Solutions Manual

Chapter 1

Questions

1. Management accounting is the heart of the metrics and analytical models that are used by organizations to inform planning, decision making, and control. It is focused on the issues and challenges facing organizations, examining them from the perspective of management. Guided by logic and the *IMA Statement of Ethical Professional Practice*, management accounting practice is shaped by the strategy, structure, processes, and products or services offered by an organization to its customers. Financial accounting takes an external perspective in evaluating a firm's performance, emphasizing the development of GAAP-driven balance sheets, income statements, and statements of cash flow for an entity. Financial accounting is historical in nature, while management accounting is future-looking and decision-driven.

2. BPA includes the continuous improvement, or control loop, or the Plan-Do-Check-Adjust cycle that underlies management action. It also includes a comprehensive framework of five product domains (process, product, customer/market, supply chain, and entity) and uses an integrated database to complete its analysis. Taking a BPA perspective enhances and organizes the analytical models and methods used by modern management accountants.

3. Data becomes information when it is "imbued" with a purpose—information is data that is compiled and used for specific purposes, such as analyzing the impact of price changes on the demand for a product.

4. Costs occur throughout the organization, everywhere resources are consumed to support some form of work or output. Cost, or the economic value of consumed resources, is a basic building block of both management accounting and BPA.

5. The management process is the basic cycle of activity in organizations. It begins with the development of a plan to accomplish one or more goals. Given this plan, action is taken, or the "do" in the management process loop. Once activity has occurred, the results are compared with the plan during the "check" phase of the management process. Finally, adjustments are made to the plan or the actions taken to meet the planned goals, completing the cycle of plan-do-check-adjust that defines the core of management's work in organizations.

6. The five decision domains are the process domain, product domain, customer/market domain, supply chain domain, and entity domain. They differ in terms of the types of decisions and actions taken, as well as the level of manager charged with making decisions within the domain. In the process domain, attention is focused on *how* work is completed. It is the most basic domain, the domain of basic action that generates the results that assure stakeholder requirements are met. In the product domain, attention turns to the output of the processes, focusing on the final products and services customers purchase from the firm. In the customer/market domain, the emphasis is on a group of customers or specific markets for products and services—it directs attention to a cluster of customers or products that are consumed in similar ways. In the supply chain domain, we focus attention on the relationships with suppliers and customers that link together from the attainment of basic raw

materials and resources all the way through to the consumption of the products the supply chain provides. Similar to the process domain, the focus is on *how* these relationships are managed to maximize firm and supply chain performance. Finally, in the entity domain, attention is directed toward all of the decisions that impact the overall organization, such as where in the organization resources are invested and why they are invested there. At the entity level, we find top management, which sets up long-term strategies and takes a comprehensive view of performance over time.

7. The primary types of managers in organizations are top management, process managers, functional managers, and operational managers. Top management establishes a vision for the organization, develops strategy, and acquires the capital and other core resources needed for the entity to achieve its goals. Top management defines the organizational structure, assigns responsibilities for outcomes, establishes performance measures and rewards, and sets the overall tone for the organization. Process managers have a much narrower role—they direct the efforts taking place in a specific cross-functional process, or linked set of activities. They focus on maintaining a smooth flow of resources across the organization with a specific outcome in mind. They negotiate for resources, coordinate actions, and identify and implement best practices that help the organization attain its continuous improvement goals. Functional managers are specialists in a specific type of activity; for instance, marketing analysis. They oversee the work of operational managers and coordinate their efforts with those of process managers to ensure the smooth implementation of organizational goals and objectives within the entity. Operational managers are on the front line, making minute-by-minute adjustments to the work performed by direct and indirect labor. Focused on the work group, operational managers serve as translation points between the goals and objectives set by upper-level managers and the day-to-day activities of line workers. They assign specific activities to individuals or groups and constantly monitor how well the activities are performed. Strong operational managers are the key to attaining continuous improvement and process goals.

8. The four components of the *IMA Statement* are competence, confidentiality, integrity, and objectivity. The *Statement* is needed in BPA and management accounting because there are no established rules for the creation and management of internal information for decision support. Organizations have to be able to rely on their financial managers to be competent in their jobs, be able to keep organizational secrets and protect the rights of the organization and its members, be trusted to do their jobs correctly and within the boundaries of the law and good practice, and finally to present information in a fair and balanced way, free of the bias that can lead an organization and its managers to make faulty decisions or take suboptimal actions.

Exercises

Exercise 1.1

a. T, or top management
b. F, or functional managers
c. P, or process managers
d. O, or operational managers
e. All managers do this.
f. T, or top management
g. P, or process managers

Exercise 1.2

a. F, or functional managers. In some organizations, this may fall to P, or process managers.
b. All managers do this.
c. P, or process managers
d. P, or process managers
e. T, or top managers, and F, or functional managers. In some organizations, P, or process managers, may also set operational goals.
f. T, or top managers
g. P, or process managers

Exercise 1.3

a. R, or product domain
b. C, or customer/market domain
c. E, or entity domain
d. P, or process domain
e. R, or product domain
f. S, or supply chain domain
g. E, or entity domain

Exercise 1.4

a. S, or supply chain domain
b. C, or customer/market domain
c. E, or entity domain
d. P, or process domain
e. R, or product domain
f. P, or process domain. There could be some argument for E, or entity domain.
g. E, or entity domain.

Exercise 1.5

a. Set objectives, complete products, analyze results, change objectives
b. Establish market price, sell product, check sales figures, put “sale” price on product
c. Make production plan, make products, inventory products made, reset production goals
d. Develop strategic plan, assign objectives to managers, evaluate performance, develop another strategic plan
e. Set financial reporting goals, complete financial statements, complete analysis of performance shortfalls, change financial objectives
f. Set daily output goals, assign workers to activities, verify output achieved, change work assignments
g. Negotiate supplier agreements, accept materials from supplier, evaluate supplier performance, find a new supplier

Exercise 1.6

a. P, or plan
b. C, or check
c. D, or do
d. A, or adjust
e. C, or check
f. D, or do
g. D, or do
h. P, or plan
i. D, or do
j. C, or check. Some argument could be made for D, or do
k. A, or adjust
l. P, or plan
m. D, or do
n. A, or adjust

Exercise 1.7

a. O for objectivity, I for integrity
b. I for integrity, perhaps C for competence
c. O for objectivity, I for integrity
d. C for competence, I for integrity
e. I for integrity, some influence on C for competence
f. N for confidentiality, I for integrity
g. O for objectivity and I for integrity

Exercise 1.8

a. N for confidentiality, I for integrity
b. O for objectivity, perhaps C for competence
c. C for competence
d. N for confidentiality, I for integrity
e. C for competence
f. I for integrity
g. N for confidentiality, I for integrity

Problems

Problem 1.1

a. Magnitude of change by year for LM Landscaping:

Measure	20x6 minus 20x5	20x5 minus 20x4
Annual profits	$26,625	$48,625
Number of employees	3	4
Number of customers	75	75

b. These numbers show that the business is growing, although at a slightly slower pace between 20x6 and 20x5 vs. 20x5 and 20x4. The number of new customers remains the same between the two years, though, suggesting a steady rate of growth but with some reduction in the profitability of the new customers vs. existing customers over the 20x5-20x6 period.

