

Changes and Learning in Estonian Organizations

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Abstract

The author conducted research in selected Estonian companies to discover how employee attitudes might be influencing organizational learning in Estonian organizations during the process of economic transition.

Individual activity among employees could be predicted according to their level of satisfaction with the leadership, information and the job itself. The general perception of the usefulness of change among employees can also indicate how active a role they might assume.

Their willingness to collaborate could be predicted according to employee job satisfaction and satisfaction with the leadership. Perceptions of the usefulness of *change* and *information* are not such good indicators of an employee's willingness to collaborate. To conclude, in economies in transition, employee satisfaction indicates organizational learning better than understanding the need for change.

Keywords: Organizational change, Organizational learning, Job satisfaction.

JEL classifications: M1, M14, M12, D23.

Introduction

Estonian companies have been in a continuous process of change since the end of 1980's. Despite that still a lot has to be done in order to achieve a welfare level comparable to the developed countries of the European Union.

Changes in organizations require that their members learn new skills and attitudes. In a rapidly changing environment the development of individuals isn't enough to establish a durable competitive advantage: this development should be institutionalized in the organization, leading to organizational learning. The aim of this study is to discover how employee's attitudes can influence organizational learning in Estonian organizations during the process of economic transition. The author conducted research in more than 100 Estonian companies in different industries from retail to telecommunications.

In this paper a brief overview concerning organizational change, employee's attitudes and organizational learning will be followed by analyses of the results of empirical research in Estonian organizations. The types of organizational change in Estonian companies are analyzed in connection with indicators of organizational learning. Connections between different facets of employee satisfaction and organizational learning in an economy in transition are drawn out in different demographic groups.

Theoretical background

Organizational changes

The author found the typology of Ackerman (1984) the most suitable to describe the changes that had taken place in Estonian companies during last decades. Ackerman divided organisational changes into three groups: developmental, transitional and transformational changes. Transformational change is the deepest by scope and distinguishes from the other types of changes by its attention to the people of the organization: the majority of individuals in an organization must change their behaviour and thinking.

Model created by Burke and Litwin (1992) helps to make distinction between transformational and transactional factors. Transformational factors deal with areas that require new employee behavior as consequences of external and internal environmental pressures. These are lead-

ership, culture, mission and strategy. Transactional factors deal with psychological and organizational variables that predict and control the motivational and performance consequences of the work groups climate. These are management practices, structure, systems, task requirements, and individual skills and indicate transactional change.

Employee attitudes in organisational change process

The success of organisational change and development efforts is positively correlated with the extent to which these efforts activate an individual's internal resources (Jawahar et al., 1992). Usually people have more skills and abilities than organisations are using. If organisations want more from their people, they have to give more of what it is that employees value.

Attitudes are an important determinant of human behaviour in any situation. According to Cooper and Croyle (1984) a person's attitudes influence that person to act in a certain way instead of another.

One of most often researched attitudes is job satisfaction. Job satisfaction is an attitudinal variable that can be a diagnostic indicator for the degree to which people like their job (Spector, 1997). Job satisfaction may be an indicator of whether individuals will be affectively connected to an institution, will merely comply with directives, or will quit (Randall et al., 1990).

Job satisfaction can be considered as a combination of attitudes about various aspects or facets of the job, which are parts of the overall job satisfaction construct. Research done in New Brunswick indicated, that most important factor for teachers satisfaction was administrative control: teachers with more positive perception of their relationship with school administration reported higher satisfaction with their professional role (Xin Ma and MacMillan, 1999). Another research suggests that newcomer satisfaction and commitment are related to support and information provided by employers (Holton and Russell, 1999). Also positive correlation between job satisfaction and supportive climate is found (Hershberger et al., 1994).

Satisfaction is considered as a mediator of individual reactions to workplace pressures and demands and satisfaction is positively correlated with organization attachment (Holton and Russell, 1999). Job satisfaction is more narrow term than organizational commitment, which shows employees willingness to exert considerable effort to serve the organization (Porter et al., 1974) and makes it especially important during major changes in organizations. McNeese-Smith's and Nazarey's (2001) recent study shows job satisfaction as contributor to organizational commitment.

As changes tend to cause stress and the relationship between job stress and job satisfaction is negative and reciprocal (Judge et al., 1994), it makes feeling satisfaction especially important during organizational change.

At the same time, satisfaction may have negative consequences for learning in an organization: it may discourage the development of interest and the active search for new information (Scherer and Tran, 2001).

