

GREEN BILLBOARD COMPANY

Using Wind to Supply Water as a Renewable Energy



Under the supervision of

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Second semester

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	Faris Alshibani	PMO	2021206369	Faris.alshabani1@gmail.com
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1.1.1 Develop a Vision statement

To be the leading project in the Middle East and North Africa in utilizing renewable and clean energy.

1.1.2 Mission Statement

Establishing one of the finest wind power plants to provide renewable energy and extract water from the atmosphere to serve government and commercial facilities by using environmentally safe tools.

1.1.3 Develop and identify the objectives in a SMART model

Covering the pedestrian corridor in Jeddah Corniche and its affiliated facilities by using rotating energy to operate the generator by building a high tower 20 meters high above the large blades and directing them in the direction of the wind, which forms a rotating movement that results in power generation.

It was agreed with external companies to purchase the blades, install them on towers or poles, and deliver them by the end of June

There are 83 countries around the world that use wind energy to enhance their electricity networks. Denmark is one of the world's largest users of wind energy, as it generates more than a third of its electricity needs.

The wind power industry is growing rapidly as the world quadrupled from 2000 to 2006. If this growth momentum continues, wind power will be able to meet a third of global energy demand by 2050.

The numbers of wind turbines and humidity will start in the month of August.

1.1.4 Develop and identify the performance measurements indicators, Lead and Lag.

Performance indicators for the project of using wind and humidity to provide renewable energy and extract the water to serve government and commercial facilities.

- 1) Reducing energy costs by 30% to 45% for facilities and places to be covered.
- 2) Providing water resources for non-human consumption (irrigation, hygiene, etc..) at a rate of 50% for the first year, and the percentage increases gradually at the beginning of the second year to 75%.
- 3) Achieving a service satisfaction rate of at least 80% for service beneficiaries.
- 4) Quick response and installation of new requests, so that the service is fully implemented within 10 working days.
- 5) The breakdown rate should not exceed 5% of peak times, and a maintenance contract with the supplier should be included, and a commitment to provide an alternative solution, in the event of a breakdown that requires a long maintenance time. In the case of periodic maintenance, it will be scheduled during non-working hours. (Friday morning, for example).
- 6) Obtaining an ISO certificate.
- 7) Contracting with a supplier, who is committed to providing equipment and machinery, conforming to the specifications, and the required quality, on time, and at competitive prices, according to the allocated budget.

1.1.5 Develop and prepare the project charter model

1. General Project Information				
Project Name:		Using Wind to Supply Water as a Renewable Energy		
Executive Sponsors:		Public Investment Fund (PIF)		
Impact of project:		To provide water as a renewable energy from the wind.		
2. Project Team				
	Name	Departm ent	Telephone	E-mail
Project Manager:	Mohammad Alosaimi	PMO	966565999410	Alosaimemohamad@gmail.com
Team Members:	Tariq Elqahtani	PMO	966548997848	PS-expert-2012@hotmail.com
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	Asma alghamdi	PMO	966503214993	aasgh63@gmail.com
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	Yasser Hab alreeh	PMO	966567333900	yasserhab@gmail.com
	Mohammad Almohanna	PMO	966543949390	m.a.almohanna@gmail.com

3. Stakeholders (e.g., those with a significant interest in or who will be significantly affected by this project)

1. Ministry of Municipal Rural Affairs and Housing
2. NEOM
3. National Water Company
4. Zakat Tax and Customs Authority
5. Ministry of Commerce
6. Ministry of Industry and Mineral Resources
7. Ministry of Environment Water and Agriculture
8. Ministry of Human Resources and Social Development
9. Saudi Authority for Intellectual Property
10. General Directorate of Civil Defense
11. Marketing and Commercial Companies
12. Non Profit Organizations
- 13.

4. Project Scope Statement

Project Purpose / Business Justification

Describe the business need this project addresses

To provide water as a renewable energy from the wind.

Objectives (in business terms) *Describe the measurable outcomes of the project, e.g., reduce cost or increase quality*

To provide water as a renewable energy from the wind to various needs.

Deliverables *List the high-level “products” to be created (e.g., improved process, employee manual)*

A source income of water to be provided to various needs.

Project Milestones *Propose start and end dates for Project Phases (e.g., Inception, Planning, Construction, Delivery) and other major milestones*

01/06/2022 – 2030.

Major Known Risks (including significant Assumptions) *Identify obstacles that may cause the project to fail.*

Risk	Risk Rating (Hi, Med, Lo)
Miscommunication	Med

Constraints *List any conditions that may limit the project team’s options with respect to resources, personnel, or schedule (e.g., predetermined budget or project end date, limit on number of staff that may be assigned to the project).*

Limit of number of staff that may be assigned to the project.

5. Communication Strategy *(specify how the project manager will communicate to the Executive Sponsor, Project Team members and Stakeholders, e.g., frequency of status reports, frequency of Project Team meetings, etc.)*

The project manager will communicate with the stakeholders and report to the executive sponsor.
The Project team will hold a weekly remote status report meetings, in addition to a monthly personal meeting.

6. Sign-off

	Name	Signature	Date: 20/06/2022
Executive Sponsor	PIF	<i>pif</i>	20/06/2022
Project Manager	Mohammad Alosaimi	<i>Alosimemohammad</i>	20/06/2022

7. Notes

TABLE 1:PROJECT CHARTER

1.2.1 Develop an organizational structure for the teams and units of the project

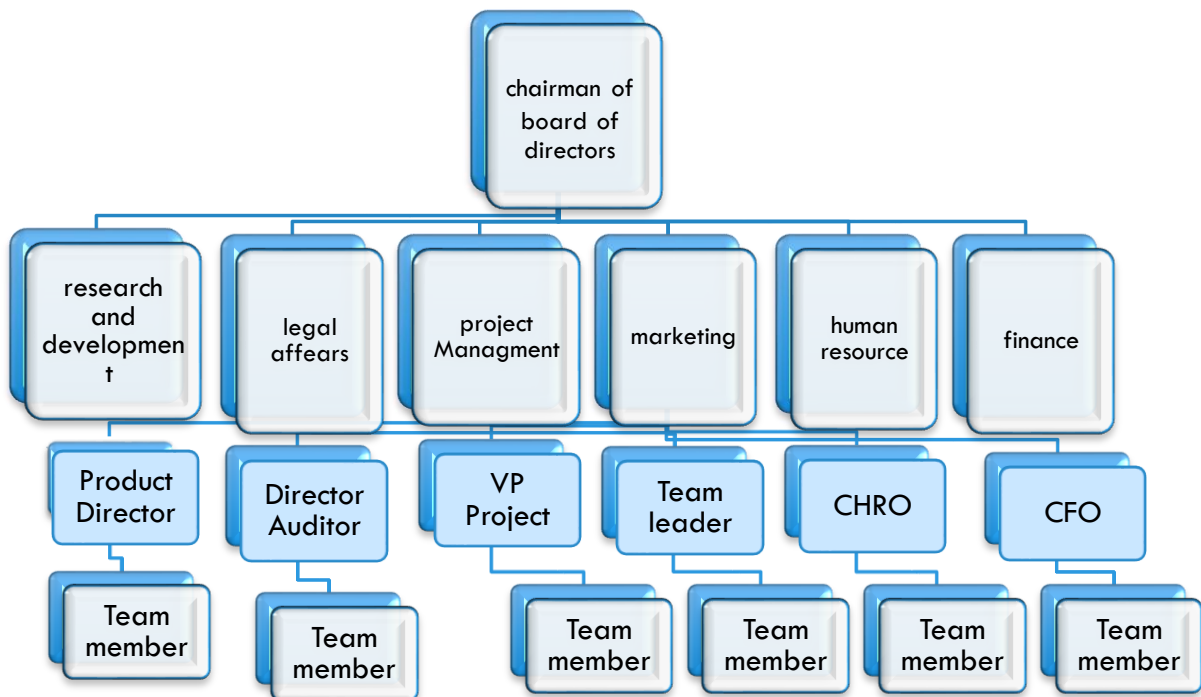


Figure 1: Organizational Structure

1.2.2 Identify the practical and scientific bases, adopted in developing the structure

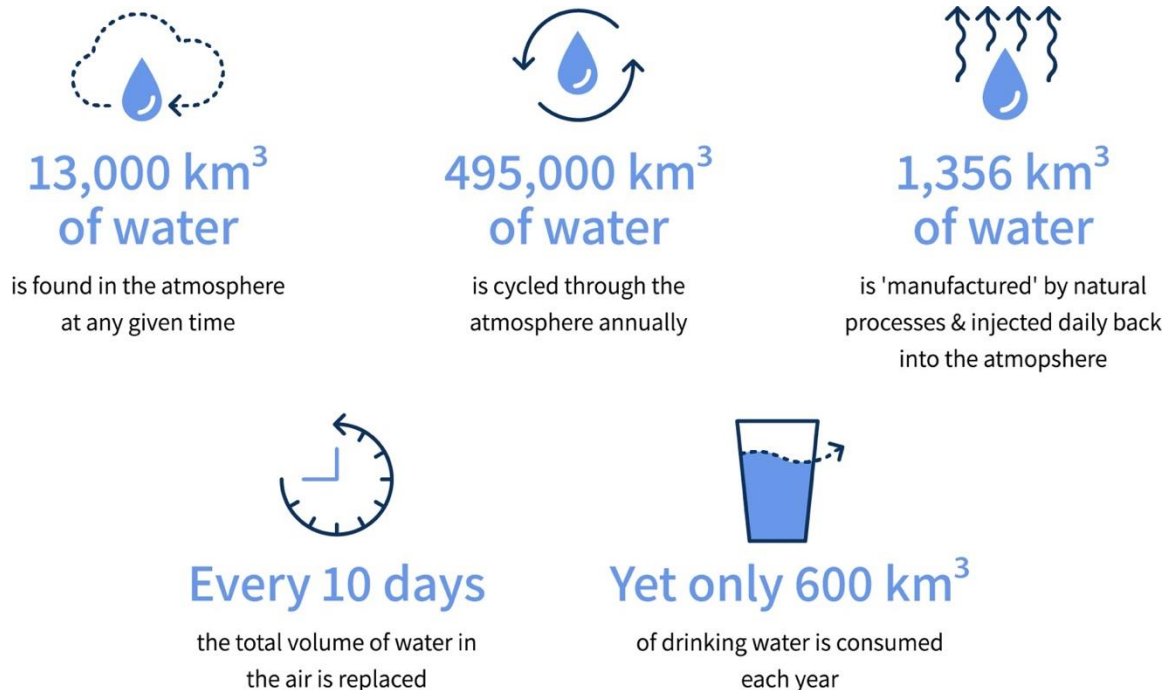


Figure 2: Water from Air

The air around us provides us with a fully renewable, practically unlimited resource that's available to us to harvest – without compromising sustainability.

AWG: The Most Important Sustainable Water Source for the Future

Among the most exciting solutions to the water scarcity problem to emerge is the field of Atmospheric Water Generation (AWG), more popularly known as “Water-from-Air” technologies.

In terms of sustainability, the challenge posed to AWG is to collect the water in large enough quantities, with as little energy as possible, and make it fresh, clean, and accessible enough to supply communities in times of water stress.

AWG technologies are truly groundbreaking. They manage to capture moisture from the air, filter out any dirt and extract the water from the air's humidity (they are most efficient when humidity levels are above 35%).

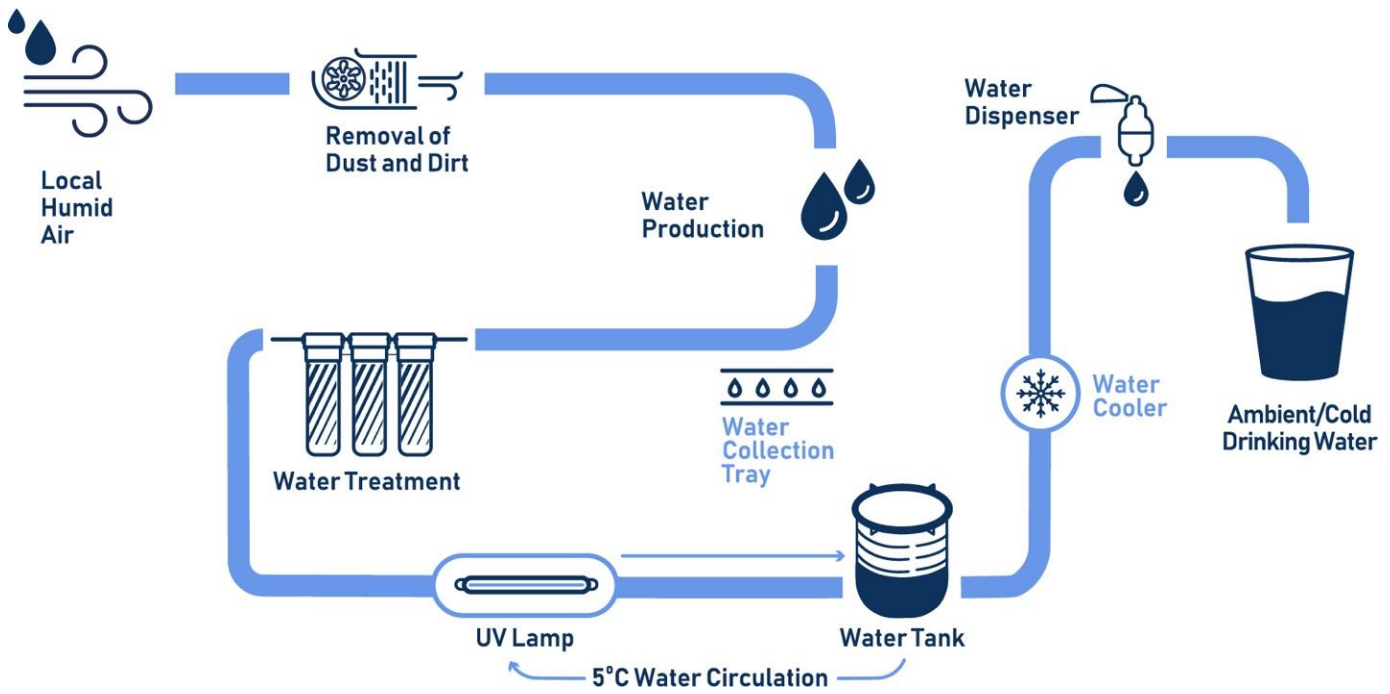


Figure 3:AWG

Water source options	Cost	Volume	Environment footprint	Delivery	Comments
 Desalination of seawater	High	Unlimited	High energy + CO2	Via existing structure	Suitable only for western world and coastal areas
 Treated contaminated water	Medium	Low	Extreme pollution	Local	Not a long-term option because more polluted water will increase
 Recycled wastewater	Medium	Low	High pollution	Local	Not a long-term option. Water quality is poor.
 Reduce agro / industry water usage (currently >90%)	Extreme	High	High	Via existing structure	Requires massive investment and corporate / government collaboration
 New technology	Low / Medium	Unlimited	Low	Point of need	AWG is the most prominent and well developed new technology!

Table 2: Costs and Benefits Comparison

AWG Systems Working for You

Producing water from air is a process that requires energy. Depending on the need's location and duration, AWG systems will draw on the most efficient available energy source. Increasingly, most systems soon will operate on a renewable source, such as solar, wind or hydro-energy.

A large AWG unit stationed in an emergency zone following a natural disaster may be powered by a generator, but a permanent unit in a remote location would rely on a renewable source, which is also the most environmentally friendly option.

Many locales are ideal for larger AWG installs, such as university and school campuses, army bases, combat units and defense forces, large factories, municipal parks, resorts, emergency response teams, villages in rural areas, RV and private vehicles, marine vessels etc.

Growing Recognition of AWG's Promise technology has the greatest potential of all current methods for reducing drinking water stress in all countries, both developing and developed, currently and in the immediate future.

1.2.3 Identify the project's office model, most appropriate to manage the project, in addition to mentioning the reason.

Directive PMO is the perfect method for this project. This type goes beyond control and actually "takes over" the projects by providing the project management experience and resources to manage the project. As organizations undertake projects, professional project managers from the PMO are assigned to the projects. This injects a great deal of professionalism into the projects, and, since each of the project managers originates and reports back to the directive PMO, it guarantees a high level of consistency of practice across all projects. If there is the task of using the winds power to provide energy and transform to pure water from the atmosphere.

The reason:

This task is effective in our project because we will need repetitive check up on the

This issue needs continuous follow-up to ensure the safety of the devices that convert air into water. It also needs laborers who make rounds at reasonable intervals to ensure that the board is not damaged, and all this needs to use this method that ensures the continuity of the project and also in the event of early detection and maintenance of problems early it prolongs its life and increases the desired benefit from it.

2.1.1 Design a check compliance model before delivering the project outputs

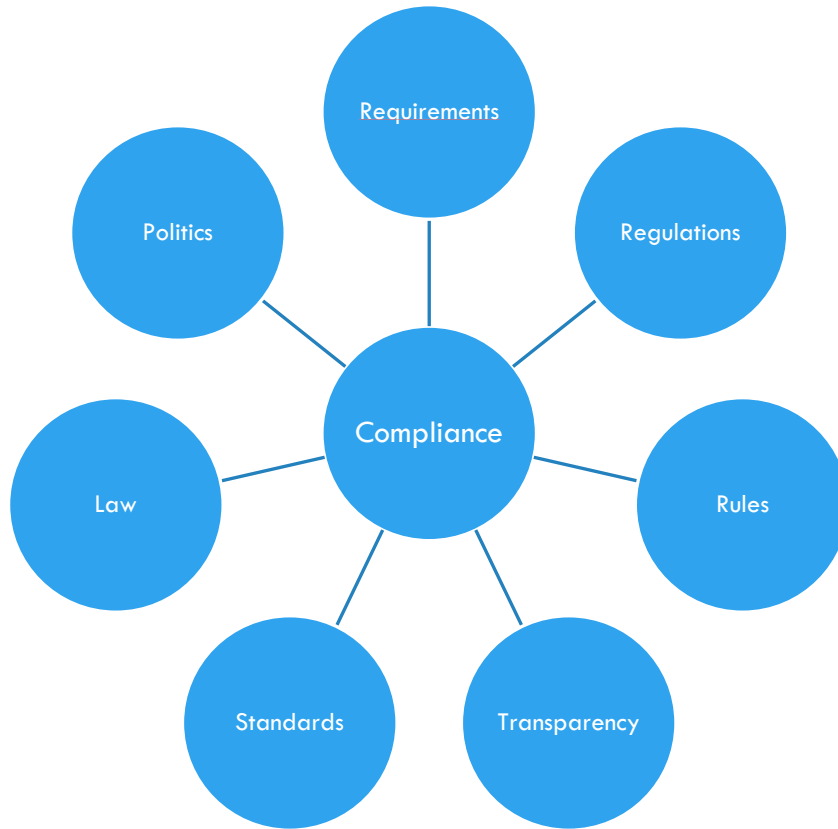


Figure 4: Compliance Model

2.1.2 Develop checklist model for the stages of the project (Start-Plan-Achieve-Close)

Project start

At this stage the project is defined at a broad level and this stage begins with a working case, through which we will discuss whether the project is feasible and whether it should be implemented or not. It should include business needs, stakeholders and business case

Project planning

Through which the focus will be on developing a roadmap that everyone follows and works on in its full technical and administrative terms. This stage begins with defining the objectives, defining the scope of the project and the method of project management, determining the cost, quality, available resources and a realistic timetable, and establishing a performance measure for the project.

