



A Statistical Peep into the Culture of a Manufacturing Organisation

Dr. Virendra Kumar Sharma

HRD Consultant, University of Delhi, India

Abstract : It is well accepted now that one of the desirable characteristics of a productive, innovative, nimble organization, tuned to the needs of 21st century, is a culture of collaboration, apart from few other elements like being caring, decisive, adaptable, achievement oriented etc. This article analyses the existing culture of a large manufacturing organization, as displayed through the dominant behavior of a group of senior executives, using a self-scoring instrument.

Key words : competencies, personality, hierarchy, behavioral style, competitive, outspoken.

INTRODUCTION

Decision was taken some time after 2000 in this large Manufacturing organization employing around 5000 people, having manufacturing facilities in different locations in India and its corporate Head Quarters in North India, to assess managerial competencies of personnel working in the managerial cadre using Assessment Centre method.

Contract was assigned to a private consultancy firm, who put together a model of managerial competencies and proceeded with assessment, in which all Vice Presidents , General Managers and others in the hierarchy participated. The scores against each of the twelve competencies were available on a scale of 1-5.

The assessment process, spread over one day, consisted of a group of 8 to 10 executives participating in a number of exercises like a discussion group, a presentation, in-tray exercise as well as self scoring on a personality instrument called OPQ. These exercises were observed and rated by a team of 4 to 5 trained assessors.

This article aims to examine the kind of organizational culture prevailing in the company, based on the analysis of data available in terms of scores of the participants on various dimensions of the OPQ instrument and their performance rating.

THE ANALYSIS

Let us have a look, to start with, at the data available which was used for statistical analysis.

One was the set of scores obtained by each participant in OPQ. OPQ (Occupational Personality Questionnaire) , developed by a private firm called SHL , “ provides an indication of the candidate’s perception of their preferred behavioral style at work” against 32 dimensions.

Self scoring questions are designed to elicit preferred styles under three main heads and eight sub-heads, as shown on the next page :

RELATIONSHIPS WITH PEOPLE

- Influence
- Sociability
- Empathy



THINKING STYLES

- Analysis
- Creativity and Change
- Structure

FEELINGS AND EMOTIONS

- Emotion
- Dynamism

The second set of data was the Performance rating for each participant. The routine Performance Appraisal ratings are not known to be very reliable indicators of performance on the job, due to various human considerations bringing in a degree of subjectivity. Therefore these ratings were moderated by the top team of Managing Director and the President.

Statistical analysis consisted of calculating Co-efficient of correlation between OPQ Scores for each of 32 dimensions and Performance Ratings.

The hierarchical structure in this manufacturing organization was as under:

Managing Director

President

Vice President (VP)

General Manager (GM)

Deputy General Manger (DGM)

Senior Manager

Manager

Deputy Manager

Assistant Manager

Bottom two clusters of designations [Asstt Manager / /Dy Manager cluster and the Manager / /Sr Manager / DGM cluster] had one common characteristic in that the job content remained the same as one progressed from one designation to the next within the same cluster, only the remuneration package got enhanced.

Promotion decisions in this organization for the position of Vice President were taken by the Managing Director in consultation with the President. Once someone reached the VP level, next promotion chance was, more or less, non-existent since bulk of the Presidents in the past had been hired from the outside market.

THE FINDINGS

The statistical analysis for a group of 69, between their scores in the self scoring OPQ instrument for each of the 32 dimensions of OPQ with their levels of performance, is quite interesting and can be seen in the attachment. It throws some interesting light on the prevailing culture in the organization.

Out of 32 dimensions, acceptable relationship is found only for three dimensions of preferred behavioral style, as defined below at the top end of the scale.



COMPETITIVE – “ has a need to win, evaluates own performance in terms of being better than others, dislikes losing.”

OUTSPOKEN – “ freely expresses opinions, makes disagreement clear, prepared to criticize others”

PERSUASIVE – “ enjoys selling, comfortable using negotiation, likes to change other people’s views”.

The statistical results obtained are as under :

Correlations of OPQ scores with Performance

Behavior Dimension	VP’s & GM’s N = 69		V P’s N=39		G M’s N=30	
	r	p	r	p	r	p
<i>Persuasive</i>	0.242	0.05	0.332	0.039	0.077	0.685
<i>Outspoken</i>	0.237	0.05	0.177	0.28	0.344	0.063
<i>Competitive</i>	0.023	0.85	-0.195	0.232	0.361	0.05

Please note that against the behavior dimension of ‘Competitive’, the correlation coefficient of 0.361, which is considered quite good in social sciences research, is having p value of 0.05 for the GM’s group. This indicates that the probability of going wrong in the conclusion that the dominant behavioral style of GM’s group is competitive is only 5% - an acceptable norm. Thus it also means that the GM’s group is not only displaying competitive behavior on the job , but is also getting rewarded for the same, since these are the General Managers who are getting promoted to the next level of Vice Presidents.

