

Personnel Management within the Conditions of New Social-Economic Reality

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ABSTRACT

The purpose of the academic paper is to study the new personnel management system within the conditions of external shocks (pandemic). The methodology is based on quantitative and qualitative methodology using in-depth interview methods with the HR Project Director for Cement JSC "Podilsky Cement" and Director on Projects in the sphere of Cement Personnel, CRH Ukraine, content analysis of the company's websites, statistical analysis of financial statements in order to determine the effectiveness of personnel management programs. The results prove that within the conditions of new social-economic reality through external shocks (pandemic) a new system of personnel management is formed, which through technology transforms the threats of management (hiring, employment) into opportunities for development and training, mentoring, internships by reducing staff turnover. Thus, the positive effect emerges of replacing the negative consequences of the virus spreading with the potential for human resources' development through effective virtual communication. External shocks cause a change in the social variables of the organization through the transformation of values, motivation, efficiency of employees. Within the pandemic conditions, the value of the collective atmosphere for employees increases, which will have a medium-term effect in the form of increased financial performance of organizations. The practical significance of the results lies in the possibility of using the results in human resource management, namely the integration of technology into personnel management in order to establish virtual communications.

Keywords: Pandemic conditions; Human resource management; Management system; The effectiveness of programs.

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La Gestión de Personal en las Condiciones de la Nueva Realidad Socioeconómica

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RESUMEN

El objetivo del trabajo académico es estudiar el nuevo sistema de gestión de personal en condiciones de choques externos (pandemia). La metodología se basa en una metodología cuantitativa y cualitativa que utiliza métodos de entrevista en profundidad con el Director de Proyectos de Recursos Humanos de Cemento JSC "Podilsky Cement" y el Director de Proyectos en el ámbito del personal de Cemento, CRH Ucrania, el análisis de contenido de los sitios web de la empresa, el análisis estadístico de los estados financieros con el fin de determinar la eficacia de los programas de gestión de personal. Los resultados demuestran que en las condiciones de la nueva realidad socio-económica a través de los choques externos (pandemia) se forma un nuevo sistema de gestión de personal, que a través de la tecnología transforma las amenazas de la gestión (contratación, empleo) en oportunidades de desarrollo y formación, tutoría, prácticas reduciendo la rotación de personal. Así, surge el efecto positivo de sustituir las consecuencias negativas de la propagación del virus por el potencial de desarrollo de los recursos humanos a través de una comunicación virtual eficaz. Los choques externos provocan un cambio en las variables sociales de la organización a través de la transformación de los valores, la motivación, la eficiencia de los empleados. Dentro de las condiciones de la pandemia, el valor del ambiente colectivo para los empleados aumenta, lo que tendrá un efecto a medio plazo en forma de aumento del rendimiento financiero de las organizaciones. La importancia práctica de los resultados radica en la posibilidad de utilizarlos en la gestión de los recursos humanos, es decir, la integración de la tecnología en la gestión del personal para establecer comunicaciones virtuales.

Palabras clave: Condiciones de pandemia; Gestión de recursos humanos; Sistema de gestión; Eficacia de los programas.

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1. Introduction

The spread of COVID-19 requires organizations “to alter their workforce in technical, physical and social-psychological ways” (Carnevale and Hatak, 2020). The pandemic has led to the transformation of human resource management, including related elements of the personnel management system, such as “human, task, structure, and technology variables” (Hartmann and Lussier, 2020). For many people, pandemic “is a career shock”, which determines the “frequency, controllability, intensity, valence, and duration” of an employee’s career (Akkermans et al., 2020; Bocheliuk et al., 2019). Herewith, if in the short term the employee fails in his career due to lack of professional qualities (dismissal, reduction of wages), then in the long term such a shock can serve as an advantage and incentive to gain additional skills, knowledge to improve professionalism (Forster et al., 2020). Among the professional skills, digital and personal (acknowledging fear, focusing on energy and on learning, control and accounting for emotions, staying engaged, flexibility (Dirani et al., 2020; Nechyporenko et al., 2019) determine the employee’s ability to hold a position, salary, etc.). Distance work requires the development of such skills due to the need for security (Bartsch et al., 2020; Kohlls, 2020). The outlined issues require studying the effectiveness of personnel management within the conditions of new social-economic reality (COVID-19 crisis).

