

Recruitment Based on Social and Economic Factors for the Formation of Effective Personnel Management

By

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Abstract

In this work grounded and formulated fundamentally new bases for determining qualified recruitment in the conditions of modernization of the personnel management system. An important factor, that affects the successful activity of the enterprise, is the properly selected staff. The analysis of qualified recruitment at a modern industrial enterprise is presented. The rational justified need of the enterprise in the personnel is determined. Problems of recruitment of personnel, aged 18-35 years, are determined. The organization of information exchange between performers in the search and recruitment of personnel at the enterprise is revealed. A personnel policy for recruitment at a trading enterprise by matrix method 9 boxes has been developed. The effectiveness of the recruitment system at an industrial enterprise is determined too.

Keywords: Personnel Management, Recruitment, Labor Market, Personnel Policy, Social Factors

1.0 Introduction and Background

The current state of development of the state as a whole is associated with the need to build an effective economic system in conditions of limited financial resources. The performance of economic entities in the national economy is primarily related to human resources, which are able to solve not only current production tasks, but also professionally move towards strategic goals.

New time requirements require HR managers to apply modern personnel-technologies of hiring, which will provide the company with competent, responsible, motivated and loyal employees Suerdem & Oztaysi (2016); Valcik, Sabharwal & Benavides (2021). An important factor, that affects the successful activity of the enterprise, is the properly selected staff. Personnel as a fundamental basis of any company, ensure the effective use of all available resources and ultimately form its competitiveness. Their contribution for achieving the goals of the enterprise depends, first of all, on the efficiency of work with personnel, starting with

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the selection Melão & Reis (2021). Therefore, solving the problems of effective search, selection and subsequent hiring of highly qualified personnel will improve the overall efficiency of the enterprise in the market environment Boiko, Volianska-Savchuk, Bazaliyska & Zelena (2021); Oostrom, van der Linden, Born, van der Molen (2013); Li (2020).

Unfortunately, at the current stage of development of our country, the situation with qualified personnel is complicated Sennewald (2021); Vedernikov, Zelena, Volianska-Saychuk, Litinska & Boiko (2020). Some old specialists have left, the number of new ones has decreased significantly in recent years. One of the problems, that does not cause the noticeable improvement in staff, is the low attachment of graduates or young specialists. The situation with managerial personnel is especially difficult, since in many enterprises managers do not have professional education at all, that would help them to work effectively. The management staff performs the main functions in the management of the enterprise and the success of the enterprise depends on its professionalism. Therefore, the management staff of the enterprise should be able to think creatively, have significant theoretical knowledge about the market mechanism of management, make sound and balanced decisions in difficult economic situations. According to these conditions, not just the need of enterprises in specialists' increases, but the need for specialists of the "new model". In accordance with this, enterprises should pay more attention to personnel issues, in particular, improving the recruitment process Murdock (2013); Nasser, Alzaanin & Maghari (2021). The modern practice of working with the personnel of enterprises indicates a lack of appropriate attention to the development and implementation of effective personnel policy, as the provision of personnel is not given strategic importance and a number of issues, including the formation of qualitative personnel potential and remain unattended Maddumage, Senevirathne, Gayashan, Shehan & Sumathipala (2019); Allen, Williams & Allen (2018).

One of the most important functions of managerial activity performed in the organization by the leadership is the recruitment. All managers are engaged in the selection of personnel - from assistant to director, as the recruitment is accompanied by their placement in accordance with business qualities. The efficiency of the enterprise largely depends on the qualitatively organized and conducted recruitment, both in the production system and in the management system Akhmetshin, Brager, Pokramovich, Andreyko & Aleynikova (2018); Li & Ma (2022); Voynarenko, Vedernikov, Volianska-Savchuk, Zelena, Bazaliyska & Baksalova (2020).

2.0 Theoretical Framework

The problem of recruitment, namely the methods used for recruitment, was investigated by such scientists as Choi, Ravichandran & O'Connor (2019); Pokrovskaia, Petrov & Gridneva (2018); Ameer, Rahul & Manne (2020), etc. In modern scientific and educational literature issues of recruitment are covered quite widely VanDyke & Lee (2020); Tuan (2017); Wach, Wehner, Weißenberger & Kabst (2020). It represented particularly, in the scientific works of well-known theorists in the field of human resources management and Labour economics Heyets, Voynarenko, Kholodenko & Stepanok (2019); Farashah, Thomas & Blomquista (2018); Vedernikov, Volianska-Savchuk, Zelena, Bazaliyska, Litinska & Baksalova (2020), etc.