Organizational Learning and Learning Organization

According to Senge (1997) learning organizations are organizations where people continually expand their capacity to create the results they truly desire, where new expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together. It is common to many theorists that a learning organization is created, when the results of learning are institutionalised. It means that the knowledge will remain with the organization even after the departure of those who brought this knowledge in.

Despite the lack of commonly accepted definition, there is a growing consensus among researchers and practitioners about the specific features of a learning organization. Most of the authors have mentioned information sharing, storage and transformation. Environment scanning, experimentation and system problem solving are the most relevant characteristics of learning organizations. In addition also empowerment, participation, strong culture and team learning are mentioned by different authors.

Organizational learning takes place through the medium of individuals and their interactions, which together constitute a different whole. The processes and outcomes of individual learning are prerequisites for organizational learning and form an important basis for it. Organizational

learning is both quantitatively and qualitatively distinct from the sum of the learning process of individuals.

Huber (1991) has defined organizational learning as a processing information to increase the range of potential behaviour.

Connection between organisational change and learning

Argyris and Schön (1978) distinguish between single-loop and double-loop learning. If single-loop learning means only correcting the behaviour, without altering the nature of the activities, then double-loop learning tests the assumptions and changes the governing values. The third level, deutero-learning involves learning how to learn and is directed at the learning process itself. It helps organizations to improve the performance of single-loop and double-loop learning (Cumings and Worley, 1997).

The ability to connect the types of learning, like single- and double-loop organizational learning, with the types of changes, reflects the ability to create developmental and transitional changes. Transformational changes call for a paradigm shift in thinking about products or services and require the highest type of learning – deutero-learning.

To summarise, theorists agree that before people and organizations can improve, they first must learn and for that matter transformational changes in Estonian companies require considerable innovation and learning.

In order to build up empirical research in Estonian companies, authors looked for cumulative model connecting learning and change processes and supported with measure. Such model was developed by Lähteenmäki, Mattila, and Toivonen (1999) derived from different theories and from measures used in previous studies. Their model (later Finnish model) brings together the idea of different learning levels and the step-by-step change process. Steps forming the learning cycle are: (1) building the ability to adapt to the new culture and to learn from it creates the ability to learn; (2) collaborative setting of missions and strategies helps to make the personnel to commit to the mission, and (3) making future together brings to implemented changes (Lähteenmäki et al., 1999: 34).

Lähteenmäki and colleagues developed a questionnaire of 110 items in order to measure the organizational learning. By using factor analysis and reliability tests 21 indicators of learning were received.

The shortcoming of this measure is the lack of empirical support to sequence and connections of steps in change process. Although their 21 indicators are gotten using factor analysis and reliability tests, statistical analysis is not used in dividing these indicators into three groups representing steps in their model.

To summarise this brief theoretical overview, a model about the connections between organisational learning and employee attitudes during the process of organisational change has been developed as a theoretical and conceptual frame for study (Figure 1).

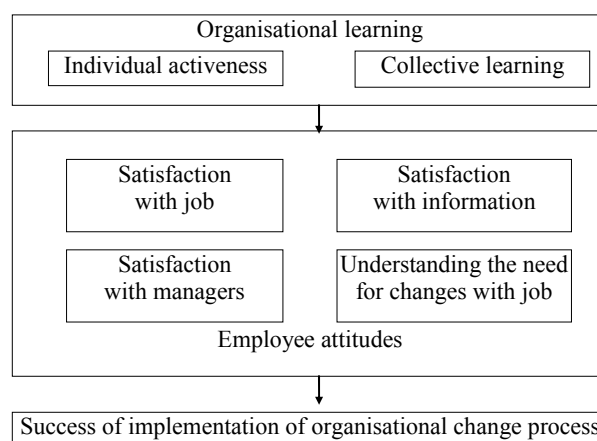


Fig. 1. Connections between organisational learning and employee attitudes in organisational change process

The empirical study of attitudes and organisational learning

The author conducted research in selected Estonian companies to discover how employee attitudes might be influencing organizational learning in Estonian organizations during the process of economic transition. In order to assess employee attitudes a questionnaire was developed and more than 2000 employees were tested in 61 companies. The author also conducted interviews about organizational change and learning with managers of 137 Estonian companies. A measure for indicating organizational learning was included into these interviews. Finally, two measures were used together in order to ascertain any connection between employee attitudes and organizational learning.