The scientific literature discusses both the opportunities and threats to the functioning of the organization’s management system due to the crisis caused by the pandemic. Opportunities include optimizing personnel management by accelerating technology integration, updating technology implementation strategies, and developing digital skills (Gopinath, 2020; Israfilov et al., 2020). Threats include the need to reorganize the personnel management structure, increase cybersecurity risks, change business processes and operations. “In the short-term, there will be opportunities arising from the COVID-19 crisis, such as developing hygiene or digital work solutions. The long-term consequences of the COVID-19 pandemic are, however, not yet foreseeable, but it seems inevitable that broader opportunities will arise” (Kuckertz et al., 2020). Consequently, a pandemic as an external shock causes both threats and opportunities for personnel management and determines the future model of organizational changes.

Increasing employees’ dependence on digital technologies (for communication and accountability) leads to several important changes, namely: the necessity for employees’ training due to the need to acquire digital skills, rapid integration of technologies by organizations because of the threat of loss of profits (Hartmann and Lussier, 2020; Goncharenko et al., 2018). A lower level of digital skills is determined by the level of education and leads to a lower level of job availability through automation and digitalization (Baert et al., 2020). The degree of use, integration and efficiency of technology use by the organization before the pandemic has determined the degree of efficiency of organizations during the pandemic. These variables also outline changes in business processes and operations, the order of tasks performed by employees. In addition, the level of digital maturity of the organization determines its effectiveness (Bartsch et al., 2020; Sidorova, 2019).

The purpose of the academic paper is to study the new system of personnel management within the conditions of external shocks (pandemic).

2. Materials and Methods

Conceptual framework. The present investigation is based on the integration of Leavitt’s model of organizational change, “person-environment (PE) fit theories” (Donthu and Gustafsson, 2020) and the theory of social-technical systems, which in combination show the importance of four related social (human and structural) and technical (tasks and technologies) variables in the study of transformations in the organization (Hartmann and Lussier, 2020; Bobrova et al., 2020). “P-E fit theories highlight that employee–environment value congruence is important because values influence outcomes through motivation” (Donthu and Gustafsson, 2020). The integration of concepts makes it possible to form a new paradigm to explain how values change, motivate productivity and employees’ efficiency through social-technical variables, including the impact of external shock of the pandemic and the integration

of technology into personnel management processes. Thus, the article uses a multidisciplinary approach and integrates various theories to better study the new system of personnel management, which is formed within the conditions of the modern social-economic reality (Frolova et al., 2020).

In order to study the effects of the pandemic on personnel management, the in-depth interview method has been chosen with the HR Project Director for Cement JSC "Podilsky Cement" (Kamianets-Podilskyi, Khmelnytsky region) (Director on Projects in the sphere of Cement Personnel) HR Department, CRH Ukraine. Data have been collected via electronic means of communication (e-mail): HR Project Director for Cement was sent a list of questions according to the defined Conceptual framework. The list of issues included the following basic blocks: 1) the impact of exogenous shocks (pandemics) on personnel management (hiring, selection, training); 2) technologies in personnel management; 3) values, productivity, efficiency of employees; 4) personnel management system. Each block examines changes prior and after the shock of the pandemic on technology, values and productivity of workers and management system.

The content analysis of the company's website has been conducted for thorough understanding of the importance of technology in HR management CRH Ukraine. This has provided an understanding of the company's strategy, including digital strategy, management system, company performance, personnel management policy in the context of the spread of COVID-19 crisis. The effectiveness of personnel management programs has been studied by using statistical analysis of financial statements based on data on the number of employees, staff training costs and net income, profit according to Annual reporting of PJSC "Podilsky Cement" for 2014-2018, available on the official website of the company (CRH, 2020).

The basic hypotheses of the study: H1. External shocks cause a change in the technical characteristics of organizations, in particular, the tasks and functions of recruitment managers. H2. External shocks cause a change in the social variables of the organization through the transformation of values, motivation, efficiency of employees.

