



جامعة الجميع الذكية
EVERYONE'S SMART UNIVERSITY

Everyone's Smart University

Project (Spring 2021)

Student Name	تمام بن عبدالرزاق الجاجة	اسم الطالب
Students I.D	2021202054	الرقم الجامعي

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Advanced project Management

Virtual Education Platform Project

Study research about "How to divide tasks and resources amongst the project team"

Prepared By: Eng. Tammam Aljajeh (Project manager)

1- Introduction:

1.1 What's our project?

In light of the COVID-19 pandemic, the world has moved towards adopting distance education (ON-LINE learning) as an alternative to traditional education, in order to preserve the safety of students and their families.

Saudi Arabia was a pioneer in this field, as it developed and launched, within a record period, distance education platforms for various school levels.

Our company "TETCO" as a technical arm of MOE "Ministry of education" has implemented the virtual education platform and App for preschools level named as "Virtual Rawdah" platform.

MOE has identified the need in building a platform to automate the state-of-the-art online education solution for all KSA students. This system main objective, aside from the automation itself, is to enable KSA students to avail its Education Virtual Rawda content to the public via Mobile Application as well as keeping track of each and every activity running on the platform. The system should provide a common framework for MOE staff of various disciplines to manage the solution more efficiently and to make full use of data captured by the system. An important business need as well, is to have an advanced reporting on the level of students and the parents as well.

Coming from the above understanding of MOE requirements, We proposed to build an effective and well-engineered platform that will enable MOE to offer its education content to KSA students and to increase the students learning efficiency, increase visibility on education related activities, enhance educational content publishing workflow and communications and also will tremendously participate in cutting cost and saving time.

Designed and built using top notch technologies, the system will provide MOE with a full-fledged automation solution capitalizing on one of the best practice Mobile and Full Stack development platforms,

Our extensive expertise in developing Mobile Education content platforms empowers us to tailor these platforms and technologies to best fit MOE auditing needs. As a key player

in the local market, our solutions are aligned with KSA strategy in many ways, following the national standards for organizational excellence and helping organizations to be an early adapter for new technologies as part of 2030 vision. This involves defining KPIs for all solution users, enhancing services provided to target audience and most importantly, the effect of such solution on reducing operational cost and request handling time across all the process.

1.2 Goals & Objectives:

Based on our understanding of the requirements, MOE required the development of a high end Educational Mobile app, and to implement the platform administration portals in order to create a more efficient information and communication channel for MOE students and parents, to fulfill MOE vision in becoming an internationally recognized location of choice for quality education and an integrated center of excellence for Edutainment.

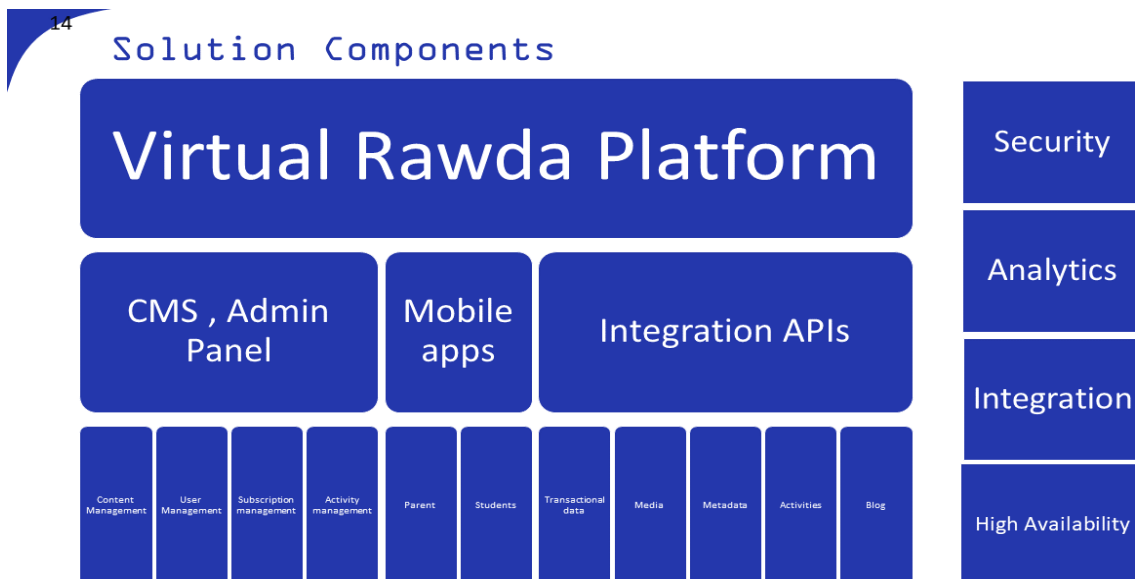


Figure 1 – Virtual Rawda High Level Logical Solution Architecture

By Leveraging the Mobile App features, as well as the Admin Panel workflow implementation features. MOE is requesting to implement the platform as part of its initiative to increase student's learning and parent's satisfaction, through which it offers:

