Staff provision of organization as an index of its energy performance

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Abstract. This article discusses the effective output of an organization, based on its effective use of qualified staff. The effective management of staff and an organization is imperative for any company in the current climate. The goal is to determine the staff resources required for a specific organization and for specific tasks within that organization. These determinations are made by assessing the complexity of tasks required to be completed and the qualifications of the bank staff who complete these tasks. The complexity of each task is assessed by determining the output of work by staff members who perform these tasks and gathering analytical and statistical data. The data on the complexity of work compared to the output/performance of staff within the organization was presented by researchers and found that only 1/3 of staff are performing and executing their duties to the standard required by the organization within the timeframe for the task. Workers who were not meeting their targets were working harder to achieve their goal, and the effort or time taken to achieve this, meaning the coefficient of the whole company rose from 10-50 %. In some categories of staff, a rise of 10-15 % of standard output is considered acceptable, whereas for other groups of staff, a rise of this amount indicates extra staff are required.

1 Introduction

State, consumers and society in general are consistently expecting organizations to be to be proactive in the effective running and efficiency of that organization. Using effectiveness management techniques in organizations is an innovative solution that is used in conjunction with the modernization of existing procedures and management. This is based on the use of international experiences within other organizations and the results and achievements of implementing real team effectiveness practices, however the effectiveness of a business should not solely be based on technical solutions, but on the higher level also, such as further education and training of staff [1, 2].

The importance of providing the correct staff requirements is essential to any organization. This can be achieved through the monitoring of staff output and performance and the requirements of each task, via outsourced monitoring or by using the organizations own experience and knowledge [3].

The monitoring of staff performance and output and the recommendations of staff

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requirements through internal methods can be very labour intensive and time consuming, however, outsourcing of this task to consultants and specialists who can provide accurate and professional information is expensive [4].

2 Materials and methods

Presented work based on a systematic approach that has let to use as methods as systems analysis, abstract logical method, methods of analyze and synthesis. As the main method of obtain data and their first preprocessing using experienced statistical method [5-7].

Definition of organization requirements in staff realized by labour intensity of performed work by employee based on formula 1.

\[
ANE = \frac{SLI}{EWT \times IRS}
\]  

where SLI – planned standards of labour intensity;  
EWT – effective worktime per one employee;  
IRS – planned implementation rate of standards;  
ANE – planned average number of employees.

The working time fund of one employee of the considered organization is presented in table 1.

Table 1. The Fund of working time of one employee of JSC «Rosselkhozbank».

| Month, quarter, half year, 9 months, a year | working days |
|-------------------------------------------|--------------|
|                                           | 36 hours working week | five days per week |
|                                           | Days          |                        |
| January                                   | 17            |                         |
| February                                  | 19            |                         |
| March                                     | 20            |                         |
| 1 quarter                                 | 56            |                         |
| April                                     | 21            |                         |
| May                                       | 20            |                         |
| June                                      | 20            |                         |
| 2 quarter                                 | 61            |                         |
| 1 half year                               | 117           |                         |
| July                                      | 22            |                         |
| August                                    | 23            |                         |
| September                                 | 20            |                         |
| 3 quarter                                 | 65            |                         |
| 9 months                                  | 182           |                         |
| October                                   | 23            |                         |
| November                                  | 21            |                         |
| December                                  | 21            |                         |
| 4 quarter                                 | 65            |                         |
| Year                                      | 247           |                         |
| Average monthly balance                   | 20.5          |                         |

So one employee working time of the considered organization should be 1 772, 4 h in a year or 147.7 h in a month on average.

Plan normative complexity was detected by experienced statistical method based on estimate of labour input for execution of certain types of labour by workers who make this type of work.

So using combination of methods let to make sound conclusions.
3 Results

Determination of needs in staff was carried out for additional office JSC «Rosselkhozbank» - organization that has specific in providing banking services for individuals and legal entities, mainly agricultural organizations. An additional office is located in the Khlevnoye village, Lipetsk Region, is represented by six employees, and its organizational structure is shown in Fig. 1.

![Organizational Structure](image)

**Fig. 1.** The organizational structure of JSC «Rosselkhozbank».

The Determination of the planned volume of work of the cashier and the senior cashier of JSC «Rosselkhozbank» is presented in table 2.