Project completion

This is all about measuring the progress and performance of the project and ensuring that everything that happens is aligned with the project management plan. We have already mentioned in project planning. Create a project performance measure. All capabilities identified in the project plan will be used to work on project completion. The project manager will use Key Performance Indicators (KPIs).) to determine if the project is on the right track, and the Project Management Manager will select two to five of these KPIs to measure project performance

Project closing phase

This stage is called the completed project stage, the work of the contractors assigned to work on the project is finished, once the project is complete the executives have to perform some tasks, they will need to create a punch list of things that were not accomplished during the project and work with team members to complete it, perform the final project budget Preparing the final project report

2.2.1 Develop a stakeholder register and form groups for them

#	Role	Classification of stakeholders	Stakeholder Analysis	Main goal	contribute	The best way to manage	contact information	The best way to communicate
1	Ministry of Commerce	External	implementation	Obtaining legislation and regulations	Follow up on regulations and legislation	Obtaining legislation and regulations	9200000667 CS@mc.gov.sa	Email, phone
2	Ministry of Industry and Mineral Resources	External	implementation	Obtaining legislation and regulations	Follow up on regulations and legislation	Obtaining legislation and regulations	19900 Cs@mim.gov.sa	Email, phone
3	Ministry of Environment, Water and Agriculture	External	implementation	Obtaining legislation and regulations	Follow up on regulations and legislation	Obtaining legislation and regulations	939 Cs@www.mewa.gov.sa	Email, phone
4	Saudi Authority for Intellectual Property	External	implementation	Obtaining legislation and regulations	Follow up on regulations and legislation	Obtaining legislation and regulations	920021421 saip@saip.gov.sa	Email, phone
5	Ministry of Municipal and Rural Affairs and Housing	External	Satisfaction	Obtaining legislation and regulations	Follow up on regulations and legislation	Obtaining legislation and regulations	114456999 cs@momra.gov.sa	Email, phone
6	General Directorate of Civil Defense	External	Satisfaction	Obtaining legislation and regulations	Follow up on regulations and legislation	Obtaining legislation and regulations	114925033 988@988.gov.sa	Email, phone
7	Zakat, Tax and Customs Authority	External	Satisfaction	Obtaining legislation and regulations	Follow up on regulations and legislation	Obtaining legislation and regulations	114208417 zatca.gov.sa	Email, phone
8	Ministry of Human Resources and Social Development	External	Satisfaction	Obtaining legislation and regulations	Follow up on regulations and legislation	Obtaining legislation and regulations	112668999 info@hrsd.gov.sa	Email, phone

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#	Role	Classification of stakeholders	Stakeholder Analysis	Main goal	contribute	The best way to manage	contact information	The best way to communicate
9	Audiovisual Media Authority	External	implementation	Obtaining legislation and regulations	Follow up on regulations and legislation	Obtaining legislation and regulations	8001189999 contact.us@gcam.gov.sa	Email, phone
10	Social Development Bank Entrepreneurship Program	External	implementation	Obtaining legislation and regulations	Obtaining funding to implement the project	Obtaining legislation and regulations	011*****	Email, phone
11	private sector	External	implementation	Financial support for project operations	Obtaining funding to implement the project	Obtaining legislation and regulations	011*****	Email, phone
12	Advertising and marketing companies	External	Satisfaction	Financial support for project operations	Attracting companies as clients	Communication through marketing and sales	011*****	Email, phone
13	non-profit organizations	External	Satisfaction	Target companies as customers	Attracting companies as clients	Communication through marketing and sales	011*****	Email, phone
14	Suppliers	External	implementation	Target companies as customers	Attracting to build ongoing partnerships			Email, phone
15	The media	External	implementation	Creating a lasting partnership relationship with the suppliers	Attracting companies as clients	Communication through marketing and sales	011*****	Email, phone
16	General Manager of the company	Internal	implementation		Giving executive decisions		@abc.com	Email, phone
17	Chairman of Board of Directors	Internal	implementation Satisfaction	Follow up published project issues & target them as clients-15	Follow up on the implementation of the decisions of the Board of Directors		@abc.com	Email, phone
18	Project manager	Internal	implementation	Ensure that the project proceeds according to the planned time, cost, scope and quality	Follow up on the implementation of the Daily follow-up of project implementation	Daily follow up of project implementation	@abc.com	Email, phone

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#	Role	Classification of stakeholders	Stakeholder Analysis	Main goal	contribute	The best way to manage	contact information	The best way to communicate
19	Project workers	Internal	implementation	Ensuring the efficiency of employees, training, qualification and motivation	Contribute to the implementation of the project according to the planned time, cost, scope and quality	Repetitive reports & decision making to ensure the progress of work	@abc.com	Email, phone
20	Chief Financial Officer	Internal	implementation	Financial administration	Managing the company's financial resources	Follow up with financial activities	@abc.com	Email, phone
21	Legal Department Manager	Internal	implementation	legal administration	Contribute to the implementation of the project according to the planned time, cost, scope and quality	Follow up with legal activities	@abc.com	Email, phone
22	Technical department manager	Internal	implementation	Automate the work and management of the company's website	Ensure compliance with internal and external regulations and legislations	Follow up on legal activities Implementation of the technical requirements of the company's departments	@abc.com	Email, phone
23	customers	Internal	implementation	Creating a lasting partnership relationship with clients	Managing the company's technical resources Attracting to build ongoing partnerships	Communication through marketing and sales	011*****	Email, phone
24	financiers	Internal	implementation	Financial support for project operations	Obtaining funding to implement the project	Follow up on financing operations	011*****	Email, phone

Table 3: Stakeholder Register

2.2.3 Stakeholder Register Logical Diagram

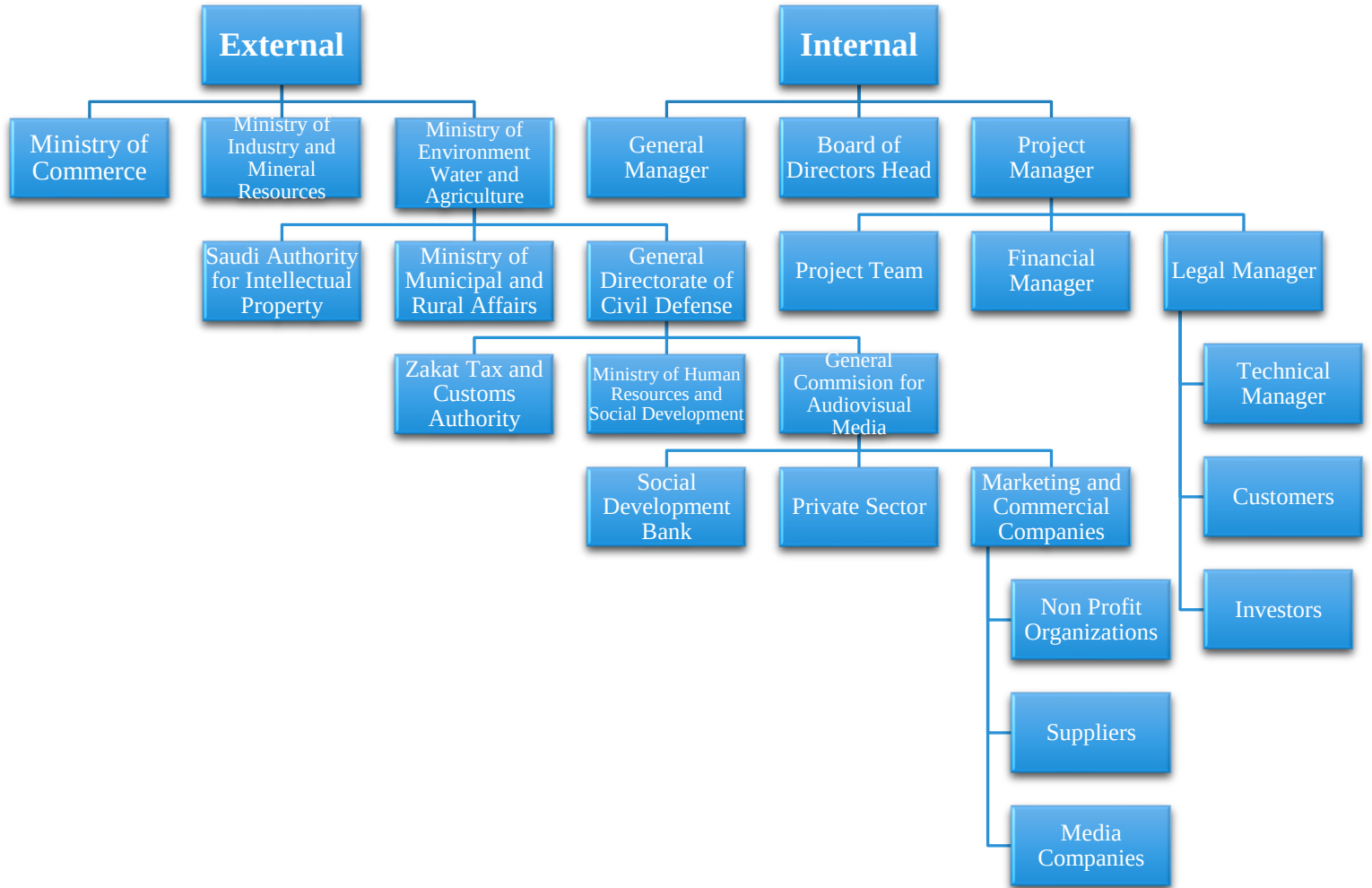


Figure 5: Stakeholder Register Logical Diagram

2.3.1 Identify the culture of the organization

- a) Responding to change and stimulating the complex with a source of energy that is free of pollution and environmentally friendly.
- b) Define authority and responsibilities for team members and increase competition for high results.
- c) The existence of a work environment conducive to creativity and its members are characterized by a love of risk in making decisions and facing challenges.
- d) The team members work through the project to create a healthy environment through renewable energy.

2.3.2 Organizational Values' Proposal

- 1. Innovation
- 2. Provides new solutions for current and future difficulties
- 3. Sustainability
- 4. Continuous improvements compatible with new challenges.
- 5. Motivation
- 6. Encourage pioneers to look for new possibilities.
- 7. Responsibility
- 8. Everybody acts as a leader
- 9. Teamwork

3.1.1 Specify 3 personal behaviors of the student that can influence the project

Behavior	Type of influence	Degree of influence
Delay in completing assignments assigned to the student	procedural	High
Failure of the student to attend meetings at the pre-agreed time	Technical	Intermediate
Handing over to the student tasks with different specifications than required, due to lack of coordination, which causes modification, or re-implementation of tasks	Technical	High

TABLE 4: PERSONAL BEHAVIORS

3.1.2 Study such behaviors, identify their reasons, and how they can be eliminated

Academic success is the right choice in this life, and it is the dream and goal that every student seeks for a better future, but unfortunately some students have great academic abilities, but they fail because of the bad habits they do, such as wasting time without interest and not arranging interests.

It can be eliminated by confronting the student himself by arranging his priorities and allocating certain times to do the tasks, in addition to writing a paper and attaching it to a visible place to always remind him of his goal and increase his desire and enthusiasm to achieve this goal.

3.1.3 SWOT Analysis

Strength points

- 1- Not high total starting cost
- 2- Long lifespan
- 3- Start production immediately
- 4- Serve the environment and society
- 5- Supports the Kingdom's Vision 2030

chances

- There is no similar commercial project that can be realized in an expanded regional way
- 6- It is possible to enter into partnerships with billboard companies to develop their current billboards to produce energy and water
 - 7- It is possible to adopt from the project from government sectors and major companies

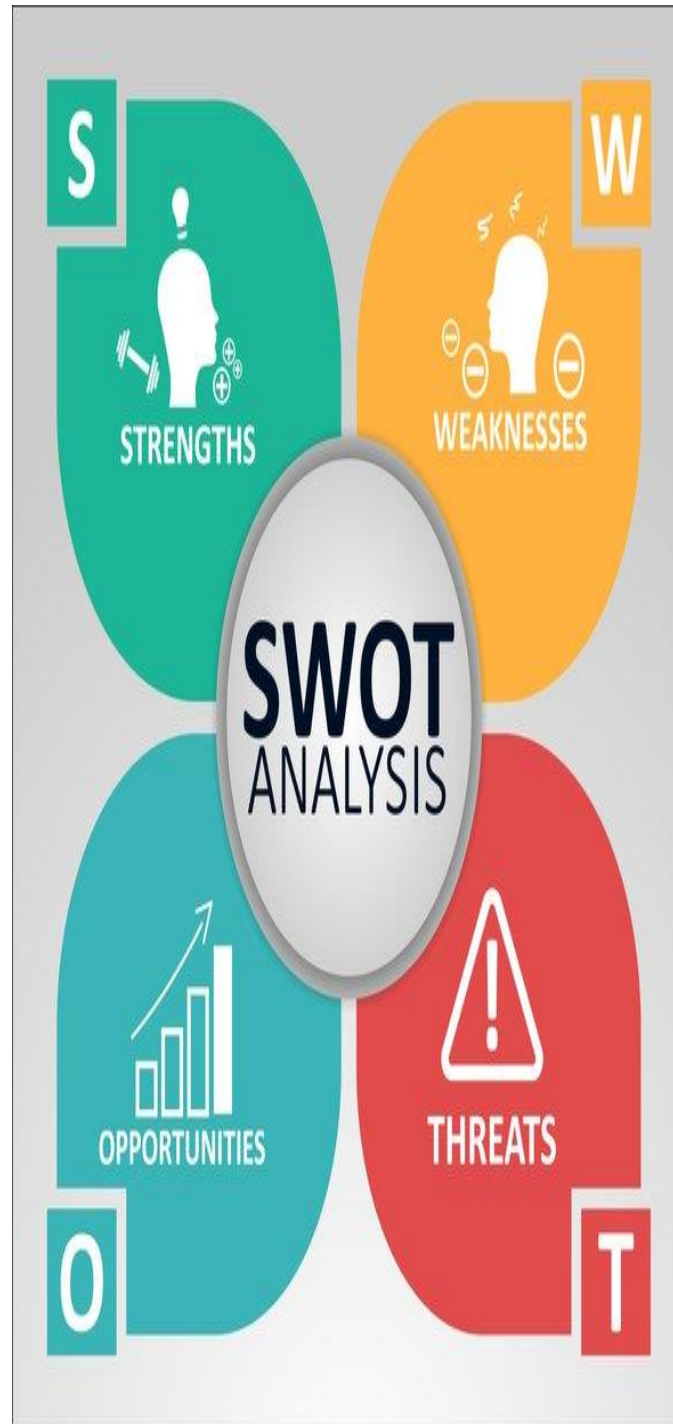


FIGURE 6: SWOT ANALYSIS

Weakness points

- 1- It needs regular maintenance
- 2- It is difficult to accurately predict production due to the relationship with the weather condition
- 3- It takes a long time to supply
- 4- Lack of reliability in certain climatic conditions
- 5- Difficulty storing energy and water

Threats

- 1- There is a high demand for wind generators globally, and therefore the supply period may increase
- 2- Water and air filters may become clogged due to dust.
- 3- Some parts may be damaged if regular maintenance is neglected
- 4- Few local experiences in the production of energy and water from wind

3.2.1 Personal Integrity and reliability (3 contradiction behaviors):

- Providing false information to the client
- Taking Credits for others' Hard Work
- Making personal deals by renting project assets.

3.2.2 Behavior Analysis

- Finance Influence:

Financial consequences result in different forms when above activities prevail in a task-force team. The company may save some costs in the beginning by deceiving clients but eventually it will compensate all clients loses and damages. Project assets could be consumed faster and cost the company extra money.

- Social Influence:

Such behaviors may affect project environment severely if they are not detected early. Motives to find solutions and achieve projects' goals will be dropped sharply. In order to maintain strong and productive team, leaders should remove success obstacles that face team members.

- Technical Influence:

Technical and development team is a valuable asset in our project, thus we must keep it clear of any negative attitudes. Providing misleading information certainly affect company's trust and reliability. Moreover, false information could damage residence, environmental health and energy durability.

3.3.2 Identify the personal communication and the effective communication

Personal contact

Face to face personal contact is an important source of a large number of information and knowledge in public life, whether in personal relationships, departments, work centers and various institutions, and therefore it is not surprising if it is considered the oldest type of communication in terms of historical context, whether at the level of society or individuals. ; The success of any other type of communication is based mainly on the efficiency of the personal communication that preceded it, in addition to the fact that most formal social relations depend on it.

Definition of personal contact:

Many scholars differed about the definition of the concept of personal communication and did not agree on a single concept; Among these definitions are the following:

- Merton defines personal communication as: "A communication that includes a direct confrontation between the communicator and the recipient that leads to a change in the behavior and trends of the future" (Al-Abd, 1998 AD, p. 83).
- As for Peter Hartley (1993 AD), for his part, he sees that personal contact is: "a meeting that includes a communicative sharing between two people face to face" (p. 5).
- As for Odeh (1980 AD), personal communication is defined as: "The process of exchanging information and ideas that takes place between people without intermediate factors or channels, and in this process, one of the two persons represents the role of the sender, while the other represents the receiver" (p. 111).

Personal Communication Objectives:

Walid (1991 AD) believes that personal communication aims to achieve the following (pp. 9-12):

- a. Obtaining the correct and honest information that enables the right decisions to be taken.
- b. Obtaining new and additional information not previously seen.
- c. Correcting wrong information, concepts or ideas in the future.
- d. Strengthening the attitude of the receiver about the message.
- e. Learn new skills that increase personal experiences.

Entertaining individuals and easing the burdens of life for them.

Importance of personal contact:

Katz and Lazars Feld (1964 AD) see that interpersonal communication is important, which is evident in the following (pp. 4-9):

- 1- It is not easy for the individual to withdraw from the conversation with the other party, and therefore the effect of communication is strong and effective.
- 2- Having more flexibility in discussion and presenting views
- 3- It is easy to estimate the reaction directly, and thus the possibility of changing the method of confrontation
- 4- Achieving the goals of personal communication depends on the exemplary behavior of the sender towards the receiver
- 5- Giving a greater opportunity for understanding and reaching real results.

Characteristics of personal contact:

- 1- Flexibility: It is reflected in the fact that the feedback in personal communication processes is great, in order to achieve harmony between the sender and the receiver and leave the sender an opportunity to modify his message (Sami, 1962 AD, pp. 276-277).
- 2- Spontaneity: personal communication takes place spontaneously and is not regulated by rules, traditions or authority (Schramm, 1961, pp405-406)
- 3- His ability to change attitudes and behavior: The decision-making process often requires fundamental changes in the attitudes and beliefs of the two parties to the communication, requiring a change of behavior in proportion to the current situation (Awda, 1980, pp. 88-89).
- 4- Achieving the principle of public participation: personal contact plays a direct role in achieving public participation through conferences, seminars and meetings, where there is a great opportunity for serious and purposeful discussion (Brom, 1982, p109).

Definition of Effective Communication:

- Hijab (2007) defines that communication that leads to creating a kind of response towards certain goals so that these goals can be achieved in the best way and at the lowest cost (p. 13)
- As for Faraj (2009), effective communication is the process of sending a message in a way that makes the meaning understood by the recipient match to a large extent the meaning intended by the sender (p. 169).

Traits of effective communication:

Fatima (2004 AD) believes that in order for communication to be effective, it must meet some specifications to ensure the effective exchange and dissemination of information. Among these specifications are the following (p. 14):

- 1- Effective communication must be fast in transmitting information so that it arrives at the right time so that it can be used in the most efficient manner.
- 2- Effective communication must be accurate and clear in the transfer of information so that it reaches complete without changing the content of the message.
- 3- The flow of information with ease and ease, according to clear and understandable procedures.
- 4- Availability and ease of obtaining information increases the efficiency of effective communication.
- 5- The means of communication should be easy to use for all communication parties so that the communication does not lose its value.
- 6- Using the appropriate means of communication, as there are messages whose subject matter requires confidentiality.
- 7- Using words and phrases that fit the culture of the future so that they are not misunderstood.
- 8- Choosing the appropriate message and medium in order to increase the chance of persuasion and thus the communication will be effective.

3.3.3 Identify the shapes, models, and channels of personal communication.

stockholder	Role of stockholder	The view of the outcome of the project	Expectation of the outcome of the project
Ministry of Commerce	external	Has no expectation	neutral
Ministry of Human Resource	external	Has no expectation	supporter
Social development bank	external	Project success	corroborative
Executive Director	internal	Project success	supporter
Chairman of Board of directors	internal	Project success	supporter
Project Manager	internal	Project success	supporter
Project Workers	internal	Project success	supporter
Financial Management	internal	Project success	supporter
The Legal Administration	internal	apprehensive	supporter
Technical Department	internal	apprehensive	supporter
customers	internal	apprehensive	supporter
financers	internal	apprehensive	supporter
suppliers	internal	Project success	supporter

Table 5: Identify personal communication

3.3.4 The Project Communication Matrix

It is a model of the software development work of a project. In this model, the work is represented by a matrix of activities

Communication type	Audience	Timing	Distribution	Contributors	Deliverable	Budget	Date
General information	Project team	weekly	Face to face	Project team	Email copy	230000	1-JAN-22
Quality assurance	Project management office	monthly	Conference call	Project manager	Quality assurance log	20000	9-JAN-22
Risk management	Project management office	monthly	Conference call	Project manager	Risk management log	170000	14-JAN-22
Financial results	executive	monthly	Face-to-face internet	Project team	-	5000	19-JAN-22
Status update	Project team	monthly	Face-to-face email	Project team	Financial report	26000	24-JAN-22
Performance review	Project management office	quarterly	Face to face	Project team	Status update	14000	29-JAN-22
Social responsibility	Project team	quarterly	In person	Project team	Performance review	4400	13-JAN-22
Status report	Project team	Face-to-face	Face to face internet	Project team	quality	450000	17-JAN-22

Table 6: Project Communication Matrix

3.3.5 Wrong Scenarios of Communication

First Scenario: Tariq Sent a text to Ahmed via WhatsApp, and Ahmed saw the message and decided that he will respond later. Meanwhile, Tariq saw the double blue ticks indicating that Ahmed saw the message and thus thought that Ahmed acknowledged the message. But in reality, Ahmed was busy dealing with other tasks at the moment, and as he was engaged in them, he forgot to reply on Tariq's message, and as he had already saw it before (double blue ticks) he thought that he did not have a message notification on WhatsApp. Thus, made a miscommunication incident.

