

Risk Management in Human Resource Management

Vyacheslav M. Kraev, Alexey I. Tikhonov

*Moscow Aviation Institute (National Research University), 4, Volokolamskoe shosse, A-80,
Postal service-3, 125993, Moscow, Russia*

Abstract – Human resource risk is the probability of unfavorable events' and threats' realization occurrences coming from people as a result of decision making. It plays an increasing role in the companies' activities. Threats of this type are of complex nature and are also called anthropogenic. Risk realization leads to the loss of important confidential information, commercial losses, profits' losses, and a decline in the company's goodwill. Adequate reduction of personnel risks will improve the personnel quality and, consequently, reduce the damage from the risk threats' realization.

Keywords – Human resource risk, personnel security, personnel risk management.

1. Introduction

Personnel security and personnel risk management play an increasing role in the business process of enterprises [1].

There is no doubt that we are going to face rapid increase in threats and dangers. The topic of risk management has become relevant around the last 40-50 years in developed countries.

According to the author [7], personnel risk management is a process that begins at the stage of developing a human resources management strategy,

encompassing the entire human resources management system of an organization, and includes defining, assessing and controlling all internal and external personnel risk factors, the change of which can negatively influence on the organization's activities and its employees.

Other modern types of personnel-related risks are the probability of a company's material assets stealing and the risk of losing company funds as a result of unjustified investment in staff training, which has left the company afterwards. Stealing the company's property arises quite often in the modern Russian business environment and has the following sources of origin:

- deformed social attitudes of employees;
- low level of organization control and accounting in the enterprise;
- double standards of tax and legal business model that management has to implement in order to keep business in crisis [13].

2. Methodology

According to the basics of risk management, risk management in HR management and security ought to ensure:

- compliance with the concept of acceptable risk, which assumes not only the absolute elimination of risks, but the minimization of threats to values below the critical ones;
- a purposeful sequence for realization through actions' is: identification, assessment, development and implementation of a risk minimization program, application of compensatory measures for leveling the damage caused by embodied threats;
- regulatory interaction of risk management's subjects and objects. The state's legislative and executive powers, the company's general management and HR service are the subjects. Management is aimed at a specific object: factors and sources of the company's personnel risks;
- implementation of special principles, functions, assessment and management methods, that allows to achieve the best effect in conditions of uncertainty and unpredictability of human behavior [13].

DOI: 10.18421/TEM84-11

<https://dx.doi.org/10.18421/TEM84-11>

Corresponding author: Vyacheslav M. Kraev,
Moscow Aviation Institute, Moscow, Russia


Email: kraev_vm@mail.ru

Received: 09 July 2019.

Revised: 26 October 2019.

Accepted: 31 October 2019.

Published: 30 November 2019.

 © 2019 Vyacheslav M. Kraev, Alexey I. Tikhonov; published by UIKTEN. This work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivs 3.0 License.

The article is published with Open Access at www.temjournal.com

The recruitment process is a separate process, which has specific risks accordingly:

- wrong candidates source selection (from which field, positions);
- incorrect job description;
- inadequate to the application form searching for candidates' channels;
- inaccurate assessment of the candidate (professional competence, incompatibility with the already established team, candidate's low motivation for a job in this company and in general, discrepancy between the company's goals and the personal goals of the candidate, whether the candidate has mental disabilities, alcohol, drug or gaming addiction, incorrect assessment the candidate's ability to harm the company, etc.);
- the risk of forming a negative employer branding image due to incorrect announcement about open job opportunities, long time "hanging" open vacancies, posts of former employees on sites of "black lists of employers", illiteracy, incompetence and rudeness of recruiters, lack of feedback or a formal response to candidates from HR specialists).

The most frequent risks in the company's HR management system are:

1. Risks at the employee's beginning working stage in the company. This type of risk arises when hiring employees. In many companies during the screening procedure there is no stage of checking a candidate for compliance along with social norms, corporate standards and psychological stability, which means that there is a risk of negative, often unintentional, employee's actions in relation to the company.
2. Risks when working with employees. A special case is when an organization becomes a "talent foundry" and trains skilled specialists for their own competitors. The reason for this may be not enough well-developed systems of adaptation and motivation of staff in current activities, training and career planning of employees.
3. Risks while working with staff at the stage of employee's dismissal. The dismissal procedure of employees is prescribed in the Labor Code of the Russian Federation, however, incompliance with formal requirements may lead to employee's claims and, as a result, to reputational and financial losses. According to legal practice, it is better not to bring labor disputes to court, because the financial costs will have to be covered by the employer [1].