The recruitment process has already been sufficiently researched in the development of scientists and practicing personnel managers Lisbeth (2019), but it remains problematic to find out the selection technologies, that could most effectively predict the effectiveness of a particular candidate for the position.



2.1 Literature Review

2.1.1. Types of Registration for the Work of New Personnel

At the present stage of development and reform of the economic, social and labor field, the requirements for personnel are constantly increasing. The selection of highly qualified personnel capable of solving the problems of modern management in different situations has become a difficult task for many enterprises. Of great importance are not only high business qualities, but also the breadth of strategic thinking, entrepreneurial spirit, independence, and resistance to stress Oostrom, van der Linden, Born, van der Molen (2013).

The main goal of forming the personnel of enterprises is to reduce the reserve of unrealized personnel opportunities to the smallest number. To do this, consider a conceptual approach to building a model of personnel formation, with the help of which it is possible to determine the future quantitative and qualitative need for personnel and measures to achieve a correspondence between this need and its availability, taking into account the enterprise development strategy (Figure 1).

The specifics of the work of the enterprise affects the formation of a system of technologies for the selection of personnel Vedernikov, Zelena, Volianska-Savchuk, Litinska & Boiko (2020). An important place is occupied by the selection of production personnel. The decline in production capacity led not only to significant economic losses, but also caused an imbalance in the labor force in the labor market. For industrial enterprises, this had the consequences of the need for skilled workers. At the moment, manufacturing professions have the status of "non-prestigious". A small number of applicants are trained in industrial professions. This leads to the fact that highly skilled workers reach almost the pre-retirement age, and someone will replace them. That is why each manufacturing enterprise should pay more attention to the recruitment process and the organization of this process in the enterprise.

Consequently, the process of forming the personnel of enterprises is quite complicated and includes a number of stages that must be agreed upon among themselves according to the goals and period of their implementation. The first stage is the analysis of the external environment, the purpose of which is to establish opportunities and threats generated by factors external to the enterprise, and to identify strategic alternatives. The enterprise is completely dependent on the external environment in relation to resources, competitors, consumers, legislation, suppliers, cultural, social, political and other factors Sennewald (2021). These interrelated factors affect all processes occurring in the enterprise, including the choice of strategy.

The company has three types of registration for the work of new personnel:

- Term employment contract is concluded in cases, where labour relations cannot be established for an indefinite period, taking into account the nature of the future work, the conditions of its execution, or the interests of the employee, and in other cases, provided for by legislative acts. At the enterprise, the employee is accepted to the staff of the enterprise for a certain period (for 3 months).
- Permanent employment contract is concluded for an indefinite period. The employee is accepted to the staff of the enterprise on a permanent basis.
- Civil contract an agreement between a natural person (natural persons) and another individual (individuals) or a legal entity (legal entities), or between a legal entity (legal entities) and another legal entity (legal entities), and is directed to the occurrence, change or termination of civil legal relations.

The decision to choose the type of registration for the position is made by the linear head of the unit to which the beginner comes. The amount of remuneration for the services rendered or the work performed, the procedure and terms of its payment, as opposed to the salary (according to the employment agreement), are established by the contract itself. The basis for the payment of such remuneration is the act of surrender-acceptance of work performed (provided services). For personnel, who undergo the procedure of working, device at the enterprise, there are 4 stages of hiring. Step 1. Acquaintance with the enterprise; Step 2. Interview in the unit, writing an application for admission; Step 3. Passing the medical commission and safety instructions; Step 4. The procedure of registration at the enterprise.

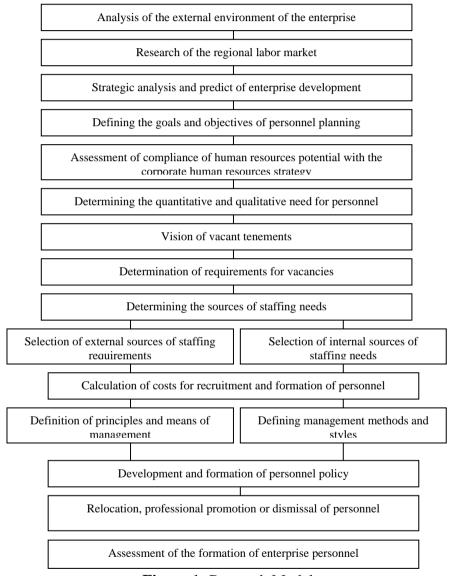


Figure 1: Research Model

Summarizing the above, we will determine the main ways of solving the problems of hiring staff of working professions, aged 18 to 35 years. The main problems of hiring staff of working professions, aged 18-35 years and how to solve them at the enterprise, are represented in Table 1.

