capability to customers. National Bank OFS achieved similar results to Futura, receiving several awards as Best Online Bank, and decreased downtime on the website by 71 percent, which resulted in decreases in customer service calls. The chief financial officer credited the BSC with keeping the company focused on operational issues while managing customer relationships (Kaplan and Norton 2001c).

Case Study of the BSC at SGC

At this small entrepreneurial company of 150 employees the BSC was used to establish a corporate culture and lead an organizational change effort as a new VP and General Manager (GM) took over in 1995. Today, SGC is a Balanced Scorecard Collaborative Hall of Fame winner based on its success using the BSC. The implementation story is a role model for other small businesses to follow as they pursue this management tool. The following case study of SGC illustrates a successful implementation of the BSC as a performance measurement tool in an entrepreneurial setting. SGC is a subsidiary of United States Sugar Corporation and competes in a consolidated market for not-from-concentrate (NFC) orange juice.

Data were collected through personal interviews with Tristan Chapman. He was hired as VP and GM in 1995 and simultaneously read an article that emphasized the fact that what gets measured gets done. He believed that people want to do a good job, perform well, and achieve. Chapman built a management team and created a culture that reinforced this core belief. He used cross-functional management teams to define what should be measured. This critical buy-in to the BSC was important to gain at the managerial level. As the individual responsible for the implementation of the BSC, Chapman also had the strong support of CEO Bob Buker.

"I needed to get involvement from the entire management team—collaboration is key to the implementation of the BSC. I looked around and saw that I was the biggest problem because I needed to let go of the card and take critical feedback from my staff," admitted Chapman. The process of putting together a BSC proves the management adage—that no one person is as smart as all of us. For an entrepreneurial owner this lesson is particularly hard, yet important. "I had to put my ego aside and listen to others to allow their input—I had to realize the card was not mine, but theirs." Chapman's success in this process named SGC one of 12 original companies invited into the Hall of Fame established by the BSC Collaborative headed by Robert Kaplan and David Norton.

Since implementing the BSC, SGC has achieved outstanding results. The company is now the lowest-cost supplier of NFC orange juice in the industry. "The Balanced Scorecard has been the key to our organization's success. It provides a perfect framework for achieving positive business results," stated GM Chapman. SGC used the BSC to achieve the following results:

(1) In 1995, SGC supplied none of the NFC orange juice private label market and was in last place among suppliers. Today, SGC supplies 60 percent of the private label market and is considered the leader in bulk NFC suppliers.
(2) SGC became the lowest-cost supplier of bulk NFC in the citrus industry after utilizing the BSC for a number of years.
(3) Recipient of the Kroger Outstanding Supplier award in 1996, 1998, and 1999.
(4) Recipient of the Tropicana Supplier of the Year award in 2001.
(5) SGC was named the premier Florida citrus processor in 1997, 1998, 1999, 2000, and 2001.

Chapman decided the BSC could help SGC to accomplish three goals:

(1) Align the organization with its overall mission.
(2) Give excellent feedback on the organization's level of performance.
(3) Provide focus on areas that require improvement.

The BSC was chosen as a management tool because it motivates employees to act in ways that increase the company's value to the shareholders, rewards all team members who are accountable for performance, and enables SGC to attract and retain outstanding employees.

To build a scorecard leadership team, Chapman organized the plant of 150 employees into 10 operating teams. Chapman established two scorecards as part of his performance management system:

(1) A corporate BSC for overall alignment to strategic direction.
(2) A Bonus Scorecard, which consists of key measures that link bonus awards to the BSC.

Cross-functional teams of managers were organized and made accountable

for each of the five scorecard dimension established by SGC. These dimensions are the traditional four from the Kaplan–Norton model (financial, customer, internal, and innovation and learning), plus a fifth dimension of "core values" (Figure 2). The core values have their own measures and targets, similar to the traditional four dimensions. The core values answer the question: "By what principles do we choose to operate this business?" SGC's mission to "[c]ontinuously improve and become the low cost supplier of high quality citrus products to our customers, while maximizing returns to our shareholders," is reflected in these values.

