Improving Efficiency in Managing Personnel Reserve

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Abstract
Company performance on strategic goals is significantly dependent on the level of qualification of employees and particularly managers as a key resource determining not only growth and development, but even the existence of the organization. Securing staff with high qualification grades is further complicated by certain external conditions faced by enterprises, including the lack of competent professionals, declining labor quality, etc. Thus, the formation of personnel reserve may be nearly the only way to provide the enterprise with the qualified staff with appropriate level of competences. The authors have explored, aligned and classified the indicators of performance of a personnel reserve. Based on the above, the conclusion was drawn on the need to extend the performance indicator system to include competence-related indicators and to introduce indicators of optimal composition of personnel reserve. The proposals were tested for a transport company and a follow-up program of measures was drawn offering the most precise solutions to the problems of personnel reserve management.

Keywords: Personnel reserve; key positions; Competence-related approach; Personnel reserve structure; Personnel reserve efficiency.

1. Introduction
In contrast to the prevalent approach among the majority of modern authors to view personnel reserve as a pool of potential management cadre, the authors believe that personnel reserve is one of the basic technologies to improve performance of human resources management and, just as any other technology, it relies on a set of specific methods of implementation and a system of indicators describing the efficiency of such technology and it should be subject to assessment in terms of performance. That said, the majority of performance evaluation methods are limited to mere calculation of the reserve personnel movement indicators. These indicators need to be complemented with the evaluation of competence levels attained by the reserve personnel while they are part of the reserve. It is the acquisition of the required skills that determines the efficiency of a particular manager. Apart from that, the composition of the personnel reserve should be evaluated in terms of its optimal structure, which can be done using the proposed matrix of personnel reserve.

2. Methods
Based on the systematization and qualification of personnel reserve performance indicators conducted by the authors, the following three groups were identified (Armstrong *et al.*, 2003; Daft, 2003; Harter, 2016; Kibanov *et al.*, 2016; Kupriyanchuk and Shcherbakova, 2013; Lukyanova, 2015; Mineva *et al.*, 2016; Mitrofanova, 2013; Tyson and Witcher, 1994; Wood and Payne, 1998).

The first group comprises quantitative indicators measuring the composition and changes of personnel reserve (Kibanov *et al.*, 2016; Mineva *et al.*, 2016). The second group includes indicators of professional and qualification advances (promotion) of personnel in the organization (Kibanov *et al.*, 2016; Tyson and Witcher, 1994). The third group is the indicators of personnel flows, as excessive personnel turnover detrains the organization (through broken communications, shifting social and psychological climate in the team, lower predictability of response to management actions, emerging new costs for the company to recruit, train and secure temporary replacements, etc.), and one of the main goals in personnel reserve management is deemed to be deterrence of staff turnover rates (Armstrong *et al.*, 2003; Mineva *et al.*, 2016).

As can be summarized from the above, personnel reserve efficiency is measured only in quantitative measures of personnel flows (Harter, 2016; Kupriyanchuk and Shcherbakova, 2013; Wood and Payne, 1998), which, in the authors’ opinion, does not align with the essence of personnel reserve formation, *i.e.*, the creation of qualified and competent management cadre of the organization. “Quality” of the employees can be determined by implementing...
the competence-based approach (Daft, 2003; Kupriyanchuk and Shcherbakova, 2013; Lukyanova, 2015; Mitrofanova, 2013) widely used in personnel assessment.

The authors believe that competence-based indicators should include threshold levels. The most prevalent methods rely on a three-point system and the lower threshold to be included in personnel reserve should be no less than 1.5 points, since it is one half of the maximum measurement. Average level of competence should also be tracked in two dimensions: in terms of key positions and in tracked focus competences.

To assess personnel reserve for optimal composition, a personnel structure matrix should be drawn. The matrix gives a representation whether the personnel reserve is comprehensive. For that, reserve personnel are grouped in four blocks by two measures, performance and competence. Performance should be assessed by the rate of career advancement. Employees showing high levels of competence, high performance levels and motivated to get promoted to key positions are most promising and considered to be top priority reserve personnel. Reserve personnel showing high performance levels should be sent to training in order to develop professional competences. Reserve personnel showing high competence levels and low performance at work should be rotated. Individuals showing low competence and low performance should not be in the personnel reserve.

3. Results

The proposed measures to adjust the assessment of personnel reserve performance were tried in the context of a transportation company involved in cargo and passenger rail transportation services.

Consider the readings of the first traditional group of indicators in assessment of performance of personnel reserve (Table 1).

| Indicator | Indicator level | Comment |
|-----------|----------------|---------|
| Efficiency of internal management cadre development | 95 % | High level of the indicator |
| External management recruiting | 5 % | High level of the indicator |
| Turnover in management reserve | 98 % | High level of the indicator |
| Average time in the reserve before appointment to a key position | 4 years | The time in personnel reserve should be brought down to the common level (3 years) |
| Reserve qualification | 33 % | The reserve personnel do not qualify by corporate competences |
| Reserve rank | 3 | Normal level |

The readings in this group suggest the personnel reserve is operated efficiently, but the reserve members do not qualify for taking over key positions because of the low level of professional competences.

