TRAINING AND DEVELOPMENT AS A STRATEGIC TOOL FOR OPERATIONAL PERFORMANCE IN THE NIGERIAN SEA PORTS: A POSTMORTEM STUDY

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Abstract

Employees are regarded as the major assets of organisations. Their involvement in achieving the firm's performance in the face of environmental challenges and technological disruption is crucial. Public establishments in Nigeria are unable to optimally utilize employee training and development strategies compared to that of their private sector counterpart thereby affecting their competitiveness. This study relying on social learning theory (SLT), double loop theory, and dynamic capability theory examine the influence of training and development strategy on the operational performance of the Nigerian Ports Authority in Lagos State. Using a cross-sectional survey design, the random sampling method was employed to administer 248 copies of the questionnaire to the respondents out of which 237 usable responses were obtained representing a 95.6% response rate. Multiple regression results showed that off-the-job training makes the strongest contribution to the operational performance of employees in the Nigerian seaports, and this was followed by on-the-job training while training delivery style and training design did not show any significant effect but with a positive relationship. Results also show significant joint prediction of on-the-job training, off-the-job training, delivery style, and training design on the operational performance of seaport employees in Lagos Nigeria. Training and development strategy has a significant and positive effect on operational performance among seaport employees in Lagos port, Nigeria. It is recommended that public establishments should not just embark on employee training and development but design purposeful, impactful, and implement training to improve operational performance.

Keywords: On/Off-the-job training, operational performance, training delivery, and design.

1. Introduction

Achieving effective performance in the Nigerian public sector has been a topical issue in the literature. The argument is mostly on the reason why most public establishments in Nigeria are not competitive and efficient when compared to private firms. As a result, literature is agog with different strategic options that can make the public sector in Nigeria more productive and

performance-oriented. For instance, while most countries generate huge incomes from marine and sea ports, the Nigerian Ports Authority has not been able to deliver operational efficiency and performance as expected (Chinedum, 2018; Ndikom, Buhari & Okezie, 2019). Any organization that cannot deploy means of achieving superior performance could be trapped in the face of fierce competition and changing environment. Organizational performance is the live wire of every firm either public or private (Arshad, Kalimullah, Khan & Shahid, 2020). It reveals the prospects and potentials of organisations to attract the attention of investors or shareholders. That is the reason managers are expected to deploy available resources within and outside organisations to deliver sustainable results. Interestingly, organizational performance cannot be achieved without the efforts of employees in the organization (Tamunomiebi & Worgu, 2020).

Employees are the strengths of every organization (Howard-Grenville, 2020; Zhang, Wang, Qian, & Parker, 2021), therefore, training and development (T&D) is expected to be a veritable tool to drive both mental and psychological capacity of workforce towards achieving superior performance. However, in spite of the fact that the benefits of training and development mostly outweigh its cost, most organisations believe that carrying out an effective T&D exercise is too expensive (Laing, 2021). The need to embark on staff development programmes for employees has become obvious (Armstrong & Taylor, 2020), particularly in the Nigerian public sector whereby effectiveness and efficiency is a major challenge compared to private sector. This is because, the absence of employees' capacity development could result into incompetence. ineffectiveness, inefficiency, and negative work outcomes in the organisations. It therefore seems natural that most employees who have been assigned with new responsibility might lack confidence with which to carry out the jobs and so need support for them to grow into more responsibility via organized training and development.

An organization that is performance-oriented is expected to have a welldesigned systematic and progressive training and development programme so as to enhance the competence of employees in the workplace (Lin, Huang & Zhang, 2019). Training and development has become universally considered as a vital input to improve the output of any establishment qualitatively and quantitatively with the efforts of experienced workforce (Niazi, 2011; Sheeba & Christopher, 2020). It helps employees to acquire and apply skills, ability and disposition that are required for the achievement of organizational goals (Islam & Javed, 2015; Nmadu, Idris, Aidelokhai & Adamu, 2021). Effective training and development is beneficial to both organisations and employees. It plays a vital role in building and maintaining capabilities of employees through which firm's performance can be enhanced towards achieving shared goals.

