

Application of OJT in the Enterprise-- Taking Tsingtao Brewery Co., Ltd. as an Example

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Abstract

How time flies, we have entered the 21st century—a new era of knowledge economy for more than a dozen years. Competition among enterprises is getting more and more intense. Knowledge has become the key factor of production. Human capital has become the most important capital, which has transcended any other capital. So personnel training should be the top priority of enterprise development. Continuous training of human resources should be regarded as a strategic task to develop rapidly, which is indispensable in improving enterprises' innovation and competitiveness. On-the-job training (OJT) refers to new or inexperienced employees learning through observing peers or managers performing the job and trying to imitate their behavior. To elevate effectively skill levels for entry employees and diversify their skills by constructing a structured on-the-job training system, which is of great significance to enhance their centripetal force and competitiveness of enterprises. In this paper, some concerned concepts of OJT are chosen as a starting point. Theories of OJT were reviewed at first, and then it elaborates something about OJT, which includes meaning, purpose, steps, significance, etc. The article analyzes the current situation of OJT in Chinese enterprises and finds a huge gap between domestic enterprise and foreign enterprise. This paper which takes Tsingtao Brewery Company as an example to introduce the OJT system implemented by it, and to explore and analyze the results and experience gained in the OJT. In conclusion, the paper puts forward several solutions in regard to current issues of the domestic OJT.

Keyword: Training; OJT training; Tsingtao Brewery Co., Ltd

1. Introduction

1.1 Background and significance

As the trend of economic globalization become more and more obvious, it brings both vast opportunities and great challenges. Competition among foreign enterprises is increasingly fierce. Knowledge has become the key factor of production. Traditional physical capital is no longer the main driving force for the development of enterprise. Corporate pay more attention to people, and is more familiar with human. People is cost at beginning and become a resource later, he turn to the capital now. Human capital has become the most important capital in the company, Increase human capital value is the premise of enhancing the competitiveness of enterprises. ^[2] Human capital refers to the staff's strength, values, knowledge and skills as well as other spiritual levels. Compared to other general resources, human resource is different. It must be developed and used through an effective incentive mechanism and brings visible economic value to the organization. Therefore, both domestic and foreign businesses, no matter what kind of companies, are seeking the most effective training methods actively.

Training is an important way of human capital investment, it plays a very important role in the realization of personal income growth, sustainable economic development and healthy functioning of society. In the background of knowledge economy era, as the acceleration of technological progress, and the increased skill needs, school education does not mean the end of human capital investment. Training gets more attention as a more practical form of investment in human capital. There are many ways of training, including a demonstration method, lecture method, interactive video, simulation, on-the-job training and so on ^[1,3]. For businesses, on-the-job training is a very widely used approach in training.

On-the-job training makes staff master new technology quickly through systematic and structured training system, and increase the ability of enterprises through training of multi skilled employees. Therefore, the study of on-the-job training in application of enterprise is important for improving the quality of human resources.

1.2 Research status

1.2.1 Foreign research status

Becker (1964) and Mincer (1962) come up with theoretical research and empirical analysis on the OJT training problem, but in the study of human capital in the next decades, research for OJT training are much lower than the normal education in terms of quality and quantity point. One of the main reasons is that most countries will focus on human capital investment in formal education instead of OJT. Another important reason is the difficulty to get the data of research measuring. Since the 1950s and 1960s, research abroad in modern human capital theory has reached a climax. In western countries, especially USA, the study of on-the-job training investment income has experienced a process of gradual improvement: corporate training data from scratch, training measurement is increasingly sophisticated, training benefits estimation method is increasingly scientific, the scope of training is increasingly broadened. Study on OJT of foreign experts and scholars mainly focus on the following three aspects:

① Research on the benefit cost ratio of OJT

OJT training plays a positive role in improving labor productivity, promoting personal income growth and other aspects, which also supports the human capital theory about OJT training has a high economic value on the other hand.

