Literature Review—Onboarding, Remote Tools, and Training for Remote-Work Teams
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Historical Background and Related State-of-the-Art Concepts

The concept of giving workers some instruction in how to do their jobs has been around for as long as people have been working. In pre-revolutionary America, this would have taken the form of apprenticeships and at-home training. Advances in industrialization changed the nature of many jobs to include more complex processes, and training for these jobs became more formalized. Around the beginning of the 20th century, vocational schools were started to train workers, and some corporations implemented their own training programs, often using scientific management principles (Altman, 2009). The skills needed were straightforward and task-oriented, often working with machinery or assembly lines, and as Altman (2009) put it, "worker input was not important."

In the later decades of the 20th century, advances in technology and globalization caused a shift in the workforce. Jobs were more likely to require higher-level skills involving problem-solving and communication. Computer use became common, and both hardware and software change and evolve rapidly. These innovations have spurred a more urgent need for people to continually advance their knowledge and skills, work together in teams, and function autonomously. The old scientific management approach that insisted there was only one right way to do a task no longer works well in training people for these jobs (*Frederick Taylor and scientific management*, n.d.). Today's companies need adaptable employees with broader skillsets, leading to an increased need for work training with more flexibility than in the past.

Onboarding

The process of onboarding new employees is essential for all businesses. New workers will need to complete insurance and tax forms, learn standard workflows, chains of command, even things as simple as location of supplies. The need for onboarding is a given; the real question is whether onboarding processes are effective.

Successful Onboarding

A very small company with few employees and a simple workflow may handle onboarding in a casual way, such as merely allowing a new worker to observe a typical workday. Larger companies with more complex operations will need a system to manage the process. In a study of onboarding practices, Snell (2006) described four required components for a successful onboarding program. First, process analysis gives the employee an overview of what they need to learn to become a productive team member. Second, implementation involves setting up the employee with access to various company systems such as technology and email, training systems, and internal networks. Integration is the next step, in which the employee begins their work role. Finally, reporting will gauge the success of the onboarding process. Breaking down onboarding training in this way makes it more manageable and less overwhelming.

The faster an employee can be integrated into a company, the sooner they become a productive part of it. However, according to Snell, more than one third of companies do not have a formal method of tracking onboarding activities or completion, and fewer than half of survey respondents were satisfied with their company's system. Treating onboarding as a standard training is an approach that could help facilitate the process. Steps involving basic tasks such as paperwork could easily be managed via a formal tracking system, employee roles could be

learned through documented processes for that position, and reporting will make it clear to new employees and their supervisors when they have handled all necessary steps.

Handling Onboarding Remotely

GitLab is a software company that operates entirely online, without any physical offices or locations. Their more than 1,000 employees work remotely from at least 60 countries worldwide. This makes GitLab one of the leading models of remote work. In a study done after the pandemic began, Prithwiraj, et al. (2020) conducted research to examine the effectiveness of GitLab's online model. The authors were skeptical that all phases of work, including onboarding and firing, could be efficiently handled remotely, and they frequently couch their concerns in vague statements like, "GitLab may need to consider individual differences in people's ability to work from remote" (p. 13). However, the idea that this model may not be ideal for all people does not serve as evidence that the model itself does not work. In their conclusions, they acknowledge GitLab's success, but question whether all companies could accomplish the same results, and they wonder about the percentage of the workforce that is ready for remote work. Those are valid questions worthy of consideration.

On their site, GitLab explains their onboarding process in detail, including a formal tracking process and all the components the Snell study considers vital for successful onboarding (*The complete guide*, n.d.). GitLab also boasts high employee satisfaction with their onboarding process, along with a below-average voluntary turnover rate (*People group metrics*, n.d.). In their statistics, GitLab has provided actual evidence of—and makes a strong case for—the viability of remote onboarding. While working entirely remotely may not be the best solution for all companies or all workers, remote work is a feasible system that may be very attractive to many workers.

The Social Aspects of Onboarding

One important aspect of onboarding is integrating new employees into the social life of the company. Notably, Snell (2006) states that socialization activities cannot be done online, but provides no evidence of this, presenting it as an unchallenged assumption. This is a particularly interesting comment since Snell does not formally include socialization as one of the requirements for successful onboarding.

It may seem logical that people meeting in-person is the best way for them to develop organizational socialization. However, there are potential pitfalls in leaving socialization entirely unmanaged. Workplaces are becoming more diverse in terms of age, gender, race, and ethnicity. According to Rogers (2020), many existing studies on the subject "assume uniformity in the practice of socialization and in the newcomer's response to it." Ignoring the evolving need for socialization changes could hamstring companies by discouraging large groups of highly qualified workers who do not fit the white male demographic model.