Problem 1.2

a. Percentage change in business metrics for LM Landscaping:

Measure	20x6 minus 20x5	20x5 minus 20x4
Annual profits	11.8%	24.5%
Number of employees	20%	33.3%
Number of customers	30%	42.9%

b. The slowdown in growth is now very clear. Here, we really see the problems with the profitability of the new customers, though, as the 30% increase in the number of customers serviced only results in an 11.8% increase in annual profits. The number of employees seems to be unrelated to the change in profits, suggesting that if anything, LM Landscaping may have added fewer employees that the increase in customers would suggest was appropriate. As long as LM is meeting customer expectations, this is a positive trend for the company. If there are starting to be performance shortfalls, though, LM may be seeing higher-profit customers looking elsewhere for service as the demand on employees makes the company less responsive.

Problem 1.3

a. Magnitude of change in business metrics for Bundy's Store:

Measure	April minus March	March minus February	February minus January
Grocery sales	($150)	($135)	($140)
Deli and coffee sales	($125)	($175)	($100)
Pizza sales	$475	$225	$80

b. Without a doubt, the gross numbers suggest that pizza is taking off at Bundy's while regular sales of groceries, deli, and coffee items are falling off markedly. Unless Bundy intends to become a pizzeria, these are troubling trends. The increase in pizza sales only offsets the loss in the other two categories in the April to March timeframe, so the company is less profitable overall in general. If Bundy wants to remain a full-service store, he has to work to restore overall store sales to their previous levels by trying to figure out why they have dropped. Some of the change could be seasonal with respect to coffee sales and perhaps takeout deli if a college crowd is served, but, in general, Bundy should be worried.

Problem 1.4

a. Percentage change in business metrics for Bundy's Store:

Bundy's Store			
Measure	April minus March	March minus February	February minus January
Grocery sales	-13.6%	-10.8%	-10.1%
Deli and coffee sales	-22.7%	-25.9%	-11.8%
Pizza sales	28.4%	18.8%	8.2%

b. These percentages suggest the same problems as noted earlier, but with a more significant concern with coffee and deli sales. The basic message is unchanged from the magnitude metrics, but the percentages focus attention on two different things. First, deli and coffee sales are up and down, though mainly down. Why was March so negative? Perhaps Bundy is facing the impact of spring break with regular customers taking vacation and reducing demand. This is something he can plan for, not necessarily change. The downtrend in grocery sales, though, is steady and more difficult to explain unless some form of competition has opened up nearby. Clearly, Bundy can't count on pizza sales saving his business, even with phenomenal growth in pizza sales. Losses in the other two core businesses swamp the pizza positives, suggesting Bundy needs to return to the basics and find a way to lure back former customers. Percentage changes help us focus on the trend lines by eliminating the bias that can occur from looking only at absolute magnitudes of change.

Problem 1.5

a. Magnitude of change for Darby Computer Associates:

Measure	20x6 – 20x5	20x5 – 20x4	20x4- 20x3
Businesses served	-10	-18	-36
Individual customers	103	60	100
Classes attended	8	5	4
Average hours to complete a job	1.5	.75	0.5
Average monthly profits	-$ 1,296	-$ 1,936	-$4,128

b. Seeing that average monthly profits are dropping from year to year, it would appear that the biggest impact is due to the fact that the business mix is changing from businesses to individuals. Businesses probably have an ongoing need for computer support and hence generate more profits and take less time to complete due to familiarity with the computers and their systems. Individuals come in normally one time with unique problems caused as much by how they use the machine as the machine characteristics itself. These customers are likely to bring a wider range of machine types as well as a much broader range of potential problems, taking longer to solve. So Phil should place his attention on the mix change, working to get more business customers because his profits were higher when they were his main focus.

c. Percentage change results:

Measure	20X6 – 20X5	20X5 – 20X4	20X4 – 20X3
Businesses served	- 8.0%	- 13.3%	-23.5%
Individual customers	10.4%	6.8%	12.1%
Classes attended	22.9%	18.5%	18.2%
Average hours to complete a job	14.3%	8.3%	6.1%
Average monthly profits	-5.1%	-7.3%	-14.5%

d. Here we can see that each new drop of a business customer appears to have the greatest impact on Phil's profit. The percentage change makes the trend, or relationship, between the loss of business customers and the reduction in monthly profits much clearer. The change in individual customers, while marked in overall size, doesn't trend as cleanly with the profit drops. Average hours to complete a job and the number of classes attended both trend with the rise in individual customers. Given individuals are charged by the hour for the work on their computers, it is likely this small increase in time across the years may be helping to mitigate some of the losses related to dropped business customers. Finally, the trends in classes attended changes inversely with profits, suggesting that either the cost of classes is high or the causes for the increased classes are driving profits in the wrong direction. Out of all of these changes, the change in customer mix remains the most important overall as it seems to be driving the rest of the performance measures.

e. TO: Phil Darby, President, Darby Computer Associates

FROM: Student

SUBJECT: Recent trends in sales and profits

Looking at the trend and absolute change numbers for your business, the most striking factor is the rapid reduction in business customers, which has been offset by a strong increase in individual consumers as customers. This change in mix is reflected in the need to increase training hours and the general increase in the time to complete a job. In general, then, this change in mix is causing negative trends in profit for Darby Computer Associates.

We recommend that the firm begin marketing heavily to the small- to medium-sized businesses in your service area to reverse this trend. Business customers pay a flat monthly fee, which stabilizes income. In addition, their employees are less likely to cause major computer failures that create complex repair jobs. In general, then, business customers appear to provide the opportunity for higher profits and lower costs than the individual consumer, who is often a onetime relationship with many more levels of uncertainty. Hence, we highly recommend aggressive marketing to business customers.

Problem 1.6

a. Magnitude of change for Rontell, Inc.:

Rontell, Inc.			
Balloon Type	20X6 minus 20X5	20X5 minus 20X4	20X4 minus 20X3
Happy Birthday	148,250	126,500	50,150
Welcome Home	-29,900	-15,300	-3,250
Get Well Soon	150,050	74,750	29,900
Happy Retirement	149,750	69,750	34,900
Happy Anniversary	10,000	11,500	1,750

b. It is hard to recommend one course of action from the gross numbers. Happy Birthday balloons seem to do well all three years, but in the 20x6-20x5 time period, Get Well Soon and Happy Retirement balloons both post similar gains. You would probably recommend that Martha split her artistic, marketing, and development dollars between these three products.

c. Percentage change for Rontell, Inc.:

Balloon Type	20x6 minus 20x5	20x5 minus 20x4	20x4 minus 20x3
Happy Birthday	9.7%	9.2%	4.0%
Welcome Home	(3.1%)	(1.6%)	(0.3%)
Get Well Soon	20.0%	12.5%	5.7%
Happy Retirement	23.0%	13.9%	8.1%
Happy Anniversary	4.4%	5.3%	0.9%

d. Percentage change in sales using 20x6 as the constant base year:

Balloon Type	20x6 minus 20x5	20x5 minus 20x4	20x4 minus 20x3
Happy Birthday	9.7%	8.3%	3.3%
Welcome Home	(3.1%)	(1.6%)	(0.3%)
Get Well Soon	20.0%	10.0%	4.0%
Happy Retirement	23.0%	10.7%	5.4%
Happy Anniversary	4.4%	5.1%	0.8%

e. Percentage change in sales between 20x6 and 20x3:

Balloon Type	20x6 minus 20x3
Happy Birthday	21.3%
Welcome Home	(5.1%)
Get Well Soon	33.9%
Happy Retirement	39.1%
Happy Anniversary	10.3%

It may be useful to point out that, taking rounding effects into account, the answers in part (d) add up to the total change noted in part (e).

f. The annual trend numbers appear to be the most useful, although the four-year trend numbers calculated in part (e) are also very useful. Now we see that Happy Retirement balloons are the real growth area, followed by Get Well Soon balloons. Both of these trends reflect the aging of the baby boomers. These results suggest that Martha should focus her artist and design teams on retirement balloon offerings, taking any leftover time and putting it into the Get Well Soon category. Given that the baby boomer phenomenon is just underway, this should be a winning strategy for Martha for several years to come. She should watch these trends, though, and perhaps even consider offering "It's a Boy" and "It's a Girl" balloons to reflect changing demographics.

g. TO: Martha Rontell

FROM: Student

SUBJECT: Sales Trends

Having analyzed sales trends both in absolute terms and in percentage terms, it is clear that Happy Retirement balloons offer the best use of scarce company resources to design and launch new balloon prototypes. While in absolute terms, Happy Birthday, Happy Retirement, and Get Well Soon balloons all look equally promising, when we focus our analysis into percentage change, which captures trend lines, Happy Retirement balloons far outpace the other offerings.