Paying for Performance

SGC used the BSC to link goals to employee performance. They established the following five strategic goals for 2001:

(1) Increase sales of NFC by 50 million gallons.
(2) Secure 66 percent of fruit supply on a long-term basis.
(3) Achieve an integrated cost of production per pound solid of $X.
(4) Continuously improve processes and products, and lower costs.
(5) Continue to improve HR, technical, and operational skills as a competitive advantage.

"Tying compensation with the balanced scorecard is an excellent way to reward individuals and teams for achieving corporate objectives. This piece has withstood the test of time mainly because we have been responsive to feedback and made adjustments where

Figure 2
Core Values

Core Values (Five-Star Philosophy)

Safety   Teamwork   Attitude   Quality

Productivity
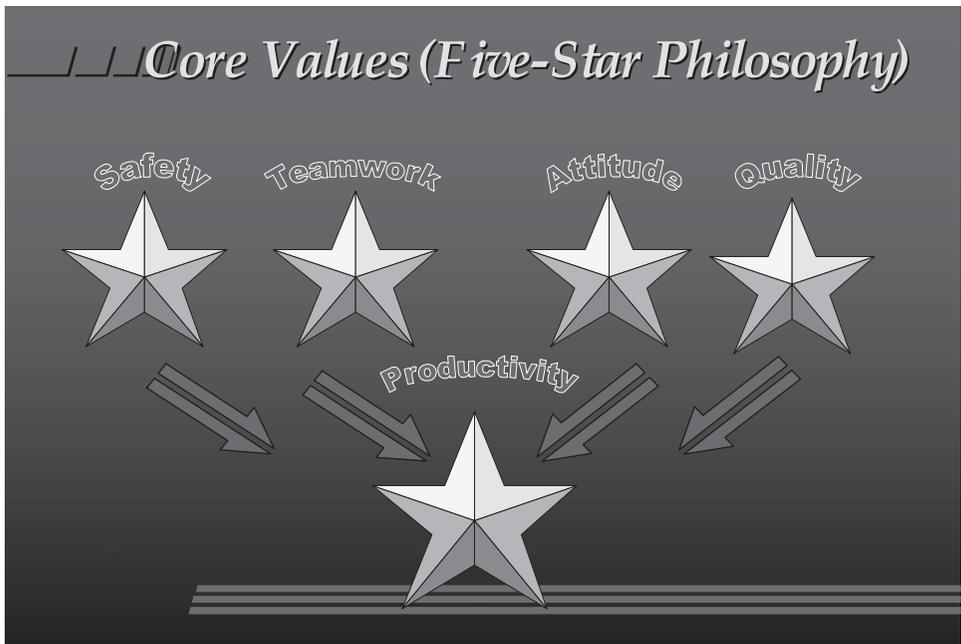
needed," noted GM Chapman. The basis for the bonus awards is the Bonus Score-card (Figure 3). This consists of BSC metrics with three levels of performance that determine payment amounts.
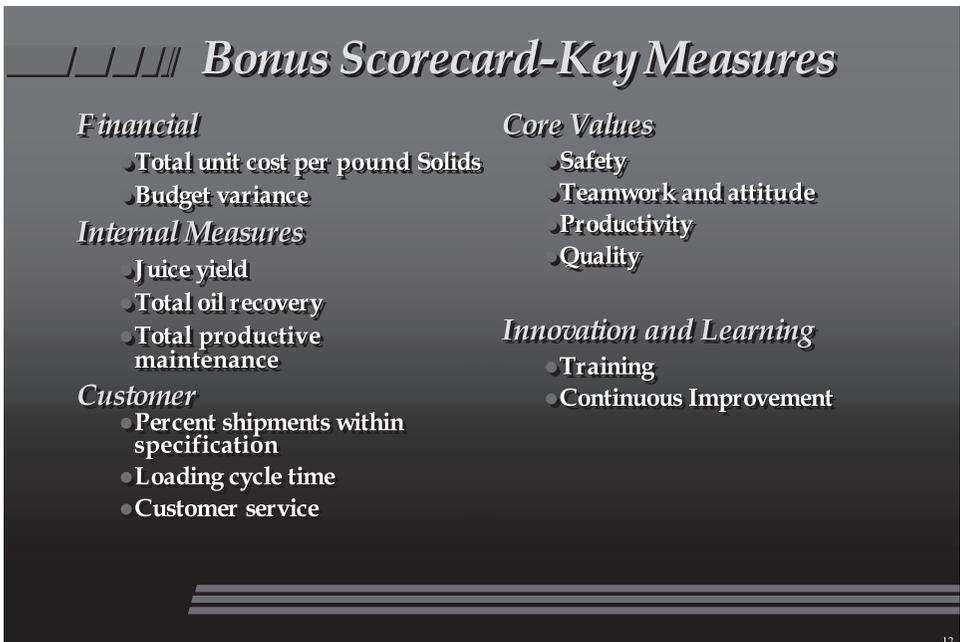
SGC has achieved impressive results in all dimensions of the card. In the *financial* area it measures juice costs per pound solid, and costs have been steadily trending down from 1995. In the *customer* dimension, a mission critical metric is percent shipments within specification, loading cycle time, and customer service. In this area, operations management (OM) shipments chemical specifications percent within specification has risen steadily from 70 percent in 1995 to 99.86 percent in 2002. In the *internal operations* dimension the company measures total juice yield, total oil recovery, and total productive maintenance. Results in

