

Budgeting and Performance Evaluation at the Berkshire Toy Company

Dean Crawford and Eleanor G. Henry

ABSTRACT: This case¹ provides an opportunity to study budgets, budget variances, and performance evaluation at several levels. As a purely mechanical problem, the case asks for calculations of various price, efficiency, spending, and volume variances from a set of budgets and actual results. The case is also an interpretive exercise. After the variances have been computed, the next step is to develop plausible conjectures about their likely causes. Finally, it is a case about performance evaluation and responsibility accounting. The company has an incentive plan, based on the budget variances, that needs to be analyzed and critiqued.

INTRODUCTION

Janet McKinley is employed by the Quality Products Corporation, a publicly traded conglomerate. The corporation manufactures and sells many different kinds of products, including luggage, music synthesizers, breakfast cereals, peanut butter, and children's toys. McKinley is Vice President in charge of the Berkshire Toy Company, a division of Quality Products.

It is late July 1998 and McKinley has just received the preliminary income statement for her division for the year ended June 30, 1998 (see Table 1). The master (static) budget and master budget variances for the same period are included for comparison purposes. McKinley looks at the bottom line, a loss approaching a million dollars, then picks up the phone to call you. You are an accountant in the controller's office at the headquarters of Quality Products Corporation. You worked with McKinley when her company was acquired by Quality Products,

and now she has called you for advice.

"I know the bottom line looks pretty bad," she says. "But we made great strides this year. Sales are higher than

¹ This case is based on field research at an existing toy company. The essential facts relating to production and sales have been retained. However, all names, dates, actual events, and identifying details have been concealed to protect the privacy and identity of the company. Thus, if any names used in this case are those of actual firms or individuals, then it is purely coincidental.

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TABLE 1
Berkshire Toy Company
A Division of Quality Products Corporation

Preliminary Statement of Divisional Operating Income
for the Year Ended June 30, 1998

	Actual	Master (Static) Budget	Master Budget Variance	
Units sold	325,556	280,000	45,556	F
Retail and catalog (174,965 units)	\$ 8,573,285	\$11,662,000	\$ 3,088,715	U
Internet (105,429 units)	4,428,018	0	4,428,018	F
Wholesale (45,162 units)	1,445,184	1,344,000	101,184	F
Total revenue	14,446,487	13,006,000	1,440,487	F
Variable production costs:				
Direct materials				
Acrylic pile fabric	256,422	233,324	23,098	U
10-mm acrylic eyes	125,637	106,400	19,237	U
45-mm plastic joints	246,002	196,000	50,002	U
Polyester fiber filling	450,856	365,400	85,456	U
Woven label	16,422	14,000	2,422	U
Designer Box	69,488	67,200	2,288	U
Accessories	66,013	33,600	32,413	U
Total direct materials	1,230,840	1,015,924	214,916	U
Direct labor	3,668,305	2,688,000	980,305	U
Variable overhead	1,725,665	1,046,304	679,361	U
Total variable production costs	6,624,810	4,750,228	1,874,582	U
Variable selling expenses	1,859,594	1,218,280	641,314	U
Total variable expenses	8,484,404	5,968,508	2,515,896	U
Contribution margin	5,962,083	7,037,492	1,075,409	U
Fixed costs:				
Manufacturing overhead	658,897	661,920	3,023	F
Selling expenses	5,023,192	4,463,000	560,192	U
Administrative expenses	1,123,739	1,124,000	261	F
Total fixed costs	6,805,828	6,248,920	556,908	U
Operating income ^a	\$ (843,745)	\$ 788,572	\$ 1,632,317	U

^a The actual operating income reported in Table 1 is a preliminary figure that has not been adjusted for fiscal 1998 bonuses, if any.

ever. Customers love our product and respect our quality. There must be a way to make this business work and turn a profit, too. The budget variances should provide some insights. Could you do an analysis of the budget variances?"