Second Scenario: Ahmed is a supervisor who is in charge of one of two teams working at his department. The original method of communication between these two teams is a handover and an oral handover between both Supervisors at the end of their shifts. After the Covid-19 Pandemic took place, both teams had to work separately each day without any physical contact. Ahmed, who was accustomed to the oral method of communication between him and the other teams Supervisor, was lazy to write everything down in the Handover, in which he would later then call the other Supervisor for the oral handover, forgot to do so. Thus, made a miscommunication incident.

Third Scenario: Ahmed ordered one of his subordinates to convey an important complex message to a senior member of the team later on. With the subordinate being confused of the technical terms used in the conveyed message as he is a new team member with a little experience on the job. Ahmed thought that the new team member could convey the whole message accurately to the other senior member later on simply because Ahmed was complacent, as he is far more experienced on the job. He thought that the technical terms were trivial simply because he has far more experience and did not think that it could be difficult for a rookie member. Thus, made a miscommunication incident.

3.3.6 Stakeholder Analysis

Stakeholders		Project Relationship			Level of Commitment C = Current Level R = Required Level				
Name	Level of Impact (High, Medium, Low)	Level of Influence (High, Medium, Low)	Content Expert (Y/N)	Decision Authority (Y/N)	No Commitment	Let It Happen	Help It Happen	Make It Happen	Strategies for Moving Commitment
1- Ministry of Commerce	Med	Med	No	No	C	R			
2- Ministry of Industry and Mineral Resources	Med	Med	No	No	C	R			
3- Ministry of Environment Water and Agriculture	Med	Med	No	No			C	R	
4- Saudi Authority for Intellectual Property	Med	Med	No	No	C	R			
5- Ministry of Municipal and Rural Affairs	Med	Med	No	No				C/R	
6- NEOM	Med	Med	No	No	C	R			
7- Zakat Tax and Customs Authority	Med	Med	No	No	C	R			
8- Ministry of Human Resources and Social Development	Med	Med	No	No	C	R			
9- General Commission for Audiovisual Media	Med	Med	No	No	C	R			
10- Social Development Bank	Med	Med	No	No	C	R			
11- Private Sector	Med	Med	No	No	C	R			
12- Marketing and Commercial Companies	Med	Med	No	No	C	R			
13- Non Profit Organizations	Med	Med	No	No	C	R			

Table 7: Stakeholder Analysis

4.1.1 Describe and identify the leadership model, which is preferred for project leadership.

The manager's ability to influence subordinates to act with enthusiasm and confidence to complete assigned work.

Driving Types:

1- Dictatorship leadership: The leader has absolute power, to coerce and guide individuals.

2- An autocratic leader: It is the uniqueness of the decision-making process and the development of policies and plans without the participation of subordinates, and is characterized by extreme firmness and a precise definition of the duties granted to each individual, and the dictatorial leader differs in that he is active and effective.

3- Democratic leader: It is characterized by the style of employees' participation in the decision-making process, planning and policy development.

4- Personal leadership:

Direct communication between the leader and individuals.

5-Parental leadership:

The direct relationship between the leader and the individuals and the extent of the leader's concern for the comfort and well-being of his subordinate individuals. This type of development and the group's independence and self-reliance are taken into account.

6- Informal leadership: They are within the informal social organization groups without being associated with a formal function in the organizational structure.

In our project, democratic leadership is followed.

4.1.2 Specify the reasons for which such model is preferred

Impact of leadership on project:

Leader role is one of the most challenging jobs in any organization, because it requires broad understanding of the various areas that must be coordinated and requires strong interpersonal skills.

Democratic Leadership Style

In this leadership style, subordinates are involved in making decisions as it is centered on subordinates' contributions. The democratic leader holds final responsibility, but he or she is known to delegate authority to other people, who determine work projects. His style of authority depends on the group been counseled and their feelings being esteemed. Riles on the skills and knowledge of team members, group makes decisions collectively.

Pros: Higher quality work, allow follower to say any decision, Create a well collaborative work place.

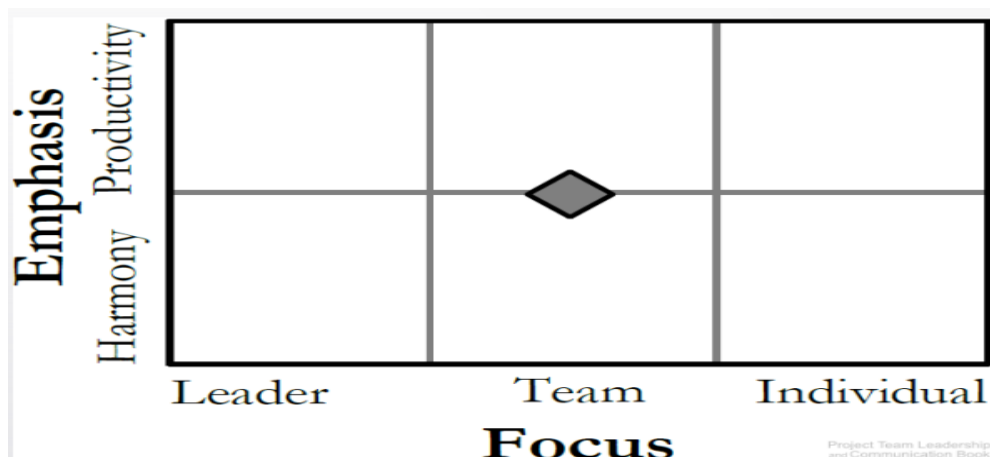


FIGURE 8: DEMOCRATIC LEADERSHIP STYLE

4.1.3 Provide 5 proposals for the motivation methods that are compatible with the nature of the project

1. Expanding access to clean energy for off-grid, remote, coastal or island communities.
2. This innovation will help strengthen the cities of the future. And it will become a powerful incentive for many countries to build smarter cities
3. This innovation will help reduce carbon emissions in the UK to zero and make it an incentive for the global health community to push for its application to the largest scale
4. It is possible to generate energy from people's steps as well as through body heat, and perhaps this will become an incentive for people to exercise and its reflection on alternative energy.
5. It will create new job opportunities in renewable energy industries.
6. Reduce carbon emissions and air pollution from energy production.
7. Increased affordability, as many types of renewable energy are cost-competitive with traditional energy sources.

4.2.1 Design RACI model for 3 Administrative measures of the project

Task	Project Manager	Quality	Sales	Legal Affairs	Marketing	Technical Team	Human Resource	Finance
Service Contracts	A		I	R		C		C
Marketing Plans	A		I		R	C		
KPI Measures	A	R				C	I	

TABLE 8: RACI MODEL

4.3.1 Identify the conflict and crisis

Conflict is "a situation of competition in which the parties are aware of the incompatibility of potential future positions and in which each party wishes to occupy a position which is incompatible with the wishes of the other." Conflict is viewed as a cycle: "As with any social process, there are causes; also, there is a core process, which has results or effects. These effects feedback to effect the causes." To understand conflict further, the situation must include elements of interdependence, emotions, perceptions, and behaviors. For example, conflict occurs between parties whose tasks are interdependent, who are angry with each other, who perceive the other party as being at fault, and whose actions cause a problem. The crisis is the process by which an organization deals with a disruptive and unexpected event that threatens to harm the organization or its stakeholder.

4.3.2 Conflict event in the project

#	Description	Conflicts
1	scheduling	A scheduling conflict can lead to a significant delay in the course of project management. We do not mean here meetings or events, but the deadlines for various tasks.
2	scarcity of resources	Scarcity of resources is something that can cause damage to the team as well as the project and the company's reputation and that makes a double effort to search for new resources quickly.
3	Roles and Responsibilities	Scarcity of resources is something that can cause damage to the team as well as the project and the company's reputation and that makes a double effort to search for new resources quickly.

TABLE 9: CONFLICT SCHEDULE

4.3.3 Project Conflict Management Strategies:

Identifying and addressing conflicts is at the core of the conflict management process in any organization. The PMBOK Guide recommends five techniques for resolving project conflicts, which are as follows:

First: Withdrawing Technique:

Also called the avoiding technique; The withdrawal technique is used by the project manager in certain cases, by avoiding conflict and letting the problem resolve itself with time. Among these cases in which it is preferable to use it are as follows:

- When the issue is not important or there is no opportunity to solve it due to the intransigence of the other party in the conflict.
- There are other more important issues and the project manager does not have enough time to deal with this epilepsy.
- Lack of available information about the conflict, and therefore it is better to withdraw to gather sufficient information and then return to solve it.

Second: Smoothing technique:

Also called accommodating, this technique distinguishes that the project manager deals with the interests of others rather than his own; So it can be used in special cases such as:

- When the other party's solutions are more effective.
- When the problem needs a temporary solution only.
- When the problem is not significant for the project.
- When the continuation of the conflict is harmful to the project.

Third: Forcing technique:

This technique is also called competition; It is used when the project manager wants to achieve the objectives of the project, regardless of the point of view of the other parties to the project, and therefore imposes his point of view forcibly; This technique is used in the following cases:

When the decisions of the other parties are important.

- When a contested position requires consensus.
- When the relationship between the parties is long-term.
- When the level of trust between the parties is high.

Fourth: The Collaborating Technique:

Known as the win-win technique for all parties to the conflict, it is used when the project manager wants to find a solution to the conflict that takes into account multiple aspects, including meeting the demands of the parties to the conflict through negotiation; This technique is used in the following cases:

- When the decisions of the other parties are important.
- When a contested position requires consensus.
- When the relationship between the parties is long-term.
- When the level of trust between the parties is high.

Fifth: Compromising Technique:

It is used when the project manager takes suggestions from the parties and presents a compromise that satisfies all parties and is at the expense of their giving up some of their interests; this technique is used in the following cases:

- When a situation needs a temporary solution about complex issues.
- Reaching an appropriate solution to the important issues.
- When both parties have equally important goals.
- When the level of trust between the parties is low.

4.3.4 Root Cause Analysis

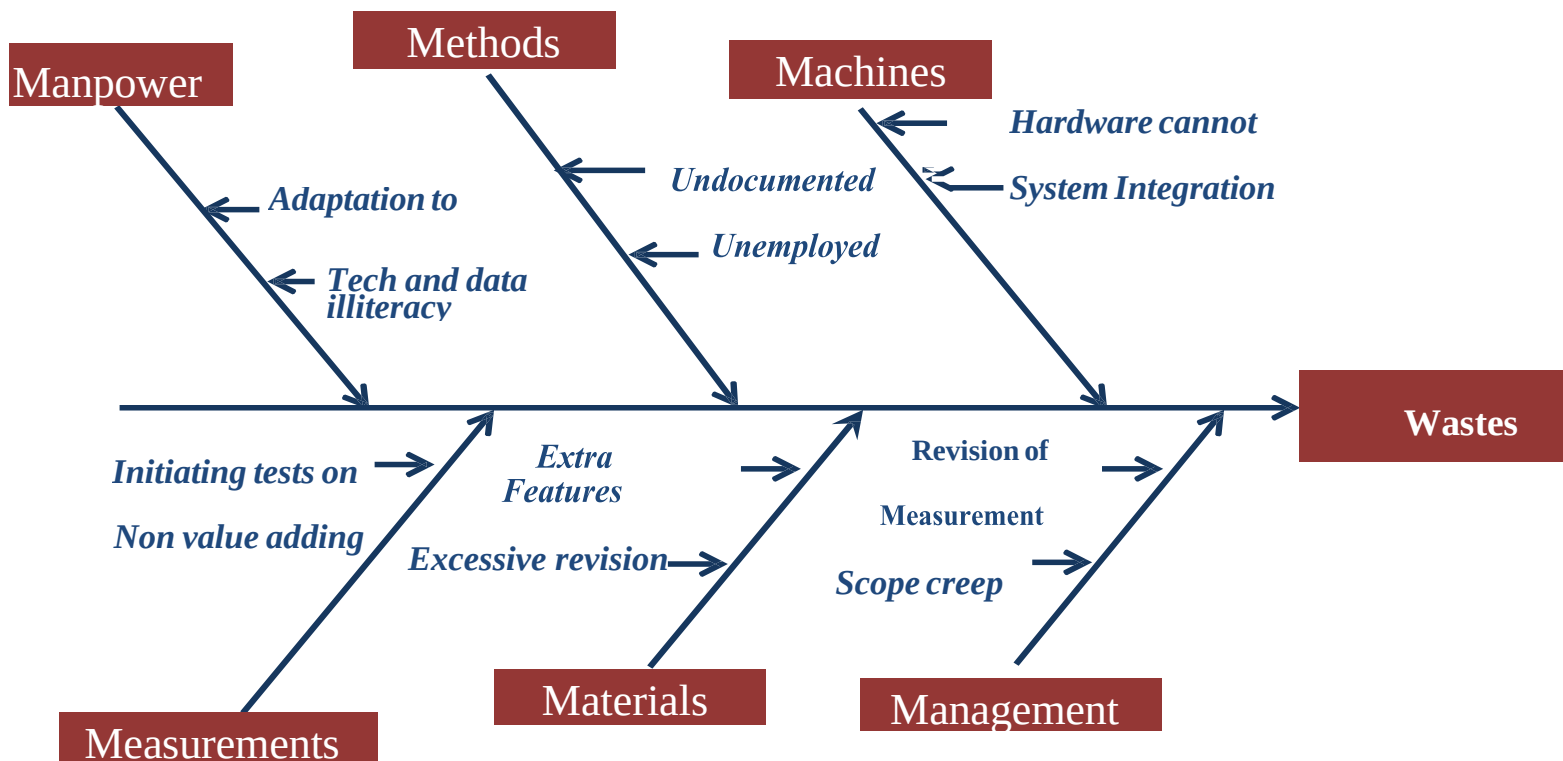


FIGURE 9: ROOT CAUSE ANALYSIS

5.1.1 Distribute the human resources to the functions

The company consider the Chainman of board of directors accountable for the major company decisions including Go/No Go for projects, Company long term vision & assign company executives.

The research & development department are responsible for short term vision and long-term vision based on marketing, finance and project management input, the vision shall be presented to Chainman of board of directors for his approval.

Human resource shall be informed of the final decisions & strategies to tack it in consideration during the hiring process.

	RACI Matrix							
Project Task	chairman of board of directors	Head of research and development	Head of legal affairs	Head of project Management	Head of marketing	Head of human resource	Head of finance	Head of procurement
vision	A	R	C	C	C	I	I	I
Phase 1 : Research								
Econometric model	I	C	C	I	I	I	A	C
Strategic formwork	A	I	C	C	I	C	I	I
Risk factors	I	A	C	C	C	C	C	C
Phase 2 : Structure								
Product Specs	I	A	I	C	C	I	I	R
Design wireframe	I	A		R	C	I	C	I
User journey	C	I	C	C	R	I	I	I
User Experience testing	A	I	I	C	R	I	I	C
	RACI Matrix							
Project Task	chairman of board of directors	Head of research and development	Head of legal affairs	Head of project Management	Head of marketing	Head of human resource	Head of finance	Head of procurement
Delivery roadmap	A	C	C	R	I	I	I	I
Project execution	A	R	C	R	I	I	I	R
Development backlog	A	C	C	R	C	I	I	I
Project man power	A	I	I	C	I	R	I	I

TABLE 10: RACI MATRIX

5.1.2 Analyze the influence of conducting the crashing and fast-track process

The reality of project management is that sometimes you will need to compress the project schedule and deliver the project's product, service, or result sooner than originally planned. Schedules are constantly subject to change; in most cases, schedules get longer as opposed to getting shorter, which can negatively affect the original schedule because the project team will not be able to complete it in the time available.

- Fast tracking involves the performance of activities in parallel, whereas crashing involves the addition of resources to a project.
- In fast tracking, there is increased risk, whereas in crashing, there is increased cost.

5.2.1 Develop general rules for the negotiation process

1. Gather all required information and alternatives which give you more power.
2. Know other side goals to achieve a win-win situation as much as possible
3. Be patient because if other party noticed that in rush, they will have advantage over you.
4. Focus on required rather than desires. Value of things are not always equal for both parties.
5. Accept the fact that everything in negotiable avoid words such as impossible or never unless it is seriously off the table.
6. Understand your relationship with the other party if it is only once or continuous if so,
7. you need to keep them supportive in the future.

5.2.2 Negotiation Plans

1st Negotiation Plan: The negotiation team will research everything that they can about the other side and negotiation position before walking into negotiations. They will communicate to discover the strength of the other side's position, and to try to detect how badly the salesperson needs to close the sale. The team will also avoid disclosing any information that indicates a weak position. Furthermore, the team will use the bogey tactic and try to generate a demand that is not actually important to them, so that they can later give it up, and make the other side feel that they won.

2nd Negotiation Plan: The negotiation team will try to maintain a friendly composure at all times, and try to view negotiations with a sense of humor. Avoiding negative emotions such as anger, conceit and mistrust. In addition to applying abundance mentality, and looking at the situation as a win-win. Thinking of the other side's perspective and try to find offers that benefit both.

6.1.1 Identify the Triple constraint of the project

The triple constraint theory says that every project will include three constraints: budget/cost, time, and scope. And these constraints are tied to each other. Any change made to one of the triple constraints will have an effect on the other two.

Due to the nature of our project, each client could have different requirements with adjective scope, However the Triple constraint should be defined prior to sign the contract including; The number of billboards, location, size, amount of required energy generated billboards, how many liters of water per day, how the water will be stored.

After we agree on the scope with our client and know what our client wants and expects from the project. We should Find out if they have a budget (cost per unit) and timeline in mind.

If you can't settle on the guidelines for the project, use triple constraint to weigh options and discuss potential tradeoffs. Even though you know that adjustments might need to be made along the way, it's still important to begin with an achievable and fair target.



Project Triple constraint

The project management triangle is a model used to visualize the triple constraint theory. Let's take a look at each point on the triangle.

Scope: each project scope could cover multiple units in deferent location with deferent specifications, the project scope could be tailored based on the clint requirements, budget and timeline.

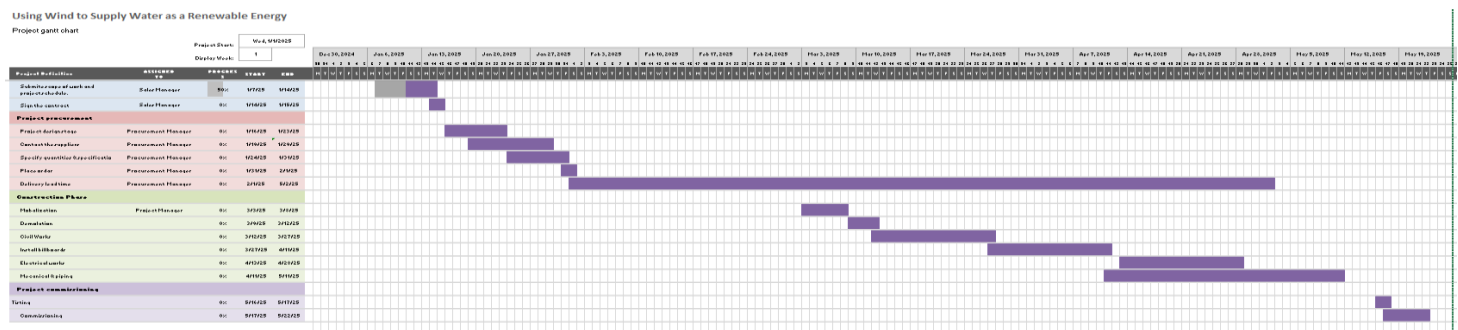
The project main scope is to deliver & install advertisement billboards with ability to generate electricity through wind turbine and produce water by air humidity condensation. The scope shall be more detailed to include the fowling information:

- 1- The number of billboards, location of each one and the billboards size.
- 2- If the billboards foundation, construction and gov. requirements part of the scope.
- 3- Amount of required energy generated billboards & if additional batteries is required.
- 4- How many liters of water per day and storage tank is required.
- 5- In case if the client want a maintenance program.

Time: As a commercial project, Project duration is vary critical for your clints, Therefor project activates crushed/ fast tracked as much as possible. However, the procurement lead time will govern the project schedule.

