



## Emergence of training and development in organisations – A historical perspective

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### Abstract

Employee development and training programmes are essential to the global success of firms. These programmes help organisations raise employee productivity and promote corporate culture while also allowing employees to expand their skills. These training programmes, while necessary for the survival of today's enterprises, were not part of the organization's culture from the start. Training as a concept did not arise until the late 1930s. Training became a notion during World War II, when the US government cooperated with the country's industries to train workers in order to increase the production of military hardware. Following the war, several businesses began providing classroom and on-the-job training to their employees in order to improve their overall efficiency. The ISD model was used to design the trainings. Becker's Theory on Human Capital clarified that training should be viewed as an investment rather than a cost to the organisation. Because of the increasingly complex nature of work and developments in instructional technology, the major site of training has shifted away from the classroom to videos and simulation. Training programmes are no longer planned separately from an employee's job, but are rather integrated into the work process, allowing individuals to grow while they work. Employee training has become more interactive owing to the use of Artificial Intelligence, Virtual Reality, and Machine Learning. Trainees can now experiment and judge the implications of their actions in real-life scenarios. These technology improvements have benefited both individuals and businesses because these tools provide real-time feedback to employees, allowing them to take prompt action and correct problems. Training & Development programmes have progressed from being an organization's initiative to becoming a vital element of the organization's strategy, and will continue to progress in the future, providing a variety of benefits to the organisations.

**Keywords:** Training, Development, Organisations, Human capital, Human resources management.

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## 1. Introduction

Training and development refer to learning programmes within a firm that are designed to improve employees' knowledge, skills, abilities and attitudes while also offering information and instruction on how to do specific tasks more effectively. Training is about understanding where you are now and where you will be in the future with your abilities. People can learn new material, new methodologies, and refresh their existing knowledge and abilities by attending the training sessions. As a result, there is significant improvement and increased productivity at work. The goal of the training is to make an impact that lasts beyond the duration of the training and to keep employees informed about new trends. With the purpose of employee long-term development, training programmes can be produced independently or with the help of a learning management system. Orientations, classroom lectures, case studies, role playing, simulations, and computer-based training, including e-learning, are all common training methods.

Training and Development programmes are a very novel idea in organisations. Training and Development gained grounds in the organisations during and post -World War II. The very first Training initiative “Training within Industry (TWI)” was taken up by the US War Manpower Commission. The booming wartime economy and technological breakthroughs caused a huge increase in the demand for trained workers during this time, which aided to the expansion of employee training and development. Many corporations had set-up training programmes during the war period. With the steady restoration to a peacetime economy, training was to remain a permanent presence in most organisations, albeit in smaller numbers.

Training and development initiatives in the modern workplace have a wide range of uses, ranging from instruction in highly specific work skills to long-term professional growth. In recent years, training and development has become a recognised profession with distinct theories and approaches, as well as a formal company function and an integral component of strategy. As a means of supporting employee growth and gaining a highly qualified workforce, an increasing number of firms of all sizes have adopted "continuous learning" and other components of training and development. Thus, Training and Development have come a long way from where it started as a mere effort to train workers during wartime to its significant influence on the growth and sustainability of an organisation.

## 2. Literature Review

Training and Development initially were not seen as viable investments that could help generate value for the company. With time the perception has changed and a company that follows innovative training methods is likely to report better financial performance (Raymond A. Noe.). Richard J. Torraco mentions in his paper “Early History of the Fields of Practice of Training and Development and Organization Development” about the emergence of training practices which dates back to World War II. The need was to develop the technical skills of employees during that time.

By comparing the evolution of Organisational Behaviour in different eras – Classical, Behavioural and Modern, we identify its impact on need for training and how the focus eventually shifted from mere technical upskilling to overall development of an individual.

The evolution of training and development has been traced seeking the help of Nick Welna’s paper “A History of L&D: Learning from the Past to Build the Future,” which illustrates the development of practices in different timelines.

Finally, owing to the current pandemic wave, we identified the upcoming trends in training and development as the focus is increasingly shifting to technological innovation, sustainability, simulation through AI, among other trends that contribute to the performance of the company.

### 3. Research Methodology

The research is based on secondary survey where data has been collected from journal publications, newspaper reports, book publications, and blogs.

### 4. Emergence of Training and Development

The emergence of Training and Development was first recognised during World War II when there was a dramatic increase in the need for trained workers who could contribute to technological evolutions. In the US, Training Within Industry (TWI) helped to establish technical training programs during this time in 16,511 manufacturing plants nationwide with new methods such as the four-step job instruction program (Dooley, 1945). During the war, training and development had become an integral part of many companies to help sustain economic growth.

