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THE INFORMATIC APPLICATION
SMART PERSONNEL EVALUATION

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ABSTRACT

The informatics application drawn up allows the calculation of the score of the total of the individual performance of the staff to be evaluated, save the data relating to the regular evaluations, the criteria used, the weights and scores and the graph display of the evolution of the performance of an employee over a period of several years. The data base contains a series of tables well established, which allow the save all important data of this application. The design of the data base was done on the basis of the model of the entity - Relationship.In the Romanian language was adopted the term model: Entity Association. In the early stages of the design of an information system we have made an analysis of the requirements of the application, in order to ensure that those requirements allow highlighting features of data and of their properties and to determine the type of information which is to be stored in a database. Having expressed the entities and relationship of liaison between them, shall be constructed the E-R (Entity-Relationship) from which it is clear definition of the tables that should exist in the data base to serve the corresponding to the computer system in question.

KEYWORDS: *informatics, evaluation, database, performance, Smart.*

JEL CLASSIFICATION: C88

1. INTRODUCTION

Performance evaluation of the staff has a great influence on the activity of the economic and social situation and the organizational climate of each economic unit (Lefter, 2008).

The systems for performance evaluation shall constitute an intrinsic part and particularly important management system in general and of the system of the management of human resources and in particular, which includes, in a certain sense, the climate organizational levels (Burloiu, 2010).

The scientific procedure to draw up this work was based on the conviction that the success, performance and competitiveness depend to a large extent on the quality of human resources.

Performance Evaluation has a central role and constitutes an important element or a basic component of the system performance management (Constantinescu, 2007).

Periodic actions for the evaluation of quality of the professional activity make it per employee to acknowledge the importance of the quality of his performance during his term of office in the company and by the feedback I receive, to make an effort to recover the blemishes of the professional, in order to meet the requirements of the job which it occupies (Pitariu, 2000).

At present in the environment of the Romanian economy is observed to have a growing interest for the measurement of the performance of individual staff and for inward processing

continuous professional training of personnel. The practice has shown that the association of the performance criterion with the ability of the decision-making process has led to the beneficial results, measurable to the firm. The paper presents an application computing for performance evaluation of human resources and a data base of staff that will improve the management of human resources within the framework of a company, the characteristics and the interface of the application. This application uses modern technologies for programming the computer applications.The methodologies are presented within the framework of the work in the form of explanations accompanied by images of the application during operation.

The application that we developed a smart Personnel Evaluation, makes it possible to determine the total score obtained in the following the evaluation of the performance of human resources, for an employee occupying a specific post in organization.

2. THE DATA BASE OF THE APPLICATION

Describe used method and justify its choice (the description of the method informs the readers of the usefulness of the method and so the quality of the results. By this you also justify the relevance of the used method). In the early stages of the design of a computerized system i application requirements, in order to ensure that those requirements allow highlighting features of data and of their properties and to determine the type of information which is to be stored in a database. Having expressed the entities and relationship of liaison between them, shall be constructed the E-R (Entity-Relationship) from which it is clear definition of the tables that should exist in the data base to serve the corresponding to the computer system in question.
By analysing the properties of the list of entities listed above shall be determined (associations or connections, relations) absolutely necessary which needs to be made between the tables, at the stage of the definition of the tables in the database. To the practical implementation relational database on the basis of the model of data discussed above has been made on a system SQL Server. The creation and management of the data base for this application is made with the administrative utility SQL Server Management Studio. Following the creation of the tables and the relations of the connection in accordance with the model Entity-Relationship discussed above (Figure.1) has been obtained a data base relational which constitute the data carrier for the Smart Personnel evaluation.
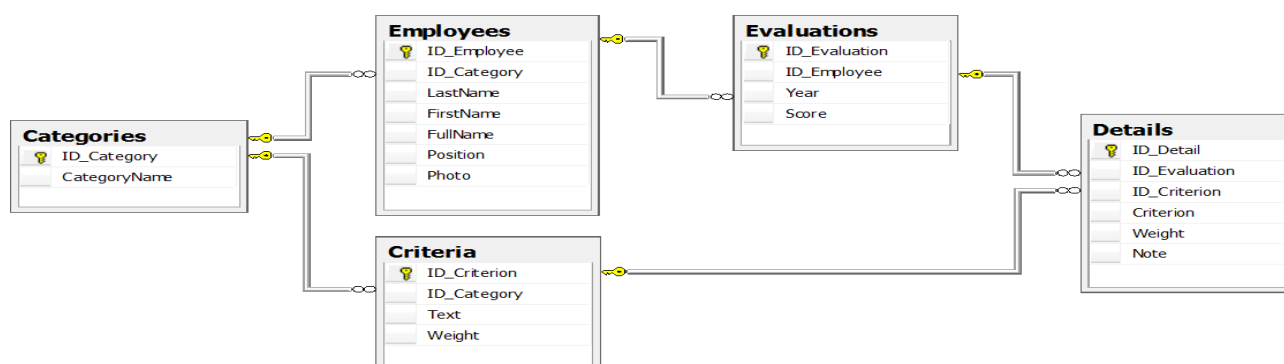

