STRATEGIC TRANSFORMATION OF PUBLIC ENTERPRISES IN TANZANIA: ACTION RESEARCH ORIENTED METHODOLOGY

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Abstract

Naturally, enterprises are dynamic in the sense that they can either grow or shrink. Growth is the wish of all owners and particularly a fast growth. We talk of growth here as both increasing the speed of circulation of the working capital profitably and increasing the size or expansion of the fixed assets through retained earnings. Proper management will in most cases assure a gradual growth. However, in some situations, gradual growth may not be sustainable due to global competition and/or some other political changes such as elimination of monopoly. In these situations, enterprises will need a strategic transformation, not only as an assurance of continual growth, but also as a means of survival. Approaches and methods do exist globally to assist management in this task. However, they lack comprehensiveness and they are not specific enough. In this paper, through an action-oriented research on a public enterprise, a comprehensive approach for strategic transformation of enterprises in Tanzania has been developed. Although the tools used are not entirely new, the methodology for application of these tools provide lessons which will be useful for similar attempts in similar environment.

Introduction

Transformation of private and state owned enterprises has been taking place through different approaches depending on the economic purpose, for decades now. Whereas England experienced the corporate restructuring in 1920s, 1930s, 1960s and 1980s, United States undertook such processes as early as 1890s later in 1920s, 1960s and finally 1980s [1]. The disintegration of communism in central and eastern Europe in 1980s gave way to free market economy. State owned enterprises (SoEs) needed to be restructured either to be commercially attractive to internal and external investors or gain international market competitiveness [2]. The current restructuring in developing countries results from the structural adjustment programmes under influence of the World Bank. Low economical levels and lack of proper vision have been narrowing the chances of exploiting the maximum success.

Most of the literature concerning strategic or organizational change processes focus on the development of strategies and their implementation. A number of tools which can help in planning strategic changes are concerned with identification of change driving forces (external and internal triggers), strategic planning, strategy choice, implementation and performance monitoring [1, 3, 4]. However, they lack comprehensiveness because they deal with a particular aspect of the process. Also there is no evidence in the literature that their suitability has not been tested in environments of the developing countries such as Tanzania.

This paper presents a systematic and practical methodology developed through an action-oriented research, which can be used by management to plan and implement strategic transformation. The whole framework is the combination of both strategic planning for public organizations and development of business strategies. The first component aims at attending to the satisfaction of stakeholders and the public as the primary role of public enterprise. The second component on the other hand, gives a useful tool of business development in order to sustain long term organizational achievement. The strength of this methodology lies in its provision of strategy formulation process with high

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implementation perspective (action-oriented research). The paper identifies the need for environment assessment as continuous learning of organization in respect to its external surroundings as well as within itself.

The objective and summarized steps of the methodology are outlined in the following section. This part paves the way for a detailed methodology. Under this section, detailed information, theoretical techniques and procedures for this process are discussed at length. To execute this process an action-oriented methodology is proposed and a public engineering workshops case study demonstrates its application. The last section gives the conclusion and recommendations.

OVERVIEW OF THE PROPOSED METHODOLOGY

The objective of this methodology is to provide some guiding, practically-oriented steps which can be followed during a strategic transformation approach. The steps include the systematic and continuous cycle of environment assessment, identification of strategic issues, development of strategies, and establishing vision for the future, the details of which are summarized below:

(1) Assessment and analysis of the organization and its environment
    (i) What strengths does the firm posses?
    (ii) What weaknesses does the firm have?
    (iii) What are the future opportunities?
    (iv) What external threats the firm is likely to face?

(2) Identification of strategic issues
    (I) Review the organization's mission, policy, and ideology.
    (ii) Review the organization's goals and objectives.
    (iii) Identify the issues which limit or will limit the organization to meet its objectives and goals affordably.
    (iv) Measure the strategic importance, profitability and significance of attending to each issue.

    (v) Consider and asses the impact against the organization's environments.

(3) Development of strategies to deal with the issues
    (i) What are the practical alternatives for resolving the issue?
    (ii) What are the barriers for achieving these alternatives?
    (iii) What are the major proposals for achieving the alternatives either directly or indirectly through overcoming barriers?
    (iv) What actions should be taken in six to twelve months to implement the proposals?

