Emergency Logistics Talent Assurance and Emergency Human Resources Supply Chain Management under Public Health Emergencies

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Abstract

Currently, it is an important period for people around the world to resist the outbreak of new coronavirus. In the face of public health emergencies, emergency logistics companies face major production pressure management and human resource management problems, and workers face risks of safety, health, unemployment and income reduction, and labor instability is increasing. Scientific and effective human resource management and human resource security are particularly important under public health emergencies. On this basis, the company must deal with or cannot operate according to the law, deal with the interests of employees to work normally and resume production, scientific arrangements to the post, down to concentrated, scattered flexible working hours. In the emergency human resources supply chain management, the role of the organization must be given full play. Lead the industry standard, lead the government to formulate relevant industry policies, and allow the establishment of a federation of emergency logistics companies, including specialized teams for emergency logistics industry training certification.

Keywords


1. Introduction

A new coronavirus in 2020 has brought emergency logistics into the spotlight. In China’s rapidly developing e-commerce industry, logistics is playing a key role and is becoming a new profit growth point for enterprises. Modern logistics is not only a support industry for the national economy and a new economic growth point for China, but also a branch of its evolution - the construction of an emergency logistics system helps to reduce the losses caused by public emergencies.

The National Development and Reform Commission actively carried out work on logistics planning after the State Council issued the Opinions of the General Office of the State Council on Accelerating the Development of Emergency Industry, and issued the Medium- and Long-term Plan for the Development of Logistics Industry (2014-2020), in which emergency logistics projects were among the twelve key development projects. However, the research on emergency logistics in China still remains in the preliminary development stage, and there are still many problems in the implementation of emergency logistics management. Exploring the construction of emergency human resources supply chain management system under public health emergencies and talent guarantee can help improve the talent management model and accumulate experience with reference value (Gu Dong, Jiang Fangtao, He Yan 2018) [1].
2. Literature review

The sudden epidemic tests every emergency logistics enterprise. Three scholars, including Gu Dong, believe that emergency logistics, as a branch of logistics activities, assumes the responsibility of realizing the spatial utility and temporal utility of materials. Like common logistics, emergency logistics also consists of fluid, carrier, flow, flow direction, flow and flow rate. However, emergency logistics has its own special features that distinguish it from ordinary logistics. Compared with ordinary logistics that takes into account efficiency and effectiveness to achieve maximum utilization of resources, emergency logistics does not take into account economic benefits and requires the shortest time and maximum flow to send emergency materials to the place of disaster, so as to achieve logistics benefits through logistics efficiency. The management of human resources of emergency logistics enterprises is particularly important under public health emergencies, and Dong, Haibo (2008) believes that there will be a peak in the demand for human resources in the short term after a public health emergency.[2]. This resource demand is not only large in quantity and high in professional and technical requirements, but also time-sensitive, so proper supply and demand planning is necessary. In order to have a more targeted talent reserve and development plan, a demand forecast analysis of emergency-type human resources must be conducted. In the demand forecast, the mix of different professionals should be fully considered, while the talent reserve should also be combined with the total population of each region; generally speaking, the larger the population, the more professionals are needed. The supply forecast of human resources is divided into two aspects: external supply forecast and internal supply forecast. The demand forecast is analyzed in comparison with the supply forecast for the same period, and the difference between the two is the part that the organization should find a way to make up for. When ensuring a balance between the total supply and demand of human resources, attention should also be paid to the balance of personnel structure. Bao Ligang (2020) argues that under a sudden public health event, the HR department of an enterprise should adjust the recruitment plan, employment methods, recruitment and interview methods that have been set before the epidemic[3]. First, due to the reduction of foreign trade orders and poor logistics and distribution under the epidemic, the production and sales quantities of most enterprises will be reduced to varying degrees, and the quantitative demand for human resources will also be reduced. In order to minimize the contact of personnel gathering, enterprises should try their best to help and retain the existing employees, especially for the core key positions of employees should pay more attention and help, in order to facilitate the stability of human resources. If a new employee has been hired before the outbreak and can only report to work after the outbreak, the HR department of the company should follow up and communicate with the new employee through the Internet or telephone in a timely manner and negotiate with the new employee to change the date of reporting to work. For the signing of labor contracts for new employees and the renewal of labor contracts for old employees, the HR department of the enterprise can confirm the official way through the enterprise e-mail, official website platform, office platform, etc., and promise to make up the written labor contract afterwards to eliminate the doubts and anxieties of employees.