② From the affecting factors in the participation of OJT

At present the study abroad is mainly summarized as four kinds of variables, human capital characteristics, personal characteristics, job characteristics and organizational characteristics. The human capital characteristics include formal education, the type of formal education, the experience of labor market; personal characteristics include age, gender and marital status; job characteristics include the type, level, income of labor job and the match of major and job; enterprise features mainly include the scale of the enterprise, the nature of the industry, ownership and enterprise location etc..

③ From the relationship of OJT and formal school education

On the relationship between OJT training and school education are not conclusive in the existing literature. It is usually regarded that both positive complementary and reverse substitution relationships are between OJT and regular school education, but complementary or alternative relationship perform more obvious in different conditions. At the same time, along with the changes in technology, the relationship between OJT and regular school education will change. ^[15]

In addition, many scholars also analyzed the comparing system of OJT of employees. There is a complete different system of staff training in the United States and Germany, staff training in the United States rely mainly on external training institutions, while Germany is largely dependent on a sound internal training system. There are also some foreign scholars research and analysis the OJT from the perspective of microeconomics and institutional economics.

At present, many foreign companies have been offering OJT training as a key work of the human resources department, as a way to improve employee job skills, an effective way to promote the quality of the products. They are committed to establishing a comprehensive and effective OJT training system to provide human resources guarantee for the realization of the objectives of the organization and business strategy.

1.2.2 Domestic research status

The current research of domestic scholars on OJT is primarily at the risk from OJT staff and its prevention measures angle, mostly using the methods of qualitative analysis. It has been found in recent years, some research of on-the-job training concepts and methods as well as the impact on employees' income growth and career development and other aspects, but the lack of systematic analysis and research on training, only to start arguments against the implementation process and techniques of training.

Through comparative research on OJT training, we can find: Study abroad on business OJT is not perfect. Numerous documents focused on cost-benefit analysis and institutional analysis of OJT, and research of combining with the concrete practice of corporate construction of practical training system is rare. There is a certain lack of systematic, structural and practical common problem. Foreign countries have introduced OJT many years ago and have accumulated a wealth of practical experience. But our emphasis on OJT training and promotion is just in its infancy, and lack of systematic theoretical guidance and tool support. ^[3] Reality make us along the route that has been researched and investigate the guidelines and operating procedures of on-the-job training in domestic enterprises so as to promote the rapid development of scientific and effective OJT training system in domestic enterprises.

Many of our companies do not pay attention to on-the-job training, and they are lack of advanced training concepts, strategic management thinking, systematic OJT structure and effective training departments. OJT training has not linked with performance appraisal, low efficiency in the implementation, time lag in the training, the implementation of training programs is arbitrary. Unplanned OJT may lead to the unqualified staff, resulting in the inefficient or ineffective production or providing services, and ultimately lead to low labor productivity. On the other hand it also wastes valuable resources of enterprise. Business investment in human capital can not be rewarded. Therefore, it is necessary for the enterprise to pay more attention to on-the-job training and build a systematic and structured on-the-job training system. Some domestic enterprises establish their own training system, but most are still simple ism which copy the advanced experience of foreign companies and ignore the applicability of the enterprise itself. Enterprises must base on the environment and their operating characteristics in the industry to develop a set of perfect training system which is suitable for the enterprise. Otherwise it is difficult for enterprises to achieve the desired effect and can not promote good development of corporate. Therefore, the current need of improving the quality of human resources, strengthen human resources training and development efforts and build a set of comprehensive OJT system which is suitable for China's national conditions and business development is urgent.

1.3 The main research contents and methods

- Tracking observation: In a certain period after the training, evaluate in a way of face to face survey or interview, according to the increase or decrease depending on the workload and the quality of presence and the skilled process;
- Consulted law: Survey or visit supervisor or subordinate trainees to understand whether the trainee's job performance has improved;
- Working standard evaluation method: Compare the job performance of trainees after training and business rules on job requirements to see if the gap narrowing and to determine if the training is effective;
- Interview method: Through direct interviews to trainees, find the changes in professional skills, behavioral characteristics, learning attitude and so on.

1.4 The innovation of this paper

This paper collects a lot of data to support reference points so that it has strong persuasion. It has a strong role in guiding and reference for companies both inside and outside the industry.

