THE EXPLOITATION AND MAINTENANCE OF COMPUTER SYSTEM IN SCHOOLS AT PRIMARY AND SECONDARY LEVEL

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Abstract: *This paper presents the concept of computer system and the need for its maintenance by a specialist in the field. The theoretical part describes the concept of computer system, outlines the role of the responsible person in this activity, and within the second part (the case study) it is realized a direct, quantitative research, an inquiry applied to human resources from two of our school units in Dambovita county. It has been assumed that the inappropriate use of computers can lead to a physical wear and tear, and this will overcome the school results obtained by students and teachers.*

Key-words*: computer, system, school, maintenance.*
JEL Classification*: L86, C88.*

1. Information system

An information system is a software component that captures, sends, stores, retrieves or displays information, thus supporting people, organizations or other components.

If the information systems are not properly maintained, the quality of the services provided to customers or service users, may be considered poor. Their maintenance can be achieved by system control, reliability and participation of specialists in the field (Butler and Gray, 2006). The role of the computer system maintenance staff is to support information systems, desktops and peripherical elements. This includes installing, diagnosing, repairing, maintaining and upgrading all the equipment, while ensuring performance optimization (Ray, 2008).

There are several types of ways to maintain the information systems (Bokhari, 2010):

1. Corrective maintenance: the set of tasks is intended to correct the defects that occur in different equipment and which are communicated to the maintenance department by the users of the same equipment.

2. Preventive maintenance: Its mission is to maintain a certain level of quality, to program the interventions.

3. Predictive maintenance: continuously seeks to know and to report the state and the operational capacity of installations, knowing the values of certain variables.

4. Periodical maintenance, is the basic stage of the equipment maintenance.

2. Case study- the perception of human resources in primary and secondary school units over the information system

The main aim of the research is to provide information on how respondents perceive the information system.

Objectives:

O1: Knowing how is carried out the maintenance activity of a computer system.

O2: Identifying the number of computers in school units.

O3: Observing the period of computer systems maintenance.

Hypotheses:

H1: Many of the respondents specified the fact that there is a specialist in computer system maintenance at the level of the school unit.

H2: Most of the respondents said that keeping the information system in operation aims putting the computer in an operational state.

H3: In the opinion of a small percentage of the respondents, the development of information systems is an expensive process.

From the sample surveyed are 30 respondents, teachers in two primary and secondary school units in Dâmbovița County. The questionnaire consists of questions with one answer.

The interpretation of results

The interpretation of results takes place on the two sections of the questionnaire.

Section 1. Information system

Question 1. Please express your opinion related to the following statements:

1.1. The activity of exploiting the information system is carried out according to a manual.

Table 1. Performing the exploitation activity

Answer	Number
Totally agree	10
Agree	5
Neutral	15
Disagree	0
Totally disagree	0

The criterion score = (10*5+5*4+15*3) / 30, a score of 1.15 showing an attitude of agreement to the statement.

1.2. The maintenance of the information system begins with the installation of the program.

Table 2. Maintenance of the information system

Answer	Number
Totally agree	5
Agree	5
Neutral	20
Disagree	0
Totally disagree	0

The score of the criterion = (5*5+5*4+20*3) / 30, a score of 1.05 showing an attitude of agreement to the statement.

1.3. Maintaining in function the information system aims putting the computer into an operational state.

Table 3. Maintaining the information system in function

Answer	Number
Totally agree	20
Agree	5
Neutral	5
Disagree	0
Totally disagree	0

The criterion score = (20*5+5*4+5*3) / 30, a score of 1.35 showing an attitude of agreement to the statement.

1.4. The maintenance period of an information system is of over 5 years.

Table 4. Maintenance period

Answer	Number
Totally agree	-
Agree	5
Neutral	25
Disagree	0
Totally disagree	0

The criterion score = (0*5+5*4+25*3) / 30, a result of 0.95 showing an attitude of agreement to the statement.

1.5. Corrective maintenance consists in making the necessary repairs.

Table 5. Corrective maintenance

Answer	Number
Totally agree	10
Agree	10
Neutral	10
Disagree	0
Totally disagree	0

The criterion score = (10*5+10*4+10*3) / 30, a result of 1.20 showing an attitude of agreement to the statement.