The sample

The sample group, consisting of more than 2000 respondents from 61 companies, from which a measure for attitudes was developed, was from a wide range of industries, starting from retail and ending with banking and telecommunications. Characteristics of the sample according to position and demographic data can be seen in Tables 2 to 7.

Data about companies, where interviews were conducted indicate, that 13% from 137 organizations represented public sector. Selected private companies were from various industries: trade (34% of whole sample), production (20%), consulting and training (15%), entertainment (10%), banks (5%) and telecommunication (2%).

Last survey was run in one transportation company and in 5 hospitals.

Methodology

Tool for Measuring Employee Attitudes in the Process of Organisational Change

The questionnaire was designed from questions about satisfaction with leadership, with job itself and with previous changes. Also questions about employee involvement were included (Alas, Vadi, 2004).

The entire questionnaire contains 27 items. Likert scale was used: respondents could show their attitudes by choosing one of the answers that range from "1" (strongly disagree) to "5" (strongly agree).

By using SPSS, an Explorative Component Analysis was done and four indexes were received. Three of these were connected with satisfaction: satisfaction with job, leadership and informing. The fourth was about evaluation how useful the changes would be for company. Scales were made up of statements with factor load per factor above 0.30 and the same load per another below 0.30. Scales describe together 63,2%. The internal consistency, or Cronbach's Alpha coefficient, is between .74 and .84 for all scales.

Tool for measuring organizational learning

To evaluate organizations' learning abilities indicators from measure developed by Lähteenmäki, Mattila, and Toivonen (1999) were used. In the current research the questionnaire of 110 items was not used, because along with questions about organisational changes, it could take too much managers time and make them reluctant to participate in this survey. The authors let respondents evaluate these indicators on a 10 point scale. We grouped these indicators by using SPSS program (Alas, Sharifi, 2002).

To find statistically significant differences, the ANOVA test was used. Correlation analysis, cluster analysis and regression analysis were used in order to find statistically relevant connections.

Results

Types of changes

The analysis of types of changes taken place in Estonian companies is based on Burke-Litwin's model of organizational performance and change (Burke and Litwin, 1992). The results indicate, that radical changes, which changed the system itself had taken place in 90% of the companies studied, where at least one of transformational factors had been changed.

We should also consider the fact that Estonian companies are relatively young. The companies which were established before 90's had exceptionally implemented more changes than those with a shorter period of existence.

Process of change

The results indicate, that the main attention of Estonian managers was on initiating changes and much less attention was paid to assessing the process of change and making modifications and consolidating improvements. No-one mentioned identifying resistance forces. At the same time resistance to change appeared on all the levels of the organisation. According to this survey resistance to change mostly came from inertia in the thinking of employees. 36% of respondents mentioned this as an obstacle. 23% found that fear of the new and unknown situation caused resistance.

Organizational learning

The results of the research indicated which activities and features the managers most often related to a learning organisation. These were: environment scanning – in 23% of answers and openness – in 22% of cases. Self-development for all the members of the organisation was mentioned by 20% of respondents, creating learning climate and learning from both past experience and best practices – by 19% of managers.

The managers were also asked to evaluate the indicators characterising organizational learning, according to the Finnish model, on a 10 point scale and success of the implemented changes in their companies on a 5 point scale. The values of indicators and correlations are shown in Table 1.

Table 1

Indicators of organisational learning in Estonian organisations

Cluster and indicator	Mean	Std. Dev.	Correlation with evaluation of success of changes
The cluster of individual activeness:	6,25	1,42	.239**
The awareness of business objectives	6,81	1,93	.120
Commitment to objectives	6,64	1,76	.097
The acceptance of a new operational culture	6,09	1,75	.310**
Commitment to the change process	6,47	1,79	.166
Willingness to make initiatives	5,94	2,01	.225*
Encouraging activeness at work	6,03	1,68	.284**
An open-minded and positive attitude towards risk-taking	6,22	2,00	.318**
Active participation in decision making	5,81	2,20	.214*
The cluster of building collaboration:	6,94	1,26	.197*
A collaborative ability	7,11	1,57	.161
The ability to use teamwork	6,73	1,69	.272**
Fluent work processes	6,83	1,61	.262**
Open communication	7,05	1,85	.207*
Willingness to develop oneself	7,43	1,59	.194*
Learning from mistakes	6,62	1,71	.305**
Managerial support for personal development	7,15	1,88	.226*
Emphasis on training	6,62	2,18	.131
The remaining indicators:			
Efficient strategic planning	6,23	1,99	.249**
The removal of distress amongst the personnel	5,90	1,82	.171
Open information flow	6,50	1,98	.228**
A business oriented operational culture	6,96	1,96	.303**
The acceptance of and satisfaction with lean management	6,29	2,02	.258**

** correlation is significant at the 0.01 level.

* correlations are significant at the 0.05 level.

