



جامعة الجميع الذكية  
EVERYONE'S SMART UNIVERSITY

## Everyone's Smart University

### Project (Spring 2021)

|              |                             |               |
|--------------|-----------------------------|---------------|
| Student Name | Wesam Kamel Dawood Izzeddin | اسم الطالب    |
| Students I.D | 2021202154                  | الرقم الجامعي |

Section

Course

Code

Thursday

Master

Date

18 / 03 / 2021.

(PMG506)

## Advanced project Management

### Instructions:

- اخر موعد للتسليم هو يوم الخميس 2021-05-20 8 مساءً في تمام الساعة 9 مساءً.
- الإجابة متاحة باللغة الإنجليزية أو اللغة العربية مع مراعاة أن تكون المصطلحات العلمية باللغة الانجليزية.
- يتم تسليم المشروع في صيغة ملف pdf مع الالتزام نموذج الجامعة ولن تقبل أي مستندات أخرى.
- يجب مراعاة أقسام البحث الرئيسية (مقدمة Introduction، دراسات علمية سابقة Literature Review، طريقة البحث Methodology، النتائج والمناقشة Results and Discussion، وأخيراً المراجع References . وان كان هناك ملحقات Appendices يتم إضافتها)
- يجب الالتزام بـ Theme موحد كما يلي:
- حجم الخط 12.
- نوع الخط Arial.
- لون الخط أسود.
- المسافة بين الأسطر 1.5 line spacing

• عدد صفحات البحث (لا يقل عن ثلاث صفحات ولا يزيد عن ست صفحات).

Instructor's Name: ~~Eng. Amaal Aburumman~~ **Eng. Dr. Akram M. S. Ali**

### Project:

You are required to document your role in administering a project. The project may be set in a business, social, sporting, or family environment but must be of a significant size and scale. If you do not have an actual project to write about you may complete the project hypothetically.

**This report will be between three to six pages in length.** This is a significant research project.

Your report must address ~~each~~ **ONE** of the following issues:

1. Identify and describe the purpose, scope, and objectives of the project. **Display this information using an appropriate tool.**
2. Describe how the team is given an outline of the project.
3. Describe the strategies that are going to be set up to maintain communication with the team members.
4. Describe the tools that are going to be used to monitor the goals, time frames or milestones.
5. Identify project milestones and activities. **Display this information using an appropriate tool.**
6. Create a budget and link the costs to the key milestones for a project.
7. Describe how you are going to divide tasks and resources amongst a project team. **Display this information using an appropriate tool.**
8. Briefly describe how the progress will be monitored.
9. How are current project records maintained? Who has responsibility for this? provide some recommendations on how this process could be improved.
10. Describe the current procedure for finalizing projects. Create your own procedure and identify how you will evaluate the success of the project.
11. Legislation that may affect the project including health and safety, and anti-discrimination legislation.

**Best of luck...**

## المشروع:

مطلوب منك توثيق دورك في إدارة مشروع. قد يتم تعيين المشروع في بيئة تجارية أو اجتماعية أو رياضية أو عائلية ولكن يجب أن يكون بحجم مناسب. إذا لم يكن لديك مشروع فعلي لتكتب عنه ، فيمكنك إكمال المشروع افتراضياً. سيكون هذا التقرير من ثلاث إلى ست صفحات .

يجب أن يعالج تقريرك كل **أحد** القضايا التالية:

1. تحديد ووصف الغرض والنطاق والأهداف من المشروع. اعرض هذه المعلومات باستخدام أداة مناسبة.
2. صف كيف يتم إعطاء الفريق مخططاً تفصيلياً للمشروع.
3. وصف الاستراتيجيات التي سيتم وضعها للحفاظ على التواصل مع أعضاء الفريق.
4. صف الأدوات التي سيتم استخدامها لرصد الأهداف أو الأطر الزمنية أو المعالم.
5. تحديد معالم المشروع والأنشطة. اعرض هذه المعلومات باستخدام أداة مناسبة.
6. إنشاء موازنة وربط التكاليف بالمعالم الرئيسية للمشروع.
7. صف كيف ستقوم بتقسيم المهام والموارد بين فريق المشروع. اعرض هذه المعلومات باستخدام أداة مناسبة.
8. صف بإيجاز كيف سيتم رصد التقدم.
9. كيف يتم الاحتفاظ بسجلات المشروع الحالية؟ من المسؤول عن هذا؟ تقديم بعض التوصيات حول كيفية تحسين هذه العملية.
10. وصف الإجراء الحالي لإنهاء المشاريع. قم بإنشاء الإجراء الخاص بك وحدد كيفية تقييم نجاح المشروع.
11. التشريعات التي قد تؤثر على المشروع بما في ذلك الصحة والسلامة ، وتشريعات مكافحة التمييز.

