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THE RELATIONSHIP BETWEEN THE LEARNING ORGANIZATION AND ITS LEVEL OF PERFORMANCE AND EFFICIENCY IN PUBLIC-SECTOR ESTABLISHMENTS

Abstract: *The main objective of this paper is to expose the relationship between the learning organization and its level of performance and efficiency in public-sector establishments.*
It has been a descriptive study, built upon data that has been collected from a survey to find out if organizations in the public sector are learning organization and how it affects its level of performance and efficiency. In addition, the paper follows a comparison research design methodology, where a certain population has been selected (executive and managers). It has been approved that there is a positive relationship between learning organization (an updated continuous learning environment) and its level of efficiency and performance. It has been granted that the level of performance and efficiency influenced by the readiness of the organization for a continuous change and adaptation. Theoretically, the study confirmed that advanced organizations (implementing a continuous change) enhance the organizational level of performance and efficiency. Also, it has been agreed that it impacts the relationship between employees (group/individual) levels of learning organization characteristics and the organizational performance.
***Keywords**– learning organization, performance, learning organization dimensions*

1. INTRODUCTION

Nowadays, with the high level of competition among competitors in the global market, organizations need to implement change within their organizations to guaranty their sustainability in the existing market, develop and enhance their level of productivity by implementing change and become a learning organization.

Many people may misuse the terms learning organization and organizational learning which needs to be clarified before start explaining the relationship between learning organization and the level of the organizational efficiency and performance, the fact that they are two different concepts one is the process and the other one is the structure. Consequently, the term organizational learning is 'the ability of an organization to gain insight and understanding from experience through experimentation, observation, analysis, and a willingness to examine both successes and failures" [1]. On the other hand, the term learning organization is the process of learning about what organizations do now, what they need to work on or change in order to be more competitive or create a monopoly, what they are doing right, who the people are that work there and with their competitors, and what they are like as individuals [1].

It has been noticed by the human resources development, different fields of organizational change, strategic management, and organizational development that the Learning organization concept provokes a better organizational performance and efficiency.

Even though it has been known that learning organization influences the level of the organizational efficiency and performance, few empirical studies have evaluated, examined and analyzed the association between the level of performance and the concept of the learning organization, in a public sector.

2. LITERATURE REVIEW

A learning organization is an ultimate learning environment, that perfectly fit the

organization objectives. It is also considered as a place where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole (reality) together.

There are five dimensions learning organization depends on; building shared vision, systems thinking, Mental models, personal mastery, and Team learning [2].

Building Shared vision: Sharing the organization vision is a powerful tool to enhance the level of motivation, enthusiasm, and commitment within the organization [2].

System thinking: It is a system where employees need to recognize the organization complexity and focus on long-term objectives instead of short –term [2].

Mental models: Are assumptions, ideas, or even images that help employees understanding the organization's culture and to learn how to take actions and accept challenges that may lead them to new ideas and be able to implement change in their organization [2].

Personal mastery: it is a process where an employee works hard to learn continuously and improve his/her vision [2].

Team Learning: It is a process where group members work collaboratively to attain a common objective that was built based on a shared vision [2].

There are several characteristics of a learning organization [3] such as developing both individual and group learning.

It also links the employee's performance (as an individual) with the organizational performance, therefore, the individual performance affects the level of the organizational performance. For example, if the level of performance of an individual increase, the level of the organizational performance will increase.

It provides a continuously updated variety learning opportunities.

It supports innovative and creative ideas and employees, as a source of the organizational change [4]. It concerns about their employees', organizational culture, development, and performance; thus, the organization continuously raises their ability to adapt and change by training employees.

This kind of organization is more flexible and adaptable to the external environment due to appropriate leadership [5].

3. CASE STUDY: Dubai Media Incorporated (DMI)

Dubai Media Incorporated is a Full government entity assigned as the state television for the government of Dubai. They carry the channels such as DubaiTV, Sama Dubai, Dubai One, Noor Dubai, Zaman, Dubai Racing, Dubai Sports and the radio channels. It has made a remarkable success in this field catering to both local and international audiences. It embodies creativity, originality, and modernity.

