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STRATEGIES FOR MANAGING CHANGE IN INDIAN INDUSTRY

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ABSTRACT

Indian engineering industry is witnessing a very difficult time with increasing demand in global market and liberalization and globalization of economy. Competition amongst manufacturers is becoming stiff. Escalating material prices and reducing profit margins have contributed problem for Indian industries. In the present scenario, need of change is felt to adapt cost cutting, technology, lean structure and supportive systems to add to the competitiveness. This paper is based upon a case study of an organization manufacturing valves and fittings. Various aspects like need of change, process of change, phases of change management and drivers of change have been considered in the case study. SWOT analysis as well as SAP analysis has also been presented.

Keywords: Strategy, Managing Change, Indian Engineering Industry

Change Management

Managing change is probably the single most important issue today for all those who have undertaken the difficult task of managing organizational changes. Technological changes and increased global competition caused by liberalization and deregulation have placed greater demands on organizations to be flexible, responsive and efficient. Around the world, big and small face the inevitable prospect of change. Change management represents the processes, tools and techniques to manage people-side of business change to achieve the required business outcomes, and also to realize that business changes can be met effectively within the infrastructure of the workplace (Prosci, 2001). In the absence of proper change management techniques, changes in technology, systems and structure do not achieve the organizational objectives. In the process of change management, the most important aspect is resistance to change. Managing the resistance offered by the human beings has been the major part of a change programme. Resistance of individuals can be dealt with upgrading education and communication, boosting participation and involvement of people at all levels, facilitation and support by top management, negotiation and agreement between employees and management (Kotter and Schlesinger, 1989). Change management is facilitated by change agents, drivers of change, leadership, and formation of teams, innovations, free flow of information, openness, belongingness and managing resistance to change (Garg and Jain, 2005).In this case study, the case company was thoroughly studied and various aspects of change, need of change and phases of change has been identified and SWOT analysis and SAP analysis of the case company has been carried out and presented in this paper.

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Areas of Change

Change in any organization is a transformation process. This transformation includes a sequence of phases: recognizing the need for change, creating new vision and then institutionalizing the change (Tichy and Devanna ,1990).Further, for making a change in an organization, traditional measures need to be controlled with an empowered work force (Beatty and Ulrich, 1996). By creating empowered employees who act as leader at all levels of organization; changes like increasing production, altering the hardware (strategy, structure and system) and software (employees' behavior) can be brought in matured organizations very effectively. It is realized that change management comprises of various inter connected and inter dependent areas. Each of these areas need to be recognized individually and also in terms of multilateral linkages with other areas of change. The major areas are described as under (Garg and Singh, 2002);

i. Technology: Technology is not only concerned with design and layout of production facilities, type and mix of machines and equipments, product mix, flow of data and sharing of information, inventing new materials, automation, using computer software's and hardware, monitoring and control of production processes.

ii. Organizational systems: This area is concerned with working practices related to production, marketing, sales, information technology, material procurement, inspection, quality, etc. on the one hand and their interconnection on the other.

iii. Organizational structure: Structure is related to organizational support system that facilitates change process in an organization. The area includes, cadres, span of control, manpower utilization, hierarchical levels administration, communication, integration, coordination, learning, etc.

iv. People: This area is related to management attitude, vision, objectives, resistance to change, motivation, developing skills, coordination, mindset of individual, and impact of group dynamics on change process.

v. Culture: Cultural change includes flexibility, work environment, team spirit, and behavior of individuals, group behaviour, management commitment, belongingness, leadership and interpersonal relationship in an organization.

These areas of change cover almost every aspect of organizational change and individual change and are important from practical point of view**.**

Background

The company was established in 1972 and the production of valves and fittings was started in 1974. Due to growing demand of these products in the market, the company diversified in this field. The company has employed nearly 100 operators and 10 engineers. It had established a network of dealers and suppliers, and supplies the products to various PSU's, boards and overseas buyers. The company has adopted latest manufacturing practices. The company has also modified the designs from time to time according to customer requirements. The company is aware of modern systematic practices also. It was accredited for ISO-9001 in the year 2001. It has expanded its production capacity by establishing a new plant for casting of valves in the year 2003. JMW entered in the global market in the year 2000 and started export business with European countries and Gulf countries under a brand name "KARTAR". In recent years, JMW has established its branch offices in various metros to strengthen the customer relationship in domestic market and meet with the competition from other manufacturers.

