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Does Training Formats Influence the Go/No-Go of ERP Implementation? A Case Study Approach

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Abstract

Implementing enterprise resource planning (ERP) at the optimal time can greatly boost income streams and improve corporate performance; nevertheless, a delayed or unsuccessful deployment can have immediate effects on the success, function, or functionality of the firm. To establish a uniform information system, enterprises have implemented ERP solutions throughout the previous few decades (IS). Prior research indicates that business users and stakeholders may be resistant to this transition, even though enterprises devote substantial tangible and intangible resources to implementing and maintaining ERP systems. Using a single case study of an SME (Small and Mid-Sized Enterprise) migration from a small-scale ERP to a global enterprise solution also known as System Application Product and Data Processing (SAP), we interviewed 15 business-focused key users to determine the impact of employee product training in remote, in-person, and hybrid learning environments. To support our analysis, we identify educational theories for knowledge transfer, transfer of training, and the unified theory of user adoption of technology. Given that the COVID-19 pandemic has restricted the movement of consultants and business users, qualitative evaluations of our data indicate that the training formats, perceived usefulness, and learnability are drivers of whether a company decides to advance with ERP implementation.

Synopsis

Purpose

Our study aims to determine how training formats, perceived usefulness, and learnability impact an organization's adoption of ERP solution.

Problem of Practice

During the COVID-19 pandemic, many firms debated whether to implement new technology or delay its implementation for several strategic and safety concerns. Despite the unpredictability of the pandemic, many firms continued their ERP implementations to gain a competitive edge in the personal, social, and organizational domains. In addition to the research that only covers the basic notion of ERP implementation, there appears to be no support for the specifics of how training formats influence the Go/No-Go decisions for small and medium-sized enterprises.

To mitigate these undesirable perceptions, it is essential to understand how the complexities of training formats affect the ERP implementation's official outcome.

Results

We discovered the following themes: Identical Elements, Perceived Ease of Use (PEOU), and Self-Efficacy. We observed no correlation between training and the stakeholders' Go/No-Go decisions for these themes. The response to our research question is that the training format did not directly influence the leadership and stakeholders' Go/No-Go decision. The preparedness of the system, including organizational (master and transactional) data for employees to use in a practice scenario, was the main worry and, according to the data, the primary determinant in the Go/No-Go determination. The personnel could not comprehend how to use the system and did not believe it would enhance their performance on the job. This diminished confidence in the ERP solution's capability and possible ramifications.

Due to the lack of critical master data required to maintain confidence in the new (to-be) system, end-to-end business process training was ineffective. In addition, due to disruptions in ERP implementation and a lack of user-friendliness, many interviewed believed they would lose the training-acquired knowledge and had to begin again. Our research's primary purpose was to determine the impact of training format on the Go/No-Go decision for ERP deployment.

Conclusion

Our research will fill a gap in the academic literature by viewing training through multiple lenses: educational theory, training theory, and technology acceptance theory. Practitioners will benefit from our advice for successful training based on our conversations with the employees of the case organization. Successful training should include pre-planning and the one that suites the specific business need. One of the most common suggestions we received was if there could have been data entered into the system and training manuals or instructions before training was started. If possible, train several employees in advance to create a superuser or somebody who can help assist employees in addition to the training consultants. An additional element is implementing a better strategy to ensure employees feel less distracted. Our recommendation is to ease these employees' concern by allotting sufficient time and focus on devoting to training. We think the result would be less stress on the employees, a better learning experience, and increased self-efficacy and morale among the employees and management of the case organization.

Given how the COVID-19 pandemic has restricted mobility of consultants and business users, qualitative analyses of our data suggest that the training formats, perceived usefulness, and learnability are determinants of the organization making a Go decision for ERP implementation.

Practical Relevance

Our study suggests that as organizations are getting more technology-driven, and with the pandemic onset, leaders are more conscious of technology needs to address future demand. Organizational decision-makers must implement new strategies and practices to stay competitive in this new business environment. This lack of organizational data could hinder the training and therefore the new technology adoption. There is a need to provide adequate scaffolding or identical elements to ensure successful training. The need for data surpassed any problems associated with the training format. The lack of data, scaffolding, or similar characteristics impacted whether they go forward with the technology implementation.

