

Measuring effects of ethical operations

Dr Donarski Jerzy

Dean of Management Department, The Bogdan Janski Academy, e-mail: donarski@nkp.pl

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1 AIMS OF THIS RESEARCH

1.1 *Measuring is still a problem*

Measuring the effects: the number of social gains and the competitive productivity of ethical operations, require still empirical research. Social gain is simply the consequence of ethical operation. To manage successfully the implementation of the Lisbon strategy and Corporate Social Responsibility - CSR strategy, practical methods and tools for managers are required.

Measuring requires ethical values and principles to be used as yardstick-model for measuring, as ethics for making ethical operations. What are the ethical values and principles can be used by decision makers and employees in Europe? What is the impact of attitude ethicality of decision makers on social gains and on the influence power for competitive productivity?

1.2 *Three aims of this research*

Practical aim: To prepare for managers a method and tools for measuring the effects of ethical operations, to plan and monitor the pro ethical activity (operations).

Didactic aim: to communicate and embed ethical values and principles into the organisation.

Theoretical aim: To prove the hypothesis: "Attitude ethicality of the decision makers has an impact on effects. The higher the attitude ethicality is – the higher the consequence-effect: Number of Social Gains per one stakeholder and these in turn leading to the achievement of competitive productivity. It can be measured.

2 METHOD AND TOOL FOR MEASURING

2.1 *The method*

The method is simply based on collection of opinions from two groups of respondents: the stakeholders (internal) and decision makers. The opinions of stakeholders are on decision making process ethicality and in matrix relation are on the attitude ethicality of decision makers. This means *ex post* the relation - the social gains versus attitude ethicality to conclude, using the reversible connection, *ex ante* the attitude recommended to be taken by decision makers to achieve higher social gains and competitive productivity. The decision makers select the ethical value system for their

own company, taking into consideration internal and external conditions for the decisions to be taken.

2.2 *The indicators measuring the effects*

Two main indicators are proposed for measuring the effects:

- ❖ NSG - Number of Social Gains per 1 stakeholder-respondent. It is the ratio of the sum of stakeholders opinions "YES" which of ethical principles are applied in the company, divided by the number of respondents. It range is from "0" to the number of the full set of principles.
- ❖ CP – Competitive Productivity. Productivity is competitive if the Productivity Operation Surplus POS of the particular analyzed company is bigger than the POS of the whole competitor's branch at the home market (or at markets from other countries the company likes to enter - what is an essential question raised at the EPC 2006). Productivity Operation Surplus per 1 hour of presence at work of the total number of employees is calculated from productivity P minus "wages and salaries" in the particular analyzed company.

"Ethicality" please understand simply as the degree of conformity to ethical principles (drawn as analogy to the definition of "morality is the degree of conformity to moral principles" published in: "The Concise Oxford Dictionary", Oxford at the Clarendon Press, seventh edition 1982, p. 657.)

2.3 *The model of 197 criterions for the evaluation of ethicality of operations in a company (decision making ethics)*

To measure the number of social gains we have to have a model of ethical principles, which, when followed by the decision makers (and remaining crew members of the company), will contribute to creation of social gains or even common good. Such a model was proposed by the author, who has prepared a list of 197 ethical principles mainly from three European sources mentioned in TABLE 1

TABLE 1
SOURCES FOR DECISION MAKING ETHICS

The source and kind of main document	Number of principles
John Paul II, Encyclical letter Centesimus annus, Libreria Editrice Vaticana, Vatican 1991, [1] ch. IV- V.	64+28
European Commission, Employment and social affairs, Partnership for a new organisation of work. Synthesis of responses, Manuscript completed in 1998, [2] pp. 5-19.	41

European Association of National Productivity Centers, Productivity, Innovation, Quality of working Life and Employment. Memorandum, Brussels, February 1999, [3] pp. 7 -14.	64
TOTAL:	197

Source: Own Doctoral Dissertation [5] p. 17

2.3. The matrix of 9 relations: Decision makers – Stakeholders for measuring the impact

To prove empirically the impact of attitude ethicality of decision makers on social gains the 9 relations of evaluation of the : “Decision-makers versus Stakeholders” matrix of. Professor T. Pietrzkiwicz is used. He is the co creator of the method presented in this paper. The matrix he has published in his book, 2002 [4] p. 27, and under the title: *Rationality and Ethics of Economic Decisions*, has published ,in the scientific journal, periodical “Praxeology”, Warsaw: The Polish Academy of Science, pp.175-184.

This matrix is based on three kinds of ethical attitudes: Self-interested – I, not self-interested (rational) -N and self sacrificed – Explanation: Self-interested - he is guided mainly by his personal interest; Not-self-interested – he is guided mainly by the decision making procedures; Self - sacrificed – he is guided mainly by the interest of COMMON GOOD. [4] p. 59. Each of these kinds of ethical attitudes is causing three different consequences, such as social gains or social losses or neither losses nor gains.

