

DOES THE “EQUIPMENT MAINTENANCE DEPARTMENT” AT DUBAI PORTS WORLD MEET THE EMPLOYEES’ EXPECTATIONS?

Dr. Mohamad Shehada *

Dr. Muntaha Bani-Hani *

Abdulla Al Sayed *

Abstract

This paper explores improving the quality of the Equipment Maintenance Department (EMD) at Dubai Ports World (DPW) in the United Arab Emirates (UAE). In this research paper, we will investigate whether the Equipment Maintenance Department at Dubai Ports World is meeting the employees' expectations in providing quality services in the equipment maintenance. A questionnaire was specifically developed for this study and data was collected from 77 employees from different departments of Dubai Ports World. These departments include: container terminal, general cargo and CFS. Indeed, results showed that the Dubai Ports World employees were satisfied with the maintenance requests. On the other hand, they were neither satisfied nor dissatisfied with attending the maintenance request by the technical department crew.

Key Words: Quality, Dubai Ports World, Maintenance, Equipment, Performance, Technical Department, End-Users.

*** Talal Abu-Ghazaleh University College**

Introduction

The company constantly invests in terminal infrastructure, facilities and people. It works closely with customers and business partners to provide quality services today and tomorrow, when and where customers need them. Maintenance of Dubai Ports World facilities and equipment has traditionally been a process related to the performance of the administration as well as the employees and technicians of that place. Indeed, the failure of equipment will lead to high maintenance and operation costs. Improving Quality of the Maintenance system in Dubai ports World is very important for improving policy processes and reducing operating costs. This type of policy and strategy maintenance will improve performance of Dubai Ports World through availability of equipment and the reduction in costs and satisfaction of users.

Objectives of the Study.

- To check whether the “Equipment Maintenance Department” at Dubai Ports World meet the employees’ expectations.
- To examine the current relationship between the technical department and the other departments of Dubai Ports World
- To determine whether the maintenance department is meeting the expectation of the end users.

Significance

The main significance of this paper is to understand the position of the technical department on providing services to others, at the same time to carry out the maintenance by understanding the other parties’ needs and expectations. This paper will help the top management know where they stand and how to go forward to meet employees’ satisfaction, and improve services to meet the end-users expectations.

Hypothesis

Ha: Technical Department at DPW is meeting the employees’ expectation in providing quality service in equipment maintenance.

Ho: Technical Department at DPW is not meeting the employees’ expectation in providing quality service in equipment maintenance.

Dubai Ports World

Dubai Ports World (DPW) manages Jebel Ali, Port Rashid, Port Hamriya, Abu Dhabi Port and Fujairah Terminal in the UAE region. DPW-UAE employs multi-cultural and multi-national work force of over 7,000 skilled employees. It takes the seventh positions in world ranking for container handling throughout the world. It handled 10.65 million Twenty Feet Equivalent Container Units (TFECUs) in 2015, a growth of 21% over 2012 (Quality Manager DPW, 2008). DPW was established in September 2005 with its global headquarters at Dubai, stands at 4th place as a Global Port Operator, with an ambition to be the largest best port operator in the world. In addition to growth in TFECU and Cargo Handling Capacity (CHC) and the port size (number of terminals including berths), DPW has placed a great importance on its employees for growth with a particular emphasis on Emiratization. DPW manages 48 terminals in 27 countries and 13 new developments in 31 countries spreading across all Middle East, Asia, Europe, Australia and Latin America. (Quality Manager DPW). Its dedicated, experienced and professional team of nearly 30,000 people serves customers in some of the most dynamic economies in the world. DPW aims to enhance customers' supply chain efficiently by effectively managing containers, bulk and other terminal cargo.

Research Methodology

Population and sampling of the Study:

The population of the study is the staff of the Equipment Maintenance Department at DPW. They are from many different nationalities. They are mainly Indians, Arabs, Europeans, Asians, and some Africans. Normally in the gulf countries (GCC countries) the top management is in the hands of nationals though they might not have the qualifications, experience or skills to handle the work. Besides Arabic, the questionnaire was translated into Hindu and English. The total number of questionnaires distributed was 70 but the valid ones for analysis were 54.

Sources of Information

The information gathered in this paper is categorized mainly as secondary sources and primary ones. The secondary information was gathered from journals, pamphlets, brochures, books, and search engines. Primary sources were gathered from a questionnaire that was designed and

articulated by a group of specialists in the field of business administration to answer the paragraphs of the questionnaire.