(4) Establishing vision for the future
    (i) Establish the vivid, real and visible picture of the future in the form of dreams, hopes and aspirations.
    (ii) Work out the core ideology which will bind the organization towards the envisioned future.
    (iii) Establish the role of staff in fulfilling the vision.

The following section discusses the four steps in a more detailed manner.

DETAILED METHODOLOGY

One of the requirements here is that processes should be implemented in the order shown as the outcomes of earlier processes are subsequently used as inputs.

External and internal environment assessment

External and internal environmental assessment gives an organization a clear sense of its present situation and lay the basis for identifying strategic issues and developing strategies in the following steps. It also produces information vital to the organization's survival and prosperity. A major purpose of this exercise is to alert the organization to the various external threats and opportunities that may need effective response

in the foreseeable future. Any effective response must be based on an intimate knowledge of the organization's internal strengths and weaknesses. Effective responses build on internal strengths and minimize or overcome internal weaknesses to take advantage of external opportunities and minimize or overcome external threats.

The assessment process
The "snow card" technique [5] is a very simple yet effective action oriented process for developing a list of strengths, weaknesses, opportunities and threats (SWOT). It combines brainstorming (which produces a long list of possible answers to a specific questions) with synthesizing step (in which the answers are grouped into categories according to common themes). In total the technique is extremely simple in conceptual terms, very easy to use, speedy and remarkably productive.

Identification of strategic issues

Strategic issues are issues which have major influence on an organization and must be managed if it is to meet its objectives. They are not current problems (even though they give a strategic implication to how current problems can be resolved). They are complex and potentially destructive if not satisfactorily resolved. They can arise when technology, costs, financing, staffing management or political choices for achieving basic objectives change or will soon do. The main concept of identifying the strategic issues is to make a clear recognition of forthcoming developments either inside or outside the organization, developments which are likely to have an important impact on the ability of the enterprise to meet its objectives.

One of the powerful screening test of issues is the litmus technique [5]. A worksheet (Fig. 1) is designed to include the significance, strategic importance, fiscal effects and other advantages of attending and those of not attending an issue. Above that it is very significant for the action group to know the impact of the issues on environmental assessment in order to reveal the desirability of an organization to either take opportunities or defend itself against the issue.

Formulating strategies to manage issues

A strategy may be thought of as a pattern of purpose, policies, programs, actions, decisions or resource allocation that define what an organization is, what it does and why. It is an extension of mission to form bridges between an organization with its environment and from the past to the future such that people will cross those bridges relatively easily and painlessly [6].

According to this definition every organization has strategy, that is for every organization there is already some sort of a pattern across its purpose, policies, programs, actions, decisions or resource allocation. However, the strategy may be inadequate. It may need to be refined or sharpened or changed altogether if it is to be an effective bridge. In strategy development process a clear picture will emerge. This picture provides the measure of clarity about where the organization is going, how it will get there and what are the important and rewarding parts of the most successful strategic efforts.

Strategy development process begins with identification of practical alternatives for resolving the strategic issues. Next the action group should enumerate the barriers to achieving those alternatives. This is one way of assuring that strategies to be developed deal with implementation difficulties directly rather than haphazardly. Once alternatives along with barriers to realization are listed, the team develops major proposals for achieving these alternatives either directly or indirectly through overcoming the barriers. After major proposals have been developed the final task involve the actions needed to be taken in six to twelve months to implement the proposals. Sequencing and evaluating the proposed strategies against organization capability, difficulties and financial returns conclude the practical orientation of strategy development process.