2. Related theory in OJT

2.1 Meanings of OJT

On-the-job training (OJT) refers to new or inexperienced employees learning through observing peers or managers performing the job and trying to imitate their behavior. OJT apply to the training of new staff posts, by the introduction of new technologies and the need for technological upgrading of experienced staff, cross-training in a department or job changes or employees and job duties to be promoted employees. OJT, simulation, business games, case studies, conduct demonstrations, interactive video and online training together constitute the six parts of passing laws.

2.2 Purposes of OJT

- (1) Let its staffs be skilled and do their job well
- (2) To improve the department's overall performance.
- (3) To promote staffs' personal growth.
- (4) People who are responsible for training improve their abilities through the guidance of others.

2.3 Steps of OJT

(1) Prepare for learning.

Let him calm down and tell him the kind of his work, know his understanding of the work, tell him the training objectives, produce the atmosphere for his learning and make him into the correct state. Of course, the first thing is to make sure he determines to learn.

(2) To delegate work.

Working content will train decomposition, tell him step by step and put into practice, emphasize the point, and tell him attention note. Patience is needed in clear and complete delegation and should not beyond his grasp.

(3) Try to do.

Let him try, the key is to have the supervision and help him correct the mistakes. And ask him to try and tell the procedures and precautions at the same time.

(4) Assessment.

Asked him to start working and make sure the assist, check regularly, encourage questioning, and gradually reduce the guidance until no guidance and unsupervised. Test when necessary, the examination content is the operation content.

2.4 Significance of OJT

(1) Do not delay the work time

Different from off-the-job training, OJT will link training and work closely, melting into the training at work, so that training is interacted with work. As a result employees receive training from work and get more jobs from the training, so as to get more valuable and meaningful improvement.

(2) Save training costs

Although training is not seen as the cost but an investment, but after all it still has to produce costs compared with off-the-job training, OJT training can save a lot of costs.

(3) Establish channels of communication between line managers and employees ^[8]

Through OJT training, it can increase the chance of contact between line managers and employees for convenient communication and mutual learning, to establish mutual trust and communication channels and make training as the type of communication between line managers and employees.

(4) More targeted

OJT training and school education in are able to increase the stock and the quality of human capital in common, but they have different emphases: School focuses on gaining knowledge; while OJT training is more focused on improving vocational skills . OJT training is an important way of investment in human capital, a lot of knowledge and skills are acquired in re-education after having a job. Rapid development of socio-economic and science and technology , not only make the intangible loss of physical capital intensifies, but also make the original qualified human capital who has received specialized education accelerate depreciation. In order to overcome the knowledge of aging caused by the depreciation of human capital, through various forms of education, accumulate the existing stock of human capital, update and improve the quality of human capital, is of great significance to the sustainable growth of economy and enhance the competitiveness of enterprises.

2.5 The main methods of OJT

(1) Coaching

Coaching is also called apprenticeship, refers to the selection of experienced staffs to trainees in key behaviors of teaching, demonstration, practice, examination, feedback and a series of process, to reach the purpose of training. Using this method can make the trainees understand more intuitive and get practice, and trainers can give timely feedback to the job performance.

(2) Assistant System

Assistant system refers to the trainees on the job needed in training, by assisting experienced staff to complete the work, making a detailed understanding of specific operational procedures in the work. Training through this way, employees can not operate all the work by themselves and may sometimes have misleading in critical step.

(3) Job rotation

Job rotation method is a systematic and formal training method to arrange the trainee to perform actually work on different jobs in different departments in the organization. Job rotation allows trainees to understand the purpose of operation and functions of departments in the entire organization, and also enables trainees to find suitable jobs. Generally speaking, staffs participate in job rotation get more rapid advancement opportunities and higher pay levels those who don't.

2.6 Implementation Guidelines of OJT

- (1) Let subordinates establish standard operation in every task on their own.
- (2) Pay attention to the expression type and content of subordinates.
- (3) Let subordinates must determine their own purposes or goals at first before carrying out work.
- (4) Let subordinates to carry out the work in the use of the scientific process.
- (5) Let subordinates work with the corresponding job skills or management tools.