Validity of Tools Measurements:

In the context of this subject Cronbach's Alpha is used as an index of reliability. Cronbach's alpha determines the internal consistency or the average correlation of items in the questionnaire to gauge its reliability. It is considered very important to know whether the same set of items would elicit the same responses if the same questions are recasted and re-administered to the same respondents. The measures derived from the questionnaire are declared to be reliable only when they provide stable and reliable responses over a repeated administration of the questionnaire. (Cronbach's Alpha factor was > 70% and it has valid and reliable results). Likert Scale had been used to analyze answers. The Scale includes the following ranks:

1= Strongly Disagree 2= Disagree 3=Neutral 4=Agree 5=Strongly Agree

Data Collection and Design

This study used a descriptive research design to explore improving the quality of the equipment maintenance in Dubai Ports World. We chose this research design because we were interested in learning more about the level of the services provided by Technical department of Dubai Ports World. Data for the research was collected by using statements of a questionnaire that was distributed to employees form different departments of Dubai Ports World.

The convenient sample for this study consisted of 70 employees form different departments of Dubai Ports World and some contractors. These departments include: containers terminal, general cargo and Container Freight Stations (CFS). Furthermore, the participants were all males with different ages, different ranks, multi-nationals, multi-cultural and different educational level. Most of the participants in this study completed the questionnaire and there were 16 missing. Therefore, the sample for analysis was 54.

Data Analysis

The questionnaire consisted of 21 questions: some were demographic, some were functional, and others were statements that measure the following concepts:

(1) Employment status, (2) job grade, (3) years of experience (4) educational background, (5) request, (6) speed of request, (7) maintenance, (8) attending the request (9) age, (10) system functionality, (11) nationality, (12) marital status, (13) system functionality, (14) system accessibility, (15) level of satisfaction, (16) availability of the system, (17) availability of system information, (18) handling the request, (19) training, (20) feedback, (21) staff helpfulness.. The paragraphs from 1 to 8 deal with demographic and functional variables. The paragraphs from 9 to 21 deals with general statements and Likert scale and ranking question (very dissatisfied 1, dissatisfied 2, Neutral 3, satisfied 4 and very satisfied 5) were used.

The participants were not forced to respond to the questionnaire and they felt confident because we informed them that their names would not be mentioned. Moreover, we told them that their answer will help others learn and understand more about improving the Quality of the equipment maintenance in Dubai Ports World. Indeed, all participants' responses are kept confidential. Certainly, we did not offer any type of compensation to the participants who completed the questionnaire.

Results

The participants were from different employment status: operation workers (mostly Indians, Pakistanis, Bangladeshis and Africans), mid-level managers (mostly Philippines, Indonesians and Arabs) and top-level managers (mostly Emirates, Europeans and Americans). In fact, most of the workers are from the mid-level management and this is normal in many companies. Besides, results showed that (91%) of the participants were from DPW and only (9%) of them were from contractors. (See chart 1)