BACKGROUND

The Berkshire Toy Company was founded by Franklin Berkshire, Janet McKinley's father, in 1974. Berkshire was an industrial artist who enjoyed making stuffed animals in his spare time. His first creation, a teddy bear that he presented to Janet on her seventh birthday, occupies a place of honor at Berkshire Toy Company's headquarters. In 1974, Frank Berkshire acquired an old pneumatic pump that had been used to fill life-jackets for the Navy during World War II. He modified the machine to mass produce stuffed animals, and the Berkshire Toy Company was born.

The company started small at first, but grew quickly as Berkshire's reputation for quality spread. By 1986, annual sales exceeded a million dollars for the first time. Janet McKinley had learned the business from the bottom up. She had started out with the company in the mail room as a part-time summer employee. As a college student, she had spent summers and Christmas vacations working on the production floor, in the sales department, and finally in the accounting department. She was named Assistant to the President in 1988 after receiving her M.B.A..

In 1991, at her urging, the company launched an initial public offering (IPO) of common stock and became publicly traded on the NASDAQ. Janet McKinley became CEO of the company on July 1, 1993 when her father retired. On March 17, 1995, Berkshire Toys was acquired by the Quality Prod-

ucts Corporation in a friendly exchange of common stock valued at \$23.2 million.² The terms of the acquisition included an agreement to employ McKinley for no fewer than five years at an annual salary of \$120,000.

The Berkshire Toy Company produces the Berkshire Bear, a fifteen-inch teddy bear enjoyed by children and adult toy collectors around the world. The company touts the handcrafted features of the bear and advertises its product as the only teddy bear made in America. The bears are fully jointed, constructed of washable acrylic pile fabric, and stuffed with a polyester fiber filling. The toys are dressed in various accessories, such as bow ties, sports jerseys, or character and occupational costumes. Thus, the product can be personalized for numerous occasions. The Berkshire Bear is sold with an unconditional lifetime guarantee. In communicating with customers, the company refers to its repair center as the "bear hospital." A damaged bear may be returned by the customer and repaired (or replaced, at the company's discretion) free of charge.

The Berkshire Toy Company's 241 employees are organized into three departments: purchasing, production, and marketing. The purchasing department consists of David Hall, the purchasing manager, and a staff of ten. The department is responsible for acquiring and maintaining the supply of production materials. Bill Wilford manages 174 employees in the production department, where the manufacture

² In a friendly acquisition, the terms of the exchange are negotiated by the acquiring company and the incumbent management of the target (acquired) firm. This method of merging two companies is quite different from a "hostile takeover," which is initiated by the acquiring company over the objections of the target's incumbent management.

and assembly of the product takes place. The marketing department is headed by Rita Smith. She is responsible for all aspects of marketing and she supervises the nine sales clerks and 42 sales representatives that make up Berkshire's sales force. The remaining three employees are McKinley, her secretary, and her secretary's assistant.

Production

Production begins with a large press that cuts the acrylic pile fabric into the required pattern pieces. The press-cutter machine applies 23,000 pounds per square inch of pressure to a tray of pattern stainless steel dies³ that are stamped into the fabric. The bolts⁴ of fabric are rolled out and layered on the cutting table. The fabric is measured at this time for length and width and inspected for fabric flaws, tears, and soiled areas. Fabric flaws create waste. Shortages in length or width may require a different cutting set-up and increase fabric waste. Additional cutting set-ups increase production time. The press-cutter machine cuts 14 layered bolts at a time, enough for 588 units. The machine produces a clean, crisp, cut edge that will not fray or ravel.

The fabric is also inspected for trueness of color. The Berkshire Bear is advertised as a honey bear. Thus, fabric dye lots are important for matching shades of brown. The toy animal is available also in off-white and dark brown. Off-color fabric must be scrapped or returned to the supplier. Because the toy is designed to be washable, the fabric must be colorfast. Berkshire obtains the most economical price for specified colors by timing its fabric orders with the production runs of its suppliers. Rush orders almost always increase substantially the price of the required fabric.

In the next stage of production, operators of industrial sewing machines construct the six parts of the finished unit: two arms, two legs, the head, and the torso. Each piece is sewn inside-out and then turned right-side-out for assembly. Sewing is the most labor-intensive phase of the production process. Any additional sewing steps, such as appliqué⁵ or monograms, require additional production time.