Through a clear vision defined by Dubai Media Inc. which focuses on innovation and quality, and working in line with the directives of the government of Dubai, It seeks to create a legacy of distinctive Arabic media resources that represent creative and meaningful television content, while respecting social, cultural, and family values in the United Arab Emirates.

3.1. My organization as a learning organization

Dubai Media Incorporated has a unique requirement for its manpower. Given the nature of the business, it is not always easy to find employees or personnel who are capable or specializing in this field. Even employees with vast experience in the field of television, they also have to go through learning the culture of working for Dubai Media Incorporated. The role of culture and laedreship is very important [6]. The same hold true with the fresh graduates of universities, they also have to familiarize with the working culture of Dubai Media Inc. plus they have to specialize in some parts of the station.

Looking at the technical department, it is currently composed of five sections. All of them having their own function and set of equipment to run. All engineers did have engineering degrees but they have specialized in one of these sections. Fresh graduates are allowed to train in these different sections but they will be assigned to a section where they have excelled the most during their training. Below are the section description and mandate.

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3.2. The Broadcast Engineers section

The Broadcast Engineers section is assigned to make sure that all the channels of Dubai Media Inc. are always on-air and does not go off-line for whatever reason. They are tasked to make sure that all preventive measures had been contemplated in order to address any failure which might happen. It is also the broadcast engineers' job to design and re-design the system as deemed necessary in order to update the current workflow or fix issues related to it. Broadcast engineers most of the times do have to do training for the operators regarding new systems or workflows which are installed either as a new set-up or integrated to the existing chain. They also handle the quality control of the television station. This is to make sure that whatever we are sending to the viewers complies with international standards which are defined by television group experts and accepted worldwide by users and suppliers.

A House format standard is also a task for the Broadcast Engineer section. They need to make sure that all the equipment in the system has a common format which can be used in another system as part of the signal chain. This is to ensure that time is not wasted when a material has to be moved from one equipment to the other. Having said these responsibilities for the Broadcast Engineers group, they also have to go through local and international training to be updated with the current technology available in the market and to be aware of the best practices in handling a system or equipment. Due to Dubai Media Inc. size, there are a lot of different sites where Broadcast Engineers are deployed. Their task is all similar but the difference is in the size and complexity of the system they are handling. With all this given, learning organization plays a big role in the Broadcast Engineer section, all sites has to report to the headquarters for the status of the system they are looking at. At the same time, they also have access to the central database where they are able to reference any issues they will face or is facing. This enables the section to benefit from the data which was gathered whether in in the headquarters or in the remote location.

3.3. Thepower/electro-mechanical engineers section

The power/electro-mechanical engineers section is assigned to maintain the power supply of Dubai Media Inc. They are tasked to provide electrical power where it is required. This may sound simple but in reality, it also involves specialization and a lot of computation before they can say that the power source is worthy to be used with the multi-million dollar equipment which is being used in the television station. They have to make sure that if power will be cut off from DEWA, they should be able to provide the power continuously without cutting the source even for a microsecond. Having this scenario would mean they have to use UPS power supplies and generators.

This equipment requires a lot of specialization as it involves high voltages which can easily cause fire and damage to the equipment. They are also tasked to maintain the cooling system in the station. This is a very critical part of broadcasting equipment a temperature requirement which it needs to operate normally. Any mechanical fault in the station is also their responsibility. Like the broadcast engineers, they also keep a database where all the data regarding the faults and fixes in their system are stored. These are being accessed for repetitive jobs or if a problem had reoccurred. The engineers in this section are also sent for local and international training.

3.4. The outside broadcast engineer is a section

The Outside broadcast engineer is a section in Dubai Media Inc. to handle the mobile broadcast van which the station has. These engineers are deployed locally or internationally depending on the need of the station to cover an event which would require the signal to be broadcasted live on television. This is another field where it requires specialization. These engineers operate broadcast equipment in a portable setup where they can deploy the equipment and set it up in a minimal time. They have to make sure that all the equipment is compliant with international standards. It is a must that the material format which is being produced on the portable set-up complies with Dubai Media Inc. station format. This is important to make sure that when the materials get to the headquarters for processing and transmission, it will be compatible with the receiving equipment. They have also been giving local and international training to make

sure that they will be able to properly deploy the mobile set-up. It is also their job to report to the headquarters regarding the status of the equipment under their care. They have to log this in the engineering central database. In cases when they are outnumbered versus the bookings from the operation group, broadcast engineers are often sent to give assistance.