2.7 Five keys (5E) of OJT coach

(1) Explanation

Make detailed description about how to do this work. First, summary the entire process; then describe each step of the process, explain a step each time. It is helpful to conclude the steps in instructions; finally, when you explain these steps once again, demonstrate how to finish the task. It is an important way for those listeners in terms of accepting new knowledge and information, and also a good opportunity to answer the questions they have accumulated. Therefore, in addition to expand their new knowledge field, answers should be prepared for them their questions.

(2) Experience

Make full use of receiving counseling experience and let him put his whole heart into the work. Share your experience is also very important, don't worry about the subordinates will replace you as a result. Because the subordinate has a high level and do a good job also belongs to the coach's "credit."

(3) Exercise

"Any theory is more important than practice!" Guiding purpose is to allow subordinates to do things better, rather than doing things for them. Therefore, more opportunities should be given for subordinates to practice, observe and guide beside them. Let subordinates be self inspiration and develop the personal potential and find a better way through practice.

(4) Expression

Provide constant feedback to recognize and reward the progress, to help employees assess progress and learn the lessons. It is very important to explicitly point out the mistakes. It can improve the performance of training. But the attitude is very important which must be sincere and is based on the facts, not the person.

(5) Esteem

Kindness and respect is very important. Encourage immediately when things are well done, but correct the wrong place immediately with the attitude on the facts, not the person. We should immediately lend a helping hand to the unskilled case, avoid letting him feel not as good as others so that lose his confidence.

3. Case study of OJT

3.1 Basic introduction of the case enterprise

Tsingtao Brewery won the favor of consumers by its unique taste and stable quality from the date of birth of 1903. In 1993 the company became the first domestic listed in both Hong Kong and Shanghai Co., Ltd., product was sold in the market of fifty countries and regions, production and sales of beer were in the top ten in the world. Brand value reached 25.827 billion Yuan, ranking first place in the same industry. In the new Centennial, Tsingtao Brewery has a vision of "become a large international company with global influence brand", and a mission of "Consumer preferences for beer brewing with our passion in order to create happiness", focus on the production and sales of beer, nurture and display brand proposition of "Enthusiasm make dreams come true", let Tsingtao Brewery deliver the joy and hope vividly to every corner of the world along with the success of consumer. In August 2005, Tsingtao Brewery became sponsor of the 2008 Beijing Olympic Games. In 2007, Tsingtao Brewery won the best employer of the whole year.

3.2 Introduction of the OJT system in the case enterprise

The OJT program has four key factors to success, respectively is the gap analysis, selection and training of OJT teachers, materials and methods of OJT and documentation and tracking. Gap analysis refers to the needs of OJT training based on actual demand in the way of the gap analysis; selection and training of OJT teachers explain that OJT teachers can implement training after going through the selection and implementation of specialized training; materials and methods of OJT refers to all OJT training in the use of standardized equipment based on job or OJT training programs ; documentation and tracking of training in order to test OJT training effect, trainees’ master of skills are tracked inventory verified by subsequent work . As the saying goes, a good beginning is half of success, do not fight the unprepared battle, Tsingtao Brewery Company Limited (hereinafter referred to as "Tsingtao beer") pays special attention to OJT program, regards it as the key to the success of on-the-job training and the whole business.

In 2004, OJT first entered Tsingtao beer. And just a few years later it is promoted in Tsingtao beer. OJT’ s effective promotion results in many years’ accumulation of pioneering, innovative learning atmosphere, and at the grassroots staff job standardization, SOP and CPCP-R(critical control point review) work foundation in Tsingtao beer. OJT in Tsingtao beer has experienced the following four stages in the whole process of implementation:

□ Start exploration stage

In March 2004, became the first to start the implementation of OJT in two factories. By the pilot in the part of the job, the program began to establish programs written in other methods, such as creating the instructor selection mode, and summed up some key points such as the support of leader and department, incentive policy, training, and propaganda. The first phase lasts for one year and made a good preparation for the following development.

