Sustainable solutions for corporate governance

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Abstract

This article is concerated on the cost of the candidate recruited durring the recruitment and selection process coordinated by the Central Public Authority. Objectives: the main objective is to demonstrate that the recruitment and selection process carried out by an IT system is more advantageous than a process assisted or not by an independent human resources expert. The demonstration will be based on the comparative analysis of costs and the transparency of the recruitment IT process which will highlight the decentralization of the decisions from the Short List of candidates, eliminating the human factor from the recruitment and selection process.

Approach By comparing the costs generated by hiring an independent expert by the Central Public Authority or implementing a IT system to replace this independent expert, will diseminate the main objective of the research.

Results The idea of sustainable governance by digitizing the recruitment and selection process is achievable by doing a simulation for the public tutelary authorities in Romania. The classic processes assisted by the human factor compared to the innovative ones, bring to light a new approach to corporate governance that becomes sustainable by digitizing its processes, being assisted by a software.

Implications Due to the fact that I study the subject in my doctoral thesis, I have not had the honor of involving other people with expertise, so far.

and Value In the Romanian public administration, the recent progress has contributed to the improvement of Corporate Governance, which is why I proposed to bring to the fore the importance of studying this area by adopting new tools for the public sector in Romania, support mechanisms, simple, uncompromising, completing the need of transparency.

Keywords: IT systems, costs, analysis.

1. Sustainable national corporate governance

Sustainability from the point of view of Corporate Governance implies the digitization of the current recruitment and selection process, carried out above, often outsourced process, hiring an independent expert, who carries out the activity following the corporate governance's issues regarding the implementation in the public sector, as a consequence of wasting time and costs, not completing the process and thus the process remains partially decentralized, its finality being non-transparent and undemocratic, the Short List currently depends on a single decision maker.

In her paper, "e-government information systems or e-government: between the present and the future", D. Litan says that "the advantage of an e-government solution is, in addition to reducing costs, it is possible to promote two concepts simultaneously: e-government and e-democracy ", D. Litan proposes" the integration of the two types of applications, developing a single computer system, thus making the effort smaller. "

What are the risks of digitizing the recruitment and selection process?

Deloitte experts identify the potential risks of intensifying the digitization of certain processes following the Covid 19 pandemic, arguing that "The crisis has accelerated digitization, but uncertainty and lack of transparency will continue to affect the business environment; followed by the computerization of the tax administration and the intensification of controls in risk areas ". Conclusion: "The crisis caused by the COVID-19 pandemic worldwide, including in Romania, has accelerated long-standing processes that progressed slowly before the crisis, such as automation, digitization or implementation of remote work, but fiscal uncertainty and the lack of transparency persists and will continue to affect the business environment, say tax and legal experts at Deloitte Romania. At the same time, given the declining budget revenues and the authorities' intention not to increase taxes in the next period, they expect an increase in the digitalisation of the tax administration, but also, most likely, an intensification of controls in high-risk areas."

Source: www.deloitte.com/ro

What are the Specialized works in the field of Information Systems applied in the field of Human Resources in the private sector?

Here are some trends in the adoption of information systems in the private sector, from which we can extract some directions for the evolution of recruitment and selection processes today.

In the article of the online newspaper https://economie.hotnews.ro, it describes the situation of the telework phenomenon generated by the SARS Covid 19 pandemic:

"Do we walk the papers like in the last century, dreaming of efficiency or do we go full digital? There has been a lot of talk about digitization, about how some internal procedures have been hit by a deadlock due to the lack of an internal digital infrastructure in some companies. Human resource management is one of the most important processes of a company and, at the same time, one of the most resource consuming (time, staff, archiving space), the solution may be to digitize these processes. It is necessary to replace cumbersome, lengthy and inefficient processes based on printed documents (ink-on-paper) with an electronic process that facilitates the quick signing of employment documents. Source: https://economie.hotnews.ro/Narcis Anton, Smile Media, Thursday, January 28, 2021.

2. Digitized corporate governance in the Romanian public sector

Corporate Governance in the public tutelary authority is in the form of corporate governance structures that aim to function the start of the process of recruitment and selection of candidates for vacant positions of directors of the Boards of Directors of Public Enterprises in which the state is a majority or partial shareholder; monitoring the activity of the Public Enterprise; to monitor the activity carried out during the 4 years of the directors' term; centralization of the information transmitted by the Enterprise and its transmission to the Authority for Monitoring the Performance of Enterprises and Boards of Directors from the point of view of the legislation governing Romanian Corporate Governance.