In order to assess the reserve in terms of employee promotion, consider the indicators of the second group (Table 2).

| Indicator | Indicator level, % | Comment |
|-----------|--------------------|---------|
| Average time in one position | 6 years | The common standard is 5 years. Promotion rates should be increased |
| Level of employee involvement in each type of promotion | 85% | The common standard is 90% |

The time in one position should be decreased and the efficiency of employee promotion should be increased.

In order to assess personnel turnover in the organization, indicators of change may be used (Table 3).

| Indicator | Indicator level | Indicator |
|-----------|----------------|----------|
| Hiring total, number of people | 2 | Departure total ratio, % | 1.4 |
| Departure total, number of people | 5 | Replacement ratio, % | 40 |
| Total flow, number of people | 7 | Personnel stability ratio, % | 97 |
| Terminations for personal reasons, number of people | 5 | Personnel turnover ratio, % | 1.4 |
| Hiring total ratio, % | 0.6 | Personnel continuity ratio, % | 98.6 |

The staff of the organization can be deemed stable but replacement is not secured.

The authors’ proposed method is then applied for more comprehensive assessment of professional competence levels of the members of personnel reserve (Tables 4,5), and it is the low level of competences that is the major drawback of the personnel reserve in its current state, according to the analysis conducted.
To determine the least developed corporate competences, an average is calculated based on the levels across the personnel reserve, and the results are laid out in Table 4.

Table 4. Average Of Corporate Competence Levels Across The Reserve

| Corporate Competencies                        | Development management, employee development | Systematization of work with customers | Strategic thinking, systemic thinking | Securing teamwork in the company | Performance focus | Efficiency management, work process management | Fostering innovation-driven environment | Leadership as management style |
|-----------------------------------------------|-----------------------------------------------|---------------------------------------|--------------------------------------|---------------------------------|------------------|-----------------------------------------------|----------------------------------------|---------------------------------|
| Aptitude for development                      | 1.65                                          | 1.54                                  | 1.45                                 | 1.5                             | 1.3              | 1.23                                          | 1.5                                    | 1.61                            | 1.54 |

Thus, reserve members show unacceptably low level of competences in the “Performance focus” dimension and a threshold reading in “Securing teamwork in the company”. These are key competences for the future company’s managers. What is necessary is to get an understanding of reasons behind the actual levels and to intensify training efforts in these particular dimensions by relying on trainings, psychological advice, etc.

Consider the level of competence by positions (the threshold value is 1.3).

Table 5. Average Corporate Competence Level In Reserve In Terms Of Key Positions

| Key positions | Head of Railway Station | Technical Director of Railway Station | Deputy Head of Railway Station for Operations | Deputy Head of Railway Station on Even Days | Deputy Head of Railway Station on Odd Days | Deputy Head of Railway Station for Cargo and Commercial Operations | Deputy Head of Railway Station for HR and Social Policy | Deputy Head of Railway Station for Transportation Services |
|---------------|-------------------------|--------------------------------------|-----------------------------------------------|---------------------------------------------|-------------------------------------------|---------------------------------------------------------------|----------------------------------------------------------|-------------------------------------------------------------|
|               | 1.65                    | 1.54                                 | 1.45                                          | 1.5                                         | 1.3                                       | 0.9                                                          | 0.7                                                      | 1.61                                                       |

An analysis of corporate competences helped to identify major key positions with low competence readings.

1. Deputy Head of Railway Station for Cargo and Commercial Operations (average competence grade for the position being at 0.9)
2. Deputy Head of Railway Station for HR and Social Policy (average competence grade for the position being at 0.7)

Then the personnel reserve structure is used to assess the reserve quality (Figure 1).

Figure 1. Personnel reserve structure matrix

- **Higher** Growth potential
  - **Higher** Reserve members requiring development
    - 5 individuals (21%)
  - **Top priority reserve members**
    - 8 individuals (33%)

- **Candidates to be excluded**
  - 3 individuals (12.5%)

- **Lower** Competence level
  - **Lower** Reserve members requiring development
    - 8 individuals (33%)

- **Expenses**

High growth potential is identified in five people. Three individuals should be excluded from the personnel reserve.

4. **Discussion**

The systematization and classification of the available indicators of personnel reserve in three dimensions (personnel reserve flow, career advancement, personnel flows in the organization) helped to assess the performance of the personnel reserve and its influence on HR management efficiency in the organization in general. The same techniques helped to identify problems linked to nonassessment of qualitative growth among reserve members, which assessment is commonly conducted based on the level of professional competences. Moreover, the authors propose to use the descriptive method - the matrix of personnel reserve - for assessing the rationality of personnel reserve composition.
5. Conclusion

Based on the above analysis, several measures can be proposed. The main group of problems in the case study consists in the problems related to employee development. In order to develop previously identified competences, the whole personnel reserve should complete a set of training programs in teamwork and goal-setting. To secure the required quality of reserve members for the positions of Deputy Head of Railway Station for Cargo and Commercial Operations and Deputy Head of Railway Station for HR and Social Policy, refresher training should be arranged, and given these are not high-specialization roles, this can be done without sending the employees to the Corporate university but rather by relying on available programs in higher educational institutions in the cities of presence.

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