Evaluating the effectiveness of an experiential “hybrid” workshop

Strategy development and team building in a manufacturing organization

P. Mazany, S. Francis and P. Sumich
University of Auckland, New Zealand

Management development is increasing in importance

Team building and strategic planning are considered fundamental elements contributing to an organization’s performance in the 1990s. The primary aim of this article is to report on the effectiveness of a three-day workshop as a tool for strategy development and team building. This was held during June 1992 for the senior managers of a New Zealand manufacturing organization.

Management development has been the focus of much attention over the last decade, from management consultants, senior managers, and academics. Three reasons for the increased interest in management development are[1]:

1. The need for a more competent managerial workforce due to organizational right-sizing and a reduction in the number of middle-level managers in the organization (those that remain must be able to handle more responsibilities and personnel).

2. The knowledge needed to be an effective competitor in a global marketplace.

3. The need to cope with the rapidly changing business environment due to advances in technology, more complex and multicultural communications, and the growing number of stakeholders in business activities.

During harsh economic times, it is consistently middle management who feels squashed between organizational “right-sizing” and increasingly tighter departmental budgeting. With New Zealand managers being poorly educated compared to other OECD countries[2], it is nearly always the case that training and development budgets are the first budget extras to be cut[3]. It has been argued strongly that companies which invest heavily in their employees outperform those that do not[4], so it is not surprising that companies are now beginning to realize the important role which middle managers perform in interfacing between senior management, frontline staff, and the customer, and are looking at more effective ways of developing them. This observation relates to other levels of management equally.
Stewart and Fondas[5] agree: “Nowadays we hear a lot about strategic management of the company but not about the need for individual managers to think strategically about their jobs”. Nichol[6] also discusses the benefits of incorporating middle managers in the strategic planning process. Middle managers have the “detailed knowledge of how the current system operates, as well as the potential for operating differently in the future”. The importance of incorporating middle managers in the strategic direction of the firm is also mentioned by Lebowitz et al.[7]:

Most senior managers believe that human resources are an organisation's greatest asset. From boardrooms to business schools, they hear about the importance of developing competent and satisfied employees to improve productivity, profits, and long-term growth. They hear far less about the crucial role of managers - the men and women on the corporate front lines, in middle management, and at the top - in actually translating development from theory into action[7].

An increased ability of managers to operate as a team will increase their ability to develop a better environment for their subordinates, and achieve progressively higher levels of performance.

**Team building needs to link to organizational strategy**
The strategic goals and priorities of the participating organization should serve as the foundation for the design of a workshop. The need for new methods to develop organizations and their managers is great. Traditional management development materials and methods, including the use of lectures, business cases, and short exercises, have not been able to provide the learning and education needed by managers[4,8,9]. While the concepts presented and discussed in traditional development programmes are frequently believed to be of value on completion of the activity, only a few of the ideas developed are put into practice. Organizations sponsoring management development have been demanding more of their investments than good rhetoric. They want to see concepts applied in such a way as to enhance their business performance[1].

Most team-building workshops available in both New Zealand and the USA consider the individuals, and train them to function more effectively, either as individuals or in a team environment, but not necessarily in the organization's environment. The Veritas Accelerated Learning Unit (VALU) is an organization that trains individuals within the organization to function better as teams within the organization. To achieve this, corporate strategy is the single most important vehicle used for team development.

Figures 1 and 2 highlight the difference in the roles that change agents typically play when asked to team build for an organization. Most organizations sponsor employees to attend an event whereby a change agent undertakes to team build participants, without specific reference to the strategy, vision and values of the sponsoring organization (Figure 1). The approach taken by the VALU team is to team build participants while they develop components of organizational strategy. The teams develop within the organization’s vision and value system while developing the organization’s strategy (Figure 2).
An experiential perspective is key

Experiential activities exploit the three components of learning (emotional, behavioural, and cognitive) far more readily than other methods. Most outdoor workshops function largely on the emotional and behavioural components of learning. By incorporating a degree of cognitive learning, either through operations theory (e.g. continuous improvement) or through strategy development (e.g. competitive analysis of their organization) individuals will find the experience more rewarding. The organization will have also succeeded in capturing the creativeness and the commitment of the teams much more effectively.

Why develop strategy?