3. Results and Discussion

Studies that partially describe the opportunities and threats of personnel management in the context of the spread of the COVID-19 pandemic (Table 1) indicate the following changes: change in the structure of the organization (the need for reorganization), increasing dependence of employees on digital technologies, increasing the flexibility and adaptability of the management system of personnel and organizations; increase in the number of obstacles in the matters of hiring and personnel management; growing role of IT departments; accelerating the integration of digital development strategies; transformation of the role of leaders and managers in recruitment.

Donthu and Gustafsson (2020) have analyzed 13 articles on the impact of the pandemic on various sectors of the economy (retail, tourism, higher education), identifying changes in the business environment and consumer behavior, aspects related to leadership and staff. At the same time, the publication is based on a qualitative assessment of trends and prospects of the personnel management system; there is no analysis of technical changes in order to determine the degree of transformation of the model of organizational changes. According to the investigation of Akkermans, Richardson and Kraimer (2020), within the conditions of new social-economic reality personnel management is transformed in the following areas: structure, technologies, tasks (roles, functions of management managers), human resources (skills, competencies, knowledge). These variables are interrelated and determine the future model of the organization in the context of integrating technology into personnel management (Gurieva et al., 2019).

Bibliometric analysis of scientific articles of Verma and Gustafsson (2020) on the issue of personnel management within the conditions of the pandemic shows the limited research in this area. The impact of the crisis on business and management is studied in four areas and 18 sub-areas, namely: 1) overall impact on the business environment (business, value chain impact, pandemic and startup activities, impact on trade, employment, pandemic and communication risks); 2) pandemic and technologies

(pandemic and new technologies (innovations), telemedicine, “COVID-19 and infodemic”, social-technical transition); 3) “supply chain management”; 4) the sphere of services (travel and tourism, education, basic services) (Buribayev et al., 2020; Buribayev and Khamzina, 2019).

Table 1 Results of research on the issue of personnel management in the context of the spread of the COVID-19 pandemic

Author, year	Methodology	Conclusions
Hartmann and Lussier (2020)	Bibliographic analysis, interviews with innovators in B2B sphere, webinar with sales managers	Changing the structure of the organization (award trips, quotas, incentives and activities, number of employees, workload, new business processes). Increasing dependence of employees on digital technologies (for communication and accountability).
Dirani et al. (2020)	Cases of leading leadership practices in the field of personnel management	Integration of technologies increases the flexibility and adaptability of the personnel management system and organizations in general, forms new functions of personnel managers. IT departments become the basis of organizations. Digital strategies of organizations are transformed taking into account the needs of employees.
Kuckertz et al. (2020)	Qualitative research based on interviews with business ecosystem entities (startups)	The growing number of obstacles to recruitment and personnel management, pressure on the management structure and the need to reorganize personnel management.
Baert et al. (2020)	Qualitative research through a survey of 3821 Belgian employees	“The sudden changes as a result of the current crisis, including the abrupt introduction of compulsory teleworking for almost all non-essential occupations in Belgium”.
Bartsch et al. (2020)	Survey of 206 service employees working in a virtual environment. Least squares method and construction of structural models	Support for a certain level of productivity in a virtual work environment is provided by leadership-oriented and objective-oriented behavior. The effect of autonomous work of employees is indirect.
Loeb et al. (2020)	Case of software integration for the development of telemedicine in orthopedic surgery	“Despite the use of digital technology in healthcare, telemedicine has not been readily adopted. During the COVID-19 pandemic, healthcare systems have begun crisis management planning”. Program integration requires technological resources, certification and training of suppliers, sorting of clients (patients), planning and development of regulatory framework.

Source author's development.

On the one hand, the pandemic has accelerated the integration of technology into personnel management, on the other – it requires increasing security and data protection. Partially, this issue has been studied by Hartmann and Lussier (2020), who state that “the increasing of remote work and use of digital technologies brought about by the COVID-19 pandemic has led to greater concerns regarding cyber security, confidentiality of information, and privacy”. As a result, organizations need to integrate data protection technologies and strengthen security (e.g., intranet, encryption, organization provided devices, virus and malware protection, dual factor authentication, and personnel access).

