

Customer Product Rationalization for Ailing Businesses

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This Chapter Covers

- ▶ The customer product/process rationalization (CPR) model—a tool for profit optimization.
- ▶ The total asset utilization (TAU) model.
- ▶ Average (standard) vs. allocated cost accounting.
- ▶ Calculating actual vs. apparent profitability.
- ▶ Product/process rationalization.
- ▶ Understanding potential market opportunities.
- ▶ Ramifications, implications, and cautions related to the CPR model.

Introduction

Every organization knows that some of its products or services, and perhaps even some customers, lose money with every sale. The problem, of course, is in figuring out which they are. There is a complex interplay between production or service provision rates, differential revenue and costs that all need to be accounted for in order to make rational decisions about the product and service portfolio and customers selected. This is further hindered by antiquated average cost accounting methods which obscure true profitability and the lack of connection between profitability and production tradeoffs. Accordingly, most businesses make decisions to simply increase revenue while acknowledging, but rarely cost justifying, loss leaders.

In this chapter, we propose a method to combine true profitability and production tradeoffs to make the identification of current profitability sinks easy to identify, giving managers the ability to make data-based management decisions to maximize profit given market constraints.

Scenario

You are considering resigning your job as a high-powered (and highly paid) vice-president of a major corporation. You have risen about as far as you can expect in that company, and you have an opportunity to trade your current level of job security for the opportunity to become a CEO and run a corporation by accepting an offer from the board of directors of an existing, but troubled, manufacturing business. This organization has existed for quite some time, but recently, while revenue has increased, profit has not. Benchmarked against its competitors, this company's profitability is in the lowest quartile of its group.

Could you be the one to turn things around? Is there a tool to help you to use the company's own data to do so? Indeed, is there a tool which might help to identify

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companies that have great potential but are currently performing at a lower level of profitability than they should?

In this chapter we are going to present such a tool, termed “customer product/process rationalization” (CPR). CPR offers a way to not only resuscitate a failing or underperforming business, but indeed to assist organizations to move, as Jim Collins would state (Collins, 2001), from “good to great” through the optimization of profitability.

CPR: A Tool for Profit Optimization

The CPR model is the result of the merger of three contributory models: the total asset utilization (TAU) model; an allocated cost accounting (ACA) model (although an activity-based cost accounting model will work equally well); and a strategic product/market capability analysis model (which most firms of any significant size will already possess).

CPR is useful when a company has multiple customers, processes, and/or products which may contribute differently to the profitability of the corporation. It should be noted, as will be discussed in a later section, that the differentiation in profit contribution may not be apparent to management if an average or standard cost accounting system is being employed. However, those differences will surely exist, and this model will reveal them. The CPR model provides a technique for modeling profit differences using real data, and subsequently allows management to plan and achieve a profit-optimized customer, product, and process portfolio in the presence of growth. The model will also provide key information that can be used to drive future strategic improvements.

The Total Asset Utilization (TAU) Model

Your first step in building a CPR model and its associated database is to create a TAU model for your firm.

The purpose of the TAU model is to help understand the effectiveness of how your processes use time to produce salable products and/or services.¹ The model may be deployed in a manufacturing environment for a single machine, a single production center, multiple centers or lines, or for an entire facility or company. Similar applications are possible for services-based organizations.

A considerable modification of the well-known total productive maintenance (TPM) approach, the TAU model has unique characteristics that allow it to be used in building our CPR model. In fact, without the use of the data generated by TAU, CPR cannot be accomplished.

A TAU model consists of four ratios, two based on time and two based on numbers of units produced, which are then employed in a multiplicative expression. World-class firms operate at a TAU level of 85%, or at the 85th percentile of their sector or technology.

The 4 components of the TAU model are Availability (AV), Duty Cycle (DC), Efficiency (Eff) and Yield (Yield) and are described in the following sections.

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A TAU model consists of four ratios, two based on time and two based on numbers of units produced, which are then employed in a multiplicative expression.