The author [15] among the factors of personnel risks attributes to the "diffuse values of particular workers" in a separate category.

Risks in the staff screening, as personnel risks are becoming increasingly important. At the screening stage, it is necessary to identify at least the level of education, work experience, etc. The task is difficult due to the limited information at this stage. In the context of the information theory, addressed to human communications, the uncertainty in the estimates of any objects is a consequence of the information's incompleteness about these people, the poor quality of the estimated information and subjective preferences in the estimates, leading to distortion of information. Therefore, to reduce risk in personnel decisions, it is necessary to obtain complete information about applicants, improve the quality of evaluation information by eliminating the imperfections of the assessment mechanism and limiting the subjectivity in applicants' evaluations [15].

From the above suggested approach, logically follows the need to determine whether the applicant is honest and decent. It is impossible to give an answer at the stage of the applicant's documents review, and even at the interview stage, using the traditional approach. Namely, these qualities are welcomed by the employer and make it possible to significantly reduce personnel risks [14], [15].

According to the information in the social networks, it can be determined which candidate's resume is in front of us, and also check some of the CV's information for accuracy. For example, how much an active and law-abiding life does the candidate lead, what he is keen on, and whether he can combine his hobbies with the position (for example, the correspondence of personal qualities) [9], [10].

There are a lot of problems while working with employees that cannot always be solved.

But problems are not all the troubles of the HR department. There are other risks connected with a large number of factors. For example, hiring of certain workers who may not correspond to a particular position.

Risk management is a system of managing risks and financial or economic relations that arise in the process of management itself, and also includes the strategy and tactics of management actions and consequences that affect the enterprise. Thus, when implementing unfavorable events, the company receives a specialist, who does not fit the requirements while recruiting. Moreover, the risk can be associated not only with the non-performance of the functional, but also with the actual damage.

At the moment, there are three key areas of risk management development:

1. Risk and risk occurrence prevention and their impact on the structure of the organization.
2. Minimization of negative consequences for the company, which may be caused by different types of risks.
3. Study of the risk's positive aspects, such as additional income, bonuses for risk identifying and those that an organization can receive in a risk situation.

The risk management system created in the enterprise is capable of managing risks in order to achieve the goals and objectives. In such cases, the concept of a risk-based approach can be applied, which focuses on the need to identify risks when planning certain activities. This system is displayed in the probability of a negative event (risk) occurrence in the analysis and research, as well as its minimization or complete elimination [12]. The choice of specific methods by which the evaluation takes place from the analyzed information is determined by such main factors as:

- type of a business risk;
- availability of a complete research information base, specially formed to assess the level of probability of certain business risks;
- the level of specialists' qualification according to risk management; the degree of their awareness for the use of modern mathematical and statistical devices for such an assessment;
- technical and software equipment of financial managers (risk managers);
- the possibility of using modern information technologies for carrying out such a complete elimination assessment.

The main task and peculiarity in risk assessment is their grouping and the development of an integrated approach to determine the risk level that may affect the financial and economic activities of enterprises.

When forming a risk management system, it is necessary to ensure that there is no conflict of interest, i.e. so that the same employees do not determine the risk management strategy and monitor the extent to which the company's activities correspond to, and at the same time initiate the decision to take risks and manage them. In other words, it is necessary to divide duties between employees and clearly define the duties of a risk manager in order to avoid conflicts in the organization at the subordination level and in the process of risk control over the activities of certain departments. Also, the presence of a risk manager should not relieve responsibility for risk from employees of other departments, especially since

they understand the nature of these risks better than others and provide the first level of protection for the company against unreasonable actions leading to risk [1].

The algorithm for risks determining:

I. Receiving and information processing.

Information may be one of the key parties in identifying and analyzing risk. For any risk research, it is necessary to spend a lot of time for collecting and analyzing the information received, but, unfortunately, not everyone pays due attention to this aspect.

Identifying the main requirements that apply to the quality of the received information:

- exhaustiveness of the received information;
- correctness or accuracy of the information received;
- degree of objectivity of information obtained during the study;
- number of links from the source to the end user information;
- degree of information proximity to the essence;
- the information's relevance;
- the information's obtaining costs.

