

Chaparral steel



The culture itself developed mainly in the very context of the way that the ten MM decision areas' at the company were actually managed. The Chaparral case seems to afford us study of a very effective, natural and participative process of management at work. The climate of informality and once of very organic process of management at work is visible right at the start of the case where the UP of operations and the superintendent of the melt shop and the general superintendent of the rolling mill discuss in an unplanned way on a major proposal for capacity expansion (without any feelings of distance between the organizational levels).

The same is again visible at the end of the case where the UP of marketing comes up informally with another new consideration on the capacity expansion proposal that is essentially in the operations domain, and within only two says the general superintendent of the rolling mill presents his quickie analysis on it, and presents it to his UP. All these show how so much could have been possible at the company, within only four to five years of its operations.

This natural process of management is captured well in the paradigm of 'visioning and auctioning', where visioning refers to the process of ideation for pursuit of a possible, desirable attainment of business performance in the future, and auctioning refers to the process of ideation that can precede, accompany, and succeed action in an immediate sense for its effective fine-tuning, as well as also be a very valuable source of feedback that can strengthen the visioning.

Two outcomes realized at the company from the above natural process of management: 1 . The case describes how, after the plant was set up in 1974 and the production started in 1975, the plant underwent a significant evolution (see Para 5 in page 3) during the four years till Seep 1979 (the case date), in terms of continual technological improvements, streamlined operating procedures, etc. , leading to nearly doubling the capacities of the furnace and the aster, thus coming close to the deliberately high installed capacity of the rolling mill.

Such incremental improvements would have been based on a pursuit of a hierarchy of improvement purposes that reflect essential purpose-meaner relationships between them. In this hierarchy of improvement purposes pursued, the higher level improvement purposes would place specific constraints which the pursuit of improvement purposes at the lower levels would be required to adhere to. The hierarchy of improvement purposes as might have been followed at Chaparral Steel, sequenced from the lowest level to the highest level, may be listed as follows:

Improvements of medium term nature (along with development of necessary infrastructural support systems): 1) Improvements in the Work systems design' and 'Job design' at various workplaces in the plant (which happened in the context of " the company's people and operating style"? see up 4 - 5 of the case? and resulting work culture, and which could contribute effectively to the pursuit of all the other higher level Improvement purposes, Decease AT Its TTY to strengthen ten company's natural process of management).) Cost reductions through incremental process improvements (without compromising on customer value) 3) Improvements in speed,

efficiency, etc. 4) Improvements in process flexibilities through changeover time reductions, improvements in process range, etc.) Improvements in process reliability and maintenance 6) Improvements in process quality and hence in product quality Improvements of long term nature (along with necessary structural systems): 1) Improvements in 'product design' (in terms of the company's 'product scope' or 'product profile') 2) Improvements in 'process design' (in terms of the whole plant that is concerned with the production of the company's entire product scope) 3) Improvements in 'Scale and capacity planning and management' (in terms of the company's scales of the individual plant machinery and equipment employed, and of the combined capacities of all of them) 2.

The case also describes how, in September 1979, only 4 years after the start up and the significant capacity growth even during this period, the company is privileged to be able to again consider a large step increase in plant capacity (see Para 2 in page 1, and Para 5 in page 7).

The Assignment: The objectives of the assignment accordingly are to: a) Develop an understanding of how the 'management' (and in particular the 'decision making and their implementation') processes functioned, evolved and developed at the company during the four years from 1975 to September 1979, (with progress submissions, as follows: Progress submissions on the 'management perspectives' (as these evolved and developed over the four years since the start of production in 1975, and till September 1979, the case date) on the MM dimensions of: (As soft copies) (Submission Deadlines) 1. Job design' and the Work systems' design (which happened in the context of "the ultra, and which could contribute effectively to the continual process

of the company's 'operations design') , 29 July 13 (Moon) 2. 'Product design', 5 Jug 13 (Moon) 3. 'Process design', which, as a process in itself, also derived support from the company's 12 Jug 13 (Moon) 4. Scale and capacity planning and management', and 19 Jug 13 (Moon) (b) Utilize the above understanding to develop a strategic plan for the company (as of September 1979): Though the company's performance has been extraordinary over the years since its inception, the company is presently contemplating a very large tepee capacity expansion with all attendant risks of such a venture.

