

AQARMGT

Assets Management

SRS 4.2

Contents

AQARMGT

1. Introduction
 - 1.1. Purpose**
 - 1.2. Product Scope**
2. Overall Description
 - 2.1. Product Perspective**
 - 2.2. Product Functions**
 - 2.3. Glossary**
3. Specific requirements
 - 3.1. User management**
 - 3.1.1. Create Country Admin (local Admin)
 - 3.1.2. Approve REA and MO
 - 3.1.3. Create Owners, Staff and Tenant Accounts
 - 3.1.4. Update User Information
 - 3.1.5. Block User
 - 3.1.6. Delete User
 - 3.2. Registration, Login and roles management**
 - 3.2.1. REA and MO User Registration
 - 3.2.2. Login
 - 3.3. Building management**
 - 3.3.1. Create Building
 - 3.3.2. Update Building
 - 3.3.3. Delete Building
 - 3.3.4. Assign Owners, Staff, and Tenant to a Property
 - 3.4. Accounting**
 - 3.4.1. Capital expenses (per building and per unit)
 - 3.4.2. Operational expenses (per building and per unit)
 - 3.4.3. Tenant's rent.

3.4.4. REA to Owners.

3.4.5. REA & MO to the Country Admin.

3.5. Leases

3.5.1. Create Lease

3.5.2. Terminate lease

3.5.3. Renew lease

3.5.4. Update lease

3.5.5. Alert lease creation/termination/renewal/update

3.5.6. Lease Template:

3.6. Maintenance is called as Facility management (FM) portal

3.6.1. Introduction about this service

3.6.2. Create a Maintenance Request

3.6.3. Receive a Maintenance Request

3.6.4. Classify a Maintenance Request

3.6.5. Charge a Maintenance Request

3.6.6. Assign Staff to a Maintenance Request

3.6.7. Change the Status of a Maintenance Request

3.7. Notification Hub

3.7.1. Notifications channels

3.7.2. System notifications

3.7.3. Notifications Template:

3.8. Reporting

3.8.1. Generate a report

3.8.2. Exporting reports

3.8.3. Reports Template:

3.9. Rules and regulations

3.9.1. Global Rules and regulations.

3.9.2. Country Rules and regulations.

3.10. Subscriptions and promotion codes management

3.10.1. Set Transaction Price for REA

- 3.10.2. Update Transaction Price for REA
- 3.10.3. Set Transaction Price for MO
- 3.10.4. Update Transaction Price for MO
- 3.10.5. Set Promotion Code
- 3.10.6. View Promotion Codes
- 3.10.7. Update Promotion Code
- 3.10.8. Buy Transactions

4. Facility Management (FM) Portal:

4.1.1. Introduction

5. How does the cost calculated in FM and how does the work flow defined..?

6. Conclusion

6.1.1. This project has to change the world vision in terms of PM & FM. We are open for any enhancement in this project.

1. Introduction

Aqar**MGT** is a modern asset management system. That aim to offer a range of services to its clients that best suit and meet their requirements through continuous improvement and service development. Aqar**MGT** is divided into two segments, the 1st is Property management PM and 2nd is Facility Management FM.

-Services

Dashboard for facility management (part of services)

1.1. Purpose

The purpose of this document is to give a detailed description about the Aqar**MGT** project. The document will explain the functions of the system and illustrate how all the parts of the system will interact together. This document is written primarily to provide and clarify detailed description of the system to the stakeholders.

Owner = Holding

Services of holding could be deactivated

1.2. Product Scope

The system is a web based application that will gives the functionality to manage properties for real-estate agent and the owner of properties. The system will be developed and tested for the following browsers:

- Google Chrome version 36 and above (Full-Support)
- Firefox version 37 and above (Partial-Support) for previous versions
- Internet Explorer version 10 and above (Full-Support) for previous versions
- Microsoft Edge (Full-Support) Safari browser also

2. Overall Description

This section will introduce the general concept of the system. The system is like reporting system.. the super admin is classified to us as holding account for the entire company. Local or country admin is specialized for country level only. So, the holding has the power to deactivate any local admin ... example the Headquarter (super admin) has the power to add, delete, deactivate any country admin or local admin. As I mentioned earlier that each local admin has features may not be available in another local admins. Any country admin has a financial account that counts all income under specific admin and all local admins classified as basket for Holding Admin. The plan in the future to get this Web engine in IPO for global stock market. Also, each local admin valued 1,000,000 Shares. The real value of the local admin is measured by the net income of each country. The holding account is adding all admin accounts together then representative in global market IPO.