So, the main reasons for refusing employment are the following: 1. "Menopause" of working professions in the labour market; 2. Lack of social hostel for young workers; 3. Partial absence of corporate transport; 4. Low wages.

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However, these indicators of job rejections for these reasons tend to decrease. This indicates, that the HR service carefully analyses the reasons for candidates' "refusals" from the proposed workplace, and the company management takes measures to eliminate them Valcik, Sabharwal & Benavides (2021).

Thus, the need for staff of working specialties increased by almost 50 percent. This is due to the opening of new branches, and as a result - the opening of new jobs. The proposed measures are developed on the basis of studying the content of the questionnaires, which are filled in by persons, who refuse to work at the enterprise.

Table 1: The main problems of hiring staff of working professions, aged 18-35 years and how to solve them at the enterprise

1) "Menopause" of working professions in the labour market. 2) Low salary compared to private enterprises. 3) Lack of social dormitory workers. 4) Partial absence of corporate transport. 5) Lack of social support for young families. 1) Improving the level of vocational guidance work of the personnel management service with students of vocational schools. 2) Building or renting a dormitory for singletons. 3) Construction of social housing for young families. 4) Introduction of a wider route of corporate transport or partial payment of travel documents. 5) Construction of children's institutions for children of young families or partial payment for the stay of such children in children's institutions of other organizations	Problems of Hiring Staff Aged 18-35 Years	Solutions
<u> </u>	professions in the labour market. 2) Low salary compared to private enterprises. 3) Lack of social dormitory workers. 4) Partial absence of corporate transport.	personnel management service with students of vocational schools. 2) Building or renting a dormitory for singletons. 3) Construction of social housing for young families. 4) Introduction of a wider route of corporate transport or partial payment of travel documents. 5) Construction of children's institutions for children of young families or partial payment for the stay of such

In turn, such questionnaires are useful information for the implementation of such personnel policy of the enterprise, which would allow to attract as many young employees as possible. Organization of information exchange between responsible performers, when searching and recruiting staff is as follows (Table 2).

Table 2: Organization of information exchange between performers in the search and recruitment of personnel at the enterprise

Name of Information Flow	Source of Information	Consumer Information	Method of Receiving/providing
Application for recruitment	Head of Department (RP)	PPP	Paper view
Placement of vacancy information in the media	Recruitment Group (PPP)	MEDIA	Electronic view
Information about candidates	MEDIA	PPP	Electronic view
Information about candidates	PPP	RP	Paper view
Information about the candidates for which the decision was made	RP	PPP	Verbally
Notification to candidates about the decision	PPP	Candidate	Verbally

In order to be confident in choosing a potential employee at the enterprise, an accountant developed a procedure for recruiting and hiring staff: 1. Candidates for a vacant position; 2. Preliminary selection of applicants; 3. Conducting a primary interview; 4.

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Evaluation of the applicant; 5. Verification of documentation, collection and verification of recommendations; 6. Medical examination; 7. Conducting a final interview on hiring; 8. Making a final decision on hiring.

The chief accountant of the general director of the enterprise in the recruitment and hiring of personnel clearly understands, that the interview is one of the most effective methods of recruitment, but it also does not exclude correspondence with a potential applicant for a vacant position.

Consider the process of recruiting and hiring staff at the enterprise. During the probationary period, the employee performs full duties, receives a reward, however, can be dismissed at the end of it without any consequences for the organization. If during the probationary period the employee has established himself as a specialist with good knowledge and abilities, he is transferred to the category of permanent employees. After hiring, the employee is helped to adapt to the new workplace. The head of the enterprise perfectly understands that insufficient attention to the issues of adaptation will nullify the results of hiring, if a new employee, having failed to learn a new job in time and not fit into the work team, will quit. So, recruitment for the company takes place in certain stages: preliminary conversation, filling out an application form, questionnaire, interview, test, verification of recommendations and service list, medical examination, probationary period, and decision making.

The results of the study make it possible to conclude, that in order to ensure the competitiveness of the enterprise, its further development, it is necessary to pay attention to the youth Ukrainian labour market. It is important for the modern employer to determine the most attractive, priority opportunities for attracting employees, starting with the definition of personnel policy in career guidance work with young people. And in order to retain applicants for jobs' positions, aged 18-35 years in menial work professions, especially attention should be paid to creating conditions, that would satisfy young people, would help to solve their problems.

