Good to Great – Enhancing Services to Professional Working Adult Learners through a Campus-Wide Benchmarking Study

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Abstract

With a new university President, a two year freeze on student tuition rate increases and the challenges of a contracting State general fund for higher education, the Purdue University Center for Professional Studies in Technology and Applied Research (ProSTAR) underwent a highly visible assessment of value addedness. This study compared all on-campus continuing professional education organizations to determine efficiencies through a reduction in redundancies and subsequent cost savings.

In 2009, Purdue University's College of Technology centralized professional studies into a single fully supported Center for Professional Studies in Technology and Applied Research (ProSTAR). ProSTAR (as it became approved in 2009), on October 13, 2000, was approved by the full committee of the Indiana Commission on Higher Education (ICHE) to provide a fee-based distance learning Master of Science degree in Technology, versus, the traditional tuition-based on-campus residential program.

As a fee-based organization, ProSTAR receives no state funds. It is entirely funded through fee-based revenue. To this end, organizational success in delivering quality programs to professional working adult learners is paramount.

Over the five years since its inception, ProSTAR has demonstrated significant success by increasing enrollments over 200%, graduate students 154% (representing 41% of the total college) and gross revenue 300%; this while dropping overhead from 56% to near 24%.

With a new University President and renewed focus on efficiencies and cost savings, ProSTAR was invited to participate in a benchmarking of its operations against other internal university similar fee-based program organizations.

This paper focuses on the results of this five month benchmarking study; including the recommendations for improvement to serve professional working adult learners in the areas of:

- ❑ Reduction of administrative overhead
- ❑ Creation of an expense and residual financial model
- ❑ Unbundling of services – a la carte service provider
- ❑ Increasing Program specific expense transparency
- ❑ Enhancing marketing expertise
- ❑ Standardization of a faculty compensation model
- ❑ Administrative department teaching to reduce overhead

Additional this paper focuses on the emotional and psychological implications on the administering organization's personnel during the above referenced organizational success.

Methodology

The time-phased activities of the study were spread over seven months; from March through October, 2013. Deliverables included an initial 44 page white paper detailing the ProSTAR current infrastructure and financials, a follow-up 19 page delivery with detailed responses to Dean inquiries, and, a final 13 page delivery in response to Dean specific questions.

- ❑ 2013, March 9, Sticking a Fork in It – Dean announcing intent to benchmark ProSTAR
- ❑ 2013, April 19, Evolution of ProSTAR – Delivered a 44 page document to benchmarking committee kick-off meeting[1]
- ❑ 2013, July 22, Final committee report sent to Dean[2]
- ❑ 2013, Aug 1, Dean improvement request
- ❑ 2013, Aug 6, 19 page improvement response to Dean[3]
- ❑ 2013, Sep 16, Meeting on ProSTAR improvements with Dean
- ❑ 2013, Sep 21, Addendum (13 pages) submitted to Dean; full combined 96 page document submitted[4]
- ❑ 2013, Oct 14, Final Dean actions and recommendations meeting[5]

Analysis

The first delivery to the benchmarking review committee was a 44 page document describing the ProSTAR organization from the following perspectives:

- ❑ The current organizational design model and its origins and applicability to other similar campus organizations
- ❑ The roles and responsibilities of this and other organizations
- ❑ Budget models used for incentivizing departments and faculty
- ❑ Student and enrollment growth and future projections
- ❑ Overhead reductions; past, present and future
- ❑ Collaboration activities with the College of Engineering
- ❑ Capitalizing on the engineering-technology educational continuum
- ❑ The five-year marketing forecast
- ❑ The five-year pro forma rolling window budget with 18 month projections
- ❑ Initiated and sustained academic scholarships for females and underrepresented minorities
- ❑ Future growth opportunities with other colleges across campus

In a subsequent meeting, post benchmarking review committee's recommendations, ProSTAR was asked to respond to the findings of the committee. Below reflects the seven improvement categories of response:

- ❑ Improvement #1 – in response to reducing overhead expense, ProSTAR proposed the use of a growth strategy aligned to increasing the activity base of students and attendant enrollments (credit hours taken).
- ❑ Improvement #2 – in response to overhead fees, ProSTAR proposed a tiered structure taking into consideration credit versus non-credit courses and certificate offerings.
- ❑ Improvement #3 – in response to the potential unbundling of services, ProSTAR proposed a growth strategy to avoid interdepartmental contention.
- ❑ Improvement #4 – in response to greater financial transparency, ProSTAR proposed monthly, quarterly and annual performance reporting.
- ❑ Improvement #5 – in response to increasing marketing expertise, ProSTAR proposed increasing marketing expenditures and strategic alignment to engineering's marketing personnel.
- ❑ Improvement #6 – in response to a college-wide faculty compensation model, ProSTAR proposed following a similar model as that used since 1957 by the College of Engineering. The model focuses on:
  - ♦ Fairness
  - ♦ Equity
  - ♦ Functioning to incentivize maximum participation from the most applicable talent
  - ♦ Considering the compromising realities of normalizing a model
- ❑ Improvement #7 – in response to reducing the ProSTAR overhead through ProSTAR personnel teaching, ProSTAR agreed to negotiate with participating departments to transfer teaching incentive to off-set overhead expenses within an academic year.

On submission of the above seven improvement initiatives, ProSTAR was asked to respond to three additional questions below, which was submitted in a 13 page response.

- ❑ Create a plan which maps current and future overhead (personnel) growth to a rational model of revenue growth. I.E., tie overhead to revenue growth considering type/delivery of program.
- ❑ Create a ProSTAR expense allocation model differentiated by type/delivery of program: non-credit, distance and distance-hybrid.
- ❑ Compare and contrast the hiring of a marketing resource given two scenarios: (a) an internal marketing individual, serving traditional programs and ProSTAR programs, and (b) a .5 FTE resource combined with the engineering equivalent resources targeting individuals (professional working adult learners) in both engineering and technology fee-based programs.

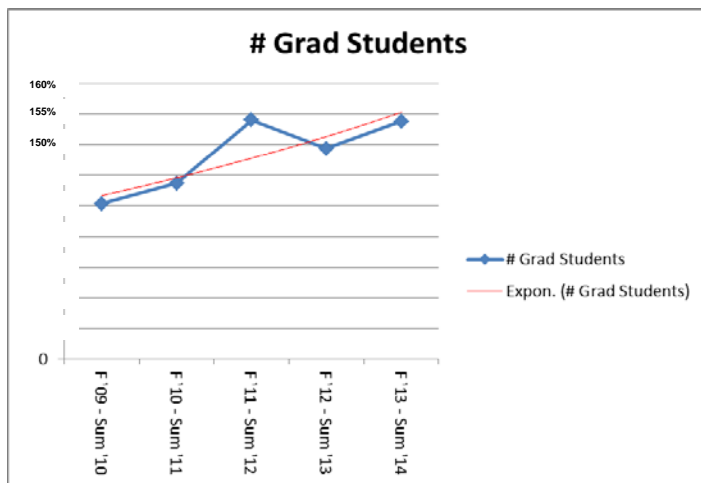In summary, ProSTAR presented the following 2012-2013 academic year end information:

- ❑ 5 Years – year over year exponential revenue growth
- ❑ 41% of the College of Technology's total number of graduate students
- ❑ 32 States and Countries represented
- ❑ 67 companies represented
- ❑ 70 degrees awarded in 2013
- ❑ 21% women representation