Availability

Availability refers to the proportion of time that a process is actually available to run versus the total amount of time. Availability is sometimes referred to as “uptime” or “run” time. It is *not* the amount of time that the process is actually generating products or services. The “total” in “total asset utilization” refers to the base time period to be employed for indexing *Availability*. This value should reflect the total possible time for which our process could have run—basically, 24 hours a day, seven days a week, 365 days a year.

For our illustrative scenario, let us index against a full work day, which has three eight-hour shifts, which we run seven days per week, or 43,200 minutes per month. To calculate *Availability*, we simply subtract from the total available time those time periods that the process was not available to run, and then divide by the total time. The process might not have been available for a number of reasons, of course. For example, the process might not have been in operation due to planned or unplanned maintenance (PM or UM); an absence of orders (NO); no raw materials on hand (NM); a simple choice not to run the process (CNR), or perhaps due to missing personnel or breaks. Not all of these sources of downtime will apply to all firms and applications. Also, notice how breaking *Availability* into its components in this way highlights that a number of different process owners control run time, not just maintenance. The actual formula that considers these possible sources of downtime would appear as:

$$\text{Availability} = \frac{\text{Total time} - (\text{PM} + \text{UM} + \text{NO} + \text{NM} + \text{CNR})}{\text{Total time}} = \frac{\text{Run time}}{\text{Total time}}$$

Duty Cycle

The *Duty Cycle* component is important enough to be broken out as a separate item. Although often considered as simply another component associated with downtime in the *Availability* component, such as unplanned maintenance or breaks, it is absolutely essential that the *Duty Cycle* component of the model stand on its own. The primary reason for this assertion is that the process owners of losses associated with this component (sales and marketing) are completely different than those process owners responsible for losses in the *Availability* portion of the model. This is why throughput improvement initiatives often fail in business and industry when the root causes of those losses are due to deficiencies related to the *Duty Cycle* component. This is because the responsibility for improvement is assigned to operations or maintenance personnel, when in fact the primary responsibility for improving throughput (number of units generated) is actually in the hands of those who determine the firm’s portfolio, or what will be sold.

Duty Cycle is the proportion of the run time or uptime, after losses due to *Availability*, during which the process is actually generating products or services. The two sources of lost time associated with *Duty Cycle* relate to (1) getting a process up and running

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(*set-up* time) and (2) the time loss incurred by less significant pauses to the process when, for example, switching from one package to another, but not for changing the set-up from one product to another. These losses, which are relatively lower in their comparative significance, are collectively referred to as losses due to *changeover* time. The *Duty Cycle* component is calculated as:

$$\text{Duty cycle} = \frac{\text{Run time} - \text{Set up and Changeover time}}{\text{Run time}}$$

Multiplying *Total Time* by the *Availability* index, and subsequently by the *Duty Cycle* index, we now have the amount of time during the study period that the process was actually producing products or services.

Efficiency

Now that we have accounted for all of the time that the process was producing a product or service, we need to account for how well we are using the production time that we do have. This *Efficiency* ratio considers our actual production rate versus the theoretical maximum production rate. For CPR purposes there is an additional critical consideration; this rate must be in “units we get paid for” and not in engineering terms, such as “number of strokes per minute.” This will allow us to employ the *Efficiency* ratio later in the CPR process to account for tradeoffs between, say, two different products with different profitability and different production rates.

$$\text{Efficiency} = \frac{\text{Actual production rate}}{\text{Theoretical maximum production rate}}$$

Yield

The final component of the TAU model accounts for the fact that most processes do not produce products or services that are totally free of defects or defective units. *Yield* is the proportion of salable (“good”) units to the total units produced for the period in question and is calculated as:

$$\text{Yield} = \frac{\text{Number of good units produced}}{\text{Total number of units produced}}$$

In order to calculate the final TAU index, we simply multiply the values of the model’s four components:

$$\text{TAU} = \text{Availability} \times \text{Duty cycle} \times \text{Efficiency} \times \text{Yield}$$