1.6. Preventive maintenance has the role of prevention.

Table 6. Maintenance of prevention

Answer	Number
Totally agree	10
Agree	10
Neutral	10
Disagree	0
Totally disagree	0

The criterion score = (10*5+10*4+10*3) / 30, a result of 1.20showing an attitude of agreement to the statement.

1.7. Developing an information system is an expensive process

Table 7. Developing an information system

Answer	Number
Totally agree	20
Agree	10
Neutral	0
Disagree	0
Totally disagree	0

The score of the criterion = (20*5+10*4) / 30, a score of 1.40 showing an attitude of agreement to the statement.

Table 8. The score obtained by each statement

Statements	Score
1. The activity of exploiting the information system is carried out according to a manual.	1.15
2. The maintenance of the information system begins with the installation of the program.	1.05
3. Maintaining in function the information system aims putting the computer into an operational state.	1.35
4. The maintenance period of an information system is of over 5 years.	0.95
5. Corrective maintenance consists in making the necessary repairs.	1.2
6. Preventive maintenance has the role of prevention	1.2
7. Developing an information system is an expensive process.	1.4

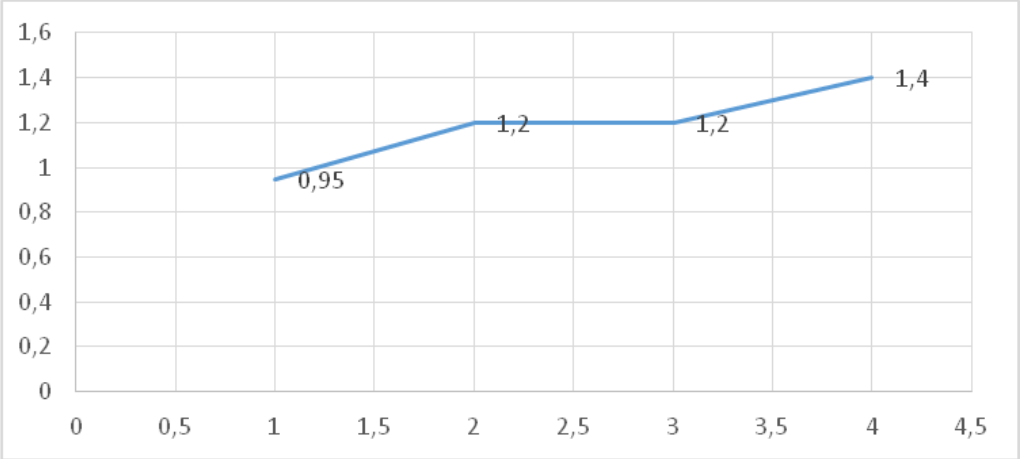

Figure 1. Graphical representation of the score

The highest score was obtained by the last statement. The overall score of the criterion is = (1.4 + 1.2 + 1.2 + 0.95 + 1.25 + 1.05 + 1.15) / 7, a score of 0.99 showing an attitude of agreement.

Question 2. The school unit where you work has a specialist in information system maintenance:

Table 9. The existence of the specialist

Answer	Percentage
Yes	*80*
No	*20*

2. Data of identification

Question 3. How many computers are there in your school unit?

Table 10. The number of computers

Answer	Percentage
Up to 50	*50*
Between 50-100	*50*
Over 100	
I don't know	*0*

Half of the respondents mentioned the fact that they have up to 50 computers, and the others said that they have between 50 and 100 computers.

Question 4. How many information labs are there in your school unit?

Table 11. The number of labs

Answer	Percentage
2	*50*
3	*50*
4	*0*
More than 4	*0*

A percentage of 50% of respondents said that there are 2 laboratories at the level of the school, and the rest stated that there are 3 laboratories.

3. Conclusions

The three objectives formulated in the methodology part of research have been achieved. The information system plays an important role in the activity of the school units, which is why the respondents appreciate the investments in its development. The first two hypotheses have been verified, and the latter one was not, because the development of information systems is perceived as a costly process.

References

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