Methods

Research Question. *How does training formats Influence the Go/ No-Go decision for an ERP implementation?*

Method and Design. Using a single case study qualitative method, we sampled 15 individuals from our case organization. We used semi-structured interviews as our data collection tool. After data collections, we coded, analyzed, and interpreted our results.

Practical Problem

During the last few decades, organizations of different sizes (small, medium, or large) have implemented ERP solutions to have a standardized information system (IS) for their day-to-day operations. While firms spend significant tangible and intangible resources on adopting and continuing with the ERP system, prior research indicates that business users and stakeholders may be hesitant about this change, and they may feel unprepared to put this system into their daily use. Synchronous and Asynchronous training has become the new standard as people are concerned about catching and spreading the COVID-19 virus.

According to Kshirsagar et al. (2020), in June 2020, almost half of the in-person programs had been canceled. The pandemic forced most training to go online/ Synchronous. Organizations were under practical and ethical pressure to keep employees safe but continue training (Aplin-Houtz et al., 2022b; Zajac et al., 2022). We believed the training format was a profound factor for an organization implementing a new ERP system and considered the debates regarding the learning format (Higgins, 2022). Several letters to the editor argued that online learning was no replacement for in-person learning.

Enterprise resource planning (ERP) systems are highly multiplex information systems containing complete end-to-end enterprise business processes. Implementing these systems is a high-cost and challenging proposition that demands corporate time and resources. After investing substantial time and money into employee training on the enterprise application, leaders look for the moment that matters when employees and critical stakeholders give a strong affirmation that the training, they received was adequate. They now possess the ability to run in live operation. Hence, they are ready to "Go" to the top management and the ERP partner or the complete opposite, i.e., No-Go decision when leaders render that their organization is unprepared to begin using the new ERP technology and must continue running their business with the current tools.

When done effectively, user training can help organizations become efficient, achieve their organizational goals, enhance employee performance, boost employee productivity, and reduce employee turnover (Hughes et al., 2018). Baldwin & Ford (1988) provided a model for the transfer of training that contains a foundation for studying the transfer of training. Their model comprises two inputs to training design: trainee characteristics and work environment. Additional researchers in training have added to the literature by suggesting that systematic plans and social learning facilitate the training (Blume et al., 2010; Hart et al., 2019; Hughes et al., 2018). The fundamental

question of whether training can transfer has been answered affirmatively. There is a need to fill gaps in the literature to target specific areas within the training (Blume et al., 2010; Grossman & Salas, 2011). Our case study extends information for training design, trainee characteristics, and learning by examining the training format of the case organization undergoing training for an ERP implementation. Our research question will explain how training format impacts the Go/No-Go decision for ERP implementation?

Our case study will view the training for the ERP implementation through the lens of team-based learning and behavior modeling. Through these lenses, we explain how Vygotsky's theory of zones of proximal development (Vygotsky, 1962) and (Bandura's, 1977) social learning theory are connected to training design, trainee characteristics, and learning. Our explanation of the importance of training design, trainee characteristics, and the learning process in lay terms will be helpful to management as they plan future training for ERP implementations.

Literature Review

Our lens of analysis for this case study will be input to new technology training formats for employees. Our theoretical perspective relies on two major theoretical ideologies; Vygotsky's theory of zones of proximal development (Vygotsky, 1962) and the general theory of behavior modeling, based on Bandura's social learning theory (Bandura, 1986; Grossman & Salas, 2011). We believe an explanation of our case based on these theories will give us a unique perspective that has not been addressed for training in a business setting.

According to Vygotsky (1962), learning occurs when the learner actively participates in the task rather than passively participating. Vygotsky theorized that a learner must also have support, perhaps in example or practice. Vygotsky believed some tasks needed the assistance of somebody with experience to guide the learner. According to Vygotsky, zones of proximal

development is the terminology to describe what tasks learners can do alone and what tasks need assistance from an instructor. We believe that Vygotsky's theories apply when employees receive training for a new ERP implementation. Employees who learn a new information technology system will not know unless they practice and examine how it will perform in real-time. They also need subject matter experts or trainers with in-depth system experience to guide them until they are ready to conduct day-to-day business transactions effectively.