Need for Change

The Company started its operation in year 1974 for the manufacturing of fittings and valves. Till 1980's, there was a small domestic competition existing in the Indian market. With the growing demand of fittings and valves, many new manufacturers entered in this business and that posed a stiff competition for the existing manufacturers. Due to industrial recession and stagnation of Indian Rupee in international market, overall performance of company was affected. Performance of company and trends in these indictors are described below.

***Turnover per Employee**:* Fig.1 indicates the trend of turnover per employee from the year 1999 to 2003. Turnover per employee from Rs 300000 in the year 1999, increased to Rs 3, 51,428.57 in the year 2000.

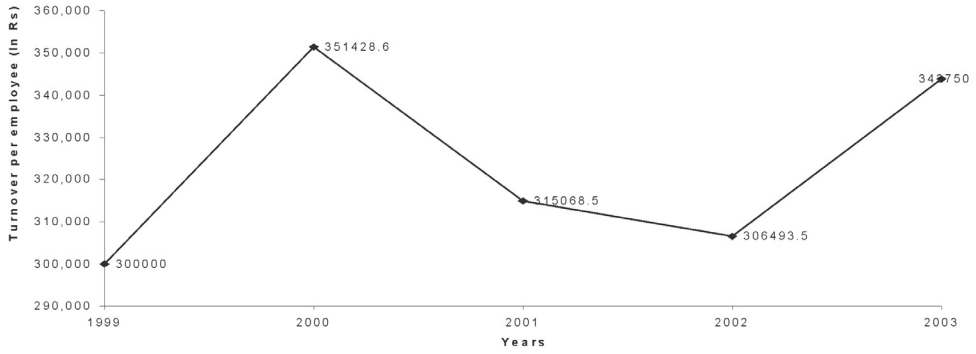

Figure 1: Turnover per employee

The company observed a sharp drop of turnover per employee as shown in the year 2001 when the turnover per employee dropped to Rs 3, 15,068.5 and further to Rs 3, 06,493.50 in the year 2002. However, the company has shown a recovery in the year 2003 when turnover per employee increased to Rs 3, 43, 750.

Profit Turnover Ratio: Fig. 2 depicts the profit turnover ratio for the years 1999 to 2003.

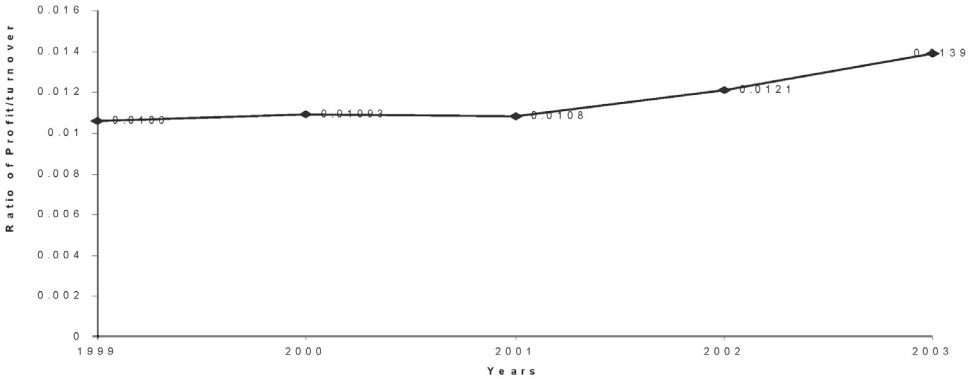

Figure 2: Profit turnover ratio

It is shown that the ratio is 0.0106 for the year 1999 and it increased slightly to 0.0108 in the year 2001. After 2001, the ratio is continuously increasing to 0.0121 and 0.0139 in the year 2002 and 2003 respectively.

***Production per Employee*:** Fig. 3 shows the production per employee from the year 1999 to 2003. Volume of production per employee from 494 pieces in year 1999 increased to 630 pieces in year 2000 and then production decreases to 594 in year 2001. Production per employee remained 667 pieces in the year 2002 and 675 pieces in the years 2003.

