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Design of a Business Process in the Field of HRM "Corporate Training" for the Company "100 Tonn Montaz", Yekaterinburg, Russian Federation

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Abstract. Management of a company's business processes is a key management task of modern organizations, which can cover not only the main, but also providing and servicing areas in its internal environment, including human resource management. The article is devoted to the design of the HR business process "Corporate training" for a rapidly developing regional company in the field of installation and rigging services, caused by the need to provide projects implemented by the company with highly qualified specialists involved in them. The analysis of the real practice of training in the company revealed the need to introduce corporate training as a business process that solves this problem. Based on the use of a standard model, the authors present a model of the HR business process "corporate training", developed for the needs of the organization under study, which is the practical significance of the study. The results obtained are universal and can be applied in the activities of organizations of any form of ownership, sphere of activity and size.

1. Introduction
Nowadays the development of the personnel is regarded both as urgent need and as a crucial factor for success. This is mostly linked to the intensive development of the economy based on knowledge and implementation of innovative technologies.

The change of generations in economy, the constantly changing and developing labor market, and a serious demographic decline have led to a shortage of highly qualified employees. This makes it necessary to prepare employees systematically for changes occurring both in the external (economic policy of the state, legislation and taxation system, the emergence of new technical standards and quality systems), and in the internal environment of the enterprise (structural restructuring of enterprises, changes in the social and age structure of personnel, the emergence of new jobs).

Constant training of employees is becoming more and more of current interest in the context of economic relation globalization and internationalization as well as integration of Russian enterprises in global and European socioeconomic space. In the competitive struggle in the "market without borders", into which the modern world is turning, the leaders are those who have programs of lifelong learning designed for the long term. According to the Swedish scholars K. Nordstrom and J. Riderstrele [5], in a world where the search for a competitive advantage is shifting to the intangible, non-material sphere, where knowledge decides everything, education should become continuous and lifelong. The authors believe that education is a powerful weapon in a competitive struggle for both
individuals and companies. Thus in the struggle for competitive advantages in a globalized economy, corporate training of personnel has become the most important means of achieving the strategic goals of the organization.

Determining the goal and priorities of corporate training largely depends on the characteristics of the strategic management of the organization in general and personnel in particular. The general approach to personnel training largely depends on strategic goals of the company’s management. Little attention is paid to corporate training in the organization where the management sees personnel as costs that need to be reduced. With this approach, it is considered more productive to attract already “ready” highly qualified personnel from outside, rather than invest in professional development of own employees. If the personnel is considered as the main asset of the company, ensuring its success, significant funds are invested in the development and training of personnel. Thus corporate training becomes one of the priority directions of the development of the organization.

The relevance of the research topic is conditioned by:

First, the issues of the effective development of Russian organizations and their personnel are among the most topical scientific problems conditioning changes in the requirements for the training of highly qualified and competitive employees. That is why recently in Russia, activities in the field of professional development of human resources have been expanding not only at all levels of the vocational education system, but also within the framework of private initiatives of individual commercial companies that are actively implementing and developing programs for internal corporate training of their employees.

Second, in the market economy, the competitiveness of a specialist directly depends on his readiness for continuous and career-long training since, regardless of someone's desire; there is a professional and qualification cycle that determines the emergence and obsolescence of knowledge, skills and abilities, motivations and values. Corporate training is designed to stimulate and develop the desire of employees to continuously improve their professional educational level, on the one hand, and on the other, through the creation of a system of in-house training, forms staff loyalty, ensures a decrease in staff turnover and high labor productivity.

Third, corporate training has become a common practice in modern business in recent years. Numerous huge corporations are either already implementing or testing various formats for creating an internal corporate training system for employees. This is especially true for industrial enterprises. This is mostly true for industrial enterprises. However, enterprises carrying out their economic activities in the service sphere are also actively developing systems of internal personnel training.

Fourth, the specificity of services and companies forces effective manufacturers to use and develop personnel training technologies capable of ensuring identity and high quality of service delivery without taking into account the "human factor".

All stated above conditions the development of scientific ideas on the creation of corporate training models that can be most effectively integrated into the structure of service enterprises.