The probability of taking an undue risk depends on the quality and completeness and information security. If there are several options according to which the decision is being made or with equal profitability the minimum risk probability decision is taken [10]. It can be also drawn to a conclusion that with several identical options (approximately the same profit) it is needed to choose a solution that, based on the checks' results, corresponds with more reliable information.

II. Risks fixation.

To assess the company's financial and business operations, it is necessary to perform risk fixation, that will help to narrow the circle of existing risks. This principle is based on considering the most significant and most common risks. There are types of risks that are worth using in this method: property, production, financial, natural, personal, legislative, organizational, transport, marketing, regional, calculated, investment, currency, credit, political.

III. Developing the decision algorithm.

This stage exists in order to divide the decisions that are planned into more detailed and simple solutions. In another way, it may be called the composition of the solution algorithm.

IV. Qualitative risk assessment.

Identification of risks related to the proposed solution implementation; quantitative risk structure determination; the most dangerous risk areas

identification in the decision developed plan – all these risks imply a qualitative assessment.

The main purpose of this assessment stage is to identify the main types of risks that affect the enterprise's financial and economic activity. The advantage of this approach is the fact that at the initial stage of the analysis, the manager can independently, based on the data, estimate the risk degree and also refuse to implement a certain solution.

V. Quantitative risk assessment.

For the successful enterprise organization, the risks should be managed but not fight against. Risk managing these is one of the main tools that are aimed at increasing the company's management efficiency, which ought to be used to minimize the product life cycle price and avoid or, in extreme cases, mitigate potential problems that will become the key factors of the company's success.

Risk prevention situations and losses reduction contribute to the enterprise's positive development. Thus, risk management is a process as a result of which organization management is aimed at risk management. Risk management is the process when losses that a company faces during the main product manufacture and the exposure degree are identified, and the selection of the most appropriate way to manage each of the certain type of risks.

In order to minimize the risks mentioned above, innovative solutions are required to be implemented. An indicator in evaluating an applicant by HR manager is the innovations economics. So, it can be concluded that the achievement of the specified values of the personnel efficiency indicators system have to meet the target indicator of increasing the project's profitability by reducing losses caused by inefficient production behavior of staff.

Currently, the problem of employees' selection in organizations and enterprises is one of the most currently central. Therefore, this topic is increasingly considered in modern literature [2]. Recruitment is the first task of any organization, which gives the first step to the creation of an enterprise. Recruitment of new staff is a recurring action and of a very significant consequence. It is important to note that the recruitment should be made as qualitatively as possible and at minimal cost.

It is very important to determine the set: search within the organization or from external sources. The main advantages of attracting labor from outside are primarily related to the possibility of covering the additional need for labor resources, broader choices and the possibility of using another firms' experience. The disadvantages of this type are connected with higher costs (material and time) for attracting labor, a negative impact on the

psychological microclimate in the organization and staff turnover, lack of knowledge about the features of production and its organization, etc.

The recruitment criteria allow selecting objectively, since all applicants are evaluated according to the same criteria. Though the recruitment criteria, it is possible to identify both the strengths and weaknesses of applicants for the vacant position. Requirements description for a particular job opportunity is prepared by the head of the structural unit, which includes the vacant position.

The CV provides some useful information for evaluating an employee. For example, information about how often the applicant changes companies, the duration of work in each department, the nature of his career transfers, get an insight into his professional experience, level of business skills, communication skills; education data may serve as evidence of its intellectual potential. On the basis of the data collected from the CV, it is possible to formulate hypotheses about certain candidate's characteristics, assume about his professional qualities, but these assumptions should be supported by interviews and other methods.

The interview, in most cases, is the only source that presents a trustful picture of the motivational and emotional characteristics, as well as the specifics of his social behavior (tact, manners, benevolence, etc.).

Sometimes, managers, as well as heads of HR services, while seeking to make a fairly reasonable decision to hire a new employee, rely primarily on these characteristics (recommendations) from their previous job. For example, from a copy of a diploma, it can be gathered some information about what subjects candidate handed over and with what marks, but it is impossible to judge about the creative potential of the diploma holder, his value orientations, motivational orientation, etc. However, it is difficult to assess the personal qualities of a candidate only on the basis of the information contained in them, since they cannot always be objective.

Depending on the composed personnel management structure, how the goals function which are assigned to the managers, subdivisions and employees are distributed, as well as if the authorities' delegation is carried out correctly, staff and managers are aware of the trust degree to employees in corporate governance.