3. Overview of emergency logistics and its human resource related theories based on emergencies

The so-called emergency logistics refers to the special logistics activities aimed at providing emergency materials for emergency situations such as natural disasters and public health emergencies, maximizing time efficiency, and minimizing disaster losses (Bianchao 2010) [4]. In real life, new coronavirus, SARS, public health activities and sudden natural disasters can cause specific death, injury and property damage. Emergency material transportation urgently
needs social logistics systems that perform emergency functions. In the period when companies are resuming their business one after another, the field of human resource management in emergency logistics companies is facing new conditions and issues. Faced with public health emergencies, companies are faced with greater production, operational pressure and human resource management issues. Workers are also faced with crises of safety, health, unemployment and reduced income. The instability of labor relations is also increasing (Bao Ligang 2020) [3]. Therefore, scientific and effective human resource management approaches are urgent and important in public health emergencies.

3.1. Planning of human resources for emergency logistics enterprises

Following a public health emergency, there will be a short-term peak demand for human resources. This resource demand is high, specialized, technically demanding, and timely. In order to have a more advanced talent reserve and development plan, emergency logistics companies must implement a demand forecasting analysis of emergency talent. In demand forecasting, we need to consider the role of different professional talents. At the same time, we should consider the total population of each region when we are recruiting talent. Generally, the population is more and we need more professionals. Human resource supply forecast is divided into external demand forecast and internal demand forecast. The difference between demand forecast and supply forecast in the same period is the part that the organization should create. To ensure the balance of supply and demand of human resources, attention should be paid to the balance of talent (Dong, Haibo 2008) [2].

3.2. Acquisition of human resources for emergency logistics enterprises

There are several ways to obtain talents for emergency enterprises: administrative recruitment; talent introduction, the organization should take active measures to introduce suitable talents, optimize the distribution of the talent pool, improve the talent training mechanism, and establish the talent reserve mechanism. According to regional and demographic characteristics to establish the appropriate database of experts, qualification and classification management, and update in time.

4. Emergency management framework

In this paper, the occurrence of public health emergencies is divided into four stages, namely prevention, preparation, response and recovery, see Figure 1.

Figure 1. Emergency Management Framework

It should be noted that the emergency management framework is a dynamic rather than a static system. Different regions need to analyze and identify potential local risks and adjust accordingly to their own circumstances. Within the same region, emergency management plans need to be modified in response to changes in various influencing factors in order to adapt to the changing environment. In the emergency management process, human resources are the first resource and have a dominant and proactive role. In these activities, the human factor is undoubtedly important. In addition, the management of disasters and accidents is different from the management of general events. Emergency management has the urgency of time, wide scope, and coordination of resources, and the human resources of emergency logistics companies play an important role. How to manage talents effectively is directly related to the effectiveness of disaster and incident management. In the four phases of the emergency
management system, we focus on the response phase and the recovery phase, and discuss what issues should be paid attention to in the two phases of human resource management in emergency logistics enterprises.

4.1. Human resource management in the response phase

The response stage is the third stage of emergency management. According to the advantages and problems exposed by our emergency logistics, the following suggestions are made.