Tick (√) your choice

	Operational (1)	(2)	Strategic (3)
1. When will the strategic issue challenge or opportunity confront the PEWs?	Right now ☐	Next year ☐	Two or more years from now ☐
2. How broad an impact will the issue have on the agencies?	Single unit/ section ☐	Several units/ section ☐	Entire workshop ☐
3. Will it enhance future income flow generation, organization's reputation and attract customers that fit the current capabilities?	Not known ☐	May happen ☐	Very possible ☐
4. Will it give rise to innovation, flexibility for change, and corporate improvement?	Not known ☐	Somehow ☐	Likely ☐
5. How large is the financial risk/financial opportunity?	Minor ☐	Moderate ☐	Major ☐
6. Will strategies for issue resolution likely require:			
a. Development of new service goals and objectives?	No ☐		Yes ☐
b. Subsidiary costs such as warranty, research, prototyping etc?	No ☐		Yes ☐
c. Major facility additions or modification?	No ☐		Yes ☐
d. Significant staff expansion /new skills ?	No ☐		Yes ☐
e. Significant amendments of management system?	No ☐		Yes ☐
7. How apparent is the best approach for the issue resolution?	Obvious, ready to implement ☐	Broad parameters few details ☐	Wide open ☐
8. What are the consequences of not addressing this issue?	Inconvenience, inefficiency ☐	Service disruption and financial losses ☐	Large costs, setbacks, major disadvantages ☐

Fig. 1 A Litmus Test Worksheet for Identification of Strategic Issues Facing PEWs.

Establishing an effective vision for the future

A vision is not an extension of the present. It should be an affirmation of the present ideal and inspiration of the future. It creates an image of an ideal future and then maps back to the present to show organizational members how their actions can help the organization (and themselves) achieve success. In other words, the vision for success should promise that it will support organizational members [5].

Development of vision in this approach starts by requesting action group members to describe an imaginary state of organization after twenty years of successful implementation of formulated strategies. The following instructions may be used:

"Imagine that it is twenty years from now and your organization has executed its strategies successfully. It is a recognized leader in all aspects of its businesses. Imagine you are newspaper reporter assigned to do a story on this organization. You have thoroughly reviewed the mission, service, personnel, financing, management, technology etc. Describe in no more than a page what you see".

The subsequent discussion on these papers obtained gives the vision of the organization.

APPLICATION OF THE METHODOLOGY IN A CASE STUDY

The following case study demonstrates the application of this methodology whereby Public Engineering workshops are transforming into autonomous business oriented technical agencies.

Defining the case study

The Public engineering workshops (PEW), under the Electrical and Mechanical Division of Ministry of Works are located in every administrative regional town in Tanzania. They are categorized in terms of machinery and equipment they contain. The most equipped is the Government Motor Transport (MT) Depot located in Dar es Salaam. Its facilities include a foundry, metal cutting machines, bench works, welding and motor mechanics repair facilities. The other special workshop which deals with repair and maintenance of earth moving equipment is located in Morogoro. The third category is the former zonal workshops located in Mwanza, Tabora, Dodoma, Arusha, Mbeya and Songea. Their facilities resemble those of the MT Depot except for the foundry shop. The rest mostly contain the auto repair facilities.

Currently these workshops are concerned with repair and maintenance of public facilities such as vehicles and construction equipment, traffic lights, electrical and electronics equipment, repair and installations of electrical wiring in government quarters and so on. Generally they take care of government's technical activities

located in their respective areas. Under the executive agencies project (EAP) the PEWs are transforming into independent and business oriented technical agencies. Through their facilities and other resources they posses the workshops will carry out service on business basis sufficiently to meet all kinds of expenditure and moreover sustain their life.

Applying the methodology

The following are the sequential steps and respective results of a typical application of the methodology used by action group of six people.

Step 1. Environmental assessment
The environment assessment process was divided into two main stages. The first stage was brainstorming which generated the preliminary list of SWOT. The assessment items were grouped into categories according to common themes. The following were the final assessment:

(i) What strengths do the PEWs posses?
   ♦ Capable technical manpower
   ♦ Extensive geographical location network
   ♦ Available equipment, machinery and tools

(ii) What weaknesses do the PEWs have?
   ♦ Lack of modern equipment and unequal distribution of facilities
   ♦ Lack of commitment among staff
   ♦ Lack of management vision
   ♦ Lack of implementable strategic planning

(iii) What are the future opportunities?
   ♦ Increased customers and services
   ♦ Introduction of new products and services
   ♦ Economic and technological development