2.4 The design of the matrix tool for research

The questionnaire was designed as a matrix described in 2.4. Vertically in the tool are specified the 197 ethical principles and horizontally – the three kinds of ethical attitude..

TABLE 1

SCHEME OF THE DESIGN AND CONTENTS OF THE MATRIX TOOL

DECISION MAKING AREAS	PRO-BLEM FIELD S	ETHICAL PRINCIPLES	“+” “-“ “0”	VALUES (WEIGHT OUT OF 1000)	COMPETITIVE POWER
1	2	3	4	5	6
MISSION	4	34			
PRODUCT	5	26			
TECHNOLOGY	7	22			
PERSONAL POLICY	6	90			
FINANCIAL POLICY	7	25			
TOTAL	29	197			

SELF-INTERESTED	NOT-SELF-INTERESTED	SELF-SACRIFICED

RESOURCE: DOCTORAL DISSERTATION, [5], p. 49

The stakeholders-respondents, in column 4, are expressing their opinion which of the specified 197 ethical principles are applied (+) or not (--) or he doesn't know (0).

The respondent has to express, after each decision making area his opinion on the ethical attitude of decision makers, marking I, or N or S.

The decision makers, in column 5, express their weight(out of 1000) each principle has in the decision making process, taking into consideration internal and external conditions of particular company. They have no upper limitation, so, for example in the research done several decision makers have given up to 90 points to some particular ethical principles. Point “1” means that this ethical principle has no meaning in this particular company. It is an important feature of this method – each company has its own ethical value system.

This method and tools were labeled: E1000 (Ethicality) and after inclusion of the search for competitive productivity labeled EC1000 (EthicalCompetitiveness).

3 RESEARCH FINDINGS, YEAR 2004, 2005, 2006

3.1 The social gains and competitive productivity in six enterprises in Poland, Year 2004.

This research was done in 2004, in the scope of doctoral dissertation of the author and accepted in June 2005 [5]. Stakeholders in a total number of 167 were involved as respondents working in six industrial enterprises named A,B,C,D,E,F. This means 167 x 197 ethical principles – altogether above 32 thousand opinions had been collected in the 167 questionnaires. Nine decision makers have selected their own ethical value system. The collected opinions of the stakeholders, after aggregation (aggregation is possible because all principles-questions are formulated positively and thus can be added as a sum for the whole company) are presented in TABLE 3

TABLE 3

SOCIAL GAINS (SG) IN POINTS OUT OF 1000 POINTS

	Companies in sequence of Social Gains					
	C	A	D	B	E	F
TOTAL Social Gains	486	597	639	717	835	846
Consequence from “I”ethical attitude	238	252	277	260	222	225
Consequence from “N+S”ethical attitude	248	345	362	457	613	621

COMPETITIVE PRODUCTIVITY (all data in \$/1hour)

Productivity	6	n.d.	9	13	18	28
Wages and salaries	4	n.d.	4	4	4	4
POS -Productivity Operation surplus	2	n.d.	5	9	14	24
Productivity of the competitive branch	11					10
Wages and salaries in the c. branch	4					4
POS b. Productivity Operation surplus of the c. branch	7					6
Competitive Productivity should	14					already

Source: Own research [5] p. 97. For the Branch it is a recent simulation done, to show the method proposed.

The first conclusion can be drawn: the number of social gains (in points) doesn't depend on the consequences from the "self-interested - I" ethical attitude of decision makers – but depends on the consequences of the "not self-interested + self-sacrificed – N+S". More - the consequence from "self-interested" has a tendency to be constant (it is 222-260). It has an important meaning for the practical application by managers – There will be no need in the future to ask stakeholders of a company. on the delicate question what the ethical attitude of their decision makers is. It can be an contribution to the management theories development.

The second conclusion that can be drawn is: the higher the social gains the higher the productivity and competitive productivity.

The above conclusions were seen, in the doctoral dissertation, only as initial confirmation of the hypothesis, Therefore further research in more enterprises had been started in the year 2005 and 2006.

3.2 The social gains from the decision area: MISSION, in 176 enterprises. Fundamental values. Year 2005

This research had the aim to check if the tendency of consequences from "self-interested" ethical attitude of decision makers keeps the tendency to be constant. The respondents were employees of 176 business organizations master degree students of management departments on the Bogdan Janski Academy and the Warsaw University The research focused on the decision making area: MISSION of the company, as whole and on the problem field: "Fundamental values of the company" in the breakdown into 8 ethical values and principles according to the social teaching directed by John Paul II to the entrepreneurs and employees in companies.