Linking TAU to a Metric of Interest

The TAU index accurately shows how well a process creates salable units, but it does not by itself show or imply what to do about it. For example, there may be a product that nets \$100 of profit per unit but has a terrible TAU index, and another product that has a high TAU index but loses \$0.25 per unit sold. As a result, maximizing TAU is oftentimes not the best business decision. However, TAU does provide the basis

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to model productivity tradeoffs in order to optimize profit. Additionally, TAU may or may not correlate with a metric of interest, such as “throughput” (the number of units produced per unit of time), so simple or multiple regression may be needed to identify the components of TAU that relate back to the metric of interest (throughput for the TAU model, profitability for the CPR model).

For our scenario and for purposes of brevity, let us assume that the TAU analyses have already been performed (See Table 1) and that they have resulted in the following conclusions.

- ▶ All the customers are equivalent—they purchase about the same mix of our products at about the same price. There is, therefore, no customer-based differential cost allocation for our illustrative firm—they all demand about the same amount of time and resources to serve. As a result, we will ignore minor customer differences at this time.
- ▶ The four products evaluated have quite different TAU and component values for the time period studied; these are given in Table 1.
- ▶ A multiple regression of the individual components of the TAU model as independent variables against the period throughput values (gross, not net) for the different products reveals that although gross throughput can in fact be predicted from the model components, each of the products has a different prediction equation (Table 2).

Table 1. Average TAU values

	Product 1	Product 2	Product 3	Product 4
<i>Availability</i>	0.8504	0.7536	0.9220	0.5522
<i>Duty cycle</i>	0.6834	0.6252	0.5048	0.9694
<i>Efficiency</i>	0.4834	0.6620	0.8542	0.9520
<i>Yield</i>	0.8498	0.9532	0.8026	0.9736
<i>TAU</i>	0.2387	0.2973	0.3191	0.4962

Table 2. Regression results for total asset utilization components by product

	Product 1	Product 2	Product 3	Product 4
<i>Constant</i>	143,697	210,366	101,160	178,556
<i>Availability</i>	210,364	n.a.	562,093	211,252
<i>Duty cycle</i>	n.a.	100,118	554,851	n.a.
<i>Efficiency</i>	136,962	524,122	112,153	n.a.
<i>Yield</i>	n.a.	256,454	458,877	125,212

[Table fn] n.a.: Not applicable (statistically insignificant).

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The values shown in Table 2 relate to the partial regression coefficients for each TAU component in the prediction equation, by product.

The general equation for a product would be:

$$\text{Throughput} = \text{Constant} + B_{AV} \times \text{Availability} + B_{DC} \times \text{Duty Cycle} + B_{EFF} \times \text{Efficiency} + B_Y \times \text{Yield}$$

where “Throughput” is a prediction for the average number of units per month produced (*both* good and bad) if we only ran that product, and B_X the factor for the X component from Table 2 for a given product. Note, however, that not all of the components of the TAU model actually impact throughput for all of our products. When “n.a.” appears in Table 2, it is because that particular TAU component was not a statistically significant contributor to throughput for that particular product. Also, note that even when a particular component is significant in predicting throughput for two products (e.g. *Availability* as related to Products 1 and 3), the partial regression coefficients are not identical.

So, if we were to make only Product 1 at our historical TAU levels (not that we would necessarily choose to do so), we would expect to generate an average of:

$$143,697 + 210,364 \times 0.8504 + 136,962 \times 0.4834 = 388,798 \text{ units per month}$$

However, while that is the *total* number of units that would be produced, on average from month to month, given the *Yield* for Product 1 of 0.8498, we could only sell an average of $388,798 \times 0.8498 = 330,400$ units per month. Note that this calculation must still be executed, even though *Yield* was not statistically significant in the prediction of gross unit production levels.