These management positions represent the top management of a company and the model of the positions of administrators in the private sector is taken over, the candidates being recruited from various backgrounds and not holding the quality of civil servant, being subject to the Collective Labor Agreement and the Civil Code. Romanian law regulates the situation in which a civil servant wishes to apply for a position of director in the Board of Directors, the Administrative Code allows him to hold a maximum of three positions for a concurrent term of four years, without the existence of conflicts of interests according to the Romanian legislation in force. The rest of the seats in the Board are left for the candidates who are recruited from various backgrounds and not holding the quality of civil servant, being subject to the Collective Labor Agreement and the Civil Code. This is avaible for Public Enterprises, aswell for the private sector.

The inefficiency of the top management of a company has a direct impact on the indicator of profitability, the cash-flow, wich reflects the capability of a company to have the stability and the productive potential by creating the real value on the market.

The inefficient governance of listed companies adversely affects the economic and financial results and their possibilities for future development in terms of the following levers:

- the priority pursuit of the short-term interests of employees and managers, ie the increase of salaries and other allowances, the stability and protection of jobs;
- diminishing the rhythm of restructuring and reorganization or postponing the bankruptcy of some companies in financial difficulty;
- abusive sale of assets of companies managed or owned;
- non-realization of investments for modernization, maintenance or development of the productive potential of the enterprises;
- abusive takeover of increasing shares of capital by the majority shareholders;
- satisfying the interests of the majority shareholders through destructive methods of diminishing and transferring the wealth of the minority shareholders;

- the impossibility of using managers' remuneration programs depending on the real value created;
- excessive mobility of staff as a result of internal conflicts and lack of promotion and stimulation programs according to value criteria;
- late distribution or non-distribution of dividends to other shareholders in order to provide incentives to employees and managers at the end of the year;
- restricting the trading of securities on the capital market, which determines the increase of the volatility and the risk of the investment in the respective securities;
- maintaining a tense atmosphere as a result of the conflict between management and / or employees and minority shareholders, or the conflict between majority shareholders and minority shareholders;
- the impossibility of the active involvement of other social partners, for example of the banks, in the process of running the companies;
- reduced access to bank loans due to the faulty provision of information and their quality and the lack of sufficient guarantees;
- the impossibility of making acquisitions or takeovers by other companies in the field in order to streamline the activity of the respective companies;
- the decrease of the prestige on the market of the listed companies.

3. Implementing corporate governance in public enterprises in terms of digital recruitment and selection

An ambitious project entitled "Optimizing the interaction with the business environment and implementing advanced mechanisms for analysis and data exchange by implementing an e-government and Big Data analysis system within the Competition Council" was launched in public consultation in April 2018, a project initiated by the Romanian Government, part of Priority Axis 2 "Information and Communication Technology (ICT) for a competitive digital economy", with the main objective of "improving the effectiveness and operational efficiency of the institution using IT tools and technologies by:

- "improving internal and external transparency;
- strengthening and increasing operational efficiency through simplified and, over time, automated organizational procedures and processes;
- aligning the roles of employees and entities / units / subunits with institutional goals and objectives;
- separation of operational functions, providing clear rules for accountability."

The project comprises five main directions of action that will ensure the successful implementation of the desired IT solution:

- "Implementation of the BigData type platform and information analysis capabilities;
- Implemented a secure access component in mobility conditions, extension of the Big Data platform;

Consolidation of internal databases by:

- completing the computerization of workflows corresponding to the main activities of the Competition Council;
- extension of data exchange with other state institutions;
- extending the data / information management system and implementing a system for migrating data from physical format (paper) to digital format;
- Developed the architecture of the Integrated Information System of the Competition Council for an easy combination of multiple data sources, internal and external;
- Improving the training of the Competition Council staff in the use and administration of the implemented ICT tools."

Source: "Optimizing the interaction with the business environment and implementing advanced mechanisms for analysis and data exchange by implementing a computer system of e-government and Big Data analysis within the Competition Council" was given in public consultation in April 2018, a project initiated by the Romanian Government.

4. Study case: The digitized recruitment and selection process for future members of the boards of directors of public enterprises subordinated to the guardianship public authority by disseminating the costs generated during the selection process

During the selection process it is estimated to organize a number of 3-6 candidates / day, in a limited interval of maximum 10 days according to the Selection Plan adopted.