At GitLab, an onboarding buddy is assigned to each new employee to help with any general questions and to provide a friendly face. They also have dedicated Slack channels for new workers so they can chat socially. These online interactions can help remove some of the barriers caused by traditional in-person work socialization by deemphasizing people's differences and allowing them to focus more on their conversation. GitLab conscious management of socializing is potentially an improvement over leaving new employees to fend for themselves in an in-person environment.

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Remote Tools

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Remote work tools cover a broad range of tasks and functions including collaborative documents, video conferencing, communication applications, and project management software.

Many of these tools are widely used even by offices that operate in-person. For remote offices, these tools are an absolute necessity, and this equipment allows for remote workplace success.

Finding the Right Tools for the Job

The use of computers and software in workplaces has been common for many years now, even before the pandemic. Email is ubiquitous, and many current workers have routinely created digital work documents throughout their careers. Office suite software such as Microsoft Office and Google's G Suite are fully online now, making document sharing easy regardless of where employees are located (Pinola, 2020). Files can be stored in cloud storage. Trello and Airtable can be used for project planning and management, and Slack was already in use by many in-office teams for sending quick messages. Even video conferencing applications such as Zoom or Google Meet allowed teams in different offices to hold live meetings. Even if some workers and companies struggled to adapt to remote work through the pandemic, the tools were available to make remote work possible.

Wading through the vast number of options can be daunting, and tool needs will vary depending on specific tasks required for a given job. Determining which tools are best may be largely subjective depending on the employee, and while some tools may have obvious value, some evaluation may be necessary to avoid time and resources being wasted on tools that provide little value for the employee or the company.

There are some basic methods that can be used to help narrow down the list. Weitz (1991) offers a checklist of questions that are primarily aimed at database users but can be adapted for general users:

- What tool is currently being used?

- What are the skill levels of the target user?

- Who else needs access to this asset?

- What is the end goal for this information or asset?

Other comprehensive checklists are available with options for considering accessibility, privacy and security concerns, and affordability (*Tool evaluation criteria*, 2021).

Effective Tools Training

Once employees have the tools they need, training may be needed to learn how to use them, or to take full advantage of more advanced features. For the basics of learning software or applications, a good place to start is with the software or applications themselves. Many software companies offer tutorials on their sites; for example, Microsoft has a comprehensive set of tutorials that include walk-throughs, screenshots, and videos customized to the user's platform (*Word for Windows training*, n.d.).

Not all software can be easily learned by watching a few videos. More advanced training may also be needed, particularly if software is complex or new company processes are involved, such as expecting a large team to work collaboratively in a remote system. Unfortunately, many companies have not managed training well through the pandemic. A study of UK businesses found that 33 percent of their employees were dissatisfied with their company's training efforts, as the offerings were too generic to be valuable (Kairinos, 2022).

On a brighter note, Kairinos also found that good infrastructure and appropriate tools makes a significant difference in training success. Further, trainings should be specific to an employee's needs and career path—perhaps allowing employees more control by giving them options for which trainings they take would be a useful approach in many situations. When employees understand the value of a particular training, they are more likely to complete it and put what they learning into action.

Overcoming Employee Resistance

With all these new tools, technologies, and trainings, it is small wonder that some employees—or their managers—may push back against the idea of change. The possible reasons behind this resistance are myriad. As the pandemic started and companies shifted to remote work, many did not have a plan in place to manage the changes and left their employees to figure out how to do their jobs on their own (Malik et al, 2021). Some of these workers were not offered extra funding or training, and time and costs became a factor. There are also issues aside from the pandemic; for example, some people may be fearful about their ability to learn and master new systems or software, and some have a predisposition toward resenting change. Malik found that inertia, the desire for things to stay as they already are, was the biggest factor.

To overcome resistance, the most important thing employers can do is maintain effective communication (Malik et al, 2021). Additionally, employers need to offer technology and trainings with value that is clear to the individuals involved in these trainings, that is, employees must know how a training will benefit them. Workers need their company's support and for completing the training process to be as easy as possible. Networking and feeling part of a team also help get employees actively involved in participating in training. Finally, employers should provide formal guidance and counseling to address fear or stress experienced by employees who struggle with the training process or have concerns about job stability.

Remote Training

Prior to remote and online work options, training happened primarily in the workplace. These in-person trainings were not always effective—shortly after learning something, the average person will forget nearly 42 percent of it, and after six days, only about 25 percent is retained (Findlay, 2021). This means one of the classic training methods used by companies—an

in-person training that takes place in a single day—is not going to achieve desired results because information cannot be pushed into people's minds that easily. The good news is that remote training options can offer follow-up options that are more enticing and useable than paper handouts from an in-person training. An online training can be completed in smaller parts, employing microlearning to aid with retention. Interactive elements like game-based learning improve how much people can recall later, too. Turning trainings into a group activity can add a social element that could make training more enjoyable, which makes employees more likely to be actively involved in the training and increase odds that they will participate in more trainings in the future.

