EVALUATING A FEE STRUCTURE FOR A NOT-FOR-PROFIT COMMUNITY FOUNDATION: A CASE STUDY ON ACTIVITY BASED COSTING

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ABSTRACT

A case is presented that focuses on a not-for-profit organization offering multiple services while having a costing base which is essentially fixed. At issue is determining a fee structure for the services provided. The organization is a community foundation which acts as custodian and disburser of several endowments designated for differing purposes.

An activity based costing (ABC) analysis is employed in an attempt to provide decision-relevant product (endowment)-level information, providing an approach for allocating costs to products when costs are not directly or easily traceable to the products.

Keywords: Activity based costing

INTRODUCTION

This paper presents a case involving cost allocation for a not-for-profit service enterprise using an activity based costing (ABC) approach. Names and dollar amounts have been changed, but the cased is based on a consulting project performed for a community foundation. The not-for-profit is The Rockwell Community Foundation which acts as custodian and disburser of funds donated and earmarked for specific purposes, referred to as "products." The Foundation adopts the ABC study as a basis for investigating alternative fee structures to that which is currently used.

The primary objective of this case is to illustrate to students who are already somewhat familiar with activity based costing, how ABC might be applied in a service industry setting. The

analyses in this case are not difficult, which enables students to focus on and easily grasp the conceptual nature of activity based costing. However, the case demonstrates some of the computational cumbersomeness and effort in performing an activity based costing analysis. It is also likely that students will question the validity of an activity based costing approach, given the many estimates and assumptions necessary for the analysis. A secondary objective of the case is to prompt a discussion of possible alternative administrative fee structures that may be employed by the not-for-profit, using the information provided by the activity based costing analysis. Students will appreciate the issues involved in developing a cost based fee structure for service type organizations with multiple products and predominantly fixed costs.

Activity based costing is "a cost accounting system that focuses on the various activities performed in an organization and collects costs on the basis of the underlying nature and extent of those activities. It focuses on attaching costs to products and services based on the activities conducted to produce, perform, distribute, or support those products and services" (Barfield et al. 2001, 141). These costs include non-divisible expenditures which are largely fixed in nature, and support multiple products and/or customers. Ross (2004, 2-3) refers to these as indirect (the direct result of producing a good or service, but cannot be explicitly tracked to the good or service) and overhead (largely independent of production, and include administration, accounting and finance, marketing, public relations, human resources, etc.). Activity based costing attempts to allocate indirect costs to products or services in a way that reflects the consumption of these resources by the products or services. Similarly, overhead costs, even though their association with products or services may be nebulous, may also be allocated to products or services. ABC offers an approach to allocate overhead costs in a rational, non-arbitrary way. It can be argued that the products and services of an organization do benefit, albeit indirectly, from marketing, data processing, and other overhead costs. At issue is that ". . . the charge back for these expenditures is proportionate to the benefit . . ." received by products or departments (Ross 2004, 4). A key objective of activity based costing is to facilitate long-term planning and control using cost models at a product-by-product level, when total cost must be recovered.

Activity based costing is well suited for service type organizations and more specifically the health care industry. Per Kaplan and Cooper, operating costs of service companies are generally fixed (Kaplan and Cooper 1998, 38). Ross (2004), in advocating an ABC approach in healthcare, argues that current accounting practices which "often rely on easily available measures to allocate production costs to output and customers" do not provide appropriate information to determine the cost of service or to make decisions. Devine et al. (2000) cites the common use in health care of capitation fee arrangements (payment of a fixed fee to health-care providers in exchange for providing medical care when it is needed) as increasing the importance of accurate costing of services, making the role of activity based costing increasingly important. Kelemen et al. (2007, 37) advocate an ABC approach in order to accurately assign selling, general and administrative costs for managed care companies, citing the importance of "strategic cost management models at a product-by-product and customer-by-customer level." Thurston et al. (2000) describe the implementation of an ABC system by Blue Cross and Blue Shield (BCBS) of Florida, which BCBS considered necessary "Because the company has large work units and shared processes" and "managers need to be able to accurately identify the processes and administrative costs associated with the various products and customers" (Thurston et al. 2000, 2). Lawson (2005) surveyed organizations on the mailing list of The Institute for the