Adaptation of new forms of technology within the pandemic conditions provides a higher level of flexibility of workers, and, as a consequence, of organizations. Organizations integrate innovative technologies such as data management policy, digital commerce, AI, IoT, drones, blockchain telemedicine, autonomous vehicles, and environmental innovations (Verma and Gustafsson, 2020). An additional advantage is the acquisition of new digital skills and competencies. Technologies reduce the level of tension among staff through the ability to obtain information about further actions of the company (Dirani et al., 2020; Zaripov et al., 2020). As a result, the organization and subsystem of personnel management becomes more flexible and adaptable to change. New trends in the integration of innovative technologies will lead to the emergence of new functions of HR managers, including support for managers in the study and implementation of technological solutions in order to provide technical support to employees (Burova et al., 2020; Zhigir, 2019).

As a result, “a new role (s) of Human Resource Development (HRD)” is being formed in personnel management, which implies the need for new leadership qualities and competencies not only of employees as a whole, but also of personnel management managers. “As technology has become an important part of the organization and its workers, leaders should be competent to enable the workers in their roles using technology”.

The study, conducted by Carnevale and Hatak (2020), has assessed the impact and consequences of the pandemic “for human resource management (HRM) as organizations help their workforce cope with and adjust to their newly altered work environment”; it has highlighted the opportunities and challenges for HRM. Herewith, there is no assessment of the effectiveness of technology in personnel management. These scientists focus on growing uncertainty, integration of technical tools for personnel management, the formation of a complex environment for human resource management in order to adapt to the new social-economic reality. Among the possibilities, they pay attention on the possibility of coordinating scientific efforts and turning them into practical activities. Among the major changes in human resource management, they emphasize on “shifting to remote work environments or implementing new workplace policies and procedures to limit human contact”. The main negative consequence of the virtual work environment is the reduction of staff well-being and productivity for business (Shmelev, 2020; Pavenkov et al., 2018).

Thus, the transition to virtual personnel management is a challenge for organizations in the context of staff productivity and efficiency. Replacement of real processes of hiring, selection and training of personnel by virtual forms, establishment of virtual communications will affect the structure of organizations, values, corporate culture. The traditional system of motivation is being transformed, the methods of personnel management in general are changing. The investigation on the formation of a new management system should be conducted in order to determine the impact of the pandemic on the effectiveness of organizations, hiring, selection, and training of personnel.

3.1 Management System Strategy and Pandemic Countermeasures of CRH Ukraine

Company CRH Ukraine positions itself as a responsible and long-term partner that integrates the concept of sustainable development into the management system. This provides ensuring the safety and health of employees as one of the key resources, social responsibility to staff, as well as staff of contractors, partners and customers. Safety is identified as the basic priority of CRH Ukraine. Development and training of human resources, regardless of social-economic characteristics (gender, age, religion) is guaranteed by 100% of staff. “Everyone has the right to learn and grow as a person and a professional in his field” (CRH, 2020).

Company CRH Ukraine operates in the markets of 31 countries (USA, India, and China, European countries, including Ukraine). CRH Ukraine integrates the following enterprises: JSC “Podilsky Cement”, LLC “Cement”, PJSC “Mykolayivcement”, Group of Companies “Polybeton”, PJSC “Bila Tserkva Ferroconcrete Structure Plant”, PJSC “Bekhyivskyi Specialized Quarry” in Ukraine, which export products to international markets. Forasmuch as CRH Ukraine operates at the international level, the strategy, tactics and practice of the HR Department integrates leading experience in the personnel

management system and makes it possible to scale the management experience to other enterprises in the field of production, operating globally and locally (CRH, 2020).

The management system of CRH Ukraine includes the following processes of hiring and employment: 1) search for potential candidates for positions (press, Internet, social networks, electronic means of communication, public organizations); 2) selection of candidates according to the following criteria: compliance with the company's values, knowledge, skills and level of professionalism, potential for training and growth, expected income, compliance of the candidate with the tasks and responsibilities of a particular position; 3) conducting interviews at various levels of government and final selection; 4) procedural familiarization at the enterprise (1 week); 5) acquaintance with business processes (2-3 weeks); 6) work at the enterprise; 7) work on project tasks; 8) trainings; 9) mentoring and guidance; 10) presentation of projects; 11) participation in meetings, round tables, etc. Processes 6-11 last 4-44 weeks (CRH, 2020).