2. Statement of the Problem

Marine sector is not only serves a gateway for the shipment of goods from one nation to the other, but also an economic hub for nations. Most Nigerian public institutions today have not adequately taken their employees' training and development seriously, while some of them do not engage in proper training gap analysis before recommending their staff for training program. Such approach is an effort in futility because employees would not be interested in something they already had knowledge about, but a new knowledge that can motivate them towards achieving their tasks. However, this could not be far from the fact that some people particularly those at management level, are seeing public establishments in Nigeria as conduit pipe to make money for themselves rather than their competitiveness.

There are training methods that are supposed to be carried out while doing the jobs as this could not only assist staff in achieving better result, but also contribute to cost minimization. However, most public establishments in Nigeria have not adequately considered this as way of enhancing operational efficiency and competiveness. Though, there are situations whereby employees are expected to go outside the immediate environment of their place of work called 'off-the-job training' for the purpose of learning new things from different environment, some employees in the Nigerian public sector tend to see this as an opportunity for them to just travel abroad to ease stress.

Despite all these training challenges, literature has not sufficiently discussed how public institutions in developing economies like the Nigerian Ports Authority (NPA) that serves as hub for trade activities in Nigeria manage their training activities towards excellent employee performance. This study, therefore, set out to examine the influence of training and development through training design, on-the-job training, off-the-job training, and training delivery style on employee's performance in NPA considering the relevance of this institution to other sectors of the economy.

3. Theoretical Framework

Training and development involves a learning process, therefore, this study is anchored on social learning theory (SLT), double loop learning theory, and dynamic capability theory as organisations cannot achieve competitiveness without quality workforce.

i Social Learning Theory

Social learning theory was propounded by Bandura (1977) and this has been widely considered with training and development in literature (Sulsky & Kline, 2007). The assumption of this theory is that human beings can build a certain behaviour as a result of cognitive reciprocal of continuous interaction with immediate environment (Illeris, 2018; Kendal, Boogert, Rendell, Laland, Webster & Jones, 2018). The SLT justifies the need for on-the-job and off-the-

job training by creating an atmosphere that can foster learning within and outside organisations. The environment where organisations operate is dynamic, hence, the training of employees has to be seen beyond immediate solutions. This informed the decision of this study to consider double loop learning theory.

ii. Double Loop Learning Theory

Double loop learning theory was propounded by Chris Argyris; a leading organizational trainer in the mid-1980's (Argyris, 1993). The postulation around double loop learning theory is that, managers are expected to equip their staff to be able to provide solutions that can degenerate to another issue for better performance (Matthies & Coners, 2018), so that they can be more resilient against environmental changes (Sujchaphong, Nguyen, Melewar, Sujchaphong & Chen, 2020). Loop learning theory supports justification for organisations to critically examine the training design and delivery style that can enhance the skills of employees through which they can be more dynamic and proactive in their place of work. However, the resources of organisations (human or material) have great influence on the level of firm's competiveness. In effect, any training exercise that cannot significantly add value to the sustainability of an organization has to be critically reviewed. This notion necessitated concern for dynamic capability theory in this study.

iii. Dynamic Capability Theory

The origin of dynamic capability theory could be found in the study of Edith Penrose in 1959 and was later proposed by Teece, Pisano and Shuen (1997) with emphasis on internal resources to enhance firm's growth (Breznik & Hisrich, 2014; Teece, 2018). The assumption of dynamic capability theory is centred on ability of organisations to develop new strategies to build the capability of employees through which they can learn quickly towards achieving higher performance (Teece et al., 1997). This theory is relevant to this study in the sense that employees are the major asset of every organization, therefore, managers have to see training and development as a means to foster the capacity of their staff for them to deliver superior performance and firm's competiveness.

4. The Concept of Training and Development

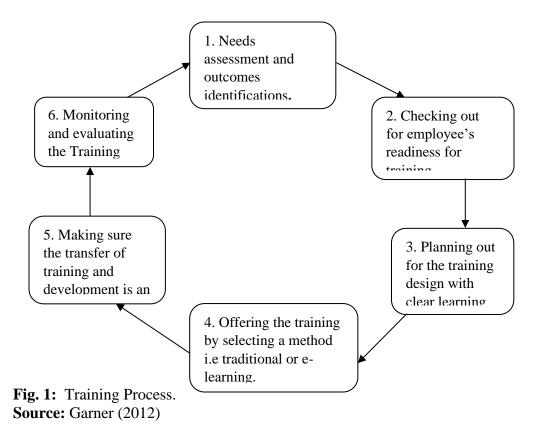
Training is a learning (T&D) activity directed towards acquiring specific knowledge and skills for the purpose of executing a task (Cole, 2002; Laing, 2021). The major concept of training and development is basically about how a job or task can be performed more efficiently (Faridi & Baloch, 2019). In the opinion of Gordon (1992), T&D is a planned and systematic modification of behavior through learning events, activities and programs which result in the participants attaining certain levels of knowledge, skills, competencies and abilities to carry out their responsibilities effectively and efficiently. It can also