Theoretical and methodological approaches to professional development management, training system formation and study of business processes are presented in the works of domestic and foreign scientists: P. Senge, T. Boydel, H. Vissema, A.P. Egorshin, A.Ya. Kibanov, I.P. Volkova, I.N. Gerchikova, M.H. Mescon, V. Woodcock, B. Karlof, P. Drucker, M. Pedler, B. Levi, U. Braddick, U. Ouchi, S. Dilich, E. Peter, H.Yu. Varneke, K. Starkey, S. Kreiner and others. Corporate training is the subject of interdisciplinary research, works devoted to the peculiarities of this type of educational services can be attributed to such areas as economics, pedagogy, psychology, management, marketing, human resource management and personnel management, management of educational systems, etc.. However, despite the fact that in modern scientific and industrial literature there is a sufficient number of publications devoted to the systems of in-house education, it is not possible to call this topic deeply studied.

The scientific novelty of the presented research consists in the development of a proposal for the creation of an efficiently functioning algorithmized business process of corporate training.
2. Theoretical aspects of building corporate training as a business process in the field of personnel management

2.1. Process approach as a management paradigm

The process approach in management is an approach that determines the study of the activities of any company as a network of business processes related to the goals and mission of the enterprise. The process approach is aimed at increasing the flexibility of the business, reducing the response time to changes in the market and external environment, and improving the performance of the organization. The process approach to organizing and managing the activities of an enterprise means orientation of the:

- enterprise to business processes;
- enterprise management system to manage both each business process separately and all business processes of the enterprise in general; enterprise quality systems to ensure the quality of technology for performing business processes.

A business process is a logical, consecutive, interconnected set of procedures which consumes the resources of a manufacture, creates a valuable product and presents a result to a final consumer. Among the main reasons prompting an organization to optimize business processes, it is possible to single out the need to reduce costs or the duration of the production cycle, the requirements imposed by consumers and the state, the introduction of quality management programs, the merger of companies, intra-organizational contradictions, etc. For clarity, the business process at work will be visualized using a flowchart of business processes.

Process-based management will improve the efficiency of horizontal connections between departments. The technology of describing and modeling a business process makes all the company's operations transparent and understandable, allows analyzing operations and finding problems leading to failures easily. Thus, process-oriented approach and business process management tools can help to solve many problems of modern Russian management. Today present technology is very popular since it allows organizing work in the company and finding a mechanism for improving processes.

Within the framework of the process approach, any enterprise is considered as a business system, which is a connected set of business processes, the ultimate goals of which is the release of products or services. M. Hammer and J. Lumpy define a business process "as a set of different types of activity, within which one or more types of resources are used at the input, and as a result of this activity, a product that is of value to the consumer is created at the output" [quoted by 1, 3].

2.2. HR-management as a system of business processes

HR-management is considered one of the most important spheres in the life of a company which is able to increase dramatically its efficiency.

In the general structure of the company, the work of the HR service is a group of service business processes. They provide the basic process and the processes of company management with the necessary human resources. Management processes are responsible for the company's agility, sensitivity to changes in market conditions and business development. Automatization of the main business process allows reducing costs of performing each task, increase the speed and quality of their implementation, and most importantly the company's profit.

The cost of an error with an incorrect or unsettled organization of the main process is great - loss of an order, a client, a profit. That is why the automation of business processes, as a rule, begins with the main process. In practice, companies have different approaches to the organization of work with personnel. HR processes are usually not formalized or poorly formalized. Excel is used for personnel management, registers are formed, orders and memos are issued, training programs are written, but there is not always a clearly defined, structured and formed business process in each direction of the service. Meanwhile, having a system of business processes and working in it, managers have the opportunity to track at what stage the work is being carried out for each launched stage of the process. For instance, the customer of the application for employee training sees that the HR department has
already selected several training methods, developed a training program, and at the moment they are going through the approval stage.

2.3. Features of corporate training

Corporate training is a dynamic process of disseminating knowledge and information to solve production problems, during which employees of an organization receive and apply the acquired knowledge and practical skills in their work, allowing them to more successfully and effectively adapt to changes in the external environment, while developing new models of professional activity that create a competitive advantage for the organization.

People are the main competitive advantage and the mail strategic resource in the process of modern organization development. Consequently, corporate training of the whole team is necessary to solve the set strategic tasks. Based on expert assessments and research results, it can be argued that investments in team development are the most useful among other investments and can significantly increase the efficiency, and most importantly, the effectiveness of educational activities.

The need and possibility of creating a corporate training system arise when:

- employees are considered as a strategic resource for the development of the organization;
- there is a well-developed strategy for the development of the organization with long-term, unchanging goals for its development;
- crucial professional competences of employees are described;
- the demand for education is defined.