In the next step, two optical-grade, acrylic eyes are attached to the head with plastic rivets. If the rivet posts are too short, the eyes may fall off later. If the rivet posts are too long, the eyes will stand out from the head, giving a nonstandard appearance. Eye color is also somewhat important. Acrylic eyes are purchased from vendors in "dark brown," but the exact shade may vary from supplier to supplier. Defects are not discovered until the eyes are used in production. At that point, defective eyes are discarded and replaced with ones that meet specifications.

After the cut pieces have been sewn together and eyes attached, the company's unique pneumatic stuffing machine⁶ is used to blow the polyester fiber filling into the unassembled parts.

³ Dies are heavy-duty, three-dimensional patterns used to cut the fabric into parts for the bear. Dies function in a manner similar to cookie cutters.

⁴ Fabric is shipped from the manufacturer wrapped around a cylindrical core or "bolt." A standard bolt of fabric is ten yards long and 72 inches wide.

⁵ Appliqués are descriptive or ornamental features made from contrasting materials that are applied to the outside surface of the bear. The alligator emblem used by Izod on sweaters and polo shirts is a common example of an appliqué. Another example is an identifying patch applied to pockets of uniforms bearing the employer's name and logo.

⁶ Berkshire Toy Company adapted technology used by the Navy. The stuffing machine is not patented.

Except for two replacements of the electric motor and a new power cord, this is the same machine that Franklin Berkshire acquired from Navy surplus in 1974. Bags of filling are loaded into the machine hopper and mechanically fluffed to the proper loft.⁷ An operator places the empty arm, leg, body, or head over a stationary nozzle and uses a foot pedal to control the flow of filling. The machine operator judges whether the part has been filled correctly. Too little filling affects the firmness of the bear; too much filling is unnecessary and expensive. Inferior grade fiber filling is less expensive but can cause clumping and clogging in the hopper. When this happens, production is interrupted and the operator must unclog the vacuum hose and reset the machine.

Next, the arms, legs, and head are attached to the torso using three-part, snap-on, hard plastic disc joints. The disc joints allow the head and limbs to rotate and eliminate the need for sewn attachment. The plastic joints are designed to be foolproof in production and dependable for the life of the product. However, the joints cannot be removed without destroying them. Occasionally, after initial joint insertion, the parts do not fit together properly and they must be removed and replaced.

At the end of the construction process, a woven satin label that states "Made in America by the Berkshire Toy Company" is attached to the back of each bear. More polyester filling is stuffed into the torso and the back seam is hand-stitched, using essentially the same "shoelace" procedure practiced by surgeons. Each seam is brushed by hand to give the bear a seamless look.

The production process is a continuous source of airborne polyester and acrylic fibers that must be controlled, both to protect the health and safety of

the employees and to safeguard the production equipment. The company has taken several steps to control the fibers. First, an air filtration system works constantly to remove dust and fibers from the factory. Second, production employees wear dust masks while they are working with fabric or filling. Finally, regular cleaning and maintenance of the sewing, cutting, and stuffing machines is performed to prevent the fibers from building up.

Maintenance is especially important for the sewing machines. Machine oil and static electricity attract pile fabric lint. Lint buildup can cause lines of stitches that are uneven and seams that do not hold. The Berkshire Bear workmanship is guaranteed for life. Burst seams require rework during the production phase and during the lifetime of the product.

All production employees are paid a regular wage for a 40-hour work week. They receive their regular wage plus an overtime premium of one-half the regular wage rate for overtime. The cost of fringe benefits and employer taxes, such as social security, health insurance, and vacation time, adds 20.55 percent to the cost of labor. The employees' regular wages are charged to direct labor. The overtime premium and the fringe benefits are carried as variable overhead costs.