The company might also want to consider pulling back on the Welcome Home balloons, popular as troops were returning home from the warfront, with "It's a Boy!" and "It's a Girl" balloons to reflect the change in demographics occurring in the general populace. Finally, while no additional attention needs to be paid to Happy Anniversary balloons, they should be kept as an active part of the inventory as long as no further investment is needed to maintain current sales patterns.

Problem 1.7

In asking you to ignore what appears to be faulty or biased data, your manager is asking you to violate integrity and objectivity. There is also a hint that your manager is placing you at risk of being judged incompetent in completing your assigned tasks. If your manager is unwilling to pay attention to your observations, you have limited options. The most important one is the need to potentially go to your manager's manager and report the problem. Raising the visibility of the problem to someone who can do something about it is the key. Going up the chain of command until someone pays attention is your obligation. If no one is willing to take action in the area of concern, you may have to go to the board of directors or to some outside expert. This clearly depends on how critical the data irregularities are and how much they distort the firm's reported performance and decision making.

Whistle-blowing laws exist to help protect you from the repercussions of bringing questionable practices to light. That being said, you may still end up having to leave the organization if higher-ups persist in the faulty practices or seem unwilling to correct them at any level. Simply remember: No one can take your ethics away from you, you can only give them away. Doing so is a slippery slope that can ultimately destroy your career and your life, so do what is right regardless of the immediate consequences. That is what the *IMA Statement of Ethical Professional Practice* requires of each financial manager.

Problem 1.8

a. You should not agree to this request because sharing your work with others is no different than directly colluding in crafting the responses. Even though you have done the work yourself, by sharing your solutions with classmates, you are violating the honor code.

b. You are violating both the integrity and confidentiality aspects of the *IMA Statement of Ethical Professional Practice* if you share your work with classmates. Giving someone else a free ride doesn't avoid these problems but simply puts you in a worse position—having to disappoint a friend vs. violating the code laid out by the instructor. You shouldn't even discuss the problem with your friend as that is a form of collaboration that is specifically forbidden by the code. Your friend, if that is what he or she is, is simply on their own, which is what the instructor intended.

Cases

Case 1.1

Part a:

The Coffee Palace			
Product Type	Materials (1)	Labor Costs (2)	Total Cost per Cup (3) = (1) + (2)
Regular coffee	$ 0.50	$ 0.17	$ 0.67
Decaffeinated coffee	$ 0.50	$ 0.17	$ 0.67
Flavored coffee	$ 0.50	$ 0.17	$ 0.67
Cappuccino	$ 1.25	$ 0.50	$ 1.75
Mochaccino	$ 1.25	$ 0.50	$ 1.75
Iced Cappuccino	$ 1.25	$ 0.50	$ 1.75
Iced Mochaccino	$ 1.25	$ 0.50	$ 1.75
Regular Latte	$ 1.25	$ 0.50	$ 1.75
Flavored Latte	$ 1.25	$ 0.50	$ 1.75

Part b:

The Coffee Palace Profit per Cup This Year			
Product Type	Price per Cup (1)	Direct Cost per Cup (2)	Profit per Cup (3) = (1) - (2)
Regular coffee	$ 1.75	$ 0.67	$ 1.08
Decaffeinated coffee	$ 1.75	$ 0.67	$ 1.08
Flavored coffee	$ 2.00	$ 0.67	$ 1.33
Cappuccino	$ 3.00	$ 1.75	$ 1.25
Mochaccino	$ 3.00	$ 1.75	$ 1.25
Iced Cappuccino	$ 3.25	$ 1.75	$ 1.50
Iced Mochaccino	$ 3.25	$ 1.75	$ 1.50
Regular Latte	$ 2.50	$ 1.75	$ 0.75
Flavored Latte	$ 2.75	$ 1.75	$ 1.00

The Coffee Palace Profit per Cup Last Year			
Product Type	Price per Cup (1)	Direct Cost per Cup (2)	Profit per Cup (3) = (1) - (2)
Regular coffee	$ 1.50	$ 0.67	$ 0.83
Decaffeinated coffee	$ 1.50	$ 0.67	$ 0.83
Flavored coffee	$ 1.75	$ 0.67	$ 1.08
Cappuccino	$ 3.25	$ 1.75	$ 1.50
Mochaccino	$ 3.25	$ 1.75	$ 1.50
Iced Cappuccino	$ 3.50	$ 1.75	$ 1.75
Iced Mochaccino	$ 3.25	$ 1.75	$ 1.50
Regular Latte	$ 2.75	$ 1.75	$ 1.00
Flavored Latte	$ 3.00	$ 1.75	$ 1.25

Part c:

The Coffee Palace			
Product Type	Profit per Cup (1)	Cups Sold (2)	Profitability per Type (3) = (1) x (2)
Regular coffee	$ 1.08	4,500	$ 4,860.00
Decaffeinated coffee	$ 1.08	4,000	$ 4,320.00
Flavored coffees	$ 1.33	4,000	$ 5,320.00
Cappuccino	$ 1.25	3,000	$ 3,750.00
Mochaccino	$ 1.25	2,500	$ 3,125.00
Iced Cappuccino	$ 1.50	1,800	$ 2,700.00
Iced Mochaccino	$ 1.50	3,500	$ 5,250.00
Regular Latte	$ 0.75	4,500	$ 3,375.00
Flavored Latte	$ 1.00	3,000	$ 3,000.00
Total Profit This Year			$ 35,700.00

The Coffee Palace			
Product Type	Profit per Cup (1)	Cups Sold (2)	Profitability per Type (3) = (1) x (2)
Regular coffee	$ 0.83	8,000	$ 6,640.00
Decaffeinated coffee	$ 0.83	5,800	$ 4,814.00
Flavored coffees	$ 1.08	6,000	$ 6,480.00
Cappuccino	$ 1.50	2,000	$ 3,000.00
Mochaccino	$ 1.50	1,800	$ 2,700.00
Iced Cappuccino	$ 1.75	1,200	$ 2,100.00
Iced Mochaccino	$ 1.50	2,600	$ 3,900.00
Regular Latte	$ 1.00	3,000	$ 3,000.00
Flavored Latte	$ 1.25	2,100	$ 2,625.00
Total Profits Last Year			$ 35,259.00

Part d:

The Coffee Palace				
Product Type	Profit This Year (1)	Profit Last Year (2)	Change in Profit (3) = (1) - (2)	Percentage Change (4) = (3) /(2)
Regular coffee	$ 4,860.00	$ 6,640.00	$ (1,780.00)	-26.8%
Decaffeinated coffee	$ 4,320.00	$ 4,814.00	$ (494.00)	-10.3%
Flavored coffee	$ 5,320.00	$ 6,480.00	$ (1,160.00)	-17.9%
Cappuccino	$ 3,750.00	$ 3,000.00	$ 750.00	25.0%
Mochaccino	$ 3,125.00	$ 2,700.00	$ 425.00	15.7%
Iced Cappuccino	$ 2,700.00	$ 2,100.00	$ 600.00	28.6%
Iced Mochaccino	$ 5,250.00	$ 3,900.00	$ 1,350.00	34.6%
Regular Latte	$ 3,375.00	$ 3,000.00	$ 375.00	12.5%
Flavored Latte	$ 3,000.00	$ 2,625.00	$ 375.00	14.3%

Part e:

The Coffee Palace				
Product Type	Volume This Year (1)	Volume Last Year (2)	Change in Volume (3) = (1) - (2)	Percentage Change (4) = (3) /(2)
Regular coffee	4,500	8,000	(3,500)	-43.8%
Decaffeinated coffee	4,000	5,800	(1,800)	-31.0%
Flavored coffee	4,000	6,000	(2,000)	-33.3%
Cappuccino	3,000	2,000	1,000	50.0%
Mochaccino	2,500	1,800	700	38.9%
Iced Cappuccino	1,800	1,200	600	50.0%
Iced Mochaccino	3,500	2,600	900	34.6%
Regular Latte	4,500	3,000	1,500	50.0%
Flavored Latte	3,000	2,100	900	42.9%

Part f: TO: Alice Cornwell

FROM: Student

SUBJECT: Sales Trends

Having reviewed your sales and profit figures for the last two years, it is clear that the change in prices has driven up the volumes and profitability of your specialty drinks but has a very negative impact on your regular drinks. While you make less profit per cup with your regular coffees, they were driving profitability prior to the change in price. With this being noted, it is recommended that you either return to your old prices on all products, or at least return to them for your regular products. This should reverse the volume trends and reduce the amount of labor overall your company needs.

Case 1.2

Perry, Tim's manager, is violating both the law (Sarbanes-Oxley restraints on consulting by audit firms) and also the *IMA Statement of Ethical Professional Practice* in terms of confidentiality and integrity. It is definitely a problem that he is sharing competitive information with Charlie in this way.

Tim is facing a very difficult situation. He immediately has to contact the partner in charge of the engagement and report the manager's behavior. Failing to do so not only puts Tim at risk but also the accounting firm itself. The real danger here is that since this practice has been going on for a while, the partner may be aware of it and condoning the activities of the engagement partner. In this case, Tim has to step outside of his chain of command and seek out a higher authority to deal with the matter. He has to do so, even if it means compromising his future, because each individual is accountable to the *IMA Statement of Ethical Professional Practice* and to the mandates of Sarbanes-Oxley—there is no dodging accountability. Specifically, Tim should:

- Contact the partner in charge of Charlie's Electronics' engagement and report the sharing of competitive information.
- If no action is taken, Tim needs to go above the partner's head to the managing partner and report the infraction.
- Failing to get action at this level, Tim has to consider going to outside parties to report the breach of ethics and criminal behavior. To fail to do so makes him an accomplice after the fact, equally responsible under the law for the illegal behavior.
- Start updating his résumé, because if the firm condones these types of behavior, it is only a matter of time before one of the cases becomes public and goes to court.
- Tim can only protect his own integrity—he cannot enforce it on others if they are resistant. Remember, you can only give your integrity away; it cannot be taken by force.

Chapter 2

Questions

1. Financial accounting measures focus solely on financial transactions, summarizing the outcomes of activities for owners and external stakeholders. Measurement is done when an economic transaction is done, summarized on a monthly, quarterly, and annual basis. Measures are solely in financial terms and take place only when a transaction is done. The measures are focused on business units and entity performance. Management accounting measures critical success factors, key performance indicators, process, and individual performance. Measurements are done to direct attention—to make events visible. They also analyze trends and outcomes in order to motivate desired behavior. Measurement takes place before, during, and after activities are completed. Management accounting uses a broad number of integrated financial and nonfinancial metrics, measuring across all the organizational domains. Finally, anyone who performs work with the organization can be the focus of management accounting measurements. A critical success factor is an operational or strategic objective that captures an aspect of performance vital to the firm's success. Striving to grow the business profitably is a critical success factor for McDonald's.

2. A key performance indicator is a simple, accurate measure of the progress or outcome of an individual or unit against a critical success factor. At McDonald's, strong financial returns is a key performance indicator. It differs from a critical success factor in that it is more precise in terms of how it is defining profitable growth, for instance. A key performance indicator provides the basis for specific measurements while critical success factors simple lay out the general trends with no specificity in terms of what actual results are desired.

3. The eight basic characteristics of a good measurement are:

    1. Objectivity: The measure is unbiased;
    2. Reliability: The measure provides a regular, repeatable signal of performance;
    3. Accuracy: Clear, concise and consistent measures;
    4. Unambiguous: What is being measured is obvious;
    5. Benefit exceeds cost: Costly measures don't help the organization perform, they impair performance;
    6. "Scalar" in nature: The more defined the term is, in terms of change always being measured in the same units, the easier it is to use in performance evaluation;
    7. Sensitive to change: When something happens that matters, the measure should reflect the event and its effects;
    8. Creates desired behavior: Measures direct behavior, so a good measure directs people to do desirable things.

4. Measurements are used during the planning stage to set expectations and make desired actions clear and actionable. During the "do" phase, measurements provide an instantaneous means to judge progress and make small adjustments. When we "check" performance during the management process, measurements serve as the heart of the comparison of actual outcomes to desired outcomes. Finally, during the adjust phase, measurements help lay out new expectations and provide the means to gauge what type, and how much, of a change is expected.
5. A vision statement describes the basic goals, characteristics, and philosophies that shape the strategic direction of an organization. A mission statement is much more specific, identifying key

customer needs that the firm intends to meet. The first is a statement of general intent, while mission statements make the vision actionable.

6. Firms utilize strategic, tactical, and operational objectives. Strategic objectives focus on desired outcomes five to 10 years into the future. Tactical objectives underlie more daily action, emphasizing the two- to five-year future period. Finally, operational objectives can be daily, monthly, or annual in focus, emphasizing actions that can be taken in the near term.

7. There are two basic types of action controls—standard operating procedures and point-of-action control tools. Standard operating procedures focus on having people do the same things in the same way, over and over. They attempt to remove the "human" element from the completion of a task to ensure that outcomes are as desired. Point of action controls, on the other hand, put the individual in charge, giving them the information needed to take action immediately. An andon light, which is triggered by an operator when a problem occurs on a line, is an example of a point of action control.

8. Gap analysis emphasizes the total difference in actual vs. planned results, where trend analysis tracks changes over time in key performance indicators. Finally, variance analysis isolates the causes of performance shortfalls.

9. Goal congruence means that individuals have the same, or compatible, goals with those being pursued by the company. When goal congruence exists, there is a natural agreement on what the best course of action should be.

10. The three different types of controls are results, action, and personnel controls. Results controls focus on the output of a process, while action controls look at how action is taking place (the "do" in the management process). Finally, personnel controls deal with the human element in an organization—its culture, group dynamics, and individual conscience. It is the most powerful form of control.