□ Accumulation of experience stage

Successful pilot plant provided an opportunity for the company. OJT started local implementation in Qingdao, the factory also expanded from the original two to five. It has made many achievements in more than a year: nearly 80 copies of course, selection of more than 120 teachers. Meanwhile, the nearly 100 pages of Tsingtao OJT instruction handbook came into being as the times require, the relevant methods and cases were studied and systematically summarized. All of these improved the plant's operation ability and provided the reference for the advancement of OJT.

□ Field pilot phase

Tsingtao beer adopted an idea of "comprehensive coverage - wide training - focus on in 2007. OJT was extended to the field of more than 20 factories. In the meantime it organized two main training camp and trained more than 60 people, lay the foundation for upgrading the skills of basic level staffs. In addition, Tsingtao beer implemented the internal communication and sharing of experience and promoted the efficiency of overall plant through the annual review, half schedule and electronic journals, knowledge platform and other channels.

□ Company universal stage

OJT began to popularize in Tsingtao beer from 2008, and became the core tools in the training and development of staffs. Tsingtao beer has not become dizzy with success, and improved the method constantly according to the needs and realized truly advancing with the times.

preparation phase	1. the establishment of the OJT project team		2. make the project OJT program plan		
analysis phase	3. face the future design and analysis of differences in organizational structure				
implementation phase	4. the selection of the training instructor	5. determine standardized job training	6. OJT training and tracking program	7. the signing of the OJT apprenticeship training contract	8. the implementation of OJT training
perfect stage	9. verify the effect of OJT training		10. improve the implementation process and OJT training programs		

Many people in Tsingtao beer play an important role in the advancing process of OJT, including the factory executive, training manager, department training coordinator, team leader, master trainers teacher, student, etc. Tsingtao beer summed up a set of effective OJT model in a few years of exploration and practice, divided into four stages and ten steps.

Preparation phase

Including the establishment of OJT project team and make the project OJT program plan. The former is set up in the factory and each department to determine the key personnel and their respective division of responsibilities. The latter is developed by the project team and implemented step by step.

Analysis phase

This step is facing the future design and analysis of differences in organizational structure. This is demand for improvement of productivity, analysis efficient staffing shifts and draw the gap between needs and realities, and find out the key improve the performance, thus make a staff training plan based on future development strategies. Attention must be paid to variance analysis which is the beginning and the end of the entire training and the key to the successful implementation of the plan.

Implementation phase

The first step is the selection of the training instructor, on the basis of differences in analysis, to determine the need of training for person, and the number of teachers and suitable candidates. All the teachers have to go through the selection and specialized training before getting their qualification. Selection is based on their ability and colleagues' respect. The content of training consists of two aspects: learning of the operational processes and guidance of teaching skills. Then determine standardized job training, this is not a simple transfer of experience, but based on a standardized training curriculum. Instructors are responsible for the preparation of lesson plans and data collection, master workers teach in a way according to the same standards and reasonable method, all rectification can be quickly finished in the way of program improvement. Second is to develop OJT training and tracking program. Standardized curriculum program, qualified teachers and realistic difference analysis are key elements for the successful implementation of plan. With the above factors, you can vary the flexibility to develop appropriate plans for different objects. This approach is undoubtedly more efficient, easier to get a better input-output ratio. Next is the signing of the OJT apprenticeship training contract, which greatly reflects the company's attention. In a way of a contract can regulate the behavior of learning, make teachers and students more clear about the responsibilities and obligations and motivate them to better accomplish the teaching work. The last one is the implementation of OJT training. It's much more difficult than teaching in the classroom. Teachers not only undertake the daily work, but also finish the content of the training program. Therefore, the implementation of the training needs dedication of teachers and students and much support from all levels of management personnel in order to ensure a smooth implementation in the whole process.

Perfect stage

The final stage is to verify the effect of OJT training. Clear objectives for each phase are documented and can be refined to be judged by "can" and "can not". After the training, teachers and monitors are together to validate learning outcomes and make judgments. Only when goals are achieved at all stages, students can be qualified to work independently for the job. The last step is to improve the implementation process and OJT training programs. Finish the verification at all stages doesn't mean the accomplishment of the plan, problems will continue to emerge in the process. Analyze and resolve for each problem and improve OJT operational process continuously, gain teachers' skills and maintain the dynamic improvement of the curriculum program.