Advancement of Healthcare Management and found that ABC in hospitals had declined (most commonly cited reason was the complexity of implementation of such systems) while it had increased in other types of health care organizations. The next section of this paper (Methods) presents the case, followed by Results, showing the case solution. The last section, Conclusion, overviews the findings and merits of the case.

METHODS

The Rockwell Community Foundation is a not-for-profit organization which since 1984, has helped Rockwell County residents build a better community by linking donor interests with the community's most pressing needs and promising opportunities. Through partnerships with local nonprofits, The Rockwell Community Foundation helps to fulfill charitable dreams of donors while at the same time creating a strong, vibrant community for all people in Rockwell County now and for generations to come.

Like other nonprofits, The Foundation addresses a variety of needs in local communities. However, it offers a unique way for contributors to donate. Amounts donated will always be with The Foundation as part of its endowment. With the help of endowment investments, that original amount will be left untouched and will continue to grow as it gains interest and value. However, any monies earned above and beyond that principle will be awarded in the form of grants and scholarships to other nonprofit organizations within Rockwell County. These grants and scholarships help an array of programs and special initiatives addressing topics such as: arts and culture, recreation, education, senior citizens, agriculture, healthcare, and many more. With the variety of funds The Community Foundation holds, donors are bound to find at least one fund to match their contribution interests.

The Rockwell Community Foundation currently has eight “products.” A product is a category to which donations are given. The eight products are: (1) Donor Advised/Grant Making - donors reserve the right to be involved and suggest grants from the fund they establish. Can be used to establish any type of fund; (2) Unrestricted Field of Interest - beneficiary is not specified at the time of the gift. The Foundation Board has the flexibility to support current priority needs no matter what they are or how the community's needs have changed; (3) Agency and Restricted Funds - a separate legal entity which is affiliated with The Rockwell Community Foundation. Supporting organizations enjoy public charity tax status and are not subject to excise taxes or the rules governing private foundations; (4) Scholarships - provide students with an opportunity to further their education or training; (5) FORCE – After school program for high school students where they do community related activities; (6) Americas Promise – a national initiative founded by General Colin Powell, seeking to ensure that at-risk youth have access to fundamental resources necessary for them to get a good start in life; (7) Field of Interest – designated for a particular area of interest such as "the arts," or "children," or the "elderly." Does not limit grants to any particular organization; and (8) Special Projects - monies designated for a specific agency or agencies, i.e. funds benefit the United Way, the Rockwell Area Symphony Orchestra, the Childrens' Zoo, or any other agency of choice.

Each product may have multiple funds. For example, the product “Scholarships” is designated for scholarships to assist students. The Scholarships product consists of many Funds, with each

fund constituting a specific scholarship. Foundation Product assets total $36,985,263, with the largest product being Agency and Restricted Funds at $16,819,425 and the smallest being Americas Promise at $73,428. Administrative fees assessed for maintaining each product, one percent of the average total assets for each fund, total $400,996. Schedule 1 lists the products, total assets by product, fees charged by The Rockwell Community Foundation for each product, and product definitions.

Schedule 1. Assets and assessed fees by product

Product	Total Assets	Administrative Fee
Donor Advised/Grant Making	$ 2,017,933	$ 18,214
Unrestricted Field of Interest	11,811,749	132,336
Agency and Restricted Funds	16,819,425	170,443
Scholarships	3,336,254	39,008
FORCE	1,406,620	27,728
Americas Promise	73,428	696
Field of Interest	1,139,798	7,286
Special Projects	380,056	5,285
Total	$ 36,985,263	$ 400,996

Product designated purposes:

Donor Advised/Grant Making - donor reserves the right to be involved and suggest grants from the fund they establish. Can be used to establish any type of fund.