3.5. The Microwave engineer is a section

The technical department also has a microwave section. This section specializes in the wireless transmission which includes microwave and satellite transmission. It is their job to make sure that no matter where the mobile setups are deployed, it should have a direct connection with Dubai Media Inc. headquarters. This specialization requires an extensive training as a wrong configuration especially when transmitting to a satellite can cause huge issues, not just technically but also with the law of the United Arab Emirates. The same goes with the microwave transmission, if this equipment is pointed at a wrong direction, it will not work. If it is pointed on a living organism, this can cause serious harm as it uses the same wavelengths as a microwave oven. Like other sections, they also have to maintain their own set of gear. They have to make sure that it is compliant with international standards. Plus, they also have to check all the time the power rating output of their transmitter for efficient operation.

The microwave engineers had been sent for training locally and internationally to master their gear and to be able to troubleshoot in the field. Unlike the broadcast engineer section, they have to deal with the complexity of working in harsh environments. All diagnostics of their equipment are also sent to Dubai Media Inc. headquarters for referencing and if a new process had been done to aid the requirement of a deployment, then it will be used as a reference in future engagements. These data will then be used and considered during updates and upgrades in the system. Learning organization plays its role in this section as due to its mobility and ever changing requirement of linking their site with Dubai Media Inc. headquarters, they have to document every single setup which they have done in order to optimize the use of the equipment and to make sure that I does not violate any rules and regulation in the United Arab Emirates.

3.6. The maintenance engineers section

The maintenance engineers section is assigned to fix the equipment which is considered to be out of warranty. This means that the equipment is more than 3 years of age, with some of it reaching 15 years of age. They have to learn the internal mechanism of the device to understand how it works. There are documentations provided by suppliers for their system but it does not on the component level as these are covered by international patents. They fix this old aged equipment by opening the main frame and literally documenting what is on the board.

They also save this on the central engineering database to make sure that they do not investigate the same problem twice. Having said this, they are literally building the low-level manual of particular equipment by doing reverse engineering. This work requires doing an extensive catalog of the devices which is beneficial in terms of the speed it requires to fix a machine also, they benchmark the signals they are getting out of the equipment to standardize the repair.

3.7. The audio engineer is a section

The technical department also has a section for audio engineers. They are specialized in handling the audio part of the station. Unlike the other sections, they are not limited to a specific age or location in Dubai Media Inc. It is part of their mandate to go into the remote location to verify the deployed audio setup. It may not sound complicated but it is really complicated as they have to deal with a wired and wireless system. Before going to a deployment, they have to investigate the terrain with which they have to operate on. They have to consider how dynamic the setup would be in order to use the right equipment to handle a particular setup. It is a must that they operate at frequencies which are provided to them as per the law of the United Arab Emirates in order not to interfere with frequencies allocated for the authorities.

All audio signals have to comply with the standards as directed by the headquarters. In the case that they have to transmit the material as a file, they also need to comply with the compression formats which is defined by Dubai

Media Inc. technical department to make sure that whatever they will be sent will be interoperable with the equipment which is the headquarters. This is important to make sure that when the materials arrive in the storages of the station, it will not need to be converted or transcoded in order for it to be usable in the current system installed. In each of the deployment, they do have to fill out an execution plan and save it in the technical department central database. After each event, they will fill out a report where it will indicate all the adjustments needed during the event. This provides the technical department the information of the most efficient setup in a particular deployment. This will also dictate if a new set of gear is required if any difficulty was encountered during a set-up. In return, documenting all of these serves as a manual on how to speed up the deployment as there are already guidelines in the most efficient way of deploying an audio system. The audio engineer section is also tasked to look after the FM radio arm of Dubai Media Inc. Like in the channels of the television, they are also not allowed to lose the signal which is transmitting in the radio frequency.

This means that they also have to make sure that they are ready for a contingency plan in case of an equipment failure. Studies are always conducted how to make the workflow efficient in their section. These too are logged in the central database for future references and could be used as a roadmap during an upgrade. During a fault in the workflow, the audio engineers sit together in order to determine the best possible solution to a particular issue. All discussions are documented and have to be reported to the management of the technical department for further action if it requires procurement or a reconfiguration. They are also sent for specialization training both locally and internationally which depends on the type of equipment which had been acquired by Dubai Media Inc.