**Table 2.** The Determination of the planned volume of work of the cashier and the senior cashier of JSC «Rosselkhozbank».

| №  | Performed tasks/operations                                      | The rate of time for the evaluation of the employee. min | Number of works/operations per month | Monthly labour input. h |
|----|----------------------------------------------------------------|--------------------------------------------------------|--------------------------------------|-------------------------|
| 1  | Extradition of cash from bank account                          | 5                                                      | 450                                  | 37.5                    |
| 2  | Reception of cash from individuals and legal entities credited to a bank accounts | 5                                                      | 450                                  | 37.5                    |
| 3  | Reception and extradition of cash for transactions of it without opening a bank account | 8                                                      | 270                                  | 36                      |
| 4  | Operations with foreign exchange cash                          | 12                                                    | 112                                  | 14.9                    |
| 5  | Reception arrangements of establishment of purchourse exchange rate of foreign exchange cash. audit of comformity and presentation of stand | 4                                                      | 22                                   | 1.5                     |
| 6  | Recalculation of cash that was delivered by collectors. testing of its authenticity and creation attented documentation | 25                                                    | 40                                   | 16.6                    |
| 7  | Exchange of banknotes and coins of Bank of Russia that have injury and defects for the solvent banknotes and coins | 5                                                      | 18                                   | 1.5                     |
| 8  | The alarm system items functionality check                     | 1                                                      | 22                                   | 0.4                     |
| 9  | Creation massages about banknotes that has forgery sings       | 7                                                      | 7                                    | 0.8                     |
| 10 | Managing of issue and accept values record book                | 8                                                      | 22                                   | 3                       |
| 11 | Daily creation a cash flows certificates                       | 2                                                      | 22                                   | 0.7                     |
| 12 | Documental fixation of rests in values                         | 15                                                    | 22                                   | 5.5                     |
| №  | Performed tasks/operations                                                                 | The rate of time for the evaluation of the employee, min | Number of works/operations per month | Monthly labour input, h |
|----|--------------------------------------------------------------------------------------------|--------------------------------------------------------|-------------------------------------|-------------------------|
| 1  | Learning normative documents of Head Bank CB RF and other economical and social literature | 30                                                     | 4                                   | 2                       |
| 2  | Creation of an accountability and delivering it to the branch                                | 240                                                   | 1                                   | 4                       |
| 3  | Creation of credit reports about assigned clients                                           | 7                                                     | 120                                 | 14                      |
| 4  | Organization and transfer of cases to archive                                               | 24                                                    | 130                                 | 52                      |
| 5  | Consultation and selling of credit products and cross-products, including programs of collective insurance to individuals | 6                                                     | 130                                 | 13                      |
| 6  | Organization of credit deals in ABS «BISQUIT»                                               | 5                                                     | 120                                 | 10                      |
| 7  | Making an visual assessment of a client and filling an questionnaire                          | 2                                                     | 130                                 | 4.3                     |
| 8  | Asking an written clients agreement for the using of personal data and making a photo       | 3                                                     | 130                                 | 6.5                     |
| 9  | Checking out of client's documents authenticity in providing retail credit products          | 3                                                     | 120                                 | 6                       |
| 10 | Scan of documents that have been taken from a client and placement them in the scan system  | 5                                                     | 130                                 | 11                      |
| 11 | First enter parameters of a credit deal and supporting contracts in «Credit and Deposits» IBS «BISQUIT» inputting additional details | 6                                                     | 120                                 | 12                      |

Based on table 2 it is possible to note that monthly volume of work of the cashier and the senior cashier of JSC «Rosselkhozbank» is 291.2 hours. Because of the small size of given organisation but the volume work is large the employees are completely interchangeable executing similar functions.

The Determination of the planned volume of work a senior account Manager JSC «Rosselkhozbank» is presented in table 3.

**Table 3. The Determination of the planned volume of work a senior account Manager JSC «Rosselkhozbank»**.
parameters of a credit deal and supporting contracts

| №   | Performed tasks/operations                                                   | The rate of time for the evaluation of the employee, min | Number of works/operations per month | Monthly labour input, h |
|-----|-----------------------------------------------------------------------------|----------------------------------------------------------|--------------------------------------|-------------------------|
| 12  | Creation and printing Agreements from IBS «BISQUIT»                         | 4                                                        | 120                                  | 8                       |
| 13  | Organisation and singing contracts, additional agreements                   | 6                                                        | 120                                  | 12                      |
| 14  | Inputting adjustments into IBS «BISQUIT» when parameters are not incompatible in credit deal | 2                                                        | 32                                   | 1                       |
| 15  | Sending scan copies cover letters to responsible worker DRB                 | 4                                                        | 120                                  | 8                       |
|     | Total                                                                       |                                                          |                                      | 163.8                   |

Based on table 3 it is possible to note that monthly volume of work of the senior account Manager of organization is 163.8 hours.

The Determination of the planned complexity of the work of the leading operator TO JSC «Rosselkhozbank» is presented in table 4.