(iv) What external threats are likely to face the technical agencies?
   ♦ Poor economic base
   ♦ Rivalry
   ♦ Negative attitude among some customers

♦ Trend of technological development in vehicle manufacturing industries
♦ Problems associated with spares and other inputs

Step 2. Identification of strategic issues
In this step each member developed his/her own list of strategic issues. The subsequent discussion gave the following preliminary strategic issues (after removal of some repetitions);

i1: What should be done to attain full utilization capacity level in PEWs in order to gain significant commercial sound?
i2: What should be done in order to turn the service delivery system of PEWs into highly competitive one?
i3: One of crucial aspects in today's business oriented firm is its future orientation. What deliberate decisions should be made now to ensure a long term sustainable development of the transformed PEWs?
i4: What should be done to withhold the experienced and competent staff from shifting to other places?
i5: One important aspect in sustaining long term development is to establish or to regain values which are still useful. What should be done to transform PEWs so that it accomplishes this?

(ii) Testing the strategic issues
   Under this exercise each of the action group member was to fill the litmus test worksheet (Fig 1). Total tallies on the two columns of the worksheets per each issue gave the graphically presented results in Fig. 2.
   Criterion used is; a truly strategic issue is one that scored high on column (2) and (3) while the operational issue would score on column (1) and (2). Hence issue number four (i4) was dropped out of the strategic list and considered to be operational.
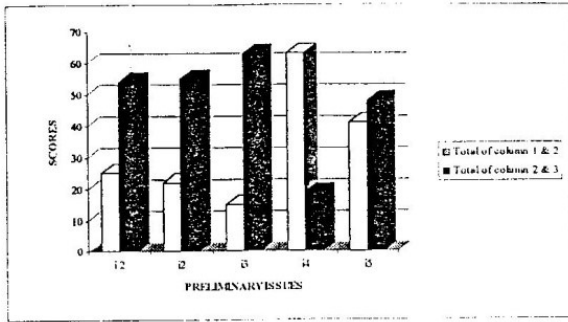
Fig. 2 Results of litmus test exercise showing total of columns 1 & 2 and 2 & 3 respectively.

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(iii) Mapping the issues with environmental assessment

One technique that has proved useful in strategic issue mapping is the SWOTs matrix. On one side of a two-by-two matrix are listed strengths and weaknesses; on the other side, opportunities and threats. Mapping was then done by identifying patterns in the resulting juxtaposition of SWOTs. Inside the table the identified issues were mapped depending on the pattern of their effects. Issues with combination of strengths and opportunities or threats were considered to be desirable as the firms were strong enough to undertake the opportunities or minimize such threats. The combination of weaknesses

and the opportunities or threats were undesirable as they were not able to withstand the pressure of those threats or they were not in position to undertake the opportunities. The resulting mapping is shown in Figure 3.

Step. 3 Strategies development process
Strategies development process composed of four stages viz. identification of practical alternatives for resolving the strategic issues, enumeration of barriers to achieve the alternatives, major proposals to overcome the barriers and major action to be taken in six to twelve months to implement the proposals. From the process the following list of strategies was developed.

s1: Strategy for introducing new services and products.

s2: Strategy for competing with private and other sectors

s3: Strategy for customer satisfaction.

s4: Strategy for acquiring new production technologies and other working facilities.

s5: Strategy for acquiring smooth and efficient communication between branches, with similar organization, with suppliers, major stakeholders, within their compounds.

s6: Strategy for acquiring more efficient management information system.

s7: Strategy for development of entrepreneurial spirit.