Analysis of these criteria allows us to conclude, that the methods of recruitment and hiring of personnel, that are present in the enterprise complement each other. And it is in recruitment and hiring, that all methods should be divided into active and passive.

2.1.2. Rational Reasonable Need of the Enterprise in the Staff

The human resource management system includes the main management functions, of which planning is fundamental. The main purpose of the development of a plan for work and personnel is to determine the rational reasonable need for personnel, the main requirements for it.

At the same time, in the process of planning work, a number of tasks are to be solved: creation of an able-bodied team aimed at fulfilling the main goals of the enterprise; formation of the optimal structure of the team; improvement of labour organization; search for rational motivators; improving the efficiency of work; rotation of personnel; optimization of funds for staff maintenance, etc Li (2020).

When planning staff, the total synergistic effect is of great importance, since it is necessary to evaluate the team members to work in the team. At the same time, the analysis process should acquire a systematic character for the purpose of the widest possible consideration of determining factors. The resulting indicator is more important than the sum of indicators by determining factors. To this end, in terms of labour and personnel allocated three sections: labour plan; plan by number; salary plan.

In terms of labour and number of calculated indicators of productivity; determines the labour intensity of the production unit and the planned volume of commodity output, the number of employees in the context of different categories of personnel, the planned amount of costs for the maintenance of the company's personnel and its structural units, the number of those released (dismissed), and employees who are hired; measures to improve the organization of labour, training, retraining and training of personnel, the formation and use of personnel reserve; initial data are prepared for the planning of the remuneration fund and the wage fund, the average salary of the company's employees, etc. In the process of personnel planning, first of all, it is necessary to analyze the implementation of the work plan and personnel for the previous period. More namely: calculate planned indicators of productivity; calculate the planned balance of time of one worker; calculate the need for staff, its planned structure.

The initial step of the personnel planning process is to plan the personnel needs. It is based on data on existing and planned jobs, organizational and technical measures, staffing and vacancy plan (Figure 2).

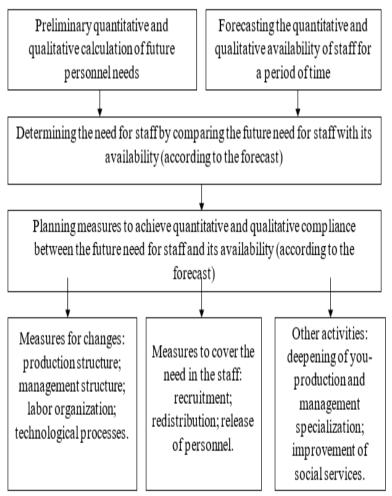


Figure 2: Scheme of Planning the Need for Staff

In determining the need for personnel in each case, the participation of heads of relevant departments is recommended. There are four categories of employees under which planning is carried out: current staff; beginners; potential employees; staff who left the organization. With respect to each of these categories, the management of the company must take different actions (Table 3).

Table 3: Actions, taken by managers towards staff

Categories of Employees	Managerial actions		
Available staff	Evaluation of productivity. Distribution of employees. Training and		
Available staff	development. Payment and motivation. Career growth		
Beginners	Methods of hiring. Selection procedures. Introduction to office.		
	Terms of contracts. Adaptation process. Training		
Potential employees	Methods of hiring. External connections. The level of remuneration.		
	Bonuses for staff		
Staff, who left the	Dismissal on the initiative of the administration. Retirement. Staff		
organization	fluidity		

Staff development plan is drawn up, the reserve of labour personnel is calculated and analyzed, etc. At the same time, when analyzing the plan for the previous period, the provision of the enterprise with labour resources as a whole is evaluated, the effectiveness of their use is assessed, reserves of labour saving are identified and measures are developed for their use.

Further, by comparing the planned and basic values, the company's security in the staff is analyzed. As a result of the analysis, there is a shortage or surplus of personnel in general in the firm and separately in the structural divisions. At the same time, the main sections of the labour plan are the following: personnel dismissal, personnel policy, recruitment, personnel reserve, personnel turnover, personnel development, improvement of labour organization, economic efficiency, innovation plan.

In general, the personnel security planning system consists of several stages. Initially, during planning, it is advisable to evaluate existing employees, determine the main measures to optimize the work of existing personnel. For this purpose, the company conducts certification, testing of employees for a certain time. To assess the quality of workers, special inventory systems are sometimes used, registering information regarding the acquisition of new skills by employees.