One might be tempted at this point to look at the TAU components for opportunities to improve throughput, but we are missing one very important bit of data—the actual profitability of each product, which we must obtain from our ACA system. Perhaps the assumption about essentially equal profitability per unit is flawed. If that were the case, we might maximize throughput but actually reduce profitability.

But in order to do that, we need to understand the weakness of standard cost accounting.

Average (Standard) vs. Allocated Cost Accounting

As you are designing and installing a TAU model, you want to gather data on the true, rather than apparent, profitability within the company. You have found that the company uses a simple average (often referred to as a “standard”) cost accounting system, where all costs are divided equally among all customers and products. Average costing hides the true costs (and therefore true profitability) of customers and products alike, leaving management with an assessment of apparent profitability and a likelihood of making misguided decisions. Should you find that your firm is using this accounting method, one of your first steps will be to institute a rational cost accounting system.²

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It has been the authors' experience that while many proponents of the use of activity-based cost accounting (ABC) contend that this is an ideal toward which one might strive, it turns out that most of the benefit generated by an ABC system can be captured by implementing an allocated cost accounting (ACA) system that tracks costs stratified by product, customer, and production line, while avoiding the additional costs required by a complete ABC system.

For our scenario, let us simplify the illustration of our model by assuming that we are operating a single production line, so that our costs are stratified only by customer and product.

Average cost accounting has unfortunately led to the assumption at this company that all products manufactured and all customers served generate the same level of profitability. As a result, the sales force has sold whatever products it can, to every and any customer, under the illusion that by maximizing revenue it will be maximizing profit for the firm.

Suppose that last year's portfolio of products appeared as shown in Table 3. Since our theoretical firm is using an average cost accounting system, nothing is known about the true contribution to profit for each product. We do, however, know from the overall financial data that the firm's total profit, which was an average of \$1,177,648.25 each month. Therefore, each unit sold produces on average a profit of \$2.21 for our firm.

Table 3. Historical volume of products per month

Product	Units produced	Units sold	Proportion of product mix as sold	Revenue per unit	Total revenue
1	150,000	127,470	23.96%	\$20	\$2,549,400.00
2	200,000	190,640	35.83%	\$10	\$1,906,400.00
3	115,000	92,299	17.35%	\$7	\$646,093.00
4	125,000	121,700	22.87%	\$15	\$1,825,500.00
Total	590,000	532,109	100.00%	—	\$6,927,393.00

Calculating Actual Vs. Apparent Profitability

Now that the ACA and TAU models have been concurrently implemented, you are about to obtain data from the two new systems. By tracking overhead, maintenance, machine time, and numerous other costs and properly allocating them to the different products (recall that we are assuming that, for the purposes of this simplistic example, all customers are equivalent and you have only one production line), your accounting department can calculate per-unit costs and subtract them from the per-unit revenue to find, for the first time at this business, the true profitability of its products. Today you received the data set out in Table 4.

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Table 4. True profitability by product

Product	Revenue per unit	True profit per unit sold
1	\$20	\$1.25
2	\$10	\$3.30
3	\$7	\$1.25
4	\$15	\$2.25

This information was quite a surprise to everyone involved. Using average cost accounting has for years hidden from the company the fact that there are real and significant differences in the profitability of the four products. Now it is clear how driving up revenues (for example, by selling more of Product 1) could actually reduce profits, since it comes at the expense of the potential profitability of Products 2 and 4, as you can see in Table 4.

However, this illustration highlights a limitation of allocated costs and even of activity-based costing if used in isolation. A natural response to the data in Table 4 might be “Let’s sell more of Product 2!” But what if Product 2 requires 10 minutes to make one unit, as compared to Product 3, of which you can make 10 per minute? The goal should be higher dollar profit per minute of total time, not just profit per unit. Only by combining the business’s overall ability to manufacture the product units in time (using the TAU model data and the subsequent throughput regression analyses) and the actual profit per unit from the ACA model will we be able to maximize profits.