Unrestricted Field of Interest - beneficiary is not specified at the time of the gift. The Foundation Board has the flexibility to support current priority needs no matter what they are or how the community's needs have changed.

Agency and Restricted Funds - a separate legal entity which is affiliated with The Foundation. Supporting organizations enjoy public charity tax status and are not subject to excise taxes or the rules governing private foundations.

Scholarships - provide students with an opportunity to further their education or training.

FORCE – After school program for high school students where they do community related activities.

Americas Promise – a national initiative founded by General Colin Powell, seeking to ensure that at-risk youth have access to fundamental resources necessary for them to get a good start in life.

Field of Interest – designated for a particular area of interest such as "the arts," or "children," or the "elderly." Does not limit grants to any particular organization.

Special Projects - monies designated for a specific agency or agencies, i.e. funds benefit the United Way, the Rockwell Area Symphony Orchestra, the Childrens' Zoo, or any other agency of choice.

In 2006, The Rockwell Community Foundation earned a net profit of $79,578. Total revenues were $481,658, with the bulk of the revenues consisting of administrative fees charged funds, $400,996 (83% of total revenues). The remaining revenues, which do not represent ongoing revenues that can be counted on each year, consisted of miscellaneous ($74,895), grants

($5,689), and transfers ($78). Expenses totaled $402,080, with the majority of expenses (67%) consisting of salaries ($225,820), employee benefits ($26,350), and payroll taxes ($18,029). The 2006 income statement for the Rockwell Community Foundation is presented in Schedule 2.

Schedule 2. Income Statement of the Rockwell Community Foundation

The Rockwell Community Foundation
Income Statement
Year ended December 31, 2006

Revenues	
Miscellaneous	$ 74,895
Fees	400,996
Grants	5,689
Transfers	78
Total revenues	481,658
Expenses	
Salaries	225,820
Employee benefits	26,350
Taxes-payroll	18,029
Accounting services	10,501
Legal services	2,191
Consulting services	19,741
Website	3,608
Dues	250
Supplies	9,270
Postage	8,367
Insurance	6,548
Equipment rental/maintenance	1,895
Publications and subscriptions	167
Printing	14,724
Professional development	5,473
Mileage	475
Meetings	1,527
Annual meeting	4,462
Excellence in education	7,055
Occupancy	24,858
Telephone	5,810
Publicity/promotions	2,046
Miscellaneous	2,913
Total expenses	402,080
Net profit (Loss)	$ 79,578

Near the end of January, 2007, Rachael Bennett, President and CEO of The Rockwell Community Foundation, had finished a meeting with the Board of Directors. The primary topic of interest was the assessment of administrative fees for maintaining the various funds. Administrative fees are currently charged in the amount of one percent of the average balance in each fund. The Board had heard a few complaints from some clients regarding the fee structure, and asked Rachael to analyze the fee structure and recommend alternatives. Rachael had a friend in the MBA program at the local university, Chris Simpson, who was his capstone project away from finishing the degree. Thinking that this may be a good project for Chris, she met with him for lunch on February 4, 2007. The meeting went something like this.

"Chris, have you found a capstone project for your MBA?" asked Rachael.

"Not yet," responded Chris, "I'm still looking."

Rachael responded, "Your search might have come to an end. We have a project that I think might work nicely for your project."

"That's great. What do you have?" Chris responded.

Rachael gave Chris a copy of the income statement (Schedule 2) and the schedule of total assets and fees by product (Schedule 1). "The board has asked me to research our administrative fee structure. Some clients, especially those with a larger asset base at The Foundation, have complained that our fees are too high. Also, from my point of view, it appears that the fees we charge do not necessarily correspond to the amount of work we devote to each product. For example, we get a lot of money from the Agency funds, but they require very little of our time. We are basically holding the money for the Agencies, they do the decision making. Could you perform a study which gives us an idea of the cost of maintaining each product? Unfortunately our costs are not the type that can easily be traced to each product. Our costs are largely fixed, and they benefit, maybe to differing degrees, all the products."

