



Adding Economic and Information Theory to Technique – The Case of Using the Uniform Chart of Accounts for Building Entrepreneurial Nonprofit Organizations

John F. Sacco
Department of Public & International Affairs-3F4
George Mason University
Fairfax, VA
Tel: 703 993 4569, fax: 703 993 1399
jsacco@gmu.edu

Odd J. Stalebrink
Division of Public Administration
West Virginia University
213 Knapp Hall, PO Box 6322, Morgantown, WV 26506-6322
(304) 293-2614 Ext. 3155, fax: 304-293-8814
Odd.Stalebrink@mail.wvu.edu

BACKGROUND

Integral to entrepreneurship in nonprofit organizations is finding more earned income to balance traditional philanthropy. An entrepreneurial context for nonprofit entities, however, tends to challenge the effectiveness of traditional nonprofit accounting systems. Frequently, these systems have lacked both uniformity and flexibility in organizing financial data at desired level of detail.

Touted among the accounting reforms for entrepreneurial entities is the Uniform Chart of Accounts (UCOA). The UCOA allows for tracking various types of revenues and expenses by category such as grants, programs and departments. The level of detail permits a closer look at where cost or revenue problems might be located. The UCOA is also designed to automatically take account information (e.g., contributions, salaries and supplies) and report it according to Generally Accepted Accounting Principle (GAAP) as well as Internal Revenue Service reporting requirements, namely, Form 990.

Recalling the accounting equation (Assets = Liabilities + Net Assets [revenues – expenses]), here is a simple outline of the UCOA for coding nonprofit transactions.

- 1xxx where 1= assets
- 2xxx where 2= liabilities
- 3xxx where 3=net assets
- 4xxx-xxx to 6xxx-xxx = revenues and associated activities
- 7xxx-xxx to 9xxx-xxx = expenses and associated activities

The additional 3xs for the revenues and expenses are for programs and operations. The account numbers 7xxx-100 might be an expense for an adoption program. Following the same format, the account number 7710-100 might be a supplies expense for the adoption program, indicated by the 100. Revenues for the adoption program could also be tracked. Thus, with UCOA, a positive or negative change in net assets (“profit or loss”) can be assessed for the adoption program.

THE ENTREPRENEURIAL NONPROFIT

Since at least the 1980s nonprofit organizations have sought to become more enterprising. Among other things, this means adding earned income to philanthropic donations. Some of the larger nonprofit entities have remained classical hierarchical organizations, adding royalties, licensing fees, some products and affinity cards. Some mid-size nonprofit operations have sought to operate more like loosely connected organizations with franchises and partners. In these mid-sized entities, the national or headquarter office can generate ideas, products and cover start up costs. These national offices are some-

times called “angels.” They fly in, offer start up cost and support and then leave, hoping the franchise or partner will succeed and share some of its returns with the national office. Regardless of the mode, this more energetic, risk taking venture needs a sound accounting and financial reporting system. UCOA is a part of that sound accounting system.

THEORY BUILDING

While the UCOA adds necessary details for entrepreneurial management, it is still a technical foundation without the benefit of theoretical guidance. With respect to suggestions for nonprofit entrepreneurship there is no lack of ideas. Examples are the use of royalties, affinity cards, and changes in the organizational culture to one that is more entrepreneurial, including shifting or discharging employees who cannot or will not fit the new earned income thrust. Given that the focus is entrepreneurship, theories from economics ought to be considered in developing approaches or guides for those nonprofit entities that wish to be oriented to what is called earned income. One broad theory that can help is Austrian Economics. Unlike classical economics, it does not make the operating organization a black box and has entrepreneurship as one of its main foci. Another important economic idea for entrepreneurial nonprofit entities is that marginal cost should equal marginal revenue (MC=MR). The next element borrowed from economics is agency theory. Agency theory is very important in the discussion of nonprofit entrepreneurship since nonprofit entities operate on the notion of trust and agency theory goes against faith in trust. The last economic element is transaction cost economics (TCE). Costs associated with negotiations and contracts among parties can become high and must be included in any earned income plan. With this dispersion of efforts as a possible important vehicle for the entrepreneurial nonprofit, an information technology (IT) theory is important. The direction here is to have sufficient robustness in IT so that it can accommodate both coordination and individuality. The last element in this theoretical model is a value added accounting tool. The tool interjected is activity based accounting (ABC).