Using our current understanding, we can now show in Table 5 how the true potential profitability breaks out for each product (note that the “Units Sold” column contains yield-corrected data).

Table 5. Itemized average monthly profitability (current state)

Product	Units produced	Units sold*	Revenue per unit	Total revenue	True profit per unit sold	Average profit
1	150,000	127,470	\$20	\$2,549,400.00	\$1.25	\$159,337.50
2	200,000	190,640	\$10	\$1,906,400.00	\$3.30	\$629,112.00
3	115,000	92,299	\$7	\$646,093.00	\$1.25	\$115,373.75
4	125,000	121,700	\$15	\$1,825,500.00	\$2.25	\$273,825.00
Total	590,000	532,109		\$6,927,393.00		\$1,177,648.25

*Yield-corrected data.

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Market Penetration

It would be nice to simply manufacture and sell the one product that will generate the most profit during the production time you have available, but you suspect that it won't be that easy. The market you are in is not an infinite one, and you don't have a huge marketing budget. You call a meeting with marketing and sales personnel to determine what the market potential is for the four products you produce. Given their budget, how much of the current market is available to you?

Table 6. Analysis of potential market for the firm's four products

Product	Total monthly market demand	Estimated proportion of market demand that can be captured by your firm	Total number of units that can be sold by your firm
1	1,000,000	15%	150,000
2	900,000	23%	207,000
3	800,000	40%	320,000
4	900,000	20%	180,000

Table 6 shows the limit of the current demand that the marketing department thinks it can capture without price changes. This has never really been a question it has had to answer before, since it has always been assumed that all of the products contributed equally to profit. Now that we know better, we must move away from the “sell whatever we can” paradigm and focus on selling those products that make us the most profit per unit time. As an aside, giving the marketing department numerical goals by which to measure its success can only be beneficial for the company.

We are now ready to conduct the CPR analysis.

Product/Process Rationalization

You now possess all of the constituent data required to optimize the profit generated from the products you sell given the market constraints as they currently exist.

The first step is to estimate the production rates for the products we generate as things stand today. These values may originate from a historical database, or from throughput values recorded during the TAU implementation study period. The regression equations built from Table 2 will allow us to estimate how many units can be made (on average) if we run at our historical average TAU values (Table 1) for each product, if we run only that product. Then all we need to do is divide the predicted value by the time frame we used in creating our regression equation—in this example, 43,200 minutes. The results are given in Table 7. Again, keep in mind that this production rate is the total number of units produced (good and bad) and will need to be adjusted for yield loss in subsequent calculations.

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Table 7. Predicted current production rates per month and per minute

Product	Maximum capability (units per month)	Production rate (units per minute)
1	388,797.98	9.00
2	864,380.49	20.01
3	1,363,594.30	31.56
4	417,115.76	9.66

Using these numbers, we can estimate the monthly average profit we could generate if the company chose to exclusively run (and was able to sell) each of the products in its current portfolio, adjusted for yield loss. That allows us to rank the products by their potential contribution to profit. This is done in Table 8.

Table 8. Profit per product if product is run exclusively for a month

Product	Revenue per unit	Maximum capability (units per month)	Product maximum capacity \times Revenue \times Yield	True profit per unit	Product maximum capacity \times True profit	Profit after yield adjustment	Product rank
1	\$20	388,797.98	\$6,608,010.41	\$1.25	\$485,997.47	\$413,000.65	4
2	\$10	864,380.49	\$8,239,274.83	\$3.30	\$2,852,455.62	\$2,718,960.70	1
3	\$7	1,363,594.30	\$7,660,945.52	\$1.25	\$1,704,492.88	\$1,368,025.99	2
4	\$15	417,115.76	\$6,091,558.52	\$2.25	\$938,510.45	\$913,733.78	3

