

# Mapping the Organizational Climate for Innovation: Introducing SWOT as a Process Based Tool

## Introduction

To be innovative, i.e. to be able to implement novel ideas in order to gain a competitive advantage, an organization should be organized in a way that facilitates rather than inhibits innovative practices. In particular, it has been argued that the organizational climate is a key factor for explaining the innovation capacity of a firm (Amabile *et al.*, 1996; Kanter, 1983; Patterson *et al.*, 2005).

Survey tools are a common method used today for assessing the organizational climate for innovation. Two well-documented survey tools are the Organizational Climate Measure (OCM) (Patterson *et al.*, 2005) and the organizational survey KEYS (Amabile *et al.*, 1996). These tools are typically used in two ways: The first refers to academic research questions, for example, regarding the relationship between organizational climate and innovation performance. The second refers to consultants who use these tools as process-based tools to improve performance in a company.

There are challenges related to the use of survey tools as process-based tools. Three challenges particular to mapping the organizational climate for innovation are summarized below. As a means of improving some of these issues, an alternative method for mapping the organizational climate for innovation is introduced. Some key data from a case study are then presented in an effort to illustrate the practical use of the tool.

### A) The problem of interpreting survey data

In a firm, it is often difficult to interpret statistical survey data owing to a lack of discriminatory validity and clear implications of the findings. Schein (1999) neatly summarizes the issue: “Organizations frequently purchase surveys in order to determine how their employees feel about certain issues or even to ‘diagnose’ their culture. When the ‘expert’ information comes back in quantitative form, I have observed managers poring over graph data, trying to figure out what they now know when they note that sixty-two percent of the employees think the organization has a poor career development system. What kind of information value does such a statement actually have, given the problems of sampling, the problems of questionnaire construction, the semantics of words like career and development, the ambiguity of whether sixty-two percent is really good

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or bad outside some broader context, the difficulty of determining what the employees were thinking when they answered the question, and so on? Reality in this situation is an elusive concept.”

### B) The problem of reflection

Many scholars in the field argue that ‘reflection’ within the firm is a key success factor (West, 2002). Organization surveys, as a process tool, do not prompt any reflection on behalf of the employees, as they merely need to put down a mark on a five-point Likert-scale. Even though the result of such surveys can act as a framework for reflection (so-called survey feedback sessions), the act of assessing the climate hardly prompts reflection.

### C) The problem of organization levels

Models for organization climate tend to mix phenomena that arise at different levels of the organization (see e.g. West *et al.*, 2004). For example, creativity and employee skills refer to the individual level; team processes and team composition refer to the team level; management practices refer to the management level, and organizational values and culture refer to the organizational level. It is vital for the firm to be aware of this distinction, and that it does not focus on one level only, particularly as long as the firm’s problems might be located at other levels. Survey tools do not fully support the firm in addressing this issue.

## Developing a SWOT based tool

SWOT is a qualitative method, where information is gathered by way of semi-structured interviews, guided by a general framework of Strengths, Weaknesses, Opportunities and Threats (SWOT) of the organization. This framework emphasizes a positive-negative dimension, a present-future dimension and an internal-external dimension. This general framework forms the basis of self-generated reflection on behalf of the employees. Statements are then extracted from the interviews, and coded according to which organizational level they are targeted at. In order to avoid blind spots (the employees might talk about irrelevant topics, or fail to address important topics), and to provide a direction for future change, the statements are coded according to established, empirically proven models for innovation. As opposed to traditional SWOT analysis, the present tool aims at quantifying the information gathered and subsequently shared with the company. This makes it possible to compare data over time, and across different populations.

## Case study illustration

To illustrate the material presented to the firm as a basis for future improvements in organizational climate for innovation, some case data are presented below. The OCM climate model (Patterson *et al.*, 2005) was applied as the referent model.

The companies in question are two medium-sized international companies headquartered in Norway. They both promote themselves as innovative organizations. All 15 interviewees are members of executive or middle management. The interviewees produced a total of 660 statements. There were no statistical differences between the two organizations.

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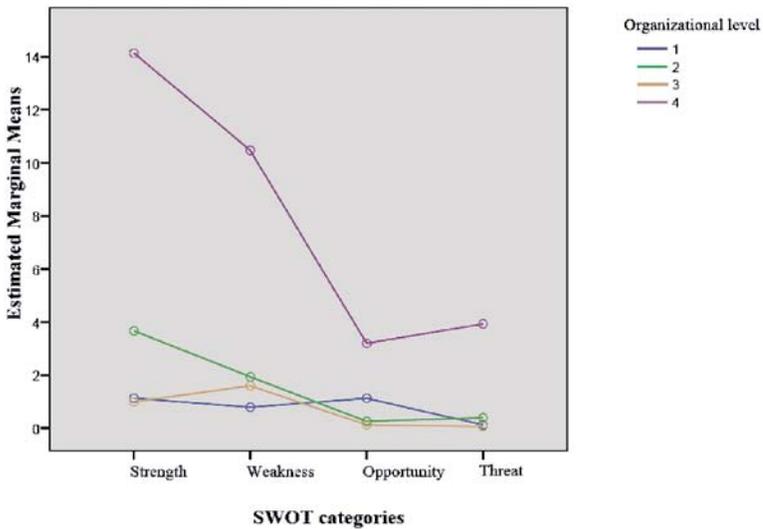
SWOT	Total	Mean	Std. Derivation	Percent
Strength	299	19.9	6.1	45 %
Weakness	222	14.8	4.3	34 %
Opportunity	71	4.7	2.6	11 %
Threat	68	4.5	1.6	10 %
Total	660	44	3.7	100 %