- Ease of Use: Introducing a new system usually faces some resistance however the proposed solution ease of use can easily convince the users not only to use it, but also to perform all their activities just by trying its user-friendly interface.
- Flexibility: Our solution provides a great deal of flexibility that creates the perfect balance between applying the internal rules, and giving the organization the tools to maneuver.
- Performance Management: It focuses on empowering the decision makers with the right information through the system extensive reporting and analysis tool.
- Information Governance: Managing access and governing valuable information are key success criteria for an automation system.
- Manageability: For such integrated solutions, manageability is always an issue. This is not the case with what we are providing. Using one administration console, employees in charge, can do it all from one place with the minimal effort.

The main objectives of this solution are to digitalize the various processes and services offered by the Virtual Rawda to its students, parents, and employees. The services within the scope of this solution are grouped in four main categories, the registration services, Content Management services, Reporting services and User Management Services.

1.3 My Role in the project:

I was assigned as a project manager for this important project, for supervising the project system from initiating to closing.

My main responsibilities are:

- Day-to-day management of the project and its resources.
- Providing regular reports to the Project Board and stakeholders.
- Project designing and restructuring, if necessary.
- Dividing tasks and resources amongst the project team.

The one of main project management responsibilities is how to breakdown tasks and resources of the project and divide it amongst the project team, So I'll focus in this report on how I managed this part of the project management to achieve best results.

The purpose of dividing tasks is to providing common understanding of all the work required to deliver the product/services based on project timeline.

2- Literature Review:

Several studies presented and discussed the importance and methods of tasks dividing amongst the project team.

In our organization we usually used these standard methods, and we achieved good results which aligned with the project goals and objectives.

- **Work Breakdown Structure “WBS” of the Project**

The researchers have defined work breakdown structure WBS as the one of best used tools to make complex projects more manageable. The WBS is designed to help break down a project into manageable chunks that can be effectively estimated and supervised.

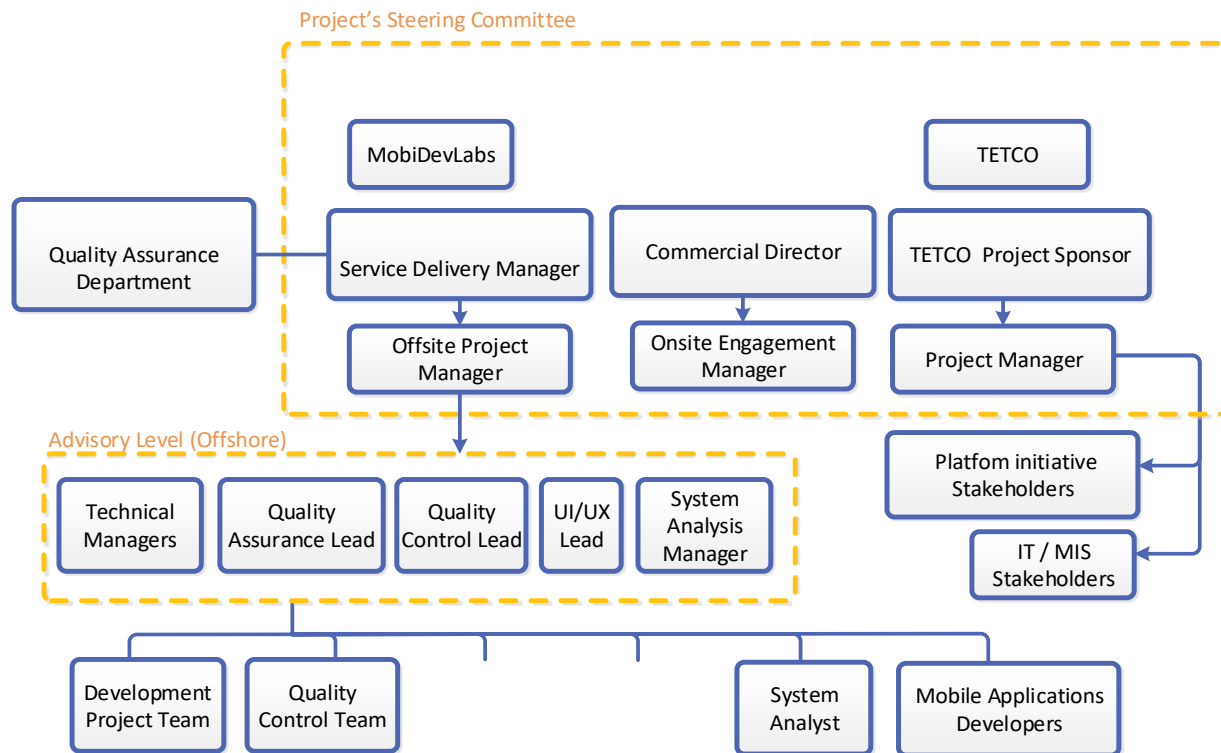
The WBS divides the entire project into its component elements in order to establish a framework for effective management control of the project scope, schedule and budget. We use this dividing tools and method in our organization and I have used it in this project to define the tasks and resources for each member of project team.