The quality of HR management system functioning depends, first of all, not only on the employees' qualification level, but also on the particular specialist's load. It is the performance level. According to the specialists' recommendations, such load should not exceed 100–120 applicants per month per HR employee.

Effective screening leads to the creation of a positive HR brand image and further attraction of experienced and skilled candidates for the vacant position [4].

For some job opportunities, the screening process is much more complicated than for others, and preparation must be done very carefully. The more responsible the work is, the greater the value of the task for the enterprise, and the more difficult and costlier is the recruitment process for this position. The screening procedure usually consists of several stages, each subsequent cost more than the previous one. At each stage, part of the applicants for the vacancy should [14].

The approach to the personnel screening assessment stages is compared with the set of business objectives. The information obtained during the steps should help minimize risks when making decisions.

Thus, it is necessary to find the optimal balance between the cost of risk assessment and income after completing the task [6].

The HR procedures of many enterprises include testing and questioning. The final results of testing and questioning are considered when making a final decision on whether or not an employee will be admitted, but at the same time, these procedures are not key when planning.

Testing while the personnel screening is now becoming increasingly popular in the organization. These tests used in recruitment are aimed at obtaining a psychological portrait of the applicant, assessing his professional knowledge and skills, as well as decision-making abilities in stressful situations. They allow making candidates' comparing table among all applicants, as well as with the preferred candidate. There are two reasons for tests usage. First of all, when the applicants's number for a vacant position in an enterprise increases, HR specialists seek to use every opportunity to determine and identify the worthiest candidate of all [7]. The more applicants responded to the vacant position, the more difficult it is to decide on the choice of a candidate.

It is not possible to form the right portrait about the applicant according to education only, and professional experience as well. Other advantages of the candidate are also considered, among which are personal qualities, intelligence, decision-making flexibility and ability to adapt in the workplace can be distinguished as well. Testing is considered as a method that is able to provide the employer all the above positive applicant's qualities.

Another stage in checking the applicant is an interview. The main goal for the employer during the interview is to get acquainted with a potential employee of the company as deep as possible,

thereby minimizing the risks from hiring low-skilled staff that may be related to hiring mistakes [3]. The quality of the interview gives the maximum possible information about the real possibilities of the candidate, but also increases the motivation of the candidate to accept the offer from this particular company.

When selecting personnel, it is necessary to consider, as the main factor, the overall strategy for the effective development of the enterprise, as well as the information based on the objectives of the enterprise for the near future.

As we mentioned above, each subsequent stage in the personnel screening is more expensive. On this basis, it is necessary to develop a set of automatic or semi-automatic, i.e. non-costly, filters that allow to "screen out" unacceptable applicants at the early stages of the screening process [5]. When talking about unacceptable applicants, it means referring to a greater extent – not professional level of training, but rather the potential risk of adverse events that may occur in the future. It is about the so-called "toxic" employees.

Let us consider in more detail what "toxic" employees are in a few examples. In 2018, a 31-year-old employee from one of the educational institutions in Moscow [1], driving a BMW car, knocked down several people at a pedestrian crossing. As a result of an accident 2 people died. The university's PR department claimed that the accident's author was an employee from the university's regional development department and the person behaved adequately at work. 49 traffic citations in the six months that he drives a car show of the level of his law-abiding. Later in the blood of the accident's author cannabinoids were detected, which means, that before he got behind the wheel, he used marijuana or hashish. Based on this, the investigator re-qualified the crime as "Traffic violation and vehicle operation, committed by a person in a state of intoxication, resulting negligent homicide" [13]. There is a realization of personnel risk, which cost the well-known university's trust and reputation level reduction, accordingly, financial losses as well.

How to recognize at the stage of personnel screening in the average young man or woman potentially dangerous one for the company employee? Moreover, according to their personal data, such a person is no different from his colleagues.

