

VALUE AS THE BASIS FOR EFFECTIVE LEADERSHIP

Katarzyna PUSZKO

General Tadeusz Kościuszko Military University of Land Forces, Department of Management, Poland;
Katarzyna.Puszko@awl.edu.pl, ORCID: 0000-0002-7126-5140

Purpose: Identification of effective leadership, understood as exerting influence on achieving (the highest) value for the client in favorable and unfavorable conditions of the company's operation in empirical terms.

Design/methodology/approach: The article presents the results of empirical research. The basic measuring instrument used in the research was the questionnaire. The research includes verification of the assumed hypotheses.

Findings: Assessment of the significance of criteria, evaluation of leadership according to criteria, value index, arithmetic average, Spearman's rank correlation coefficient. In general, customers rated the value of leadership low in both favorable and unfavorable conditions. This is a signpost for increasing activity for the growth of value for the customer.

Research limitations: Research subjectively assessed by the client.

Practical implications: Positioning of a leadership level. On the basis of evaluation, it allows you to locate leadership at an effective level in favorable and unfavorable conditions.

Originality/value: A statistics application in the domain of effective leadership. It can be a kind of a signpost for orientation as to the direction of activities ensuring the achievement of effective leadership.

Keywords: leadership, effectivity, value, customer.

Category of the paper: Research paper.

1. Introduction

Efficiency, as an attribute of human action, has been the subject of interest in management theory and practice for centuries. In the literature there are comparisons of this tendency to the "terror of efficiency" (Boj, 2014). This is due, inter alia, to the capacity and multidimensionality of the term efficiency. Also, the emergence and dynamics of the spread of new phenomena and the increase in their role in management processes open up new research problems in the field of efficiency (Dudycz, Osbert-Pociecha, Brycz, 2015; Puszko, 2021). The aim of the article is identification of effective leadership, understood as exerting influence on achieving

(the highest) value for the client in favorable and unfavorable conditions of the company's operation in empirical terms.

The article assumes the verification of the following hypotheses:

1. Value for external and internal customers leads to achieving and increasing effective leadership.
2. Emotional and socio-ethical values are of significant importance, while economic and technical values are relatively less important from the point of view of the external customer in favorable conditions.
3. Economic and technical values are more important, while emotional and socio-ethical values are relatively less important from the point of view of the external client in unfavorable conditions.
4. In favorable conditions, internal customers attach more importance to values based on relational mechanisms, while in unfavorable conditions, values based on economic mechanisms become more important to them.
5. Values covering issues desired by the client (internal, external) are rated higher than values not related to the client's expectations (internal, external).
6. Higher customer value ratios are achieved due to the correlation of customer-relevant values with the customer's assessment (internal and external) both in favorable and unfavorable conditions.
7. There is a very weak and negative correlation between the customer value index achieved under favorable conditions and the customer value index achieved under unfavorable conditions.

2. Characteristics of empirical research

Empirical research was carried out in the period June 2022 - February 2023. The aim of the research was to identify effective leadership from the perspective of external and internal clients in favorable and unfavorable conditions.

The basic measuring instrument used in the research was a questionnaire. The study population, understood as a finite community about which the researcher wants to obtain specific data (Kaczmarczyk, 2005), covered 48 respondents from the following voivodeships: Lodz, Mazowieckie, Lesser Poland, Silesian, Lublin, Subcarpathian, Podlaskie, Świętokrzyskie, Lubuskie, Greater Poland, West Pomeranian, Lower Silesia, Kuyavian-Pomeranian Voivodeship, Pomeranian and Warmia-Masuria Province. The respondents were internal and external customers of enterprises. The synthetic characteristics of customers are presented in table 1.

Table 1.
The synthetic characteristics of customer

Respondent number Customer type	The synthetic characteristics of customers
	type of customer value
1. internal	1, 4, 5, 7 10, 19, 36, 44, 47, 48
2. external	2, 3, 6, 8,9, 11, 12, 13,14, 15, 16, 17, 18, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 37, 38, 39, 40, 41, 42, 43, 45, 46

Source: Own study based on research results.