Before the advent of the term “training and development”, vocational education was popular as a way of increasing knowledge base. Though both terms have a shared mission, they often run parallel to one another rather than in partnership. Vocational education has had a profound influence in shaping the training and development in organisations today. Just like apprenticeships were taken up after a vocational training, it has become a base for modern day on-the-job training (Jacob and Jones, 1995).

Earlier, the costs incurred in the training and development process were difficult to justify to financial decision makers. However, the Human Capital Theory helped in modifying the perspective that training in an organisation is like an investment in human capital and their productivity rather than a cost. As the economic value of training and development was considered and its returns were justified, it became a regular investment of the organisations.

The 1990s witnessed the evolution of training to improve the performance of employees. Earlier the emphasis of training was to improve the technical skills of the employees but as time passed, the emphasis broadened to include the enhancement of behavioural skills as well.

#### 4.1. Need for Reinforcement Through Training

The Behavioural era was recognised only post 1930 with the Hawthorne experiment. The attention was shifting to the “human factor”. Before this the Classical era focused on money as the primary motivation to work. During that time, training was not given much emphasis and it was linked with vocational education to provide technical enhancements. The focus was to teach employees new skills such that it will primarily benefit the company but the focus on their motivation, which directly impacted their productivity, was not given enough attention.

Training became important to reinforce behavioural skills in employees only during Behavioural Era. The importance of forming “teams” in an organisation was recognised. Post 1960, in the Modern Era, the motivation of the employees was acknowledged and emphasis was given to enhance themselves rather than just think about the company.

The concept of reinforcement theory was given by B. F. Skinner, a 20<sup>th</sup> century influential psychologist in 1957 – almost a decade after World War 2. The internal state of the employees directly impacts their contribution and loyalty towards an organisation. Training was one such tool to reinforce positive behaviour among employees. This was done by appreciating good results post training and rewarding and encouraging employees for upskilling themselves. In case they were not able to fulfil their responsibilities post the training, negative reinforcement through viable punishments helped the organisation keep in check that their investment on training was giving results back to the organisation.

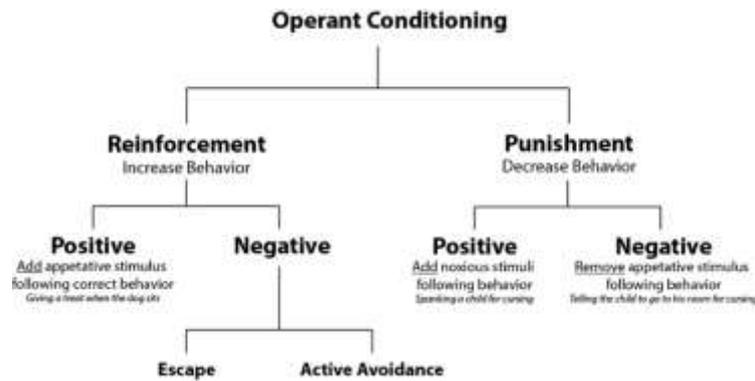


Figure 1

Thus, the word “development” became relevant with “training” when the perspective shifted to psychology rather than mechanical expectations from employees. Before the behavioural aspect came into play, the emphasis was only on training. However, as the psyche of the employees was understood and their motivation to work, various learning theories contributed to enhancing the training to developing individuals.

#### 4.2. Evolution of Training and Development

Training and Development in today's world of human resources is a very on-the-go common topic that needs no to zero introduction. But there was a time; it was an uncommon term. Therefore, Training and Development evolved to become a mandatory HRM function over a long time in today's organizations. Thus, the concept of training and Development (T&D) is not unusual in the twenty-first century but has evolved since the earliest stages of human civilization and has been gradually refined into the sophisticated process that it is today.

Here is a chronological history of the evolution of Training and Development:

##### The 1800s-1900s

Possibly the first foundations of training were seen with the introduction of **Kriegsspiel**. Kriegsspiel is a sort of wargaming developed by the Prussian army in the 19th century to teach battlefield tactics to officers. Kriegsspiel was the first wargaming system adopted by the Prussian army as a tool for training. Other countries widely adopted this method to train their troops after Prussia's remarkable win over France in the Franco-Prussian War.

Next comes the **factory school** by Hoe and Company to train factory machinists; after their success and growth, other factories started to follow the path. Thus, many factory schools were implemented.