**Table 4.** The Determination of the planned complexity of the work of the leading operator TO JSC «Rosselkhozbank».

| №   | Performed tasks/operations                                                   | The rate of time for the evaluation of the employee, min | Number of works/operations per month | Monthly labour input, h |
|-----|-----------------------------------------------------------------------------|----------------------------------------------------------|--------------------------------------|-------------------------|
| 1   | Opening and closing of banks accounts                                       | 8                                                        | 100                                  | 13.3                    |
| 2   | Validation clients’ documents during opening a bank account, replacing a card, a client updates a package of documents /several documents, etc. | 2                                                        | 60                                   | 2                       |
| 3   | Reception of payment documents for the transfer of funds from customer accounts | 6                                                        | 350                                  | 35                      |
| 4   | Signing of certificates issued to customers on their requests about the state of the settlement account | 4                                                        | 100                                  | 6.6                     |
| 5   | Creation of a certificate of seized documents on DO and its transfer by e-mail to the account and report department (daily, no later than 11-00 the next business day) | 3                                                        | 22                                   | 1                       |
| 6   | Clarification to depositors of issues related to the operation of the deposit insurance system | 4                                                        | 65                                   | 4.3                     |
| 7   | Request and receive the necessary information from individuals and legal entities | 7                                                        | 70                                   | 8.2                     |
| 8   | Familiarization of customers with card products, conditions, tariff plans, rules for card transactions, card additional services | 3                                                        | 150                                  | 7.5                     |
| 9   | Reception of documents and execution of the procedure for interaction with the ACC for the issue and service of payment cards | 18                                                       | 150                                  | 45                      |
| 10  | Creation and supporting legal cases of card owners                          | 8                                                        | 50                                   | 6.6                     |
| 11  | Opening, supporting and closing card accounts                               | 7                                                        | 50                                   | 5.8                     |
| 12  | Documents reception and validation, disclosure in the accounts of private operations in transactions without account opening. | 10                                                       | 80                                   | 13.3                    |
| 13  | Scan the received documents from the client                                 | 5                                                        | 120                                  | 10                      |
and place them in the scan system

|   |   |
|---|---|
| 14 | Documental organization of operations with depersonalized metal accounts of individuals | 7 | 8 | 1 |
| 15 | Serving Customer Service Pack Owners | 13 | 40 | 8.6 |
| 16 | Selling Premium Service Packages to Existing and Potential Customers | 17 | 11 | 3.1 |
| 17 | Client identification and updating of information received as a result of identification of the client, his representative, beneficiary in process changing specified information, as well as in the process of studying the client and analyzing his activities | 10 | 55 | 9 |
| 18 | Execution as the operator performing the list of services specified in the order of money transfers by order of individuals without opening bank accounts using money transfer systems based on MoneyTrans and Western Union software products | 13 | 15 | 3.3 |
| 19 | Scan the received documents from the client and place them in the scan system | 4 | 50 | 3.3 |

**Total** 186.9

Based on table 4 it is possible to note that monthly volume of work of the senior account Manager of organization is 163.8 hours.

The Determination of the planned complexity of the work of senior Manager-operator TO JSC «Rosselkhozbank» is presented in table 5.

**Table 5.** The Determination of the planned complexity of the work of senior Manager-operator TO JSC «Rosselkhozbank».

| № | Performed tasks/operations | The rate of time for the evaluation of the employee, min | Number of works/operations per month | Monthly labour input, h |
|---|-----------------------------|------------------------------------------------------|--------------------------------------|------------------------|
| 1 | Opening and closing banks accounts | 8 | 150 | 20 |
| 2 | Validation clients documents during opening a bank account, when replacing a card, when a client updates a package of documents, etc. | 2 | 100 | 3.3 |
| 3 | Reception and validation documents of a client which needed for opening current accounts | 3 | 150 | 7.5 |
| 4 | Reception of payment documents for the transfer of funds from customer accounts | 6 | 550 | 55 |
| 5 | Reception and validation of cash documents for receipt and issuing cash | 3 | 400 | 20 |
| 6 | Organization a certificates to customers on their requests about the state of the current account | 4 | 100 | 6.6 |
| 7 | Caneration of monthly summary personal accounts | 180 | 1 | 3 |
| 8 | Creation of ganaral joining of accounting documents of the day (daily) | 20 | 22 | 7.3 |
| 9 | Scan the received documents from the client and place them in the scan system | 5 | 120 | 10 |
| 10 | Clarification to depositors of questions related to the operation of the deposit insurance system | 14 | 150 | 10 |
| 11 | Execution of documents for deposit operations | 7 | 70 | 8.2 |
for further work with them and the subsequent transfer to the archive