79% of external customers and 21% of internal customers took part in the research. The criterion for selecting the sample was the consent of the respondent. Such a sample does not meet the criterion of a statistical sample. It is also not a random sample. The time horizon of the research covered the years 2012-2023. Favorable operating conditions - occur when the result measured by the difference between effects and inputs is greater than 0. Unfavorable operating conditions - occur when the result measured by the difference between effects and inputs is less than or equal to 0. Based on the presented conditions, the study should be treated as a case study. The effectiveness of leadership was measured using the value for the client indicator, i.e. a measure which is calculated using the ratings according to the criteria and the weights assigned to the criteria and is calculated according to the formula (Bozarth, Hanfield, 2007):

$$V = \sum_{n=1}^N I_n \cdot P_n \quad (1)$$

where:

V- value index,

I_n - weight of n criterion,

P_n - evaluation according to the criterion (Bozarth, Hanfield, 2007).

The respondents were asked to assess the significance of the criteria on a scale of 1 ("completely unimportant") to 5 (decisive) in favorable and unfavorable conditions, assigning weights to them. The assessment of the significance of the criteria in favorable conditions is presented in table 2.

Based on the information contained in table 2, it can be seen that economic and technical values are very important for external customers, while values based on economic mechanisms are very important for internal customers. Respondents then rated leadership on a scale of 1 ("low rating") to 5 ("very high"). The assessment of leadership in favorable conditions is presented in table 3. Based on the information contained in table 3, it can be concluded that external customers rated the economic and technical values relatively low. On the other hand, internal customers rated values based on economic mechanisms as low. The data obtained made it possible to calculate the indicators of value for the customer in favorable conditions. The calculation results are presented in table 4.

Table 2.*Evaluation of the significance of the criteria in favorable conditions*

Evaluation of the significance of the criteria in favorable conditions						
Respondent number \ Criterion	emotional values	technical values	economic values	socio-ethical values	values based on economic mechanisms	values based on relational mechanisms
1.					5	4
2.	3	4	5	1		
3.	3	5	4	2		
4.					5	1
5.10.19.					5	3
6.	2	4	3	5		
7.47.					5	2
8.	3	2	4	5		
9.	5	3	4	1		
11.	5	3	4	2		
12.	1	5	4	3		
13.	4	5	3	2		
14.	3	4	5	2		
15.	5	4	3	1		
16.	2	3	5	4		
17.	2	5	4	3		
18.	2	3	5	4		
20.	2	3	4	5		
21.	3	5	4	1		
22.	3	2	5	4		
23.	3	4	5	1		
24.	3	2	5	4		
25.	2	5	4	3		
26.	3	5	4	2		
27.	3	4	5	2		
28.	2	1	3	4		
29.	4	5	3	1		
30.	3	4	5	1		
31.	2	5	4	3		
32.	1	4	5	3		
33.	5	4	3	2		
34.	3	5	4	2		
35.	3	2	4	5		
36.					5	5
37.	3	4	5	2		
38.	2	5	4	3		
39.	4	3	5	2		
40.	2	5	4	3		
41.	3	5	4	2		
42.	5	4	3	2		
43.	2	4	5	3		
44.48.					5	4
45.	4	5	2	3		
46.	4	2	5	1		

Source: Own study based on research results.

The presented ratios indicate that customers, especially internal customers, do not receive values that are of particular importance to them, which is reflected in lower value ratios. In the case of external customers, lower value ratios are caused by a particularly low assessment of

economic and technical values. In unfavorable conditions, the expectations of internal customers in terms of values based on relational mechanisms increase.

Table 3.
Evaluation of leadership in favorable conditions

Evaluation of leadership in favorable condition						
Leadership assessment Respondent number	emotional values	technical values	economic values	socio-ethical values	values based on economic mechanisms	values based on relational mechanisms
1.4.					2	1
2.	3	1	2	4		
3.	4	2	3	5		
5.10.					4	3
6.	4	1	2	3		
7.					3	2
8.	3	2	1	3		
9.	4	2	3	1		
11.	5	1	2	2		
12.	1	1	2	3		
13.	5	3	2	1		
14.	2	3	4	2		
15.	5	2	3	1		
16.	3	1	2	4		
17.	2	4	4	1		
18.	2	2	3	3		
19.					1	2
20.	3	2	1	4		
21.	5	3	2	1		
22.	3	2	1	4		
23.	4	1	2	3		
24.	3	2	2	3		
25.	3	2	1	3		
26.	3	4	2	1		
27.	3	2	1	2		
28.	2	1	2	4		
29.	4	3	3	1		
30.	3	2	4	1		
31.	2	3	1	5		
32.	1	2	1	3		
33.	5	2	3	4		
34.	3	1	2	2		
35.	4	1	2	5		
36.44.48.					2	3
37.	4	2	3	1		
38.	2	1	4	3		
39.	4	3	1	2		
40.	2	1	4	3		
41.	4	1	3	2		
42.	4	2	1	3		
43.	4	1	2	3		
45.	5	4	2	3		
46.	4	3	2	1		
47.					4	2

Source: Own study based on research results.