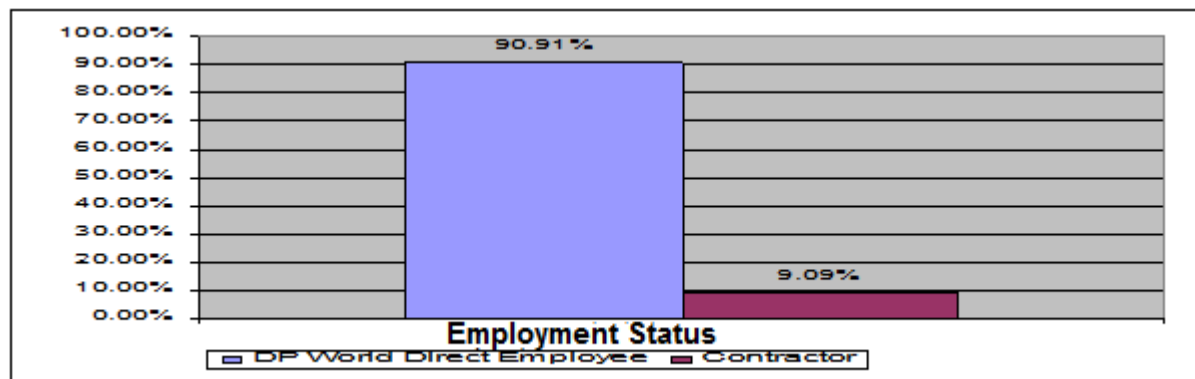
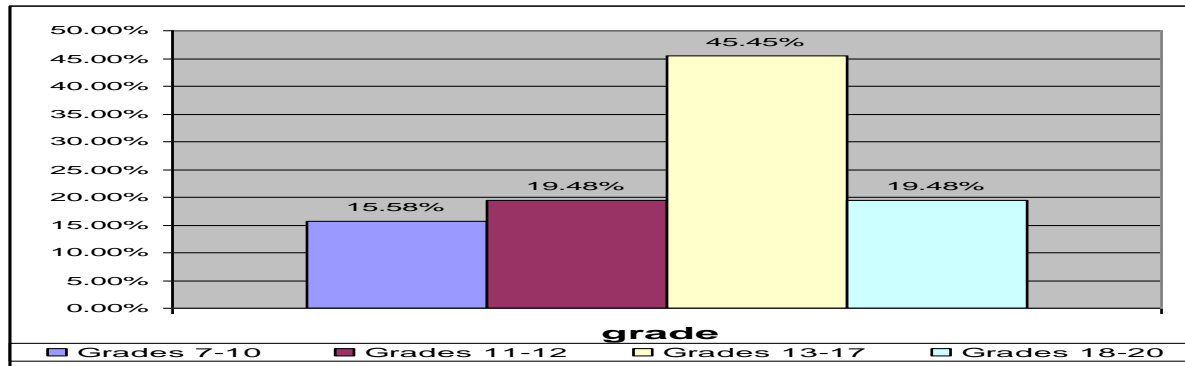
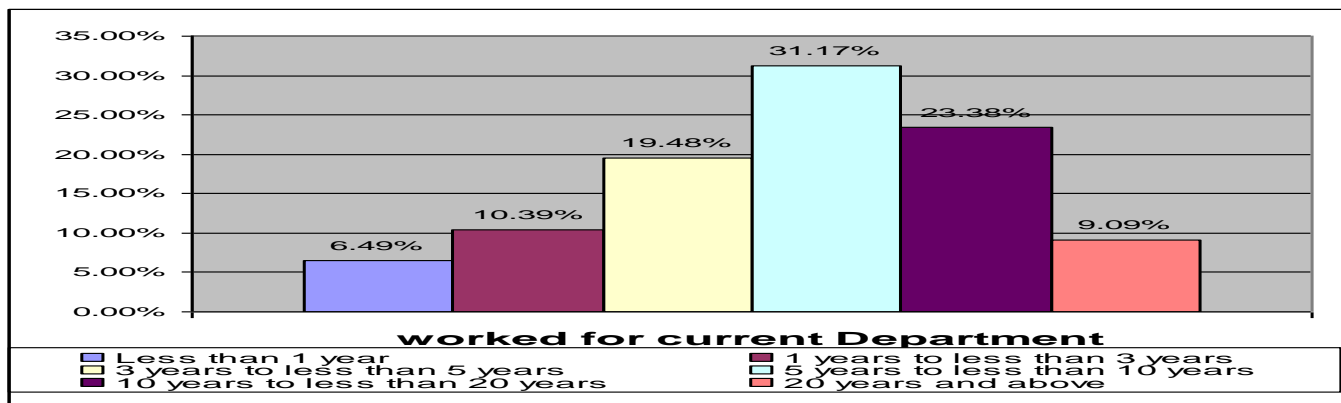


Chart (1)

Results of participants' job rank (grade) showed that most of them were from mid-level management 13-17(45%) and the rest were from rank 7-10 (15%). (See chart 2)

**Chart (2)**

Result about participants' years of experiences showed that working from 5 to less than 10 years have the highest percentage (31%) and less than 1 years have the lowest percentage (6%). (See chart 3)

**Chart (3)**

The participants have different levels of education. In fact, results showed that (52%) of them have college degrees and above, (28%) have diploma degrees and (19%) have high school degrees. (See chart 4)