A.Y. Kibanov [4] characterizes corporate training "as a special training system focused on the personnel of a particular enterprise and based on the solution of specific problems for this organization." Corporate training may be organized both on the territory of the enterprise, in corporate training centers, in educational institutions of vocational education, and in third-party educational organizations with the involvement of both their own and external teachers.

From a pedagogical point of view, corporate training is an organized process of interaction between trainers and students in the interests of the corporation and its employees, carried out inside or outside the organization and aimed at solving educational problems and ensuring the professional development of employees. Modern authors emphasize that the system of in-house training should be aimed at solving the goals of the company. That is why the educational purposes are directly linked to the strategic plans of the company.

Corporate training of personnel in the most general sense is a complex of interrelated processes and structures aimed at ensuring organizational development through the assimilation, development and transmission of experience by employees and the organization as a whole. The system of corporate personnel training is created where: there are long-term, unchanging goals of the company's development; elaborated development strategy; the required staff competencies are described; the need for training is realized (through certification); personnel are recognized as a strategic resource of the company; the corporate culture is consistently formed and developed. The system of corporate training includes certain processes and structures ensuring the management of these processes.

The corporate personnel training system allows to achieve the set goals in a short period of time measure them in specific units; assess the quality of the knowledge gained using various methods. Long-term goals and correlation with core business objectives are the main goals to be achieved.

The organization of corporate training is based on the study and consideration of the professional needs of the organization in general and the cognitive interests of specialists, their job functions, service status and professionally significant personality traits. It should be noted that corporate training should possess such characteristics as the openness of corporate training and its focus on the final result associated with solving urgent professional problems; flexibility, determined by the ability to take into account the objective needs of production and specialists in their professional and personal development. Another feature of corporate training is the participation in it of a specific category of students with basic vocational education and professional experience.
The realization of corporate training programs for employees and personnel allows maintaining the necessary level of qualification to ensure the competitiveness of the organization in the market and to train proactively focusing on changes in the external environment.

2.4. Corporate staff training as a business process

It is necessary to develop the structure of corporate training of personnel for successful functioning of the company, solving its current and strategic tasks, production of competitive goods or highly-qualified services. Trainings are used in a continuous mode, short-term programs helping to update and improve knowledge as quickly as possible are introduced. This allows the staff to master new technological processes, learn how to work on modern equipment or in practice apply various methods of high-quality service delivery. Corporate personnel training are the most important strategic objective of effective human resource management. Today, the majority of organizations develops their own business processes for corporate personnel training of, equip specialized classes or organize trainings that allow them to get a full range of new knowledge and skills on the job. If it is necessary to improve the qualifications of employees of the company, they enter into a direct contract with specialized centers or educational institutions that have state accreditation.

Typologically, the construction of the business process "corporate training" in accordance with the rules of business design is shown in Figure 1.
3. The analysis of corporate training system in Ltd "100 Tonn Montaz"

The company “100 Tonn Montaz” specializes in the installation of technological equipment since 2002. To perform various rigging and installation tasks, “100 Tonn Montaz” uses its own fleet of Dutch and German hydraulic equipment, constantly updating it taking into account the needs of the customer. Hydraulic gantry systems with a lifting capacity from 10 to 1100 tons, systems for shifting and side shifting of loads, a turntable, bogies and trailers (lifting capacity up to 120 tons), rails, beams, supports and much more - all this allows to carry out installation quickly and, at the same time, not to experience any problems with moving super-heavy equipment parts. The operating centers of “100 Tonn Montaz” are located in Moscow, St. Petersburg, Togliatti and Yekaterinburg, which makes it possible to provide installation services for industrial equipment throughout Russia and neighboring countries, as well as actively cooperate with European partners.

Thanks to the experience and technical equipment, "100 Tonn Montaz" offers any services for the installation of technological equipment: mechanical installation, electrical installation, and preparation of foundations, welding, documentation and much more. Heavy oversized equipment, such as a hydraulic press, machine tools, furnaces or turbines, is safely and accurately moved, positioned and assembled.

Today the company occupies a leading position in the market of rigging and installation. Since the beginning of 2016, the company has entered a stage of active growth, doubling the number of employees from 110 to 350 people. New directions of business have been launched; new specialists and engineers have been recruited. The number of large, complex installation projects has increased, sales have grown, and profits have increased. The company is gaining a strong position in its market developing really fast.

A personnel training is an important element of an organization’s HR department.