Strategy has for many years been recognized as an essential component of the long-term sustainability of an organization. Giffi et al.[10, p. 11] state: “The vision of where you are going and how you are going to get there is fundamental to success”. Chan and Justis[11] describe business strategy and vision as a concept that encompasses an active management process that includes such things as focusing an organization on winning, encouraging innovation and change, lengthening executive attention span, motivating employees to accomplish goals and objectives, and having a long-range perspective of the business. They quote Chandler as defining strategy as “the determination of the
basic long term goals and objectives of an enterprise, the adoption of courses of action and the collection of resources necessary for carrying out these goals”.

The concept of leadership and strategic direction are considered to be the most crucial dimensions that characterize a leading organization[12-14]. Van Bolderick[13] emphasizes that “Vision is the beginning of doing business”, and that management teams are an important way of “doing business”.

The development of strategy can have many advantages for organizations. The process through which strategy is developed, although subject to many variations, can assist the organization to direct itself towards some desired future “state”. This idea is captured in Senge's concept of “creative tension”. Creative tension comes from visualizing clearly where we want to be, the “vision” of the organization, and then being open and truthful about where we currently are, analysing our “current reality” (internal and external). The gap between the two generates a natural tension. “The principle of creative tension teaches that an accurate picture of current reality is just as important as a compelling picture of a desired future”[15,16 (emphasis added)].

Methodology
The workshop described in this article was a strategy development and team building workshop with the senior management team of an Auckland-based manufacturing organization. The workshop used pre- and post-workshop case studies and questionnaires to test its effectiveness.

To measure the effectiveness of experiential techniques it is helpful to consider two components of a group: content and process. “Content” refers to the actual subject matter of the group task, such as developing a corporate strategy. It measures the quality, the structure and the presentation of the output. “Process”, on the other hand, is the means by which the group achieves the output, solution or result. Often team-builders focus exclusively on team process, excluding a team’s task (their day-to-day objectives) from any development. The authors believe that when task development can be linked with the development of the team itself, greater benefit, both for the participants and for the sponsoring organization, can be achieved.

The model
The model that was used for the workshop is shown in Figure 3. Team functioning is measured initially so as to provide a baseline against which a similar measurement at the completion of the workshop is made. Mullen’s[17] three processes of cognitive learning, emotional and behavioural learning are used in the design of the workshop activities: team and/or business strategy is used as cognitive material, while outdoor (and some indoor) activities provide the emotional and behavioural learning experience as metaphors for the normal team working environment. The workshop should positively influence team process: how the members interact. This change in team process is obvious immediately; however, the workshop is not likely to improve what the team does so rapidly. If the workshop succeeds in establishing systems that enable team
processes to continue, and allows the team to improve its implementation of strategic planning, then overall improved team performance – in both content and process – will have been achieved. This is obviously the ideal, but will tend to happen over a longer time horizon than here.

**The measures**

In order to measure the improvements in content and process, two similar case studies were used to form the basis of the analysis. For ease of understanding, the case studies will be called Case X and Case Y. Both case studies involved the use of team work and problem solving and were concerned with business strategy, so the cases have relevance for the participants. Team functioning was measured before the workshop so as to provide a baseline against which a similar measurement after the completion of the workshop was made. One of the two case studies was handed to the team on the first morning of the workshop, the other at the follow-up session two weeks later. A time limit of 60 minutes was placed on each case study, and a questionnaire was completed once the time limit had elapsed. This questionnaire was given in order to measure the “process” side of the team operation achieving the task.

To help eliminate bias in the experiment certain controls were put in place. These included:

- Half of the teams were given case X before (and case Y after) the experiment and the other half were given the reverse. This attempted to nullify bias that may occur due to differences in the case studies.
The same set of instructions were given for both case studies and no extra assistance was given from then on. This prevented any of the supervisors from influencing the teams in any way.

The questionnaire given after each case study consisted of 20 questions[18-21]. The questionnaire asked each individual, without discussion with other team members, to record their experiences, feelings, attitudes and beliefs during the task in response to each of the 20 questions. Questions were measured on a seven-point Likert interval scale. This questionnaire measured only each team member’s perceptions of the team, and as such the instrument was potentially not as objective as evaluations by some outside agent.

The 20 questions were loosely grouped into four dimensions of group functioning: the team approach to decision making, team participation, team efficiency, and “group” experience. An explanation of each of these criteria follows:

1. Approach investigates how the team approaches the decision-making process and the method involved. It checks the appointment of a leader and/or facilitator and whether their problems were solved individually or by consensus.

2. Participation is a measurement of the extent to which team members are involved in group functioning. It questions whether all the members are equally involved and the alienation which some members might experience.