Chris thought for a moment, then responded "I could do an activity based costing analysis," then went on to explain activity based costing to Rachael.

After hearing Chris's explanation, Rachael responded, "That sounds perfect. Let me know what you need and I'll take care of it."

Chris visited The Foundation on several occasions. He decided to allocate employee wages, taxes, and benefits to each product based on the percentage of time each employee devoted to the product. Given the absence of documentation that could directly assist with the allocation of other costs, Chris decided to also use the employees' percentage of time for that purpose. However, not all the employees worked full time. Following the logic that a part time employee consumes resources to a lesser degree than a full time employee, he computed the full time equivalent status of each employee, based on a 40 hour work week. The part time employees were Emily Garza, who averaged 14 hours per week (FTE 14/40 = 0.36), and Beth Hodge, who averaged 28 hours per week (FTE = 0.69). Salaries, taxes, benefits and full time equivalent (FTE) status of each employee are shown in Schedule 3.

Schedule 3. Employee wages, benefits, taxes, and tull time equivalent (FTE)*

	FTE	Salary	Benefits	Taxes	Total
Laurie Albert	1.00	$ 32,932	$ 3,148	$ 2,644	$ 38,724
Rachael Bennett	1.00	86,409	719	6,743	93,871
Emily Garza	0.36	6,984	1,685	629	9,298
Beth Hodge	0.69	17,600	3,915	1,487	23,002
Shelly Smith	1.00	36,686	15,978	2,940	55,604
Mike		45,209	905	3,586	
Timmerman	1.00				49,700
Total	5.05	$ 225,820	$ 26,350	$ 18,029	$ 270,199

*FTE based on forty hour work week.

Next, Chris interviewed the Foundation employees, asking what their primary activities were when working on each of the products. Based on the employees' feedback, these activities were determined to be: (1) acquiring a new fund or gift, (2) maintaining funds, (3) making grants, (4) non-grant community services, and (5) other staff activities. Chris prepared a form based on this feedback, and each of the employees recorded the percentage of time they spent on each activity for each product. These percentages, for each of the employees, are displayed in Schedule 4.