To avoid project lag the company shall keep standard lead items on stoke for urgent project. In case the clint have a special requirement or for big quantities project, schedule will be prepared and submitted to clint prior to sign the contract.

Attached is Gantt chart for a typical project assuming that all services is included:



Budget/Cost: The cost will be calculated per unit (billboards) including the billboard itself, foundation, and wind turbine and water condensation:

•Resources:

Resource	Cost per hour	Number of hours	Total cost
Procurement Manager	50\$	30	1500\$
Sales Manager	60\$	15	900\$
Project Manager	50\$	60	3000\$
Designer	20\$	10	200\$
Construction worker	5\$	600	3000\$
Total			8600 \$

•Materials:

Item	Cost
Billboard	30000\$
Wind turbine	3500 \$
Water condensation	1200 \$
Elec. Infrastructure & lighting	3300\$
Mec. Infrastructure & piping	1300\$
Foundation and civil work	5000 \$
Total	44300 \$

•Equipment:

Equipment	Cost per hour	Number of hours	Total cost
Excavator	500\$	10	5000\$
Crane	1000\$	15	15000\$
Man lift	200\$	20	4000\$
Truck	50\$	8	400\$
Total			24400 \$

Total cost per unit is 77,300 \$. The project cost shall be decreases with based on the number of unit installed.

6.1.2 Set up a list of the project success factors.

- Experienced project managers and members.
- Effective planning
- Follow best practices in the market.
- Active monitoring system.
- Communication skills.
- Risk management plan.
- Priority of tasks
- Resources allocation according to priority.

6.1.3 Define Governance

We will determine what kind of governance we need to make decisions, and roles in the project will usually be defined so that an initial steering committee writes the business plan, obtains funding and develops the first proposals. Next step is to identify a leader to coordinate, inspire, and support the work. Then a board of directors is selected to coordinate activities, make contacts and communicate with other industry leaders and pave the way for the organization to achieve its goals. As a small group tends to require less formal structure. As the organization grows, the need to show hierarchy explicitly in the organizational chart helps everyone to understand who is making decisions. Formal structures tend to help organization members work more quickly, and this brings us great benefit in accomplishing and achieving project goals

Establish rules for the process

We will work at rule-making by defining how formal and informal groups work within the organization. For example, committees usually use Robert's Rules of Order to hold meetings. Rules shape the culture of the organization.

By documenting operating procedures, we can reduce misunderstanding and confusion, especially if we operate in a culturally diverse environment. Our group formed to solve a single problem may not need a formal structure, unlike large, complex organizations that usually need clear rules and authority.

Work Distribution

There is a deep need to create working groups and working committees in order to carry out activities. We will make specific changes to policies and practices in order to achieve the objectives. Conditions will be determined when the temporary support committee, or volunteer group, responds to the organization's needs. We will also locate other organizations trying to solve the same problems and learn from their experiences.

Create the structure

Creating an effective workflow will begin by creating a clear chain of command. We will clearly define job roles and associated responsibilities to ensure that everyone knows what to do. Creating an organizational chart lets everyone know who to contact when things go wrong. It can be distributed by email, newsletter or company website. Each department must produce regular status reports and communicate with other departments to ensure work flows from one

part of the organization to another. Process improvement initiatives study workflows to eliminate waste, reduce errors, and improve customer satisfaction.

Planning tasks

We will develop comprehensive plans to describe the work involved in the production of the company's products and services. We use techniques recommended by professional organizations, such as the Project Management Institute. For example, these coordinators use standard templates to complete stakeholder analysis, develop a project charter, create a work breakdown structure, assign resources and monitor task completion. According to the Project Management Institute, during the planning process, the project manager sets goals and gathers stakeholder needs to coordinate the team and direct efforts. Team members can review project-related details so that there is no confusion about what needs to be done and when it should happen.

Communicate decisions

Good communication prevents disputes, conflicts and delays. Project coordinators can promote effective communication by holding regular team meetings, distributing status reports, and documenting decisions made. This will make effective leadership influence team members and motivate them to adhere to established policies and procedures so that operations run smoothly. I will coordinate the efforts of many different employees, particularly when they are not located in the same place or time zone, such as arranging regular meetings to exchange information and using written communications to document actions.

Alignment Activities

Developing and marketing a new product takes time and planning. To achieve a strict deadline, we may work several teams in parallel. Coordination of efforts requires effective communication, which ensures that supplies are ordered and delivered in a timely manner for use in production activities. Volunteers may contribute to completing checklists or formal quality control processes may be implemented to effectively coordinate work flow.

6.2.3: Develop the hierarchical structure of the objective of the project

Policy Objective	Utilizing renewable and clean energy to producing usable water
Strategic Objective	600 Km ³ usable water
Project Objective	Building a high tower 20 meters high above the large blades and directing them in the direction of the wind
Input Objective	SR2 million contract, land for the building a high tower, and necessary labor and expertise

7.1.1 Develop, identify and prepare the scope statement.

In our energy project, we supply main two deliverables to clients. First deliverable is providing electrical power that is necessary to operate facilities such as governments sectors and shopping malls. The second deliverable is to create water source used for irrigation and hygiene from the atmosphere to public and private facilities. The service includes periodical and breakdown maintenance to ensure continuity and stability. Clients must provide sufficient information of the service so we can deliver best products that meet their needs. It is our responsibility to provide optimum capacities according to clients' requirements. Quality team should assess each project requirements to guarantee service delivery in the best way. Customer care department is responsible for receiving orders and complaints in 24/7 bases to

avoid service disruption. Legal affairs and quality prepare service contracts to detail agreements' conditions during warrantee period and after.

7.1.2 Scope Creep

Scope creep (also called requirement creep, or kitchen sink syndrome) in project management refers to changes, continuous or uncontrolled growth in a project's scope, at any point after the project begins. This can occur when the scope of a project is not properly defined, documented, or controlled. It is generally considered harmful. It is related to but distinct from feature creep, because feature creep refers to features, and scope creep refers to the whole project.

Common Causes: Poorly defined project scope

Ineffective project management communication between a client and the project manager is a leading effect of project scope creep. An assignment that is not understood correctly will turn out to be completely different from clients vision. With that being said clients can also be to blame as they may not see a clear vision of what they want.

Lack of project management practices

Adoptions and adhering to project management practices and project management processes are confirmed methods of preventing scope creep from dismantling the project.

Addition of unnecessary features

Sometimes project teams tend to start adding additional features in order to impress the client. This may not work and tend to cause more work for such project and throw off the scope.

The communication gap between project stakeholders

Another huge cause of scope creep is the communication gap between the stakeholders. Clients may not respond quickly enough to the project managers causing the project to run into a bottleneck.

These aspects can affect the operational efficiencies of companies, especially when involved in long-term relationships.[4] Scope creep is a risk in most projects. Most megaprojects fall victim to scope creep (see Megaprojects and Risk). Scope creep often results in cost overrun. A "value for free" strategy is difficult to counteract and remains a difficult challenge for even the most experienced project managers.

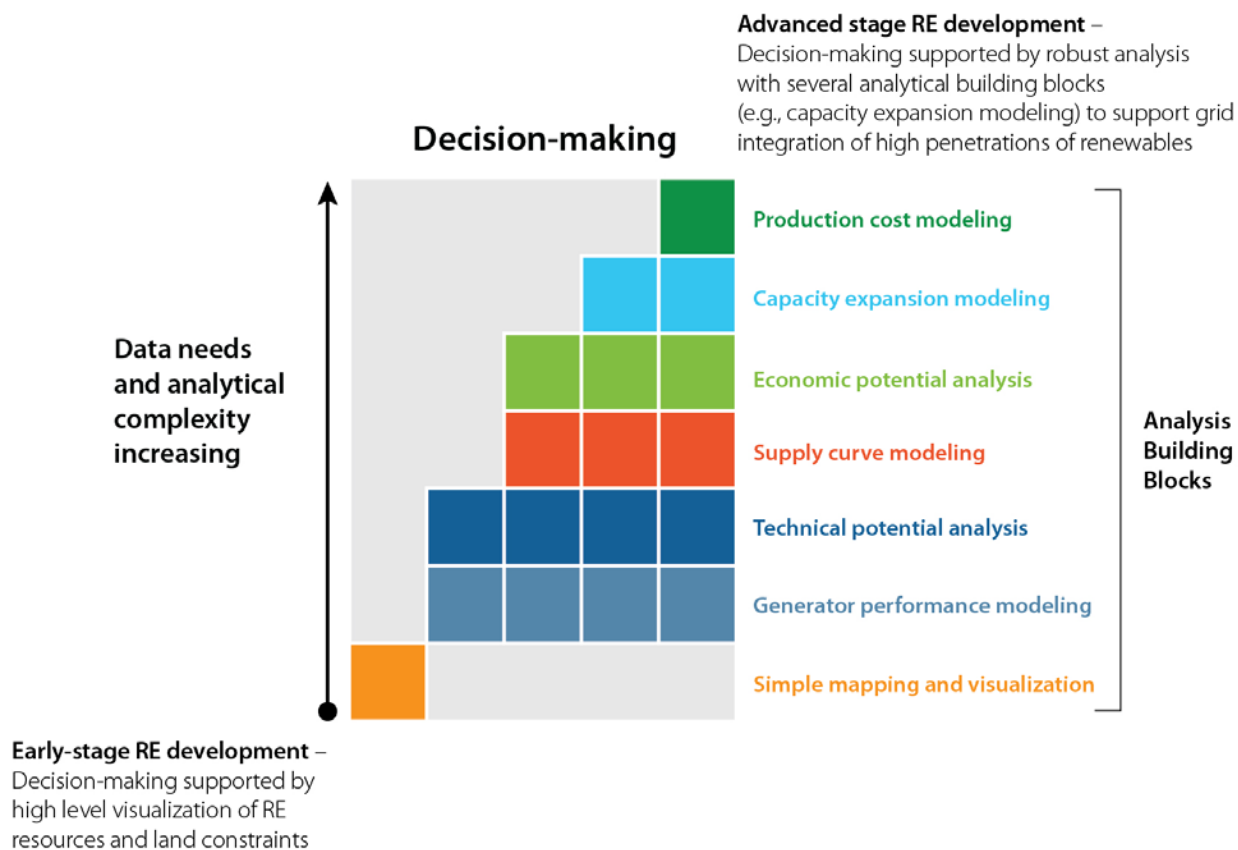
7.1.3 Illustrate product analysis management

Renewable energy decisions can be informed by seven key analytical approaches. These analytical approaches are outlined below and described.

1. Early-stage mapping and visualization
2. Generator performance modeling
3. Technical potential analysis
4. Supply curve modeling
5. Economic potential analysis
6. Capacity expansion modeling
7. Production cost modeling.

In many cases, analyses build on one another to support decisions. Figure illustrates how analysis building blocks can support various stages of renewable energy decision-making with implications related to both analytical complexity and data requirements. In the simplest case, only one type of analysis may be required to support decisions; whereas in the most complex

cases several analysis building blocks may be required (e.g., production cost modeling includes several analysis building blocks, as presented in the graphic). Thus, analytical approaches used to support decisions can be very simple and have fewer data requirements or can be very complex and data-intensive. Countries or jurisdictions at a very early stage of renewable energy development might begin with a simple, high-level mapping of renewable energy resource availability or a technical potential analysis; whereas those at an advanced stage of renewable energy development will likely pursue more complex analyses, such as capacity expansion and production cost modeling, to support grid integration of higher penetrations of renewables. Progressing along the x-axis in Figure shows a greater number of analytical building block requirements for more advanced RE decision-making. These examples and the figure show that decision-makers have many analytical options to support renewable energy development based on their level of data availability and renewable energy market development, among many other factors.

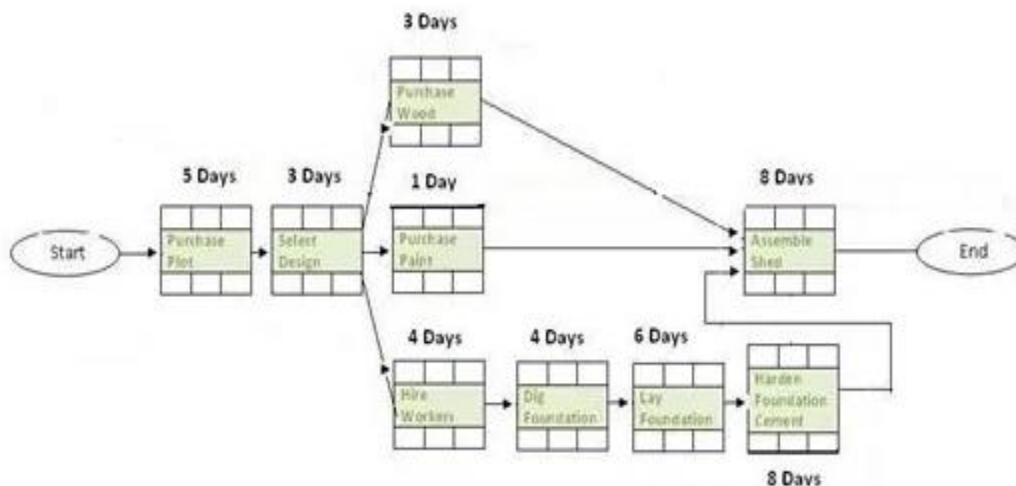


7.2.3 Develop THE Logical diagram of the project activities and identify the critical path

1. The duration of each activity will be determined.
2. All paths will be selected.
3. The duration of each track will be calculated
4. The length of the longest path will be determined.

Step 1:

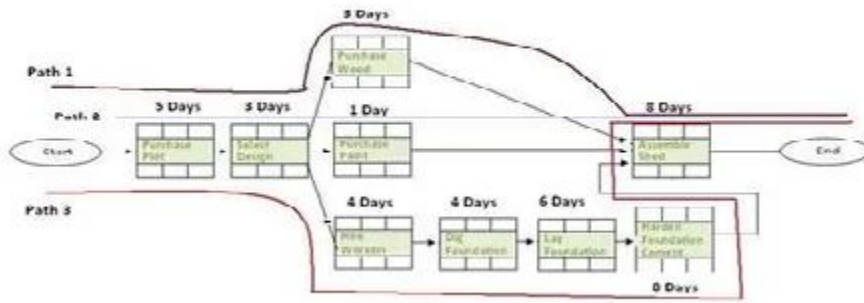
To determine the estimated duration of each activity, as shown in the image below.



Step 2:

Select all tracks

The precedence scheme shown in the image has three paths, as shown below:



Step 3:

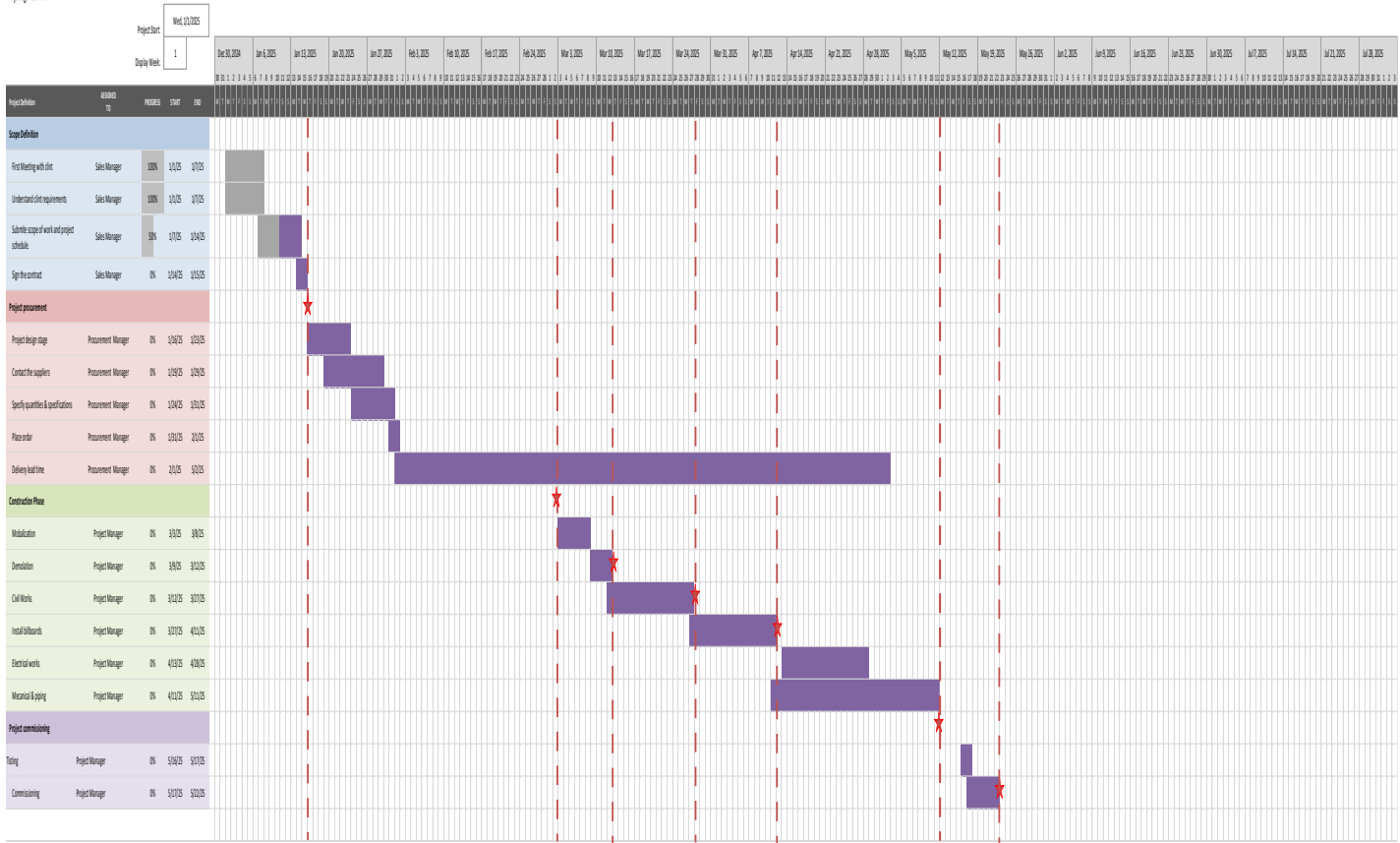
The duration of each track will be calculated To do this, you can simply add the duration of each activity in each track. For Track 1, you get: Duration of Track 1 = Duration of start + Duration of plot purchase + Duration of design selection + Duration of purchase of lumber + Duration of assembly shed + Duration of panel installation + Duration of commissioning and testing + Duration of finish

We can see that path 3 is the longest. Therefore, if the activity on this path is delayed the project will be delayed,

7.2.4 Gant chart

Using Wind to Supply Water as a Renewable Energy

Project gantt chart



7.3.1 Clarify the Deming model for quality.

Deming is the founding engineer of production quality and quality control. Deming created the so-called Deming Quality Circle and its steps are: Plan, Do, Check, Act.

Although he spoke explicitly about ways to improve quality in the United States, he was ignored by American industry leaders in the early 1940s, when the Japan Federation of Economic Enterprises invited him to give a series of lectures to Japanese business leaders. Deming's ideas were subsequently accepted by the elite of Japanese managers; Because they realized that in order to raise Japan's reputation, it had to change its reputation from a producer of low-quality goods, to a producer of high-quality and reputable goods. As a result of this,

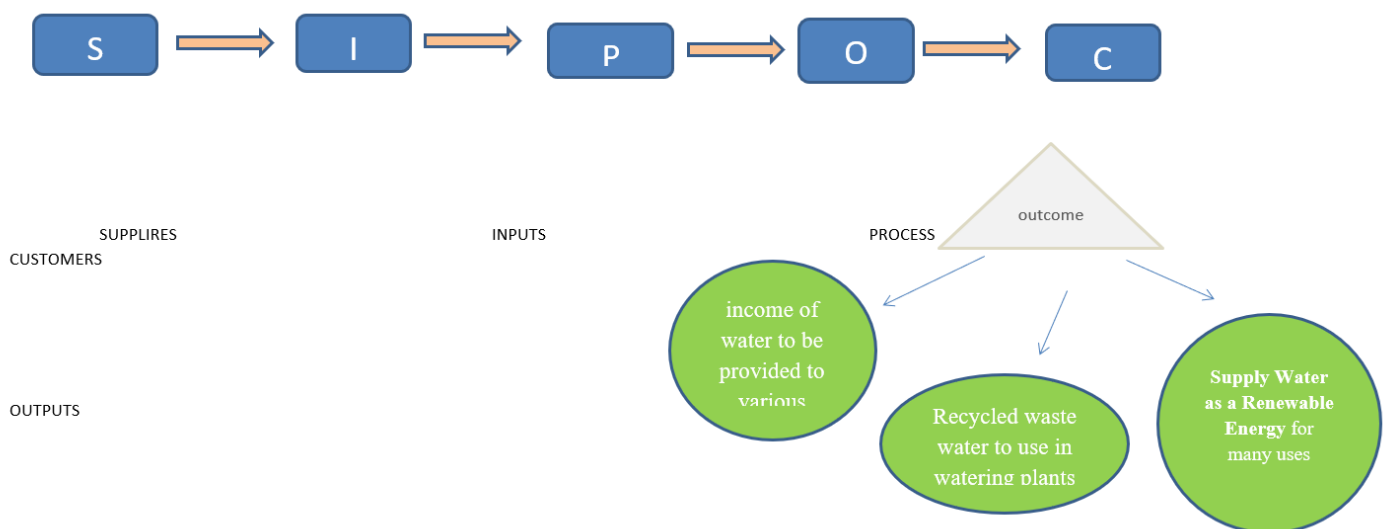
most Japanese companies very quickly adopted Deming's principles of quality control, and within twenty years the reputation of Japanese products had changed, and the Japanese industry had become a symbol of enduring quality.