Marketing

Marketing of the product takes place at the retail level via catalogue sales and in the company's retail store

⁷ Fiber filling is a loose material. Two pounds of bagged filling occupy approximately one cubic foot of space. The filling is loaded manually into a metal bin or "hopper." Rotating sets of fork-like tines separate the strands of filling and increase the volume by incorporating air. The proper mixture of air and filling is the "loft."

adjacent to the factory. Retail Internet sales are a new addition to the overall marketing effort. The company also sells wholesale to department stores, toy boutiques, and other specialty retailers. The product can be delivered by two-to-five-day ground service, next-day air, or holiday express. The customer pays the insurance and delivery charges. Berkshire promises same or next-day shipment. Most orders are shipped the same day as received.

When the company receives a customer's order, an employee takes a bear of the requested color and dresses it according to the customer's wishes. Then the bear is packaged with a protective air bag and complimentary piece of chocolate candy, and shipped in a designer box. The designer box contributes to the product image. It is reminiscent of the packaging used for a famous-name cologne and intended to lend an air of status and exclusivity to the product. The box is also important to toy collectors who expect to pay or receive a price premium in the secondary market for items that are in "mint-in-box" condition. Producing the box is a custom job involving a box manufacturer and a printing company. The unit cost of the box decreases with the size of the order that the company places with the manufacturer. Rush orders are more costly than normal orders. In July 1997, the purchasing manager placed an order for enough boxes to cover budgeted sales in the coming year.

Berkshire's policy on sales commissions has remained stable over the past several years. Commissions of 3 percent are paid on retail store sales and sales to wholesale buyers. No commissions are paid on catalog sales. The company-owned retail outlets have proved unprofitable, so all of them, except for the

factory store, have been closed in previous years.

The Accounting Problem

"I think I know what some of the problems are, but I would like a detailed analysis that provides confirmation from our accounting data," McKinley continues.

"Did inventory change much?" you ask.

"It's pretty negligible. Our peak selling time is from Christmas to Mother's Day, so we don't have much on hand at the June 30 year-end. We started last year with almost nothing and it was all we could do to keep up with demand, so we ended up with almost nothing as well." You jot down a note to ignore changes in raw materials and finished goods inventories and to assume that production volume equals sales volume.

"Didn't you put a new incentive compensation plan in place this year?"

"As a matter of fact, we did. Perhaps it was a factor in what happened this year."

The new incentive compensation plan was adopted effective July 1, 1997. Under this plan, each of the three department heads is rewarded based on the performance of his or her responsibility center. Performance is measured against the company's master budget and its standard cost system. The plan was the result of several meetings with McKinley and her managers who argued and bargained for a plan that rewarded the managers fairly for individual contributions and achievements. McKinley's plan was intended to promote participation and teamwork and the managers accepted the new program enthusiastically. The plan provides for the following:

- David Hall, the purchasing manager, will receive a bonus equal to 20 percent of the net materials

price variance, assuming the net variance is favorable. Otherwise, the bonus is zero.

- Rita Smith, the marketing manager, will receive a bonus equal to 10 percent of the excess, if any, of actual net revenues (revenues minus both variable and fixed selling expenses) over master budget net revenues.
- Bill Wilford, the production manager, will receive a bonus equal to 3 percent of the net of several variances: the efficiency (usage or quantity) variances for materials, labor, and variable overhead; the labor rate variance; and the variable and fixed overhead spending variances. Wilford receives no bonus if his net variance is unfavorable.

Internet Sales Program

"It seems that the incentive plan produced results," continues McKinley. "Smith had a terrific year this year. Unit sales were more than 16 percent above budget (Table 1). She says one of the principal factors was the new Internet sales policy she instituted and the advertising campaign to support it. We've never had that kind of year in sales before."

The Berkshire Toy Company began selling over the Internet in November 1997. At the same time, the company launched a nationwide radio advertising campaign. All radio advertisements are tagged with a reference to the web site that, in turn, provides visual support for the radio advertising

and an opportunity for customers to order online. As an additional incentive to attract Internet customers, Rita Smith proposed that Berkshire offer a substantial discount to customers who ordered over the Internet. Because the discounted Internet price (\$42.00) was still greater than the price that Berkshire was charging its wholesale customers (\$32.00), McKinley approved the price change.