**Figure.1. The structure of the database SQL Server for the
SMART Personnel Evaluation**
Source: By authors

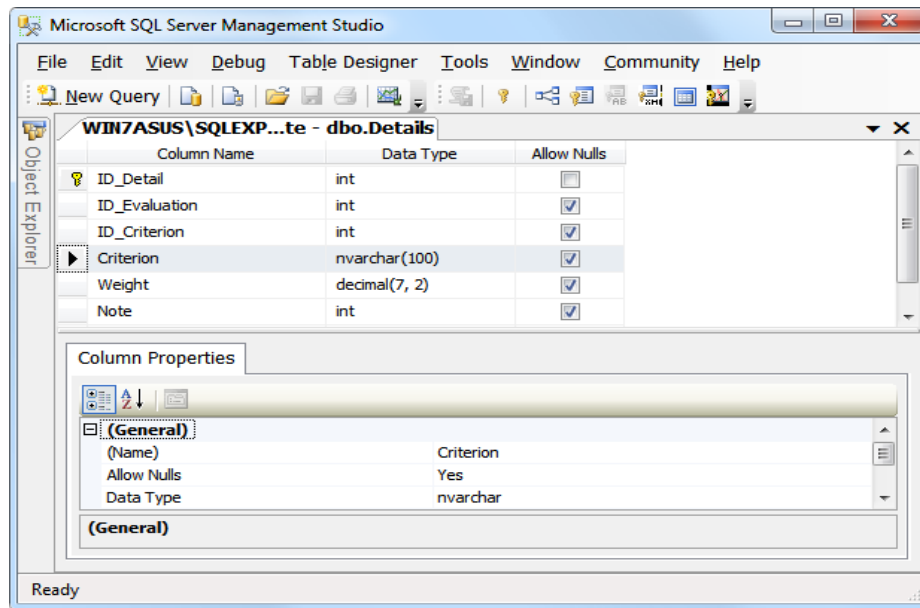In Figure 2 we presented the design of the table Details from the database.

Figure.2. The design of the table with the details of the evaluations in the SQL Server Management Studio
Source: By authors

3. THE APPLICATION SMART PERSONNEL EVALUATION

The application made runs on the Windows operating system. The user is the assessor of human resources in the company. He will use multiple application windows SMART Personnel evaluation in order for it to be able to make specific operations.

The specific objectives of this application for the management of the evaluation of the performance of the staff of a company are the following:

O.1. quick search of a staff member in the list of all employees, for a new assessment or for the analysis of the scores obtained above;

O.2. the definition of different sets of assessment criteria and their importance according to the category of staff assessed (management personnell / working personnel);

O.3. the keeping of a set of criteria laid down for all people in that category of staff, avoiding errors that may occur with rewriting criteria;

O.4. the granting of a score on each criterion for the assessment of a person in the range of values established, for example 1÷5, point;

O.5. Automatic calculation of the final score of the assessment of the periodic of a person;

O.6. save data (the final score, but also the details) in a data base for future use or to analyze the evolution of in time of the performance of the person;

O.7. graphic representation of the evolution in time of the performance of a member of staff.

The data base can be easily changed in order for you to use a table with staff already existing when installing this application. Thus, the information about the performance of the

employees will be added to the other existing data to the computer system of the company and will avoid redundancy at the writing table with the employees.

The application can be completed relatively easy with a module to export data to other systems. Modern technologies use files in XML format to export data to other systems.
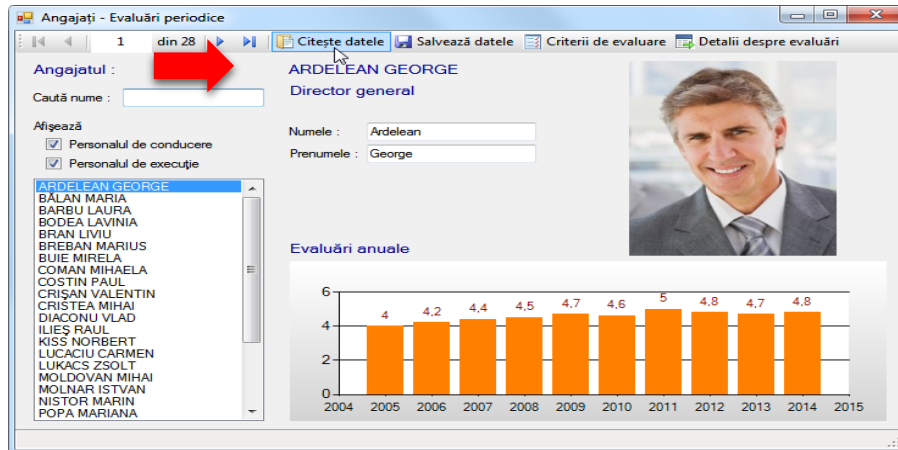

Figure.3. The main window of the application
Source: By authors

At the start of the application, the user has in front of it the main window. To read data from the data base the user must press the reads data (Fig.3).