The indicators of organizational learning were also analysed by means of a cluster analysis. The first cluster could be called the cluster of individual activeness. This cluster is connected to individual learning.

The second cluster consists of indicators connected to building collaborative abilities and organizational learning. Here the managerial support for personal development and training plays an important role.

To compare clusters gotten in this survey with the Finnish model, the first cluster in this survey mostly deals with stage 2 (the collaborative setting of missions and strategies) and the second cluster deals with stage 3 (creating future together). The current research divides the indicators of the first stage of the Finnish model between two clusters. In the first cluster individuals learn to be active. They develop an open-minded and positive attitude towards risk-taking, in order to start to unlearn an old knowledge. In the second cluster the personnel collectively learn to increase openness in communication. People are willing to develop themselves and learn from mistakes.

Such organizational variables like strategy, information systems, lean management and a business orientated operational culture were not so tightly connected with the other indicators.

The evaluation attests that both the success of changes and learning organization were positively correlated with both clusters.

Relevant positive correlation was found between managers' evaluations on the indicators of organisations' learning and on the success of changes implemented.

In conclusion, managers learned from these changes how important is the involvement of employees on every level of the organisation at the very early stages of changes. They found out the development of the learning ability of organizations is useful for more successful implementing organisational changes.

Employee attitudes during the process of organizational change

Scales

The first scale addressed satisfaction with the present workplace and present position within the organisation.

In the second scale, which addressed satisfaction with the leadership, the following issues were most important for employees: how actively does management solve company's problems, can management and their decisions be trusted, and how well can superiors organise the work of subordinates.

The third scale, which addressed whether employees were satisfied with the information they received, depended on employee involvement in the change process and how much information was given to employees about the current changes and company goals. Naturally, employees need this information before the changes are initiated, rather than after the fact.

The fourth scale included questions about the necessity of change and how useful change would be for the organization.

Differences between groups according to personal data

Statistically important differences in attitudes were found between managerial and non-managerial positions, between groups of respondents with different educational levels, between people having or not having certain professional interests, and between female and male respondents. Differences were also found between groups by age and length of company service.

Differences according to position and education were found in all four scales. By position the highest results were obtained by top managers, and the lowest by technical workers (Table 2). People with a university degree evaluated all scales higher than less educated people (Table 3). Top managers differed from every other group on all scales. Surprisingly, vice managers provided lower results than middle managers on three scales.

Table 2

Comparison of attitudes by position

Position		Satisfaction with information	Satisfaction with leadership	Job satisfaction	Usefulness of changes
Top manager	Mean	3,68	3,79	4,0397	3,88
	N	63	63	63	63
	Std. Deviation	,88	,66	,57	,68
Vice-directors	Mean	3,09	3,42	3,60	3,43
	N	107	107	107	107
	Std. Deviation	,98	,81	,71	,70
Middle- managers	Mean	3,12	3,44	3,70	3,37
	N	268	269	269	267
	Std. Deviation	,89	,73	,60	,75
Front-line managers	Mean	2,86	3,33	3,57	3,33
	N	305	305	305	305
	Std. Deviation	,85	,73	,59	,77
Technical workers	Mean	2,60	3,39	3,45	3,24
	N	1288	1290	1290	1289
	Std. Deviation	,86	,75	,70	,81
Total	Mean	2,77	3,40	3,53	3,30
	N	2031	2034	2034	2031
	Std. Deviation	,91	,75	,68	,80

Table 3

Comparison of attitudes by education

Education		Satisfaction with information	Satisfaction with leadership	Job satisfaction	Usefulness of changes
Vocational	Mean	2,61	3,38	3,47	3,26
	N	505	505	505	505
	Std. Deviation	,88	,76	,69	,79
High	Mean	2,71	3,35	3,46	3,27
	N	773	775	775	773
	Std. Deviation	,88	,73	,67	,81
University	Mean	2,93	3,46	3,63	3,36
	N	761	762	762	759
	Std. Deviation	,93	,75	,67	,78

As there was a different percentage of men and women in higher positions, it was necessary to eliminate differences arising from position and so only employees from the lowest levels were compared according to gender. The same issues arose with age and length of service in the company.