4.1.1. Establishing a qualified conductor

In the emergency response phase, the human resource management of emergency logistics companies faces several problems: firstly, whether the instructions are accurate in the process of emergency management, whether the instructions for the disaster are accurate, secondly, whether the instructions are timely and effective, and whether the relationship between various departments is coordinated, all these factors directly affect the development and final outcome of the epidemic. Therefore, when a disaster incident occurs, there is a high demand for the quality of the commanders in all directions, not only in terms of expertise in emergency management, but also in terms of sufficient opportunity, decision-making and responsibility, as well as the various departments, the public and public opinion can be properly handled. Human resource management at this time is very different from the normal situation. In addition to strict discipline and disciplinary action, in the turnover of personnel, unlike previous strict and complex procedures, the courage to break with convention is necessary in emergency situations. Choosing a commander with the nature of each direction required for emergency management, imposing severe penalties on the commander when problems arise, and using excellent alternatives quickly and effectively ensures that emergency management is carried out smoothly and efficiently. This is a prerequisite and guarantee for post-emergency management deployment.

4.1.2. Legally protect the rights and interests of employees when the emergency logistics enterprise cannot normally start and resume production

In the face of a public health emergency in the response phase, if an enterprise or its employees cannot normally or even resume production for any reason, the first issue to be faced at that time is labor relations.

(1) Alternatives to layoffs and wage rates for work stoppages in enterprises affected by the epidemic

After a public health emergency, emergency logistics companies are unable to obtain raw materials, transport, negotiate business with customers, and sell products due to the impact of the epidemic, thereby increasing business operating costs and insufficient operating capital. This can make it difficult for companies to resume production, operations and production. The human resources department of the enterprise can reduce the wages of all employees, mobilize employees, shorten labor hours, stop work, and wait for work by negotiating with employees, thus stabilizing the retention of employee jobs, or reducing the number of employees depending on the degree of difficulty. For enterprises that temporarily do not pay wages, the human resources department and the financial department of the enterprise can negotiate with labor unions or employee representatives to defer payment in order to help reduce the pressure on liquidity. For small and medium-sized micro-enterprises affected by the epidemic, the state can relax the criteria for layoff rates and apply for employment insurance subsidies. According to the benchmark of the subsidy, 50% of the total amount of unemployment insurance benefits actually paid by the enterprise and its employees in the previous year will be returned to the enterprise and can be used for employee subsistence benefits, social insurance premiums, induction training. Skills upgrading training and other related expenses.
If an enterprise is affected by the epidemic and production is suspended for less than one wage payment cycle (maximum 30 days), the enterprise must pay wages according to normal labor hours, regardless of whether the employees work or not. If an enterprise's work stoppage exceeds one wage payment cycle, the enterprise may pay the employee not less than the local minimum wage according to the labor provided by the employee; if the employee does not provide normal labor, the enterprise shall pay a living wage, which shall be paid until the enterprise resumes work and production or until the termination of labor relations. The standard of living expenses shall be implemented according to the methods stipulated by each province, autonomous region and municipality directly under the central government. Usually the living expenses shall be paid at no less than 70%-100% of the local minimum wage standard. During the period of suspension of work and production, the enterprise shall continue to pay social insurance for the employees, but no longer give performance bonuses, allowances, benefits and other benefits.

(2) Employees under the influence of the epidemic cannot be terminated from their employment contracts during the period of paid quarantine observation and treatment.

After the occurrence of a public health emergency, during the period of isolation and treatment or medical observation, as well as due to the government’s implementation of isolation measures or other emergency measures for confirmed patients, suspected patients and close contacts, who cannot provide normal labor, the enterprise is considered to provide normal labor and pay the employee for normal working hours. Of course, if the employee’s condition is confirmed as a non-communicable disease, but other non-communicable diseases, after the quarantine is lifted and he/she enjoys a medical period, sick pay is paid during the medical period, and sick pay shall not be less than 80% of the local minimum wage standard.