The competition tests are carried out, both respecting the procedures mentioned in GEO 109/2011 and GD 722/2016, as well as taking into account the relevant obligations in the field of environment, social and labor relations, in accordance with the provisions of art. 51 of Law 98/2016. Considering these, they are presented with the following stages:

1. Selection of application files

- 2. Psychometric testing
- 3. Competence-based behavioral interview
- 4. Behavioral assessments related to assessment centers

In order to meet the technical requirements required by the supervisory public authority, including:

- a team of experts and a set of specialized staff appraisal solutions
- elaboration of the competency matrix
- selection and management of application files
- psychometric assessment solutions
- conducting competency assessments through behavioral interviews
- implementation of assessment centers including various simulations (role play, presentation, case studies, etc.)
- reporting (activity report, individual psychometric testing report, evaluation center report)

The offer of an independent expert includes:

- Psychometric assessments
- Evaluation and / or Development Centers
- Top Management recruitment

An independent expert shall be contracted by public tender and then contracted according to the scheme below:

Estimated value of the purchase: 78,582 lei; for each enterprise (x 22 units under the ministry = 172,8804 lei)

The first stage is the adoption of an integrated platform, where there is a field specialized in carrying out the program for taking applications, a platform similar to the platform for submitting unemployment files https://aici.gov.ro/, where the data entry is done by applicant, completing the required fields and uploading on the platform the certificates and documents attesting to the acquired skills, including scan after the diplomas held, accompanied by a statement on their own responsibility of their authenticity.

It then moistens the selection and management of the application files by the personnel specialized in human resources from the level of the tutelary public authority.

Presentation of how a recruitment and selection software works:

elaboration of the matrix of competencies in order to establish the algorithms of the customized program;

- competency assessments by running the customized selection program;
- selection and management of application files, depending on the existence of a statement on one's own responsibility.

In order to meet the technical requirements required by the supervisory public authority, including:

implementation of an Assessment Center where psychometric assessment and proficiency testing takes place, similar to the EPSO assessment and testing center, where there is a room exclusively for secure testing, on EPSO's customized platforms, where workstations are no longer maintained for testing of this kind.

During the selection process it is estimated to organize a number of 3-6 candidates / day, in a limited interval of maximum 10 days according to the Selection Plan adopted.

The selection criteria will be established, both respecting the procedures mentioned in GEO 109/2011 and GD 722/2016, and taking into account the relevant obligations in the field of environment, social and labor relations, in accordance with the provisions of art. 51 of Law 98/2016. Considering these, they are presented with the following stages:

1. Selection of application files, following online submission;

2. Psychometric testing in the assessment center;

3. Testing specific knowledge in the assessment center;

4. Running the program with algorithms;

5. Completion of the selection following the dissemination of the results.

Cloud computing, Big Data and Big Data Analytics and C ++

Cloud computing and C ++ are closely linked. Big Data and C ++ techniques give users the ability to use common equipment to process requests and queries across multiple datasets, and provide timely result sets. Cloud computing provides the engine behind Big Data and C ++ processing using Hadoop, a class of distributed data processing platforms.

An architecture for C ++ in the Cloud, shown in Figure 4, where volumes of data from the Cloud and Web are stored in a fault-tolerant distributed database and processed using a programming model for large data sets with algorithms parallel, distributed in a cluster. The main purpose of data visualization is to present the analytical results in a visual form, through different graphs, for decision making.

The main role of the C ++ platform is to provide the Public Guardian Authority with the possibility to initiate and further carry out the process of recruitment and selection of future members of the Boards of Directors of subordinate public enterprises.

This platform is a tool to assist the investigative process, using specialized tools for retrieval, visualization, analysis, collaboration, warning and reporting through the capabilities described above.

Determining the Indicators for assessing the economic efficiency of investment projects through the BIRD or World Bank methodology according to the paper "Aspects of the Economic Efficiency of Information Systems", Lect.univ.dr. Laurențiu Cătălin Frățilă

"In order to assess the economic efficiency of investment projects through the IBRD methodology, a complex system of efficiency indicators is used, which can ensure the evaluation of the economic efficiency both at the level of economic unit and at the level of the national economy. Gross income - represents the total volume of receipts from a certain period (these are mainly the main activity of the company, but may also come from other ancillary activities, such as: receivables from the execution of receivables, sale of commercial effects In the case of financial analysis, the income also includes the credits received, because they are attracted sources and complete the funds of the economic agent. Total expenses include both investment and operating expenses. The volume of investments includes the actual expenses for the achievement of the economic objective, as well as a series of other expenses, such as: the expenses for the acquisition of some circulating means necessary for the first endowment, expenses for the preparation of the labor force, include all costs incurred in carrying out the activity, less keep the expenses with the amortization of the fixed capital.