Deming focused on the philosophy of management, and believed that quality management should be at the roots of any organization's thought, so he devised his 14-point quality theory:

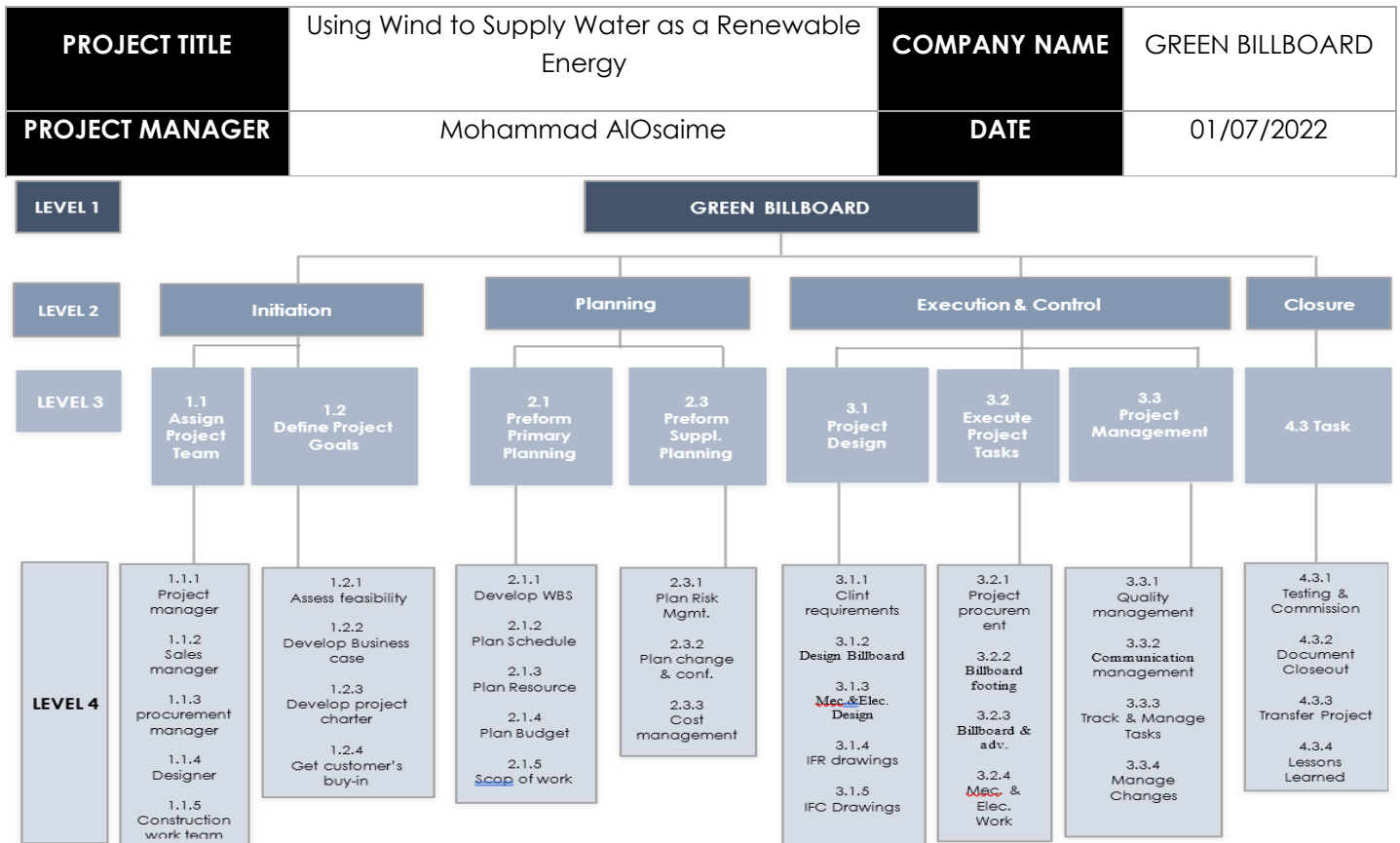
1. A permanent objective must be set for the enterprise to improve production and services, so that quality comes first, and profit results from it.
2. A new philosophy towards quality must be adopted, such that this philosophy represents a decision in which everyone participates and bears the responsibility of each individual in the organization.
3. The necessity of relying on comprehensive quality control inspection should be eliminated.
4. The idea of evaluating the quality of work only through the cost component should be abolished.
5. It is necessary to have a continuous development in the quality of production and services, meaning that the level of quality reached today must be a basis for improvement tomorrow.
6. Effective training centers should be established on quality practices, so that the training given is appropriate for the employee, his tasks and responsibilities within the quality system.
7. There must be effective leadership that motivates employees towards quality.
8. The fear of punishment should be removed and workers informed of safety in matters of quality; In order to motivate them towards applying it daily.

9. It is necessary to work to bring the different departments closer and unify their goals; In order for all employees to feel that quality is the goal rather than competing and outperforming colleagues.
10. Slogans and advice should be discarded, and instead focus on practical, hands-on orientation and how to accurately perform the required work.
11. The focus on numerical production numbers should be avoided, and instead focus on really important criteria, which reflect overall quality.
12. Obstacles to achieving the best works must be removed.
13. A strong program of continuous education and improvement should be developed.
14. The necessary organization must be found to follow up on the new changes and deal with them.

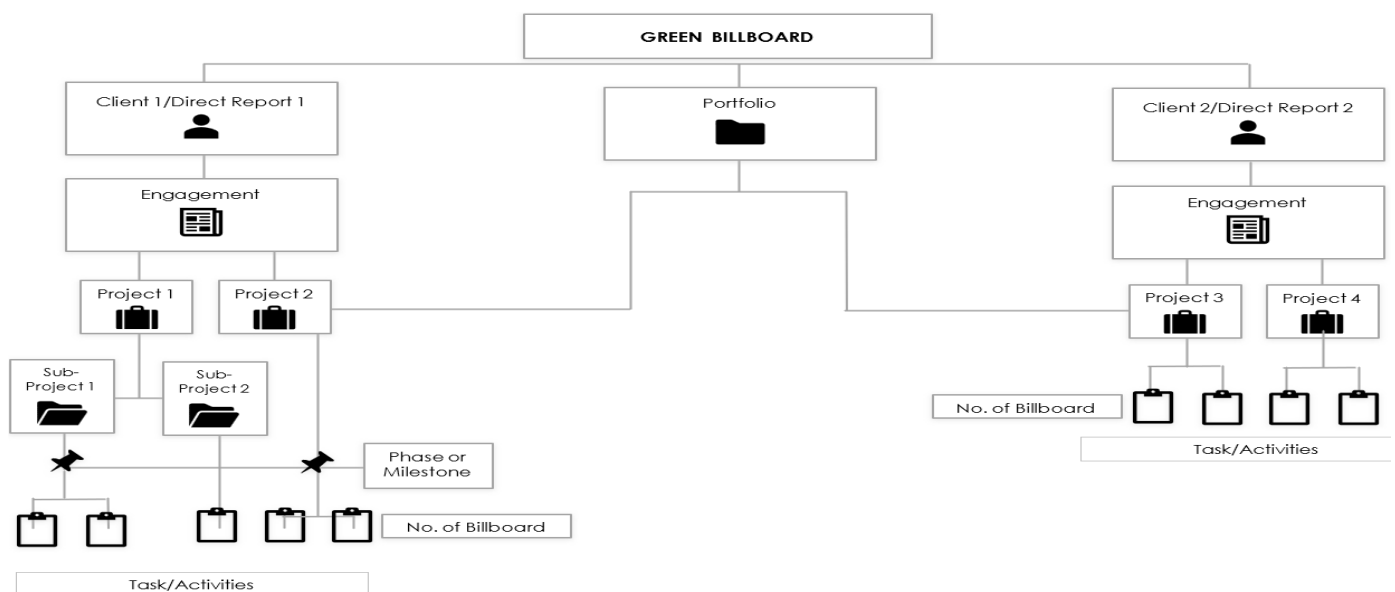
7.3.2



8.1.1 WORK BREAKDOWN STRUCTURE LEVELS



PEOPLE AND PROJECT MANAGEMENT WBS

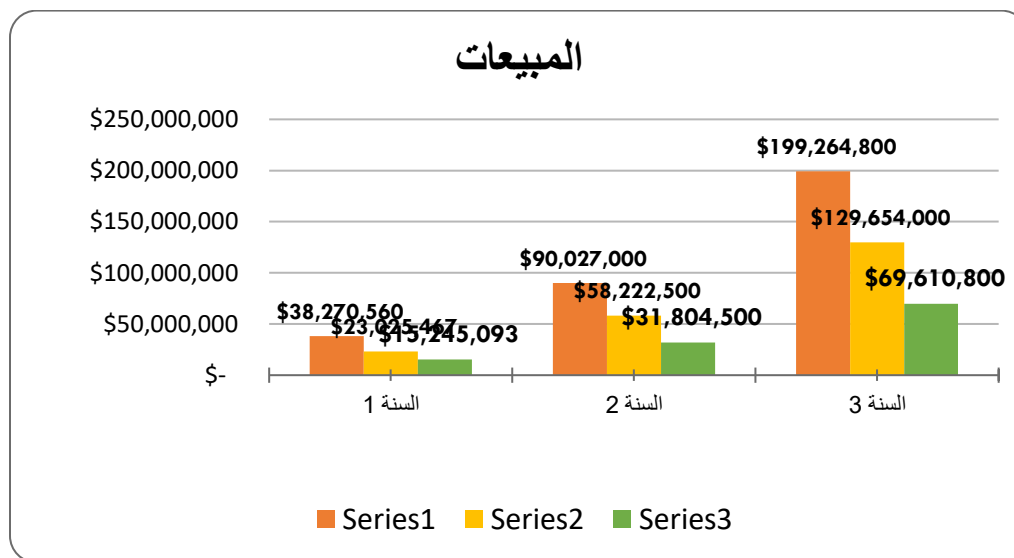


8.1.2 Project Feasibility Study

8.1.2.1 تكاليف التأسيس

اجمالى رأس المال لبدأ المشروع						
288,700 \$						
مصادر رأس المال لبدأ المشروع	النسبة من رأس المال	المبلغ الإجمالي	نسبة الفائدة	مدة السداد (بالأشهر)	الدفعات الشهرية	
مدخرات شخصية للملاك	17%	50,000 \$				
مستثمر خارجي	35%	100,000 \$				
قروض او ديون إضافية		- \$				
	35%	100,000 \$	4%	60	1,841.65 \$	
	13%	38,700 \$	0%	12	3,225.00 \$	
اجمالى مبلغ رأس المال	الخلية H 41 لازم تساوي خلية H 30	288,700 \$			5,066.65 \$	
	تم تغطية رأس المال بالكامل (متوازن)	- \$				

8.2.1.2 المبيعات



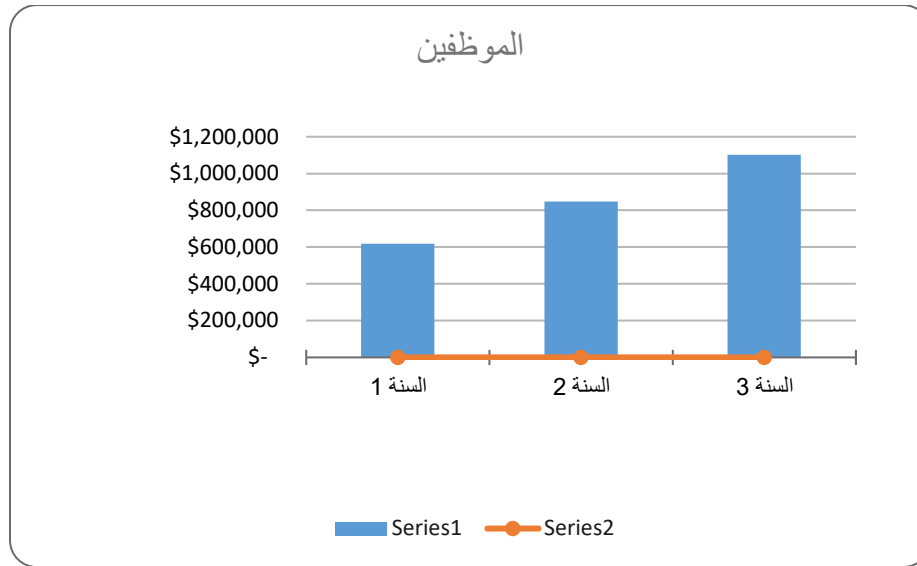
GREEN BILLBOARD COMPANY - Using Wind to Supply Water as a Renewable Energy

اكمل هذا الجدول			شهر 1	شهر 2	شهر 3	شهر 4	شهر 5	شهر 6	شهر 7	شهر 8	شهر 9	شهر 10	شهر 11	شهر 12	اجمالي عدد الوحدات لسنة الأولى	
اسم المنتج او الخدمة	سعر البيع للوحدة	تكلفة البض اعة المباع ة	عدد الوحدات المباعة لكل شهر (السنة الأولى)													
usable water	\$ 6	\$ 5	0	0	0	0	0	3500	4666. 6666 67	5833. 3333 33	5833. 3333 33	7000	8166. 66666 7	9333. 3333 33		69666.6666 7
electric ity power	\$ 0.18	\$ 0	0	0	0	0	0	2000	2666. 6666 67	3333. 3333 33	3333. 3333 33	4000	4666. 66666 7	5333. 3333 33		25333.3333 3
adverti sement	100,0 00.00	60,0 00	0	0	0	0	0	30	40	50	50	60	70	80	380	
عدد الوحدات المباعة لكل شهر			0	0	0	0	0	5530	7373. 33333	9216. 66666	9216. 66666	11060	12903 .3333	14746 .6666	95380	
			شهر 1	شهر 2	شهر 3	شهر 4	شهر 5	شهر 6	شهر 7	شهر 8	شهر 9	شهر 10	شهر 11	شهر 12		

اسم المنتج او الخدمة	قيمة المبيعات المتوقعة لكل شهر (السنة الأولى)													المبيعات لسنة الأولى		
usable water	-	-	-	-	-	21,00 0	28,00 0	35,00 0	35,00 0	42,00 0	49,00 0	56,00 0	\$ 266,000			
electricity power	-	-	-	-	-	360	480	600	600	720	840	960	\$ 4,560			
advertisement	-	-	-	-	-	3,000, 000	4,000 ,000	5,000 ,000	5,000 ,000	6,000 ,000	7,000, 000	8,000 ,000	\$ 38,000,000			
اجمالي المبيعات	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,021, 360	\$ 4,028, 480	\$ 5,035, 600	\$ 5,035, 600	\$ 6,042, 720	\$ 7,049, 840	\$ 8,056, 960	\$ 38,270,560			
اجمالي تكلفة البضاعة المباعة	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,817, 800	\$ 2,423, 733	\$ 3,029, 667	\$ 3,029, 667	\$ 3,635, 600	\$ 4,241, 533	\$ 4,847, 467	\$ 23,025,467			
اجمالي هامش الربح	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,203, 560	\$ 1,604, 747	\$ 2,005, 933	\$ 2,005, 933	\$ 2,407, 120	\$ 2,808, 307	\$ 3,209, 493	\$ 15,245,093			
اكمل هذا الجدول			شهر 1	شهر 2	شهر 3	شهر 4	شهر 5	شهر 6	شهر 7	شهر 8	شهر 9	شهر 10	شهر 11	شهر 12	اجمالي عدد الوحدات لسنة الثانية	
اسم المنتج او الخدمة	سعر البيع للوحدة	تكلفة البض اعة المباع ة	عدد الوحدات المباعة لكل شهر (السنة الثانية)													
usable water	\$ 6	\$ 5	2500 00	2500 00	2500 00	25000 0	2500 00	25000 0	2500 00	2500 00	2500 00	2500 00	25000 0	2500 00		3000000
electric ity power	\$ 0	\$ 0	1250 0	1250 0	1250 0	12500	1250 0	12500	1250 0	1250 0	1250 0	1250 0	12500	1250 0		150000
adverti sement	\$ 100,0 00	\$ 60,0 00	60	60	60	60	60	60	60	60	60	60	60	60	720	
عدد الوحدات المباعة لكل شهر			26256 0	26256 0	26256 0	26256 0	26256 0	26256 0	26256 0	26256 0	26256 0	26256 0	26256 0	26256 0	3150720	
			شهر 1	شهر 2	شهر 3	شهر 4	شهر 5	شهر 6	شهر 7	شهر 8	شهر 9	شهر 10	شهر 11	شهر 12		

اسم المنتج او الخدمة			قيمة المبيعات المتوقعة لكل شهر (السنة الثانية)												المبيعات لسنة الثانية
usable water			1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	\$ 18,000,000	
electricity power			2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	\$ 27,000	
advertisement			6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	\$ 72,000,000	
اجمالي المبيعات			\$ 7,502,250	\$ 7,502,250	\$ 7,502,250	\$ 7,502,250	\$ 7,502,250	\$ 7,502,250	\$ 7,502,250	\$ 7,502,250	\$ 7,502,250	\$ 7,502,250	\$ 7,502,250	\$ 90,027,000	
اجمالي تكلفة البضاعة المباعة			\$ 4,851,875	\$ 4,851,875	\$ 4,851,875	\$ 4,851,875	\$ 4,851,875	\$ 4,851,875	\$ 4,851,875	\$ 4,851,875	\$ 4,851,875	\$ 4,851,875	\$ 4,851,875	\$ 58,222,500	
اجمالي هامش الربح			\$ 2,650,375	\$ 2,650,375	\$ 2,650,375	\$ 2,650,375	\$ 2,650,375	\$ 2,650,375	\$ 2,650,375	\$ 2,650,375	\$ 2,650,375	\$ 2,650,375	\$ 2,650,375	\$ 31,804,500	
اكمل هذا الجدول			شهر 1	شهر 2	شهر 3	شهر 4	شهر 5	شهر 6	شهر 7	شهر 8	شهر 9	شهر 10	شهر 11	شهر 12	
اسم المنتج او الخدمة	سعر البيع للوحدة	تكلفة البضاعة المباعة	عدد الوحدات المباعة لكل شهر (السنة الثالثة)												
usable water	\$ 6	\$ 5	600000	600000	600000	600000	600000	600000	600000	600000	600000	600000	600000	600000	
electricity power	\$ 0	\$ 0	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	
advertisement	\$ 100,000	\$ 60,000	130	130	130	130	130	130	130	130	130	130	130	130	
عدد الوحدات المباعة لكل شهر			630130	630130	630130	630130	630130	630130	630130	630130	630130	630130	630130	630130	
			شهر 1	شهر 2	شهر 3	شهر 4	شهر 5	شهر 6	شهر 7	شهر 8	شهر 9	شهر 10	شهر 11	شهر 12	
اسم المنتج او الخدمة			قيمة المبيعات المتوقعة لكل شهر (السنة الثالثة)												المبيعات لسنة الثالثة
usable water			3,600,000	3,600,000	3,600,000	3,600,000	3,600,000	3,600,000	3,600,000	3,600,000	3,600,000	3,600,000	3,600,000	\$ 43,200,000	
electricity power			5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400	\$ 64,800	
advertisement			13,000,000	13,000,000	13,000,000	13,000,000	13,000,000	13,000,000	13,000,000	13,000,000	13,000,000	13,000,000	13,000,000	\$ 156,000,000	
اجمالي المبيعات			\$ 16,605,400	\$ 16,605,400	\$ 16,605,400	\$ 16,605,400	\$ 16,605,400	\$ 16,605,400	\$ 16,605,400	\$ 16,605,400	\$ 16,605,400	\$ 16,605,400	\$ 16,605,400	\$ 199,264,800	
اجمالي تكلفة البضاعة المباعة			\$ 10,804,500	\$ 10,804,500	\$ 10,804,500	\$ 10,804,500	\$ 10,804,500	\$ 10,804,500	\$ 10,804,500	\$ 10,804,500	\$ 10,804,500	\$ 10,804,500	\$ 10,804,500	\$ 129,654,000	
اجمالي هامش الربح			\$ 5,800,900	\$ 5,800,900	\$ 5,800,900	\$ 5,800,900	\$ 5,800,900	\$ 5,800,900	\$ 5,800,900	\$ 5,800,900	\$ 5,800,900	\$ 5,800,900	\$ 5,800,900	\$ 69,610,800	