In the list of persons on the left side to choose an employee, and automatically change all the displayed data, including the image of the employee (if there is saved to the Database).

In the main window by pressing the evaluation criteria opens a new window with a specific content.

Having entered this data on the different categories of staff, to the evaluation of an employee will be available to write only those criteria suitable for the staff member concerned, on the basis of the class of which it is part.

For the chosen personnel category, the specialist in the human resources enters the assessment criteria to be the most appropriate and their degree of importance in percent.

After the establishment of the sets of criteria and the weights module of evaluation of the performance of the staff can be done in a uniform manner, on each category. The actual assessment based on a set of criteria set out above shall be made in a window of the application.

In the window of periodic evaluations and details it is necessary to choose the desired, if it is desired to view the existing data, or enter a new year.The values on the column the final score in the left table will auto fill after introduce the scores on each criterion, in the table on the right.

On the columns with colored background may not be enter data, but only can read the values. Only on the columns with white background can be used to enter numeric data (year evaluation, the scores on each criterion for evaluation).

The introduction of a new evaluation year in the table on the left, no records with the details of that assessment, because only has been declared. Which is why in the table on the right is not initially appear nothing.
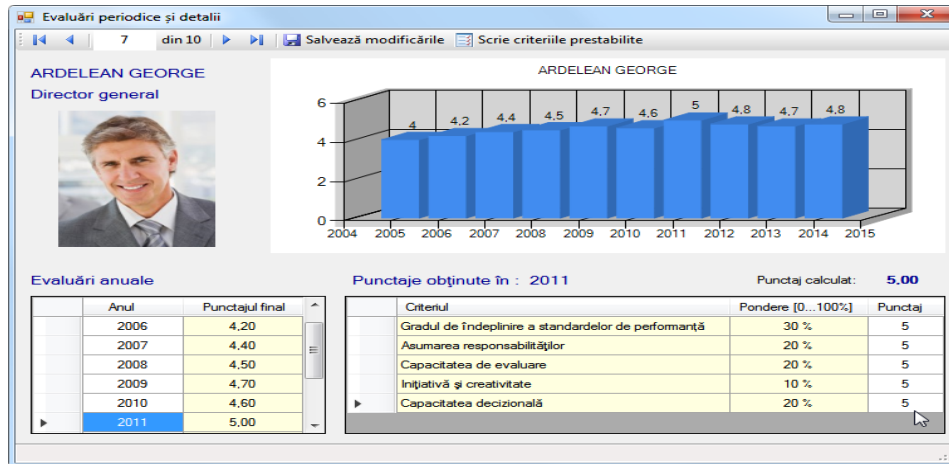
**Fig.4. The window with the details to read/write the scores
for each criterion of assessment**
Source: By authors

After entering the scores for a particular employee and the recalculation of the total score calculations of the evaluation, the user gives the save command in the data base of all the changes made on the current data by pressing the button to save changes.

The window periodic evaluations and details is very important to that:

- allows automatic writing the criteria and the weights set out above;
- allows the introduction of the scores for each criterion;
- automatically calculates the total score for periodic assessment in question;
- allows you to save the data in the database;
- for each periodic assessment saved to the database,
- shows the total scores, but also the details of assessment (scores on each criterion of evaluation);
- displays the graph evolution in time of the employee performance.

4. CONCLUSIONS

In order to be effective performance evaluation of the staff is strongly recommended to use a computer system suitable for the assessment that should include performance criteria as relevant, correlated with all the functions and responsibilities set forth in the geography.

The informatics SMART Personnel evaluation can be successfully applied in any. The interface computer system allows you to change the performance criteria on the basis of the field of activity of the station and the weights for each evaluation criteria, according to the degree of importance of them.

Data base which will store the results of the evaluations of the annual performance of employees will allow of assessors and managers to analyze the performance of his subordinates to draw up programs for the training and improvement profesionata of staff and to promote human resources with performance results and to find solutions for improving the performance of employees who are not the demands of posts which it occupies.

The informatics SMART Personnel evaluation can be completed depending on the assessment systems and professional standards of each organization.The data base of the SMART computerized personnel evaluation contains information relevant for taking subsequent decisions related to the Personnel: promotions or transfers, salaries, times and layoffs.

I think that the computerized application drawn up can influence the quality of the evaluation process of the individual performance of human resources within the company.

The computerized application has the advantage that it offers the possibility of the director of human resources to manage in the database information relating to previous evaluations employees and have them periodically assess the performance of the individual.

A significant advantage of the application is the fact that shows the situation of the present and of the past, there is the possibility of comparing the results in order to observe the evolution of the performance of the employees for a period of time.

From the data base of the assessment of the individual performance of each assessed staff will be able to take over the total scores of which will be taken into account in determining the training needs.

The informatics application Smart Personnel Evaluation drawn up shall submit to the reference in practice the managerial and can be successfully applied within the framework of any company for the evaluation of the performance of human resources in the light of the criteria for the evaluation and the degree of importance of each criterion.

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