The technical department also has a section for This section handles basically signals for contribution and distribution. In this section, signals which are entering the television are analyzed for compliance with Dubai Media Inc. standards which is based on the current international standard. They have to watch for things like carrier signals, encryption pattern, signal levels and format whenever a feed is set to be received by the station. They have to watch for these parameters as any mistake on these parameters can cause a serious problem in processing or re-transmitting the signals to the local channels.

The same with the other sections, interoperability with the materials versus the equipment in the station should be addressed. In cases where there is literally not choice but to convert or transcode the material, it is not a problem for the section as there are provisions to do this. The only drawback is it will require additional time in order to make the material compliant with the format of Dubai Media Inc. It is also part of their mandate to assign the right resource for the right job. They have all the controls in their section to do this job. In regards to the distribution part, they have to make sure that the signals being sent out of Dubai Media Inc. are also compliant with the standards dictated by the technical department management as well as the authorities in the United Arab Emirates. All these signals being sent out are also coordinated with different receiving companies in order to make the format compatible with their equipment. This also includes signal checking, proper encryption if required and all levels should be based on the international standards. There are a lot of instances where they have to dynamically change the workflow as per the needs of Dubai Media Inc.

This covers changing the signal paths in the event of a failure or simples a request from the operations department due to materials viewing restrictions. All of these activities being done in the master control room engineering section are logged as well in the technical department database for future use. In case a workflow had been changed, they do not have to retest a signal flow theory. Instead, they just have to re-implement was had been done on the previous occasions which will require a similar signal flow.

This allows the engineering section to dynamically change the workflow without having the need for re-test or to qualify the workflow. This also gives them the edge to implement this on a raid phase as most of the time; this job requires a rapid or dynamic reaction from the master control room engineers section. With regards to their training, they are sent for training in a periodic phase as configurations can always change without any

system update or upgrade. They are also operating on a 24 hours basis as the strength of this engineering section requires for an engineer to be actually sitting in the monitoring system and analyze all the incoming and outgoing signals.

With this description and complexity of working for Dubai Media Inc., it is decent to say that this organization is a learning organization. Given that the working environment can and will change rapidly depending on the requirement requested by the operations group, the technical department should always be competent enough to handle the situation. All activities being done in the organization are always documented for future references.

It had also been implemented for the engineers to do crossover duties with other section as this will give the television station the advantage of re-appropriating the engineering resources when the situation demands it. Dubai Media Inc. finds this move beneficiary as in the event of a catastrophic failure, recovery will be a lot faster than keeping the job description segregated. At the end, the technical department is composed of engineers thus understanding the role of different sections will not be difficult.

Looking at Dubai Media Inc. as a whole, the implementation of the learning organization is a must not only for the technical department but also with the operations group as the situation always dynamically change and the requirement is similar but never the same. Training is always conducted in this organization to make sure that all of its employees whether in the low level or managerial posts are always updated with the current and upcoming standards which the company will benefit from.

4. EFFECT OF LEARNING ORGANIZATION ON PERFORMANCE AND EFFICIENCY

A survey was conducted at DMI with three senior managers at the engineering department to evaluate wither DMI is a learning organization, and to what extent does it affect the organization's performance and efficiency.

According to the previous findings "DMI" can be called as a learning organization that concerns about the development of people who working at the organization, the organization itself, and the level electiveness of its efficiency and performance.

First: In my Organization people (Table 1)
• **As individuals**

The organization provides a continuous learning environment for their employees' by allocating resources, time for training and creating a rewarding system to support their employees learning and improvement.

In addition, the firm insists on building trust among employees by opening some wide channels of communication among them, giving them the chance to express their ideas and brainstorm them together, and giving constructive criticism and feedback to each other.

• **As Groups**

The organization realizes the importance of working in teams and their significant roles to enhance the firm's

productivity and development. Therefore, teams at DMI have the freedom to adjust their goals as desired. Moreover, they are always updating their ideas and decisions the firm's benefits, for example, they may change their ideas and opinions based on a group discussion or data collected. And they believe that the organization always act based on the teams' suggestions, recommendations, and advice.

