



Original Article

Legal Comments on Employment Regulations for Enhancing Technology Transfer in Vietnam

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Abstract: Technology transfer is considered one of the main factors for innovation and enhancing productivity, then becomes a crucial policy in developing countries, including Vietnam. However, research has shown that innovation in Vietnam is under the expectation, especially at the enterprise level. One reason for this concern is the need for a stable supply of skilled employees to absorb, implement and re-distribute knowledge. Thus, this paper examines the issue from the perspective of employment law which mainly relates to the rights and obligations of employees and employers for the purpose of finding how these regulations might be supplemented to promote technology transfer. Legal recommendations are the primary outcomes of the paper.

Keywords: Technology transfer, labour supply, employment law.

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1. Introduction

The role of technology transfer in developing countries has been discussed in many kinds of research. In the context of industrial innovation, technological achievements are considered the basis for economic development. Some empirical studies in other countries show a similar outcome confirming the vital role of technology in achieving economic goals [1]. In Vietnam, the policy on developing technology has been confirmed in many important documents issued by the Communist Party [2]. From a legal perspective, many laws and sub-law documents have been issued for the purpose of enhancing this process. However, the rate of technology transfer in Vietnam has been estimated to be under expectation. Vietnam is warm to face the so-called “middle-income trap” of developing countries [3]. In this context, the National technology innovation program was promulgated in 2021 and highlighted that enterprises must be the central entity for technology transfer [4]. Despite such efforts at the national level, it is well recognized that technology transfer is limited at the enterprise level [5], and the main reason is the lack of local labour supply. Thus, the paper shall briefly summarize the situation of technology transfer at the enterprise level to find obstacles to the process and then discuss the issue from a legal perspective, especially employment regulations, for considering some relevant solutions. The structure of the study, in addition to the introduction and concluding paragraphs, includes i) the actual situation of technology transfer at the enterprise level in Vietnam, ii) legal issues in employment regulations promoting technology transfer, and iii) a discussion and recommendations. Although the research focuses on the case of Vietnam, it could reflect the situation in other developing countries to some extent.

2. The Actual Situation of Technology Transfer at the Enterprise Level in Vietnam

In the context of the Industrial Revolution 4.0, innovation is considered one of the main elements for achieving the goals of industrialization and modernization of Vietnam. A vital role is confirmed in many pieces of research stating that conducting innovation is an element of labour productivity and better performance [6]. In this context, many statistics point out that developing countries have yet to benefit from the revolution, and the technology transfer processes in these countries are still at low space. More seriously, according to a World Bank report, the structural change toward high-technology and more knowledge-intensive production in Vietnam has been slow compared to its peers, such as Singapore, Malaysia, Indonesia, and the Philippines [7]. There are many reasons for this situation. The first is a limited number of capacity-related indicators (i.e., innovation inputs). All the activities of research and development (R&D), formal training for workers, using technology licensed from foreign companies, and achieving internationally-recognized certification is below that expected for Vietnam’s income level [7]. The second reason is a limited supply of skilled workforce, causing hesitance in investing in innovation. This factor is highlighted in many researches which argue that financial issues, lack of machines, and skilled workers are obstacles for Vietnamese enterprises in absorbing new technology; among others, the lack of skilled workers might be the most severe [8].

Additionally, the question of enhancing higher building capabilities activities within an organization has yet to be effectively resolved [9]. This argument is also shared that attention should be paid to improving the staff level, especially managers, and encouraging employees to contribute to the innovation [10]. It is calculated that a higher percentage of skilled employees improves an enterprise’s

absorptive capacity and reduces the costs of adopting and creating new technologies [11]. It is generally recognized that a better-skilled labour force that has a chance to continuously improve their skills is a determinant for innovation in Vietnamese manufacturing enterprises. The situation seems to be hardly resolved due to the outcome of research on the education level of the Vietnamese workforce. According to the General Statistics Office of Vietnam, only 26,1% of the Vietnamese workforce was trained in 2021 [12]. Also, compared to the four levels of manufacturing skilled labor provided by ILO, the skills of most Vietnamese workers remain at levels 1 and 2 and need to be upgraded to levels 3 and level 4 [13]. This factor strengthens the burden on enterprises to train employees after recruitment. In addition, the well-known phenomenon of “job-hopping” make the situation more serious. According to some research, labour moving causes disruptive technology transfer at national and international levels [13, 14]. In the context of international integration and policies on free moving for working between countries, without appropriate regulations, Vietnam might face an increase in brain drain to developed countries [15]. The above examination concludes that building up a stable supply of skilled employees is vital for development in general and technology transfer in particular at the enterprise level. The following part shall examine the extent to which regulations on employment satisfy this demand.