The management system of CRH Ukraine should provide the following results: strengthening of leadership and team potential, formation of a team of trainees, mentors, professionals, strengthening the joint responsibility of staff for the creation of human resources, functioning of the platform of cross-functional interaction, positioning of the company as one that stably provides expansion of personnel, technical potential, carrying out selection and development of talents in all subsystems of activity, the organization open to new initiatives in the context of newly accepted and experienced workers. An in-depth interview with the HR Project Director for Cement JSC "Podilsky Cement" shows that the management system of CRH Ukraine has undergone insignificant technical changes. The digital strategy was complemented by measures to integrate new technologies of hiring, selection as well as employment and staff training. Employment procedures have been complemented by an information campaign on additional security measures, including behavioral messages in the context of the spread of the virus to ensure continuity, stability (Zeebaree et al., 2021; Romaniuk, 2020).

CRH Ukraine conducts monitoring of the pandemic situation due to the priority of staff safety and health. Within the global scale, CRH Ukraine is implementing measures to prevent the spread of the virus and ensure business continuity in accordance with the recommendations of the World Health Organization and national authorities and health authorities at the local level. The adaptability of measures to new social-economic realities is taken into consideration as one of the basic principles of activity within the conditions of the pandemic (Romaniuk, 2017). Accordingly, the management system obtains new functions and tasks, namely: monitoring the safety and health of personnel; ensuring the adaptability of management to new conditions; development and integration of virus prevention measures; study of international, national and local recommendations for counteracting the spread of the pandemic; more intensive use of communication technologies (CRH, 2020).

CRH Ukraine's personnel management system meets the requirements and is adapted to the goal of sustainable development "Goal 8. Decent work and economic growth". The organization has transformed the model of the organization due to the imbalance and low level of corporate responsibility, in particular, starting with the subsystem of human resources' management. In order to unite all enterprises under the CRH Ukraine brand, the organization has reoriented the corporate culture through the integration of HR departments and geographical segmentation of customers. The coordination of changes was headed by the HR, PR, commercial and marketing departments, which developed a program for reorienting corporate culture with the slogan "#CRHtogether – we can do it only together!". The main changes took place in the subsystems: production, sales (customer division), marketing (positioning, segmentation, rebranding of cement trucks, change of logos on factory signs, joint design of uniforms for workers), personnel management (integration of intangible incentives and traditions, networking, competitions, celebrations, football tournaments), management (strategic and operational) (CRH, 2020). Consequently, the transformation of CRH Ukraine's corporate culture took place under the influence of external variables (outspread of sustainable development strategies at the national and micro levels), emergence of new manufacturing technologies and the need for innovative technical and technological methods of production, lack of specialists in the labor market

of Ukraine). The pandemic is among the exogenous shocks. However, CRH Ukraine was actually ready for new shocks, and the company's adaptability and flexibility ensured the stability of its activities.

3.2 "Podilsky Cement" Restructuring Program

Changes in the organizational structure began in 2014 through the implementation of the "Restructuring Program of PJSC "Podilsky Cement"" (hereinafter – the Program). The program provided the gradual reduction of inefficient staff, integration of new technologies into production processes (2.5 million investments for equipment modernization, transition to a new modern heating system for industrial and administrative premises, etc.), the formation of a unified personnel management system. In the period of 2014-2017, the company integrates technologies for communication of employees throughout Ukraine through the establishment of telebridges. Hiring of individual entrepreneurs is one of the basic innovations of the management system; it ensures the implementation of narrowly specialized tasks with a higher level of quality and efficiency (CRH, 2020). The features of the Program were the growth of the salary of individual entrepreneurs through the hiring of highly specialized specialists, the recruitment of new jobs, the increase of salaries for professionals. During the restructuring period, the company increases the payment for the duration of training while reducing tuition fees, which means an increase in the effectiveness of initial programs (Table 2). As a result, net income from products' sales is growing steadily while reducing the level of losses, increasing the level of productivity to 5 221,88 thousand UAH per employee.