this area are measured weekly and show a YTD at threshold and excellent levels. The *core values* dimension measures safety, attitude, teamwork, productivity, and quality. All major work units report in the 90–97 percent range. In the *innovation and learning* dimension training and continuous improvement are measured. Improvement teams are developed; five opportunities are identified and revised).

Comparison of SGC to Large Organizations Using the BSC

SGC used the BSC to achieve outstanding results as the industry leader and lowest cost supplier in their market. Similarly, Mobil NMA&R introduced the BSC in 1994 to launch a turnaround strategy. It went from ranking last among industry peers to maintaining industry

Figure 3
Bonus Scorecard

Bonus Scorecard-Key Measures

Financial
- Total unit cost per pound Solids
- Budget variance

Internal Measures
- Juice yield
- Total oil recovery
- Total productive maintenance

Customer
- Percent shipments within specification
- Loading cycle time
- Customer service

Core Values
- Safety
- Teamwork and attitude
- Productivity
- Quality

Innovation and Learning
- Training
- Continuous Improvement

12

leadership for four years. The performance mindset of the BSC is given credit for this result (Kaplan and Norton 2001c). The BSC played an important role in the return to profitability of CIGNA Property & Casualty Insurance after deploying the card as the core management process. It used the BSC to manage a transformation from a generalist to a specialist company. Chemical (Chase) Retail bank was another early adopter that successfully used the BSC to support major change initiatives (Kaplan and Norton 2001c). In 1995, AT&T Canada, Inc. turned the company around by focusing on process improvements guided by a balanced strategic management system. By 1998 the company had an expanded customer base and positive cash flow generated from revenue per employee increases.

Other companies have used poor financial performance to drive the adoption of a BSC such as Zeneca Ag Products N.A. The company linked incentive pay to strategic performance and aligned goals with the parent company using the BSC. United Parcel Service (UPS) moved from an operational excellence company to a more customer-focused approach using the BSC. UPS is an example of a profitable enterprise adopting a balanced measurement system as opposed to this strictly financial metrics prior to 1994. Company executives credit the BSC with moving the company to a more customer-focused and solution-oriented business (Kaplan and Norton 2001c). Many large organizations have adopted a balanced approach to measurement with successful results. This paper proposes the use of a BSC approach to measurement so that small business enterprises can share similar gains.

Discussion

The importance of measuring strategy and operational plans is here to stay, and the BSC is not just another management fad (Green et al. 2002). As presented, more than half of the Fortune 1000 companies are using the BSC to improve performance, and as illustrated in three case studies, SMEs can also benefit from using this management tool. However, because there is no BSC small business/entrepreneur literature, a comparison between the three case studies and prior SME papers is not yet possible.