Second: My Organization (Table 1)
• **Embedded Systems**

DMI embedded systems to implement change within the organization, such as creating a system to measure gaps between current and expected performance. It also measures the results of time and resources used in training. In addition, the organization makes its lessons learned accessible to its employees.

• **Empowerment**

It has been believed by DMI that encouraging, supporting and empowering their employees will expand the organization's efficiency. Thus, the organization decided to provide a full support to its employees who take calculated risks. Furthermore, it provides its employees with the needed resources to accomplish the organization's projects and activities. Additionally, it recognizes initiative people and supports their global

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perspective of thinking. Likewise, DMI encouraging their employees to find answers through using problem-solving approach.

Table 1 – Summarized description and Effect of learning organization on performance and efficiency

Level		Diminution	In my organization
In my organization people			
1	Individuals	Interchange and Inquiry	• Constructive criticism feedback to each other • Brainstorming among employees • Building trust
		Learning continuity	• Time is allocated to support training • Resources are provided to support employees learning • Reward system for learning
2	Groups	Team learning	• Goals adaptation whenever needed • Reviewing ideas based on a collected data or group discussion • Team confidence that the organization will act on their recommendation
My Organization			
1	Organization	Embedded system	• A system is created to measure the gaps between current and expected performance • The availability of learning lessons for all employees • Measuring time and resources allocated for training • Meeting external committees to reach mutual needed
2	Organization	Empowerment	• Initiative people are recognized • Employees control the needed resources to accomplish projects and activities • Full support for people who are taking calculated risks • Global perspective thinking is supported • Encouraging employees to find answers through solving problems
In My Organization			
1	Leaders & Managers	Leading	• Leading by coaching and mentoring • Searching for continuous opportunities to learn • Ensuring that organization actions are constant with its values
2	Performance & Efficiency	Effective	• A higher customer satisfaction than the 2 previous years • A higher employee's satisfaction than the 2 previous years • The high effectiveness • The high efficiency • Organization's overall performance is higher than the previous 2 years

Third: In my Organization (Table 1)

• **Leaders & Managers**

Executives and managers at DMI are well prepared to lead the change and the renewal of the organization. They are leading employees by coaching and mentoring. Besides, they are always searching for continuous opportunities to learn and participate in the organizational enhancement. They ensure that DMI actions are constant with its values.

• **Performance & Efficiency**

As a learning organization, the level of performance and efficiency in DMI is affected positively. Customer satisfaction is higher than

the previous two years. Also, it has been approved that employees of DMI are more satisfied than the last two years. Moreover, the organization's performances are highly efficient and effective.

5. RECOMMENDATIONS

Based on the data gathered for Dubai Media Incorporated, it would be a big advantage if the senior management can gather together all the databases of recorded issues and share it with the operations group which is outside of the technical department. Since most of the issues being logged can be addressed by the operations group instead of using the engineers' time to sort out minor issues. The engineers' time can then be used for a higher or better purpose which would be advantageous for Dubai Media Inc.

Through properly doing a catalog on the reports, the station will gain an advantage of having the operations group to sort out minor issues instead of using engineers to do this. By using the documents reported by the engineers, the operations groups have the just to follow the solution done for a specific issue encountered by the engineers. In case that the issue had not been reported or was only encountered for the first time, the engineers will always have the first hand is solving it. This process will help to expand the knowledge not just in the engineering

department.

6. SUMMARY AND CONCLUSIONS

This study emphasizes the deep construct of the learning organization. It evaluated the relationship between the idea of learning organization and the level of the organizational organization by examining and analyzing it in depth. This study looks for adjusting a tool to measure the learning organization structure that can elaborate conceptual definition of the term of learning organization, delivering proofs of its structure validity while exploring efficiency improvements, measuring it, observing its relationship with the level of efficiency and performance, and observing the relationship between organizational performance and learning organization.

The structure of learning organization has been viewed including the organization characteristics that enhance the continuity of the process of organizational learning. We wish that our paper will motivate other researchers to conduct such an empirical study dressing the structure of learning organizations and exploring new tools to measure its impact on the level of both organizational efficiency and performance.

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