Schedule 4. Percentage of time, per activity per product

	Donor Advised/ Grant Making	Un-restricted	Agency and Restricted	FORCE	Scholar-ships	Special Projects	Americas Promise	Field of Interest	Unassigned
Laurie Albert									
Acquiring new fund or gift	0.00%	0.00%	3.47%	0.00%	12.90%	0.00%	0.00%	0.00%	
Maintaining a fund	0.00%	0.00%	0.29%	0.00%	6.88%	0.00%	0.00%	0.00%	
Making grants	0.00%	0.00%	0.00%	0.00%	42.46%	0.00%	0.00%	0.00%	
Non-grant community services	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Other staff activities	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Unassigned									34.00%
Total	**0.00%**	**0.00%**	**3.76%**	**0.00%**	**62.24%**	**0.00%**	**0.00%**	**0.00%**	**34.00%**
Rachael Bennett									
Acquiring new fund or gift	0.26%	0.34%	0.30%	0.09%	9.35%	1.40%	0.62%	0.08%	
Maintaining a fund	0.17%	0.19%	0.18%	0.02%	0.50%	0.18%	0.15%	0.02%	
Making grants	3.49%	3.13%	3.70%	0.02%	0.12%	0.33%	0.15%	0.50%	
Non-grant community services	0.00%	0.00%	0.48%	0.00%	0.00%	16.44%	0.48%	2.40%	
Other staff activities	0.00%	0.00%	0.00%	0.00%	8.71%	5.20%	0.00%	5.10%	
Unassigned									35.90%
Total	**3.92%**	**3.66%**	**4.66%**	**0.13%**	**18.68%**	**23.55%**	**1.40%**	**8.10%**	**35.90%**
Emily Garza									
Acquiring new fund or gift	7.36%	7.37%	7.37%	0.00%	4.08%	1.16%	1.08%	3.08%	
Maintaining a fund	0.12%	0.12%	0.12%	1.01%	0.11%	0.01%	0.01%	0.00%	
Making grants	2.00%	0.00%	0.00%	16.00%	5.00%	3.40%	2.00%	0.00%	
Non-grant community services	0.00%	0.00%	0.00%	0.40%	0.20%	6.00%	7.40%	0.00%	
Other staff activities	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Unassigned									23.60%
Total	**9.48%**	**7.49%**	**7.49%**	**17.41%**	**9.39%**	**11.57%**	**10.49%**	**3.08%**	**23.60%**
Beth Hodge									
Acquiring new fund or gift	7.89%	7.90%	7.88%	0.00%	4.82%	2.04%	1.02%	2.02%	
Maintaining a fund	0.51%	0.51%	0.51%	1.11%	0.51%	0.07%	0.69%	0.00%	
Making grants	7.64%	0.75%	0.74%	12.00%	12.00%	0.00%	0.00%	0.00%	
Non-grant community services	0.25%	0.25%	0.34%	3.09%	2.15%	0.00%	5.25%	0.00%	
Other staff activities	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Unassigned									18.06%
Total	**16.29%**	**9.41%**	**9.47%**	**16.20%**	**19.48%**	**2.11%**	**6.96%**	**2.02%**	**18.06%**

Schedule 4 (concluded). Percentage of time, per activity per product

	Donor Advised/ Grant Making	Un-restricted	Agency and Restricted	FORCE	Scholar-ships	Special Projects	Americas Promise	Field of Interest	Unassigned
Shelly Smith									
Acquiring new fund or gift	1.91%	2.33%	3.38%	3.16%	0.03%	0.06%	0.51%	0.48%	
Maintaining a fund	7.98%	13.12%	19.98%	6.08%	5.77%	1.94%	3.80%	3.34%	
Making grants	0.00%	0.00%	0.00%	0.00%	0.33%	0.00%	0.00%	0.00%	
Non-grant community services	0.00%	0.00%	0.00%	0.00%	1.94%	0.00%	0.00%	0.00%	
Other staff activities	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Unassigned									23.86%
Total	**9.89%**	**15.45%**	**23.36%**	**9.24%**	**8.07%**	**2.00%**	**4.31%**	**3.82%**	**23.86%**
Mike Timmerman									
Acquiring new fund or gift	0.00%	0.00%	0.00%	0.00%	5.00%	0.00%	0.00%	2.00%	
Maintaining a fund	1.53%	1.28%	1.86%	1.74%	1.02%	0.04%	0.28%	0.26%	
Making grants	6.45%	25.70%	5.70%	0.00%	13.15%	0.00%	0.00%	0.00%	
Non-grant community services	0.00%	0.00%	1.00%	0.00%	1.00%	5.00%	0.00%	2.00%	
Other staff activities	1.00%	3.50%	1.00%	0.00%	10.50%	2.50%	0.00%	0.00%	
Unassigned									6.49%
Total	**8.98%**	**30.48%**	**9.56%**	**1.74%**	**30.67%**	**7.54%**	**0.28%**	**4.26%**	**6.49%**

As mentioned above, Chris allocated the wages, taxes, and benefits to each of the products using the percentages of time worked on each product, reported by each employee. Allocation of all other costs ($131,881 total) to each of the products made use of the FTE status of each employee. First, using the FTE status, Chris determined the amount of other costs to allocate to each employee. Next, using the employees' reports of the percentage of time worked on each product, Chris allocated the other costs that were assigned to each employee, to each of the products.