The next stage is the forecasting stage. According to the goals and objectives of the organization determine the future needs of employees. If the organization is going to soon open another unit, it is advisable to think about the recruitment of potential candidates now. Be sure to take into account changes in the external environment, because the external environment affects the organization, and its work. At this stage, it is possible to use a variety of methods of analysis, such as SWOT-analysis, during which the main possibilities, threats, strengths and weaknesses of the organization. After each item, points are placed, representing the amount of expert assessment and the degree of significance of each factor.

Having identified the needs, you can begin to develop a plan for their satisfaction. The plan must contain all activities, necessary to recruit, hire, train, advance staff for achieving the goals set and meeting the predicted needs. First of all, it is necessary for clearly determining the future responsibilities of the employee. Otherwise, there is a risk of hiring an employee, whose personal and professional qualities do not quite or will not correspond to the necessary ones. Psychological characteristics of a potential employee are also important Li & Ma (2022). Particular attention should be paid, if possible, to work in a group.

The analysis can be carried out with the help of employee observations, interviews, various tests. After analyzing the content of the work of the future employee, a job description

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is developed, which indicates the main duties, that need to be performed, and skills that need to be possessed, as well as the rights, that the employee has.

The next step is the set. The set is the creation of a certain reserve for planned positions from both external and internal sources. The main problem, when recruiting candidates is the inconsistency of future work with the expectations of the candidate. It is necessary to make every effort to introduce the future employee to his future work as closely as possible. Such familiarization is possible with the help of special events.

When selecting personnel, the management selects from the recruitment of candidates most suitable for work in the organization. For professional training, the following methods can be used: individual training under the leadership of a senior manager; internship in the position of his and other enterprise; study in a higher education institution, in advanced training courses depending on the planned position.

Payment for labour workers should be made at competitive rates and contain various rewards for their achievements. The amount of salary should be determined not only by the work done, but also should stimulate the employee to improve the quality of this work. Salary management staff has a more complex structure; it includes various schemes of participation in profits.

3.0 Method

3.1 Main Tasks of Personnel Management

The peculiarity of the modern personnel policy of a trade enterprise arises in its spontaneity and the absence of any clear principles of employee selection. Meanwhile, the negative trends that have turned out especially recently, such as the aging of personnel, the outflow of young employees abroad, have caused the need to develop the concept of personnel policy.

Based on the analysis of the practice, we propose to attribute to the main tasks of management of personnel policy the following: activation and qualitative transformation of innovative capacity of personnel; careful attitude to the older generation of employees, and support of their professional activity; support of corporate culture; ensuring transparency of the rights and obligations of all employees, methods of planning and control of their activities, clearly embedded in the cycle of enterprise management at any level; observance of autonomy rights in solving personnel issues.

Successful business planning largely depends on the process of identifying both effective employees, loyal to the company - the core of the team, and future leaders, who are now able to move to a new level. If you adjust this process correctly, it will become a powerful tool that will help to assess whether all the talents in the company, according to their place. So, it will be easier for HRs and heads of 9 boxes to find out that, who needs some support and who is at risk, due to potential differences with current tasks, due to burnout or other reasons, that are important to understand Ashton & Morton (2005); Andia (2019).

3.2 Development of Personnel Policy on Recruitment at a Trade Enterprise by Matrix Method 9 boxes

So, based on the processing of large data scale, a personnel policy has been developed for the selection of personnel at the enterprise using the 9 boxes matrix method. Using the 9

boxes matrix is a simple and powerful way to see, which team member demonstrates high performance (efficiency in the workplace) and potential for growth, and who needs some help and drawing up a new development plan. A matrix or 9 boxes table is a matrix tool used to evaluate company personnel based on two factors. Most often - efficiency and potential. Typically, the horizontal axis evaluates the efficiency, which is measured according to the results of the employee's performance analysis for a certain period. According to the vertical axis, the "potential" is measured, which denotes the desire and opportunities for growth and development in its position and within the company.

The lower left side of the table reflects low efficiency with low growth potential, and the upper right part reflects high performance and high potential. Split employees into 9 criteria. This is going to be our matrix. For visual display, you can make a table and make employees in different blocks. According to the 9 boxes method, an employee with High potential/High efficiency falls into the category of 1A. And our example, employee N, is located in the 3C block (Figure 3).