Scaffolding is a term that includes terms like practice and examples. Scaffolding is a term first used by Wood et al. (1996) to describe the support provided in a classroom setting. The premise of scaffolding is that the instructor offers practice, examples, or other support for the learning process. These needs could be anything from sparking an interest in the topic to ensuring all critical features of the task are understood. In some cases, a tutor may use scaffolding to help control the learner's frustration with the task at hand by ensuring there is neither too much nor too little complexity in the learning objectives.

Vygotsky's zone of proximal development contains elements of the scaffolding (Wood et al., 1996). According to Wood et al.(1996), the term zone of proximal development refers to the gap between what the learner can understand independently, without guidance, and what the learner can realize with a tutor or more capable peers. It is within the zone of proximal development culture, and cognition converges. It is logical that if social interaction enhances learning within the zone of proximal development, then team-based learning would further the learning process. This is supported by Javadizadeh et al. (2021) findings that relatedness in learning enhances performance.

Vygotsky developed his theory to educate children. The term for educating children is pedagogy. Adult learning, generally known as andragogy, contains many of the same concepts as

pedagogy. For example, studies find that adults will depend more on the instructor or trainer for answers than explore and find solutions independently—other theories on how adults learn to look to social learning (Merriam et al., 2006).

Social learning theory, developed by Bandura (1977), is the basis for behavior modeling and team-based learning (Grossman & Salas, 2011). According to Bandura (1977), social learning means that the learner constructs knowledge independently, based on their surroundings. In the team-based constructivist learning model, the instructor, or trainer, is a moderator and does not actively stimulate the learner (Merriam, 2006). Proponents of the constructivist team-based learning model believe that allowing students to create their mental models of knowledge increases critical thinking skills. Teams learn from one another by modeling behavior, practicing, receiving feedback, and social reinforcement (Grossman & Salas 2011). Before the pandemic, training could occur when trainees' teams gathered in the workplace (Kshirsager et al., 2020).

The case organization employees have received training, but because of the differences in training modes, employees who work remotely have little opportunity for behavior modeling. Employees need a guide to monitor individual zones of proximal development and ensure successful scaffolding for each employee. We believe the theoretical perspectives will benefit the study of training format and the Go/No-Go decision for this case study.

Transfer of Training (TT)

According to Nelson (2007), failure is not a function of chance. When user training is not adequate for an ERP solution implementation, it is likely the result of poor project planning. The result is increasing pressure, stress, and more mistakes. In short, when training is not successful, it results in a cycle of failure that becomes a self-fulfilling prophecy (Nelson, 2014). Training and development programs are significant investments for organizations (Hughes et al., 2018).

Successful training has several inputs, design, trainee characteristics, and work environment (Baldwin & Ford, 1988).

Transfer of learning cannot occur when training is not designed correctly (Yamnil & McLean, 2001). Training design contains four principles to support learning: identical elements, the teaching of the general tenets, stimulus variability, and various conditions of practice (Baldwin & Ford, 1988). These principles ensure trainees practice tasks they may experience on the job (Grossman & Salas, 2011). Specifically, identical elements use training stimuli similar to those found on the job. Knowledge retention increases when identical components are used in training and aligned with workplace tasks (Baldwin & Ford, 1988; Grossman & Salas, 2011).

Trainee characteristics is an umbrella term that can include abilities, personality traits, values and interests, and motivational constructs, including self-efficacy (Baldwin & Ford, 1988; Bell et al., 2017). Trainees with high self-efficacy are likelier to have high confidence in performing their job, predicting training motivation and outcome (Grossman & Salas, 2011).

The principle of work environment can influence employee participation in continuous learning (Bell et al., 2018). The work environment includes several elements: transfer climate, opportunity to perform, and follow-up (Grossman & Salas, 2011). Several researchers point out that cues in the work environment, such as goal cues, task cues, and social cues, help knowledge transfer (Baldwin & Ford, 1988; Yamnil & McLean, 2001). Based on this, training that occurs in the workplace may lead to higher knowledge retention.

Knowledge Transfer (KT)

Training and knowledge transfer can take formal and informal forms (Boudreau, 2003; Calvert & Seddon, 2006; Okhuysen & Eisenhardt, 2002). Calvert & Seddon (2006) discussed IT training for ongoing support but noted the importance of pre-implementation training. According

to Boudreau (2003), training before technology implementation is critical. Studies have found that employees who learned the ERP system effectively during initial training still retain software use 15 months later (Boudreau, 2003).