3.3 Training effect of the Case enterprise

Tsingtao beer has got remarkable results through excellent design of plans and good implementation in more than four years.

- Provide great support to promote operation targets of plant production
- Increase the grass-roots staffs' sense of belonging and form a good working atmosphere of learning
- Transfer personal skills into organizational skills and realize the knowledge management
- Cultivate professional technicians team

4. Conclusion

OJT is only a mean to achieve the purpose. It plays more roles in promoting the transformation of work ideas and improving the skills of employees as a part of organizational performance. OJT in china is still lagging behind and many companies do not pay attention to it. Chinese enterprises should take Tsingtao Brewery Co., Ltd. as an example, let OJT shine in the enterprise and create a more resounding brand. Ultimately our enterprises will set sights on the world and achieve greater success.

References

- Phillip C. Wright and Monica Belcourt. Down in the trenches: learning in a learning organization [J]. *Employee Counselling Today*, 1996(9):24-28.
- Priti Jain. On-the-job training: a key to human resource development [J]. *Library Management*, 1999(9):283-294.
- Seyed-Mahmoud Aghazadeh. REFLECTIVE PRACTICE Re-examining the training side of productivity improvement: evidence from service sector [J]. *International Journal of Productivity and Performance Management*, 2007(8):744-757.
- H. Wayne Smith and John W. Morrison. High-Impact On-The-Job Training [J]. *Emerald Backfiles*, 2007(5):22-25.
- Ronald L. Jacobs and Mohammad Jaseem Bu-Rahmah. Developing employee expertise through structured on-the-job training (S-OJT): an introduction to this training approach and the KNPC experience [J]. *Industrial and commercial training*, 2012(9):75-84.
- Phallapa Petison and Lalit M. Johri. Developing local talent in international subsidiaries: the importance of trust and respect in Toyota [J]. *Development and learning in organizations*, 2007(9):10-13.
- Paël Schùne. Analysing the effect of training on wages ± using combined survey-register data [J]. *International Journal of Manpower*, 2001(9):138-157.
- Mohamed Zairi. Managing human resources in healthcare: learning from world class practices – part II [J]. *Health Manpower Management*, 1998(9):58-65.
- Thomas N.Garavan. Human resource development and workplace learning:emerging theoretical perspectives and organizational practices [J]. *Journal of European Industrial Training*, 2002(9):60-71.
- Tasasbi Mito. The Internationalization of Japanese Management [J]. *Planning Review*, 1982(3):30-46.
- Lai Wan Hooi. Technical training in the MNCs in Malaysia: a case study analysis of the petrochemical industry [J]. *Journal of European Industrial*, 2009(11):317-343.
- Tung-Chun Huang. Gender differences in company training: the case of Taiwanese high-tech firms [J]. *Employee Relations*,, 1999(7):500-508.
- Liu. Research job training system manufacturing enterprises [D] 2005(4).
- Li, Hao. Enterprise-job training for employees income growth, the impact of career development [J].*Peking university education review*, 2007(1):150-160.
- Li. Applied Research Training of S-OJT [D] 2009(5).
- Wu. Talking about Japan's OJT training [J]. *Occupation*, 2010(3):144-145.
- Yu. Effectiveness of corporate training - structured revelation in the case of job training [J].*Business china*, 2009(3):245-246.
- Jia,Tian. Japanese firms develop new vocational education financial crisis [J]. *Vocational and technical education*, 2009(6):82-86.
- BIRGITTA OLSSON . Staff Training and Further Development in Place of Redundancies: A Swedish Example [J]. *Journal of human resource costing and accounting* ,1998(2):45-57.
- Jeffrey G. Woods . An analysis of apprentices in the US construction trades [J]. *Education and Training* ,2012(10):401-418.
- Marcel R.van der klink .Effectiveness of on-the-job training[J].*Journal of European Industrial Training* ,2002(2):196-199.
- Sohaimi Zakaria . Knowledge creation and flow in agriculture [J].*Library Management* ,2010(7):27-35.
- Patrice Jackson . A systems approach for human capital management [J].*The journal of information and knowledge management systems* ,2007(7):399-403.