be explained as a planned and systematic effort by management aimed at altering the behavior of employees, in a direction that is capable of achieving better results and organizational goals (Jahya, Azlin, Othman & Romaiha, 2020; McGhee, 1996). However, owing to technological advancement, there is an increasing emphasis on the need for a skilled and highly trained workforce (Bajracharya, 2021; Kirimi & Maende, 2019).

As a result of modern organizations' resort to the use of technology in the improvement of their productivity, employees that use the said technology in their operations have to be trained as well. This is because, training employees to handle machineries is one of the major factors in determining successful execution of tasks towards achieving long-term profitability and optimum operational performance (Bos-Nehles & Veenendaal, 2019; Quartey, 2012). For this reason, to hire and keep quality workforce in this era of incessant change in technology, it is a welcome idea to strategically invest in training and development (Zhang, Luo, Zhang & Zhao, 2019). Traditionally, what most organisations do is to train their new employees (as part of the onboarding process into the system) immediately they are employed, but fail to give them subsequent trainings based on the changes in the business environment to enhance their development and their abilities. In general, for any organization to succeed in achieving the objectives of its training program, the design and implementation has to be planned and systematic, and most importantly, tailored towards enhancing operational performance and productivity (Garavan (1997).

5. Training Process

Different studies have put forward the systematic process for training and development of employees with various steps. However, the basic approach remains the same i.e. to manage training in a better way to have the best results out of the investments made (Cole 2002; Farooq & Khan, 2011; Kozhakhmet, Moldashev, Yenikeyeva & Nurgabdeshov, 2022). Training and development is a continuous process, and irrespective of the scheme presented by various scholars and trainers, the following steps in figure .2.1 have been able to integrate the process (Garner, 2012).



6. Operational Performance Components in Seaports

Sea-ports have been recognized as essential parts of international supply chains because they are the most central nodes in supply chain and overall trading chain (Slack & Fremont, 2005; Tongzon & Heng, 2005; Wang, 2011). For this reason, their operational performance is very important for supply chain productivity. Sea-port operations are characterized as cargo handling (or moving) activity, carried out by a designed organization (gang or team), involving labor and machines (Kennedy, Lin, Yang & Ruth, 2011). They are also regarded as operations of wharf and other port facilities, port passenger transport service, cargo loading/unloading, haulage and warehousing services among others (Kennedy et al., 2011).

Sea-ports provide variety of service activities for vessels, cargo and inland transport (Dayananda & Dwarakish, 2018). However, the advent of technological innovations has brought about rapid changes in sea transportation whereby managers operating in this sector have been increasingly under pressure to improve port operational performance by ensuring that they provide services on a globally competitive basis (Simoes & Marques, 2010). In order to guarantee improved operational performance of sea-ports, there is an increasing pressure internationally to minimize the loading and unloading time. Some of the indicators of operational performance of sea-ports are: cargo throughput, vessel traffic, container traffic, vessel turnaround time, berth occupancy, cargo

dwell time berthing, waiting time among others (Duru, Galvao, Mileski, Robles & Gharehgozli, 2020; Wang, 2011). The satisfaction obtained from these factors greatly determines the effectiveness of operational performance of sea ports. Therefore lies the need to deliberately train and consistently improve the capacity of the workforce to be able to utilize required modern technology effectively (Schellinck & Brooks, 2016; Woo, Pettit & Beresford, 2011).

