
Productivity Improvement Analysis Model through Operations Strategy

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ABSTRACT

The operations strategy overcomes weaknesses and build on existing strengths and productivity of the technical educational institutions. It specifies how the institutes will employ its educational capabilities to support its business strategy. This paper has discussed the relevant operations associated with technical educational institutions and its future scope and perspective under changing environment with the help of SWOT Strength, weakness, opportunity and suggests several short-term and long-term operations for technical educational institutions.

Key words: technical education, operation strategy and productivity model, SWOT analysis.

1. INTRODUCTION

Strategic educational productivity improvement planning may be defined in the line of Dwyer et al (1991) as the design of course/curriculum, its implementation and continual improvement of the technical educational systems that create competent resource personnel through teaching/learning process. The operations involved in the productivity improvement study include both the academic and non-academic services (Aaker David,1995). The operations play a vital role in the technical institutes to achieve a competitive advantage in career development (Porter, 1985). Operations involved in the technical educational institutes should be able to provide some competitive strength. Productivity improvement is an imperative in operation strategy for all technical educational institutes. In order to remain alive in the competition the institutes must continually seek ways of increasing quality and must seek ways of improving industry-institute Interaction (III). For institutes operating in global situation, educational productivity improvement needs to become a hardcore improvement of the

technical institutes gets implemented through education planning and implementation strategy.

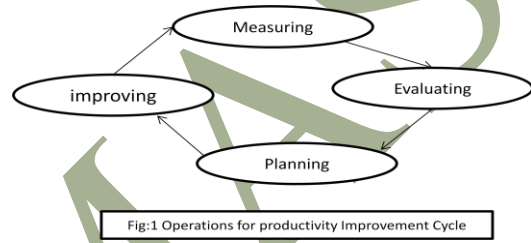
In order to formulate technical educational strategy, as well as the operations strategy, a thorough analysis should be made about the internal and external environment (Deb and Barua, 2005). The productivity improvement model through operations strategy specifies how the institutes will employ its educational capabilities to support its business strategy. This paper has discussed the relevant operations associated with higher technical institutions and its future scope and perspective under changing environment with the help of SWOT analysis. The paper has suggested a strategic operational model for higher technical educational institute that will suit satisfactorily to meet the present challenges faced by technical educational institutes.

2. OPERATIONS STRATEGY

Educational productivity improvement through operations strategy is primarily concerned with setting broad policies and plans for using the resources and facilities of the institutes to support in a best possible way under long-term competitive strategy. The operations strategy associated with productivity

analysis of education institutions can be performed in four stages working in a cyclic pattern as shown in Fig. 1. The educational productivity improvement strategy can also be defined as consisting of five objectives, (a) mission, (b) distinctive competence, (c) objectives, (d) vision and (e) policies. The resulting strategy should guide decision making in all phases of higher technical educational system. Thus, operations strategy for colleges is a vision of the operations function that sets an overall direction or thrust for decision-making. It is a functional strategy and it should get its direction from business and corporate strategy (Cahill, 1998). A simple techno-educational operations strategy is shown in figure 2.

In order to formulate technical educational strategy, as well as the operations strategy, a thorough analysis should be made about the internal and external environment. The different conditions that influence the external environment are (a) economic, (b) Social, (c) Political, (d) Technological, and (e) Employment. An analysis of the internal environment of the institute helps to identify the strengths and weaknesses of the existing operations.



The SWOT (Strength, weakness, opportunity and threat) analysis should indicate an accurate decision between the proposed strategy response of the operations functions and the strength of the educational institute. Strength and weaknesses of the institute need not be taken as static or constants. The SWOT analysis forms the basis for strategy formulation. The operations strategy overcomes weaknesses and builds on existing strengths. It specifies how the institutes will employ its educational capabilities to support its business strategy. The SWOT analysis of the technical institutes is represented in table 1.

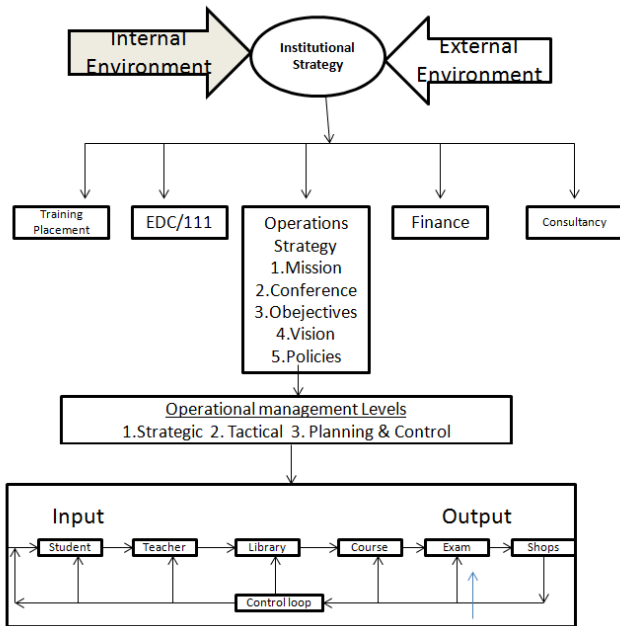


Fig.2: Higher Technical Education Operational Strategy model

Technical educational institutions consist of a group of related activities, each of which is defined as separate divisions. It is important to define higher technical educational strategy of the institute before operations strategy is performed.