In order to study the real practice of organizing training in the company "100 Tonn Montaz", a study have been conducted with the help of the methods of content analysis of documents regulating the processes of training, observation, interviews with project managers and mentors. The study has found that the block “Corporate training” in the management system of human resources has the main task to supply the company with well-trained, qualified employees in accordance with the strategy of its development. Three types of corporate training exist in the company:

• Obligatory training
• Business training
• Corporate training

Special attention and clear organization are carried out only within the framework of obligatory training organized for all workers in the site, obtaining various permits, certificates for permission to work at the installation sites with certain technical support.

Business training is a more widespread type of training that is used for all categories of professionals - business leaders and engineers, except workers - and is designed to develop professional skills. This includes attending various thematic trainings, seminars, conferences, master classes, presentations, online trainings (webinars). Such type of education is carried out in a chaotic, unplanned mode. Applications are received at the request of the employee and the approval of the management. There is no planning of training needs, no training schedules, and no budget planning for these training activities, no assessment of the effectiveness of this training.

Corporate training is training conducted by a full-time master of industrial training, based on the needs of the company - the emergence of new complex projects for the installation of industrial equipment to solve production problems. Nowadays, corporate training at “100 Tonn Montaz” is often a solution to current production problems: to prepare workers for the upcoming work. This training is one of the key tasks in the chain of implementation of the entire project, since only trained people who know all the details and specifics of the production of a new project go to the site of its implementation. The project simply would not start if the workers do not go through this process. The company implements large
installation projects in completely different areas of industry and production - mining and processing, mechanical engineering, metallurgy, oil gas, chemical industry, etc. Faced with a new industry for the company, it is not always able to respond timely to the client's request, in addition, in modern business, the customer wants to work with a general contractor who can fulfill the order on a turnkey basis. This means that the general contractor must be able to perform several different types of work - electrical, welding, and finishing, construction work, equipment installation, equipment rigging, dismantling, locksmith and commissioning of completely different types of process equipment. This is not an easy task for the company, but with versatile, skilled workers, it is possible. A clear corporate training system is of a crucial importance in solving this complex task.

Currently, the employees of the company "100 Tonn Montaz" are not appropriately qualified in all areas of production to understand the course of the project. That is why the company organizes corporate training implemented in accordance with the following technology:

1. Sale of a project by a sales manager.
2. The chief engineer of the project deals with the technical documentation - the application received from the customer.
3. The chief engineer of the project independently, as he knows, forms an application for training in an arbitrary form, setting training topics for the master of industrial training.
4. The Industrial Training Master begins to prepare the training program in the form of a presentation. The master prepares the training program in an arbitrary form, without any structure, relying on his pedagogical experience.
5. Having developed the program, he conducts distance learning - online - for all project participants. Learning takes place remotely, because all workers are on site.

The time and timing of training are not set, all events are not regulated, the training process can begin 1 month before the start of the project or 1-2 weeks, or it cannot take place due to the fact that there is no understanding of how this business process is organized. There are no clear instructions on how to proceed when there is a need for corporate training.

The following shortcomings were identified based on the analysis of the corporate personnel training technology implemented in the company “100 Tonn Montaz”:

- training planning does not take into account the real need for staff training;
- application for training is formed incorrectly;
- the training program is not fully compiled, not always correct;
- no terms and schedule of training;
- only theoretical training is carried out, there is no practice of practical skills;
- corporate training in the event of new projects is not mandatory;
- at the end of the training there is no assessment of the effectiveness of training;
- certification and assessment of students' knowledge is not carried out.

The following threats and risks may arise from the ill-conceived implementation of the corporate training process in the event that unqualified employees enter the project:

- workers and specialists perform work too slowly, while simultaneously understanding the specifics of the task;
- violation of work schedules: the project is not completed on time and with the imposition of large fines from the customer;
- an accident may occur at the site with occupational injuries due to low qualifications of workers;
- workers can ruin expensive equipment and the project will not be implemented;
- the company's image in the installation services market will be undermined;
- the company will not be able to implement projects and meet the needs of customers in the equipment installation market in various industries without highly qualified workers and a corporate training system.

Consequently, the existing system of corporate training has proved ineffective neither for the business, nor for the training employees. Training does not have a clear technology and, as a result, cannot achieve the main goal - to increase the efficiency of professionalization of the labor force.
Training is conducted in a chaotic manner, not based on regulatory documents. The managers of the departments underestimate its effectiveness and importance in the project chain. The learning process is not coordinated with the main business processes in the framework of ongoing projects.