8.2.1.3 الرواتب



اكمل هذا الجدول			شهر 1	شهر 2	شهر 3	شهر 4	شهر 5	شهر 6	شهر 7	شهر 8	شهر 9	شهر 10	شهر 11	شهر 12
نوع الوظيفة	الرواتب	البدلات	عدد الموظفين خلال كل شهر (السنة الأولى)											
procurement manager	\$ 8,400	\$ 2,100	1	1	1	1	1	1	1	1	1	1	1	1
sales manager	\$ 10,080	\$ 2,520	1	1	1	1	1	2	2	2	2	2	2	2
Project manager	\$ 8,400	\$ 2,100	1	1	1	1	1	1	1	1	1	1	2	2
Designer	\$ 3,360	\$ 840	1	1	1	1	1	1	1	1	2	2	2	2
Construction worker	\$ 840	\$ 210	2	2	2	2	2	3	4	4	4	4	4	4
عدد الموظفين			6	6	6	6	6	8	9	9	10	10	11	11

نوع الوظيفة	قيمة الرواتب الموظفين الشهرية (السنة الأولى)												اجمالي الرواتب السنوية
	شهر 1	شهر 2	شهر 3	شهر 4	شهر 5	شهر 6	شهر 7	شهر 8	شهر 9	شهر 10	شهر 11	شهر 12	
													\$ 126,000
procurement manager	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	\$ 239,400
sales manager	12,600	12,600	12,600	12,600	12,600	25,200	25,200	25,200	25,200	25,200	25,200	25,200	\$ 147,000
Project manager	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	21,000	21,000	\$ 67,200
Designer	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	8,400	8,400	8,400	8,400	\$ 38,850
Construction worker	2,100	2,100	2,100	2,100	2,100	3,150	4,200	4,200	4,200	4,200	4,200	4,200	\$ -

GREEN BILLBOARD COMPANY - Using Wind to Supply Water as a Renewable Energy

-	-	-	-	-	-	-	-	-	-	-	-	-	\$ 618,450
اجمالي رواتب الموظفين	\$ 39,900	\$ 39,900	\$ 39,900	\$ 39,900	\$ 39,900	\$ 53,550	\$ 54,600	\$ 54,600	\$ 58,800	\$ 58,800	\$ 69,300	\$ 69,300	

اكمل هذا الجدول			شهر 1	شهر 2	شهر 3	شهر 4	شهر 5	شهر 6	شهر 7	شهر 8	شهر 9	شهر 10	شهر 11	شهر 12
نوع الوظيفة	الرواتب	البدلات	عدد الموظفين خلال كل شهر (السنة الثانية)											
procurement manager	\$ 8,568	\$ 2,142	1	1	1	1	1	1	1	1	1	1	1	1
sales manager	\$ 10,282	\$ 2,570	2	2	2	2	2	2	2	2	2	2	2	2
Project manager	\$ 8,568	\$ 2,142	2	2	2	2	2	2	2	2	2	2	2	2
Designer	\$ 3,427	\$ 857	2	2	2	2	2	2	2	2	2	2	2	2
Construction worker	\$ 857	\$ 214	4	4	4	4	4	4	4	4	4	4	4	4
عدد الموظفين			11	11	11	11	11	11	11	11	11	11	11	11

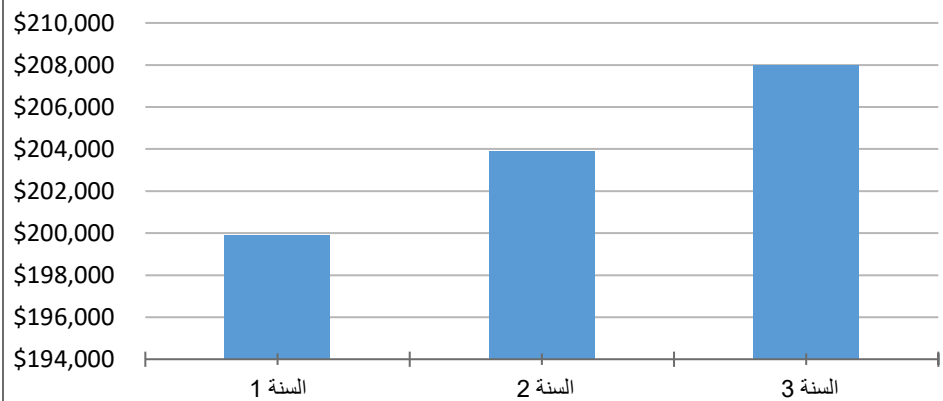
اجمالي الرواتب السنوية													شهر 1	شهر 2	شهر 3	شهر 4	شهر 5	شهر 6	شهر 7	شهر 8	شهر 9	شهر 10	شهر 11	شهر 12
قيمة الرواتب الموظفين لكل شهر (السنة الثانية)													نوع الوظيفة											
\$ 128,520													10,710	10,710	10,710	10,710	10,710	10,710	10,710	10,710	10,710	10,710	10,710	10,710
\$ 308,448													25,704	25,704	25,704	25,704	25,704	25,704	25,704	25,704	25,704	25,704	25,704	25,704
\$ 257,040													21,420	21,420	21,420	21,420	21,420	21,420	21,420	21,420	21,420	21,420	21,420	21,420
\$ 102,816													8,568	8,568	8,568	8,568	8,568	8,568	8,568	8,568	8,568	8,568	8,568	8,568
\$ 51,408													4,284	4,284	4,284	4,284	4,284	4,284	4,284	4,284	4,284	4,284	4,284	4,284
\$ -													-	-	-	-	-	-	-	-	-	-	-	-
\$ 848,232													\$ 70,686	\$ 70,686	\$ 70,686	\$ 70,686	\$ 70,686	\$ 70,686	\$ 70,686	\$ 70,686	\$ 70,686	\$ 70,686	\$ 70,686	\$ 70,686
اجمالي رواتب الموظفين																								

اكمل هذا الجدول			شهر 1	شهر 2	شهر 3	شهر 4	شهر 5	شهر 6	شهر 7	شهر 8	شهر 9	شهر 10	شهر 11	شهر 12
نوع الوظيفة	الرواتب	البدلات	عدد الموظفين خلال كل شهر (السنة الثالثة)											
procurement manager	\$ 8,739	\$ 2,185	1	1	1	1	1	1	1	1	1	1	1	1
sales manager	\$ 10,487	\$ 2,622	2	2	2	2	2	2	2	2	2	2	2	2
Project manager	\$ 8,739	\$ 2,185	3	3	3	3	3	3	3	3	3	3	3	3
Designer	\$ 3,496	\$ 874	3	3	3	3	3	3	3	3	3	3	3	3
Construction worker	\$ 874	\$ 218	8	8	8	8	8	8	8	8	8	8	8	8
عدد الموظفين			17	17	17	17	17	17	17	17	17	17	17	17

	شهر 1	شهر 2	شهر 3	شهر 4	شهر 5	شهر 6	شهر 7	شهر 8	شهر 9	شهر 10	شهر 11	شهر 12	اجمالي الرواتب السنوية
نوع الوظيفة	قيمة الرواتب الموظفين لكل شهر (السنة الثالثة)												\$ 131,090
procurement manager	10,924	10,924	10,924	10,924	10,924	10,924	10,924	10,924	10,924	10,924	10,924	10,924	\$ 314,617
sales manager	26,218	26,218	26,218	26,218	26,218	26,218	26,218	26,218	26,218	26,218	26,218	26,218	\$ 393,271
Project manager	32,773	32,773	32,773	32,773	32,773	32,773	32,773	32,773	32,773	32,773	32,773	32,773	\$ 157,308
Designer	13,109	13,109	13,109	13,109	13,109	13,109	13,109	13,109	13,109	13,109	13,109	13,109	\$ 104,872
Construction worker	8,739	8,739	8,739	8,739	8,739	8,739	8,739	8,739	8,739	8,739	8,739	8,739	\$ -
-	-	-	-	-	-	-	-	-	-	-	-	-	\$ 1,101,159
اجمالي رواتب الموظفين	91,763	91,763	91,763	91,763	91,763	91,763	91,763	91,763	91,763	91,763	91,763	91,763	

8.2.1.4 المصروفات

	المصروفات
السنة 1	\$199,908
السنة 2	\$203,906
السنة 3	\$207,984



	شهر 1	شهر 2	شهر 3	شهر 4	شهر 5	شهر 6	شهر 7	شهر 8	شهر 9	شهر 10	شهر 11	شهر 12	اجمالي مصروفات السنة الأولى
اسم المصروف	المصروفات لكل شهر (السنة الأولى)												
Rent the Land	4,160	4,160	4,160	4,160	4,160	4,160	4,160	4,160	4,160	4,160	4,160	4,160	\$ 49,920
insurance	833	833	833	833	833	833	833	833	833	833	833	833	\$ 9,996
marketing	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	\$ 60,000
Facilities	6,666	6,666	6,666	6,666	6,666	6,666	6,666	6,666	6,666	6,666	6,666	6,666	\$ 79,992

اجمالي											\$		
المصروفات	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	16,65	\$	\$
الشهرية	16,659	16,659	16,659	16,659	16,659	16,659	16,659	16,659	16,659	16,659	9	16,659	199,908

اسم المصروف	شهر												اجمالي مصروفات السنة الثانية
	شهر 1	شهر 2	شهر 3	شهر 4	شهر 5	شهر 6	شهر 7	شهر 8	شهر 9	شهر 10	شهر 11	شهر 12	
	المصروفات لكل شهر (السنة الثانية)												
Rent the Land	4,243	4,243	4,243	4,243	4,243	4,243	4,243	4,243	4,243	4,243	4,243	4,243	\$ 50,918
insurance	850	850	850	850	850	850	850	850	850	850	850	850	\$ 10,196
marketing	5,100	5,100	5,100	5,100	5,100	5,100	5,100	5,100	5,100	5,100	5,100	5,100	\$ 61,200
Facilities	6,799	6,799	6,799	6,799	6,799	6,799	6,799	6,799	6,799	6,799	6,799	6,799	\$ 81,592
اجمالي	\$												
المصروفات	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	16,99	\$	\$
الشهرية	16,992	16,992	16,992	16,992	16,992	16,992	16,992	16,992	16,992	16,992	2	16,992	203,906

اسم المصروف	شهر												اجمالي مصروفات السنة الثالثة
	شهر 1	شهر 2	شهر 3	شهر 4	شهر 5	شهر 6	شهر 7	شهر 8	شهر 9	شهر 10	شهر 11	شهر 12	
	المصروفات لكل شهر (السنة الثالثة)												
Rent the Land	4,328	4,328	4,328	4,328	4,328	4,328	4,328	4,328	4,328	4,328	4,328	4,328	\$ 51,937
insurance	867	867	867	867	867	867	867	867	867	867	867	867	\$ 10,400
marketing	5,202	5,202	5,202	5,202	5,202	5,202	5,202	5,202	5,202	5,202	5,202	5,202	\$ 62,424
Facilities	6,935	6,935	6,935	6,935	6,935	6,935	6,935	6,935	6,935	6,935	6,935	6,935	\$ 83,224
اجمالي	\$												
المصروفات	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	17,33	\$	\$
الشهرية	17,332	17,332	17,332	17,332	17,332	17,332	17,332	17,332	17,332	17,332	2	17,332	207,984

8.2.1.5 معلومات إضافية

في حال الشراء من الموردين بالآجل			
السنة 3	السنة 2	السنة 1	نسبة السداد للموردين
100%	100%	100%	تدفع للموردين خلال 30 يوم
0%	0%	0%	تدفع للموردين بين 30 الى 60 يوم
0%	0%	0%	تدفع للموردين اكثر من 60 يوم
100%	100%	100%	لازم هذا الرقم يساوي 100%

في حال البيع للآجل للعملاء			
السنة 3	السنة 2	السنة 1	نسبة التحصيل من العملاء
50%	50%	50%	يدفع العميل خلال 30 يوم
25%	25%	25%	يدفع العميل بين 30 الى 60 يوم
25%	25%	25%	يدفع العميل اكثر من 60 يوم
0%	0%	0%	تعتذر العميل عن السداد
100%	100%	100%	لازم هذا الرقم يساوي 100%
الزكاة والضرائب			
ضريبة القيمة المضافة (VAT)			15%
الزكاة			2.5%

السنة الأولى

GREEN BILLBOARD COMPANY - Using Wind to Supply Water as a Renewable Energy

أصول ثابتة إضافية (تريد شرائها بعد تشغيل المشروع)														
الأصول الثابتة	الأهلاك (بالسنوات)	شهر												اجمالي السنة
		شهر 1	شهر 2	شهر 3	شهر 4	شهر 5	شهر 6	شهر 7	شهر 8	شهر 9	شهر 10	شهر 11	شهر 12	
الأراضي	-	-												\$ -
المباني	50	-												\$ -
ترميم مبنى مستأجر	10	30,000												\$ 30,000
الآلات والمعدات	7	68,700												\$ 68,700
الأثاث	5	30,000												\$ 30,000
السيارات	5	50,000												\$ 50,000
أصول ثابتة أخرى	5	10,000												\$ 10,000
اجمالي الأصول الثابتة		\$188,700	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 178,700

السنة الثانية

أصول ثابتة إضافية (تريد شرائها بعد تشغيل المشروع)														
الأصول الثابتة	الأهلاك (بالسنوات)	شهر												اجمالي السنة
		شهر 1	شهر 2	شهر 3	شهر 4	شهر 5	شهر 6	شهر 7	شهر 8	شهر 9	شهر 10	شهر 11	شهر 12	
الأراضي	-	-												\$ -
المباني	50	-												\$ -
ترميم مبنى مستأجر	10	15,000												\$ 15,000
الآلات والمعدات	7	-												\$ -
الأثاث	5	10,000												\$ 10,000
السيارات	5	-												\$ -
أصول ثابتة أخرى	5	10,000												\$ 10,000
اجمالي الأصول الثابتة		\$ 35,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25,000

السنة الثالثة

أصول ثابتة إضافية (تريد شرائها بعد تشغيل المشروع)														
الأصول الثابتة	الأهلاك (بالسنوات)	شهر												اجمالي السنة
		شهر 1	شهر 2	شهر 3	شهر 4	شهر 5	شهر 6	شهر 7	شهر 8	شهر 9	شهر 10	شهر 11	شهر 12	
الأراضي	-	-												\$ -
المباني	50	-												\$ -
ترميم مبنى مستأجر	10	15,000												\$ 15,000
الآلات والمعدات	7	-												\$ -
الأثاث	5	10,000												\$ 10,000

السيارات	5	-												\$ -
أصول ثابتة أخرى	5	10,000												\$ 10,000
اجمالي الأصول الثابتة		\$ 35,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25,000

طريقة حساب تكاليف البضاعة المباعة

تكاليف البضاعة المباعة غالبا تكون للأنشطة التي تباع منتجات ملموسة و هي تكاليف متغيرة اي كلما زاد الانتاج او المبيعات زادت التكلفة والعكس صحيح وبالأمتلة توضح:-

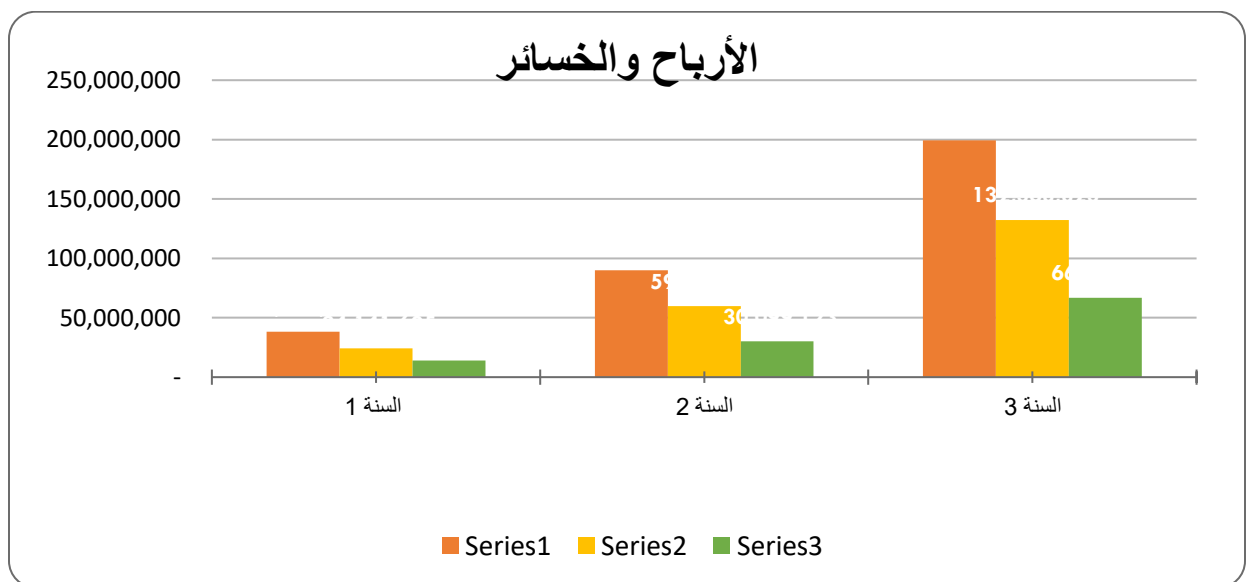
1- محل يبيع ملابس كلما زادت المبيعات زادت تكاليف البضاعة المباعة لأنه راح يشتري كمية اكثر من المورد يعني يشتري من مورد 10 ريال ويبيعه في المحل ب 15 ريال وتكون تكلفة البضاعة المباعة هي 10 ريال

2-مصنع الاثاث كلما زادت المبيعات زادت تكاليف البضاعة المباعة وهي المواد الخام مثل (الخشب،الحديد،النحاس) ويكون المنتج النهائي هو الأثاث على سبيل المثال تكلفة انتاج كرسي من خشب وحديد وقماش هي 10 ريال وسعر البيع هو 15 ريال فإن تكلفة البضاعة المباعة 10 ريال

3-المطعم كلما زادت المبيعات زادت تكلفة البضاعة المباعة مثل (اللحم، الدجاج، الخبز) ويكون المنتج النهائي ساندويش على سبيل المثال تكلفة المواد الخام (دجاج، لحم،خبز لتحضير ساندويش هي 10 ريال وسعر البيع هو 15 ريال اي ان تكلفة البضاعة المباعة هي 10 ريال

4- عند تحديد مبلغ عمولة لموظف المبيعات لكل عملية بيع للمنتج على سبيل المثال ان قيمة المنتج 10 ريال وتكلفة شراء المنتج من المورد 5 ريال و العمولة الى موظف المبيعات هي 1 ريال في كل عملية بيع اي ان تكلفة البضاعة المباعة للمنتج هي 6 ريال (5 ريال للمورد + 1 ريال عمولة لموظف المبيعات)

8.2.1.6 الأرباح والخسائر



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10	تكلفة شراء البضاعة من المورد
5	عمولة المبيعات (ان وجد)
15	تكلفة البضاعة المباعة

	السنة الأولى	السنة الثانية	السنة الثالثة
المبيعات			
اجمالي المبيعات	38,270,560	90,027,000	199,264,800
تكلفة البضاعة المباعة	23,025,467	58,222,500	129,654,000
اجمالي هامش الربح	15,245,093	31,804,500	69,610,800
اجمالي هامش الربح %	35%	35%	35%
مصاريف التشغيل			
اجمالي مصاريف التشغيل	818,358	1,052,138	1,309,144
مصروفات أخرى			
اجمالي المصاريف الأخرى	297,780	653,238	1,405,679
الأرباح او الخسائر			
صافي الربح او الخسارة	14,128,955	30,099,123	66,895,977
هامش صافي الربح %	37%	33%	34%