- **Impact of various work-breakdown structures on project conceptualization**

For a large project to be properly planned and executed, it must be ‘decomposed’ into small segments in a structural manner. The planning and execution of these segments is then assigned to specific organizational units. This ‘slicing’ approach, called the work-breakdown structure (WBS), is not new. The US Government formalized this concept for project management as early as 1962, when it started to demand that the WBS be used by all organizations working on federal projects. The PERT Coordinating Group’ defines a WBS as a family-tree subdivision of a program that begins with the end objectives, and subdivides these objectives into successive smaller end-item subdivisions. The WBS establishes the framework for defining the work to be accomplished; constructing a network plan; summarizing the cost and schedule status of a program for progressively higher levels of management.

3- Methodology:

In Virtual Rawdah project, we adopted the work breakdown structure WBS and Key roles & responsibilities matrix as tools for dividing tasks and resources amongst the project team of our organization and MOE team.



Role	Responsibility
Service Manager	- Acts to resolve issues quickly, understanding that unresolved issues can cause significant risks to the project impacting Time, Scope and Cost - He is a member of the steering committee and attends steering meetings on timely basis.
Development Managers & Lead Consultant	- Ensuring other members of the management share commitment to the project. This person may provide the resources, particularly staff time, required to make the project a success - Making decisions that can change project organization, project scope, or allocation of project funding - Ensuring that the direction of the project continues to be in line with the original mission and goals set forth at the beginning of the implementation, or new directions as determined - Removing obstacles to meeting critical success factors which may impact the successful outcome of the project - Approve overall system functionality and ensure that the business needs are met. - He is a member of the steering committee and attends steering meetings on timely basis, if needed.
Project Manager	- Perform Quality Health Checks after the important milestones - Technically Support On-Site Consulting Team. - Manage the allocation of On-Site Consulting Team. - Monitor the project and ensure the milestones delivery and quality.
	- Manage the development of the Project's key deliverables: - Project Charter - Project Plan - Change management plan - Risk management plan - Issue Management plan and

4- Results & Discussion:

As I mentioned in the beginning, we targeted to provide the required solution on time within budget and with high quality.

Now we are in the closing phase, and we delivered all requirements based on scope of work because all responsibilities and tasks were divided clearly amongst the project team by using WBS tool, and detailed the responsibilities of all members of the team as below example:

Role	Responsibility
Steering Committee	- Agree on the scope and objectives - Ensure resources are available - Commit to implementing the new modules and processes - Address and resolve major issues - Review progress on a regular basis
Development Managers & Lead Consultant	- Perform Quality Health Checks after the important milestones - Technically Support On-Site Consulting Team. - Manage the allocation of On-Site Consulting Team. - Monitor the project and ensure the milestones delivery and quality.
Project Manager	- Manage the development of the Project's key deliverables:  Project Charter  Project Plan  Change management plan  Risk management plan  Issues Management plan and  Project documentation - Ensure the project is initiated against a plan - Ensure everyone is aware of their role and have agreed to their responsibilities. - Keep people informed of project status - Measure the performance of the project. Know how the project is performing against milestones, time frames, deliverables, budget and resources. - Monitors project progress & works to keep the project on track - Acts to resolve issues quickly, understanding that unresolved issues can cause significant project impact - Ensures all key project deliverables are appropriately reviewed and approved - Provide leadership and management to project team.

Role	Responsibility
Quality Assurance Advisor	- Escalate any issues to the MEDIAOASIS Project Manager on areas impacting the implementation process / quality of implementation. - Asses the adherence of the development process to MediaOasis approved software development process. - Assures that the project documentations are updated on a timely manner, progress is visible and the process is adhered.
UI/UX Designers	- Conceptualize original ideas that bring simplicity and user friendliness to complex design roadblocks - Develops, implements graphics and creative look and feel designs for best quality and presentation on browsers. - Present and defend designs and key milestone deliverables to peers and other development stakeholders - Establish and promote design guidelines, best practices and standards, in order to provide the best possible usability within existing constraints.
Solution Developers	- Understands the requirements from the Business areas for their respective Modules - Communicates and documents, with the Functional team within the project any Customization functionality / reporting requirements to be developed as a part of the implementation. - Documents the System Design Specifications / System test strategy / scripts / data along with the Functional teams - Develops the Customized functionality / reporting needs code.
Support Engineer	- Consultation of technical issues, & known problems - Reproduction of customer environments on lab equipment; work with L3 support to isolate and solve problems. - Follow up on technical cases including proper escalation and management of the case until case closure.

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