7. Hypotheses Development and Conceptual Framework Training Design and Operational Performance

Training is an approach that organizations adopt to build the skills and capacity of their workforce towards achieving superior performance that can eventually result to firm's competitiveness (Jagero, Komba & Mlingi, 2012; Mdhlalose, 2020). In the case of training design, it is one of the strategic human resource tools deployed by managers to engage competent employees that can add significant values to the operational activities of the organisations (Birou, Green & Inman, 2018; Mozael, 2015). Training design is basically considered by modern organisations as an indispensable weapon to identify training needs and how employees can be equipped with state-of-the-art knowledge to drive the activities of organization thereby leading to enhanced operational performance (Farooq & Khan, 2011; Liu, Huang & Zhang, 2018).

Ho1: Training design does not have any significant influence on operational performance of seaports employees

On-the-job Training and Operational Performance

On-the-job training is a learning activity that takes place while employees are carrying out their actual tasks (Radeva, 2019). This method has become essentially important for firms that desire to build their training objectives around higher performance (Jacobs, Lukens & Useem, 1996; Sheeba & Christopher, 2020). The on-the-job training system is common in large corporations and public establishments owing to the internal structures that can accommodate mobility of employees within the organization's internal boundaries (Black, Noel & Wang, 1999; Mahadevan, & Yap, 2019). Consequently, this form of training scheme has been able to assist employees in managing the anxiety and frustration orchestrated by weighty workloads. It has also enabled them to handle their jobs in a more effective and efficient manners that could deliver excellent operational performance (Chiaburu & Tekleab, 2005; Timsal, Awais, & Shoaib, 2016).

H₀₂: On-the-job training does not have any significant influence on operational performance of seaports employees

Off-the-job Training and Operational Performance

Off-the-job training is a learning activity that takes place in a remote location, far away from the immediate environment to either avoid being distracted by the activities of the organization or to allow employees to have the experience of a new environment that can add value to them and the firm's productivity

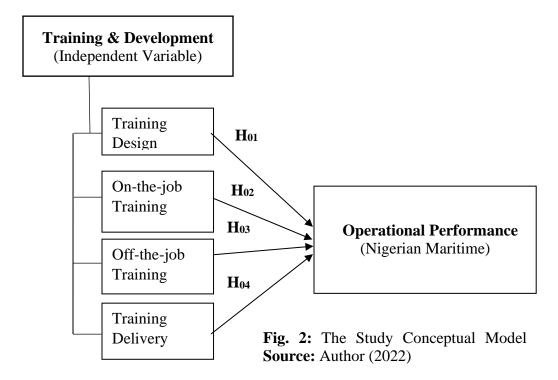
(Timsal *et al.*, 2016; Weatherly, 2019). Additionally, lack of facilities and the need for group discussions and full participation could call for an off-the-job training (Li, Yi, Chi, Wang & Chan, 2018), whereby employees will be moved out of the immediate environment to gain new knowledge (Bouris & Sahinidis, 2007; Raza, 2014), and technology to drive operational performance of an organization (Anggraini & Ciamas, 2019; Greig, 2019).

 H_{03} : Off-the-job training does not have any significant influence on operational performance of seaports employees

Training Delivery Style and Operational Performance

Training delivery style is regarded as the technique employed by enterprises to enhance the skills and capabilities of their workforce (Sheeba & Christopher, 2020).Training delivery methods involve but are not limited to audio-visual, demonstration, group discussion, design thinking, practice by doing, project simulation, and teaching people about how to make use of modern and best technology (Sekerin, Gaisina, Shutov, Abdrakhmanov & Valitova, 2018). The delivery style employed by an organization is very important because it makes it possible for firms to build the employees' abilities (Abhishek & Senthikumar, 2016; Tews & Noe, 2019) in order to improve their skills and knowledge by making novel and relevant information that can deliver enhanced operational performance and productivity available to the staff (Jagero *et al.*, 2012; Martin, 2019).

 H_{04} : Training delivery style does not have any significant influence on operational performance of seaports employees



8. **Methods and Measures**

This study employed survey method by administering copies of questionnaire to the staff of Nigerian Ports Authority in Lagos State. Survey method was employed in this study because it made it possible for the researchers to obtain primary and reliable data from relevant participants that are useful for the research. Similarly, where secondary source of data could not offer sufficient information like the issue of training and development strategy and operational performance of employees in the Nigerian seaports, primary source of data tends to serve as a better option. The study adopted cross-sectional approach and random sampling technique to administer 248 copies of questionnaire to 653 staff population of the Nigerian Ports Authority headquartered in Lagos State. By employing Yamane (1967) sampling technique. Out of 248 copies of questionnaire distributed to the participants, 237 copies were properly filled and returned representing 95.6% response rate and they were analyzed based on the study formulated hypotheses. In order to demonstrate the contribution of each predictor's variable, inferential statistics was employed while Pearson correlation was also adopted to examine the extent of relationship among the variables.