Table 4.
Value ratio - favorable conditions

Value ratio - favorable conditions								
Respondent number	Value indicator	value indicator	including: emotional values	including: technical values	including: economic values	including: socio-ethical values	including: values based on economic mechanisms	including: values based on relational mechanisms
1.		14	-	-	-	-	10	4
2.		27	9	4	10	4	-	-
3.		44	12	10	12	10	-	-
4.		11	-	-	-	-	10	1
5.		29	-	-	-	-	20	9
6.		33	8	4	6	15	-	-
7.		19	-	-	-	-	15	4
8.		32	9	4	4	15	-	-
9.		39	20	6	12	1	-	-
10.		29	-	-	-	-	20	9
11.		40	25	3	8	4	-	-
12.		23	1	5	8	9	-	-
13.		43	20	15	6	2	-	-
14.		42	6	12	20	4	-	-
15.		43	25	8	9	1	-	-
16.		35	6	3	10	16	-	-
17.		43	4	20	16	3	-	-
18.		37	4	6	15	12	-	-
19.		11	-	-	-	-	5	6
20.		36	6	6	4	20	-	-
21.		39	15	15	8	1	-	-
22.		34	9	4	5	16	-	-
23.		29	12	4	10	3	-	-
24.		35	9	4	10	12	-	-
25.		29	6	10	4	9	-	-
26.		39	9	20	8	2	-	-
27.		26	9	8	5	4	-	-
28.		27	4	1	6	16	-	-
29.		41	16	15	9	1	-	-
30.		38	9	8	20	1	-	-
31.		38	4	15	4	15	-	-
32.		23	1	8	5	9	-	-
33.		50	25	8	9	8	-	-
34.		26	9	5	8	4	-	-
35.		47	12	2	8	25	-	-
36.		25	-	-	-	-	10	15
37.		37	12	8	15	2	-	-
38.		34	4	5	16	9	-	-
39.		34	16	9	5	4	-	-
40.		34	4	5	16	9	-	-
41.		33	12	5	12	4	-	-
42.		37	20	8	3	6	-	-
43.		31	8	4	10	9	-	-
44.		22	-	-	-	-	10	12
45.		53	20	20	4	9	-	-
46.		33	16	6	10	1	-	-
47.		24	-	-	-	-	20	4
48.		22	-	-	-	-	10	12
\bar{x}			9,0	6,0	7,0	6,0	3,0	2,0

Source: Own study based on research results.

The preferences of external customers in terms of economic and technical values are also growing at the expense of social and ethical values. The assessment of the significance of the criteria in unfavorable conditions is presented in Table 5.

Table 5.

Evaluation of the significance of the criteria in unfavorable conditions

Evaluation of the significance of the criteria in unfavorable conditions						
Respondent number \ Criterion	emotional values	technical values	economic values	socio-ethical values	values based on economic mechanisms	values based on relational mechanisms
1.44.48.					5	4
2.	3	4	5	1		
3.	3	5	4	2		
4.5.10.19.47.					5	3
6.	2	4	3	5		
7.36.					5	5
8.	3	2	5	3		
9.	5	3	4	1		
11.	5	3	4	2		
12.	1	5	5	3		
13.	4	5	3	2		
14.	3	4	5	2		
15.	5	4	3	1		
16.	2	4	5	3		
17.	2	5	4	3		
18.	2	3	5	4		
20.	2	3	4	5		
21.	3	5	4	1		
22.	3	2	5	4		
23.	3	4	5	1		
24.	3	2	5	4		
25.	2	5	4	3		
26.	3	5	4	2		
27.	3	4	5	2		
28.	2	1	5	4		
29.	4	5	3	1		
30.	3	4	5	1		
31.	2	5	4	3		
32.	1	4	5	3		
33.	5	4	3	2		
34.	3	5	4	2		
35.	3	2	4	5		
37.	3	4	5	2		
38.	2	5	4	3		
39.	4	3	5	2		
40.	2	5	5	1		
41.	3	5	4	2		
42.	5	4	3	2		
43.	2	4	5	3		
45.	4	5	2	3		
46.	4	3	5	1		

Source: Own study based on research results.

The assessment of leadership in unfavorable conditions is presented in Table 6. Value indicators in unfavorable conditions are presented in Table 7.