مع تمنياتي بالتوفيق..

In this paper we will Identify and describe the purpose, scope, and objectives of the project. **Display this information using an appropriate tool.**

### **Project Subject:**

Project is using 5S project in healthcare inside ER Emergency Departments in Hospitals.

### **Abstract:**

The aim of this paper is to clarify the implementation of 5S lean project in Healthcare inside the emergency department , we will use 5S Methodology , lean , ways to enhance the workflow inside the emergency department we will focus on project phases initiation , planning , implementation and closing , discuss the deliverable of the project in emergency department and monitoring the project .

### **Introduction:**

One of the main department inside any hospital or medical centers or any healthcare providers sectors is the emergency department , in emergency department first aid of patient comes to emergency department ethers by himself or by Ambulance , day by day we noticed that the patient are increased rapidly and become more difficult and provide healthcare on time for all patient, for that reason for 5S Methodology is to make the emergency department more efficient is to apply one of the lean project is called 5S project , 5S project is the methodology of 5 main steps which is SORT , SET In ORDER , SHINE , STANDARIZE , SUSTAIN , In Sort: Separate needed items from unneeded items by sorting through items and disposing of rarely used items using red tagging. In Straighten/Set in order: Arrange the remaining items to be most efficient and accessible following the process flow by organizing and labeling item locations. In Shine/Scrub: Maintain the work area for the already sorted and set in order items by cleaning the work area. In Standardize: Ensure consistency across all users by developing procedures to maintain and monitor the first three S's. In Sustain: Maintain and improve the outcome from sort, straighten/set in order, shine/scrub and standardize.

**Description of 5S** is a popular housekeeping management tool within the Lean paradigm. 5S is intended for the physical work environment and is the simplest to implement for organizing, standardizing and maintaining the workplace (Kilpatrick, 2003). 5S stands for sort (seiri), straighten/set in order (seiton), shine/scrub (seiso), standardize (seiketsu), and sustain (shitsuke). In Sort: Separate needed items from unneeded items by sorting through items and disposing of rarely used items using red tagging. In Straighten/Set in order: Arrange the remaining items to be most efficient and accessible following the process flow by organizing and labeling item locations. In Shine/Scrub: Maintain the work area for the already sorted and set in order items by cleaning the work area. In Standardize: Ensure consistency across all users by developing procedures to maintain and monitor the first three S's. In Sustain: Maintain and improve the outcome from sort, straighten/set in order, shine/scrub and standardize phase through the use of management audits to stay disciplined (Ikuma and Nahmens, 2014).