The constructs used in the study's questionnaire were adapted from pertinent literature, therefore, training design items were modified from Mdhlalose (2020) and Mozael (2015). On-the-job training items were adapted from Timsal et al (2016) and Radeva, 2019). In addition, off-the-job training items were adapted from Anggraini and Ciamas (2019), Li et al (2018) and Greig, (2019). The items that measure training delivery style were adapted from Abhishek and Senthikumar (2016) and Martin (2019). For operational performance, the items were adapted from Panwar, Jain, Rathore, Nepal & Lyons (2018), Birasnav, Chaudhary & Scillitoe (2019) and Kaydos(2020). However, experts in the human resource and organizational behaviour further validated the questionnaire while Pearson correlation was adopted to test the relationship among the constructs.

9. Analysis

A correlation analysis is carried out to measure how the variables used in this study are interrelated.

Table 1: Correlation matrix among the study variables							
		Ν	1	2	3	4	5
1	Operational	237	1				
	Performance						
2	Training Design	237	.395**	1			
3	On-the-job Training	237	$.544^{**}$	$.518^{**}$	1		
4	Off-the-job Training	237	$.592^{**}$	$.484^{**}$	641**	1	
5	Training Delivery	237	$.509^{**}$.453**	.616**	.697**	1
	Style						

Table 1:Correlation matrix among the study	variables
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Source: Researchers' Computation (2022)

The correlation matrix in Table 1 demonstrates the extent of relationship that exists among the variables, basically, to establish the correlation coefficient. However, the values in the Table 1 do not specify estimation but to find out the interactions among the variables by adopting Pearson correlation statistical analysis at **p < 0.01. The Table 1 showed that operational performance (dependent variable) has statistical association with the four constituents of employee's training and development (e.g. training design = 395^{**} , p < 0.01, onthe-job training = $.544^{**} p < 0.01$, off-the-job training = $.592^{**} p < 0.01$, and training delivery style = $.509^{**} \ge 0.01$. Similarly, the relationship among the predictors demonstrated that training design has strong association with other three variables with values of $(.518^{**}, p < 0.01; .484^{**}, p < 0.01; .453^{**}, p < 0.01)$, on-the-job training and other two predictors showed (641^{**,} p < 0.01; 616^{**,} p <0.01) while the relationship between off-the-job training and training delivery style revealed (679^{**} , p < 0.01). Considering the degree of association among the predictors (independent variables) as illustrated in the Table 1, the study maintained that they are moderately normal as they hovered between -0.01 and 0.697 which indicates that multicollinearity is not an issue for concern.

	Description	В	Т	<i>P</i> -	R	R ²	F	Sig.	Remark
				Value					
H ₀₁	TDG	.056	1.065	.288					Accepted
H_{02}	ONT	.214	3.162	.002	.636	.404	39.375	.000	Rejected
H_{03}	OFT	.338	4.478	.000					Rejected
H ₀₄	TDS	.096	1.324	.187					Accepted

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Table 2:	Regression	anaivsis	table

Dependent Variable: Operational Performance (P<0.05)

Source: Researchers' Computation (2022)

Keys: TDG= Training Design, ONT= On-the-job Training, OFT= Off-the-job Training, TDS= Training Delivery Style

In the Table 2, relationship among all the elements of training and development vis-à-vis operational performance in the Nigerian maritime was further established and this revealed R value of .636 which indicates a positive relationship. The table 2 also demonstrates the results of multiple regressions, which illustrate the combined effect of the predictor variables (TDG, ONT, OFT, and TDS) on operational performance of sea-ports in Nigeria. The coefficient of determination of R^2 demonstrates that 40.4% of the variation in the operational performance could be accounted for by the joint effect of training and development components as examined in this study. The F-statistic value of 39.375, p<.05 reveals the goodness of fit of the model to describe the variants and to either reject the null hypothesis or accept it. In view of this, hypotheses one and four were accepted with *P* value of .288 that is greater than 0.05, and *P* value of .187 greater than 0.05. However, hypotheses two and three

were rejected because they have *P values of* .002 and .000 that are lesser than 0.05 respectively.