Formal training with an instructor contains the elements of Vygotsky's zones of proximal development. According to Calvert & Seddon (2006), formal training may be one-on-one classroom or video instruction, collaborative learning, or teleconferences; informal training may take the form of video-conferencing or casual questioning of users with considerably more knowledge. Okhuysen & Eisenhardt (2002) suggest that formal knowledge transfers like instructing somebody to listen to a presentation can make participants more aware of knowledge transfer. Awareness of the knowledge transfer brought by standard transfer processes brings greater knowledge integration (Calvert & Sidden, 2006).

Technology learning a new software system brings a knowledge transfer that is not grasped at the same rate by each respective employee. One solution is to ensure super users have been carefully selected (Karuppan & Karuppan, 2008). Superusers should have the proper knowledge, skillset, and training to help support organizations and lead users to upgrade their IT skills. The use of super users in an informal setting may smooth the differences in the skill level of users. Superusers may cue other users to form social networks that further knowledge transfer. Superusers are individuals whom their employers have identified as change agents and technology champions who can propel their departments forward.

In two distinct methods, superusers have been deployed to support Enterprise Resource Planning (ERP) deployment initiatives. First, and externally facing, they can enable the transfer of knowledge regarding internal business processes to the ERP project team, thereby assisting in the

development of the need specifications and the customization and implementation planning processes (Wu & Wang, 2007).

Perceived Ease of Use (PEOU)

New ERP learning and adoption depend on the perceived ease of use of the information system. Per the Technology Acceptance Model (Davis 1989; Davis et al. 1989), PEOU and PU are prerequisites for determining technology adoption. PEOU, in the context of information system relates to the assessment of the intrinsic characteristics of IT, such as the ease of use, ease of learning, flexibility, and clarity of its interface with an ecosystem of organizational tools (Gefen, 2000). According to Davis et al., "extrinsic motivation refers to the performance of an activity because it is perceived to be instrumental in achieving valued outcomes that are distinct from the activity self" (1992, p. 1112).

Perceived Usefulness (PU)

Technology adoption of ERP is crucial for the success of the business. Perceived usefulness affects the intended adoption of ERP system however, it mostly fails to do so regarding perceived ease of use. The unified theory of acceptance and use of technology (UTAUT) contains elements that explain users' intention to use a piece of information and subsequent user behavior (Venkatesh et al. 2003) for adopting new technology. Ease of use is the cognitive effort required to use the technology (Venkatesh et al., 2003). The definition of ease of service within the UTAUT model is the degree to which an employee expects the technology to improve job performance (Chao, 2019). According to Venkatesh (2003), perceived ease of use is the most critical predictor of acceptance and use of technology. Organizations are getting more technology-driven, and with the pandemic onset, leaders are more conscious of technology needs to address future demand. Managers must implement new strategies and practices to stay competitive in this new business environment (e.g.,

Aplin-Houtz et al., 2022a). These new strategies and tools can be only if the stakeholders accept the technology.

The review of a small company undergoing a technology implementation when in-person training was not always possible due to COVID-19 provides the perfect opportunity to fill gaps in the literature that other researchers have not targeted. Examining the transfer of training inputs, knowledge transfer supported by theories from Vygotsky (1962) and Bandura (1977), and the unified theory of acceptance and technology model will help identify those gaps.

Findings

We do not find significant correlation between training and the stakeholders' Go/No-Go decisions. The readiness of the system, including organizational (master and transactional) data for employees to use in a practice setting, was the biggest concern and, according to the data, the primary factor in the Go/No-Go determination. Due to the lack of essential master data required to maintain confidence in the new (to-be) system, end-to-end business process training was ineffective. In addition, due to disruptions in ERP implementation and a lack of user-friendliness, those interviewed feared they would lose the training-acquired knowledge.

Limitation and Future Research

When organizations implement new software tools, their function is crucial in change management. Researchers must also address the significance of these expert users (also known as superusers) in the process. These users directly impact the organization's users' ability to accept new technology. Future research should also investigate the impact of these individuals on technological acceptance. Future research may focus on the training format for ERP implementations when management has done adequate planning for systems data and ensured employees feel comfortable with the system. Additionally, we found employees were highly distracted no matter the training format. Future

research may investigate the impact mindfulness plays in the success of implementing new information technology in organizations.