3. STRATEGY FORMULATION FOR TECHNICAL EDUCATIONAL INSTITUTE

TABLE 1. SWOT ANALYSIS OF THE HIGHER TECHNICAL EDUCATIONAL INSTITUTES IN GENERAL

Strength(What the institute has)	Weakness(what Institute has to overcome)
1. Infrastructure availability	1. Institutional Relation
2. Teaching community	2. Age and experienced of the staff.
3. Teaching methodology	3. Teaching aids.
4. E-learning facility	4. Management styles.
5. Quality mindedness	5. Work culture.
6. Multi-skilled and flexible personalities.	6. Competitive employment.
7. Industry-Institute Interaction.	7. Teaching satisfaction.
8. Training and placement facility	
9. Entrepreneurship.	

<p>10. Skill and competency. 11. Teaching effectiveness etc.</p>	<p>8. Age of lab/shop and tools. 9. Coordination etc.</p>
<p>Opportunities (The institute has to utilize)</p> <ol style="list-style-type: none"> 1. Employment demand characteristics. 2. Government policy changes. 3. New courses and curriculum. 4. Industry institute interaction. 5. Distant education. 6. Improved communication. 7. Potential alumni etc. 	<p>Threats(Anticipate and combat)</p> <ol style="list-style-type: none"> 1. Business change (BPO). 2. Emerging course & curriculum. 3. Employment competition. 4. New competition in employment. 5. Institutional sickness. 6. Employment policy. 7. Change of government.

4. SUGGESTIONS AND CONCLUSION

This paper has discussed the relevant operations associated with higher technical educational institutions and its future scope and perspective under changing environment. The paper has proposed a strategic operational model for higher technical educational institute that will suit satisfactorily to meet the present challenges faced by technical educational institutes by adopting the following suggestions:

- Procurement of essential minimum resources and facilities to launch for progress.
- Full utilization of the resources and facilities available to improve base productivity.
- Establish links with the local environment & business houses.
- Apply more stress on performance improvement cycle with corrective measures.
- Initiate value/need/demand based course/curriculum which usable in market.

The suggestions made above are mainly meant for short-term operations strategies and the suggestions that should be adopted under long-term strategies are mentioned below:

- Impart quality teaching/learning by problem-based learning trainer/teacher.
- Develop skilled personalities in multiple domains as per demands of the real life.
- Establish links with the standard national & global institutions for knowledge share.
- Create alliances with leading business and academic agents of upgrading knowledge.
- Integrate IT in education to expand and enrich the teaching/learning process.
- Create continuous Industry Institute Interaction (I-I-I) and partnership cell.
- Take initiation for internal revenue generation (IRG) by consultancy service etc.

Higher techno-educational operations strategy cannot be formulated in isolation from other areas of business. Operation strategy must be linked vertically to the needs and desires of industry/business and horizontally to other parts of the institution like training and placement, entrepreneurship, consultancy etc. The operations strategy suggested for the improvement of productivity in educational institutes is shown in figure 3.

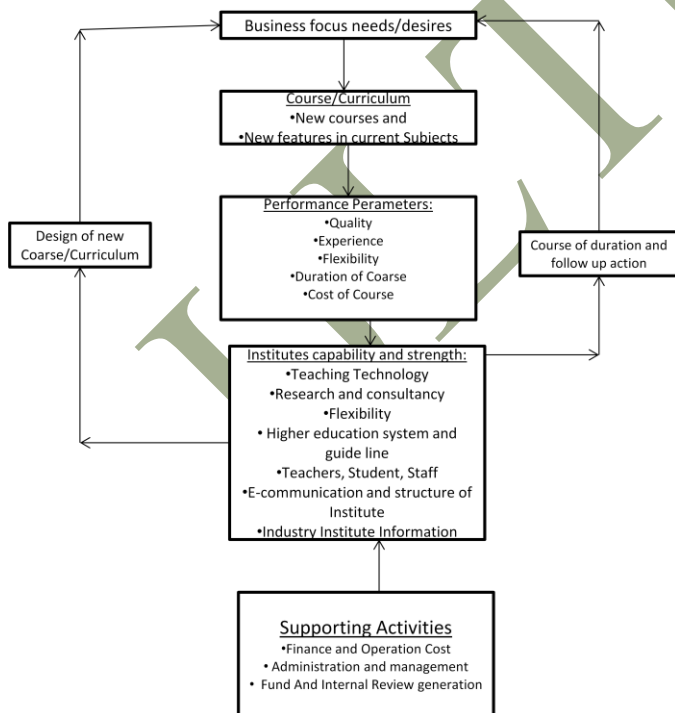


Fig.3 Operational productivity model for technical education system

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