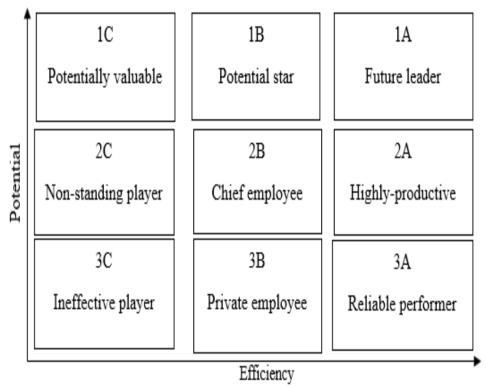


Figure 3: Matrix 9 boxes

The different types of employees that the matrix defines are listed in Table 4.

Table 4: Different types of employees by matrix 9 boxes

Tuble it Billerent types of employees by matrix y cones			
Types of Employees	Characteristics		
1A. High Potential/High Efficiency.	People, who fully cope with the current role and are		
Future Leader/Leader/Star.	ready for the next challenges and achievements.		
1B. High Potential/Average Efficiency	A valuable team member who has opportunities for		
Potential Star/Potential Leader/High	improvement, who needs to gradually set himself		
Potential.	the task to achieve more.		
1C. High Potential/Low Efficiency.	Employees who need to be trained to develop		
Problem genius/Potentially valuable.	confidence and increase motivation.		

Types of Employees

2A. Average Potential/High Efficiency. High Performance/Prevailing Expectation.

2B. Average Potential/Average Efficiency. Core Employee/Core Team/Core Team.

2C. Average Potential/Low Efficiency. Non-permanent players/In the special attention zone.

3A. Low Potential/High Efficiency. Reliable employee/Reliable executor/In its place.

3B. Low Potential/Average Performance. Private executor/Private employee/In the area of special attention.

3C. Low Potential/Low Efficiency. Ineffective employee/At risk.

Characteristics

It should be directed to advance after the development of certain skills.

An employee who constantly meets expectations.

Perhaps there is the potential to increase responsibility due to the development plan.

Employees trapped in this cell show some potential, but they are hindered by low productivity. Here, the focus should be the development of skills or an improvement plan. It is unlikely that these employees will move to a higher position, but nevertheless these are strong performers. These people may need an incentive to stay involved.

These are stable players who, nevertheless, should remain supervised by the manager and HR manager. It is necessary to discuss development plans and possible burnout.

Person, just does not live up to expectations. You may need to improve your qualifications or transfer it to another role. In some cases, the termination of cooperation may be the only way out.

Managers have been trying for years to discover which methods are most effective in recruitment. It turned out that the effectiveness of certain methods can be determined by the concept of "validity", that is, the degree of correspondence of a particular method to the purpose of selection, which originates from statistics.

4.0 Results

4.1 Development of Personnel Policy on Recruitment at a Trade Enterprise by Matrix Method 9 boxes

The validity value of several selection methods is given in Table 5. The greater the validity, the more effective in practice the method of selection. But it should be noted that for a more correct selection of personnel, several technologies should be used.

Table 5: Validity of using different methods to predict labour performance

N	Selection Method	Validity
1	General Mental Ability Test (GMA)	0.51
2	Work tasks	0.54
3	Personal tests	0.31
4	Structured interview	0.51
5	Unstructured interview	0.38
6	Tests of professional knowledge	0.48
7	Probation period	0.44
8	Evaluation of colleagues	0.49
9	Checking recommendations	0.26
10	Autobiographical data	0.35
11	Assignment Centres	0.37

4.2 Attracting Material Incentive Fund Mechanisms

Personnel selection methods Li (2020) differ for each category, due to the qualification and professional level of employees included in a particular category, as well as the situation in the labour market. For objective evaluation of candidates in the selection of personnel, it is necessary to use a set of various methods, because this is the only way to obtain the most complete and accurate information about the candidate for a vacant position.

In market conditions, much attention is paid to the motivation of labour. One of its methods is additional surcharges.

As one of the types of surcharges, we have developed a coefficient of k for the efficiency of employee composition.

$$k = \frac{NP}{N_V} \tag{1}$$

where k is the efficiency ratio of employees; NP is the number of sold products, thousand UAH; N_V is the number of employees, persons.

Consider in more detail how this coefficient affects material incentives. Each employee has some basic MFS (material incentive fund, salary), such as X_n . The company has its own additional MFS is the Y. Depending on the position of an employee works in, we choose a factor of k_n . So, additional MFS specialty will be $X_n \cdot k_n$. But if the company is limited in funds, because there is an additional MFS which is limited. Therefore, we need to derive the percentage of the surcharge for the efficiency of the composition of workers.