الأرباح والخسائر للسنة الأولى

	شهر 1	شهر 2	شهر 3	شهر 4	شهر 5	شهر 6	شهر 7	شهر 8	شهر 9	شهر 10	شهر 11	شهر 12	الإجمالي السنوي
المبيعات													
usable water	-	-	-	-	-	21,000	28,000	35,000	35,000	42,000	49,000	56,000	\$ 266,000
electricity power	-	-	-	-	-	360	480	600	600	720	840	960	\$ 4,560
advertisment	-	-	-	-	-	3,000,000	4,000,000	5,000,000	5,000,000	6,000,000	7,000,000	8,000,000	\$ 38,000,000
اجمالي المبيعات	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,021,360	\$ 4,028,480	\$ 5,035,600	\$ 5,035,600	\$ 6,042,720	\$ 7,049,840	\$ 8,056,960	\$ 38,270,560
تكلفة البضاعة المباعة	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,817,800	\$ 2,423,733	\$ 3,029,667	\$ 3,029,667	\$ 3,635,600	\$ 4,241,533	\$ 4,847,467	\$ 23,025,467
اجمالي هامش الربح	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,203,560	\$ 1,604,747	\$ 2,005,933	\$ 2,005,933	\$ 2,407,120	\$ 2,808,307	\$ 3,209,493	\$ 15,245,093
اجمالي هامش الربح %	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	40%	40%	40%	40%	40%	40%	40%	40%
مصاريف التشغيل													
مصاريف التشغيل قبل الافتتاح	-												\$ -
الرواتب	39,900	39,900	39,900	39,900	39,900	53,550	54,600	54,600	58,800	58,800	69,300	69,300	\$ 618,450
Rent the Land	4,160	4,160	4,160	4,160	4,160	4,160	4,160	4,160	4,160	4,160	4,160	4,160	\$ 49,920
insurance	833	833	833	833	833	833	833	833	833	833	833	833	\$ 9,996
marketing	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	\$ 60,000
Facilities	6,666	6,666	6,666	6,666	6,666	6,666	6,666	6,666	6,666	6,666	6,666	6,666	\$ 79,992

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اجمالي مصاريف التشغيل	\$ 56,559	\$ 56,559	\$ 56,559	\$ 56,559	\$ 56,559	\$ 70,209	\$ 71,259	\$ 71,259	\$ 75,459	\$ 75,459	\$ 85,959	\$ 85,959	\$ 818,358
مصرفات أخرى													
الإهلاك	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	\$ 30,814
قوائد قرض البنك	333	328	323	318	313	308	303	298	293	287	282	277	\$ 3,664
قوائد قروض وديون أخرى	-	-	-	-	-	-	-	-	-	-	-	-	\$ -
الديون المعدومة	-	-	-	-	-	-	-	-	-	-	-	-	\$ -
الزكاة	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,787	\$ 27,716	\$ 34,645	\$ 34,645	\$ 41,574	\$ 48,503	\$ 55,432	\$ 263,301
اجمالي مصرفات أخرى	\$ 2,901	\$ 2,896	\$ 2,891	\$ 2,886	\$ 2,881	\$ 23,663	\$ 30,587	\$ 37,511	\$ 37,505	\$ 44,429	\$ 51,353	\$ 58,277	\$ 297,780
الأرباح او الخسائر													
صافي الربح	\$ (59,460)	\$ (59,455)	\$ (59,450)	\$ (59,445)	\$ (59,440)	\$ 1,109,688	\$ 1,502,901	\$ 1,897,164	\$ 1,892,969	\$ 2,287,232	\$ 2,670,995	\$ 3,065,257	\$ 14,128,955
هامش صافي الربح %	#DIV/0!	#DIV/0!	!	!	!	37%	37%	38%	38%	38%	38%	38%	37%

الأرباح والخسائر للسنة الثانية

	شهر 1	شهر 2	شهر 3	شهر 4	شهر 5	شهر 6	شهر 7	شهر 8	شهر 9	شهر 10	شهر 11	شهر 12	الإجمالي السنوي
المبيعات													
usable water	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	\$ 18,000,000
electricity power	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	\$ 27,000
advertisem ent	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	\$ 72,000,000
اجمالي المبيعات	7,502,250	7,502,250	7,502,250	7,502,250	7,502,250	7,502,250	7,502,250	7,502,250	7,502,250	7,502,250	7,502,250	7,502,250	90,027,000
تكلفة البضاعة المباعة	\$ 4,851,875	\$ 4,851,875	\$ 4,851,875	\$ 4,851,875	\$ 4,851,875	\$ 4,851,875	\$ 4,851,875	\$ 4,851,875	\$ 4,851,875	\$ 4,851,875	\$ 4,851,875	\$ 4,851,875	\$ 58,222,500
اجمالي هامش الربح	\$ 2,650,375	\$ 2,650,375	\$ 2,650,375	\$ 2,650,375	\$ 2,650,375	\$ 2,650,375	\$ 2,650,375	\$ 2,650,375	\$ 2,650,375	\$ 2,650,375	\$ 2,650,375	\$ 2,650,375	\$ 31,804,500
هامش % الربح	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%
مصاريف التشغيل													
الرواتب	\$ 70,686	\$ 70,686	\$ 70,686	\$ 70,686	\$ 70,686	\$ 70,686	\$ 70,686	\$ 70,686	\$ 70,686	\$ 70,686	\$ 70,686	\$ 70,686	\$ 848,232
Rent the Land	\$ 4,243	\$ 4,243	\$ 4,243	\$ 4,243	\$ 4,243	\$ 4,243	\$ 4,243	\$ 4,243	\$ 4,243	\$ 4,243	\$ 4,243	\$ 4,243	\$ 50,918
insurance	\$ 850	\$ 850	\$ 850	\$ 850	\$ 850	\$ 850	\$ 850	\$ 850	\$ 850	\$ 850	\$ 850	\$ 850	\$ 10,196
marketing	\$ 5,100	\$ 5,100	\$ 5,100	\$ 5,100	\$ 5,100	\$ 5,100	\$ 5,100	\$ 5,100	\$ 5,100	\$ 5,100	\$ 5,100	\$ 5,100	\$ 61,200
Facilities	\$ 6,799	\$ 6,799	\$ 6,799	\$ 6,799	\$ 6,799	\$ 6,799	\$ 6,799	\$ 6,799	\$ 6,799	\$ 6,799	\$ 6,799	\$ 6,799	\$ 81,592

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اجمالي مصاريف التشغيل	\$ 87,678	\$ 87,678	\$ 87,678	\$ 87,678	\$ 87,678	\$ 87,678	\$ 87,678	\$ 87,678	\$ 87,678	\$ 87,678	\$ 87,678	\$ 87,678	\$ 1,052,138
مصرفات أخرى													
الإهلاك	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,693	\$ 30,939
قوائد قرض البنك	272	267	261	256	251	246	240	235	230	224	219	213	\$ 2,913
قوائد قروض وديون أخرى	-	-	-	-	-	-	-	-	-	-	-	-	\$ -
الديون المعدومة	-	-	-	-	-	-	-	-	-	-	-	-	\$ -
الزكاة	51,615	51,615	51,615	51,615	51,615	51,615	51,615	51,615	51,615	51,615	51,615	51,615	\$ 619,386
اجمالي مصرفات أخرى	54,455	54,450	54,445	54,439	54,434	54,429	54,424	54,418	54,413	54,407	54,402	54,522	\$ 653,238
الأرباح أو الخسائر													
صافي الربح أو الخسارة	\$ 2,508,242	\$ 2,508,247	\$ 2,508,252	\$ 2,508,257	\$ 2,508,263	\$ 2,508,268	\$ 2,508,273	\$ 2,508,279	\$ 2,508,284	\$ 2,508,289	\$ 2,508,295	\$ 2,508,175	\$ 30,099,123
هامش صافي الربح %	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%

الأرباح والخسائر للسنة الثالثة													الإجمالي السوي
	شهر 1	شهر 2	شهر 3	شهر 4	شهر 5	شهر 6	شهر 7	شهر 8	شهر 9	شهر 10	شهر 11	شهر 12	
المبيعات													
usable water	3,600,000	3,600,000	3,600,000	3,600,000	3,600,000	3,600,000	3,600,000	3,600,000	3,600,000	3,600,000	3,600,000	3,600,000	\$ 43,200,000
electricity power	5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400	\$ 64,800
advertisem ent	13,000,000	13,000,000	13,000,000	13,000,000	13,000,000	13,000,000	13,000,000	13,000,000	13,000,000	13,000,000	13,000,000	13,000,000	\$ 156,000,000
اجمالي المبيعات	16,605,400	16,605,400	16,605,400	16,605,400	16,605,400	16,605,400	16,605,400	16,605,400	16,605,400	16,605,400	16,605,400	16,605,400	199,264,800
تكلفة البضاعة المباعة	##### ##### #	##### ##### #	\$10,804,500	\$10,804,500	\$10,804,500	\$10,804,500	\$10,804,500	\$10,804,500	\$10,804,500	##### ##### #	##### ##### #	\$10,804,500	\$ 129,654,000
اجمالي هامش الربح	\$ 5,800,900	\$ 5,800,900	\$ 5,800,900	\$ 5,800,900	\$ 5,800,900	\$ 5,800,900	\$ 5,800,900	\$ 5,800,900	\$ 5,800,900	\$ 5,800,900	\$ 5,800,900	\$ 5,800,900	\$ 69,610,800
هامش % الربح اجمالي	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%
مصاريف التشغيل													
الرواتب	91,763	91,763	91,763	91,763	91,763	91,763	91,763	91,763	91,763	91,763	91,763	91,763	\$ 1,101,159
Rent the Land	4,328	4,328	4,328	4,328	4,328	4,328	4,328	4,328	4,328	4,328	4,328	4,328	\$ 51,937
insurance	867	867	867	867	867	867	867	867	867	867	867	867	\$ 10,400
marketing	5,202	5,202	5,202	5,202	5,202	5,202	5,202	5,202	5,202	5,202	5,202	5,202	\$ 62,424
Facilities	6,935	6,935	6,935	6,935	6,935	6,935	6,935	6,935	6,935	6,935	6,935	6,935	\$ 83,224

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اجمالي مصاريف التشغيل	\$ 109,09 5	\$ 109,09 5	\$ 109,0 95	\$ 109,0 95	\$ 109,0 95	\$ 109,0 95	\$ 109,0 95	\$ 109,0 95	\$ 109,0 95	\$ 109,09 5	\$ 109,09 5	\$ 109,0 95	\$ 1,309,1 44
مصرفات أخرى													
الإهلاك	2,693	2,693	2,693	2,693	2,693	2,693	2,693	2,693	2,693	2,693	2,693	2,985	\$ 32,606
قوائد قرض البنك	208	202	197	192	186	181	175	169	164	158	153	147	\$ 2,132
قوائد قروض وديون أخرى	-	-	-	-	-	-	-	-	-	-	-	-	\$ -
الديون المعدومة	-	-	-	-	-	-	-	-	-	-	-	-	\$ -
الزكاة	114245	114245	11424 5	11424 5	11424 5	11424 5	11424 5	11424 5	11424 5	114245	114245	11424 5	\$ 1,370,9 42
اجمالي مصرفات أخرى	117,146	117,140	117,13 5	117,13 0	117,12 4	117,11 9	117,11 3	117,10 7	117,10 2	117,096	117,091	117,37 7	\$ 1,405,6 79
الأرباح او الخسائر													
صافي الربح او الخسارة	\$ 5,574,6 59	\$ 5,574,6 64	\$ 5,574, 670	\$ 5,574, 675	\$ 5,574, 681	\$ 5,574, 686	\$ 5,574, 692	\$ 5,574, 697	\$ 5,574, 703	\$ 5,574,7 08	\$ 5,574,7 14	\$ 5,574, 428	\$ 66,895, 977
هامش صافي الربح %	34%	34%	34%	34%	34%	34%	34%	34%	34%	34%	34%	34%	34%

التدفقات النقدية للسنة الأولى

	شهر 1	شهر 2	شهر 3	شهر 4	شهر 5	شهر 6	شهر 7	شهر 8	شهر 9	شهر 10	شهر 11	شهر 12	الإجمالي
الكاش اللي دخل للمشروع													
المبيعات بالنقد	-	-	-	-	-	1,510, 680	2,014, 240	2,517, 800	2,517, 800	3,021, 360	3,524, 920	4,028, 480	\$ 19,135,28 0
المبيعات بالأجل		-	-	-	-	-	755,3 40	1,762, 460	2,266, 020	2,517, 800	2,769, 580	3,273, 140	\$ 13,344,34 0
ضريبة القيمة المضافة (VAT)	-	-	-	-	-	453,2 04	604,2 72	755,34 0	755,34 0	906,40 8	1,057, 476	1,208, 544	\$ 5,740,584
اجمالي الكاش اللي دخل المشروع	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,963, 884	\$ 3,373 ,852	\$ 5,035, 600	\$ 5,539, 160	\$ 6,445, 568	\$ 7,351, 976	\$ 8,510, 164	\$ 38,220,2 04
الكاش اللي طلع من المشروع													
الأصول الثابتة	188,700	-	-	-	-	-	-	-	-	-	-	-	\$ 188,700
تكلفة البضاعة المباعة	-	-	-	-	-	1,817, 800	2,423, 733	3,029, 667	3,029, 667	3,635, 600	4,241, 533	4,847, 467	\$ 23,025,4 67
مخزون إضافي													\$ -
مصاريف التشغيل	56,559	56,55 9	56,55 9	56,55 9	56,55 9	70,20 9	71,25 9	71,259	75,459	75,459	85,959	85,959	\$ 818,358
الزكاة + الضريبة (VAT)				-			453,2 04			2,114, 952			\$ 2,568,15 6
دفعات سداد القروض	5,067	5,067	5,067	5,067	5,067	5,067	5,067	5,067	5,067	5,067	5,067	5,067	\$ 60,800
اجمالي الكاش الخارج من المشروع	\$ 250,326	\$ 61,62 6	\$ 61,62 6	\$ 61,62 6	\$ 61,62 6	\$ 1,893, 076	\$ 2,953 ,263	\$ 3,105, 992	\$ 3,110, 192	\$ 5,831, 078	\$ 4,332, 559	\$ 4,938, 492	\$ 26,661,4 80

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اجمالي الكاش في البنك													
الكاش اللي يدخل البنك شهريا	\$ (250,326)	\$ (61,626)	\$ (61,626)	\$ (61,626)	\$ (61,626)	\$ 70,808	\$ 420,589	\$ 1,929,608	\$ 2,428,968	\$ 614,490	\$ 3,019,417	\$ 3,571,672	
إضافات مالية من صاحب المشروع													
رصيد الكاش في البنك	(150,326)	(211,951)	(273,577)	(335,203)	(396,828)	(326,020)	94,569	2,024,177	4,453,144	5,067,635	8,087,052	11,658,724	11,658,724
رصيد البنك بداية السنة													
رصيد البنك نهاية السنة													

لتدفقات النقدية للسنة الثانية													
الإجمالي	شهر 1	شهر 2	شهر 3	شهر 4	شهر 5	شهر 6	شهر 7	شهر 8	شهر 9	شهر 10	شهر 11	شهر 12	
الكاش اللي دخل للمشروع													
المبيعات بالنقد	3,751,125	3,751,125	3,751,125	3,751,125	3,751,125	3,751,125	3,751,125	3,751,125	3,751,125	3,751,125	3,751,125	3,751,125	\$ 45,013,500
المبيعات بالأجل		1,875,563	3,751,125	3,751,125	3,751,125	3,751,125	3,751,125	3,751,125	3,751,125	3,751,125	3,751,125	3,751,125	\$ 39,386,813
ضريبة القيمة المضافة (VAT)	1,125,338	1,125,338	1,125,338	1,125,338	1,125,338	1,125,338	1,125,338	1,125,338	1,125,338	1,125,338	1,125,338	1,125,338	\$ 13,504,050
اجمالي الكاش اللي دخل المشروع	\$ 4,876,463	\$ 6,752,025	\$ 8,627,588	\$ 8,627,588	\$ 8,627,588	\$ 8,627,588	\$ 8,627,588	\$ 8,627,588	\$ 8,627,588	\$ 8,627,588	\$ 8,627,588	\$ 8,627,588	\$ 97,904,363
الكاش اللي طلع من المشروع													
الأصول الثابتة	\$ 35,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 35,000
تكلفة البضاعة المباعة	4,851,875	4,851,875	4,851,875	4,851,875	4,851,875	4,851,875	4,851,875	4,851,875	4,851,875	4,851,875	4,851,875	4,851,875	\$ 58,222,500
مخزون إضافي													\$ -
مصارف التشغيل	87,678	87,678	87,678	87,678	87,678	87,678	87,678	87,678	87,678	87,678	87,678	87,678	\$ 1,052,138
الزكاة + الضريبة (VAT)	3,791,814			3,376,013			3,376,013			3,376,013			\$ 13,919,851
دفعات القروض + الفوائد	1,842	1,842	1,842	1,842	1,842	1,842	1,842	1,842	1,842	1,842	1,842	1,842	\$ 22,100
اجمالي الكاش الخارج من المشروع	\$ 8,768,209	\$ 4,941,395	\$ 4,941,395	\$ 8,317,407	\$ 4,941,395	\$ 4,941,395	\$ 8,317,407	\$ 4,941,395	\$ 4,941,395	\$ 8,317,407	\$ 4,941,395	\$ 4,941,395	\$ 73,251,589
اجمالي الكاش في البنك													
الكاش اللي يدخل البنك شهريا	\$ (3,891,746)	\$ 1,810,630	\$ 3,686,193	\$ 310,180	\$ 3,686,193	\$ 3,686,193	\$ 310,180	\$ 3,686,193	\$ 3,686,193	\$ 310,180	\$ 3,686,193	\$ 3,686,193	
إضافات مالية من صاحب المشروع													
رصيد الكاش في البنك	7,766,977	9,577,608	13,263,800	13,573,980	17,260,173	20,946,366	21,256,546	24,942,739	28,628,931	28,939,111	32,625,304	36,311,497	36,311,497
رصيد البنك بداية السنة													
رصيد البنك نهاية السنة													

التدفقات النقدية لسنة الثالثة

GREEN BILLBOARD COMPANY - Using Wind to Supply Water as a Renewable Energy

	شهر 1	شهر 2	شهر 3	شهر 4	شهر 5	شهر 6	شهر 7	شهر 8	شهر 9	شهر 10	شهر 11	شهر 12	الإجمالي
الكاش الذي دخل للمشروع													
المبيعات بالنقد	8,302,700	8,302,700	8,302,700	8,302,700	8,302,700	8,302,700	8,302,700	8,302,700	8,302,700	8,302,700	8,302,700	8,302,700	\$ 99,632,400
المبيعات بالأجل		4,151,350	8,302,700	8,302,700	8,302,700	8,302,700	8,302,700	8,302,700	8,302,700	8,302,700	8,302,700	8,302,700	\$ 87,178,350
ضريبة القيمة المضافة (VAT)	2,490,810	2,490,810	2,490,810	2,490,810	2,490,810	2,490,810	2,490,810	2,490,810	2,490,810	2,490,810	2,490,810	2,490,810	\$ 29,889,720
اجمالي الكاش الذي دخل المشروع	\$ 10,793,510	\$ 14,94,860	\$ 19,09,6210	\$ 19,09,6210	\$ 19,09,6210	\$ 19,09,6210	\$ 19,09,6210	\$ 19,09,6210	\$ 19,09,6210	\$ 19,09,6210	\$ 19,09,6210	\$ 19,09,6210	\$ 216,700,470
الكاش الذي طلع من المشروع													
الأصول الثابتة	\$ 35,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 35,000
تكلفة البضاعة المباعة	10,804,500	10,804,500	10,804,500	10,804,500	10,804,500	10,804,500	10,804,500	10,804,500	10,804,500	10,804,500	10,804,500	10,804,500	\$ 129,654,000
مخزون إضافي													\$ -
مصاريف التشغيل	109,095	109,095	109,095	109,095	109,095	109,095	109,095	109,095	109,095	109,095	109,095	109,095	\$ 1,309,144
الزكاة + الضريبة (VAT)	4,746,954			7,472,430			7,472,430			7,472,430			\$ 27,164,244
دفعات القروض + الفوائد	1,842	1,842	1,842	1,842	1,842	1,842	1,842	1,842	1,842	1,842	1,842	1,842	\$ 22,100
اجمالي الكاش الخارج من المشروع	\$ 15,697,391	\$ 10,91,5437	\$ 10,91,5437	\$ 18,38,7867	\$ 10,91,5437	\$ 10,91,5437	\$ 18,38,7867	\$ 10,91,5437	\$ 10,91,5437	\$ 18,38,7867	\$ 10,91,5437	\$ 10,91,5437	\$ 158,184,488
اجمالي الكاش في البنك													
الكاش الذي يدخل البنك شهريا	\$ (4,903,881)	\$ 4,029,423	\$ 8,180,773	\$ 708,343	\$ 8,180,773	\$ 8,180,773	\$ 708,343	\$ 8,180,773	\$ 8,180,773	\$ 708,343	\$ 8,180,773	\$ 8,180,773	
إضافات مالية من صاحب المشروع													
رصيد الكاش في البنك	31,407,615	35,43,7039	43,61,7812	44,32,6155	52,50,6928	60,68,7701	61,39,6044	69,57,6817	77,75,7590	78,46,5933	86,64,6706	94,82,7479	94,827,479
رصيد البنك بداية السنة													رصيد البنك نهاية السنة