Financial analysis of the computer system: Computer system operating costs

"The system is based on an original method of calculating costs called COST OF OPERATING HOURS PRODUCTION CENTER, which replaces the distribution of indirect costs per product by directing the section applied to direct labor.

The current method of calculating the cost of a product used by most companies in our country, based on the calculation of all indirect costs by directing the section applied to direct labor, is perpetuated since the times when internal accounting was kept manually, which did not allow a large volume of data or the use of complicated computational algorithms. Remarks:

- Calculation of indirect expenses through utilities applied to direct labor in the cost of the product. Types of indirect costs: energy agents consumed by equipment, repair costs, etc. and direct labor.
- the possibility of collecting expenses on cost centers, employees, fixed assets and their subsequent transfer to production centers to determine the inductor COST OF OPERATING HOURS PRODUCTION CENTER. "

Source: http://www.saturn-alba.ro/, workstation cost section.

"The economic efficiency of an information system is expressed by the ratio between the useful result (the effect of the information system in the management and execution process determined by reporting to a set of established indicators) and the advanced costs to achieve the desired effect. implementation and operation of the information system.

Efficiency study

- setting an economic goal and a set of implicit, clearly expressed results. This involves quantifying the effects, requiring the association of financial indicators or values of the benefits of these effects whenever possible;
- identifying a group of stakeholders and beneficiaries of the investment;
- analysis of how the proposed IT spending will support the company's strategy;
- evaluating the applicability of the technology and the operational plan;
- assessment of the risks associated with the investment; In the process of evaluating the economic efficiency, different aspects of the feasibility of an investment proposal are studied "Source: Aspects of the Economic Efficiency of the Information Systems, Lect.univ.dr. Laurențiu Cătălin Frățilă.

$$C_{th} = \sum_{h=1}^{d+D} \left(\frac{I_h + C_h}{(1+a)} \right)$$

where:

Ih - are the investment expenditures from year h;

Ch - represents the operating expenses from year h;

a - is the discount coefficient of the sums of money;

d - is the duration of the achievement of the objective;

D - is the duration of operation of the objective.

The ratio between revenues and expenditures allows a comparison between the amount of revenues made over the entire duration of the economic objective (D) and the total expenditures made both with the implementation of the new economic system and with its operation:

$$R = \frac{\sum_{h=1}^{d+D} \left(\frac{V_h}{(1+a)} \right)}{\sum_{h=1}^{d+D} \left(\frac{I_h+C_h}{(1+a)} \right)}$$

in which:

Vh - revenues realized in year h;

Ih - annual investment;

Ch - annual operating expenses;

a - the discount coefficient;

d - the duration of the achievement of the objective;

D - duration of operation of the objective.

In terms of economic efficiency, the investment project can be accepted only if R> 1, expressing a fundamental law of economic activity, which presupposes that in any activity the expenses incurred must be fully recovered and a certain profit must be made for the investor. and society. If $R \le 1$ the project is rejected.

Cash-flow is an indicator that expresses the gain or loss for each year taken into account:

$$Fh = Vh - (Ch + Ih)$$

Discounted net income (NPV) is an indicator that allows the comparison between the total volume of receipts obtained over the entire period of operation of the objective and the total costs:

$$VNA = \sum_{h=1}^{d+D} \left(\frac{V_h - (I_h + C_h)}{(1+a)^h} \right)$$

Depending on this indicator, only variants in which the discounted net income is higher than zero can be accepted in terms of efficiency, ie the company obtains a profit (V-C> 0) which can be (l). This indicator is significant in the situation of comparison between several competing projects, regarding the size of the estimated profit, remaining in the company after the investment has been made. However, being a volume indicator, which only quantifies the net effects, it cannot be considered extremely relevant to economic efficiency. Because it does not provide a comparison with the efforts made to achieve this net effect.