The late 1800s are like a milestone for the world of human resources. The National Cash Register Company was the first to implement **Corporate Welfare programs** by improving the working conditions and building a company library for the employees to learn and gain knowledge which will eventually lead to quality enhancement of their products. They also laid the foundation of what we call human resources today by forming a **personnel department** where official procedures and decisions regarding who to hire, fire, or promote would occur.

##### The 1910s-1920s

In 1911, Frederick Taylor published a book on his **productivity method**, called scientific management. He studied employees' motion, time, and use to develop ways of doing work that reduced non-productive time. **Henry Ford** is a pioneering name when it comes to human resources. Thus, he was one of the most significant figures in revolutionizing Training and Development in organizations.

Ford Motor Company formed a Sociological Department, an early version of HR. The department aimed to help employees learn. Though some were doubtful of this investment in "lower-level" workers, Henry Ford insisted that it was valuable. According to Ford, the only thing worse than training the employees and then having them leave is, unfortunately, not teaching them and having them stay.

Ford provided classes in many domains like English, homemaking, personal finance, etc. The company also inspected the homes of workers. At first, these efforts seemed too invasive and controlling. But Ford had a vision of implementing the idea in the minds of the businesses at that time and even in the future that the workforce was a valuable asset and that it needs to be monitored closely.

In 1917, Charles R. Allen created the "**Show, Tell, Do and Check**" training method in response to an increased need for shipyard workers. The technique efficiently helped workers to walk through complex processes. Miraculously, this resulted in escalated responsibility with capability and allowed for feedback. Furthermore, in 1917, during the first world war, a severe need for more defense workers and manufacturing was created. Training, thus, played a critical part in filling that need as many experienced workers were enlisting.

### **The 1940s-1950s**

A great deal of advancement can be observed in the field of Training and Development during this period. For example, in the Year 1941, following the United States' entry into World War II, **job instruction training (JIT)** was developed by a government commission.

JIT, a systematic on-the-job training method that puts learners at ease. It explained the job and demonstrated each step. Most importantly, JIT contributed to the creation of job aids.

The year 1942 marked the foundation of The **American Society of Training Directors**. The organization in the later stages came to be known as the American Society for Training and Development. Presently the association goes by the Association for Talent Development.

The reason for the 1950s to be such a remarkable period of growth for Training and Development is after the World Wars. Organizations were looking for a way to train people efficiently and reduce expense while still getting high instructional value. And with the popularization of Individualized instruction, teachers were replaced with materials. This incident broke the learning into small steps with an activity afterward to check comprehension. This change in training and reinforcement behavior research opened the door for different methods of practicing new skills.

### **The 1970s-1990s**

Various advancements, especially technology-wise, happened during this time. As a result, organizations were ready to upgrade more and more when it came to training their employees. Every organization wanted to gain a competitive advantage by having the best workforce in the industry. Motorola is one of the best examples here. Motorola implemented the first **corporate university**, called the Motorola University, in 1979. Motorola believed that every employee must possess new skills to survive the growing competition and maintain staff competency. The year 1984 was marked as the evolution of the ADDIE model in a more flexible and a lot less linear model. This laid the stepping stones to today's training design and implementation.

A few years later, in 1989, AT&T launched the first electronic performance support system. It was an updated version of job aids that came with many benefits. One of which was that assets could be immediately updated for all people in the organization.

The onset of the 1990s marked the establishment of Computer-based training. This led to the growth of blended learning. However, people realized that e-learning and computer-based training are not silver bullets. Though the term e-learning debuts, it only started gaining popularity when Jay Cross began using it in 2004. In short, E-learning is the latest emphasis of

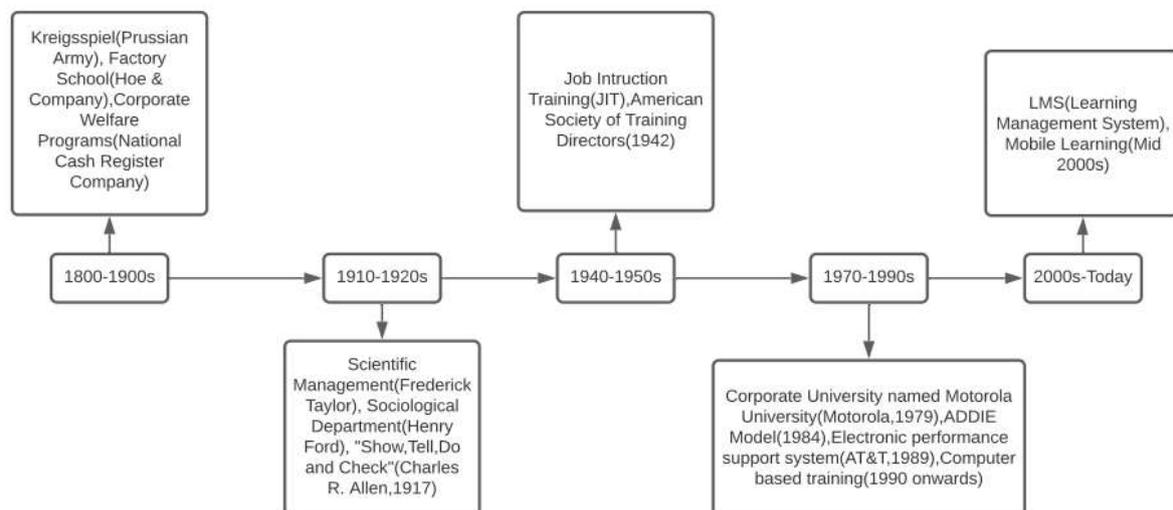
computer-based training and is typically accessed online, often encompassing other, more niche delivery methods or training techniques.

