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How psychology could help the manager to predict group conflict in an organisation?

Unbelievable does not mean impossible
- Niels Bohr

Abstract

I would like to speak about using mathematical models in predicting group conflicts in organizations. At first glance, the topic sounds unusual, not to say strange. One could hardly imagine things further from each other than mathematics and human conflicts. The first is directly connected with strong objective logic and clear rationality, while the second is almost associated with subjective emotional agitations and splashes, irrational motions and passions with unpredictable consequences.

RATIONAL	EMOTIONAL
OBJECTIVE	SUBJECTIVE
LOGICAL	SPONTANEOUS

Looking from the practical perspective, one could say that contemporary psychology has no relevant instruments that might help the manager to predict the conflicts in an organization. This means that in the decision making, manager is not able to know beforehand whether his/her decision will cause the conflict. "Probably, yes" or "Probably, no" are not the proper answers in such cases. In other words, is it possible to propose the relevant reliable formula of predicting the conflicts in organizations, based on mathematical laws that could be used in managerial practice?

In my speech I am going to present this formula. I am also going to discuss some concrete cases in which this formula was successfully applied. My talk will be focused on "Why it is possible?" and "How it is possible?"

The results of the experimental research: Predicting the group conflicts in the organizations

The abstract from the working paper

The aim and the procedure

The experiment work was held in University Center in Kajaani, Finland during the period from January 2001 to December 2006. The aim of the research was to evaluate the mathematical model of predicting the group conflicts in organization as a result of the certain managerial decisions (PPR formula) in real practice.

The procedure was arranged so that before the decision making, the leaders of the organization (decision makers) have sent the data concerning the organization to the experimenter. Experimenter analyzed the data and formulated the conclusion in two possible forms:

- a) in a case of taking the decision it will cause the group conflict in the organization
- b) in a case of taking the decision it will not cause the group conflict in the organization

Experimenter presents the prediction, formulated in a form of A or B to the decision maker.

After the realization of the decision the leader (Head) of the organization informs the experimenter whether the prediction was correct or not (did the decision really cause the conflict in the organization or not).

Cases description

Number of cases in the experiment - 26 (industrial and trade companies, educational organizations and civil service organizations)