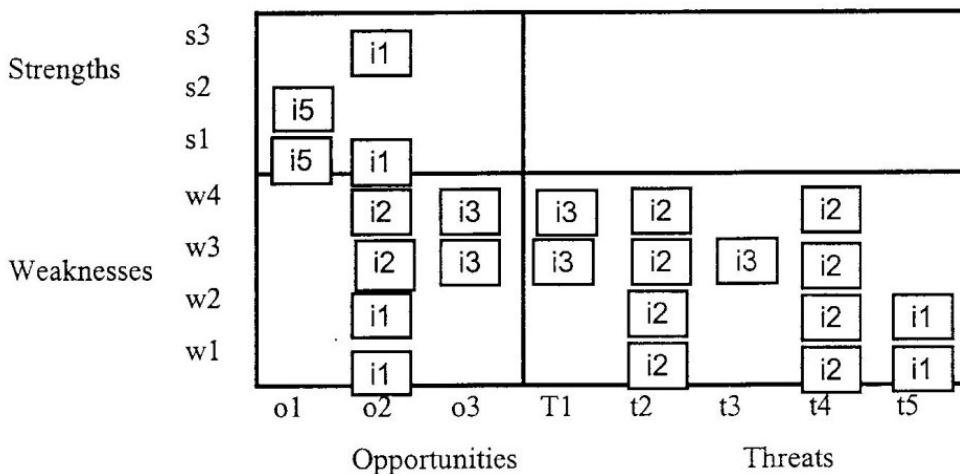s8: Strategy for enhancing the strategic thinking and action of employees.

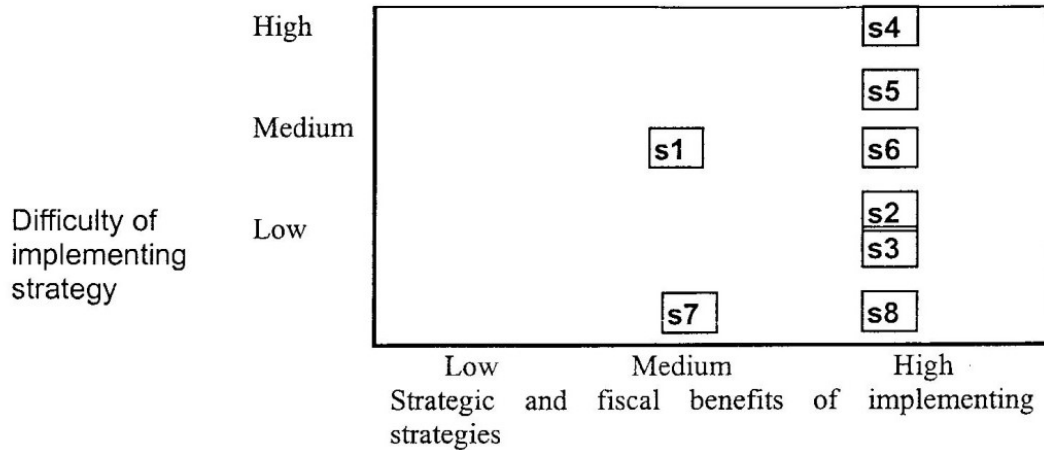Fig. 3. SWOTs' matrix for mapping strategic issues against environments

Fig. 4: Decision matrix for sequencing strategies

(i) Mapping of strategies' fiscal effects against their ease to implement

It was necessary to evaluate the strategies in terms of fiscal strength against their ease of implementation. The three by three decision matrix or portfolio mapping is presented as Figure 4.

(ii) Sequencing strategies

Basing on economic status and other limiting organizational factors the strategies were prioritized in order to ease implementation. This is shown in Table 1.

Step 4. Building PEW's vision of success

Utilizing instructions under 3.4 on how to develop effective vision of an organization, action group members developed their own vision paper. At the subsequent discussion of the papers the ideal vision of technical agencies was established.

(i) The ideal vision of technical agencies

The government technical agencies of Tanzania will have a technical system that will provide a planned and corrective maintenance (repairs) of vehicles and equipment, metal cutting and fabrication of products, electrical and electronics products and services. These services will focus on government user departments, other parastatals and individuals. They will be located in each of the twenty administrative regions in Tanzania and will cater for the above by filling technical vacuums in respective areas till the society is saturated with technical needs. All of these services will be delivered at a cost effective manner. The main objective will be to solve technical difficulties which can not be dealt with either in cost effective manner or in right quality and responsiveness by private sector.