Table 8 highlights some interesting findings. Product 3 is second after Product 2 in potential profit, but the higher yield loss of Product 3 drops it down further. How did Product 3, one of our two lowest profit-per-unit products, end up being the second most profitable after Product 2, which is more profitable per unit than Product 3 by more than two times? As is clear from the maximum capability column, while Product 3 doesn't make a lot of money per unit, we can make a lot more of Product 3 per unit of time. Table 8 should make clear:

- ▶▶ Why selling more of the highest-revenue units does not mean you will make more profit (here it is the worst scenario). It isn't even the highest-revenue option due to its low TAU numbers, primarily due to losses associated with *Efficiency*.
- ▶▶ Why we had to use "units we get paid for" in the *Efficiency* calculations.
- ▶▶ That true per-unit profit from ABC or even allocated cost accounting is insufficient by itself to allow us to maximize profitability.
- ▶▶ How maximizing total potential revenue would mislead us into selling more of Product 1, and as a result we would actually earn less profit as our revenues increased.

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Unfortunately, the entire market does not consume 864,000 units of Product 2 per month total, and we believe we can only capture part of that anyway (as shown in Table 6). In order to find the optimal product mix, we make as much of Product 2 as possible, followed by Product 3, and so on until we run out of production time. We again have to take into account the fact that the company needs to manufacture more units than it sells to allow for the yield losses. That larger number dictates the average number of minutes of production consumed, as calculated in Table 7. The actual number of units sold after yield loss gives us the actual profit for each product, which in turn adds up to our optimized monthly profit (Table 9).

Table 9. Optimum product mix

Product	Max unit sales possible	Production for max sales (rounded)	Minutes needed for max sales	Planned minutes of production	Minutes remaining	Units produced (rounded)	Units sold (truncated)	Planned profit after yield adjustment
2	207,000	217,163	10,853.37	10,853.37	32,346.63	217,163	206,999	\$683,096.70
3	320,000	398,704	12,631.33	12,631.33	19,715.30	398,704	319,999	\$399,998.75
4	180,000	184,881	19,147.82	19,147.82	567.47	184,881	180,000	\$405,000.00
1	150,000	176,512	19,612.55	567.47	0.00	5,107	4,339	\$5,423.75
Total	—	—	—	43,200.00	0	805,855	711,337	\$1,493,519.20

Note that if the company could have sold just a few more units of Products 2, 3, or 4 it would have had no time left to make Product 1 at all. Due to the change in the product mix, the average profit per unit actually goes *down* from \$2.21 per unit sold to \$2.10 per unit sold, but since the number of units sold increases from 532,109 to 805,855, the total profit generated by the firm will increase. This is another reason why the data generated by average cost accounting systems will not allow a firm to maximize profitability without the concurrent use of the TAU model.

Finally, how does the optimized product mix's profitability compare to the company's historical profitability? The comparison is made in Table 10. Astonishingly, the company captures a 26.82% increase in profits per month by changing nothing but the product mix. Again, it is worthwhile to point out that the potential to increase the profit was there all along, but hidden because the firm was using an average cost accounting system and was not employing any form of a TAU model.

Table 10. Effect of CPR on monthly profitability

Increase in production (units)	Increase in sales (units)	Increase in profit (\$)	Increase in profit (%)
215,855.00	179,228.00	315,870.95	26.82

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In addition to increasing our profit, we have moderately increased our total revenue even as we reduced our highest revenue per unit product (Table 11). This is not always the case with CPR—often the initial increase in profits is accompanied by a drop in revenue as high-revenue but low-profit products or customers are purged from the process.

Table 11. Effect of CPR on revenues by product

Product	Revenue per unit	Units sold (truncated)	Monthly revenue
2	\$10.00	206,999	\$2,069,990.00
3	\$7.00	319,999	\$2,239,993.00
4	\$15.00	180,000	\$2,700,000.00
1	\$20.00	4,339	\$86,780.00
Totals	—	711,337	\$7,096,763

These are planning numbers—real markets tend to be more dynamic. Sales is given a ranked order of products to sell and rewarded for the “richness of product mix” rather than revenue, or (worse) concentrating on the simple number of units (products) sold.