11. Six of the more common continuous improvement tools are: statistical process control which is implemented using devices like Shewhart control charts; kanbans, which control a process by controlling the buffer inventory in the flow; poka-yoke, or "dummy-proofing" an operation so that it can't be done improperly; andon lights, which are triggered to signal to workers on a line that a problem has been encountered; control boards, which detail progress against preset goals such as number of units to be produced on a line; and jidoka, which builds sensors into a machine that allows it to self-correct or respond to specific signals, such as a triggered stop light.

12. Dysfunctional consequences are outcomes that occur that are counter to what is best for the company. For instance, when an employee creates slack in the judgment of how much work they can get done, the company will not perform at as high a level as it might if the employee had been honest about their capabilities.

13. The key dysfunctional behaviors are behavioral displacement (controls lead people to do things that are inconsistent with the firm's goals), gamesmanship (action intended to skew reported performance; can include slack and data manipulation), operating delays, and negative attitudes. An example of behavioral displacement is when people focus on answering the telephone as soon as it rings but don't pay attention to whether or not they actually answer the customer's questions. Gamesmanship is when an individual builds slack into their budget so they ensure meeting their performance goals and gaining any bonuses available. Operating delays occur when people are so caught up in procedures that they don't pay attention to how long customers have to wait, as often happens in

government offices. Finally, negative attitudes include employees spreading rumors about problems at the company or simply treating customers disrespectfully.

Exercises

Exercise 2.1

The types of control measures are as they are for most companies—emphasizing results.

a. Amount of materials recycled per week: Results control
b. Percentage of packaging items made with recycled materials: Results control
c. Number of customer complaints about cleanliness or appearance: Results control
d. Number of eat-in customers: Results control
e. Average time required to fill an order: Results control
f. Average time required to fill a drive-through order: Results control
g. Number of service complaints: Results control
h. Average time food is held: Results control
i. Customer satisfaction with quality: Results control
j. Number of customer cleaning bills: Results control
k. Employee turnover: Results control
l. Employee satisfaction rating: Personnel control
m. Average length of employment: Results control
n. Number of charity events sponsored per month: Results control
o. Total monthly donations to Ronald McDonald House: Results control
p. Percentage of employees volunteering time or money to nonprofits: Results control

Exercise 2.2

a. Number of exams given: Results control
b. Case instructions: Action control
c. Personality of teacher: Personnel control
d. Self-grading of quizzes: Action control
e. Dynamics of group project team: Personnel control
f. Grades: Results control
g. Questions at the end of chapter: Results control
h. School spirit: Personnel control
i. Directions in a problem: Action control

Exercise 2.3

Ernesto's Sub Shop				
Type of Sub Sandwich	Planned Sales (a)	Actual Sales (b)	Gap	
Italian meats	100	125	25	Favorable
Meatball	250	300	50	Favorable
Salami	50	25	-25	Unfavorable
Turkey	350	300	-50	Unfavorable
Tuna	300	275	-25	Unfavorable
Roast beef	150	200	50	Favorable

Exercise 2.4 Trend analysis

Ernesto's Sub Shop			
Type of Sub Sandwich	Planned Sales (a)	Actual Sales (b)	% Change (c) =[(b) - (a)]/(a)
Italian meats	100	125	25.0%
Meatball	250	300	20.0%
Salami	50	25	-50.0%
Turkey	350	300	-14.3%
Tuna	300	275	-8.3%
Roast beef	150	200	33.3%

Salami, turkey, and tuna sandwiches are all underperforming, suggesting Ernesto's business is trending toward more traditional meat-based sandwiches, such as Italian meats, meatball, and roast beef. It could just be a quirk, or salami sandwiches may be on their way out with such a big drop overall.

Exercise 2.5

Angie's Repair Shop				
Type of Job	November less October Units		December less November Units	
Sew on buttons	150	Favorable	100	Favorable
Put in new zipper	25	Favorable	25	Favorable
Hem pants	-25	Unfavorable	25	Favorable
Hem skirt	-20	Unfavorable	-5	Unfavorable
Take in waist band	-10	Unfavorable	-10	Unfavorable
Let out waist band	25	Favorable	25	Favorable

Exercise 2.6

Angie's Repair Shop				
Type of Job	November less October Units (1)	Percentage Change (2) = (1)/October Units)	December less November Units (3)	Percentage Change (4) = (3)/November Units)
Sew on buttons	150	60%	100	25%
Put in new zipper	25	25%	25	20%
Hem pants	-25	-13%	25	14%
Hem skirt	-20	-20%	-5	-6%
Take in waist band	-10	-20%	-10	-25%
Let out waist band	25	50%	25	33%

The holidays appear to be upon us. Angie is seeing increases in all of the activities that reflect perhaps a bit of overeating, such as popped buttons and zippers and the need to let out waistbands. Sales of regular work are down, but it's not as clear if there is a reason. Perhaps everyone had this work done earlier so they were ready for the holidays.

Exercise 2.7

Exercise 2.7 Gap Analysis						
	C&L Tools					
Salesperson	20X6-20X5			20X5-20X4		
Sam Spade	$	(3,000)	Unfavorable	$	(2,000)	Unfavorable
Lisa Williams	$	(14,000)	Unfavorable	$	(6,000)	Unfavorable
Frank Hustler	$	10,000	Favorable	$	(10,000)	Unfavorable
Gene Frank	$	17,300	Favorable	$	5,500	Favorable

Management should pay specific attention to help Sam and Lisa turn around their performance, especially Lisa, whose numbers have decreased significantly. Frank Hustler seems to be in steady state mode. Gene Frank has showed much improvement over the three-year period and should be rewarded.

Exercise 2.8

Because Adam Smith is focusing on only one measurement, units sold, salespeople have no motivation to sell higher-profit items (or higher-priced items) when they are rewarded instead on pushing as many cheap units into the market as they can. This is an example of behavioral displacement.

Exercise 2.9

Tom is witnessing behavioral displacement and gamesmanship. Cutting special deals and cutting corners are both examples of a behavior taking place that is not desirable or wanted by management. They also can be a form of gamesmanship if the employees are manipulating the data they are reporting to meet objectives.

Exercise 2.10

a. B, or behavioral displacement
b. G, or gamesmanship
c. N, or negative attitudes
d. N, or negative attitudes
e. N, or negative attitudes
f. G, or gamesmanship
g. B, or behavioral displacement
h. B, or behavioral displacement, or N, or negative attitudes

Problems

Problem 2.1

a. The variance analysis is:

Problem 2.1 Gap/Variance Analysis

Don's Pizza Shop					
Measure	Plan (1)	Actual (2)	Actual less Plan (3) = (2) - (1)	% Variance (4) = (3)/(1)	Favorable or Unfavorable (5)
Number of pizzas sold	500	525	25	5.0%	Favorable
Number of grinders sold	150	120	(30)	-20.0%	Unfavorable
Number of sodas sold	1,000	800	(200)	-20.0%	Unfavorable
Total Revenue	$ 8,700	$ 8,845	$ 145	1.7%	Favorable
Total Operating Costs	$ 5,525	$ 5,600	$ 75	1.4%	Unfavorable
Total Operting Profit	$ 3,175	$ 3,245	$ 70	2.2%	Favorable

b. Don has sold more pizzas than expected, but few grinders and sodas. That being said, his revenues and profits are both up, suggesting that pizzas cost the customer more and are more profitable than the other menu items.
c. One suggestion is that Don run some type of special on both pizzas and grinders to increase his business and get more customers in the door. He might also want to check his prices against those of competitors. There's a chance his pizzas are underpriced and his grinders and sodas are overpriced given the sales shortfalls we see in the problem. What is important for the students to note at some level is the fact that revenue and cost variances are opposite in terms of favorable and unfavorable sizes. As we move along in the book, we will adopt a standard approach to

variance analysis, which will require that they understand the importance of their starting point in doing the gap analysis that underlies variance analysis.