Thus, corporate training of personnel in the company does not get enough attention, despite the fact that the presence of this process within the framework of the implementation of the entire project is an integral part, since the main goal of the company is the high-quality implementation of projects, increasing the amount of profit. Respectively, building a business process of corporate training is the only way out in the situation. If this process is not described and implemented, employees simply will not be able to understand the production problem and implement the project, which will lead the company to unprofitable projects and, as a consequence, to bankruptcy.

In order for the corporate training process to become as effective as possible and to benefit the company, it is necessary to build corporate training as a business process that will effectively solve business problems.

4. Building a business process "Corporate training" for Ltd"100 Tonn Montaz"

A business process is a set of actions that employees take to achieve a particular goal. At the same time, not all participants of the business process know the sequence of all actions; each user is responsible for certain business functions. On the other hand, the final result is fundamental for a person responsible for the business process as a whole. In order to correct this situation, to improve the quality of the training process and the possibility of effective implementation of the project as well as to improve the qualifications of working specialists, it is proposed to develop a business process for corporate training for working specialties.

5 key job positions are the participants of this business process, among which are:

1. Sales manager - MS - an employee who actively sells the company's services - industrial equipment installation services. The main task of this specialist is to find a client and bring the deal to a contract.

2. Project manager - MP - an employee who receives a project for implementation after the MS has sold it. MP is fully responsible for the implementation of the project, owns its budget and makes all important decisions during the project.

3. Chief Project Engineer - CPE - an employee who solves all engineering and technical issues during the implementation of the project, deals with as-built documentation, reads design drawings and prepares reports.

4. The head of the personnel department - MHR - is an employee who makes all decisions regarding HR blocks - selection, training, motivation, HR administration.

5. Industrial Training Master - MIT - an employee who writes training programs, conducts corporate training for workers.

Business process diagram "Corporate training" includes 9 stages.

The final diagram of the business process of corporate training for workers of Ltd "100 Tonn Montaz" is shown in Figure 2.
5. Conclusion

With the implementation of this business process “Corporate training for workers”, the company can achieve its main goal - the ability to implement large projects and make a profit. Those employees who have completed corporate training will be able to significantly improve their qualifications and develop new competencies. A developed business process is a set of interrelated activities or tasks aimed at creating a specific product or service for consumers. The business process starts from the request of the customer of the process and ends with its satisfaction. It can be divided into several sub-processes that have their own tasks, but are also aimed at achieving the goal of the main business process. The process approach to management allows managers to define and manage the key processes and results of the company's activities that really create added value, as well as integrate the often disparate actions of functional departments and direct their efforts towards a single result, as the presented diagram of business design of corporate training shows. A company built on a process principle and having such a business process is always more flexible and adaptable to the external environment and the needs of the customer.

Implementation and management of this business process allows knowing exactly "Who is responsible for what" and how each operation affects the final result. The technology for describing a business process makes all the company's operations transparent and understandable. It allows analyzing operations and finding problems in them leading to failures. With the introduction of this business process, the company will be able to implement projects in different areas of production, accordingly, it is able to capture new segments and get more profit. The qualified personnel of the company will be able to cope with any request of the customer; this business process is the key to the effective strategic development of the company.

The practical significance of the study lies in the construction of a corporate training system as a business process for a specific business - the company "100 Tonn Montaz", which will allow:
• improve the qualifications, knowledge and skills of employees;
• develop new business areas - the ability to respond flexibly to the demands of the industrial equipment installation market;
  • develop employees without interrupting production tasks;
  • increase the level of employee motivation;
  • increase the company's profit.
Meanwhile, the results of the research are universal and can be applied in the activities of organizations of any form of ownership, scope and size.

6. References
[1] Gromov A I 2016 Upravlenie biznes-prozessami: sovremennye metody Monografia (Urait, Lubertz)
[2] Hammer M 2012 Bystree, luchshe, deshevel: deviat metodov reinginiringa biznes-prozessov Alpina Publ. (Moscow)
[3] Jeston D 2015 Upravlenie biznes-prozessami. Prakticheskoye rukovodstvo po uspeshnoi realizatsii rpoektov (Simvol, Moscow)
[4] Kibanov A Y 2010 Personnel management textbook IT’s RIOR (Moscow)
[5] Nordstrem K A & Ridderstralle Y 2008 Biznes v stile fank navsegda. Kapitalizm v udovolstnvie Mann, Ivanov i Ferber (Moscow)

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