Required:

1) Allocate employee wages, benefits, and taxes (Schedule 3) to each of the eight products using the percentage of time worked on each product (Schedule 4) as the cost driver.
2) Allocate all the other costs to the eight products. To do so, use the FTE weights (Schedule 3) to determine the indirect costs to allocate, in total, to each employee, then the percentage of time worked on each product to allocate those costs to the products (Schedule 4). An employee who only works half time will not consume the resources that a full time employee will consume, hence the FTE weights.
3) Using the allocations in steps 1) and 2) above, and using the Administrative Fees revenue by product displayed in Schedule 1, prepare a statement showing Administrative Fee revenue and expenses for each of the eight products. You may combine the expenses into two categories; i) wages, benefits, and taxes, and ii) other expenses.
4) Based on your analysis in 3) above, please suggest potential alternatives to the fee structure employed by The Rockwell Community Foundation.

RESULTS

The solution to Requirement 1), the allocation of employee wages, taxes, and benefits to each of the products, is shown in Schedule 5. Dollar amounts for schedule five were arrived at by multiplying the wages, taxes, and benefits for each employee (Schedule 3) by the percentage of time the employee worked on each product (Schedule 4). For example, Laurie Albert had $1,456 of her wages, taxes, and benefits allocated to the Agency and Restricted product (Schedule 5) by multiplying her total wages, taxes, and benefits ($38,724, Schedule 3) by the percentage of time she worked on the Agency and Restricted product (Schedule 4, Laurie Albert partition, Agency and Restricted total percentage of 3.76%), and she had $24,102 of her wages, taxes, and benefits allocated to the Scholarships product (Schedule 5) by multiplying her total wages, taxes, and benefits ($38,724, Schedule 3) by the percentage of time she worked on Scholarships (Schedule 4, Laurie Albert partition, Scholarships total percentage of 62.24%). Approximately seventy five percent of the wages were allocated to the products, with approximately twenty five percent remaining unassigned.

Schedule 5. Wages, taxes, benefits allocated to products

	Total Wages, Taxes, Benefits	Donor Advised/ Grant Making	Un-restricted	Agency and Restricted	FORCE	Scholar-ships	Special Projects	Americas Promise	Field of Interest	Unassigned
L. Albert	$ 38,724	$ 0	$ 0	$ 1,456	$ 0	$ 24,102	$ 0	$ 0	$ 0	$ 13,166
R. Bennett	93,872	3,680	3,436	4,374	122	17,535	22,107	1,314	7,604	33,700
E. Garza	9,297	882	696	696	1,619	873	1,076	975	286	2,194
B. Hodge	23,002	3,748	2,164	2,178	3,726	4,481	485	1,601	465	4,154
S. Smith	55,604	5,499	8,591	12,989	5,138	4,487	1,112	2,397	2,124	13,267
M. Timmerman	49,700	4,463	15,149	4,751	865	15,243	3,747	139	2,117	3,226
Total	$270,199	$ 18,272	$ 30,036	$ 26,444	$ 11,470	$ 66,721	$ 28,527	$ 6,426	$ 12,596	$ 69,707

Schedule 6 shows the solution for Requirement 2). First, the top partition of Schedule 6 shows the allocation of the other costs to each of the employees using their FTE status. For example, Laurie Albert's allocation was $26,115 (1.00/5.05 x $131,881) and Emily Garza's allocation was $9,401 (0.36/5.05 x $131,881). Hence, full time employees were allocated a greater proportion of costs than were part time employees. The bottom partition shows the allocation of the costs assigned each employee, to each product. For example, Emily Garza had $891 of her costs allocated to the Donor Advised/Grant Making product by multiplying her assigned total of other costs ($9,401, top partition of Schedule 6) by the percentage of time she worked on the Donor Advised/Grant Making product (Schedule 4, Emily Garza partition, Donor Advised/Grant Making total percentage of 9.48%), and she had $1,637 of her other costs allocated to the FORCE product by multiplying her assigned total of other costs ($9,401, top partition of Schedule 6) by the percentage of time she worked on the FORCE product (Schedule 4, Emily Garza partition, FORCE total percentage of 17.41%). Again, approximately twenty five percent of the indirect costs remain unallocated.