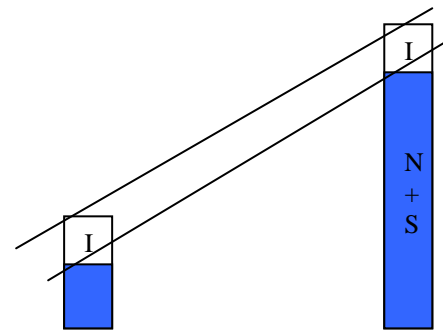
The "Discrimination power" concept was applied for the aggregation of the collected opinions on the questionnaires E1000 MISSION. Therefore from the 176 questionnaires were separated two groups of companies - those with the highest number of applied ethical principles, and those with the lowest number. The findings are presented in TABLE 4.

TABLE 4
SOCIAL GAINS IN 50 COMPANIES WITH HIGHEST AND 50 LOWEST NUMBER OF APPLIED ETHICAL PRINCIPLES

Name of indicator:	50 companies with lowest ethicality	50 companies with highest ethicality
TOTAL NUMBER SOCIAL GAINS - NSG	8/ 1 stakeholder	25/ stakeholder
from "self-Interested" attitude of decision makers	5/ 1 stakeholder	5/ 1 stakeholder
from "Not-self-interested + Self-sacrificed attitude of decision makers	3/ stakeholder	20/ stakeholder
Indicator E-SG - the impact of attitude ethicality on NSG	3:34 x100= 9 %	20:34 x100= 59 %
Ethicality - E	8:34x100= 23 %	25:50x100= 73 %

Source: Own research from 176 companies [6]

Graphically the different Number of Social Gains from "I" and from N+S can be presented as follows:



Interpretation - the hypothesis has again been confirmed in this research: Not the number of 5 social gains from the "self-interested" attitude have made the number of 25 TOTAL SOCIAL GAINS but the 20 from the "non-self-interested + self-sacrificed" attitude. Again the number of "self-interested" attitude demonstrates to be constant - it is 5 in the 50 companies with lowest number of social gains as well 5 in the 50 with highest number.

The question arises – which ethical principles out of 34 in the decision making area MISSION are making the high Number of Social Gains? The answer is: some fundamental values of the company have high frequency of opinion "YES", what means that this principles is applied and gives him social gain

TABLE 5
SOME FUNDAMENTAL VALUES OF THE COMPANY

ETHICAL VALUES AND PRINCIPLES (selected from the research tool E1000) [4] p. 216	YES in 50 companies with lowest	YES in 50 companies with highest
1.6.a. Recognition of the legitimacy of workers' efforts to obtain full respect for their dignity and to gain broader areas of participation in the life of industrial enterprises (CA 43)	6 %	90 %
1.8. In the company has to be recognized that MAN is more important than thing (10 %	88 %
1.6.e. My right to freedom as well as duty of making responsible use of the freedom	16 %	88 %
1.2. A common tendency of the CREW towards the continuous development has to be the basis for the MISSION being implemented	22 %	82 %
1.6.f. Determining is the role of a disciplined and creative work of the company's CREW and, - as an essential part of this work – the role of capability to initiatives and entrepreneurship (CA 32)	43 %	82 %
1.3. The creation of more dignity in the live through solidarity at work , specifically contribution to strengthen the dignity and development of the capabilities of each person – is the principle to be implemented by our CREW (CA 32)	12 %	76 %
1.6.c. Profit is a regulator of the life of the business, but it is not the only one; other human and moral factors be considered, which, in long term are at least equally important for the life of the business (CA 35)	20 %	76 %

The principle that MAN, member of the company's CREW, is the main wealth of the firm has to be taken into consideration in the mission, by the Board of Management (CA 32)	6 %	70 %
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Source: John Paul II, encyclical letter Centesimus annus [...]

3.3. 2006 .Measuring the influence of ethicality on competitive productivity (bridge coefficient)

This research was done on 220 other business organizations. The respondents were again part-time students who are employees of these 220 business organizations.

To get a wider picture this research covered not only the MISSION , but also the decision area PRODUCT and PERSONAL POLICY. These areas have 150 ethical principles (34+26+90). In this paper again only results for MISSION are presented.

To measure this influence we need a "bridge coefficient - BC". It is the ratio of influence scale to the maximum of influence possible. This research aims to measure the influence of ethicality on the competitiveness power from ethical principles applied and from not applied, the correlation between ethicality and competitive productivity. The method was simple. To the research tool-questionnaire E1000 was added additional column under the heading - impact power on competitiveness. The respondent , after the identification of ethical principles, applied in his company, had to do to express his opinion which of the applied ethical principles have an influence on competitive productivity. The power of influence is expressed by the respondent marking each ethical principle from 1 to 10. There is the logical assumption that the present level of productivity in each particular company was already influenced by the applied ethical principles. The respondent has received a third task: to analyze the not applied ethical principles in the practice of his company but, which, in his opinion, may influence additionally the present level of productivity and thus contribute to raise the productivity from the present level towards the "competitive productivity.