Differences according to gender were found in only one scale (Table 4). Women were more satisfied with the leadership than men ($F(1; 1287)=4.002, p=0.046$).

Table 4

Comparison of attitudes by gender

Gender		Satisfaction with information	Satisfaction with leadership	Job satisfaction	Usefulness of changes
Male	Mean	2,57	3,33	3,47	3,27
	N	466	468	468	467
	Std. Deviation	,85	,74	,68	,82
Female	Mean	2,62	3,42	3,45	3,23
	N	822	822	822	822
	Std. Deviation	,87	,75	,7114	,8113

Differences according to age were found in all four scales (Table 5). Results indicate, that older people are more satisfied with their work than their younger colleagues ($F(1; 1287)=3.024, p=0.017$). Satisfaction with the top managers of the company also increases with age ($F(1; 1287)=3.926, p=0.004$). But the results concerning change are the opposite. Younger people feel better informed ($F(1; 1285)=9.101, p=0.000$), find changes in the organisation more necessary than older people and believe that the planned reforms positively influence the performance of the organisation ($F(1; 1286)=11.027, p=0.000$).

Table 5

Comparison of attitudes by age

Age		Satisfaction with information	Satisfaction with leadership	Job satisfaction	Usefulness of changes
- 25	Mean	2,73	3,43	3,38	3,40
	N	354	354	354	354
	Std. Deviation	,87	,71	,68	,74
26-35	Mean	2,70	3,36	3,45	3,30
	N	415	417	417	416
	Std. Deviation	,85	,72	,63	,77
36-45	Mean	2,50	3,28	3,43	3,00
	N	269	269	269	269
	Std. Deviation	,85	,77	,74	,83
46-55	Mean	2,39	3,55	3,59	3,22
	N	181	181	181	181
	Std. Deviation	,82	,74	,78	,87
55 -	Mean	2,32	3,39	3,56	3,09
	N	69	69	69	69
	Std. Deviation	,83	,93	,73	,93

A comparison of the results according to length of service show differences in only two scales: job satisfaction ($F(1; 1286)=2.397, p=0.026$) and understanding the necessity for change ($F(1; 1285)=7.491, p=0.000$) (Table 6). The highest results concerning job satisfaction were in the group that had worked for a particular company for a period of 11 to 15 years. Employees, who had worked for a company for less than one year, found change most necessary.

Table 6

Comparison of attitudes by length of service

Length of service in years		Satisfaction with information	Satisfaction with leadership	Job satisfaction	Usefulness of changes
- 1	Mean	2,65	3,45	3,48	3,47
	N	303	304	304	303
	Std. Deviation	,86	,75	,70	,75
2-3	Mean	2,63	3,37	3,38	3,27
	N	392	393	393	393
	Std. Deviation	,87	,74	,67	,75
4-5	Mean	2,59	3,35	3,43	3,08
	N	253	253	253	253
	Std. Deviation	,85	,72	,71	,82
6-10	Mean	2,59	3,34	3,50	3,10
	N	177	177	177	177
	Std. Deviation	,84	,71	,67	,87
11-15	Mean	2,64	3,53	3,70	3,22
	N	49	49	49	49
	Std. Deviation	,81	,71	,69	,77
16-20	Mean	2,36	3,25	3,47	3,04
	N	44	44	44	44
	Std. Deviation	,98	,94	,83	,99
20 -	Mean	2,43	3,48	3,56	3,20
	N	69	69	69	69
	Std. Deviation	,86	,87	,76	,90

Differences arising from having professional interests were found in all four scales (Table 7). People who declared that they had certain professional interests got significantly higher results statistically, than those without.

Table 7

Comparison of attitudes by professional interests

Having Certain Professional Interests		Satisfaction with information	Satisfaction with leadership	Job satisfaction	Usefulness of changes
Yes	Mean	2,80	3,43	3,630	3,34
	N	1404	1406	1406	1401
	Std. Deviation	,93	,76	,65	,80
No	Mean	2,68	3,32	3,30	3,21
	N	632	632	632	632
	Std. Deviation	,85	,72	,69	,78

Connections between organizational learning and attitudes

In Regression analyses organizational learning was taken as a dependent variable and attitudes as an independent variable. The Regression analysis Forward Stepwise method reveals that attitudes may predict the dimension of active individual learning better than the dimension of collective learning (Table 8).