Assume that the company feels that an objective, outsider view by a consultant to the company can serve tem Day nagging a mirror In wanly to see themselves, Ana nonce De addle to further improve on what they are already doing, especially in the face of the major risk-prone, big capacity expansion project that they expect to take up soon. So assume that the company has sought from you, as a consultant, a review of its operations till date, a SOOT analysis, and accordingly both the content and processes for its operations and business strategies for the future.

Final submission in the form of a Consultancy Report to management, comprising the following: (As hard copies) (Submission Deadline) Consolidated study of the 'management perspectives' (as of September 1979? as it evolved and developed over the four years since start of production in 1975) covering the designs of all the four MM dimensions covered above, and of MM as a whole, and accordingly, 2. Specific strategic decisions and action plans for now (in particular, in relation to the capacity expansion proposals currently under consideration, as of Seep 1979), and over the years ahead. Jug 13 (Sat) The understanding of the management

processes should be presented in the form of the twin-track macro-micro processes and management perspective of Visioning and 'auctioning' (as described in the slides with reference to the case of the faltering factory), in each of the four MM dimensions above, and in MM as a whole, at the company (See also the slides of sessions 5-6, with the blue asterisk marks).

Since at Chaparral participative management as process has been so effective, even its 'strategic management' has tended to get shaped by it, and this indeed seems to be TTS basic strength, contributing to its further strength in process technologies and innovation. Though not specifically stated in the case, it can be inferred from the account of how the company and the operations evolved, that such a process of shaping of the operations design and of strategy happened as an evolutionary process, shaped by the capabilities and contributions that have been company-wide.

Assume that, as a result, your report on Operations Strategy for the company is to be not meant only for some top executive like the CEO or the UP of Operations (Gordon Forward), but for the entire company. You may make assumption that the report you submit will be for the target readership by all the key operations managers, and the basis for thinking and action (based on brainstorming with it) throughout the company. The assignment will be completed over the period of the course, simultaneous with sessions covering the different topics above being completed, as per the schedule. Progress submissions' of the above five areas will be made as per the deadlines indicated, in addition to the final consolidated report. Guidelines: 1 . After thorough reading of the case, as first step perform SOOT analysis for the many (similar to the examples of 'Pierre Alexander' and 'Peril SPA'

discussed in session 2 of the course), and accordingly determine the competitiveness strategy the company has pursued so far, and that it will pursue (in its chosen target market segments) in the future. 2.

Next, prepare and use as checklists as illustrated below, the lists of some the underlying issues governing the five dimensions (the checklists below are only illustrative and not complete; you will need to garner more of the issues faced and in more detail, through detailed analysis of the case). A. Issues faced in developing the Work systems' design and 'Job design' (which led to right development AT work culture) at ten company (Joe eagles' Ana ten work systems' design helps develop right culture for maximal employee involvement in work toward maximal customer satisfaction.) I.

Management's belief that work should be fun and satisfying (see Para 6, page 4) I'. Nonunion operation based on participatory management and profit sharing, and hence high priority for Job training (see Para 6, page 4) iii. Lean and flat management structure (see Para 6, page 4) 'v. Unorthodox operating procedures; also continuing changes in procedures v. Emphasis on informality and not formal meetings, etc. (see Para 1, page 5) v'. Freedom to experiment (see Para 3, page 5) vii. " We can do it" outlook permeated the company (see Para 2, page 5) viii. Commitment to customer (see Para 4, page 5) b.

Issues faced in 'Product design' (in relation to markets and customers): (product design' affords looking at the company's operations and business strategy from the market? and, in particular, from the major customers'? points of view.) I. Efforts to constantly move product mix to higher value-

added products such as merchant shapes and special bars (see Para 5, page 5); Product categories, biz. Junior beams (in the 'mobile-home market segment', as proposed by Jeff Werner), etc. , to take into account product profitability, less competition in these product ranges, etc. It.