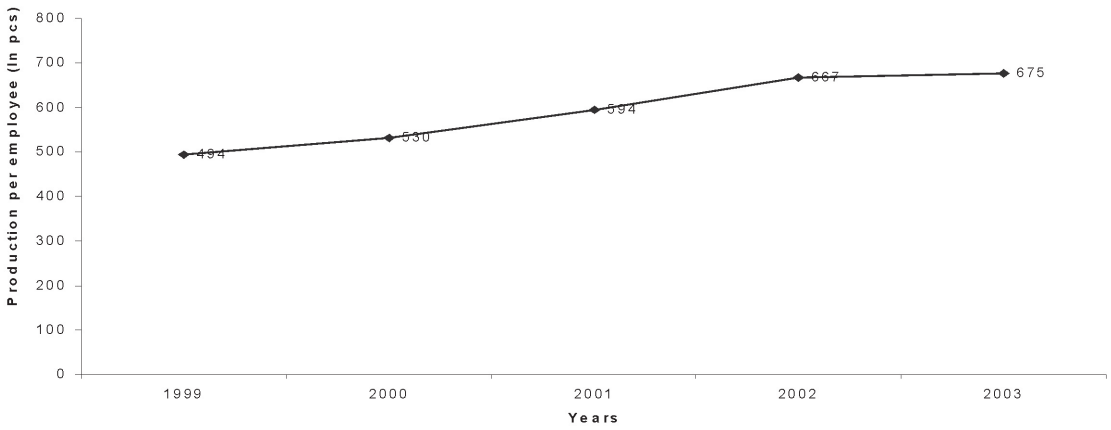

Figure 3: Production per employee

***Rejection Level*:** Fig.4 explains the level of rejection in JMW from 1999 to 2003. Level of rejection is constant in year 1999 and 2000 at 12%. The rejection level is observed to slide down uniformly after 2001 when the company was accredited for ISO 9001 certificate. Rejection level remained 10% in the year 2001, 8% in 2002 and 6% in 2003.

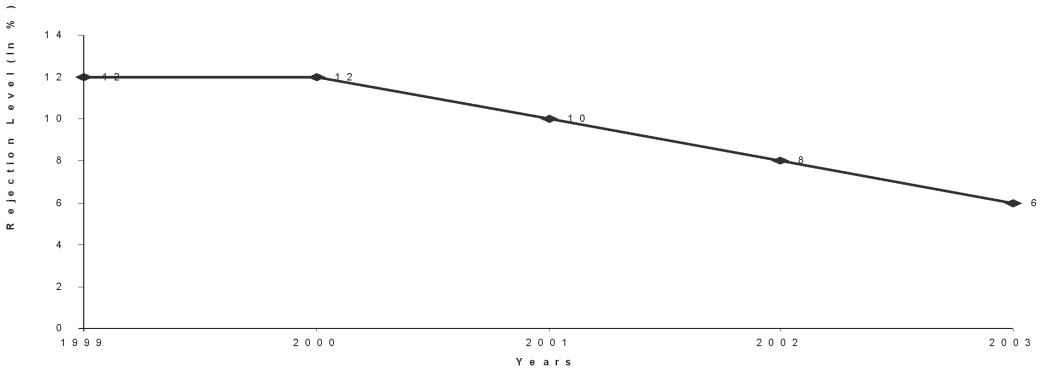

Figure 4: Rejection level

From the financial performance and the trends of the financial parameters, it is clear that the company has been successful since the year 2001. As already mentioned, due to entry of new manufacturers in the business of valve and fittings, turnover and profits etc. of JMW suffered a lot. After the change efforts made by the company, the company not only survived

since 2001 rather seems to be even stronger.

Change Process at JMW

Details of major changes since the inception of JMW have been studied, Against every need of change, action has been taken in one or more major areas of change like technological change (TECH), systems change (SYS), structural change (STR), cultural change (CL) and people change (PL) have been analyzed. After the analysis of the need of change and various areas of change and action taken, these are consolidated in chronological order and analyzed for various phases of change (Table 1), three phase of change process at JMW were identified. 1st phase depicts stable market condition, during which there has been no threat from any major competition. Profit margins remained quite high; market share was also quite high. 2nd phase has been labelled as competitive phase that starts from the year 1990 and 3rd phase has been called as turbulence phase that has started from the year 1998. In the first phase, the company has made major changes in its technology. There has been a growing need of quality products in the market. The company made investment on new technological machines to meet the required level of quality and also increased the production capacity. 'Technology' remained the major driver of change in this phase. In the 2nd phase, other manufacturers posed a competition to JMW. To sustain the competition, 'structure' chose as the driver of change. Under structural change, the company mainly widened its dealer base and sales network.The 3rd phase is called as turbulence phase, when the market turned off into customer market. The company avoided any big expenditure on technology and adopted cost- cutting in a big way. In this phase, the 'system' was chosen as a driver of change that helped the company in getting success.