FINDING A STRATEGY, PRODUCT OR PRODUCT NICHE FOR EARNED INCOME

To produce earned income a nonprofit needs to find a strategy, product or product niche. Here is where the lists of ideas can play a role. Does it have something valuable to franchise? Can it license its logo? Can it provide research and development of value to a client sector? With the exception of Austrian Economics and some other non-classical economic theories, few economic theories provide guidance to entrepreneurship. Austrian Economics is

built, in part, on learning from information and feedback. It focuses on change, uncertainty and risk. As a result, the starting point is usually the openness of the nonprofit to new ideas, tests of those new ideas and more openness about earning signals. In a case study underway, the nonprofit has a successful model and products for civic education for youth that has been franchised. Further, the companies that make the products place the nonprofit's civic education logo on the products and pay the nonprofit for use of the logo.

The Main Role of MC=RC

Table 1, "Stop Production when MC=MR", shows the important role of the equation, MC=MR, in earned income strategies. The proclivity of a nonprofit might be to push production too far on the grounds that the product fits achievement of the social mission. Notice in the Table 1, "Stop Production when MC=MR," profit is at a maximum at 140 units. Continuing production can advance the social mission but leave the nonprofit with insufficient resources to find the next niche. Moreover, once the nonprofit gets itself into the market where earned income is central, other producers will see the profits being made and jump into production, increasing the supply and lowering the price that can be charged. Thus, MC=MR will change, with MC=MR coming at a lower profit level.

TRANSACTION COST ECONOMICS

If it is the propensity of entrepreneurial nonprofit entities to have diverse structures or products to gain those earned incomes then transaction cost economics (TCE) becomes important. One main issue in TCE is whether to go to the market to buy the product or to do it "in-house." This decision was sometimes called the make-buy decision or more broadly the market versus hierarchy with the hierarchy meaning the organization. The TCE issue becomes complicated as nonprofit operations include a loose structure that includes franchises and partners. In this case, nonprofit operations are confronted with deciding whether to keep production at headquarters, spin some to a franchise or partner or go directly into the market. A number of criteria have been developed to help with this decision. One is asset specificity. If the asset, fund raising operations for instance, is not ordinarily available in the market place, then the nonprofit is best to keep that function in-house. Otherwise, the firm chosen to do the fund raising might constantly haggle and inflate the transaction costs. Fund raising, however, seems not to be a unique asset and thus some can be placed in the market for competitive bidding.

AGENCY THEORY

The underlying assumption in nonprofit organizations even when they move to be entrepreneurial is that trust was and remains integral to operations. As the social mission begins to clash with the so-called double bottom line approach where the pressure for earned income is as or nearly as important as donations, workers may pursue their own self interest for self protection rather than the goals and mission of the nonprofit organization. Under such heavy pressure for earned income, job security becomes an issue with a new entrepreneurial attitude and self interest may over take trust. If that is the case, then greater monitoring might be needed. Accounting systems, such as UCOA, become relevant again as a means to track workload, production and earnings. The delicate issue is to determine how much monitoring is needed. Nonprofit organizations can be destroyed with too little or too much monitoring. One

Table 1, Stop Production when MC=MR

Weekly Production	Price	Marginal Cost	Total Cost	Total Revenue	Profit
100	15	10.5	1250	1500	250
110	15	11.55	1355	1650	295
120	15	12.61	1470.5	1800	329.5
130	15	14.61	1596.6	1950	353.4
140	15	15.23	1738.2	2100	361.8
150	15	16.81	1890.5	2250	359.5
160	15	16.81	2058.6	2400	341.4

option is better record keeping (use of the accounting system again) and more frequent use of internal and external auditors. Another option is better tracking of bottom line issues. Accountants and auditors have a variety of ratios available for identifying problem spots. Good tracking of how quickly pledges and receivables get collected are examples of such indicators.

INFORMATION TECHNOLOGY (IT) THEORY

The main point vis a vis IT theory as it relates to entrepreneurial nonprofit operations is to avoid seeing IT as a tool solely used for coordination. Take an intranet for instance. It can be set up to be an excellent coordination tool by placing documents and forms online for all to use. However, the intranet must allow individuals to share (i.e., post) draft documents and ideas. A relatively open ended intranet can provide a place for experimentation for what to place on the intranet.