The results of the case studies of Hyde Park Electronics, Futura Industries, and SGC support the prior literature from large companies. The implication for entrepreneurs is that they too can benefit from developing and using a BSC. Three case studies, with actual BSCs, have been provided to aid entrepreneurs, and those who assist them, develop their own BSC. However, by reviewing the three BSCs, one realizes that they are very different yet work well for these SMEs. Thus, an important implication is that there is no one BSC that fits all, and BSCs should be used to stimulate thinking of relative measures in the critical success factors of any business. The development of the BSC should be a team-based ongoing process, as the three cases illustrate. Thus, the BSC is used for continuous improvement, which is important to the growth of the SME.

As with all research, this case study has limitations. This is the first published paper on the BSC in a small business/entrepreneur journal, thus there is no literature base. Implications are the need for further research to develop the literature with emphasis on how small businesses actually use each of the quadrants in their performance measurement system. Further research is needed on how small businesses align the BSC to employee appraisal, compensation, and the capital budgeting process (Lyons, Gumbus, and Bellhouse 2003). Future studies should include larger sample sizes/. This study has three cases, and most papers include only a single large

organization. All cases in this study are manufacturing companies, so there is need for BSC research in the small business service sector. The current study and literature include case studies in which the BSC was successfully implemented. Another implication is that practitioners and researchers can also benefit from a better understanding of unsuccessful use of the BSC, and to compare successful and unsuccessful implementation of BSCs. In research, as well as in performance measurement, a balanced approach is recommended.

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Appendix: Hyde Park Electronics BSC

SALES
Total sales
Prior year sales ($1000)
Current year sales ($1000)
Cumulative change (percent)
Prior year rolling average ($1000)
Rolling average ($1000)
Distributor Sales
Prior year sales ($1000)
Current year sales ($1000)
Cumulative change (percent)
Channel Partner Sales
Prior year sales ($1000)
Current year sales ($1000)
Cumulative change (percent)
Sonic sensor sales
Prior year sales ($1000)
Current year sales ($1000)
Cumulative change (percent)
Sonic system sales
Prior year sales ($1000)
Current year sales ($1000)
Cumulative change (percent)
New products sales
Accum. percent total sales

**PRODUCT GROSS
MANUFACTURING MARGIN**
SM100 Margin (percent)
SM500 Margin (percent)
SM600 Margin (percent)
SM800 Margin (percent)
SM900 Margin (percent)
SM300 Margin (percent)
LS/PR/SP Margin (percent)
Modular sensors Margin (percent)
Array Sensors Margin (percent)
Financial
Operating Profit (15 percent)
Current ratio
Average collection (days)
Cumulative gross margin
Marketing
Corp/Div Target HQ
Total Corporate Targets
Percent Corporate Target Contacts
Total Market Contacts
Site visits
Web leads
Media Leads generated
News letter leads
Direct mail leads
Direct mail leads
Direct mail leads
Direct mail leads
Human Resources
Training expense
Employee welfare (6150, 6160, 6180)
Number of employees
Welfare $ per employee
Purchasing
Total inventory ($1000)—Acctng
Total inventory ($1000)—G/P value
Inventory turns (per year)
Consignment Inventory ($1000)
New PO activity level
PO commitments ($1000)
Delivery performance
Inventory target ratio
Quality
Cumm. total return ratio
Cum. warranty ratio (1.7 percent)
SMTA accept. Performance

IT
Public site
Search engines polled
Top ten ranking
Average Rank
Search percentage
Distributor Portal
No. of registrants
Active users (percent)
Distributorships registered
Distributorships registered/ total
Distributorships active/ registered
On line orders
Manufacturing
Delivery performance (90 percent)
Same day deliver
Five day delivery
Direct/total labor ratio
Labor utilization
Overall
Labor efficiency per line
Overall
SM100
SM500
SM600/SM800
SM900
SM300
Scrap per line
Overall (1.8 percent)
SM100
SM500
SM600
SM800
SM900
SM300

ENGINEERING
SM300FP
Months remaining
Cost accumulated
VIRTU
Months remaining
Cost accumulated
Sliver
Months remaining
Cost accumulated