### **The 2000s-Today**

With the advancing technologies, many advanced training tools came to light. One of which was the LMS (Learning Management System). The origin of Learning Management Systems is from traditional universities and not businesses. Due to the LMS, delivering learning became digital and reaching people that brick-and-mortar universities never could be more accessible. The mid-2000s introduced Mobile Learning. Thus, mobile learning enters the training lexicon at the beginning of the new century. Still, mobile learning doesn't start gaining traction until the explosion of personal smartphones in the mid to late 2000s.

Furthermore, with the developing era, social media networks gained popularity and caught the eyes of the training designers. Thus, with social networks at their peak, the concept of social learning takes on new dimensions.

The following flowchart illustrates the evolution process across years:



**Figure 2**

### **4.3. Current Trends in Training and Development**

After the Covid 19 Pandemic, organizations have undergone and implemented numerous changes, negatively impacting employee performance. Thus, organizations have adopted several training techniques to enhance employee performance and regain their lost spots in the industry.

As businesses are becoming agile, the need for agile training increases. Agile learning methods that focus on speed, flexibility, and collaboration are the newest wrinkle in employee Training and Development. The rapid change from in-office to remote work in 2020 has already entailed the first significant round of active upskilling for trainees and trainers.

Apart from all the other training and development trends, the ongoing pandemic has accelerated the need for **remote upskilling and reskilling approaches**.

The **Role of AI** is gaining excellent traction in the realm of Employee development. Artificial Intelligence has been creeping bit by bit into the learning technology stack. And thus, recommendation engines and competent assessments are gaining moderate popularity in the Training domain. The results are exciting. So, the predicted scenario indicates that AI will screen, select, and train more professionals.

**Mobile Learning** will continue to boom in the Training domain as smartphones have become the default medium for everything. Be it emails, social media, or any crucial information, employees reach out to their smartphones to access them. Hence, 2021 will witness a significant advancement in mobile learning initiatives. Organizations aim to increasingly adapt to the changing learning appetites and dynamics to grow and train their workforce.

Last but, not the least, comes Gamification. **Gamification** will Regulate fresh Trends in Training and Development. Leveraging e-Learning gamification in Training and Development programs is one of the best moves organizations need to make to keep up with the new training and development industry trends, especially in work from home scenarios.

## 5. Findings

Through this paper we were able to delve deeper into the history and growth of Training and Development in organizations. First, we learned about how training and development emerged as a function of HRM. After the end of the World War II Training and Development emerged formally, when there was a dramatic increase in the need for trained workers who could contribute to technological evolutions. Then, we shifted our focus towards the role of Training and Development in reinforcement of behaviour. Training became an important tool to reinforce behavioural or technical skills in employees that would be beneficial to the company. But this happened only during Behavioural Era. The importance of forming “teams” in an organisation was recognised during this period. Post 1960, in the Modern Era, the motivation of the employees was acknowledged and emphasis was given to enhance themselves rather than just think about the company. Through B. F. Skinner’s (20th century influential psychologist) Reinforcement Theory in 1957 – almost a decade after World War 2 we came to realize that the internal state of the employees directly impacts their contribution and loyalty towards an organisation. Training was one such tool to reinforce positive behaviour among employees. Then we studied the evolution of training in a chronological manner throughout history. In the 19<sup>th</sup> century, Kriegsspiel developed by the Prussian army to teach battlefield tactics to officers. Factory Schools were set up by Hoe and Company to train factory machinists. The National Cash Register Company was the first to implement Corporate Welfare programs. During the onset of the 1910s, Ford Motor Company formed a Sociological Department providing classes in the domain of English, homemaking, personal finance, etc. The year 1941 marked the establishment of JIT (Job Instruction Training) an early version of On-the-Job Training by an American government commission. Research on modern training methods led us to Motorola. Motorola implemented the first corporate university, called the Motorola University, in 1979. The 2000s was the onset of LMS. The origin of Learning Management Systems is from traditional universities and not businesses. Due to the LMS, delivering learning became digital and reaching people that brick-and-mortar universities never could be more accessible. The current trends in training and development attributes to the Covid-19 Pandemic. The year 2020 marked the transformation of training and development methods as everything became digital. Thus, training became backed by more technology like Artificial Intelligence, Gamification, remote upskilling and so on.