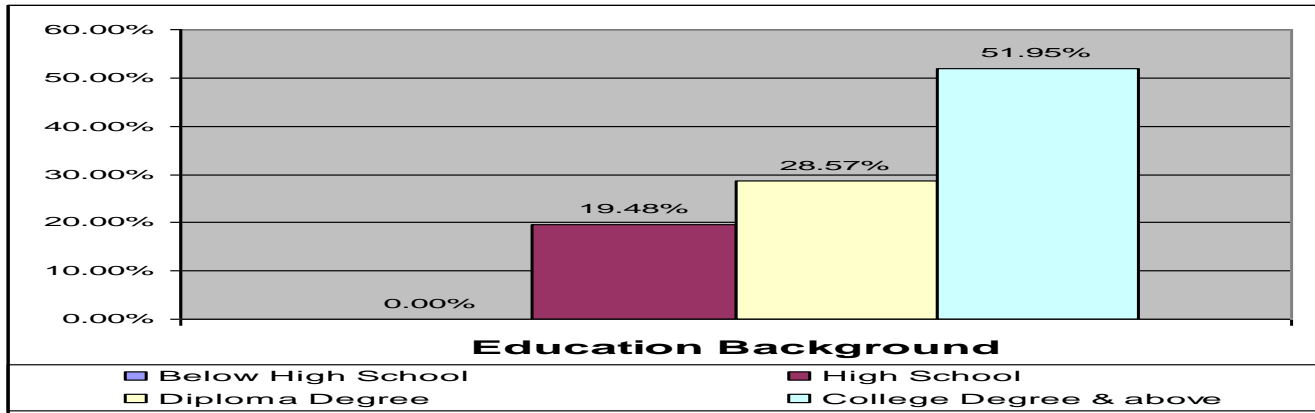


Chart (4)

In order to explore DPW employees’ feelings about the maintenance request. The employees were satisfied about the availability of the systems’ request and showed the highest percentage (61.04%), while training had the lowest percentage (24.68%). (See chart 5)

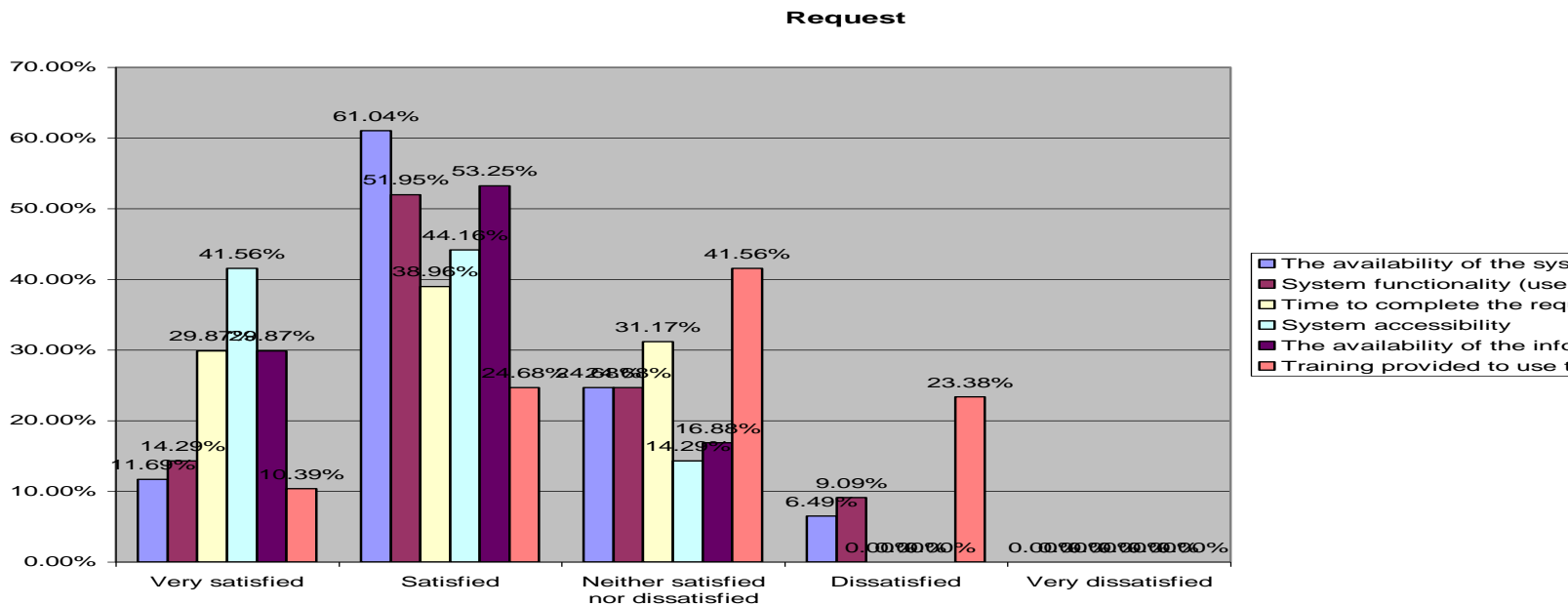


Chart (5)