3. Legal Issues in Employment Regulations Relating to Technology Transfer

The issue of technology transfer is mainly regulated by the Law on Technology Transfer and the Law on Intellectual Property [16] as well as their supplementing sub-law documents. However, the scope of these regulations is mainly on technology transfer activities at the national level, which concerns the source and procedure of technology to and from Vietnam.

Thus, from the perspective of the enterprise level, these regulations are silent on the obligation of parties to ensure a continuous technology transfer process. Within the scope of the article, the focus of this part will be employment law which concerns the rights of employees and employers. The current Labour Code adopts many international standards on labour rights and adds more articles strengthening labour rights. However, the rights and obligations of employees and employers regarding the promotion of technology transfer have not been appropriately paid attention to. To some extent, the protection of labour rights might harm technology transfer, which shall be examined in detail below.

i) Stability of Employment Relations and Freedom of Working

As examined above, technology transfer requires a stable labor supply for absorbing and distributing knowledge. In other words, the stability of employment relations, especially employment relations of highly skilled employees, plays a vital role in ensuring an effective technology transfer process. Such stability is already one of the main targets of employment law. It has been protected with many articles concerning the term of a contract, termination of a contract, and even labor dispute settlement,... Employees are protected from a sudden unilateral termination of a contract without justified reason. However, an employment contract is still easily broken by employees, even in the case of no justified reason. The reason is the balance between the stability of the employment contract and the employee's right to choose a job freely. On the one hand, the employment contract is generally regulated as an indefinite and definite term contract. Still, parties are entitled to sign no more than a definite term contract in the case of continuous working [17]. These regulations aim to protect parties in stable employment relations that benefit both employer and employee. Also, in the case of unilateral termination of the employment contract, both parties must provide prior notice to the other party. Such prior notice

periods vary from 30 to 45 days, depending on the reason for such termination. These regulations are expected that provide parties of employment relations a chance to prepare for chaotics due to broken employment relations. On the other hand, Vietnamese regulations on employment protect the principle of employment at will between an employee and their employer. International standards widely recognize this principle, including the Universal Declaration on Human Rights, International Covenant on Economic, Social and Cultural Rights, and ILO Conventions [18]. At the national level, it is confirmed in the Constitution of Vietnam that all citizens have the right to work and to choose their job, employment, and working place [19]. Labor regulations clarify this principle through both general and details articles. Accordingly, the employee has the freedom to choose their employment, workplace, and employer that is not prohibited by Law [17]. In particular, employees are given the right to terminate the employment contract at will. This freedom is even more extended in Labor Code 2019, stating that an employee is entitled to terminate their employment contract without any reason upon fulfilling the notice period. From the perspective of protecting employment rights, these regulations satisfy both international standards and national policies. However, in terms of technology transfer, they are not favorable for a stable and continuous transfer, or even worse, cause sudden termination of employment relations by employees and directly disrupt technology transfer. Thus, it might be concerned that ultimate freedom in terminating an employment contract would be an obstacle to the technology transfer process.

ii) Rights and Obligations of Parties in Training Activities

The second issue concerns parties' rights and obligations in improving labour capacity through training activities. In the context of low education levels, one of the most effective ways to have skilled employees is training taken by their employer. Furthermore, each enterprise

might apply one or few specific technologies which cannot be generally trained in professional schools. From a legal perspective, it is essential to consider how the rights and obligations of parties should be regulated. In the Labour Code 2019 and other implementing legal documents, there are already attention and detailed articles on promoting such activity. It is clearly regulated that one of the labour policies is "facilitating vocational training and apprenticeships to improve employability, labour-intense production, and business activities" [17]. The Labor Code 2019 refers to some rights and obligations of employees and employers regarding apprenticeship, internship, and vocational training. During the period of apprenticeship and internship, the employer is required to protect trainees' safety and some labour rights. These regulations raise both parties' awareness of the importance of training during the employment period. However, the content of this chapter is too general and mainly focuses on the solutions for enhancing productivity and avoiding unemployment risk. Details on rights and obligations regarding this issue should be mentioned more clearly. These regulations encourage employers to provide training activities rather than providing a legal framework for a long-term commitment between employees and employers. It is stipulated that the employer has the right to provide a training course for employees. In addition, the employer is entitled to provide apprenticeships or interns for its potential employee [17]. Employment regulations only regulate potential conflicts between parties during the training period. It is regulated that employer and employee are compulsory to create vocational training contract with main content on a training course, training period, wage, commitment for post-training employment, training expense and responsibility to refund training expense, obligations of parties,... [17]. It is reflected from these articles that the solution for diminishing the breach of commitment to training is only refunding training expenses.

