Chapter 9

Conclusions and Recommendations

Introduction

Organizations of modern era are passing through fiercely competitive corporate business scenario. For survival and sailing through today, one has to be ahead of the fleeting competitive benchmark obtaining in the world. The prevailing winds of liberalization, privatization and globalization (LPG) have created a complex business environment and has posed insurmountable challenges as well as cut-throat competition.

The critical managerial issues in the emerging scenario are free flow of information, organizational and technological breakthrough changes, transparent, open and boundaryless organization that eventually culminate in tailor-made human resource development for achieving the desired goal of productivity. Today, industry de-regulation, increasing customer focus, managing employee value, and co-creation of value-system, work-ethics are the factors that have placed unprecedented demands on business enterprises for coping with rapid changes in the competitive landscape. Also, the shrinking time-frame for the break-even-demands, the need for the organizations to unleash the brain-power of people to fullest extent in order to maximize the organizational throughput and yet be in the game most competitively are the major concerns.
All the above business complexities require to slough off yesterday’s conventional management war-gaming and thought process, and usher into a new paradigm shift of flexible system management (FSM) and other innovating techniques. Certainly, the emerging issues on the horizon and the ever-changing business scenario, requires incorporation of flexibility and adaptability at the first-stage, which may be coupled with other HR performance drivers and leveraging with appropriate HR technological core competencies, for accomplishing organizational excellence.

With above aim in view, an attempt has been made in this work to gather and critically examine the valuable inputs from various representative R&D establishments (laboratories) and carry out analysis of the qualitative and quantitative data for arriving at desired organizational throughput. To accomplish these events in this study, apart from continuity management/ flexibility systemic approach, propositions, five other approaches/ propositions have been considered, viz. Pareto law, Six Sigma, Theory of Constraints (TOC), Power of Full Engagement and HR Balance ScoreCard (BSC). Apart from ‘manifestations of Flexibility’, literature review study-design formulations/methodology has been evolved. Further, chapters five, six and seven deal with qualitative analysis (interviews)—internally within R&D labs and external institutions and also prominent individuals; case-studies of select labs and the analysis of the questionnaire. At the end of
ch chapter, emerging learning issues have been listed under each of the propositions, so formulated as above.

In chapter eight, which is the `synthesis’ and proposed framework, a listic overall gist of all the three type of studies, i.e. qualitative analysis, se-studies and the empirical study (questionnaire analysis) has been summarized proposition-wise. Then an interlinking linkage map of all the parameters accruing out of propositions have been drawn and suitably presented. Herein, the correlation, and co-creation of values/ingredients self prove/validate the interactive/interdependent articulation of various performance drivers successfully.

Finally, few main thrust-points have been brought out from the linkage map of the propositions. In case-studies, one DRDO lab, LASTEC has also been studied form the angle of Balanced ScoreCard (BSC) technique. A causal flow diagram which is nothing but linkage flow-diagram schematic presentation, of various project activities/sub-activities, has also been drawn up as per BSC so as to give a fair idea of how a feasibility stage of project takes shape upto completion of the project, i.e. product-development stages-and their cost-benefit analysis and post-product development follow-up activities.

Most importantly, the study has been able to culminate into three associative `work-culture models’ which is a step-wise demonstration of how organizational excellence’ can be achieved, with the application of High
formance Work System (HPWS). It should be further noted that change is inevitable to maintain continuity and passionate organizations are not intimidated by change; rather they take it as a challenge in their stride-the organization unleashes brain-power of its people to exploit change.

2 Summary of Research Findings

The various dimensions of organizations of DRDO have been studied in chapters five, six and seven, which discuss about qualitative analysis, interviews; case-studies and empirical study (Questionnaire analysis). The important parameters of HR performance drivers and related ingredients, show a deep insight about the problem areas, which need to be improved as well as distinctly indicated the strong areas of the labs with respect to various propositions and management aspect, which should be further enhanced synergetically.

A summary of the important findings emerged out of the study are enumerated below:

- Top management attitude has been found very positive, creative and supportive.
- Flexibility in HRM, interchangeability and crisis management is encouraging.
- Strong-communication in the DRDO labs has made a way of working.
- Regular and need based training and development (T&D) is taking place.
Most of the DRDO labs have got accreditation as per ISO: 9000:2000, therefore, world-class quality products/services are now being delivered.

Focused, committed working-culture has taken place.

`Acceptance of Change` has been found at higher order.

Participative planning/control and leadership is exhibited.

Passionate work-culture has taken place in most of the labs and the differentiation/modification of Pareto Law grouping now comes to: 30:50:20 in place of 20:60:20 adopted earlier.

Customer satisfaction, loyalty and co-creation of values are amply visible.

Decision-making through consensus has taken place in most of the DRDO labs.

With HR and technological core competence, a higher professionalism and high order of passionate work-culture has been found to set-in in the DRDO labs. High performance work-system (HPWS) is being adopted in some labs.

Rotation of scientists and staff in the like discipline of DRDO labs and succession-planning is lacking.

More focus requires to be given to career planning, promotional avenues and compensation management.

Post product-development follow-up actions are lacking in general.

3.3 Major Recommendations and Implications

The major recommendations and implications of the research are summarized as follows:

(i) DRDO laboratories should adopt higher positive top-management attitude and progress towards focused and passionate work culture
in order to achieve high core competences and High Performance Work System (HPWS).