Table 6.
Evaluation of leadership in unfavorable conditions

Respondent number	Evaluation of leadership in favorable condition						
	Leadership assessment	emotional values	technical values	economic values	socio-ethical values	values based on economic mechanisms	values based on relational mechanisms
1.						2	1
2.		3	1	2	4		
3.		4	2	3	5		
4.						1	1
5.10.						4	3
6.		4	1	2	3		
7.19.						1	2
8.		3	2	1	3		
9.		4	2	3	1		
11.		5	1	2	2		
12.		4	1	1	3		
13.		5	3	2	1		
14.		2	3	4	2		
15.		5	2	3	1		
16.		4	1	2	1		
17.		2	4	4	1		
18.		2	2	3	3		
20.		3	2	1	4		
21.		5	3	2	1		
22.		3	2	1	4		
23.		4	1	2	3		
24.		3	2	2	3		
25.		3	2	1	3		
26.		3	4	2	1		
27.		3	2	1	2		
28.		2	1	1	4		
29.		4	3	3	1		
30.		3	2	4	1		
31.		2	3	1	5		
32.		1	2	1	3		
33.		5	2	3	4		
34.		3	1	2	2		
35.		4	1	2	5		
36.44.48						2	3
37.		4	2	3	1		
38.		2	1	4	3		
39.		4	3	1	2		
40.		4	1	2	3		
41.		4	1	3	2		
42.		4	2	1	3		
43.		4	1	2	3		
45.		5	4	2	3		
46.		3	2	2	1		
47.						3	2

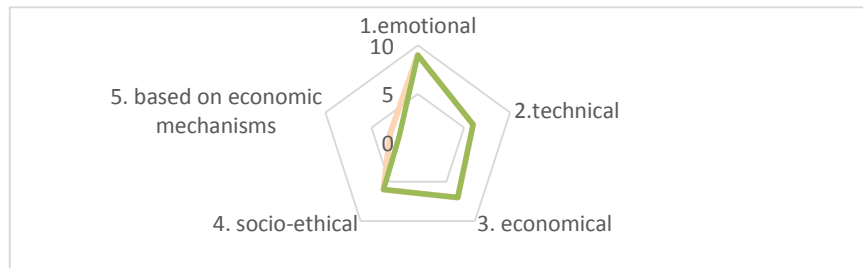
Source: Own study based on research results.

Table 7.
Value ratio - unfavorable conditions

Value ratio - unfavorable conditions							
Value Indicator Respondent number	value indicator	including: emotional values	including: technical values	including: economic values	including: socio-ethical values	including: values based on economic mechanisms	including: values based on relational mechanisms
1.	14	-	-	-	-	10	4
2.	27	9	4	10	4	-	-
3.	44	12	10	12	10	-	-
4.	8	-	-	-	-	5	3
5.	29	-	-	-	-	20	9
6.	33	8	4	6	15	-	-
7.	15	-	-	-	-	5	10
8.	27	9	4	5	9	-	-
9.	39	20	6	12	1	-	-
10.	29	-	-	-	-	20	9
11.	40	25	3	8	4	-	-
12.	23	4	5	5	9	-	-
13.	43	20	15	6	2	-	-
14.	42	6	12	20	4	-	-
15.	43	25	8	9	1	-	-
16.	25	8	4	10	3	-	-
17.	43	4	20	16	3	-	-
18.	37	4	6	15	12	-	-
19.	11	-	-	-	-	5	6
20.	36	6	6	4	20	-	-
21.	39	15	15	8	1	-	-
22.	34	9	4	5	16	-	-
23.	29	12	4	10	3	-	-
24.	35	9	4	10	12	-	-
25.	29	6	10	4	9	-	-
26.	39	9	20	8	2	-	-
27.	26	9	8	5	4	-	-
28.	26	4	1	5	16	-	-
29.	41	16	15	9	1	-	-
30.	38	9	8	20	1	-	-
31.	38	4	15	4	15	-	-
32.	23	1	8	5	9	-	-
33.	50	25	8	9	8	-	-
34.	26	9	5	8	4	-	-
35.	47	12	2	8	25	-	-
36.	25	-	-	-	-	10	15
37.	37	12	8	15	2	-	-
38.	34	4	5	16	9	-	-
39.	34	16	9	5	4	-	-
40.	26	8	5	10	3	-	-
41.	33	12	5	12	4	-	-
42.	37	20	8	3	6	-	-
43.	31	8	4	10	9	-	-
44.	22	-	-	-	-	10	12
45.	53	20	20	4	9	-	-
46.	29	12	6	10	1	-	-
47.	21	-	-	-	-	15	6
48.	22	-	-	-	-	10	12
\bar{x}		9,0	6,0	7,0	6,0	2,0	2,0

Source: Own study based on research results.