It therefore stands to reason that the example set by the GM’s group is most probably promoting competitive behavior among levels below reporting to them.

Looking at the correlation coefficients calculated, it appears that the GM’s also needed to be ‘outspoken’ to a degree for getting promotions to the next level of Vice President.

And once having achieved the position of Vice President, there was no need to behave in a competitive manner, since the next promotion was not really there. In turn they started displaying persuasive behavior. It has clearly emerged that while at the level of GMs, the group was not displaying persuasive behavior.

Looking at the full statistical analysis of all behavioral dimensions in OPQ in the attachment , it clearly stands out that a string of behavior patterns that normally one would think highly desirable like being ‘innovative’, ‘caring’, ‘achieving’, ‘decisive’, ‘adaptable’, ‘tough minded’ etc do not show a valid relationship.

CONCLUSION

In conclusion. It can be stated that work culture in this organization is a work in progress with a good deal of distance yet to cover. And a change in the positive direction will happen after the top management stops rewarding competitive style.



Correlations of OPQ dimensions with performance

	<i>ATTACHMENT</i>		N=69		N=39		N=30	
			VP & GM		VPs		GMs	
		r	p		r	p	r	p
	Relationships with people							
1	<i>Persuasive</i>	0.242	0.05		0.332	0.039	0.077	0.685
2	Controlling	-0.087	0.48		-0.149	0.362	0.01	0.957
3	<i>Outspoken</i>	0.237	0.05		0.177	0.28	0.344	0.063
4	Independent minded	-0.071	0.56		-0.084	0.611	-0.053	0.78
5	Outgoing	0.209	0.08		0.225	0.168	0.188	0.32
6	Affiliative	-0.042	0.73		-0.117	0.478	0.097	0.607
7	Socially Confident	0.023	0.85		0.058	0.726	-0.038	0.84
8	Modest	-0.139	0.25		-0.182	0.265	-0.068	0.721
9	Democratic	0.005	0.96		0.102	0.535	-0.133	0.481
10	Caring	-0.106	0.38		0.022	0.891	-0.312	0.092
	Thinking Style							
11	Data rational	0.025	0.84		-0.052	0.751	0.132	0.484
12	Evaluative	0.144	0.24		0.077	0.638	0.282	0.13
13	Behavioural	-0.099	0.41		-0.088	0.592	-0.127	0.503
14	Conventional	-0.162	0.18		-0.187	0.253	-0.138	0.467
15	Conceptual	-0.111	0.36		-0.085	0.605	-0.192	-0.309
16	Innovative	0.03	0.8		0.104	0.529	-0.08	0.671
17	Variety seeking	0.082	0.5		0.126	0.444	-0.002	0.989
18	Adaptable	-0.054	0.66		-0.147	0.369	0.136	0.471
19	Forward thinking	0.213	0.08		0.283	0.08	0.132	0.485
20	Detail conscious	0.14	0.25		0.145	0.378	0.126	0.504
21	Conscientious	0.127	0.3		0.275	0.09	-0.14	0.458
22	Rule following	-0.015	0.9		-0.106	0.519	0.173	0.36
	Feelings & Emotions							
23	Relaxed	0.055	0.65		0.203	0.213	-0.214	0.256
24	Worrying	-0.234	0.05		-0.238	0.145	-0.238	0.205
25	Tough minded	0.02	0.87		0.04	0.806	-0.032	0.863
26	Optimistic	0.064	0.6		0.092	0.578	0.028	0.88
27	Trustiing	-0.07	0.57		-0.022	0.878	-0.194	0.304
28	Emotionally controlled	-0.186	0.13		-0.054	0.741	-0.416	0.022
29	Vigorous	0.036	0.77		0.163	0.32	-0.153	0.417
30	Competitive	0.023	0.85		-0.195	0.232	0.361	0.05
31	Achieving	0.206	0.09		0.249	0.126	0.145	0.442
32	Decisive	-0.111	0.36		-0.142	0.386	-0.071	0.708