3. Efficiency asks how well the group achieves its task in the given time limit. It looks at the quality of the output and how efficiently they planned and solved the problem.

4. Group experience covers the individual’s personal feelings with his/her comrades. It asks whether the team members were committed to the group and its solution. It also investigates whether the experience was worthwhile, enjoyable, and if they would do it again.

The data were tested for any significant difference in the “process” of group functioning. It tested for differences in the means of each individual question and the four grouping of questions (approach, participation, efficiency and group experience). From these results conclusions can be drawn for the improvement in group functioning and therefore whether to accept or reject the null hypotheses. This part of the procedure requires quantitative parametric data analysis and the use of analyses of variances.

The second part of the results measures the content side of the experiment. The solutions are marked on their quality, structure and presentation. It would be expected that an improvement in process would lead to an improvement in content also. However, improvement in case study results may result from increased knowledge of case study solutions, and not from improved team functioning. While this was not explicitly tested, similar research conducted with advanced undergraduate students during 1992 indicates that over the
course of an activity, similar to the one suggested here, there is no significant variation between the pre- and post-event case study answers.

**Workshop outline**

The organization is a manufacturing firm that manufactures for export and domestic markets, and imports various household products for domestic use. Annual sales are approximately $35 million, and it employs around 200 people. The participants in the workshop consisted of the eight members of the senior management team, who have traditional functional responsibilities as managing director, and managers of sales, finance, marketing, engineering, manufacturing and accounting.

This workshop incorporates strategy building sections. The main focus of this “stage-one” workshop[22] is the improvement of team building and development of a strategic framework. The workshop structure can be seen in Table I.

The objectives of the strategic planning and team building workshop were to:

- develop a strategic plan, that has the input, understanding, and commitment of the team;
- develop an ongoing strategic planning process, with clearly defined expectations and points of input from the team;
- develop improved teamwork and understanding within the team in a variety of decision-making situations;

<table>
<thead>
<tr>
<th>Time</th>
<th>Saturday</th>
<th>Sunday</th>
<th>Monday</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 a.m.-12 noon</td>
<td>Session 1:</td>
<td>Session 4:</td>
<td>Session 7:</td>
</tr>
<tr>
<td></td>
<td>Strategy session</td>
<td>Specific analysis</td>
<td>Major team exercise</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>continued</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Debrief</td>
</tr>
<tr>
<td>12 noon-1 p.m.</td>
<td>Lunch</td>
<td>Lunch</td>
<td>Lunch</td>
</tr>
<tr>
<td>1 p.m.-6 p.m.</td>
<td>Session 2:</td>
<td>Session 5:</td>
<td>Session 8:</td>
</tr>
<tr>
<td></td>
<td>Warm-up exercises</td>
<td>Outdoor exercise</td>
<td>Team theory</td>
</tr>
<tr>
<td></td>
<td>Strategy continued</td>
<td>Presentations</td>
<td>Next steps</td>
</tr>
<tr>
<td>6 p.m.-7.30 p.m.</td>
<td>Dinner</td>
<td>Dinner</td>
<td>Departure</td>
</tr>
<tr>
<td>7.30 p.m.</td>
<td>Session 3:</td>
<td>Session 6:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Specific analysis</td>
<td>Skit</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Skit preparation</td>
<td>Major team exercise</td>
<td></td>
</tr>
</tbody>
</table>

**Table I.** Structure of strategic planning and team building workshop
provide an environment in which it is possible to enjoy the achievement of the above objectives.

**Hypotheses**

The central hypothesis for the experiment is that this team building and strategy development workshop has a positive effect on team development. Since team functioning is investigated according to the four question groupings four further hypotheses, shown below, are able to be defined.

**H1. Experience-based activities develop a team approach to decision making.**

Does the team approach problems more systematically; is a leader or facilitator appointed; are decisions made by consensus; are problems solved by individuals, or by the team?

**H2. Experience-based activities improve team participation.**

To what extent are team members involved in the normal functioning of the team? Is the involvement equal; are some members alienated from activities or decision making?

**H3. Experience-based activities improve team effectiveness and efficiency.**

How well does the team work within the time limit? Is the output of high quality; how efficiently did they use the time for planning, discussion, and solving?

**H4. Experience-based activities improve the individual's team experience.**

The group experience examines an individual's feelings about their team members. Was the individual committed to the group, or to the solution; was the experience enjoyable and worthwhile; to what extent are they prepared to work with one another again?