Problem 2.2

Problem 2.2 Part a) Gap Analysis of Dollar Sales

Eastern Productions				
Salesperson	Planned Dollar Sales (1)	Actual Dollar Sales (2)	Actual Less Plan (3) = (2) - (3)	Variance % (4) = (3)/(1)	Favorable or Unfavorable (5)
Sam Sneed	$ 500,000	$ 465,000	(35,000)	-7.00%	Unfavorable
Wendy Silversmith	$ 450,000	$ 500,000	50,000	11.11%	Favorable
Anne Conlon	$ 475,000	$ 525,000	50,000	10.53%	Favorable
James Burke	$ 600,000	$ 585,000	(15,000)	-2.50%	Unfavorable
Frederick Thompson	$ 550,000	$ 600,000	50,000	9.09%	Favorable
Susan Coyle	$ 500,000	$ 575,000	75,000	15.00%	Favorable
Company Total	$ 3,075,000	$ 3,250,000	175,000	5.69%	Favorable

Looking at these results, Susan Coyle is the top performer for the year and Sam Sneed is the worst performer because they had the highest percentage variance. If you look at their differences in absolute (gap) terms, Susan is still the best and Sam still the worst, so the percentage results for these two extremes holds. But, we see that the same $50,000 gain in sales for Wendy, Anne, and Frederick yield very different percentages. This is due to how high the sales associate set their initial goals.

Problem 2.2 Part b) Jobs Sold Gap Analysis

Eastern Productions				
Salesperson	Planned Jobs Sold (1)	Actual Jobs Sold (2)	Actual Less Plan (3) = (2) - (1)	Variance % (4) = (3)/(1)	Favorable or Unfavorable (5)
Sam Sneed	50	75	25	50.00%	Favorable
Wendy Silversmith	45	40	(5)	-11.11%	Unfavorable
Anne Conlon	50	60	10	20.00%	Favorable
James Burke	60	50	(10)	-16.67%	Unfavorable
Frederick Thompson	55	45	(10)	-18.18%	Unfavorable
Susan Coyle	50	80	30	60.00%	Favorable
Company Total	310	350	40	12.90%	Favorable

Now we see things in a different light. Susan still remains the top sales associate, but Sam is right behind her with a 50% increase in number of jobs sold. The worst performer now is Frederick, who missed his jobs sold gold by 18.2%. Once again, we see that the percentages give us better information than the absolute gap, because James and Frederick missed their sales projections by 10 units each but this was a larger percentage of Frederick's goals.

Problem 2.2 Parts c) and d) Average Results						
Eastern Productions						
Salesperson	Planned Dollar Sales	Actual Dollar Sales	Planned Jobs Sold	Actual Jobs Sold	Planned Size of Jobs Sold	Actual Size of Jobs Sold
Sam Sneed	$ 500,000	$ 465,000	50	75	$ 10,000	$ 6,200
Wendy Silversmith	$ 450,000	$ 500,000	45	40	$ 10,000	$ 12,500
Anne Conlon	$ 475,000	$ 525,000	50	60	$ 9,500	$ 8,750
James Burke	$ 600,000	$ 585,000	60	50	$ 10,000	$ 11,700
Frederick Thompson	$ 550,000	$ 600,000	55	45	$ 10,000	$ 13,333
Susan Coyle	$ 500,000	$ 575,000	50	80	$ 10,000	$ 7,188
Company Total	$ 3,075,000	$ 3,250,000	310	350	$ 9,919	$ 9,286

The company is targeting an average sale of $9,919. For the sales associates, everyone but Anne is targeting $10,000 average sale per job, which must be what they see on average, suggesting Anne may be lowballing her estimates or be less capable of securing the larger customers. Frederick, who missed his total number of jobs sold by the largest amount, brought in the largest jobs for the company. Since Eastern Productions makes more profit off of larger clients, this is a very positive trend. Sam brought in the smallest customers, followed directly by Susan, our superstar on every other measure of performance.

e. The favorable and unfavorable ratings could be assigned but a gap analysis of actual vs. planned would have to be done first. It is just as easy to look the absolute sales against plan and assign favorable and unfavorable designations directly. The second question, or namely the size and profitability of jobs, leaves Frederick as the company's best salesperson. It probably takes more time to secure the larger job, so Frederick has decided to place his emphasis where the company benefits most rather than pursuing his personal goals. He is illustrating actual goal congruence with the company's desire to be more profitable, but the performance measures the company is using do not drive the sales associates toward the most profitable jobs but rather highest overall sales even if the average size of the customer is small (and hence less profitable).

Problem 2.3 :

Problem 2.3 Parts a) and b) Job Cost Percentages						
Treidmont Landscaping						
Job Number	Month of Job	Revenue from Job (1)	Labor costs for job (2)	% Labor Cost (3) = (2)/(1)	Other costs for job (4)	% Other Cost (5) = (4)/(1)
15	April-May	$ 7,500	$ 3,750	50.0%	$ 1,875	25.0%
20	May	$ 5,000	$ 2,550	51.0%	$ 1,250	25.0%
23	May	$ 3,500	$ 1,925	55.0%	$ 875	25.0%
35	June	$ 8,000	$ 4,800	60.0%	$ 2,000	25.0%
38	July	$ 4,000	$ 2,800	70.0%	$ 1,000	25.0%
42	August	$ 2,500	$ 1,875	75.0%	$ 625	25.0%

Problem 2.3 Part c) Profitability by Job						
Treidmont Landscaping						
Job Number	Month of Job	Revenue from Job (1)	Labor costs for job (2)	Other costs for job (3)	Profit From Job (4) = (1) - (2) -(3)	Profit Percentage (5) = (4)/(1)
15	April-May	$ 7,500	$ 3,750	$ 1,875	$ 1,875	25.00%
20	May	$ 5,000	$ 2,550	$ 1,250	$ 1,200	24.00%
23	May	$ 3,500	$ 1,925	$ 875	$ 700	20.00%
35	June	$ 8,000	$ 4,800	$ 2,000	$ 1,200	15.00%
38	July	$ 4,000	$ 2,800	$ 1,000	$ 200	5.00%
42	August	$ 2,500	$ 1,875	$ 625	$ -	0.00%

d. What we see is that other costs, or overhead, are assigned as a flat percentage of a job while actual labor costs vary. We also see that for the most part, Arthur Treidmont makes more money off the larger jobs. It would appear that he needs to revise his estimates or find a better way to understand how much effort a job is going to be.

Problem 2.3 Analysis for Part e)						
Totals		$ 30,500	$ 17,700	$ 7,625	$ 5,175	89%
Average (Rounded		$ 5,083.33	$ 2,950.00	$ 1,270.83	$ 862.50	15%

e. What we see now is that Arthur's other costs (which are overhead) are greater than his plan, suggesting that he might need to look for ways to decrease these costs. We also see no real pattern in labor costs, except that his workers seem to be faster than expected during the cooler months of April and May, while they start to slow down during the middle of the summer. Arthur should study his other costs to understand why they are greater than plan and adjust his labor estimates on jobs to reflect the potential temperature his workers will need to labor under. This would ultimately raise prices during the peak summer months, but Arthur also can't continue to lose money during this period.

f. Now we see that Arthur could lose all of his business if he starts raising prices. In other words, he is a price taker in the market, not a price setter. Now it becomes even more important to understand the other costs and try to bring them down as there is probably little he can do about the labor. He might try to find out if he can use different skill levels of laborers (and hence different salaries) in parts of the jobs to reduce overall labor costs. For instance, it may take less skill to get a site ready for planting than it does to actually get the plants in. Mulching is another area where low-skilled labor would be okay to use. So Arthur needs to plan his labor usage so he gets the optimal sales value for each hour different employees work. He may also have to plan for rest breaks to ensure that his employees can actually work at their best even during periods of high temperatures.