❑ 13% underrepresented minority representation

The following three charts depict a 200% increase in enrollments with an attendant 300% increase in gross revenue over the five academic years beginning 2009-2010. Reflected on these charts is the exponential curve for each.
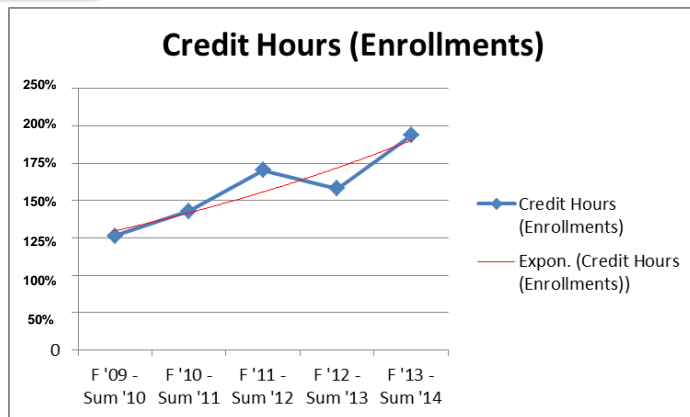
Graduate Students

154% increase in number of graduate students; representing 41% of total graduate students in the CoT

 # Grad Students

160%
155%
150%

0

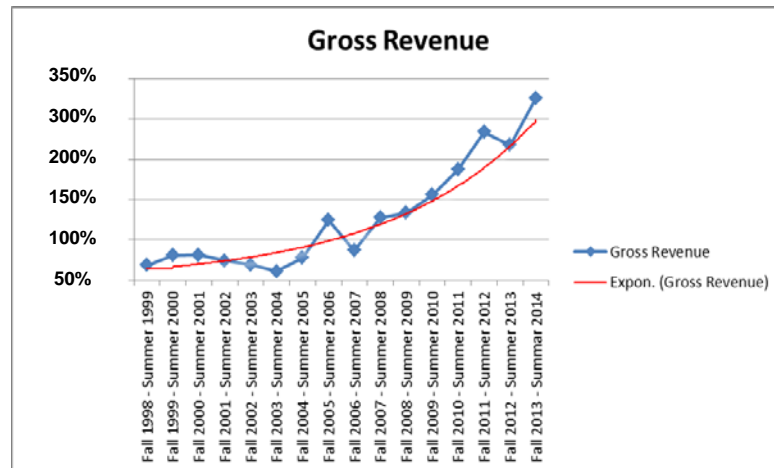F '09 - Sum '10
F '10 - Sum '11
F '11 - Sum '12
F '12 - Sum '13
F '13 - Sum '14

◆ # Grad Students
— Expon. (# Grad Students)

Enrollments

200% increase in enrollments over 5 years

Credit Hours (Enrollments)

250%
200%
175%
150%
125%
100%
50%
0

F '09 - Sum '10   F '10 - Sum '11   F '11 - Sum '12   F '12 - Sum '13   F '13 - Sum '14

◆ Credit Hours (Enrollments)
— Expon. (Credit Hours (Enrollments))

Gross Revenue

Gross Revenue

ProSTAR is a not-for-profit organizational entity with a semi-fixed overhead and overhead rate calculated as the actual expense base divided by the actual prior year gross revenue activity base (in terms of credit hours taken). Using this method of calculation is more accurate, assuming a semi-steady state enrollment, than applying an estimated overhead rate based on projected future enrollments. This method of rate determination also protects the College of Technology from having to fund the ProSTAR organization.

Given this model, and in accordance with general accounting practices, there are two complementary methods for reducing an overhead rate reflecting fixed expenses: (1) controlling fixed and variable expense growth and/or reducing expenses, and (2) increasing the activity base (gross revenue). Reducing expenses, while typical in mergers, acquisitions and restructurings, is usually perceived as a pessimistic view of future growth and a protectionist approach. Increasing the activity base (gross revenue) is perceived more positively as a growth strategy and typically viewed as a methodology associated with a competitive spirit.

While reducing overhead can work in some instances, it is widely held there exist a floor expense which if reduced will actually hurt, or create erosion in the underlying activity base (gross revenue). Reducing the overhead to the point of eroding the underlying activity base is one reason business and industry cautiously approaches reductions in bid and proposal and internal research and development dollars; to reduce these two areas is essentially minimizing opportunities for product and/or service innovation and subsequent awards from available funding sources. The United States is no different in this perspective; frequently measuring the

social-economic well-being of competitive nations through innovation as measured by investment in research and development (R&D).