Determining the Best Remote Training Methods

Video conferencing is one way of porting in-person training to an online environment while retaining many of the personal interactive elements. However, it is wise to consider expanding beyond that by taking advantage of methods that are not possible in an in-person environment. Virtual learning communities (VLC) remove constraints like geography and scheduling while providing an environment where people can support each other, ask questions, and interact as they learn together (Learning communities, 2007). A VLC allows greater flexibility of time by letting learners choose when to engage with learning content. It also enables microlearning, breaking down subjects into smaller parts, which can increase retention (Kairinos, 2022). It is still necessary for companies to ensure employees can spend some of their time learning, but this greater flexibility of time management makes it more likely that employees will continue with learning and become actively engaged with it. Another benefit of VLCs is the social aspect of interacting with others who are involved in the same learning. This added engagement is another reinforcement technique.

Another option for remote training is gamification, which applies game mechanics to lessons. Adding gamified thinking to learning increases engagement and improves critical thinking and problem solving (Najjar & Salhab, 2022). People using a gamified learning system are more likely to engage emotionally. Achieving game goals serves as a reward system that increases their sense of accomplishment, making learning more enjoyable. All of this helps to increase retention of the material, and learners are more likely to complete game-based learning and want to engage with it again in the future.

Assessing the Value of Training

Wonderful as education and learning are for their own sake, employees and employers want to know that their investments in training are worthwhile. It is possible to evaluate a monetary return on investment (ROI). This is figured by calculating the ratio of benefits to cost while considering the value occurring over a period of time (Is training worth it, 2008).

However, figuring the value of training strictly on a monetary basis may not be ideal, as it does not account for more intangible aspects. Training programs have been shown to improve motivation and increase positive feelings in employees toward their coworkers and their company (Elkhdr & Kanbur, 2022). These results are consistent in businesses that support their workers by providing quality training and encouraging them to take advantage of it. Further, many people view work training as a valuable job benefit. In fact, nearly 94 percent of workers are more likely to stick with an employer that facilitates their career development (Dey, 2015). Increased employee loyalty and retention are high-value reasons to build and maintain good work training programs.

Transitioning to Remote Training

Before a business decides to move existing trainings online or to develop new trainings in online platforms, it is necessary to look for potential barriers that could cause unexpected problems. Such barriers may include lack of technology or expertise needed to create or convert trainings, insufficient bandwidth, and costs (Roy, 2010). It may also be necessary to evaluate whether these same barriers are already interfering with existing training to fully address the root of the problem, such as inadequate support for training or allowing employees enough time for career development and training. Such barriers should be addressed regardless of whether a company is interested in having a remote workforce.

A major barrier for remote training is insufficient infrastructure to support a digital environment (Kairinos, 2022). Companies need to invest in a solid online infrastructure to successfully make the switch to online training. Considering the growth and increasing dependence on computers and software in the work world, this, too, may be an issue that businesses should address even if remote training is not a major goal, and it's a firm requirement if they do have such goals.

<div align="center">Conclusion</div>

In today's current pandemic and (hopefully) post-pandemic environment, businesses need employees who can adapt and learn, and those workers need employers to support their career development and help them get new skills. These needs require workplace training that is flexible and innovative. Online training can meet these conditions in ways not previously possible from in-person training. Basic tasks like completing onboarding forms or looking up steps for using a software tool can be streamlined by having simple resources or systems in

place, and easy access to such systems lets employees get through those exercises quickly so they can devote more time to the more important aspects of their jobs.

Remote work can allow companies to broaden their options in terms of hiring and office locations, and software and tools that their people already use can facilitate that. Even if a company has some requirements for maintaining a physical presence at work, such as a retail or service-based business, these tools can allow collaborative work between workplace locations, or some job positions being fulfilled from home. This opens possibilities as businesses no longer need to restrict all employees in the same building during the same hours. Also, these tools can help improve communication by adding flexible avenues for messaging, making it easier for people to keep each other informed.

If employers devote time and energy toward facilitating their employees' career development, they can increase retention rates and improve the quality of their human resources. Their workers will be more productive and more satisfied with their jobs. The value of workplace training cannot be overstated, and companies would do well to be thoughtful and purposeful in making sure they are creating training programs that build up their workforce and help them to achieve at the highest possible levels.

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