To do this, calculate an additional MFS total university:

$$Z = \sum X_n \cdot k_n \tag{2}$$

Then we calculate the percentage values of the surcharge is the P_n :

$$P_n = \frac{X_n \cdot k_n}{Z} \tag{3}$$

Now you can make a material equivalent of the surcharge for the efficiency of the composition of workers - Q depending on the limit of additional enterprise MFS:

$$Q_n = Y \cdot P_n \tag{4}$$

After this calculation, we will get a material expression of the coefficient offered by us. Increasing integration into the world society, explains the list of modern requirements in the field of personnel support of the enterprise. The recruitment should be referred to in more detail, plan this selection, conduct constant monitoring. For optimal recruitment, several recruitment strategies should be used.

5.0 Conclusion

To improve the qualified recruitment in the conditions of modernization of the personnel management system at enterprises, based on the processing of large data scale it is proposed to determine the rational and reasonable need of the enterprise in the personnel. The essence of the development of a plan for labour and personnel at the enterprise is considered; defined tasks to be solved in the process of labour planning; the stages that make up the system of planning the provision of personnel of a trade enterprise.

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A personnel policy for recruitment at a trading enterprise by matrix method 9 boxes has been developed based on the processing of large data scale. The matrix can be used in Performance Review evaluation cycles as an employee selection. At the same time, if regular state assessments are carried out, it is logical to include a potential and efficiency assessment in each cycle to track the progress of colleagues.

References

- Suerdem A. & Oztaysi, B. (2016). Collaborative Requirement Prioritization for an E-Recruitment Platform for Qualified but Disadvantaged Individuals. Information and Creativity Support Systems. *Advances in Intelligent Systems and Computing*, vol. 416, Springer, Cham. https://doi.org/10.1007/978-3-319-27478-2 42
- Valcik, N. A., Sabharwal, M. & Benavides, T. J. (2021). *Human Resources Information Systems. Management for Professionals*, Springer, Cham. https://doi.org/10.1007/978-3-030-75111-1
- Melão, N. & Reis, J. (2021). Social networks in personnel selection: profile features analyzed and issues faced by hiring professionals. *Procedia Computer Science*. 181, 42-50. https://doi.org/10.1016/j.procs.2021.01.097
- Boiko, J., Volianska-Savchuk, L., Bazaliyska, N. & Zelena, M. (2021). Smart Recruiting as a Modern Tool for HR Hiring in the Context of Business Informatization. In: 2021 11th International Conference on Advanced Computer Information Technologies (ACIT), pp. 284-289, IEEE Press. https://doi.org/10.1109/ACIT52158.2021.9548558
- Oostrom, J. K., van der Linden, D., Born, M. Ph. & van der Molen, H. T. (2013). New technology in personnel selection: How recruiter characteristics affect the adoption of new selection technology. *Computers in Human Behavior*, 29(6), 2404-2415. https://doi.org/10.1016/j.chb.2013.05.025
- Li, P-C. (2020). Industrial exhibitors' resource commitment to booth personnel: A study of select predictors and consequences. *Industrial Marketing Management*, 91, 1-15. https://doi.org/10.1016/j.indmarman.2020.08.010
- Sennewald, C. A. (2021). 8-Hiring security personnel. Effective Security Management (Seventh Edition), Butterwort Heinemann. https://doi.org/10.1016/B978-0-12-814794-8.00008-1
- Vedernikov, M., Zelena, M., Volianska-Savchuk, L., Litinska, V. & Boiko, J. (2020) Management of the Social Package Structure at Industrial Enterprises on the Basis of Cluster Analysis. *TEM Journal*, *9*(1), 249-260. https://doi.org/10.18421/TEM91-35
- Murdock, D. (2013). Relevance of electronic resource management systems to hiring practices for electronic resources personnel. *Library Collections*, *Acquisitions*, & *Technical Services*, 34(1), 25-42. https://doi.org/10.1080/14649055.2010.10766256
- Nasser, I. M., Alzaanin, A. H. & Maghari, A. Y. (2021). Online Recruitment Fraud Detection using ANN. In: 2021 Palestinian International Conference on Information and Communication Technology (PICICT), pp. 13-17, IEEE Press. https://doi.org/10.1109/PICICT53635.2021.00015
- Maddumage, C., Senevirathne, D., Gayashan, I., Shehan, T. & Sumathipala, S. (2019). Intelligent Recruitment System. In: 2019 IEEE 5th International Conference for Convergence in Technology (I2CT), pp. 1-6, IEEE Press. https://doi.org/10.1109/I2CT45611.2019.9033836
- Allen, S., Williams P. & Allen, D. (2018). Human resource professionals' competencies for pluralistic workplaces. *The International Journal of Management Education*, *16*(2), 309-320. https://doi.org/10.1016/j.ijme.2018.04.001
- Akhmetshin, E. M., Brager, D. K., Pokramovich, O. V., Andreyko, M. N. & Aleynikova, M. Yu. (2018). Modern theoretical and methodological approaches to personnel management in manufacturing enterprises. *Revista ESPACIOS*, 39(31).