Lastly, Go/No-go judgments are generally predicated on a company's perception that the new ERP system has reached a tipping point. Training is a component that should be considered. Considering this, future studies should inquire about respondents' go/no-go decision times.

Keywords

Enterprise Resource planning; Training formats, Perceived Ease of Use; Perceived Usefulness

The Case

When the training has not been thoughtfully designed and lacks efficiency, the success rate of the ERP implementation may be below. However, the question becomes what training areas can influence the success rate. Therefore, the research problem we seek to evaluate is "How does training format impact the Go/ No-Go decision for an ERP implementation?"

While many research articles share the ERP system migration process and training, very little research breaks down the training formats that can be the success or demise of an organization's ERP implementations. This case study aims to examine what issues, if any, through the training process caused the case organization to decide to delay the ERP Implementation. We seek to identify the critical roles that affected the organization's decisions by interviewing the case organization employees who serve in diverse roles in various locations throughout the United States. Through this case study, the research provides a direction for organizations experiencing or planning similar system migration to understand the importance of structured training models and formats for a successful implementation.

Our case study examines a pseudonym company, the case organization. This organization was established in 2000 and is headquartered in the Midwest United States. It is a leading

formulator, blender, and provider of proprietary and third-party chemical solutions for the industrial water treatment and oil and gas industries throughout North America. Due to the COVID-19 pandemic, the case organization requested a mixed training format, including minimal in-person and online sessions via Microsoft Teams audio/video training. Few of the employees attended in-person training, and the remaining key users participated in a mix of in-person and synchronous training via the Microsoft Teams video conferencing platform.

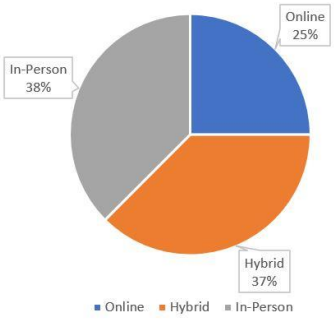
According to Yin (2018), the case study method best explains how a social phenomenon works. Following Yin, we used an explanatory case study research method. This case study examined the impact of the different training formats used for the SAP ERP implementation on the case organizations. The employees of the case organization were our unit of analysis; therefore, we chose a single case study approach. Our research team benefited from a team member who was one of the trainers contracted for complete system training for the ERP test platform. The author conducted in-person and remote training sessions leveraging PowerPoint presentations and MS Word documents.

Before collecting data, we prepared our case study protocol. Yin (2017) prescribes four parts to a protocol: (a) an overview, (b) data collection procedures, (c) protocol questions, and (d) an outline for the case study report. We utilized this protocol to plan our research, with all team members contributing to the process. After identifying our unit of analysis, we researched relevant literature and prepared interview questions (see reviewers' appendix). We followed our institution's policy for protecting human participants and prepared a procedure for compiling our findings. As a final preparation, we designed an outline of our case to facilitate its presentation.

We identified at least 21 key users to inform our research. Fifteen of those key users responded to our request for interviews. The users who responded were trained in the ERP system

in different training formats, as displayed in Figure 1. We used the Microsoft Teams platform to conduct semi-structured interviews and asked participants their perceptions of the training process and methods. Three members of the team conducted interviews that lasted up to 45 minutes. The interviews were conducted within two weeks. The recordings were securely saved and transcribed for data analysis. All the team members read the interviews, and the results were discussed during weekly team meetings. We determined codes, and they we applied it to the NVivo platform. All team members reviewed the results, and when the results seemed surprisingly toward one direction, the data was entered in Excel for verification. Figure 1 shows the pie chart for employee training by training format.

Figure 1
Training Formats by Employees



Method

With Yin (2018) as a guide, we used an explanatory case-study-based research design as our primary approach for our research question.

Sample Selection

Our research team benefited from a team member who was one of the external training consultants hired for ERP training and managing implementation. We leveraged the relationship between our author and only coordinated interviews with key business users of the case organization.

For the individual interviews of stakeholders, this study employed criterion-based selection for its sampling. Our rationale for requiring this restriction in our sampling comes from LeCompte & Schensul's (2010) argument that this method is ideal for identifying the intended population crucial to understanding the research problem with those who uniquely live the experience studied. To this end, we required all participants to be over the age of 20 and be involved with the case organization for at least two years.