**Table 1.** Distribution of statements by SWOT categories ( $N = 15$ )

SWOT	Total	Mean	Std. Derivation	Percent
Individual	48	3.2	1.6	7 %
Team	94	6.3	6.3	14 %
Leader	42	2.8	2.3	6 %
Organization	476	31.7	10.9	72 %
Total	660	44	5.3	100 %

**Table 2.** Distribution of statements by Organizational level ( $N = 15$ )

Tables 1 and 2, figure 1, and table 3 represent feedback to the individual organizations as a basis for further organizational development with respect to innovation performance. Table 1 shows the relative emphasis in the company on SWOT-related dimensions. Table 2 shows the relative emphasis in the company on different levels of the organization. Figure 1 illustrates the interaction between organization level and SWOT dimensions. Table 3 represents the mapping of statements onto an already established model of innovation capacities of organizations (OCM).



**Figure 1.** Mean distribution of statements by SWOT categories and organizational level. Note. Organizational level: 1 = Individual, 2 = Team, 3 = Leader, 4 = Organization.

A feedback session with the individual firm would typically start with SWOT data. An example of important information in the present case is that the firms display low reflexivity on aspects of the future, compared with the here-and-now situation (Tab. 1). Then, the feedback would typi-

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cally concentrate on organization level (Tab. 2). In these data, there is relatively little emphasis on individual and team aspects, compared with organizational aspects. Furthermore, one can present the interaction effects between SWOT aspects and organizational level (Fig. 1). In this case, there is a clear skew in the data towards aspects related to strengths and weaknesses on organizational level.

To avoid blind spots in the interviews, the statements are mapped onto established models of organizational antecedents of innovation performance (Tab. 3). In this case, OCM was applied, but other models, such as e.g. KEYS, or Organizational Citizenship Behaviour (Podsakoff *et al.*, 2000) might equally well have been applied. OCM is based on the competing values model (Quinn and Rohrbaugh, 1983; Quinn and McGrath, 1985; Gifford *et al.*, 2002) which implies that there are inherent tensions in the organization between the four umbrella values (Open Systems, Human Relations, Rational Goal and Internal Process, respectively).

The variables Flexibility, External Focus and Reflexivity constitute core aspects of innovation capacity (Open systems quadrant), whereas Autonomy, Integration, Involvement, Support, Training and Welfare (Human relations quadrant) represent variables that indirectly support innovation capacity, but might also to some extent hinder innovation. The remaining variables, Formalization and Tradition (Internal process quadrant) and Clear Goals, Effectiveness, Effort, Feedback, Production pressure and Quality (Rational goals quadrant), represent aspects that might be counterproductive for the innovation capacity of the firm. All quadrants are presented here, because there might be trade-offs in company values that the firm needs to handle.

As an example of relevant information for the firm, see, for example, the Reflexivity dimension, where the company in question provides no more than five statements of a grand total of 239 statements. For a full description of the sub-categories of OCM, please consult Patterson *et al.* (2005).

	S	W	O	T	Tot
Autonomy	19	15	8	6	48
Integration	14	10	2	0	26
Involvement	3	12	2	2	19
Support	3	2	0	0	5
Training	8	3	1	0	12
Welfare	6	0	0	1	7
Formalization	3	1	0	0	4
Tradition	1	8	0	3	12
Flexibility	26	20	4	1	51
External Focus	16	9	13	12	50
Reflexivity	2	3	0	0	5
Clear goals	9	1	1	1	12
Effectiveness	2	7	5	2	16
Effort	5	0	0	0	5
Feedback	4	2	0	0	6
Production pressure	0	5	0	4	9
Quality	1	0	1	1	3

**Table 3.** Statements distributed over SWOT and sub categories of OCM, Company 1, ( $N = 7$ )

### Conclusion

The aim of the development of the present tool was to preserve the quality of the surveys (representative information with a clear reference to an underlying causal model), while also avoiding some of the challenges inherent in using surveys in organizational development, particularly with respect to the interpretation of data and the potential lack of reflection involved in answering a survey instrument. Being a very time-consuming method, the present tool should probably be used in conjunction with survey instruments, as only a fraction of employees can be interviewed. Top management groups and subgroups in the firm are likely candidates for benefiting from the present tool.

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