Social Science Journal

- Li, M. & Ma, Q-h. (2022). Do not impose on others what you desire. Research on the influence of service Personnel's interactive orientation on customer comfort. *Journal of Retailing and Consumer Services*, 65, 102887. https://doi.org/10.1016/j.jretconser.2021.102887
- Voynarenko, M., Vedernikov, M., Volianska-Savchuk, L., Zelena, M., Bazaliyska, N. & Baksalova, O. (2020). Modeling of Controlling Activity as an Instrument of Influence on Motivation in the Personnel Management System of Industrial Enterprises. In: 2020 10th International Conference on Advanced Computer Information Technologies (ACIT), pp. 601-606, IEEE Press. https://doi.org/10.1109/ACIT49673.2020.9208991
- Choi. B, Ravichandran, T. & O'Connor, G. C. (2019). Organizational Conservatism, Strategic Human Resource Management, and Breakthrough Innovation. *IEEE Transactions on Engineering Management*, 66(4), 529-541. https://doi.org/10.1109/TEM.2018.2845343
- Pokrovskaia, N. N., Petrov, M. A. & Gridneva, M. A. (2018). Diagnostics of Professional Competencies and Motivation of the Engineer in the Knowledge Economy. In: 2018 Third International Conf. on Human Factors in Complex Technical Systems and Environments (ERGO)s and Environments (ERGO), pp. 28-31, IEEE Press. https://doi.org/10.1109/ERGO.2018.8443851
- Ameer, M., Rahul, S. P.& Manne, S. (2020). Human Resource Analytics using Power Bi Visualization Tool. In: 2020 4th International Conf. on Intelligent Computing and Control Systems (ICICCS), pp. 1184-1189, IEEE Press. https://doi.org/10.1109/ICICCS48265.2020.9120897
- VanDyke, M.S. & Lee, N. M. (2020). Science public relations: The parallel, interwoven, and contrasting trajectories of public relations and science communication theory and practice. *Public Relations Review.* 46.4, 101953. https://doi.org/10.1016/j.pubrev.2020.101953
- Tuan, L.T. (2017). Administrative Error Control: The Role of Value-Based HR Practices, I-Deals, and Organizational Politics. *International Public Management Journal*, 20(4), 648-674. https://doi.org/10.1080/10967494.2016.1269858
- Wach, B. A., Wehner, M. C., Weißenberger B. E. & Kabst, R. (2020). United we stand: HR and line managers' shared views on HR strategic integration. *European Management Journal*. https://doi.org/10.1016/j.emj.2020.09.012
- Heyets, V., Voynarenko, M., Kholodenko A. & Stepanok, N. (2019). Modeling state regulation of the labour market. *CEUR Workshop Proceedings*, 2422, 308-319.
- Farashah, A. D., Thomas, J. & Blomquista, T. (2018). Exploring the value of project management certification in selection and recruiting. *International Journal of Project Management*, 37(1), 14-26. https://doi.org/10.1016/j.ijproman.2018.09.005
- Vedernikov, M., Volianska-Savchuk, L., Zelena, M., Bazaliyska, N., Litinska, V. & Baksalova, O. (2020) Infocommunication Paradigm of Corporate Culture Development in HR Management System. In: 2020 IEEE International Conference on Problems of Infocommunications. Science and Technology (PIC S&T), pp. 197-201, IEEE Press. https://doi.org/10.1109/PICST51311.2020.9468007
- Lisbeth, C. (2019). HR disruption—Time already to reinvent talent management. *BRQ Business Research Quarterly*, 22(3), 207-215. https://doi.org/10.1016/j.brq.2019.04.00
- Ashton, C. & Morton, L. (2005). Managing talent for competitive advantage: Taking a systemic approach to talent management. *Strategic HR Review*, *4*(5), 28-31. https://doi.org/10.1108/14754390580000819
- Andia, L. (2019). Why Partnering with HR During Organization Change Matters: It Is Not Just About Moving Boxes, *Perf. Improv.* 58, 6-9. https://doi.org/10.1002/pfi.21834