To boost its Internet sales, the company held special holiday sales. The Christmas and Valentine's Day sales featured the Berkshire Bear in special seasonal costumes. Both events were immediate successes not only with Internet customers, but also with retail and wholesale customers who paid the customary prices. The greatest success was the Mother's Day campaign. For this event, the web site displayed an image of "Mama's Boy," a bear sporting sunglasses, jeans and T-shirt, and an appliquéd tattoo on its upper arm that said "Mom."

The 15-inch bears produced by the Berkshire Toy Company are identical except for their color and their accessories. Although the bears may be purchased with differing accessories, the unit cost of the accessories per bear has been relatively stable over time. The average historical cost of accessories has been a very small part of the total cost of the bear, and the standard cost of accessories is computed as an average. The price differences in the product reflect the company's discounting practices and not differences in accessories.

The master (static) budget for the year ended June 30, 1998 was prepared before the Internet program and price change were adopted. It called for the sale of 280,000 units, allocated as follows:

Retail and mail order	238,000 units	× \$49.00	=	\$11,662,000
Wholesale	42,000 units	× \$32.00	=	1,344,000
Total	<u>280,000 units</u>			<u>\$13,006,000</u>

The expected distribution of 85 percent retail and 15 percent wholesale was based on the company's experience in prior years. Thus, the budgeted average selling price was \$46.45. Actual sales for the year were as follows:

Retail and catalog	174,965 units	× \$49.00 =	\$ 8,573,285
Internet	105,429 units	× \$42.00 =	4,428,018
Wholesale	45,162 units	× \$32.00 =	1,445,184
Total	<u>325,556 units</u>		<u>\$14,446,487</u>

Materials and Production

"Hall had a few triumphs of his own this year," said McKinley. "He managed to get some substantial price discounts on acrylic pile fabric, plastic joints, and polyester fiber filling. Price discounts of 7 to 10 percent on our three main inputs add up to some real savings." Berkshire Toy Company's schedule of standard manufacturing costs is reproduced in Table 2. The schedule of actual manufacturing costs for the year ended June 30, 1998 is in Table 3.

"So," McKinley continues, "at least on the surface, it looks like marketing and purchasing had a good year, but production is another story. Bill Wilford was not part of the original Berkshire team. Headquarters sent him here from Hercules (the luggage division) to learn the ropes after Jack Johnson left. Jack joined a competitor last July."

"During Bill's first week on the job, we had a freak thunderstorm and the storm drain backed up, ruining a large amount of fiber filling. The loss was uninsured. Since then, I have gotten plenty of feedback from Bill who has been struggling to keep up with production. He has complained about the substandard direct materials, deviations from standard production plans, and the amount of overtime required to meet sales demand. The plant has been operating at near to maximum capacity of 350,000 units. His people are tired. Some of them quit and had to be replaced at

higher-than-standard wage rates. Bill also said that extra maintenance was required on the machinery and that, even so, they've experienced frequent breakdowns. He's been vehement about stock-outs of some of the imported accessories. At one point, sales commitments made it necessary to schedule overtime to copy some of the bear outfits and make them in-house. But he tries to be fair and responsible. He admitted that he was the person who moved some of the plastic parts to an empty box marked 'refuse' that was hauled away later by the trash collectors. This is a small place and I hear almost everything that goes on."

"By the way," McKinley winds up, "did you get the information I faxed you?"

"Let's see," you reply. "I have the 1997-98 income statement (prior to bonus calculations), the breakdown of budgeted and actual revenues, and schedules of standard and actual direct production costs. I do need some more detailed information about manufacturing overhead and selling costs. After that, I'll get back to you as soon as I can." McKinley agrees to send you details of actual overhead expenditures for the last five years and actual selling expenses for 1997 and 1998. These are shown in Tables 4 and 5.