Table 1: Phases of change

S No.	Year	Major Area of change	Process of change	Driver of change
1	1973	TECH	*Stable Market conditions* • Lack of competitions • Growing demand of valves • High rate of return • Large investment on new facilities	Technology
2	1974	TECH		
3	1975	TECH-TECH		
4	1976	SYS		
5	1977	STR-SYS		
6	1978	SYS		
7	1979	TECH		
8	1980	TECH		
9	1981	PL-PL		
10	1984	PL		
11	1986	TECH		
12	1987	TECH		
13	1990	TECH-TECH	*Competitive Phase* • competition from new entrants • Stable market share • Reduced rate of return on investment • Expand sales and market network	Structure
14	1992	SY-TECH		
15	1993	TECH		
16	1994	STR		
17	1995	TECH-STR-TECH-TECH		
18	1996	SY		
19	1997	STR-STR		
20	1998	STR-STR-TECH	*Turbulence Phase* • Stiff Competition • Reduction in profit margins • Increased turn over through export market • Accreditation for ISO-9001 • Investment of developing new products • Start vendor rating	System
21	1999	SY-TECH		
22	2000	SYS		
23	2000	STR		
24	2001	SY-SY-SY		
25	2002	SY-TECH-PL		
26	2003	TECH-STR-SY		

SWOT Analysis of Juneja Metal Works (JMW)

Strengths

- Experienced manpower
- Innovative attitude of management
- Capacity for risk taking
- Strong brand image
- Large network of dealers, vendors and suppliers
- Large product mix
- Quality consciousness at all level

Weakness

- Lack of professionalism at top management
- Unprofessional working style
- Inadequate education level of the employees
- Inadequate level of training of employees
- No facility of in-house research and development
- Inadequate investment level of management
- Large product development cycle

Opportunity

- Growing demand of fittings and valve in Indian market with rapid industrialization
- Growing avenue of exports in the neighbouring countries

Threats

- Unorganized sector manufacturing low quality and low cost valves and fittings
- Escalating material price

SAP Analysis

A flexible system methodology (SAP) has been developed by Sushil (1997). This methodology tries to resolve the end of continuum paradoxes, by treating all the system based methodologies, and techniques as lying on a continuum ranging from well structured to unstructured. The three basic components in flexible systems management paradigm are situation, actor and process. The situation is to be managed to an organic order by an actor through flexibility evolved self-organizing management process, which recreates the situation. The actor exercises the freedom of choice to flexibly and systemically evolve a management process in an interactive and innovative manner. SAP (Situation, Actors, and Process) analysis of JMW is carried as under:

Situation

- Escalating material Price
- Reduction in profit margins
- Changing demand of customers

- Entry of new manufacturers in valve industry
- Need of technology transfer
- Government. norms and policies
- Reducing rate of return on investment requiring large turnover/growth
- Need of transformation of family owned business to professionally run organization

Actors

- Business Partners
- Managers
- Supervisors and operators
- Dealers
- Customers

Process

- *Technological Process*

- Optimum utilization of existing machinery and skills
- Productivity increase by changing conventional Machines to CNC
- Development of new product through In-house innovations
- Standardization of design of common valves and starting bigger lot sizes

- *Structural Process*

- Widened dealer network
- Rating of vendors for timely supply
- Expanding new market

- *System Process*

- Accreditation of ISO 9001
- Product certified for quality through ISI mark
- Reduction of inventory level
- In-house Testing
- Start cost cutting through reducing overheads

- *People and Culture Process*

- Starting education and training programs for employees at all cadres
- Increased involvement of employees in organizational policies
- Clearly defining duties, authority and responsibility of employees at all cadres

Incursion and Conclusion

As a result of SAP analysis of JMW, the following strategies have emerged, which company has to adopt to become competitive and successful.

- The era is gone when prices were decided by the manufacturers considering the cost of production and adding hefty profit margins. Now with the rise of competition, reduction of manufacturing prices has been the strategy to survive in the market

- There is lot of scope of cost cutting which can be done by:
  a. Technological up-gradation
  b. Replacing the obsolete technological equipments with new technology
  c. Developing cheap alternatives of the costly materials
  d. Reducing the scrap rate, waste rejection etc.
- Getting accreditations for Quality standards like ISO-9001, ISO- 14001 etc. to help an organization in gaining market reputation
- Optimizing number of employees, encouraging team spirit and developing multi- skill ability for increasing plant productivity

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