In fact, the 2016-2017 Program not only provided a solution to the problem of low levels of corporate culture and social responsibility, but also became a timely stage of preparation for new external shocks. The unification of the team and the formation of comfortable working conditions ensured the growth of financial, investment and technological results. The approach aimed at reducing the distance between staff and ensuring the unity of the team has become a key resource for maintaining stability within the conditions of the spread of the virus (Ushakov and Chich-Jen, 2018).

The results of the in-depth interview with the Director of HR Project Director for Cement JSC "Podilsky Cement" (Table 3) indicate insignificant changes in the personnel management system with short-term effects. The basic changes include: a greater use of technology for communication and the abolition of mass collective events, which have increased the level of importance of the existing collective atmosphere for employees. The staff noted a reduction in the level of motivation due to worries and fears of losing their jobs. The personnel management policy was aimed at actively informing employees about the new working conditions.

Within the conditions of the virus spreading, CRH Ukraine continued to develop staff in professional and personal areas. HR Project Director for Cement notes that the pandemic has made it possible to focus more on training employees due to the need of staff for stable incomes, social guarantees in accordance with collective agreements, within the crisis conditions. The HR department has become more focused on ensuring the development of the professional personnel reserve, in particular the development of technical target specialized specialties (mechanics, technologists, electricians). This was due to a reduction in staff turnover, which distracted recruitment managers from important tasks in the areas of training (Ihnatenko et al., 2019; Mishchenko et al., 2021). Thus, the technical system of personnel management has changed due to changing personnel tasks. On the one hand, the functions of communication, information have been added, on the other hand, the number of tasks from routine business operations on selection, hiring, employment has been reduced. HR managers have more time for mentoring, improving the permanent annual internship program for students, graduates of Ukrainian universities (Ivanov et al., 2019).

Table 2 Dynamics of efficiency indicators of “Restructuring Program of PJSC “Podilsky Cement””, 2014-2018

Indicator	2014	2015	2016	2017	2018	Growth rate (2018/2014), %
Number of hired employees, persons	47	47	52	69	24	-48.94
Number of dismissed employee’s persons	96	165	86	62	-	-
Average number of employees (persons)	598	598	537	511	487	-18.56
IE, thousand UAH.	63 064,1	60 928,3	65 962,20	73 105,10	85 449,00	35.50
Total duration of training, hours.	71 591	25 617	21 702	27 713	-	-
Total duration of training per 1 employee, hours / year	110.8	48.5	43.9	55.3	-	-
The total amount of training costs, thousand UAH	206 792	448 973.8	957 700	1 323 641	-	-
The total amount of training costs per 1 employee, thousand UAH	320	850	1939	2641	-	-
Net income from sales of products, thousand UAH	1255 377	1 633,772	2 389,702	2 668,380	2 735,821	117.93
Increase of net income, thousand UAH	-	378 395,0	755 930,0	278 678,0	67 441,0	-
Net financial result: loss, thousand UAH	-2 818 231.0	-3 392 333,0	-1 353 708,0	-643 237,0	-479 618,0	-82.98
Increase in net profit, thousand UAH	-	-574 102,0	2 038 625,0	710 471,0	163 619,0	-
Labor costs, thousand UAH	85712	71375	66661	73382	86 775	1.24
Labor productivity, thousand UAH / 1 employee	2099.29	2732.06	4450.10	5221.88	5617.70	167.60

Source CRH, 2020; SMIDA, 2020.

Hartmann and Lussier (2020) have noted the emergence of new business processes due to changes in organizational structure. The present academic paper confirms this conclusion, however, it is due to other external shocks, while the pandemic has actually shifted the focus from one business to another (from hiring to communication). Social variables that relate to staff, are associated with a decrease in the level of motivation, a sense of the value of interpersonal communication. This is due to the increased level of anxiety about employment, which forced employees to temporarily reduce the level of professional activity. It can be expected that in the medium term this will affect the efficiency of the company. The level of use of technology has increased significantly, however the organization was ready to use actively virtual connections throughout Ukraine through the Program of reorientation in order to unify the workforce and the formation of corporate culture. Such findings are contained in a study of Hartmann and Lussier, (2020), which have noted an increase in employees’ dependence on

digital technologies (for communication and accountability) during the pandemic (Shumilo et al., 2021; Bulatov et al., 2020).