To make such decisions, it is necessary to analyze the applicant, not only by personal data. Much more information can be obtained from social networks, because most young people actively use them. According to this information, it is possible to plan the possibility or impossibility to considering the applicant at the next stages of screening. Social

networks now represent a large data base. The number of accounts in VKontakte is about 26 million, of which 58% are women, and 42% are men. Main users – 37% – under the age of 18 years. The second group is 18 – 24 years old – 25%. Among more than 7 million Instagram users, 77% are women. Facebook has about 2 million users. FB users are older than VK users. In the age group of 25 – 34 about 37% of users. Over 45 years old – 24% of users [11]. The authors [13] believe that according to outward appearances, behavior, processes and products of another person's activities, one can make a conclusion about his personal qualities, intentions, abilities, emotional state, social status, cultural level, etc. In this respect, an accessible list of the "friends" of a particular applicant has a certain advantage: the presence of a common acquaintance among them is desirable, the reputation of this acquaintance serves as a kind of confirmation of the correctness of the interpersonal perception actions performed. However, there is never any certainty that a person who is not familiar (in direct communication) is someone who claims to be: a presentation may be deliberately erroneous or provocative, photographic materials may not belong to the author of the presentation, biographical data with the user's real biography or only partially coincide [8]. Each social network member may have many accounts registered for different purposes, or differing chronologically (for example, an abandoned and not closed account if there is a new and actively used one) or meaningfully, that is, in essence, assigning different identities to the presenting participant. According to the All-Russian Public Opinion Research Center, at least half of Russian respondents distort information about themselves in social networks: from age, family status, appearance and income or gender, political and religious views, musical preferences, etc.

Thus, on the one hand social networks, although represent a large amount of information, should be carefully considered, taking into account the above mentioned content.

3. Conclusion

Personnel screening is an important stage of HR processes. A significant disadvantage is the limited information on the applicant, on the basis of which the recruitment decision is made. To improve the screening stage, it is proposed to use information from social networks in which the applicant is a member. Adequate approach in the methodology formation and information analysis will significantly increase the decision-making objectivity at the screening stage and reduce costs when considering the applicant at subsequent stages.

References

- [1]. Arkhipov, A.A., & Abramova, O.F. (2018). Modern statistics on the use of social networks of different segments of the population. *Materials of X "International Student Forum - 2018"*. 6.
- [2]. Erven, B. L. (2009). The role of human resource management in risk management. *Department of Agricultural, Environmental and Development Economics, Ohio State University*, 6.
- [3]. Fedotova, M. A., Tikhonov, A. I., & Novikov, S. V. (2018). Estimating the effectiveness of personnel management at aviation enterprises. *Russian Engineering Research*, 38(6), 466-468.
- [4]. Krayev, V.M., & Tikhonov A.I. (2017). *Counteraction to deception in personnel work*. Stavropol': LOGOS.
- [5]. Kudashkin, Ya.V. (2015). Features of work of bailiffs with social networks. *Collection of articles on the materials of the fifth all-Russian scientific-practical conference "Actual problems of jurisprudence in modern Russia"*, 257-261.
- [6]. Meyer, M., Roodt, G., & Robbins, M. (2011). Human resources risk management: governing people risks for improved performance: opinion paper. *SA Journal of Human Resource Management*, 9(1), 1-12. DOI: 10.4102/sajhrm.v9i1.366 .
- [7]. Mitrofanova, A. (2013). Methodological aspects of management of personal risks in the organization. *European Science and Technology: 4th International scientific conference, Munich*.
- [8]. Ishunin, P. (2011). Personnel risk management: problems and solutions. *Personnel management*, 3. Retrieved from: <https://hr-portal.ru/article/upravlenie-riskami-personala-problemy-i-resheniya/> [accessed: 15 March 2019].
- [9]. Slobodskoy, A. L. (2011). Riski v upravlenii personalom [Risks in personnel management]. *St. Petersburg: Izd-vo SPbGUEF*.
- [10]. Smirnova, P.V., & Tsyplakov, A.A. (2016). Self-presentation and formation of social capital in business social networks. *Naukovedeniye.V. 8*, 6(37), 66-75.
- [11]. Tikhonov, A. I. (2019). The use of networking in staff recruitment: recommendations and referral programs. *Amazonia Investiga*, 8(19), 521-528.
- [12]. Sultanov, I. A. (2019). Threats of personnel risks. *Projectimo*. Retrieved from: <http://projectimo.ru/upravlenie-riskami/kadrovye-riski.html> . [accessed: 18 June 2019].
- [13]. Voyskunskiy, A.Ye. (2014). Social perception in social networks. *Bulletin of Moscow University. Series: psychology*, 2, 90-104.
- [14]. Zakharov, D.N. (2015). Sociological evaluation of images presented by social networks. *Journal of legal and economic research*, 3, 200-202.
- [15]. Zhukov, D.V., & Mansurov, A.V. (2018). *Methods of identifying socially dangerous links in computer social networks*. Materials of XIX International Scientific and Technical Conference. Measurement, control, informatization, 170-173.