**Description of lean** Lean is a tools used to reduce cost and make better achievement with high and good quality.

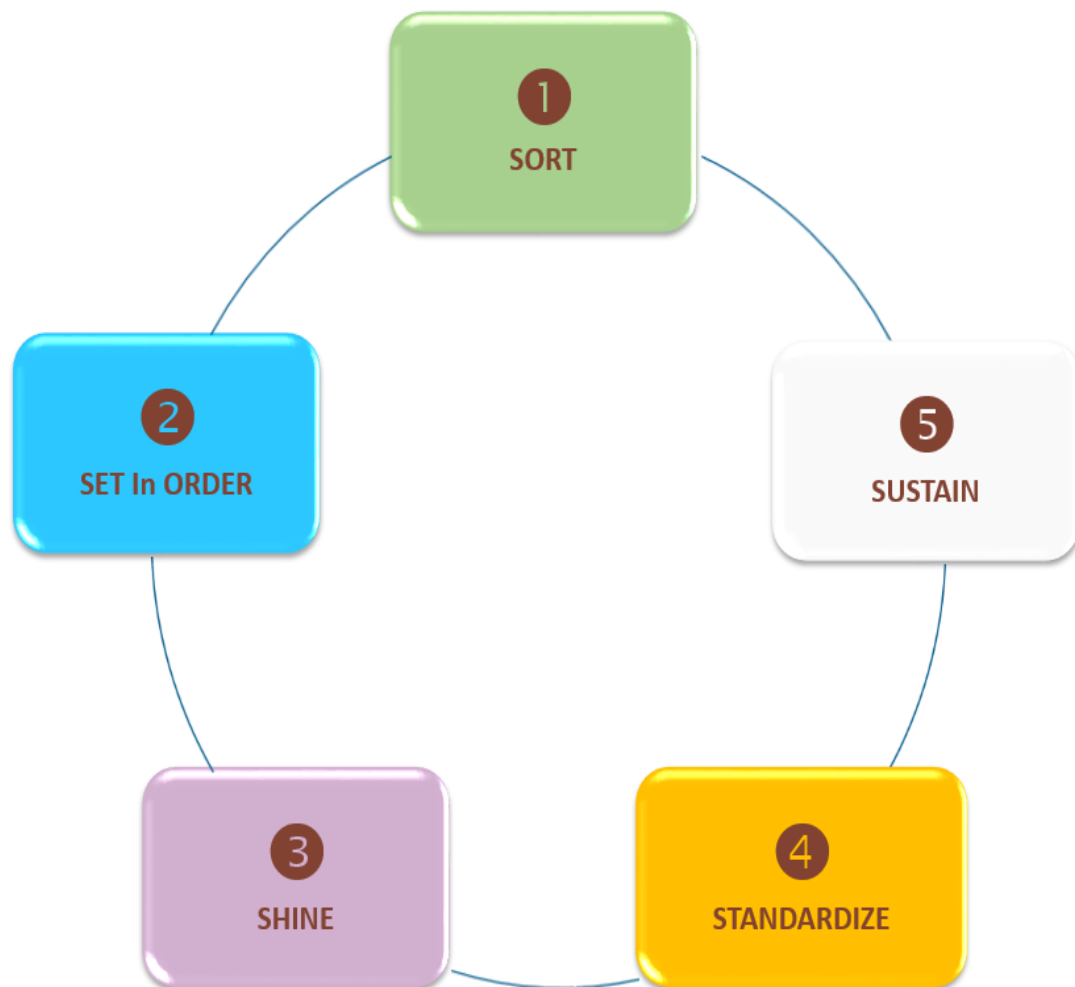
In this small example is showing Now how to use 5S lean project in home office room.

First step is cleaning the office room take the monitor, keyboard, mouse, printer and power extension off from the desktop and remove all drawers out and put them around and take the chair out this step is called sort.

Second step is put everything you like to keep and put them in suitable place and make up the office put some roof around for books, and cup for pens and all tools, this called SET IN ORDERS.

Third step is when everything is sort and set in orders its time to clean the room you found something need to be fixed like one drawer hand is broken and power extension is not good and now you are trying to fix all of them and restore

everything in place this is called Shine now you need to repeat this in next few days because you're not standardize and sustain your effort , Standardizing means to create the guidelines for Sort, Set in order, and Shine and then to actually follow those guidelines. Sustain is having the discipline and keeping the 5S processes going.