Table 8

The prediction of attitudes to organizational learning

Attitude scales	Individual activeness	Collectiveness
Satisfaction with information	$\beta = .17$	$\beta = \text{—}$
Satisfaction with leadership	$\beta = .20$	$\beta = .11$
Satisfaction with job	$\beta = .12$	$\beta = .21$
Usefulness of changes	$\beta = .17$	$\beta = \text{—}$

Note: — lack of significant β

Satisfaction with a job and the leadership may predict collective learning better than informing employees and usefulness of changes. But at the same time, all four attitudes could predict active individual learning.

Conclusions and discussion

Research indicates that 90% of Estonian companies have made transformational changes. The main focus of Estonian managers was on initiating changes and much less attention was paid to assessing the process of change and making modifications and consolidating improvements. No-one mentioned identifying resistance. At the same time resistance to change appeared on at all levels of the organisation. According to this survey resistance to change mostly came from inertia in the thinking of employees. The biggest difficulty during the implementation process according to 32% of managers was the inability of employees to unlearn what they had done before.

The results of the research indicated which activities and features managers most often related to a learning organisation. These were: environment scanning in 23% of answers and openness in 22% of cases. Self-development for all members of the organisation was mentioned by 20% of respondents, and creating a learning environment and learning from both past experience and best practices by 19% of managers.

The indicators of organisational learning were analysed by means of a cluster analysis. Two clusters were received. The first cluster is connected with the active participation of individuals in the process of organisational change and the second with the development of collaborativeness in an organisation.

A relevant positive correlation was found between the managers' evaluation of the indicators of organisational learning and the success of changes implemented.

The following conclusions about employee attitudes were made from the current research:

- Job satisfaction and evaluation of the usefulness of organizational change generally grow according to hierarchy, only vice-managers gave surprisingly low results.
- People with university education and with certain professional interests have a more positive attitude toward their job and managers, feel better informed and find changes more useful.
- Female respondents are more satisfied with their manager's work than the male respondents.
- Older people are more satisfied than younger, but younger people are more interested in change.

- According to the length of service at the same company, those who have been at the company for between 11 and 15 years showed the highest level of satisfaction. Employees find changes most necessary during their first year in the company.

Satisfaction and perceiving usefulness of changes were rising according to the position in hierarchy. But surprisingly vice-managers showed lower satisfaction with job itself, leadership and informing than middle-managers.

Most writers portray the middle managers as demotivated and dispirited from lack of influence on decisions (Dickson, 1977) and frustrated from plateaued careers (Torrington, Weightman, 1987). Dopson and Stewart (1993) conducted study in UK and found that a slimmer middle management in a time of rapid change has a more important role to play than before. They suggested that whether the middle managers see changes as positive or negative depends on how clear is the need for change for them and what has been done to help managers to think positively and adapt to change, for example communication, incentives, and examples set by top management. Career stage influences organizational commitment as well (Allen, Meyer, 1993). Career plateauing yields frustration, low work involvement and dissatisfaction (Bardwick, 1988). But plateaued managers show higher levels of satisfaction and commitment when they have more discussions with their supervisor concerning their career (Milliman, 1992, cited by Yarneall, 1998).

The more favourable attitudes from those employees with certain professional interests in the current research are similar to the findings of Witt (1993), which connected higher occupational identification with higher organizational commitment.

Results according to age support Feldman's (1988) conclusions, that workers in their mid-life transition notice a marked decrease in their job satisfaction, but after age forty-five job satisfaction increases again. Also, the low evaluation of the usefulness of change by older workers could be explained by their lower level of involvement and professional commitment, pointed out by Feldman (1988).

Individual activity among employees could be predicted according to their level of satisfaction with the leadership, information and the job itself. The general perception of the usefulness of change among employees can also indicate how active a role they might assume.

Their willingness to collaborate could be predicted according to employee job satisfaction and satisfaction with the leadership. Perceptions of the usefulness of *change* and *information* are not such good indicators of an employee's willingness to collaborate.

To conclude, in economies in transition, employee satisfaction indicates organizational learning better than understanding the need for change. These results indicate how important is to trust management and believe in their decisions under conditions of uncertainty. If people don't believe in the leading implementers of change, they are not willing to take risks and start learning new behaviour.

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