4.2. Human resource management in the recovery phase

The recovery phase is long and involves complex issues that relate to the final outcome of emergency management and the recovery of the incident site after the disaster. During this phase, the supply and demand for human resource management in emergency logistics companies needs to be adjusted in terms of quantity and structure. On the supply side, many people lost their lives in the disaster, while some people moved to other places. Affected by the disaster, the inflow of human resources from home and abroad will also decrease in a certain period, so the supply of human resources for emergency logistics enterprises will also decrease. The demand will increase and the demand structure will change. For example, in the post-disaster recovery phase, the reconstruction work requires a large number of urban construction personnel. Therefore, human resource strategy and planning need to be revised according to the changes of internal factors and external environment.

4.2.1. Do a good job of reporting to work when employees return to work in the recovery phase of the epidemic

Before the resumption of production within the period allowed by the government and the health and epidemic prevention department, the human resources department of the enterprise should guide the workers, especially the returning workers, to come to work in the company within the specified time and prohibit the workers, especially those who have the following behaviors, to come to the company in advance after their return, so as to effectively reduce the gathering of people and stop the spread of the epidemic. The Human Resources Department of the company needs to design forms and documents for epidemic prevention and safety start-up in advance for the resumption of production, and issue reports to guide and implement the relevant work by sending and contacting the "Notice to all employees" and documents, forms and videos related to epidemic prevention and safe production life through the office system, QQ group, WeChat group and email. The employees are required to reply and confirm the receipt of the relevant documents and keep the evidence of the notice.
4.2.2. Conduct decentralized multi-shift flexible work schedule

Companies that are able to start production and resume production first understand the working conditions and environmental requirements of each position, the home office conditions and working time requirements of each employee through a web-based survey, and then arrange the work needs of the company by dispersing multiple shifts of flexible working hours according to the actual situation. For employees who do not rely on equipment and places, they can work in different places of the company in a decentralized and independent manner. For employees whose home office conditions meet their work needs, home remote network offices are also available. If necessary, a home telecommuting agreement can be signed with the employee. For employees who rely on fixed equipment and places, flexible working hours can be arranged. The Human Resources Department of the enterprise should plan and implement off-site residential employees to come to work at the company in advance according to different time periods of the day in order to stagger the peak hours of work and minimize the accumulation of traffic on the way, especially after the employees arrive at the company. Employees living in the in-house dormitory should try to work at different times of the day in the evening and morning to avoid frequent meetings with employees living in the company and also to reduce the chance of meeting with employees outside the factory.

4.2.3. Scientific adjustment of recruitment plans, employment methods, recruitment and interview methods

After the occurrence of a public health emergency, the human resources department of an enterprise should adjust the recruitment plan, employment method, recruitment and interview methods determined before the occurrence of the public health emergency. First, due to the reduction of foreign trade orders and poor logistics and distribution under the epidemic, the production and sales volume of most enterprises will be reduced to varying degrees, and the demand for human resources will also be reduced. In order to minimize personnel contact, enterprises should try their best to help and retain existing employees, especially those in key positions, in order to facilitate the stability of human resources. If a new employee has been hired before the outbreak and can report to work only after the outbreak, the HR department of the enterprise should follow up and communicate with the new employee through the Internet or telephone in a timely manner and negotiate with the new employee to change the start date. For the signing of labor contracts for new employees and the renewal of labor contracts for old employees, the HR department of the enterprise can formally confirm through email, official website platform, office platform, etc. and promise to sign written labor contracts afterwards to eliminate employees’ doubts and anxious employees.

5. Arranging and managing employee relations under epidemic prevention and control in advance

5.1. Do a good job in the epidemic medical treatment of individual medical fees, foreign settlement and medical insurance coverage three protection work