- industrial and trade companies - 14
- educational - 5
- civil service - 7

Number of employees

- from 11 to 21 employees - 10
- from 21 - 45 - 8
- from 45 to 100 - 8

International profile

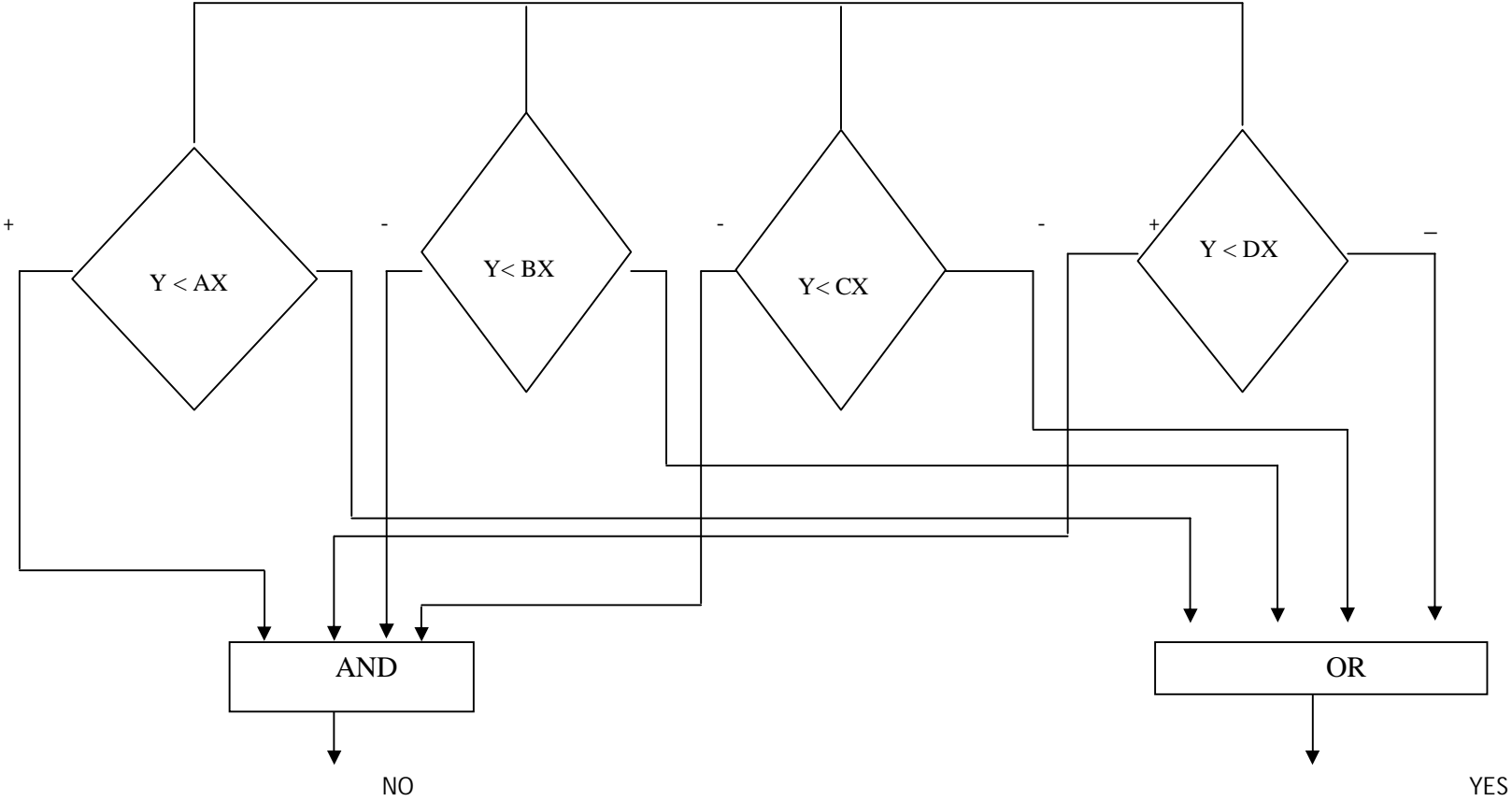
- Russian organizations - 16
- Finnish organizations - 6
- Finnish-Russian - 4

N	Organization area	Number of employees	Prediction form given	Prediction confirmed
1	Trade company	82	a	+
2	Company in wood production	98	a	+
3	Secondary school	27	a	+
4	Kindergarten	14	a	+
5	Book - store	13	b	+
6	Restaurant	19	a	+
7	Supermarket	24	b	+
8	Department at the City Council	11	b	+
9	Local library	16	a	+
10	Car renting company	14	b	+
11	Local primary school	23	b	+
12	Joint-stock company	79	a	+
13	Technical school	25	a	+
14	Production company	97	b	+
15	Building company	79	a	+
16	Transport company	86	b	+
17	Department at the University	38	a	+
18	S-market (Small market store)	14	a	+
19	Joint-stock company	75	b	+
20	Trade company	90	a	+
21	Non-governmental organization regional branch	32	a	+
22	Local polyclinic	16	a	+
23	Local publishing house	18	b	+
24	Local newspaper	33	a	+
25	Research center at the University	36	a	+
26	Consulting company	16	a	+

Conclusion

The evaluated mathematical formalism (PPR) formula might serve as a reliable instrument for predicting of conflicts in the organizations and can be applied for the rising of the quality of the organizational decision making.

INCOMING PARAMETRES X, Y, A, B, C, D



FORMULA: $0 < Y < AX < BX < CX < DX$, $Y = (\text{from } 0 \text{ to } X)$