Problem 2.4

Problem 2.4 Parts a), b), and c) Percentage Costs by Job								
Free and Easy Window Cleaning								
Job Number	Job Price (1)	Labor (2)	% Labor (3) = (2)/(1)	Supplies (4)	% Supplies (5) = (4)/(1)	Overhead (6)	% Overhead (7) = (6)/(1)
15	$ 500.00	$ 255.00	51.0%	$ 75.00	15.0%	$ 27.50	5.5%
18	$ 375.00	$ 225.00	60.0%	$ 52.50	14.0%	$ 20.63	5.5%
25	$ 250.00	$ 155.00	62.0%	$ 30.00	12.0%	$ 13.75	5.5%
32	$ 300.00	$ 174.00	58.0%	$ 39.00	13.0%	$ 16.50	5.5%
35	$ 450.00	$ 234.00	52.0%	$ 67.50	15.0%	$ 24.75	5.5%
40	$ 600.00	$ 288.00	48.0%	$ 108.00	18.0%	$ 33.00	5.5%

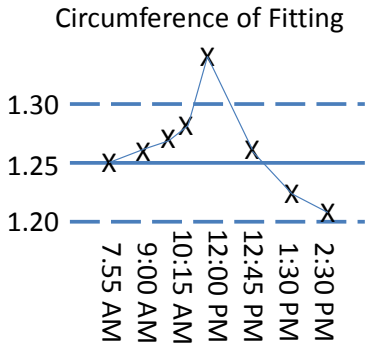
Problem 2.4 Part d) Profitability by Job							
Free and Easy Window Cleaning							
Job Number	Job Price (1)	Labor (2)	Supplies (3)	Overhead (4)	Total Cost (5) = (2) + (3) + (4)	Profit (6) = (1) - (5)	Profit Percentage (7) = (6)/(1)
15	$ 500.00	$ 255.00	$ 75.00	$ 27.50	$ 357.50	$ 142.50	28.5%
18	$ 375.00	$ 225.00	$ 52.50	$ 20.63	$ 298.13	$ 76.88	20.5%
25	$ 250.00	$ 155.00	$ 30.00	$ 13.75	$ 198.75	$ 51.25	20.5%
32	$ 300.00	$ 174.00	$ 39.00	$ 16.50	$ 229.50	$ 70.50	23.5%
35	$ 450.00	$ 234.00	$ 67.50	$ 24.75	$ 326.25	$ 123.75	27.5%
40	$ 600.00	$ 288.00	$ 108.00	$ 33.00	$ 429.00	$ 171.00	28.5%

e. The information suggests that the profitability on small jobs is significantly less than on the larger jobs. Since it takes the same amount of time to set up to be ready to clean windows on small jobs as on large, June needs to pitch her sales to larger houses or clients so she can keep her profitability high.

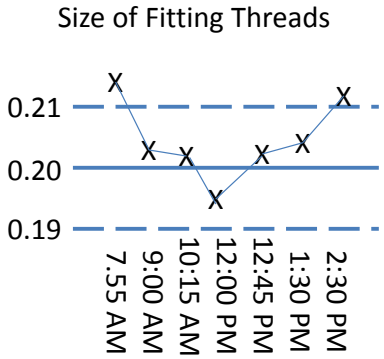
f. One might recommend that June put out “specials” flyers in the neighborhoods with larger houses. Changing prices is probably not necessary as she sees solid profitability on larger jobs, which she would lose if she raises her prices. She might want to give quantity breaks, instead, to larger houses or clients where she makes the most profit. This way she can grow the business without the risk of alienating her profitable customers, opening the pathway to more large clients and higher overall profitability.

Problem 2.5

a. The solution should look something like this:



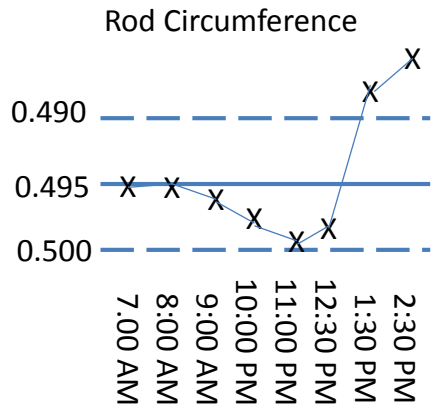
b. The solution should look something like this:



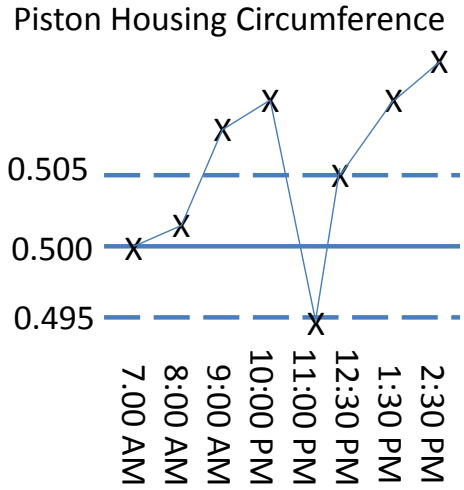
c. The company should probably recalibrate every hour or at least when the sample falls out of range. They didn't start out well on the fitting threads, operated fine during the day, then fell out of range again at the end of the day. The circumference was only a problem at noon, but was close to falling out of range again at the end of the day. To avoid long-term quality problems, they should recalibrate whenever they drift too far away from the target value, especially if they go outside of tolerances.

Problem 2.6

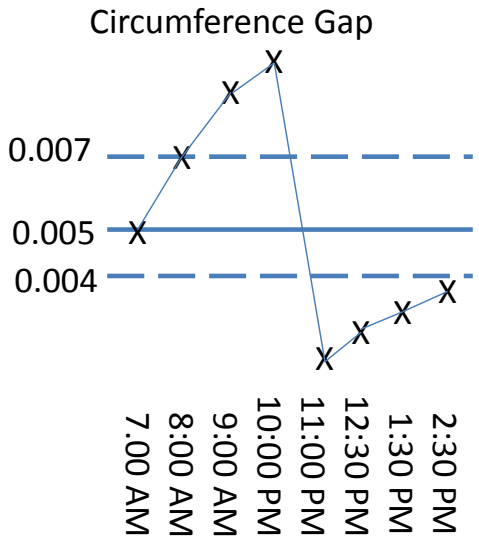
a. The diagram should look something like this:



b. The diagram should look something like this:



c. The diagram should look something like this:



d. The circumference gap is the most critical variable, and as can be seen, they were only within tolerance at 7 a.m. and 8 a.m. The rest of the day, while most of the tolerances were being held for the two components, their joint circumference gap fell far outside of the acceptable range. They probably need to tighten the tolerances on the rod and piston housing to reduce the circumference gap to within desirable range.