This solution is only for reimbursement of training expenses but cannot count for lost opportunity costs. Additionally, this solution is not helpful in avoiding the disruption in technology transfer. In terms of vocational and training activities, employment regulations do not conflict with the purpose of transferring technology. However, they are still limited in providing opportunities and ensuring parties' legitimate rights in technology transfer.

iii) Rights and Obligations of Parties on Technology Secrets

Another issue that should be paid attention to during technology transfer is protecting technology secrets. As this is a process of transferring knowledge, any leak of information or secret might cause severe losses for an employer, and they will lose the motivation for innovation. This concern is mentioned in the Law on Technology Transfer and Labour Code, but the content is still too general. According to the Law on Technology Transfer, it is prohibited to leak technology secrets [20]. It is also stated in the Labor Code that employees have an obligation to protect (trade secrets and) technology secrets in and even after the termination of the employment contract [17], [17]. In the case of violating this obligation, an employee might be subject to disciplinary measures [17]. These regulations point out the obligations of parties in protecting technology secrets. However, the term "technology secret" has not been defined in any legal documents, even though it exists in both Law on Technology Transfer and Labour Code. Also, these laws mainly focus on preventing the leak of technology secrets and labour rights rather than facilitating the enhancement of this process. The target of protecting technology secrets now is only preventing illegal use rather than promoting the facilitating of technology transfer. Technology secrets should be clearly defined and then considered as the object to be continuously developed by employees or anyone who knows about them. In other words, the rights and obligations of employees and employers regarding technology secrets should

be separated from labour rights and discussed and agreed upon separately. Such separation shall allow the (former) employee and (former) employer to cooperate in other legal relations to promote technology transfer.

iv) Recruitment of Foreign Worker

Foreign workers are also essential elements of technology transfer. The technology transfer process mainly comes from industrialized and developed countries to developing countries like Vietnam. In addition to technical materials, foreign experts are the key to starting and taking over the technology transfer process. Then, it is also necessary to examine the regulations on recruiting foreign workers from the perspective of technology transfer.

In general, the policies on foreign workers in Vietnam are in favour of technology transfer, which focuses on highly skilled employees. It is required that foreign workers working in Vietnam must have technical, professional, or occupational qualifications and experience [17]. Also, the recruitment of foreign workers must be upon the condition of not having relevant local workers for the given position [17]. Foreign workers are also required to obtain work permits, of which the maximum duration is 2 years [21]. This is a popular labour policy in developing countries. On the one hand, it aims to enhance technological development with skilled foreign experts and prevent unskilled workers from taking jobs in the national labour market. These regulations, as mentioned earlier, open a door for skilled foreign workers to come to Vietnam and join the technology transfer process. Foreign workers are treated equally with local workers in terms of labour rights. They have a legal motivation to work in Vietnam, which creates an opportunity for technology transfer in Vietnam. However, these regulations are silent regarding rights and obligations concerning knowledge transfer. For obtaining the purpose of innovation, the ultimate goal of recruiting foreign workers is to fill the gap in professional knowledge between foreign and local workers. Thus, foreign workers, to some extent, should

have an obligation to transfer knowledge to the local workers. This gap shall be narrowed by commitments from foreign workers, employers, and local employees. From the point of view of promoting technological development, the rights and obligations of foreign workers should not be limited within the scope of labour law. Still, they should include the commitment to transferring knowledge to local people.

4. Discussion and Recommendations

Based on the result of the previous parts on the legal context in Vietnam, it is required to discuss how to create a working environment more favorable for a stable supply of skilled workforce for enterprises

The first step forward to a better legal framework for this issue is the connection between technology law and employment law. Although each branch of law has its scope of application, the technology transfer process requires the implementation of regulations on technology within employment relations with specific rights and obligations of parties. As mentioned in the previous part, during the process of technology transfer, the rights and obligations of parties on technical knowledge and labour simultaneously occur and need to be separated. Employees often have access to the technology transfer process when they start their employment relations. Employment law already provided some articles focusing on technology secrets. However, this issue has yet to become a target of employment law, causing some regulations to restrain technology transfer. A details recommendation here is that employment law should refer to the rights and obligations of parties regarding the technology of parties and mention them as an exceptional case in employment regulations.