Before organizing employees to report back to work, the human resources department of the enterprise should not only collect information on the whereabouts of employees at the early stage of their return to work, but also actively inform employees about the handling of public health emergencies and infections, so as to eliminate the concerns of suspected patients and close contacts about costs and vacation pay during isolation medical observation and treatment, facilitate employees to actively cooperate with information collection and isolation medical
After SARS, China attaches great importance to the handling of public health emergencies. On January 22, 2020, the new coronavirus infection medical insurance issued by the National Health Insurance Bureau and the Ministry of Finance. The following three points were clarified: (1) Individual medical expenses do not need to worry: for pneumonia patients diagnosed with new coronavirus infection, medical expenses are paid after paying basic medical insurance, major medical insurance and medical assistance. Financial subsidies are provided for the portion borne by employees. (2) No need to worry about off-site settlement: for patients diagnosed with pneumonia due to new coronavirus infection in off-site locations, treatment is first settled and reimbursement is not subject to the reduced payment ratio for patients transferred to hospitals. (3) New coronavirus pneumonia patients do not need to worry: new coronavirus pneumonia patients diagnosed drugs and medical services can be in line with the health department to develop a new coronavirus pneumonia treatment plan, and can be temporarily included in the scope of payment of health insurance funds.

5.2. Do a good job of employee health management under epidemic prevention and control

Decentralized multi-shift flexible working hours can not only effectively reduce the gathering of employees during working hours, but also reduce the chance of employees gathering in the cafeteria due to the different working places and working hours, which is helpful to stop the spread of infectious diseases. In terms of employee health management, the HR department of the enterprise should urge the logistics department to implement the basic work of employee return-to-work prevention, issue free masks for employees, conduct temperature testing, disinfect the workplace and living places, etc. The company should also consider contracting the disinfection and prevention business to a third-party professional organization. The logistics department of the enterprise should also adjust the layout of employee dormitories, transfer employees with different working hours to one dormitory, and minimize and separate the bunks in the same dormitory. The enterprise human resources department should also urge the canteen to provide flexible catering services according to the flexible working time arrangement of employees in multiple shifts, minimize the number of people dining at the same time, and guide employees to dine in batches at different times, meanwhile, the dining employees should be separated by about one meter as far as possible. If possible, the canteen can send special staff to deliver meals to the relevant areas of each department, and employees can dine in their respective areas. In addition, employees can go to the cafeteria for meals and then find a place where no one is eating. Employees’ necessities are purchased by the logistics department and placed by the employees themselves at the designated place. Companies that are in a position to do so can also set up a temporary supermarket in-house to provide daily necessities, which can be paid for by credit card, WeChat, Alipay or transfer. According to the provisions of the Prevention and Control of Infectious Diseases Act, the human resources department of an enterprise shall promptly report to the nearby disease prevention and control institution or medical institution when it finds a patient with a contagious disease or a suspected contagious disease. If the enterprise conceals the relevant situation and causes the spread of infectious diseases, it shall be liable for compensation.

5.3. Do a good job of training employees’ production and life networks under epidemic prevention and control

After the occurrence of public health emergencies and the resumption of production, enterprises should start to carry out the training of production and life networks for prevention personnel. The training contents can be divided into the following categories: (1) Protection observation, and fundamentally prevent employees from concealing the epidemic.
knowledge related to work areas, including protection knowledge on the way to and from work, entering buildings and rooms, attending meetings, dining in canteens, official procurement, public areas, official travel, logistics, official visits, document flow, telephone disinfection, air conditioning disinfection, disposal of waste masks and other protective knowledge. (2) Knowledge of personal protection, including hand washing, masks, home and Internet. (3) Knowledge of novel coronavirus pneumonia and public health emergencies. (4) Knowledge of medical procedures and precautions. (5) Knowledge of individual medical costs, off-site billing, and epidemic health insurance coverage. (6) The importance of integrity, mutual trust and code of conduct for health and epidemic prevention staff. (7) Knowledge of psychological counseling for epidemic prevention staff.