Intranets have the potential for this dual capacity. One definition of an intranet is that it is "a private network that uses Internet software and standards to deliver information to an internal audience." A focus on the employees does not mean that employees cannot use the intranet to train clients or demonstrate products. It can be used for training either by direct use of the intranet or by spinning off software from the intranet to the market. While the intranet logic as well as the various tools included can cut across different organizations, organization culture can play a role. For instance, if units within the organization are accustomed to some independence then the intranet needs to allow for that independence in the form of allowing units to add their own material. Thus, the coordination and individuality capacity must be built into the intranet from the beginning.

VALUE ADDED THROUGH ACTIVITY BASED ACCOUNTING

Activity based accounting (ABC) is designed to provide a picture of which program activities are consuming the most resources. Here is an example of assigning object expenses from the UCOA to program activities. Table 2, "Activity Based Accounting for Better Program Management," shows the process.

Unit Cost from the Matrix

One piece of potentially important information that can be derived from this matrix is the cost to train teachers. Assume that four (4) teachers were trained. At a total cost of \$1200, cost per unit or the cost to train one teacher is \$300. If such information were done in budget or proposal form, it could be used to price any cost to teachers (or schools), not covered by donor money.

SUMMARY

Accounting tools such as UCOA and ABC as well as IT tool such as intranets are important to the progress of entrepreneurial nonprofit operations. However, they are techniques that need to be placed in a theoretical context for guidance. This paper suggests the use of economic and IT theory for this context.

Table 2, Activity Based Accounting for Better Program Management

Salary	Training	Taxes	Supplies	Rent	Phone	Services	Total
\$2,000	\$400	\$100	\$1,300	\$400	\$100	\$500	\$4,800

Allocation to Activities

Activity	Salary	Training	Taxes	Supplies	Rent	Phone	Services	Total
Recruiting	0	0.3	0	0.3	0.5	0.2		
600	0	\$30	0	\$120	50	\$100	\$900	
Training teachers								
30%	0.4	0.3	0.1	0.4	0.2	0.2		
600	160	30	130	160	20	100	\$1200	
Investigating								
20%	0.2	0.2	0.1	0.1	0.1	0.2		
400	80	20	130	40	10	100	\$780	
Implementing								
10%	0.3	0.1	0.7	0.1	0.1	0.2		
200	120	10	910	40	10	100	\$1390	
Learning laws								
10%	0.1	0.1	0.1	0.1	0.1	0.2		
200	40	10	130	40	10	100	\$530	

0 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/proceeding-paper/adding-economic-information-theory-technique/32211

Related Content

A Graph-Intersection-Based Algorithm to Determine Maximum Lifetime Communication Topologies for Cognitive Radio Ad Hoc Networks

Natarajan Meghanathan (2018). *Encyclopedia of Information Science and Technology, Fourth Edition* (pp. 6536-6545).

www.irma-international.org/chapter/a-graph-intersection-based-algorithm-to-determine-maximum-lifetime-communication-topologies-for-cognitive-radio-ad-hoc-networks/184349

Organizational Adoption of Sentiment Analytics in Social Media Networks: Insights From a Systematic Literature Review

Mohammad Daradkeh (2022). *International Journal of Information Technologies and Systems Approach* (pp. 1-29).

www.irma-international.org/article/organizational-adoption-of-sentiment-analytics-in-social-media-networks/307023

Financing Micro, Small, and Medium Enterprises in Indian Industry

Shromona Ganguly (2018). *Encyclopedia of Information Science and Technology, Fourth Edition* (pp. 6916-6926).

www.irma-international.org/chapter/financing-micro-small-and-medium-enterprises-in-indian-industry/184388

Scholarly Identity in an Increasingly Open and Digitally Connected World

Olga Belikovand Royce M. Kimmons (2018). *Encyclopedia of Information Science and Technology, Fourth Edition* (pp. 6779-6787).

www.irma-international.org/chapter/scholarly-identity-in-an-increasingly-open-and-digitally-connected-world/184373

The Systems View of Information Systems from Professor Steven Alter

David Paradice (2008). *International Journal of Information Technologies and Systems Approach* (pp. 91-98).

www.irma-international.org/article/systems-view-information-systems-professor/2541