REQUIRED

- 1 a Using the information in the case and Tables 1-5, prepare a

TABLE 2
Berkshire Toy Company
A Division of Quality Products Corporation

Schedule of Standard Costs: Fifteen-Inch Berkshire Bear

Normal Capacity: 280,000 units	Quantity Allowed Per Unit	Input Price	Standard Cost Per Unit
Direct materials			
Acrylic pile fabric ^a	0.02381 bolts	\$35.00/bolt	\$ 0.8333
10-mm acrylic eyes	2 eyes	\$0.19/eye	0.3800
45-mm plastic joints	5 joints	\$0.14/joint	0.7000
Polyester fiber filling	0.90 lbs.	\$1.45/lb.	1.3050
Woven label	1 label	\$0.05/each	.0500
Designer box	1 box	\$0.24/each	.2400
Accessories ^b	various		.1200
Total direct materials			<u>3.6283</u>
Direct labor			
Sewing	0.50 hours		
Stuffing and cutting ^c	0.30 hours		
Assembly	0.30 hours		
Dressing and packaging	0.10 hours		
Total direct labor	<u>1.20 hours</u>	\$8.00/hour	9.6000
Variable manufacturing overhead ^d	1.20 DLH	\$3.1140/DLH	3.7368
			<u>16.9651</u>
Fixed manufacturing overhead	1.20 DLH	\$1.9700/DLH	2.3640
			<u>\$19.3291</u>

^a One bolt of fabric is 10 yards long by 72 inches wide. Fabric for 42 finished units can be cut from one bolt.

^b The cost of accessories varies from 7 cents per unit for a bow tie to 45 cents per unit for fisherman's gear. The standard of 12 cents per unit reflects the historical assortment of accessories chosen by customers.

^c Less than 0.01 hour per unit is spent cutting the fabric. Therefore, hours spent in the cutting operation are not separately recorded. They are included with hours spent operating the pneumatic stuffing machine because both operations are usually performed by the same employees.

^d Variable and fixed overhead are allocated to production on the basis of standard direct labor hours allowed. Standard amounts are computed at normal capacity of 280,000 units. Maximum practical capacity is 350,000 units of production attainable in consideration of planned maintenance and scheduled down time for holidays. Normal capacity is the long-run average productive output that smoothes out seasonal, cyclical, and other variations in customer demand.

TABLE 3
Berkshire Toy Company
A Division of Quality Products Corporation

Schedule of Actual Manufacturing Costs
for the Year Ended June 30, 1998

	<u>Quantity Used</u>	<u>Input Price</u>	<u>Total Cost</u>
Direct materials			
Acrylic pile fabric	7,910 bolts	\$32.4174/bolt	\$ 256,422
10-mm acrylic eyes	661,248 eyes	\$0.1900/eye	125,637
45-mm plastic joints	1,937,023 joints	\$0.1270/joint	246,002
Polyester fiber filling	344,165 lbs.	\$1.3100/lb.	450,856
Woven label	328,447 labels	\$0.0500 each	16,422
Designer box	315,854 boxes	\$0.2200 each	69,488
Accessories		various	66,013 ^a
Total direct materials			<u>1,230,840</u>
Direct labor			
Sewing	189,211 hours		
Stuffing and cutting	104,117 hours		
Assembly	121,054 hours		
Dressing and packaging	<u>34,615 hours</u>		
Total direct labor	<u>448,997 hours</u>	\$8.1700/hour	3,668,305
Overtime premium	103,787 hours	\$4.0850/hour	423,970
Other variable manufacturing overhead			1,301,695 ^b
Fixed manufacturing overhead			<u>658,897</u>
			<u>\$7,283,707</u>

^a The actual input price for accessories is derived by dividing the actual cost of \$66,013 by units sold (325,556), yielding an average accessories cost of \$0.20277 per bear.

^b The actual input price for variable overhead is obtained by dividing the total variable overhead (\$1,301,695 + \$423,970) by actual direct labor hours worked, yielding a price or rate of \$3.843377 per direct labor hour.