Recruitment. After receiving approval from the case organization's CEO (Chief Executive Officer), we inductively recruited our participants to ensure the applicability of our findings to a larger population. Considering that our initial choice of purposeful sampling for the case organizations carried the potential for "information poor" data (Merriam & Tisdell, 2016. p. 98), we believe that we were able to capture the best data available under the sampling circumstance. Further support for utilizing snowball sampling comes from Cohen & Arieli's (2011) finding that snowball sampling for data gathering is ideal for gathering rich content during a time of conflict.

All individual participants were sent emails inviting them to participate in a study about the ethics of the organization in which they were a stakeholder. After receiving interest from potential participants, we pre-screened the participants to ensure each met the criteria for our study.

Participant descriptions. We recruited 15 participants to take part in our study. All participants were current stakeholders of our case organization and had a minimum of two years of active involvement in the organization's business processes. Each participant represented a different stakeholder role from plant manager, QC (Quality Control) manager, Purchasing Manager Production Manager, CSR (Customer Relationship Representative), Sales Manager, and Inventory Manager. The demographics breakdown encompassed seven female and five male participants aged 26 to 66 years old (M =46.455, SD = 14.875). All participants were white and lived in four different states in the United States. Please see table 1. for more details about the participants.

(Insert Table 1. About here)

Coding Method

After each interview, the authors of the study created a memo separately (within 24 hours of the interview) to identify the perceived critical points of interest, potential codes that might be useful if emergent coding became necessary, perceived possible themes, or connections to prior interviews (Merriam & Tisdell, 2016). We chose to share our memos between the authors to improve inter-rater reliability and determine if each iteration of the code set was adequate for analysis.

The coding of qualitative data for this study involved three phases of coding. During each stage, we attempted to parse out the case organization's unique occurrences of the codes the case organization in a relationship and without the relationship between each participant. In the below section, we detail each phase of coding.

We chose to use an a priori code set derived from the literature associated during the first coding round. Following recommendations by Bernard (2017), a codebook was developed to maximize coding consistency among coders.

NVivo v1.4 was then used for organization and data processing (Bernard, 2017; Saldaña, 2021). Initially, we performed line-by-line coding using our a priori codes. Following this first coding round, the authors synchronously compared and discussed their results to identify and resolve points of disagreement. Per Boyatzis (1998), we unanimously agreed on the code set's utility following this discussion. At the same time, we also decided to allow for the addition of emerging concepts via inductive coding (Hitchings & Latham, 2020). During this initial coding, we used the lens of horizontalization to ensure that the unique participants' lived experiences were given equal value and honored without comparison to how the participant was a stakeholder for the organization. We rationalized this approach also allowed for identifying the presence of a priori coding material without the bias of relationships between stakeholders.

We next re-coded the interviews. We inductively coded phrases that were not captured by the a priori codes during this second coding iteration. Following the second coding round, the authors synchronously shared coding results and agreed on the inductive codes to be retained and added to the codebook.

Developed from code consolidation based on commonalities and synonym elimination, the final codebook (which included the case organization a priori and inductive codes) was used for the third iteration of interview coding. During our final coding phase, we focused on demographics and other similar factors to consider how the participants related to each other. We chose to use the lens of de-horizontalization during this phase because greater meaning could be determined by

comparing the stakeholder's access, interactions, and attitudes surrounding the topic of our research question.

Results

Principle of Identical Elements

Training has occurred multiple times, but participants could not perform tasks in training because there was not enough data in the system. Most of the participants commented on the lack of data that matched with data used on the job. Seven out of eight participants saw that data was missing or not available. This feedback for data was the same regardless of the training format.

Participant 6, who trained in a hybrid manner, the case organization in person and online said, "We didn't have everything uploaded into the system we needed. So, we couldn't train well. We couldn't do a scenario because the information wasn't in the system." Participant 8, who trained online, said, "All the data was not uploaded into the system. Like we would practice putting a standard order in for us, and we couldn't. I hate to say it, but it was a waste of time" Participant 2, who trained in person, said, "The training was good, but there was not enough data loaded, and the server was always down."

This lack of data relates directly to two critical academic literatures. A key input to the transfer of training is training design, and a key element within training design is the principle of identical elements (Baldwin & Ford, 1988, Blume et al., 2010, Yamnil & McLean, 2001). The use of data in training can also be related to scaffolding, a key element in Vygotsky's zone of proximal development. The case organization transfer of training and zones of proximal development identifies a need for users to have access to practice retaining the information in training.