Based on the information contained in table 7, it can be seen that external customers rated the economic and technical values relatively low. On the other hand, internal customers rated values based on economic mechanisms as low. The calculated arithmetic mean made it possible to illustrate effective leadership in favorable and unfavorable conditions in the model approach (Figure 1).



Note. - model - favorable conditions; - model - unfavorable conditions.

Figure 1. Model of effective business leadership in favorable and unfavorable conditions.

Source: Own study based on research results.

Then, using the Spearman's rank correlation coefficient, the strength and direction of the relationship between the value index achieved under favorable and unfavorable conditions was determined (Ręklewski, 2020). Auxiliary calculations are presented in table 8. Note that the literature indicates that Spearman's rank correlation coefficient is used when the number of observations is $n < 30$ (Ręklewski, 2020). However, there are studies that do not mention this recommendation. For example (Kurkiewicz, Stonawski).

$$r_s = 1 - 6\sum_{i=1}^n d_i^2 / n(n^2 - 1) \quad (2)$$

where:

d_i - difference between trait ranks X and Y i.e. $d_i = x_i - y_i$,

n - number of pairs of features X and Y (Ręklewski, 2020).

$r_s = 1 - 0.002 = 0,98 \Rightarrow 0,8 < |r_s| \leq 1,0$ – very strong.

Therefore, there is a very strong and positive correlation between the value for the customer indicator in favorable and unfavorable conditions ($r_s = 0,98$). This means that an increase in the value for the customer ratio in favorable conditions results in an increase (maintaining) of this ratio in unfavorable conditions (Ręklewski, 2020).

Research limitation is research subjectively assessed by the client.

Table 8.
Auxiliary calculations

Auxiliary calculations					
Value ratio - favorable conditions x_i	value ratio - unfavorable conditions y_i	ranks x_i	ranks y_i	$d_i = x_i - y_i$	d_i^2
14	14	1	1	0	0
27	27	2	2	0	0
44	44	3	3	0	0
11	8	4	4	0	0
29	29	6	6	0	0
33	33	6	6	0	0
19	15	6	6	0	0
32	27	7	7	0	0
39	39	8	8	0	0
29	29	9	9	0	0
40	40	11	11	0	0
23	23	11	11	0	0
43	43	11	11	0	0
42	42	12,5	12,5	0	0
43	43	12,5	12,5	0	0
35	25	14	14	0	0
43	43	14	14	0	0
37	37	14	14	0	0
11	11	15	15	0	0
36	36	16,5	16	0,5	0,25
39	39	16,5	18	-1,5	2,25
34	34	18,5	18	0,5	0,25
29	29	18,5	18	0,5	0,25
35	35	18,5	19,5	-1	1
29	29	18,5	19,5	-1	1
39	39	20,0	20	0	0
26	26	20,0	23	-3	9
27	26	20,0	23	-3	9
41	41	21,0	23	-2	4
38	38	22,0	23	-1	1
38	38	24,5	23	1,5	2,25
23	23	24,5	24,5	0	0
50	50	24,5	24,5	0	0
26	26	24,5	26,5	-2	4
47	47	25,5	26,5	-1	1
25	25	25,5	26,5	-1	1
37	37	26,5	26,5	0	0
34	34	26,5	27,5	-1	1
34	34	27,0	27,5	0	0
34	26	28,0	28,5	-0,5	0,25
33	33	29,5	28,5	1	1
37	37	29,5	29,5	0	0
31	31	30,5	29,5	1	1
22	22	30,5	30	0,5	0,25
53	53	31,0	31	0	0
33	29	32,0	32	0	0
24	21	33,5	33	0,5	0,25
22	22	33,5	34	-0,5	0,25
Σ					40,25

Source: Own study based on research results.

3. Discussion

As Gayle C. Avery notes, although interest in leadership has been around for millennia, it is both the most widely studied and least understood topic (Avery, 2009). According to Warren, "Today we know for sure that an increasingly insecure, stable and predictable world makes the need for leadership in every organization, in every institution stronger than ever" (Warren, 2003). The article identified effective leadership from the perspective of external and internal clients in favorable and unfavorable conditions in empirical terms. Empirical research has proven that hypotheses number 1, 3, 5 were confirmed, hypotheses number 2, 4, 6, 7 were not confirmed. In general, customers rated the value of leadership low in both favorable and unfavorable conditions. This is a signpost for increasing activity for the growth of value for the customer.

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