In order to identify DPW employees’ feeling about attending the maintenance request. They were neither satisfied nor dissatisfied about the time which was given to complete their request and that had the highest percentage (64.99%). On the other hand, they were satisfied with the friendly and helpful way the staff treated them (67.53%). In addition, they were dissatisfied with the speed of the response time where it showed (42.86%). (See chart 6)

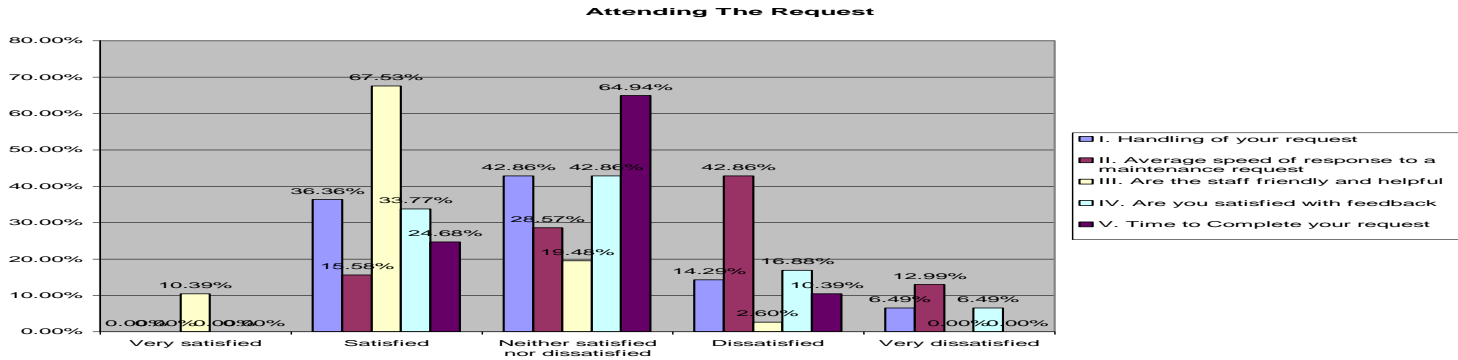


Chart (6)

In order to explore the DPW employees’ feelings about the quality maintenance of the equipment, Chart 7 illustrates that employees were neutral with a high percentage (67.53%), while they were dissatisfied with the clearness of the information about maintenance (46.75%). On the other hand, they were satisfied with the quality of work (55.85%). (See chart 7)