(ii) Intake of talented human capital coupled with richly varied breakthrough technological upshot should be ensured so as to enable the organization to march towards HPWS.

(iii) To achieve greater “customer satisfaction”, HR practices of the organization should be modified to facilitate greater acceptance of change as well as increased emphasis on co-creation of values.

(iv) DRDO laboratories have to move away from the traditional functional structures which has instilled more rigidity. In order to inculcate higher degree of flexibility, these laboratories will have to switch over to matrix, vertical and horizontal configurations of the organizational structure.

(v) DRDO laboratories where scientists of exceptional expertise are working in a “discipline of execution work culture”, differentiation norms of Pareto Law should be modified to 30:50:20, by moving away from 20:60:20. This modification is especially recommended for those laboratories which work on “evolvability design techniques”. With modified differentiation norms of Pareto Law, these laboratories can embed intelligence in the design for “Experience Quality Management” (EQM) which can effectively take care of the changing needs of the customers in future.

(vi) To transform into a passionate organization, EQM and embedding evolvability design should be combined with the ‘management of change’. For this purpose, combination of “power of full engagement” and “EQ manifestations” is recommended from which powerful learning model emerges. This learning model should be adopted particularly for the management of change.
Also, a `linkage map’ showing a framework of `Total Organizational Excellence’ should be developed with the help of powerful six propositions and articulate HR Performance drivers. This will give an upshot to High Performance Work System (HPWS), which will inturn help−converting the organization into a `passionate organization’.

Rotation of scientists and staff turn−over within the DRDO labs of like disciplines is of lower order imparting lesser flexibility to personnel as far as promotional/career planning is concerned. Rotations of scientists should be carried out in the DRDO labs for achieving higher flexibility.

Managers at all levels should coordinate their efforts for synergizing human and non-human resources and should strive for maximization of superior service quality products. To facilitate this, such practices should be adopted which will discourage high staff turnover and also address the issue of adequacy of compensation management (rewards, incentives etc.)

4 Significant Research Contributions

Significant outcome of the study and its dominant determinants are listed below:

(i) Very senior levels personnel (mostly Directors, Jt. Directors etc.) have been interviewed. This has brought insights and a holistic approach to how the organization’s existing capabilities can be enhanced.

(ii) Case−studies have been done comprehensively and all the six powerful propositions have been applied/examined. SAP−LAP model of study has brought significant learning issues and also how the performance can be synergized into HPWS for maximizing the throughput of the organizations.
(iii) The empirical study-questionnaire analysis has brought in wealth of valuable information. The emerging determinants reveal that adequate interchangeability, continuum management and HR flexibility exist in the organizations.

(iv) Linkage map of the emerging powerful determinants has been drawn. It significantly provides a powerful tool and successfully correlates and co-creates the human capital values as well as HR performance drivers. The linkages demonstrate their interactive and interdependent characteristics of the determinants successfully. The various study findings generally prove that the HR architecture and performance drivers mostly are based on ‘intangible assets’.

(v) The significant culmination of the present study has resulted into three focused and powerful work-culture models imparting an upshot to organizational excellence. These are:

- Differentiation people-working model: Modifications of Pareto Law of 30:50:20;
- Experiential learning model-based on Power of Full Engagement and emotional manifestations; and
- Linkage map framework for ‘Total Organizational Excellence’.

4.5 Limitations of the Study

These study has also had some limitations as follows:

(i) Quantifiable measurable hypothesis could not be further tested due to limitations of data in view of confidentiality concerns.

(ii) Thorough statistical analysis could not be done due to study being qualitative in nature by leading concepts.

(iii) Sample size was also found to be a constraint due to defence restricted and confidentiality considerations.
Variables and testing have been limited to six major identifiable themes (i.e. propositions) whereas there are many more emerging concepts (e.g. co-creation of customer-experience centric perspective; multi-skilling building platforms for multi-party dialogue, advanced electronic heterogeneity intelligent models; fully automated experience-evolving design techniques etc.) which could not be tried out due to limited scope of the study. Also, it was difficult to validate most of them.

The proposed models could not be statistically validated due to limitations of the quantitative data.

6 Suggestions for Further Work

(i) Specific studies can be undertaken to work in the areas of organizational structure and core processes, imparting implementable programmes to traverse towards higher flexible structure.

(ii) Detailed study can be done primarily to fill the gap between existing flexibility and the desired flexibility in the DRDO.

(iii) The three models evolved in chapter eight can be used for statistical validation in the context of organization, where quantitative data could be available on the variables given in these models.

7 Concluding Remarks

The present study has touched upon the various issues at a suitable designed level for the framework of this research. This can now be used as a starting point for further detailed as well as more specific studies in the select key areas. It has been amply observed that DRDO labs are pretty
ing in management attitude, communication, infrastructural flexibility, discipline of passionate execution etc. However, some of the labs use little flexibility in the organizational structure, processes and HR practices. Thus, there exists a gap between existing and desired flexibility. The gap can be mainly bridged by breakthrough technologies and by an upshot passionate work-culture.

The present study has also brought out many powerful determinants of learning issues. A linkage map of dominant ingredients has been developed. It significantly provides a successful tool for establishing the linkages and co-creating the human capital values as well as HR performance drivers. Thus, it is observed that linkages successfully demonstrate their interactive and interdependent dynamic characteristics of determinants. Finally, the study has culminated into three innovative passionate work-culture models for eventually achieving organizational dynamics and excellence.