Ramifications, Implications, and Cautions Related to the CPR Model

In the illustrative analysis we have presented the current product mix was optimized to achieve a 27% improvement in profit. The company did not downsize or spend money on new capital projects to capture this improvement in the bottom line. In the authors’ experience, implementing CPR at a typical business will result in a profit improvement of somewhere between 15% and 20%, typically without the need for headcount reduction or capital investment.

Once CPR is operational, a business can use the model to strategically enhance its profitability even further. For example, a team could be charged with reducing the yield loss for Product 3. With the state of the current market, the business may not be able to sell any more of products 2, 3, or 4, but if some capacity were freed up, more of Product 1 could be made and sold, which would generate additional profit.

Marketing could be given a larger budget to see if the business could capture a higher percentage of the market in Product 2, 3, or 4 (in that order, with Product 1 as minimally profitable filler). Or perhaps dropping the price for Product 2 to less than what competitors are demanding will allow the business to undercut the competition while still making more profit than it does today.

Right now the business is not capacity-constrained but market-constrained, so improving process TAU is probably not a high priority, since any additional capacity will just go toward the tepid Product 1. It probably can make more money by investing

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those resources in the marketing department at this point. However, if marketing is able to generate more demand for Product 2, 3, and 4 than plant capacity allows, the TAU data in Table 1 show that there may be untapped potential capacity, so purchasing new production equipment is unnecessary if we can find ways to better utilize the existing equipment.

The CPR model allows these questions to be asked and answered with data, and it becomes a very important input into the strategic planning process.

For the purposes of this chapter we have presented a highly simplified example. In reality, most businesses are rather more complex. However, the increased complexity allows the CPR model to shine all the more brightly.

Summary and Further Steps

A CPR model provides a model from which management decisions can be made, hypotheses tested, and profitability improved based on actual data and process tradeoffs.

To implement a CPR model:

- ▶▶ Build a TAU model of the process, indexing off of total time and units you get paid for
- ▶▶ Use multiple regression techniques to understand how TAU and its components of *availability*, *duty cycle*, *efficiency* and *yield* relate to a metric of interest to the company
- ▶▶ Create an allocated cost model (either by simplification or statistical sampling) that properly allocates costs and is stratified by at least three important determinants, for example product, customer, and production line.
- ▶▶ Combine the true profitability with the TAU model to account for opportunity costs and profit per unit of time.
- ▶▶ Use this information to generate a new portfolio mix in order to maximize profit generation
- ▶▶ Reward Sales and Marketing on profit contribution, not revenue
- ▶▶ Going forward, use this information to generate ideas for future process improvements

After implementing CPR in your new business, you are pleased to note a bottom-line profit increase of about 20%. Now your profitability puts you in the top tier performers in your industry. By understanding where your company makes money (and just as importantly, where it does not) you now have many more options on the table. Rather than becoming a corporate hatchet man stuck in never-ending downsizing hoping you can shrink your way to prosperity, you are a hero to the employees with whom you are entrusted, your community that relies on those good jobs, and your family, who might have originally questioned your sanity at giving up that cushy position in the first place. Perhaps now is the time to aggressively expand your market or product line, or maybe to work on projects to improve your own processes. Any way you go, you will have data from your CPR model informing you at each step of the way. You and your company have a bright future ahead.

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More Info

Book:

Collins, Jim. *Good to Great: Why Some Companies Make the Leap... and Others Don't*. London: Random House Business, 2001.

Articles:

Luftig, Jeffrey T. "Total asset utilization." *Measuring Business Excellence* 3:1 (1999a): 20–25. Online at dx.doi.org/10.1108/eb025561

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Websites:

Jim Collins: www.jimcollins.com

Simple article on TAU/CPR: tinyurl.com/86qu4vh

Notes

1. For an extensive explanation and treatment of this model, see Luftig (1999a).
2. For additional information on this topic, see Luftig (1999b).