## **Literature Review:**

The Toyota manufacturing company has developed system principles to address similar issues in automobile manufacturing (Ikuma and Nahmens, 2014). In the early 1980s Takashi Osada formalized a framework of applying 5S within a business (Ho et. al., 1995). Ho (1999) described 5S as a five-phase technique to establish and maintain a quality environment in an organization. 5S stands for five words translated from Japanese, sort, straighten/set in order, shine/scrub, standardize, and sustain. The outcome of 5S is a well-organized workplace, where employees can easily distinguish common and uncommon conditions to ensure a reduction of defects and costs, and to maintain a safe work environment (Ikuma and Nahmens, 2014). The basic idea is to provide what is needed, at the time it is needed and where it is needed. 5S is one of the tools that within the set of Toyota management system principles termed Lean thinking/philosophy (Womack and Jones, 1996). Lean practitioners recognize that the 5S is the foundation of a Lean facility (Summers, 2007). The original goal of 5S was to improve efficiency and product quality. After decades of development by automotive manufacturers, the implementation of Lean, including 5S, resulted in improved productivity, quality and safety (Ohno, 1988). Different health care institutes have adopted the 5S to improve efficiency and services. The aim of this article is to provide an updated account on the application and effect of 5S in healthcare services by reviewing the literature.

## **Methodology and tools for this research**

Using 5S Methodology in this project, here we will focus on making all project steps, and communication channels, and make a project charter for this project and see how is succeeded.

## Methodology

In this research and paper will use applied research , Applied research “aims at finding a solution for an immediate problem facing a society, or an industrial/business organisation, whereas fundamental research is mainly concerned with generalisations and with the formulation of a theory”[\[1\]](#). Applied research is considered to be non-systematic inquiry and it is usually launched by a company, agency or an individual in order to address a specific problem.[\[2\]](#)

[\[1\]](#) Kothari, C.R. (2008) “Research Methodology: Methods and Techniques” New Age International

[\[2\]](#) Bajpai, N. (2011) “Business Research Methods” Pearson Education India

After we defined the applied research methodology, as this project used to solve an issue inside the Hospital in emergency department we will apply an 5S lean project in emergency department.

## Tools of the project:

Project charter is the suitable tools for 5S project as follow

| 5S lean project charter             |                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                           |                |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|----------------|
| <b>Project name</b>                 | Applying 5S Lean Project in Healthcare Emergency Department                                                                                                                                                                                                                                                                                                                                                                                             |                           |                |
| <b>Project Sponsor</b>              | Zeina Kawas                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>Project Manager</b>    | Wesam Izzeddin |
| <b>Date of the project approval</b> | 15 April 2021                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>Last Revision Data</b> | 29 April 2021  |
| <b>Project description</b>          | As part of Saudi Arabia's Vision 2030 plan to enhance overall healthcare services, the "Enhancing Clinical Services Across EDs" Program was launched to directly contribute towards enhancing overall operations & service quality in Emergency Departments                                                                                                                                                                                             |                           |                |
| <b>Scope</b>                        | 1- Support ED teams in identifying areas for Improvement<br>2- Enhance overall ED operations and services<br>3- Effectively monitor & sustain improvements<br>4- Saving patient waiting time<br>5- Organizing documents , medicine , treatment and decision making.<br>§ Develop and/or fine tune the policy for requests for consultation from non-ED specialists<br>§ Support enablers of timely specialty consultation leading to admission decision |                           |                |

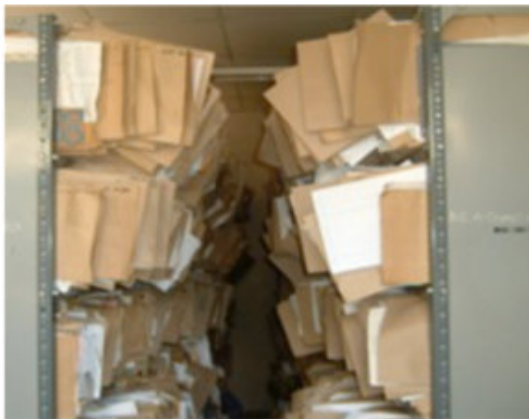
|                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Business Case</b>                   | <ul style="list-style-type: none"> <li>§ To clarify expectations for response times for ED-requested consultations based on patient acuity (CTAS level) and specialty</li> <li>§ To enhance interdisciplinary collaboration</li> <li>§ To reduce time from door to decision for admission decisions</li> <li>§ To improve handovers from ED to specialty for patients to be admitted</li> <li>§ To reduce time to treatment</li> </ul>                                                                                                                                                                                                                                                         |
| <b>Constraints (in priority order)</b> | <ul style="list-style-type: none"> <li>q Orientation - walk through previously completed templates as examples</li> <li>q Health consultant department will schedule visits</li> <li>q Site visit</li> <li>q FaceTime guidance from Health consultant team</li> <li>q Take photos</li> <li>q Complete and send templates to Health consultant department.</li> <li>q Health consultant department will develop the full reports</li> <li>q Time (excluding travel) <ul style="list-style-type: none"> <li>Ø Orientation with HTS – 1 hour</li> <li>Ø Site visit – 1 - 1.5 hours/site (X4)</li> <li>Ø Complete template – 1 hour/site (X4)</li> <li>Ø Total – 9-11 hours</li> </ul> </li> </ul> |
| <b>Project Deliverables</b>            | <ul style="list-style-type: none"> <li>§ To clarify expectations for response times for ED-requested consultations based on patient acuity (CTAS level) and specialty</li> <li>§ To enhance interdisciplinary collaboration</li> <li>§ To reduce time from door to decision for admission decisions</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                 |