TABLE 4
Berkshire Toy Company
A Division of Quality Products Corporation

Schedule of Actual Manufacturing Overhead Expenditures
for the Years Ended June 30, 1994 through 1998

	<u>1998</u>	<u>1997</u>	<u>1996</u>	<u>1995</u>	<u>1994</u>
Units produced	325,556	271,971	252,114	227,546	201,763
Variable overhead:					
Payroll taxes and fringes	\$ 840,963	\$524,846	\$467,967	\$413,937	\$356,150
Overtime premiums	423,970	24,665	2,136	1,874	1,965
Cleaning supplies	4,993	6,842	6,119	5,485	4,996
Maintenance labor	415,224	256,883	232,798	244,037	216,142
Maintenance supplies	27,373	15,944	12,851	15,917	14,323
Miscellaneous	13,142	11,244	9,921	8,906	7,794
Total	<u>\$1,725,665</u>	<u>\$840,424</u>	<u>\$731,792</u>	<u>\$690,156</u>	<u>\$601,370</u>
Fixed overhead:					
Utilities	\$ 121,417	\$119,786	\$117,243	\$116,554	\$113,229
Depreciation—machinery	28,500	28,500	28,500	28,500	28,500
Depreciation—building	88,750	88,750	88,750	88,750	88,750
Insurance	62,976	61,716	57,211	55,544	54,988
Property taxes	70,101	70,101	68,243	68,243	66,114
Supervisory salaries	287,153	274,538	275,198	269,018	254,469
Total	<u>\$ 658,897</u>	<u>\$643,391</u>	<u>\$635,145</u>	<u>\$626,609</u>	<u>\$606,050</u>

TABLE 5
Berkshire Toy Company
A Division of Quality Products Corporation

Schedule of Actual Selling Expenses
for the Years Ended June 30, 1998 and 1997

	<u>1998</u>	<u>1997</u>
Units sold:	325,556	271,971
Variable expenses:		
Packing and shipping	\$1,580,089	\$1,015,913
Commissions	129,080	216,116
Catalogs, brochures, and samples	150,425	65,658
Total	<u>\$1,859,594</u>	<u>\$1,297,687</u>
Fixed expenses:		
Salaries	\$2,734,868	\$2,345,121
Advertising and promotion	2,288,324	2,086,021
Total	<u>\$5,023,192</u>	<u>\$4,431,142</u>

flexible budget⁸ for the Berkshire Toy Company for the year ended June 30, 1998. Analyze the company's total master (static) budget variance for the year. Compare the flexible and master (static) budgets and prepare a schedule showing the sales volume variance. Compare the actual results and the flexible budget, and prepare a schedule showing the flexible budget variance. Subdivide the flexible budget variances into the appropriate price (rate or spending) and efficiency (usage or quantity) variances for materials, labor, and variable overhead.

- b. Compute the bonuses earned in fiscal 1998, if any, by David Hall of the purchasing department, Rita Smith of the marketing department, and Bill Wilford of the production department.
2. a. You will be assisting in the investigation of certain variances. Using the information provided, formulate some likely explanations for the observed variances.
- b. Comment on the advantages and disadvantages of the incentive compensation plan as it applies to department heads. What is the appropriate role of the budget in performance evaluation? What

modifications to the incentive plan would you recommend? Why?

3. (Optional) Suppose that Berkshire Toy Company adopts a balanced scorecard (BSC) to measure its performance. What performance dimensions are typically included in a BSC? What specific performance measures (indicators) might be included in the scorecard? For useful background information on BSCs, see Forsythe et al. (1999, 13–18).

⁸ For the sales revenue categories shown in Table 1, prepare a flexible budget based on actual units sold multiplied by the master (static) budget prices. For Internet sales, use a "revised" budget price of \$42. To analyze sales volume effects, also prepare a second flexible budget for the sales revenue categories based on the total of 325,556 units sold, multiplied by the budgeted mix (85 percent for retail, 0 percent for Internet, and 15 percent for wholesale). Multiply these quantities by the respective budgeted sales prices. The difference between the two flexible budget amounts is generally termed a "sales mix variance," which quantifies the effect on income that results because the actual mix of distribution channels deviates from the budgeted mix. A comparison between the master (static) budget and the flexible budget prepared on the basis of the budgeted mix is the "sales volume variance." This variance measures the effect on operating income of selling more or fewer units than planned. The net of the sales mix variance and the sales volume variance equals the "sales activity variance."

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