The internal rate of return on investment (IRR) is the discount rate that equals the discounted value of income with the cost over the entire period of operation of the objective.

For its calculation, it is necessary to choose a positive updated net income (V1) that corresponds to a minimum accepted rate (amin) and an income (V2) that corresponds to a maximum rate (amax).

$$RIR = a + (a_{max} - a_{min}) \cdot \frac{V_1}{V_1 + |V_2|}$$

Where: amin and amax are chosen in such a way that for amin to obtain a positive updated net income, and for amax a negative one.

The amine and amax values are determined by repeated tests. In order to limit as much as possible the number of attempts, first an approximate determination of the internal rate of economic return is made by relating the size of the average annual profit to the size of the investments, after which it is corrected as follows:

- if the service life is less than 5 years, it decreases by 0.20, between 5 and 10 years it decreases by 0.10, between 10 and 15 years it decreases by 0.05;
- for durations longer than 15 years, the discount coefficient corresponding to the ratio between the average annual profit and the total investment is considered.

The internal rate of return is one of the most significant indicators of the efficiency of investment projects, because it expresses the ability of the investment to provide profit throughout the operation of the objective, establishing its economic power, respectively the net profit obtained at a total effort. Synthetic indicators quantify the economic efficiency obtained by exploiting the information system, as an investment of the beneficiary economic unit.

The main synthetic indicators are:

The economic efficiency coefficient for each computer subsystem (k (i)) is calculated by the relation:

$$k(i) = \frac{E_D(i)}{C_R(i)}$$

where: ED (i) - represents the direct economic effects obtained by introducing and operating the information subsystem "i";

CR (i) - represents the expenses incurred for the design and implementation of the information subsystem "i"; The coefficient of economic efficiency at the level of the designed system "k" is determined by the relation:

$$k = \frac{E_D}{C_R} = \frac{\sum_{i=1}^{N} E_D(i)}{\sum_{i=1}^{N} C_R(i)}$$

The term of recovery of the total expenses for the realization of an informational subsystem "t (i)", expressed in years, is determined with the relation:

$$t(i) = \frac{1}{k(i)} = \frac{C_R}{E_D}$$

The term for recovering the total expenses related to the entire information system designed "t", is determined by the relation:

$$t = \frac{1}{k} = \frac{C_R}{E_D}$$

The comparative efficiency coefficient "k *" is determined by comparing the designed system with another standard computer system, with the relation:

$$k *= \frac{E_D - E_D *}{C_R - C_R *}$$

where: ED * - represents the direct effects with the realization of the standard information system;

CR \ast - represents the expenses incurred with the realization of the standard information system.

The term of recovery of the additional investment "t *" expressed in years, is determined as the difference between the investment of the designed information system and the standard one, with the relation:

$$t *= \frac{1}{k} = \frac{C_R - C_R *}{E_D - E_D *}$$

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Sensitivity analysis in evaluating economic efficiency

In the conditions of the market economy, the analysis of the efficiency of the investment projects is completed with a sensitivity analysis. This makes it possible to specify how sensitive the future investment objective will be to some changes of some factors considered risky, during its future operation. Examples of elements that can vary unpredictably over 5-10 years are:

- technical progress involving the exponential development of the information society;
- increasing competition in the field, which determines the emergence of new services and products that involve upgrading the IT system;
- depletion of initial financial and technical resources;
- moral wear and tear of equipment;
- changes in trends in product / supplier markets;
- increasing the salaries of specialized personnel.

It is important to highlight the extent to which the future system works in a stable way, even with the appearance of disturbances of the initial conditions. Sensitivity analysis involves addressing issues related to the risk and economic uncertainty specific to investment issues.

During the implementation of the investment project, phenomena can occur that can influence the economic results, such as:

- extension of the duration of the achievement of the objective or achievement of the projected parameters;
- exceeding the volume of investments initially foreseen;
- increase in prices for equipment, consumables, but also materials, utilities (energy, rents);
- salary increases. "

The economic calculation formulas were selected from the paper specified above in order to determine the costs of an IT system, viewed from the perspective of implementation at the level of the public guardianship authority to digitize the process of recruitment and selection of candidates for vacancies on boards of public enterprises subordinate.

Source: Aspects of the Economic Efficiency of Information Systems, Lecturer Ph.D. Laurențiu Cătălin Frățilă

The calculation formulas presented above are reference formulas in calculating the costs generated by the implementation of an IT system in an organization and were taken over in order to simulate the costs generated in the case study of the implementation of the IT system at the level of Central Public Authority. the recruitment and selection process of this scientific research.