|   |   |   |
|---|---|---|
| 12 | Opening and closing of an account to clients for accounting credit, deposit operations, operations with securities | 12 | 110 | 22 |
| 13 | Off-balance sheet accounting of strict reporting forms | 9 | 22 | 3.3 |
| 14 | Documents reception and validation, disclosure in the accounts of private operations in transactions without account opening | 10 | 80 | 13.3 |
| 15 | Entering all necessary additional details to deposit accounts | 5 | 65 | 5.4 |
| 16 | Execution of functions as the operator performing the list of services specified in the order of money transfers by order of individuals without opening bank accounts using money transfer systems based on MoneyTrans and Western Union software products | 13 | 15 | 3.3 |
| 17 | Documental organization of operations with depersonalized metal accounts of individuals | 7 | 8 | 1 |
| 18 | Scan of documents that have been taken from a client and placement them in the scan system | 4 | 150 | 10 |
| 19 | Serving Customer Service Pack Owners | 13 | 20 | 4.3 |
|   | Total |   |   | 216.8 |

Monthly volume of work of the senior Manager-operator of organization is 216.8 hours.

4 Discussion

The completeness of using of personnel by TO JSC «Rosselkhozbank» can be estimated by the number of worked days and hours by the employees per month, also by the degree of using of the working time fund. Such an analysis for each employee of TO JSC «Rosselkhozbank» is presented in table 6.

Table 6. The Use of the working time Fund of employees TO JSC «Rosselkhozbank».

| Employees                  | Average monthly Fund of employees, h | change |
|----------------------------|--------------------------------------|--------|
|                            | plan       | fact         | surplus |
| Chief Cashier              |           | 145.6        | –       |
| Cashier                    |           | 145.6        | –       |
| Supervising Account Manager| 147.6     | 163.8        | 16.2    |
| Leader Checkout Clerk      |           | 186.9        | 39.3    |
| Chief Checkout Clerk       |           | 216.8        | 69.2    |
| All employees              | 738       | 858.7        | 124.7   |

Based on the data in table 6, we can conclude that only the cashier and the senior cashier of the additional office work out practically the prescribed amount of working time per month. The complexity of the work of the rest of the staff is that they are forced to process a month from 16 hours for a senior client manager to 70 hours for a senior operating manager.

Calculation of the needs of TO JSC «Rosselkhozbank» in employees will carry out in table 7.
Table 7. The Calculation of the planned number of employees TO JSC «Rosselkhozbank» on the complexity of their work.

| Employees               | EWT. h | SLI. h | IRS | Calculation       | Number | Change |
|-------------------------|--------|--------|-----|-------------------|--------|--------|
|                         | plan   | fact   | surplus |
| Chief Cashier           | 145.6  | 145.6  | 1    | 145.6/147.6       | 1      | 1      | –     |
| Cashier                 | 145.6  |        |       |                   | 1      |        |       |
| Supervising Account     | 163.8  | 1      | 1.1  | 163.8/147.6       | 1.1    | 1      | –     |
| Manager                 |        |        |       |                   |        |        |       |
| Leader Checkout Clerk   | 186.9  | 1      | 1.3  | 186.9/147.6       | 1.3    | 1      | –     |
| Chief Checkout Clerk    | 216.8  | 216.8  | 1.5  | 216.8/147.6       | 1.5    | 1      | –     |

5 Conclusions

Based on the obtained data, reflected in table 7, we can conclude. The planned and actual number of employees of cashier and senior cashier positions is the same. This means that there is no additional need for these employees.

Supervising Account Manager over fulfills the norms on 10 %, but this is quite acceptable and does not mean the involvement of another employee.

As for Leader Checkout Clerk and Chief Checkout Clerk, their over fulfillment of norms is much bigger and varies from 40 to 70 hours per month. This indicates about a high level labour intensity of the employees of the operational department, and as a result, is characterized by constant delays in the workplace of these employees after the working day.

So, based on carried out calculations, we can note the lack of specialists in the credit and operational departments. But if the actual number of employees implies an over fulfillment of standards by the Supervising Account Manager on 10 %, which is quite acceptable and realistic, then for the employees of the operations department this over fulfillment is already from 25 to 50 %. Such over fulfillment of norms can also take place, but testifies about a extremely high intensity of labour of employees of the operational department and the lack of their number.

A great importance for the implementation of the energy conservation program and to achieve its effectiveness has the involvement of all participants of the process, who really can have a positive impact to the achievement of the main goals and the implementation of tasks.

So, a synergistic effect will be achieved from a balanced distribution of functions of performers, cost reduction, identification and elimination of unproductive expenses, image attractiveness of the company in the eyes of business partners, the public and government; ensuring managerial transparency and increasing the manageability of the company.

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