### 5.1. Future of Training and Development

The Training and Development Industry has been revolutionising gradually ever since its emergence in organisations not just in terms of its importance for the survival of the organisation in the market but also, in terms of its method of delivery. Technology is rapidly revolutionising the training sector, because of the breakthroughs in artificial intelligence (AI), augmented reality (AR), virtual reality (VR), and machine learning and when used correctly,

these technologies can aid in improving employee performance. We're all aware that hands-on practice has a significant impact on skill development, and these new technologies can help to support that power. These technologies enable businesses and trainers to go beyond basic skill development to increase employee performance. Learners can benefit from their utilisation because it adds context, relevance, and personalisation to the learning process. These technologies have the capability of bringing learning to the worker. They have the ability to make high-risk scenarios conducive for learning. The use of virtual reality for flight simulation is a typical example. If a pilot has problems or even crashes the plane, they can be given information about what went wrong so that a similar series of events does not occur in real life. Learning will become more particular, individualised, or measurable due to the advancement of technology applied to learning delivery techniques. Not only will the trainers be able to make the learner's experience entertaining and engaging, but they will also be able to comprehend how to achieve the goal of learning: a change in behaviour and a business consequence through increased knowledge. Organizations will be able to optimise the experience for everyone by using a number of distribution modalities via software and being able to measure their success profoundly and granularly. Companies may get access and make use of previously unavailable data and adapt it automatically using machine learning, and generate value for both the learner and the business.

Organizations can benefit from new experiential learning methods to increase the feedback experience required for skill development. Many factors influence a person's ability to enhance their job performance and bring value to the organisation, including how soon and in what form they receive feedback. Too often, there is too much time between when someone does a skill and when they receive feedback. Furthermore, the type of the feedback is frequently insufficient. Consider a feedback form utilised in a role-playing scenario. On the form, someone might write "too aggressive." It's possible that the leader is unaware of how they demonstrated that.

Tools like face detection to detect a furrowed brow, voice analysis to detect pressure, and wearables to detect stance can provide richer and more rapid feedback. Interaction with virtual reality avatars can boost feedback immediacy and richness, enhancing self-awareness and skill development.

The utilisation of evolving technology in learning has ushered in a new era of unrivalled opportunity for people to reach their full potential. Organizations will be able to provide more immersive learning experiences than ever before owing to advancements in VR and AR. This new tool will be used by creative professionals to handle training challenges in novel ways, and as technology improves and costs less, it will become more common in the workplaces. Companies will be able to offer the accurate training to the right individuals at the right time as AI and Machine Learning become more widely used. Smart technologies will learn not just from an individual's prior learning experience, but also from external elements such as changes in a company's workflows or an employee's personal qualities. This will have a considerably greater impact on talent development and the prosperity of every organisation. The benefits of Machine learning and artificial intelligence will go far beyond greater productivity. Companies who adopt these new technologies will gain a competitive advantage rapidly, owing to better-informed decision-making, increased operational efficiency, cost reductions, and higher returns on investment.

## **6. Conclusion**

Historical events and the transformative contributions of pioneering ideas moulded the early history of training and development. Training and Development is now viewed as a crucial

strategic tool for the survival of organisations, owing to pioneers like Becker and Campbell. Training and development were slow to evolve, but it was due to the efforts of such evolutionary thinkers that it gained traction in organisations and now provides a variety of benefits to the organisations.

Video and simulations have replaced classrooms and corporate vocational training schools in training and development programmes. These technological improvements can assist organisations in not just reaping the benefits of having a competent workforce, but also in reducing operational expenses, waste costs, and a variety of other costs incurred by the organisations. By optimising the training experience for each of their employees, organisations will be able to influence employee behaviour. Effective training and development programmes foster a learning environment for employees and encourage them to reinvent their work processes in order to become more efficient.

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