Schedule 6. Two steps in allocation of other costs to products

Step 1: Allocate Other Costs (all indirect) to Employees
Using Employee FTE Status

	FTE	Other Costs	Portion to Employee using FTE
Laurie Albert	1.00	$ 131,881	$ 26,115
Rachael Bennett	1.00	$ 131,881	26,115
Emily Garza	0.36	$ 131,881	9,401
Beth Hodge	0.69	$ 131,881	18,020
Shelly Smith	1.00	$ 131,881	26,115
Mike Timmerman	1.00	$ 131,881	26,115
Total	5.05		$ 131,881

Note: 1.00/5.05 x $131,881 = $26,115, etc.

Step 2: Allocation of Other Indirect Costs Using Percentages Reported by Employees

		Other Indirect Costs Allocated								
	Total Other Indirect Costs	Donor Advised/ Grant Making	Un-restricted	Agency and Restricted	FORCE	Scholar-ships	Special Projects	Americas Promise	Field of Interest	Unassigned
L. Albert	$ 26,115	$ 0	$ 0	$ 982	$ 0	$ 16,254	$ 0	$ 0	$ 0	$ 8,879
R. Bennett	26,115	1,024	956	1,217	34	4,878	6,150	366	2,115	9,375
E. Garza	9,402	891	704	704	1,637	883	1,088	986	290	2,219
B. Hodge	18,019	2,936	1,696	1,706	2,919	3,510	380	1,254	364	3,254
S. Smith	26,115	2,583	4,035	6,100	2,413	2,107	522	1,126	998	6,231
M. Timmerman	26,115	2,345	7,960	2,497	454	8,009	1,969	73	1,113	1,695
Total	$ 131,881	$ 9,779	$ 15,351	$ 13,206	$ 7,457	$ 35,641	$ 10,109	$ 3,805	$ 4,880	$ 31,653

Schedule 7 shows the solution to Requirement 3). Administrative fee revenues are taken from Schedule 1 and the allocation of wages and other costs using an ABC approach are taken from Schedules 5 and 6, respectively. For example, for Donor Advised/Grant Making, the administrative fees ($18,214, Schedule 1) are combined with the allocation of wages, taxes, and benefits ($18,272, Schedule 5) and other costs ($9,779, Schedule 6), to arrive at a net loss of $9,837. As can be seen, the activity based costing analysis shows little relationship between the fees charged and the resources allocated to each product. Following the objective that fees charged should reflect the cost of maintaining each product, the fee structure needs to be revised.

Schedule 7. Administrative fees revenue compared with ABC allocation of costs for all products

	Donor Advised/ Grant Making	Un-restricted	Agency and Restricted	FORCE	Scholar-ships	Special Projects	Americas Promise	Field of Interest
Admin. fee revenue	$ 18,214	$ 132,336	$ 170,443	$ 27,728	$ 39,008	$ 5,285	$ 696	$ 7,286
Wages, taxes, benefits	18,272	30,036	26,444	11,470	66,721	28,527	6,426	12,596
Other costs	9,779	15,351	13,206	7,457	35,641	10,109	3,805	4,880
Net income (loss)	$ (9,837)	$ 86,949	$ 130,973	$ 8,801	$ (63,354)	$ (33,351)	$ (9,535)	$ (10,190)
Total assets	$2,017,933	$11,811,749	$16,819,425	$1,406,620	$3,336,254	$380,056	$73,428	$1,139,798
Allocated costs as a percentage of total assets	1.39%	0.38%	0.24%	1.35%	3.07%	10.17%	13.93%	1.53%

Note: This schedule compares Administrative Fees Revenue with Foundation costs. This schedule does not include Miscellaneous revenues ($74,895), Grants revenues ($5,689) or Transfers revenue ($78), because they do not represent an ongoing revenue stream that can be counted on.