Table 3 Results of in-depth interview with the director of HR Project Director for Cement JSC “Podilsky Cement”

Block of questions	Prior the pandemic	During the pandemic
1) influence of exogenous shocks on personnel management (hiring, selection, training)	Unification of labor relations, unification of factory teams, comfortable production atmosphere, social responsibility, intangible incentives (collective celebrations, football tournaments, talent discovery, master classes for employees, teleconferences with teams throughout Ukraine).	Supporting corporate culture through teleconferences using technology. Cancellation of mass collective events. Recruitment processes have remained unchanged; however, the level of virtual communication has increased.
2) technologies in personnel management;	E-mail, Skype, Zoom, application form via Internet site, mobile phones, social media (Viber, WhatsApp, Telegram, Facebook), CRM system for sales force development and training, online mentoring and training support.	E-mail, Skype, Zoom, application form via Internet site, mobile phones, social media (Viber, WhatsApp, Telegram, Facebook), CRM system for sales force development and training, online mentoring and training support. Recruitment managers have increased the use of technology to manage employees.
3) values, productivity, efficiency of employees;	The value is a friendly team and a positive atmosphere through collective measures and unification of labor relations. Due to the formation of corporate culture, the level of production capacity was increased by 2,1 million tons with a nominal furnace capacity of 2,2 million tons. Production of record volumes was observed in 2016. The highest sales were observed in 2016-2017.	In the short term, staff noted a reduction in motivation due to rising levels of anxiety, fears because of possible reduction. HR, PR departments provided communication and meetings to inform employees about personnel management policy in a pandemic.
4) personnel management system.	Implementation of “Restructuring Program of PJSC “Podilsky Cement” and reorientation of corporate culture to unify the workforce and meet the goals of the global strategy of sustainable development. The management system included traditional methods of hiring workers; mentoring and internship programs for new employees for technologists, mechanics, electricians, etc.; personnel reserve subsystem; subsystem of development and advanced training of personnel; subsystem of project implementation for the development of personnel management policy.	The management system is supplemented by communications and information on personnel policy within the conditions of the pandemic with more active use of information and communication technologies. The level of use of technology has increased, but the classic means of communication have remained unchanged

Source author's development.

Similar to the findings of Dirani et al. (2020) concerning increase the adaptability and flexibility of personnel management through the integration of technology, our study proves that technology (telebridges) is a tool to ensure rapid adaptability of organizations to external shocks. Kuckertz et al.,

(2020) have noted an increase in the number of barriers to hiring staff, pressure on the management structure, the need to reorganize personnel management. However, this quantitative study proves that a pandemic as an external shock is not a barrier to hiring, but an opportunity to focus on the more important functions of HR managers, namely: development, mentoring, training, internship training by reducing the turnover of human resources. On the one hand, the level of anxiety of employees has increased, but on the other hand, effective communication through technology solves the problem of fear of losing a job.

4. Conclusions

This study confirms the hypotheses about the impact of external shocks on the social and technical characteristics of organizations, in particular in the personnel management system. The basic social changes in the operating model of companies are the reduction of the number of hiring, selection, employment and growth of operations of development, training, communication of personnel. It can be assumed that such transformations will have a short-term effect due to the need of employees to restore interpersonal communication and transition to normal working conditions. Thus, there is a positive effect of replacing the negative effects of the spread of the virus with the potential for human resources' development through effective virtual communication. Present study proves that a new system of personnel management is formed within the conditions of new social-economic reality through external shocks (pandemic); it transforms management threats into opportunities through technology for development and training. External shocks cause a change in the technical characteristics of organizations, in particular, there is a shift of emphasis from one task and function of recruitment managers to other ones.

The pandemic as an external shock is not an obstacle to hiring, however it is an opportunity to focus on the more important functions of HR managers: development, mentoring, training, internship training by reducing the turnover of human resources. Thus, there is a positive effect of replacing the negative consequences of the spread of the virus with the potential for human resources' development through effective virtual communication. External shocks cause a change in the social variables of the organization through the transformation of values, motivation, efficiency of employees. Within the conditions of the pandemic, the value of the employees' collective atmosphere increases; this will have a medium-term effect on the financial performance of organizations.

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