There is a need to provide adequate scaffolding or identical elements to ensure successful training. The need for data surpassed any problems associated with the training format. The lack of data, scaffolding, or similar characteristics impacted whether they go forward with the technology implementation.

Perceived Ease of Use (PEOU)

When users begin to work with new technology, they decide on the ability of the technology to improve their work efficiency. The unified theory of acceptance and use of technology (UTAUT) refers to this concept as the perceived ease of use (Venkatesh et al., 2003, Chao, 2019). Other theories, such as social learning, may have mitigated this issue by seeding the training environment with superusers. Superusers may give cues on how to respond to stimuli. Without these things, users found the new technology difficult to use, and their motivation to use it was not strong. Participant 5, who had hybrid training, said, "So that wasn't easy. The actual training was not that easy because we kept running into roadblocks. My answers, everything was not an easy aspect of this so far. I'm still waiting on the easy aspect; I haven't seen one yet. I've had ERP systems that you can almost hand me a book and send me off my own, and I will get started, this is not that. SAP is a.... it's not intuitive If you don't have the training, you couldn't launch it on your own, it would be impossible. Participant 3, who trained in person said, "Hey tried hard but it made everything so difficult." Participant 4, who trained online said "There were no easy roles; I'm not sure if it's true with every aspect of SAP, but just the version we had everything is German. I guess my username and password were the easiest." The participants who trained online and in person said the new technology was complex. The perceived difficulty of use impacted the decision to implement the technology. Perceived ease of use was a more robust indicator of training success than training format.

Self-Efficacy

Confidence in job performance is a predictor of successful training (Grossman & Salas, 2011). Most participants felt uncomfortable with the training results and their ability to perform their job using the new system. The training format made no difference in participants' self-efficacy. Participant seven, who had hybrid training, said "Um, as it stands today, I don't feel like I can be successful.". Participant one, who trained in person, said "I am not confident at all. I fear that I will lose everything I've learned." Participant eight, who trained online, said "I would say in two years, yes, we're probably going to have it down. But like I said, if we had to start tomorrow, and not have ["Breeze" pseudonym], which is our current system, our business would shut down."

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Appendix 1

Figure 1. Data visualization in NVivo

Figure 2. Word cloud in NVivo

Table 1. Correlation between variables

	PU	*PEOU*	***Master data***	*scafolding*	*Go*	*In-person*	*hybrid*	*virtual*	*social learning*	*knowledge transfer*	*Behavioral Intention to Use*
PU	1										
PEOU	0.333333	1									
Master data	0.218218	-0.21821789	1								
scafolding	-1	-0.333333333	-0.21821789	1							
Go	-0.14907	-0.447213595	-0.292770022	0.149071198	1						
In-person	0	0	0.377964473	0	0.258199	1					
hybrid	-0.33333	-0.333333333	0.21821789	0.333333333	-0.14907	-0.57735	1				
virtual	0.333333	0.333333333	-0.654653671	-0.333333333	-0.14907	-0.57735	-0.33333	1			
social learning	-0.44721	0.447213595	-0.487950036	0.447213595	0.066667	0.258199	-0.44721	0.149071	1		
knowledge transfer	0.218218	-0.21821789	-0.142857143	-0.21821789	0.48795	-0.37796	0.218218	0.218218	-0.487950036	1	
Behavioral Intention	0.447214	0.745355992	-0.292770022	-0.447213595	-0.06667	-0.2582	-0.14907	0.447214	0.066666667	0.487950036	1

Table 2. participants list

Title of Participant	**Gender**	**Age**	**Training level**
CEO	M	45	Hybrid
CFO	M	55	In-person
Plant Manager	M	59	In-person
QC Manager	M	32	Hybrid
Purchasing Manager	F	57	Remote
Production Manager	M	52	Hybrid
CSR I	F	27	Remote
CSR II	F	31	Hybrid
CSR III	F	26	Remote
Sales Manager	F	61	In-person
Inventory Manager	M	66	Hybrid
Warehouse Assistant	F	46	Hybrid
Controller	M	53	In-person
Buyer	M	62	Remote
Sales Assistant	F	34	Hybrid