Secondly, employment law is expected to contribute to a stable supply of skilled employees for the technology transfer process at the enterprise level. From this perspective, employment law, which mainly focuses on

labour rights, still has some gaps to fill. The first issue is the possibility of the unilateral termination of employees' employment contracts. A relatively simple termination of the employment contract might restrain the employer from providing training activities. This concern was defined in published research on technology transfer and its promotion. The research was based on the observation of the activities of the Thai-Nichi Institute of Technology and many in-depth interviews with staff of Vina Mazda and other organizations. Accordingly, job-hopping in Vietnam is one of two significant challenges for technology transfer [13]. Vietnamese employees want to gain experience to get a higher-paid job from other companies. This phenomenon requires enterprises to spend more time and money training new employees. From the perspective of economic benefit, such investment could be seen as a waste of time and money. As a result, a legal question might be raised about protecting the technology transfer process without diminishing the principle of freedom of employment. This concern could be resolved with the distinction between rights and obligations in employment and ones in technology transfer. In other words, although absorbing and distributing knowledge in technology transfer are activities taken during the working process, they are still separated from employment rights via a specific contract. Regarding labour rights, employees have the right to terminate employment contracts freely. But to enhance technology transfer, it is necessary to consider legitimate rights and obligations relating to the technology of both employer and employee. In addition to employment relations, employers and employees should have a legal commitment to transferring technology. Accordingly, among others, the employer has the right to use, apply or transfer a specific technology, and the employee should be obliged to transfer it. Such legal commitments should last until the completion of the transfer process and be

independent of employment relations. Employers should have the right to undertake technology transfer as a whole process, and any disruption at any stage of such process causing losses for them needs to be appropriately compensated. On the one hand, such separation does not conflict with the principle of employment law and, on the other hand, protects the rights of the technology of parties. The second issue to be discussed here is the consideration of the rights and obligations of parties in apprenticeship, internship, and vocational activities and the protection of technology secrets. They are essential for the technology transfer process but are only regulated to ensure labour rights. The goal of technology transfer has yet to be transplanted in these regulations. As a result, in the case of termination of the employment relation, employees will be discharged from the obligation of re-transferring knowledge. Employment law only refers to the compensation for leaking technology secrets, which is not the most significant obstacle to the technology transfer process. The process shall be restrained due to the disruption of employment relations. Thus, employment law should distinguish rights and obligations on labour and technology.

Lastly, employment law provides many articles on recruiting foreign workers, who are one of the keys to technology transfers. The ultimate role of these regulations is to supply a skilled workforce for the labour market, which in turn motivates technology transfer. Then, it is essential to implement regulations on transferring knowledge from these experts to local workers. However, these regulations mainly focus on labour rights and have yet to consider the issue of technology transfer. The author's opinion is that legal requirements for foreign workers should pay more attention to the rights and obligations of parties in transferring knowledge in employment relations. In detail, the application for a work permit for foreign workers should be supplemented with a proposal for transferring

knowledge, which might concern the knowledge type and the transfer schedule. These commitments might be in a separate contract in which rights and obligations relate but do not depend on employment relations between parties. In this case, the legal relationship between parties shall be further clarified, and the process of transferring knowledge between them might be further enhanced. As the term of the technology transfer process varies, the requirement on the work permit's duration should also be amended in a more flexible way. In the case of the necessity for a complete transfer of technology, foreign workers should be entitled to a longer-term work permit, ensuring the process.

5. Conclusion

Technology transfer is a valuable process for developing one country, especially developing countries like Vietnam. Despite many efforts at the national level, technology transfer is still estimated to be under expectation at the enterprise level due to the need for a stable supply of skilled employees. From the perspective of employment law, the author pointed out that there are some legal gaps to be filled for enhancing such supply, among others, more attention on rights and obligations between parties concerning transferring knowledge. To some extent, employment regulations might not facilitate technology transfer, but such obstacles could be removed with the distinction between employment rights and rights on the technology. The paper has also discussed some detailed legal solutions regarding employment contracts, vocational activities, technology secrets protection, and foreign workers' recruitment.

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