To this end and in proof of concept, ProSTAR's overhead rate has demonstrated a steady decline since the 2009-2010 academic year. The overhead rate decline is directly related to three factors: (1) ProSTAR is a not-for-profit administrative organization, (2) an increase in the activity base (enrollments) as measured by credit hours taken in an academic year (fall – summer), and (3) a conscious effort to manage sustainable cost growth within the administrative organization.

Given the distribution of the expenses against overall overhead, the solution to lowering overhead would appear most readily to be a growth strategy.

To control ProSTAR expense growth, ProSTAR has created policies, procedures, methodologies and practices aligned to the university and College of Technology. This alignment creates a seamless transition of ProSTAR activities which in turn creates efficiency and effectiveness and subsequently reduced cost through cost avoidance.

These combined thrusts will continue to maintain and reduce ProSTAR overhead rates, therefore resulting in increased residuals to the university, college and participating departments.

Reducing overhead is a function of positive growth and cost containment

Overhead Rates
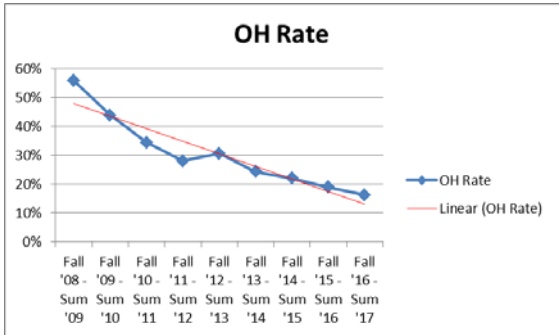
Quality Factors

A prior paper[6] shared the results of a longitudinal follow-up study of nearly 300 professionals, most from business and industry, who graduated from Purdue University's Center for Professional Studies in Technology and Applied Research (ProSTAR) programs. This cohort-based set of programs employed a hybrid classroom and distance-supported, innovatively-delivered graduate degree (MS) in technology. An online survey collected the data and cross-tabulation and frequency analysis identified the findings. Consequences; with respect to career experiences, advancement and salary; were reported and evaluative perspectives – generated in retrospect – shared. The paper also included the context for the evaluation and follow-up and a benchmarking of its findings against a previously reported research initiative from 2002[7].

On the whole, the data suggested the:

- ❑ Program of the study received an increasingly positive assessment over time,
- ❑ Program enhanced the students' portfolio of skills, i.e., to assess, assimilate and apply learned content
- ❑ Program and students benefited from the continuous quality improvement process,
- ❑ Directed project was perceived as being an important part of the program and also important to the students,
- ❑ Program provided a positive impact on student career, opportunities, job responsibilities and salary, and,
- ❑ Employers of the students were largely supportive with both time release and educational assistance and many with significant financial contributions.

The results of the longitudinal surveys coupled with the increasing number of program participants and enrollments (as measured by credit hours taken) are testaments to the quality of the program and effective outcomes of the program to promote individual participant personal and professional growth.

While program quality, as determined by longitudinal surveys, increasing number of graduate students, increasing enrollments and exponential revenue growth are important, they were not directly addressed by the benchmarking review committee or the final recommendations. Intuitively implied, however, is had these quality and growth factors not have been perceived as positive, yet, other changes to infrastructure, processes or practices would have been additionally impacted.

Final Outcomes

The findings of the Benchmarking Review Committee were forwarded to the Dean of the College of Technology for further analysis. The report offered numerous and significant

accolades for ProSTAR and further found that ProSTAR compared favorably to other organizations outside of the college.

The Dean's final recommendations were to:

- Maintain a 20% maximum overhead structure
- Evaluate provided services for efficiencies
- Provide quarterly reports to departments
- Align to globalization and engagement
- Provide a common faculty and department compensation model

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