Requirement 4) asks for alternative fee structures. Generally speaking, the products with higher total assets show an allocated net income while products with smaller asset bases show an allocated net loss. Thus, it appears that the size of the fund does not correlate with the resources consumed to maintain the fund. Therefore, assessing a fee of one percent of total assets poorly matches revenues with resources consumed.

There are myriad alternative fee structures. One alternative would be to charge a graduated fee based on the size of the fund. For example; 4% for funds with assets less than $500,000, 3% for funds with assets from $500,001 - $1,000,000, 2% for funds with assets from $1,000,001 - $4,000,000, 1% for funds with assets from $4,000,001 - $8,000,000, 0.75% for funds with assets over $8,000,000. Students would need to work with various combinations to determine the combination that best covers costs. Also, assessing fees using a graduated fee structure will indirectly be a function of resources consumed, because as Schedule 7 shows, the smaller the fund (in total assets), the larger are the resources consumed as a percentage of total assets.

Another alternative would involve assessing fees based on the relative times worked on each product by the employees. Following this approach, a fee could be separately determined for each product, with the fee being sufficient to cover the allocated costs of each product.

Schedule 8 compares the Administrative Fees revenue with the costs allocated to products following the ABC analysis. Importantly, as shown in Schedule 8, there are significant costs which are unassigned to the products. Also, the non-administrative fee revenues (Grants, Transfers, and Miscellaneous) cannot be counted on as an ongoing revenue stream each year. As such, the fee structure adopted would have to provide fees sufficient to cover the allocated costs of each product as well as the unallocated costs (approximately 25% of total costs, or $101,360 for 2006). Students will arrive at many fee structure suggestions, and there obviously are myriad potential alternatives.

Schedule 8. Income statement showing allocated and unallocated costs and revenues

Administrative fees charged	$ 400,996
Costs allocated to all products	300,720
Allocated profit for products	100,276
Unassigned costs	101,360
Net loss	(1,084)
Miscellaneous revenues, grant revenues, and transfers	80,662
Overall net profit	$ 79,578

CONCLUSION

This case presents students with a problem involving the use of activity based costing in a service industry setting. The organization is The Rockwell Community Foundation, which has multiple products and exclusively administrative fixed costs which span across products. The case presents students with information on The Foundation, most importantly Foundation revenues, expenses, and percentage of time employees' devoted to The Foundation's products. Using this information, students conduct an activity based costing analysis to allocate Foundation expenses to Foundation products. Based on this analysis, it becomes clear that The Foundation's current fee structure, one

percent of the average total assets held by each fund, does not correspond with the effort and allocated resources necessary to service (or maintain) each of the products. Students are asked to suggest alternative fee structures which more closely match the resources allocated to each product. Based on the analysis, when comparing administrative fees charged with resources allocated to each product, it appears that, generally speaking, products with larger asset bases are overcharged and products with smaller asset bases are undercharged. Alternative fee structures are discussed.

This case serves nicely to demonstrate the cumbersome and complex nature of computations when performing an activity based costing study. It also demonstrates some of the shortcomings of activity based costing, such as the large amount of unassigned costs resulting in this analysis. Students will appreciate the revised information provided by the analysis, comparing revenues with costs by product. Overall, the case provides the students with a good working idea of how activity based costing works.

The principles of this case are applicable to health care organizations, which are characterized by predominantly indirect and fixed costs which span across multiple products and/or services. Activity based costing can provide insight regarding the costs associated with the products or services provided by providing a mechanism for allocating these costs to the products and/or services.

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