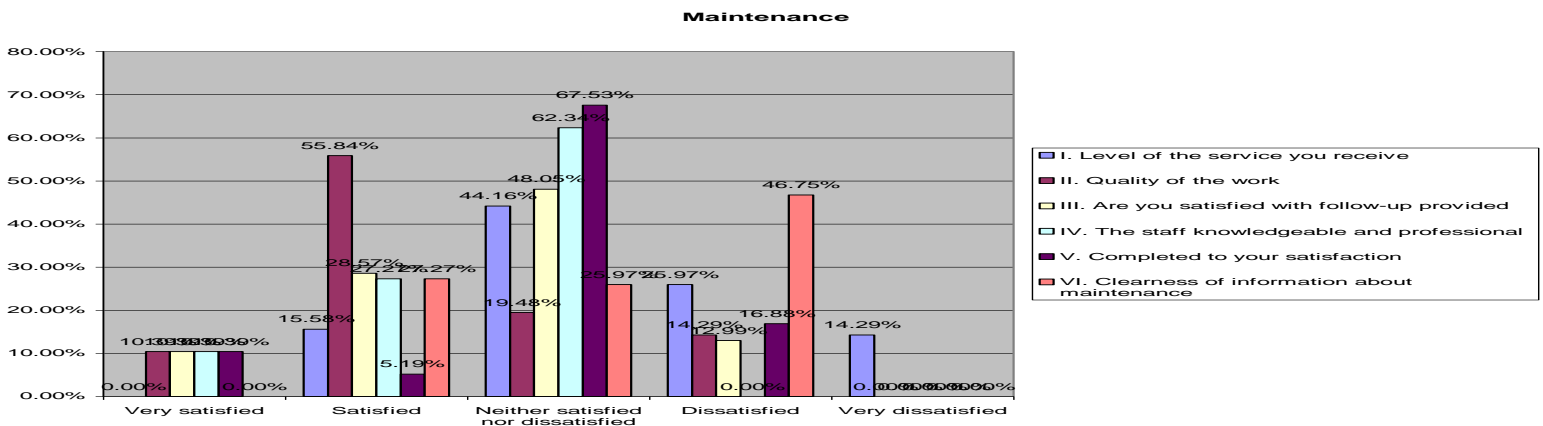
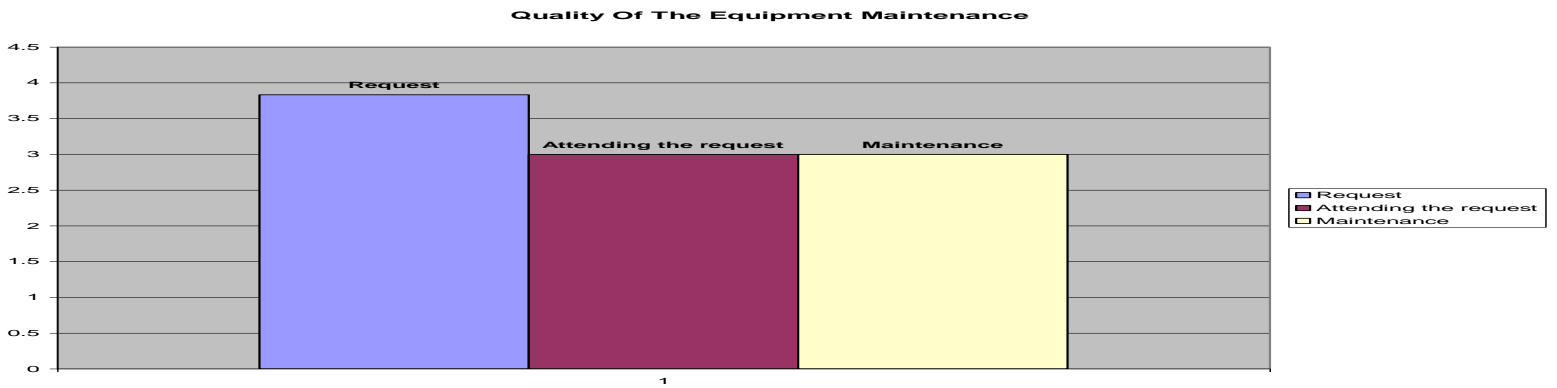


Chart (7)

Chart 8 illustrates the overall picture of the statements of Request. The results showed that the request category scored (3.8) which is satisfied. While in the other two categories attending the request and maintenance have scored (3) which were neither satisfied nor dissatisfied.

**Chart (8)****Discussions**

In our point of view, we need to improve the maintenance process from the category neither satisfied nor dissatisfied to satisfy. The main thing we noticed is that communication between the technical crew and the requester were weak because of the follow-up and the feedback of the job accomplished.

At the same time, participants were happy about the quality of the work so there was no doubt about the efficiency of the work done. We think that the participants should be aware about the policies and procedures and according to the results, the response time was dissatisfied were the requester expected response within 15 minutes but in the Memorandum of Understanding between the technical and the other department the response time that was agreed upon was 30 minutes. We found from the results given that the majority of the dissatisfied and bias results were form the low-level grades and low-level education background.

We found out from the results given that satisfaction differs from one department to another where we found the most satisfactory department is the container terminal, and the lowest department is the CFS. We believe that happened because of the importance of and priority for the container terminal. This need to be taken into consideration by the top management to improve the overall results and by giving attention to all departments.

Attached, at the end of this paper, the rest of the charts that will answer the many statements that measures the concepts at (DWP).

Conclusion

This study contained enough hard data to shape many valid conclusions. We believe there is enough evidence to prove that the Equipment Maintenance Department processes have a great potential for improvement to satisfy the employees' expectations.

Recommendations

If we have the chance to do another study in the same issue we will try to find a sample in the all the departments of Dubai Ports World in order to avoid any limitation. We prefer to use another instrument in order to get better result. We do not personally believe that there is huge cause for concern regarding the Maintenance Department but we recommend certain improvements in the communication process between the given departments.

Future Research: Although this study provides important insights into the Equipment Maintenance Department at Dubai Ports, the relationship between organizational structure and organizational ambidexterity for different firm types, the binary distinction between manufacturing and public service firms denotes one important limitation. Participating firm was categorized into public service firm based on its primary business activity. To what extent this primary business activity is related to the real ratio of manufacturing vs. service remains open. Therefore, this study may lack some generalizability with regard to the application of findings to pure public service firms.

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