Linkage with parastatal and private auto repair workshops, local franchisers, manufacturers, material suppliers, user departments and the public as a whole will be enhanced in order to provide beneficial, coordinated and comprehensive services to the nation. Open technical information exchange and collaboration with local and international technical firms will aid the maximum technical contribution to the society by delivering valued service at user satisfaction level. Funding for all services will be in a business (labour charges, fees, departmental costs) oriented manner.

They will make use of workforce scheme that retain and attract personnel who fit the ideologies and let out those who do not. Innovation and creativeness will be appreciated and developed. If the corporations wants to provide their own services, high expertise personnel will be hired and will have management control of their service delivery. Private and individuals will be encouraged to

replicate the services for their needs or to contract for services.

Table 1: Sequencing of strategies in relation to time of implementation, impacts to PEW and fiscal effects.

Prioritizing criteria	Strategies
Those which require immediate urgent attention and must be dealt with without sequence of planning	Strategy for enhancing thinking and action of employees upon strategic issue
	Strategy for development of entrepreneurial spirit
	Strategy for customer satisfaction
	Strategy for competing with private sector
	Strategy for business expansion
Those which need handling in regular planning cycle	Strategy for acquiring more efficient management information system
	Strategy for customer satisfaction
	Strategy for competing with private sector
	Strategy for business expansion
	Strategy for new products/ services and innovation
Those that require no immediate action but must be monitored	Strategy for acquiring new technologies
	Strategy for better information infrastructure

(ii) Priority actions to realize ideal vision scenario

The final task was to set an imaginary sequence of actions in order to achieve the envisioned future. The following were priority actions to realize the ideal vision:

1. Collaboration with user departments, organizations and individuals so that technical agencies contribute towards their success.
2. Provision of quality services as a model of competence in service delivery system.
3. Consultation with organizations and the public to meet their technical demands in more effective system.
4. Collaboration with research institutions (like Faculty of Engineering, UDSM) to develop the practice of engineering in technical agencies' specialty.
5. Use of developed technologies to deliver services efficiently, and at low cost.

Conclusion

Regardless of its simplicity, systematic nature, and flexibility with time and management changes, the methodology has proved to be suitable in strategy formulation process which is the most useful tool of transformation's success. The following features justifies its superiority.

First, through the environment scanning and strategic issues identification the process keep people away from jumping immediately to solutions, which could result into failure of systematic way of solving problems. Secondly evaluation of practical alternatives, barriers, major proposals and major actions with specified time limit keeps creation of strategies away from being emotional and therefore keeps the methodology in a systematic manner. Third, strategies developed from this approach force people to build a bridge from where they are to where they would like to be with more reality and practical orientation, hence implementation thrust comes within the organization (participative motive of the methodology). It is from this sense that, the methodology will find a wide application in numerous Tanzanian public enterprises.

Recommendations

The developed methodology embodies a stream of concepts and procedures which are flexible enough to be used by any organization depending on respective conditions which govern its success. The cycle of this process viz. internal and external environment assessments, identification of key issues, development of strategies to deal with issues, decision making and continuous monitoring of results is recommended to be the norm to any organization. Certainly if such cycle is not routinized, important opportunities will be missed and threats will not be recognized until it is too late or until many strategic options are foreclosed .

References

[1] El Namaki M.S.S., *The Restructuring of State-owned-enterprises: A Cross-country Analysis and a Conceptual Frame,* Un-published, Netherlands, (1996).

[2] Frederick R., *Enterprise Restructuring in the Context of Privatization: An Overview of the Issues* Un-published Msc. Dissertation, Dar es Salaam, (1996).

[3] Hellriegel D., Slocum J.W. and Woodman R.W., *Organizational behavior* p.p. 714-774, West Publishing Co., USA, (1992).

[4] Kotter P.J., *Leading change: Why Transformation Efforts Fail* Harvard Business Review Vol. 45, Issue 8, March-April, p.p. 59-67, (1995).

[5] Bryson J.M., *Strategic Planning for Public and Non-profit Organizations,* Jossey Bass Publishers London, UK, (1988).

[6] Porter M.E., *What is Strategy,* Harvard Business Review, Vol. 74, Issue 6, November-December, p.p. 61-78, (1996).