**Results**

The workshop was found to influence the team's functioning positively along all measured dimensions at a 90 per cent level of significance. The data were then retested at a 95 per cent level of significance. The approach of the group to decision making, the level of participation across team members, and the individual's experience in the group during the task all experienced positive change at a 95 per cent level of significance. The efficiency of the group, as perceived by the team members, was the only dimension to have improved at a 90 per cent level of significance. Table II summarizes the results.

Comparison of the case outputs, indicated that there was no improvement due to the workshop marked, i.e. the “content” results of the group had not improved. This was somewhat disappointing but not unexpected, since a longer time would probably be required for the improvements in process to lead to an improvement in content.
Conclusions
Significant improvements across all “process” dimensions of team performance resulted from the workshop. Teams found that their decision-making process was more defined, consensus-orientated and was not dominated by individuals. Members found that they were more prepared to give and receive ideas from others, and that there was more active, equal participation. Members were more satisfied with the teams’ output, and found that discussions were generally more relevant and that time was utilized more efficiently. The members are also more committed to the group’s outcome, they enjoyed the group experience, and found the overall experience more pleasant.

There was no discernible change in the content of what produced. And, in fact, a true test of the improvement in content would involve a measure of the quality of the strategy that the team develops. But the appropriate measurement of this would typically take several years.

Significance of the results
This work discusses several interesting developments in the area of experimental techniques. Perhaps first and foremost is that it presents an example of experimental techniques being used successfully for the development of corporate strategy. As suggested in the literature, there are very close relationships between a successful, focused business and effective management teams.

Second, this article presents an effective methodology for assessing improvements in group functioning in such situations. The need for adequate measures for assessing the effectiveness of experiential techniques is mentioned by many authors[23-25]. The robustness of the model has been tested, and some alterations have been suggested.

Finally, this research assesses an experiential technique that is becoming increasingly popular in the 1990s. Business and educational institutions are rapidly increasing their use of outdoor workshops for various reasons. Many New Zealanders will be able to remember back to the numerous school camps attended, both at primary and secondary school level. Summer camps in the USA have existed also for many years. However, as more and more organizations begin to send participants “into the bush”, there is a need to ensure that such activities are effective, and have measurable positive outcomes that relate to defined, important business objectives.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Significant</th>
<th>Level of significance (per cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decision-making approach</td>
<td>Yes</td>
<td>95</td>
</tr>
<tr>
<td>Participation</td>
<td>Yes</td>
<td>95</td>
</tr>
<tr>
<td>Group experience</td>
<td>Yes</td>
<td>95</td>
</tr>
<tr>
<td>Group efficiency</td>
<td>Yes</td>
<td>90</td>
</tr>
</tbody>
</table>

Table II.
Summary of process results
Limitations
It will be some time before “ideal” effectiveness measures will be developed for outdoor workshops. However, when the workshop is hybrid in nature, one test for effectiveness is to check whether all objectives are satisfied. In this case these were to:

- develop a strategic plan, that has the input, understanding, and commitment of the team;
- develop an ongoing strategic planning process, with clearly defined expectations and points of input from the team;
- develop improved teamwork and understanding within the team in a variety of decision-making situations;
- provide an environment in which it is possible to enjoy the achievement of the above objectives.

In the immediate time frame, these objectives seem to have been satisfied. But a more important issue is whether lasting improvements are actually achieved by such a workshop. This requires longitudinal analysis over a much longer time frame than that used here (e.g. one year or more).

Evaluating the effectiveness of experiential workshops is a continuing area of research by the authors. Evaluation of a second strategy development and team building workshop with a metropolitan ambulance service[26,27], and an outdoor workshop for an MBA programme[28] are in process. The authors are also researching the use of computer simulations for team development[29].

Notes and references
8. Rakich et al.[9] discuss other common management development tools including: case studies, formal training programmes, action learning, business gaming and simulation.
18. Scheweiger et al.[19] and Scheweiger et al.[20] use similar criteria, while Bettenhausen[21] provides an excellent overview of group research. This is the second version of the questionnaire developed by the authors in other research carried out during 1992.
22. VALU has a three-workshop model for strategy and team development that it uses with clients normally over a two-to three-year period.
Further reading


Kolb, D.G., “Mapping the wilds of adventure-based training”, a presentation to the 1992 Annual Meeting of the Australia and New Zealand Academy of Management, Sydney, Australia. Kolb is from the Department of Management Studies and Labour Relations, University of Auckland.


Scott, D.R. and Shieff, D.S., "Service quality components and group criteria", unpublished, Department of Marketing and International Business, University of Auckland.