100000													
مبلغ القرض	\$ 100,000												
نسبة الفائدة	4.00%												
مدة سداد (الأشهر)	60												
الدفعة الشهرية	\$1,842												
	شهر 1	شهر 2	شهر 3	شهر 4	شهر 5	شهر 6	شهر 7	شهر 8	شهر 9	شهر 10	شهر 11	شهر 12	الأجمالي
السنة الأولى													
الفائدة	333	328	323	318	313	308	303	298	293	287	282	277	3,664
الأساسي	1,508	1,513	1,518	1,523	1,529	1,534	1,539	1,544	1,549	1,554	1,559	1,565	18,435

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رصيد القرض المتبقي	98,492	96,978	95,460	93,936	92,408	90,874	89,336	87,792	86,243	84,689	83,129	81,565	
السنة الثانية													
الفائدة	272	267	261	256	251	246	240	235	230	224	219	213	\$ 2,913
الأساسي	1,570	1,575	1,580	1,586	1,591	1,596	1,601	1,607	1,612	1,617	1,623	1,628	\$ 19,186
رصيد القرض المتبقي	79,995	78,420	76,840	75,254	73,663	72,067	70,466	68,859	67,247	65,629	64,006	62,378	
السنة الثالثة													
الفائدة	208	202	197	192	186	181	175	169	164	158	153	147	\$ 2,132
الأساسي	1,634	1,639	1,645	1,650	1,656	1,661	1,667	1,672	1,678	1,683	1,689	1,695	\$ 19,968
رصيد القرض المتبقي	60,744	59,105	57,461	55,811	54,155	52,494	50,827	49,155	47,477	45,794	44,105	42,410	
													رصيد القرض المتبقي

38700													
مبلغ القرض او السلفة	\$ 38,700												
نسبة الفائدة	0%												
مدة سداد (الأشهر)	12												
الدفعة الشهرية	\$3,225												
	شهر 1	شهر 2	شهر 3	شهر 4	شهر 5	شهر 6	شهر 7	شهر 8	شهر 9	شهر 10	شهر 11	شهر 12	الأجمالي
السنة الأولى													
الفائدة	-	-	-	-	-	-	-	-	-	-	-	-	-
الأساسي	3,225	3,225	3,225	3,225	3,225	3,225	3,225	3,225	3,225	3,225	3,225	3,225	38,700
رصيد القرض المتبقي	35,475	32,250	29,025	25,800	22,575	19,350	16,125	12,900	9,675	6,450	3,225	-	-
السنة الثانية													
الفائدة	-	-	-	-	-	-	-	-	-	-	-	-	\$ -
الأساسي	-	-	-	-	-	-	-	-	-	-	-	-	\$ -
رصيد القرض المتبقي	-	-	-	-	-	-	-	-	-	-	-	-	-
السنة الثالثة													
الفائدة	-	-	-	-	-	-	-	-	-	-	-	-	\$ -
الأساسي	-	-	-	-	-	-	-	-	-	-	-	-	\$ -
رصيد القرض المتبقي	-	-	-	-	-	-	-	-	-	-	-	-	-

الإهلاك	
المباني	50
ترميم مبني مستأجر	10
الألات والمعدات	7
الأثاث	5

السيارات	5													
أصول ثابتة أخرى	5													
		شهر 1	شهر 2	شهر 3	شهر 4	شهر 5	شهر 6	شهر 7	شهر 8	شهر 9	شهر 10	شهر 11	شهر 12	الإجمالي
بداية الاهلاك	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	\$ 30,814
الاهلاك الإضافي		0	0	0	0	0	0	0	0	0	0	0	0	
نهاية الاهلاك	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	\$ 30,814
السنة 2														
بداية الاهلاك	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	\$ 28,246
الاهلاك الإضافي	-	-	-	-	-	-	-	-	-	-	-	-	125	
نهاية الاهلاك	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,693	\$ 30,939
السنة 3														
بداية الاهلاك	2,693	2,693	2,693	2,693	2,693	2,693	2,693	2,693	2,693	2,693	2,693	2,693	2,693	\$ 29,621
الاهلاك الإضافي	-	-	-	-	-	-	-	-	-	-	-	-	292	
نهاية الاهلاك	2,693	2,693	2,693	2,693	2,693	2,693	2,693	2,693	2,693	2,693	2,693	2,693	2,985	\$ 32,606

9.1.1 Explain the Concept of Resource Leveling and Smoothing

In each project there are tasks need to be accomplished using sufficient resources. Leveling is required because resources are not unlimited, there are usually some constraints of all types of resources such as labors and raw materials. For example, running machines for 10 or 12 hours for 3 days while keeping them off for coming 24 hours due to maintenance will affect any subsequent stages that depending on machines outputs. Similarly, project manager cannot force labors to work for extra hours for the whole project schedule, there should be some certain levels. Although, resource leveling may result in longer schedule than initial plan, project plan should be balanced not to be too late behind deadline or too early requires extra resources.

Resource smoothing is mainly about balancing work schedule and utilize resources effectively. As well as responsibilities should be assigned fairly, resources are better be equally distributed according to project period. Smoothing avoids high demands of resources in short period while making them relaxed and available for other periods among schedule. Smoothing acts as a

routine daily work. Matching tasks schedule with needed resources is a great challenge faced by project managers to keep executing tasks in continuous and balanced manner

9.2.1 Develop the procurement execution process, and contractor selection.

- Identify project's material resources.
- Find all possible suppliers that meet materials' characteristics as required.
- Priorities suppliers according to quality, budget and delivery.
- Evaluate vendors and negotiate terms to build strategic partnerships.
- Proceed purchase order.
- Perform quality check for received materials.
- Match quantity invoiced and received.
- Finalize payments and keep records and account statements.

Contractor selection is similar to supplier selection in terms of looking for best prices and best quality. In order to achieve optimum outputs material and contractor should meet high standards. Contractors could be classified by governmental or international agencies and their past projects. This process requires knowledge and experience to analyze offers and after projects services. Contractor relationships may last for years therefore it is very critical to pick best one with maximum benefits for both parties. If a contractor has many branches across country it will add great values for mobility and availability of resources.

9.3.1 Agenda-Invitation

Weekly Project Meeting

[Pick the date]

[9:00 a.m. to 5:00 p.m.]

Meeting called by: ////

Attendees: All Project Team

Please bring: All Updated Documents

[9 a.m. – 10 a.m.]	Introduction Continental Breakfast Welcome: Tariq Assehemi
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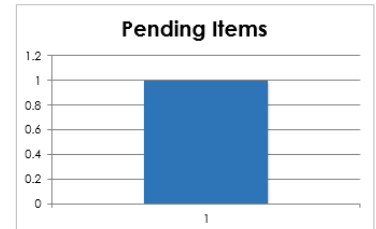
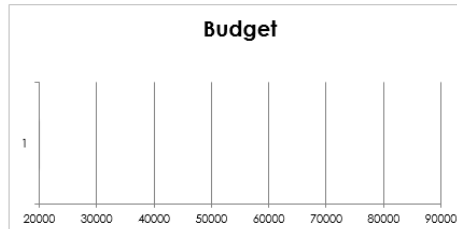
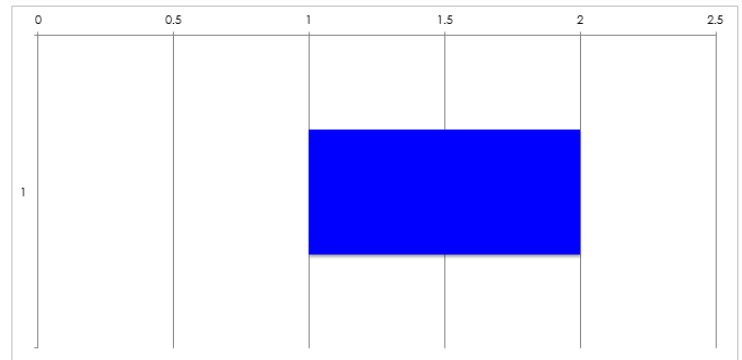
[10 a.m. – noon]	Project Review Project reports and KPIs
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[Noon – 4 p.m.]	Working Groups Group A: Product Planning Group B: Product Development Group C: Risk Assessment
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[4 p.m. – 5 p.m.]	Wrap-Up Q&A Session
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9.3.2 Performance Measurement

TASKS	ASSIGNED TO	PRIORITY	STATUS
Set Kick-Off Meeting	Mohammed		COMPLETE
Agree on Objectives	Mohanna	★	COMPLETE
Detailed Requests	Tariq		COMPLETE
Hardware Requests	Raed	★	OVERDUE
Final Resource Plan	Murad		IN PROGRESS
Staffing	Yasser	★	IN PROGRESS
Technical Requests	Faris		NOT STARTED
Testing	Asma	★	NOT STARTED
Dev. Complete	Mohanna	★	NOT STARTED
Hardware Configuration	Mohammed		NOT STARTED
System Testing	Tariq	★	NOT STARTED
Launch			



9.3.3 Develop a change Request model

We will evaluate the impact of the change request

When a stakeholder or team member submits a change request, you will need to check it to make sure the change is necessary, and then assess the effects. And we ask some questions

- What is the change?
- Why is the change being introduced?
- Does the change contribute to the objectives of our project?
- What are the challenges of change?

We will explain all the steps the change will require - and make sure we have specific information about the potential project schedule and budget implications. This way, everyone can agree on the next steps and any additional costs before proceeding with the work.

2. Adjust project plan.

Once everyone has agreed on the next steps, it's time to update the plan. Having a documented plan makes it easier for us to manage change to completion because it provides a single source of legitimate truth

3. Connecting the change.

We will need to inform the team and stakeholders. With this change, everyone knows the path forward and can work together to bring the project back to success

10.1.1 Identify Risks (threats) and opportunities, and give examples:

Risk identification:

Risk identification is the process of documenting any risks that could keep an organization or program from reaching its objective. It's the first step in the risk management process, which is designed to help companies understand and plan for potential risks. Examples of risks include theft, business downturns, accidents, lawsuits, or data breaches.

Threats:

This component of a strategy for project risk management refers to actions for identifying, analysing, and mitigating negative consequences that are risks. Threats management involves utilization of project risk management resources to describe risks, analyse their attributes, evaluate the probability of occurrence, and add identified risks to the risk register.

Like with managing opportunities, managing threats refers to a 4-stage process (Identify, Analyses, Plan and Manage). A project risk manager is responsible for organizing a team which will follow a risk treatment plan and report back on current progress of project risk management strategy.

Opportunities:

The aim of this risk response strategy is to eliminate the uncertainty associated with a particular upside risk. An opportunity-risk is defined as an uncertainty that if it occurs would have a positive effect on achievement of project objectives. The purpose of the risk and opportunity identification step is to generate a comprehensive list of risks and opportunities based on those events that might create, enhance, prevent, degrade, accelerate, or delay the achievement of objectives.

Examples:

Risk Avoidance

The best way to explain risk avoidance would be to take the example of an investor trying to manage his/her risk in the company that they invested in. If the company they have invested in is going through losses and decide to sell their investment (stock) in the company, they can exclude it from their list of investments, it is considered risk avoidance.

Customer Credit Risk Management

When it comes to the retail industry, there is always a risk because of the external factors involved. One such external factor is customer credit, which can really impact the profits of the company. If companies conduct a customer credit risk analysis and find that things are not going so well, they can manage their risk. This can be done by stopping the extensions on invoices to the customers the company views as high risk so that it can eliminate further risk.

Industry-Specific Strategy

Take the manufacturing industry as an example. One organization wants to manufacture a new product. Before they can start production for the same, they have to conduct a thorough risk analysis to understand the level of risk the company can face. Then they can decide if the benefits of manufacturing the new product can outweigh the risks that come with it or not.

Elimination of Contract Risk

When investors make investments overseas, there can be external risks to the company. The foreign exchange rates can fall, which can lead to losses, which is considered to be a big threat

to the investor. To deal with this risk, the investor can make the contracts in USD and keep themselves safe.

Compliance Risks

Maintaining regulatory compliance is an important aspect of any institution, which can, in turn, become a huge risk. Companies need to ensure they have controls in place to monitor their organizations' compliance on a regular basis. They need to monitor all their existing processes, procedures, and technologies and stay compliant. This can be effectively done with a risk management system.

Safety Risks

There can be a risk to the safety of the operations within the company. This needs to be analyzed and taken care of regularly as well. All maintenance processes need to be audited regularly to check for latent human error in the processes. This can also be handled very efficiently if companies implement a risk management system.

10.1.2 Prepare Risk register

BANK RISK REGISTER

Bank	Risks registered by
Address	Last change date
	2/5/2022

RISK IDENTIFIED	PROBABILITY	IMPACT	RISK RATING	POTENTIAL FINANCIAL LOSS	RESPONSIBLE
Interest rate risk. Possible occurrence of adverse effects on the bank's financial result and capital on account of banking book items caused by changes in interest rates.	3	2	6	\$3,600,000.00	Garry Finch
Legal risk. Loss caused by penalties and sanctions originating from court disputes due to breach of contractual and legal obligations, and penalties and sanctions pronounced by a regulatory body.	1	4	4	\$15,000,000.00	John Doe

ENGINEERING

Risk Register

LOW RISK

2

Activities

MEDIUM RISK

1

Activities

HIGH RISK

0

Activities

Category: Categorization of risks by area of project affected. What is the risk? The risk stated in a complete sentence which states the cause of the risk, the risk, and the effect that the risk causes to the project. Likelihood: The likelihood that a risk or opportunity will occur (on a scale from 0 to 5 with 5 being the highest). Severity: The impact of the risk on the engineering process if the risk occurs (scale from 0 to 5 with 5 being the highest). Risk Factor: Determined by multiplying likelihood and severity (scale from 0 to 25).

Mitigation: The action which is to be taken to avoid the risk or if this risk occurs.
Priority: If more than 1 risk is active, priority ranking decides which risks are treated first (Options: Low, Medium, High priority).
Responsible: The person who the project manager assigns to watch for risk triggers, and manage the risk response if the risk occurs.

Category	What is the risk?	Likelihood 1=Unlikely 5=Very likely	Severity 1=Little impact 5=Major impact	Risk factor (LxS=) Low Risk 1-8 Medium Risk 9-14 High Risk 15-25	Mitigation What can you do about it?	Priority	Responsible?
	Concerns over packaging, unable to provide adequate design	1	3	3	Consult an external company (industrial design) at an early stage	Low	B. Harmony
	Prototype performance not met (3000pcs/h)	1	5	5	Provide refunds to the client in case of failure.	Low	J. Doe
	Product tests are not set up correctly	2	5	10	Detailed test feasibility to be assigned to the person making the test plans.	Medium	G. Foreman
							
							
							
							

PROJECT RISK REGISTER

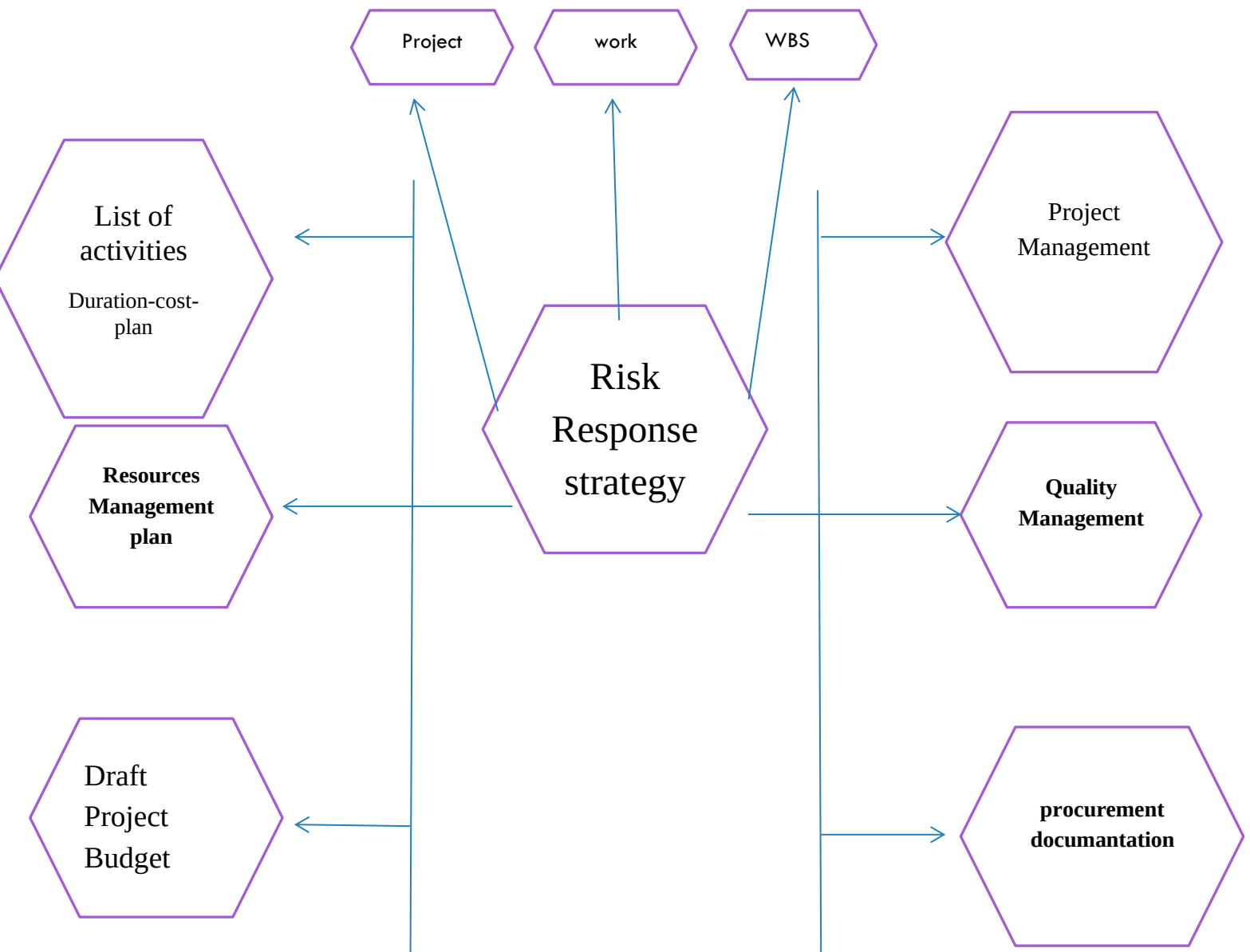
PROJECT NAME:	PROJECT #:	PROJECT VALUE:
CLIENT NAME:	START DATE:	
PROJECT MANAGER:	END DATE:	

DATE	#	RISK DETECTED	PROJECT IMPACT	CATEGORY	RISK RATING	RESPONSIBLE	STATUS	CLOSURE DATE
4/5/2022	R000	Chip manufacturing worldwide crisis	Electronic boards delay - more than 3 weeks	Supplies	HIGH	John Richardson	Ongoing	
4/9/2022	R001	Emergency equipment renovation	Closing offices for 2 days - delay	Infrastructure	MEDIUM	Isabella Grey	Finished	04/14/2022
4/10/2022	R002	Additional permits related to RoHS	Not able to deliver products w/o certificate	Permits	HIGH	John Forester	Not Started	

LAST CHANGE DATE: 16/04/2022

10.1.3 Specify Risk Response Strategies

Risk Response Strategy is an action plan on what you will do a Risk on your project. The main risk response strategies for threats are Mitigate, Avoid, Transfer, Actively Accept, Passively Accept, and Escalate a Risk.



10.2.1 The Stakeholder Engagement Assessment Matrix

The Stakeholder Engagement Matrix is a very useful tool, and it supports the comparison between the current engagement levels of your stakeholders and the desired engagement levels required for successful project delivery.

	Unaware	Resistant	Neutral	Supportive	Leading
Ministry of Commerce				★	
Ministry of Industry and Mineral Resources			★		
Ministry of Environment, Water and Agriculture					★
General Directorate of Civil Defense	★				
Zakat, Tax and Customs Authority			★		
Resources and Social Development					★
Audiovisual Media Authority		★			
Saudi Authority for Intellectual Property					★
Ministry of Human Resources and Social Development				★	
Social Development Bank Entrepreneurship Program	★				

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