5.4. Employee Assistance Program

Employee assistance programs are a series of measures to diagnose and treat personal problems that affect employees' work performance and to rehabilitate them. Its content involves stress release management, occupational mental health, layoff psychological crisis, catastrophic events, career development and other aspects to comprehensively help employees solve their personal problems. People are paying more and more attention to the safety and health of human resources in emergency logistics enterprises, especially in the process of emergency management, where staff overload and frequent access to dangerous areas are a great threat to health. More importantly, staff members often feel guilty for their dereliction of duty. At the same time, they hear and witness the tragedies that come with disasters, and even their friends and family are taken by the virus. The negative impact of psychological stress is far greater than the threat to physical health and lasts much longer. Therefore, during the recovery phase of emergency management, the public sector must pay sufficient attention to the possible psychological problems of employees, while forming an institutional psychological rescue. (Wang, Article, Sun, R. 2010) [5].

6. Conclusion

Under the epidemic, different types of logistics companies have different coping strategies in terms of human resource management: State-owned enterprises: ensure the employment stability of their own employees during the epidemic. Private enterprises: guarantee the timeliness of emergency supplies. Also for small and medium-sized enterprises, survival is the first rule. Foreign-invested enterprises: epidemic welfare. Know exactly how much the epidemic affects each employee and provide different benefits to the appropriate type of employees to appease them.

During the special period, HR departments of logistics companies should make efforts to maintain employment stability by taking into account the actual situation of the company and properly handling the procedures of switching from offline services to online offices during the epidemic, such as changing offline recruitment to online recruitment, suspending offline training business and publicity work and switching to online training. On the other hand, offline operations that are already planned can be postponed. At the same time, the services of dispatched and outsourced employees should be arranged to protect the legitimate rights and interests of employees and promote the coordination and stability of labor-management relations. On the other hand, enterprises should ensure continuous services for necessary business. The human resources of enterprises generally have a part of business that must be carried out every month, such as the payment of employees’ salaries, social security, the recruitment of newcomers to the enterprise, the processing of relevant documents and the handling of staff entry and exit procedures, etc. Many services cannot be delayed. Therefore, before resuming work, we need to do a good job of collecting information on salary or attendance and staff increase or decrease, and do a good job of salary payment and social
security payment. Secondly, to carry out the home network office, for most companies' HR departments, it is already suitable to carry out online office to work. However, the epidemic happened so suddenly that many companies and HR departments were not prepared for it, which caused certain problems in carrying out online work. For example, did the employees take their computers home? Many companies have installed desktop computers, but most of the employees' information is placed in the company computer, how to carry out office work at home? Is the operation of information systems realized? How to ensure the quality and efficiency of services? Enterprises can resume work, for these problems, enterprises can establish a corresponding temporary mechanism to prepare for the enterprise workers to work at home.

In essence, the epidemic did not substantially change the day-to-day management of human resources, especially for logistics companies, because the relationship between express delivery and people's lives is getting closer and closer, and it is important to deploy human resources and deploy personnel. Under the epidemic prevention and control, the HR department of the company can communicate with the relevant leaders of the company to carefully assess the impact of the epidemic on the business progress of the company and clarify the direction of the future work of the company. Second, communicate with department managers to assess the staffing and work style needs of each department and to clarify the company's human resource reserves and needs. Third, communicate with employees who cannot return to work in time, understand the types of employees affected by the epidemic and follow up on the work status of employees on time. Fourth, the Human Resources Department can communicate internally, introduce a management manual applicable to the human resources management of the company under the epidemic, and invite senior leaders to communicate with the employees of the company so that the employees know what the managers think under the epidemic.

In the process of growth, enterprises are actually meeting challenges and risks. The other side of any crisis is opportunity, so when faced with a crisis, an organization with more power and energy will be more flexible and the ability to turn crisis into opportunity will be stronger. Now that the new coronavirus is spreading around the world, both state-owned and private enterprises and foreign companies should reflect their core values. 2020 may be a difficult economic year, and companies should lay off fewer or no employees to tide over the difficulties with all employees and respond to the call for a community of human destiny. The epidemic may disrupt some rhythms of logistics enterprises, but it does not and cannot disrupt the established strategies. The author believes that the form will be better and better.

References