|                         |                                                                                                                                                                                                                                                                                                   |                                                                                                      |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
|                         | <p>§ To improve handovers from ED to specialty for patients to be admitted</p> <p>§ To reduce time to treatment</p>                                                                                                                                                                               |                                                                                                      |
| <b>Key stakeholders</b> | <p>Project Team: Initiation, Planning , execution , closing</p> <p>Medical consultant: Monitor the implementation of the project</p> <p>ER team ( Doctors , nurses): Standardize the 5S lean in ER department</p> <p>ER Supervisor: Monitor the Standarize and Sustain steps in ER department</p> |                                                                                                      |
| <b>Risks</b>            | <b>Define risks</b>                                                                                                                                                                                                                                                                               | <b>Solution</b>                                                                                      |
| <b>Risk 1</b>           | ER department refuse the 5S project idea.                                                                                                                                                                                                                                                         | Recognize the 5S to the ER supervisor and staff and show him the result                              |
| <b>Risk 2</b>           | People changed from ER department.                                                                                                                                                                                                                                                                | Make a template inside the department define to all persons in simple way                            |
| <b>Risk 3</b>           | Some staff in ER is not implement 5S in the department                                                                                                                                                                                                                                            | Ask the supervisor to monitor the 5S in the department in weekly basis to make sure its implementing |

## Result and discussion

Findings of this paper were obtained from c-RCT conducted at selected hospitals in Manyara and Kilimanjaro regions in Tanzania. The broad objective of the study was to examine the effectiveness of the 5S approach on the reduction of patients' waiting time at different service points in OPDs. We hypothesized that hospitals in the treatment group that would practice 5S activities would improve productivity and minimize process time for service provision through improving the working environment as described in the below Figure. Due to the reduction in process time, sections that would practice the 5S approach could reduce patients' waiting time for provision of health services.[2]

**Before 5S**



**After 5S**



## References:

- 1- Using the 5S Lean Tool for Health Care Lean is a problem-solving approach for continuous improvement – and the 5S tool is of value in health care settings. by Janice Ahlstrom (RN, BSN, CPHIMS)

[https://search-academy.com/article.php?p\\_id=424011](https://search-academy.com/article.php?p_id=424011)

- 2- Abdullah, M. H. (2005), "Study on outpatients' waiting time in Hospital Universiti Kebangsaan Malaysia (HUKM) through the Six-Sigma approach", Statistics Malaysia – Journal of Department of Statistic, Kuala Lumpur, Vol. 1, pp. 39-53, available at: [www.researchgate.net/publication/237515690\\_Study\\_on\\_Outpatients'\\_Waiting\\_Time\\_in\\_Hospital\\_University\\_Kebangsaan\\_Malaysia\\_HUKM\\_Through\\_the\\_Six\\_Sigma\\_Approach](http://www.researchgate.net/publication/237515690_Study_on_Outpatients'_Waiting_Time_in_Hospital_University_Kebangsaan_Malaysia_HUKM_Through_the_Six_Sigma_Approach) (accessed December 12, 2013).

## Appendex