The data collected from the N = 220 questionnaires labeled now EC1000 (Ethical Competitiveness) of this influence research are presented in TABLE 5

TABLE 5
ETHICALITY INFLUENCE ON COMPETITIVE PRODUCTIVITY

Name of indicator:	60 companies with lowest NSG		60 companies with highest NSG	
	NSG	Influence on comp. productivity "IC"	NSG	Influence on comp. productivity "IC"
TOTAL	8	17 %	28	63 %
...from "self-interested" attitude of decision makers	4	8 %	4	8 %
...from "non-self-interested +self-sacrificed" attitude of decision makers	4	9 %	24	55 %

Resource: Own research not yet published (Year 2006)

Interpretation: The influence of high attitude ethicality of the decision makers on competitiveness power is much bigger than the influence of low attitude ethicality.

4.. SUMMARY CONCLUSION DRAWN FROM THIS RESEARCH

4.1. Method and tools for managers

The method and tools can be applied by managers of each companies and serve them to measure the present ethicality, social gains produced and to check if the productivity is competitive or not. The present state will be the basis for planning of the needed multiplication of social gains and productivity level and make the pro ethical operation plan for the company. This tools can serve also to monitor the effects achieved.

Obviously the list of ethical principles in the questionnaire with the now 197 ethical principles for the five decision making areas :MISSION, PRODUCT, TECHNOLOGY, PERSONAL POLICY, FINANCIAL POLICY - will have to be continuously revised and adapted by the decision makers of particular companies to the specific of the company. In some cases the list will have to be increased.

4.2 Further applied research with companies is needed

The strength of this method is that it enables to employ the "social dialog" between the decision makers, representing the shareholders and the stakeholders of the particular company. The assumption is that all employees of a company have to have the right to express their opinion on the present state of the social gains and involve all of them into search for ethical operation which may influence the competitive productivity. The total CREW creative involvement and long life learning are the recently recognized is an important factor for sustainable growth through the Corporate Social Responsible - CSR strategy.

At the Bogdan Janski Academy in Warsaw a government to be financed had been prepared to be conducted with more than 200 companies with two aims *first*: to start pro ethical progress through planning the pro ethical operation and *second* to continue the theory that ethicality contributes to multiplication of social gains, competitive productivity and finally to increase number of better workplaces and higher employment.

4.3. Contribution to European ethicality standards

AA1000 AccountAbility standard, British origin, becomes more and more an European standard for ethics and corporate social responsibility. The EC1000 proposed in this paper can be a contribution to the selection of ethical values by company's decision makers and to the measurement of ethicality.

ACKNOWLEDGEMENT

This paper is devoted to the memory of Prof. Tadeusz Pietrzkiwicz, co-creator of the method presented, creator

of the 9 fields of relations' evaluation: "Decision-makers – Stakeholders", great ethical authority. My thanks for the five years of creative guidance, as the thesis director, to develop this method and tools. He passed in October 2005

REFERENCES

- [1] John Paul II, Encyclical letter *Centesimus annus*, Vatican: Libreria Editrice Vaticana, 1991, ch. IV- V.
- [2] European Commission, Employment and Social Affairs, *Partnership for a new organisation of work*. Synthesis of responses, Manuscript completed in 1998, pp. 5-19.
- [3] European Association of National Productivity Centres, *Productivity, Innovation, Quality of working Life and Employment*. Memorandum, Brussels, February 1999, pp. 7 -14.
- [4] T. Pietrzakiewicz, *Ethics and Rationality of Economic Decisions*, Warsaw: Printing house of the Warsaw School of Management, 2002, pp. 25-29.
- [5] J. Donarski, *Factors of pro ethical activity in Business Organizations*, Doctoral dissertation, defended in June 2005, (manuscript), Warsaw: Institute of Organisation and Management, 2005, pp. 43-44, 58, 97, 191-198.
- [6] J. Donarski, *176 questionnaires (34 ethical principles)* collected from 176 business representatives –master degree students of the Management Departments at Bogdan Janski Academy and Warsaw University, Warsaw: own research conducted as Lecturer and Researcher, 2005
- [7] J. Donarski, *220 questionnaires (150 ethical principles)* collected from 220 businesses Representatives – students of the Management Departments and Social Science at Bogdan Janski Academy and master degree students at Warsaw University, Warsaw: own research conducted as Research Project Leader on: "Impact of work ethicality on competitive productivity, social gains and creation of work places in the conditions of integration and globalization. Project of ethical standard EC1000 for companies in Poland and Europe", 2006