According to the author, the economic efficiency of an information system that is to be implemented at the level of a tutelary public authority aims at a certain linear path of determining the costs of this information system.

Strengths of the computer system

- saving time, money;
- certification with international recognition and legal value of the entire digital process;

- flexibility, from the applicability of the software for each company, to the maintenance of the software for 16 years, ie 4 consecutive terms for each company;
- fully complies with the GDPR Regulation;
- it is very easy to implement, only by hiring an IT team, codding specialists;
- electronic archiving, can be integrated with the help of the Cloud platform, to be adopted by the government;
- both the management and the staff can view in real time, the data regarding the recruitment and selection process within the same system, eliminating data entry errors;
- generating instant reports of the situation of the recruitment and selection process, of the reserve candidates and of the data security;
- the technical solution is provided by a support team, ensuring the maintenance of the entire IT system. The support team can be hired or provided by the ministry staff.

Weaknesses of the computer system

- the permanent threat of the cyber security of the information system represents a risk with high potential;
- the risk of fraud of the support team for the maintenance of the entire IT system represents a risk with high potential;
- requires ensuring the continuous security of the hardware room of the computer system represents a residual risk;
- requires ensuring the security of the assessment center, where the workstations are located is a residual risk.

5. Conclusion

Following the dissemination of the case study, the financial analysis of the two selection and recruitment processes shows that the recruitment and selection process in the IT system is more advantageous than a process assisted or not by an independent human resources expert, the difference being no only in the fact that the discontinuity of the mandates of the top management from the Public Enterprises is eliminated, but also the costs of the public authority are substantially diminished, considering the fact that the time of a process in digital system is much faster than the one in classical conditions.

The direct costs used to simulate the case study for the IT system consist of fixed costs with employees, the necessary and effective IT space, and indirect costs are unpredictable costs such as travel or debt costs.

Once the budget allocated for the implementation of the IT system is established, a budget versus benefits analysis is generated, consisting of: efficiency that is reflected in productivity and financial efficiency that is reflected in profit and last but not least efficiency that is reflected in productivity.

The investment in this project proposed to implement an IT system that will transform the recruitment and selection process, brings long-term benefits, becoming sustainable.

This innovation in the field adds value through its objectives, the financial benefits exemplified in the case study and takes into account the fact that in the near future we will face an older population, which leads to a decrease in the workforce of recruitment experts. of human resources in general and thus, software can create long-term opportunity.

Comparing the costs generated by the hiring of an independent expert by the Central Public Authority and the implementation of a computer system to replace this independent expert, we arrive at very good results, in the sense that a single simulation of the costs generated by the independent expert. A single simulation means a single contract for a public enterprise according to the tariff practiced on average by independent experts on the Human Resources market.

Consequences of the digitization of the recruitment and selection process at the Board of Directors:

> The paper analyzes the issue of management, governance and data analysis of the administrative system in terms of its relevance for the solutions it offers to increase competitiveness in smart specialization sectors at the national level.

> Results: The idea of sustainable governance by digitizing the recruitment and selection process is achievable by doing a simulation at the Romanian tutelary public authorities.

> Given these objectives, it practically substantiates the conclusions that can be drawn from the realization of a comparative situation of the classical processes assisted by the human factor and the innovative ones, which become sustainable through their digitization, being assisted by a software.

> Given the two cases of recruitment and selection analyzed, I conclude that an IT system to ensure the recruitment and selection process is more advantageous from the three essential points of view of an acquisition:

- it is more efficient, through the transparency and decentralization of the process;
- it is faster in terms of applicability and process;
- it is cheaper compared to the constant acquisition of an independent human resources expert.

The three Case Studies presented in the paper come to strengthen the idea of implementing a customized information system according to the specific requirements of the public guardianship authority.

The customized software must include specific software that is either developed in-house within an organization.

In most cases, the customized software is paid for in full by the organization (Tutelar Public Authority), which becomes the default owner of the software, and owns all rights to its subsequent use. Source: Romania's National Interoperability Framework.

Thus, we conclude that a software belongs entirely to the guardianship authority, being necessary whenever a recruitment and selection process is initiated.

The result of this scientific research answers the research questions and fulfills the proposed research objectives in full.

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