The implication of these statistical findings is that training design was not found having a significant effect on operational performance, though, there is positive relationship. In the case of on-the-job training, and off-the-job training, they were found having significant and positive effects on operational performance in the Nigerian maritime sector. In contrast, training delivery style was not found having significant effect on operational performance but there was positive relationship. However, when the predictor variables of (TDG, ONT, OFT, and TDS) were disaggregated, the relative contribution of OFT was the strongest predictor of operational performance with (β =.338, t=4.478; p<0.05), followed by ONT with (β =.214, t=3.162; p<0.05), while TDS with (β =.096, t=1.324; p>0.05) and TDG with (β =.059, t=1.065; p>0.05) were not showing significant contribution but having positive relationship.

10. Discussion of Findings and Conclusion

This study examined training and development as a strategy to influence operational performance of seaports in Nigeria with reference to the Nigerian Ports Authority in Lagos State being the corporate head office of the organization. Seaports contribute majorly to the economic activities of every nation and so there is a need to improve the capacity of the workforce who engage in utilizing material resources for better performance. The outcome of the study indicated that training design does not have any significant effect on operational performance among employees in the Nigerian maritime sector. The implication of this result is that, the sector has not done enough to examine training gap before approving a budget for such exercise and most of their trainings are not designed based on needs. Despite the fact that this finding does not support the submission of Mozael (2015), it corroborates the position of Mdhlalose (2020) who posits that training evaluation is the most ignored in the process because many organisations do not see it as important as the training itself.

This study found out that on-the-job training has a significant influence on operational performance of staff in the Nigerian maritime sector. In other words, most employees in the Nigerian public sector enjoy moving from one task to another for them to gain wider experience. They also gain more knowledge when they have an opportunity to participate in a project that is different from their primary activities. This finding is in tandem with the study of Timsal *et al* (2016) who submit that when an organization has systematic and organized ways of improving career development for employees, operational performance and productivity can be improved. Similarly, this study found out that off-the-job training has a significant influence on operational performance of employees particularly in the maritime sector in Nigeria. The assumption

here is that employees of public establishments in Nigeria feel that they learn more when they go for training or conferences abroad or outside the immediate organization. This finding supports the argument of Anggraini and Ciamas (2019) and Raza (2014) who submit that both on-the-job and off-the-job training have significant effect on the performance of employees.

Training strategy has different dimensions and each is important based on the changing conditions in the environment and how managers react to changes differently. On this note, it is demonstrated in this study that training delivery style does not have significant influence on operational performance in the Nigerian seaports. Though, this finding does not support the study of Abhishek and Senthikumar (2016), yet, the role of training delivery methods in employee's performance cannot be downplayed. Employees that have phobia for new technologies cannot cope with modern training techniques and this is very prominent in the public sector because most of them are not profit-inclined. However, the general finding of this study justifies that training and development strategy has significant and positive effect on operational performance of seaports in Nigeria.

11. Recommendations

Employees are the assets that organisations can leverage upon, therefore, enhancing their capacity is highly needed for performance to be improved and sustained. Training and development has been widely identified as human resource strategy to enhance the capacity of employees towards achieving superior performance. This has established the reason why public establishments in Nigeria have to examine the potentials of their various training strategies. Public institutions like the Nigerian Ports Authority is expected to continuously consider the appropriate training design that can enhance the capacity of employees to avoid spending money on trainings that are not result-oriented. There is a need for the management to ensure that their places of work are made conducive for employees to learn from the tasks they are carrying out and as well learn from their supervisors as this can go along a way to improve their competency on the jobs.

Employees should be exposed to outside world beyond their immediate environment for them to be acquainted with novel events that are happening in the globe as this will not only improve their knowledge, but it will equally help them to be acquainted with current happenings. In addition, each training is expected to deliver a specific result, and for this to be achieved, training must be designed in such a way that employees acknowledge the needs, and understand what they are taught. Human resource units in organizations should not just embark on training and development initiatives without proper planning. They should embark on purposeful trainings that are impactful and that are capable of delivering outstanding results.

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