Problem 2.7

a. Right now, the company is relying upon personnel controls, but they seem to be beginning to lose their effectiveness.

b. Action controls that might help the company out include standard operating procedures for completing the various jobs, statistical process control (Shewhart charts) to track the time to complete various jobs, and control boards to track the amount of work completed per hour against preset objectives.

c. Some potential results measures could be number of jobs completed, profitability of jobs, number of customer complaints, and number of billable hours worked.

d. It really does become more difficult to maintain personnel controls as an organization grows because the trust and open communication required to make it work become more and more difficult to sustain. That being said, some extremely large companies still rely on personnel controls, like Southwest Airlines and Johnson & Johnson. Results controls reflect a bureaucratization of the company, stepping away from trust and people-based control measures to ones that are more objectively defined and measured. Moving to results control, then, is the more common result of company growth, but it is not inevitable that results controls have to dominate. A blend of controls, including personnel controls, provides a richer control environment.

e. TO: Jim and Kenny Phillips
FROM: Student
SUBJECT: Change in control system

After reviewing your control system, it is my recommendation that you consider both beefing up your personnel controls by holding more office meetings and increasing your "hands-on" time with your employees to instill in them the importance of the customer and meeting their requirements, which includes treating them with respect. In addition, I recommend that you institute at least some level of action controls to help focus employees' attention on key variables, such as meeting job standards. Finally, results control that specifically identify desired outcomes should be added to create a multi-dimensional, comprehensive communication and evaluation structure for your firm.

Problem 2.8

a. It is unclear what type of controls are in place. If anything, the individual franchisees seem to be relying on personnel controls while Rapid headquarters appears to have no form of control in place except reputational effects, which are personnel-based.

b. In the car wash business, it would be useful to have control boards that show how many cars have been completed against some preset range of outcomes (Shewhart control chart). They could also do random checks on the quality of the job, rating them from "excellent" to "poor" on such things as cleanliness of the car, the car's windows, and carpets. Andon lights could also be used when problems are encountered during the cleaning process.

c. Results controls could include number of customer complaints, number of "rewashes" that need to take place, time to complete a car wash, amount of time to wipe down the car, amount of time to vacuum, and number of cars processed per hour. These may not all work in the desired way, though, as many would push the workers to go faster rather than being focused on doing the right job the first time.

d. It is not the size of Rapid Car Wash that suggests it may be difficult to rely on personnel and action controls, but rather its structure. As a franchisor, Rapid has far less direct control over daily operations and procedures at its franchisees. In order to make personnel and action controls work, Rapid needs to start holding meetings where the culture of excellence is discussed and various groups get the chance to talk about what is working well and where they have problems, creating a bonding between franchisees that will result in them putting more emphasis on the quality of customer care.

e. It is never recommended to try to run a large organization without some form of mission and vision statement because it becomes very difficult to directly oversee and communicate with individuals in the organization as it grows. This is particularly a problem for a franchisor. They have to work especially hard to sustain a culture of quality.

TO: Robert Kingsley
FROM: Student
SUBJECT: Car Wash Control Systems

After careful review of the control system in place across the franchisees' operations for Rapid Car Wash, it has become clear that the culture of excellence needed for the business to continue to grow is not in place. Some franchisees are very concerned about customer satisfaction and loyalty, but others simply run the business with a deaf ear to the final customer. Therefore, we recommend that the best practices of franchisees be incorporated into an overall mission and vision statement, which will then be used to develop a set of blended personnel, action, and result controls to ensure more consistent, high-quality delivery of the firm's products to all of the customers that use Rapid Car Wash facilities.

These objectives should be met by directly working with franchisees to establish clear benchmarks for superior performance, and perhaps providing incentive programs to encourage those firms that are doing a superior job to continue to grow profitably. Rapid has to assume more control over total operations and set clearer standards of performance for all of its franchisees if it is to maintain its brand reputation and grow the business overall. This should be undertaken as soon as possible at joint meetings of franchisor and franchisee managers and staff.

Problem 2.9

a. Janice is using very loose personnel controls in her class. Since she writes poor instructions and only verbalizes most of them in detail, she is not using action controls, which are so vital to the teaching environment.

b. She is witnessing behavioral displacement, lack of goal congruence, and some data manipulation in her daily classes. It is also clear that she is facing negative attitudes as the student interactions and classroom behavior deteriorate.

c. We would expect all of the problems she is facing to continue to worsen, ultimately having negative impacts on her teacher ratings as well as the downstream judgment of her skills by colleagues who get her students in later classes. Janice may face having to take actions against students for plagiarism and other negative behaviors as she fails to take control of the teaching environment and establish effective behavioral and performance guidelines.

d. Janice should begin transforming her assignments into more detailed, specific documents that include the use of an "honor code" to ensure that students understand her performance expectations. Janice should also consider taking surveys in her classroom to identify which elements of her teaching students find effective and where the greatest shortfalls are. Finally, Janice should probably seek the help of more effective instructors and consider taking classes on classroom dynamics and setting effective performance expectations so that she can regain control of the classroom and create a more viable learning environment.

Problem 2.10

a. Rusty is using a small set of results measures to capture what he believes are the critical dimensions of performance. Bryan's performance reflects a personnel control—his individual conscience.

b. The lack of cleanliness and the shifting of work onto Bryan's shoulders show a lack of goal congruence, negative attitudes, and behavioral displacement. Since cleanliness is not one of the stated goals, managers have no incentive to spend their time on cleaning. Bryan, by picking up the cleaning on his own, is actually more in tune with Rusty's expectations, but, by the measures, he is doing a poor job.

c. Rusty should promote Bryan and task him with rounding out the set of performance measures to ensure a pleasant dining experience for all of Rusty's customers. A dirty restaurant is unlikely to do well on any of Rusty's current measures, but right now he is relying on Bryan's own initiative and dedication to cleanliness to keep the restaurant under control. It is likely he has managers like Bryan at all his restaurants or the cleanliness problem would have surfaced earlier. Bryan also needs some education, though, so perhaps his promotion should be delayed until he learns how important "customer touch" is in the restaurant business. Rusty's restaurant chain needs to expand its measures and its set of goals to capture more of the dining experience, perhaps relying on regular customers to provide essential feedback.

Cases

Case 2.1

Case 2.1 Part a) Data Table (columns 1 and 2) and Gap Analysis

Sam's Golf Pro Shop Gap or Variance Analysis Measure	Plan (1)	Actual (2)	Variance (3) = (2) - (1)	Favorable or Unfavorable
Number of sets of golf clubs sold	50	40	(10)	Unfavorable
Number of packages of golf balls sold	1,000	1,200	200	Favorable
Number of golf gloves sold	250	225	(25)	Unfavorable
Number of bags of tees sold	1,500	1,600	100	Favorable
Number of hours of private instruction	320	400	80	Favorable
Number of golf classes given	80	65	(15)	Unfavorable
Number of golf sweaters sold	75	100	25	Favorable
Number of golf jackets sold	40	50	10	Favorable
Number of driving range buckets of balls sold	6,500	8,000	1,500	Favorable
Total revenues from merchandise	$40,750.00	$ 38,650.00	$ (2,100.00)	Unfavorable
Total revenues from instruction	$23,200.00	$ 23,750.00	$ 550.00	Favorable
Total revenues from driving range	$32,500.00	$ 40,000.00	$ 7,500.00	Favorable
Total cost of goods sold	$22,445.00	$ 27,055.00	$ 4,610.00	Unfavorable
Total operating costs	$38,580.00	$ 35,840.00	$ (2,740.00)	Favorable
Operating profit	$35,425.00	$ 39,505.00	$ 4,080.00	Favorable