Capex
Opex

2.1. Product Perspective

The system will be developed in two languages **Arabic** and **English**, so the views of the system will be **Left-to-Right** and **Right-to-Left**.

2.2. Product Functions

The functions of the system will be based on user roles; each role has access to different functions. The system has 6 different user roles as follows:

- Facility management Provider -Vendors information & location
- Global System Admin (supper Admin) Holding
- Country Admin (local Admin) Ex. Saudi Arabia
- Owner (Property Owner) (The real Estate is creating a contract under their CR. No. for this Owner, and the receipts as well) Could be individual OR Company
- Managing Owner (MO)(Who has no CR. No and Creating a contract under the local Admin CR. No) Change to Property Manager
- Real-Estate Agent Create a contract should be do able by Property Manager
- Real-Estate Agency's Staff Staff is sub-user
- Tenant Could be a person or a company
Tenant should get sms verification fro reset password and password reset
All verification codes generated should be logged

2.3. Glossary

Term	Description
CR	Commercial Registration
REA	Real Estate Agent
MO Property Owner	Building Owner who prefers to manage his own building but he doesn't have any commercial representation. (No CR). But in Kuwait for example he or she does not need to get the C.R from the local admin. We will deactivate the requirement of the CR. Box in Kuwait as example.
Country or Local Admin CR	Commercial Registration of the Country Admin Company
Court Admin (CA)	This court admin is only in Saudi and maybe in other countries ... this user approves the agreement between the MO, REA, and the tenant ... the one who is responsible to add or delete the user is the country admin. This service maybe deactivated in other country admins

User type : multiple user types could be assigned to single user

CA is the representative from the court who will have the login details from the system and will get all the requests from REA and MO, and will approve from the system.

User cannot change National ID & Iqama, only could be done by requesting admin.

National ID/Iqama ID will be entered manually as the mandatory details and copy of ID should be scanned and attached in the profile.

3. Specific requirements

This section will include brief description of all the system interfaces and the functional and logical requirements.

3.1. User management

3.1.1. Create Country Admin (local Admin)

The system shall allow the system admin user to create country admin users. The following fields are entered:

- Name. Markup for lawyer is 2.5
 - Email. markup for IT company is 2.5
 - Password. Holding = 51%
 - Phone number. Local partner = 44%
 - Countries they're managing.
 - The country currency
- CR Number Has to be a company

3.1.2. Approve REA and MO

The system shall allow the country admins to approve the registration of REAs, MOs, and (CA for Saudi as example) to allow them to login into the system and do all functions.

3.1.3. Create Owners, Staff and Tenant Accounts

The system shall allow the REAs and MOs to create Owner, Staff and Tenant users. The following fields are entered: “for the case of MO, infect he is the owner.... this is only for clarification”

- Name.
- Email.
- Password.
- Phone number.
 - o National ID or Social Security No is required for the tenant for some countries (our vision is to prepare some services ON and some services OFF based on the country regulations..).. also this services might be required when the user logged in for some local admins. The REA & MO has the right to bull any tenant registered

Super admin could define a unique Identifier number (e.g National Id , Social security number) for each country and number of digits for that identifier.

History for tenant could only be viewed by going throug the verification process from tenant & paying certain amount of fees from the wallet.

Tenant will get the verification sms including code, and share that code with the requester (REA / MO).

already in the system by submitting his ID no to the system and the system will send a code to the mobile or the email linked to his or her database ... they could see the basic information but they can not see the history of the tenant. This will be exclusive for Local Admin & super Admin. If the RAE & MO needs information for the tenant ... they sent a special request call clearance call request to the admin and the admin will cost them 20\$ for the report BUT after getting approval from Tenant by sending a code to the tenant and the tenant will give the code for Admin.

- o Tenant Could be individual or company ... if individual the ID required and if its Company the CR is required.
- o Owner could be individual or company... If individual the system needs Nation ID or Social Security no. if the owner is a company we need the CR and in this case there will be additional information which is a letter uploaded and signed from the right authority to approve that this person is the representative of the assets. The Admin will approve it based on the provided documents.

There should be only one representative who will handle credentials and manage operations, if the person is changed,, management should inform.

3.1.4. Update User Information

The system shall allow any user of the system to update the information stored in their accounts, including the following:

- Name.
- Email.
- Phone number.
- Password.

3.1.5. Block User

The system shall allow system super admin and country admins to prevent users from accessing the system by blocking their accounts.

User will be blocked if registered documents are expires (National ID, CR, Contract)

3.1.6. Delete User

The system shall system admins and country admins to mark the account as deleted.

All the submitted information has to be verified by specific person OR call center

3.2. Registration, Login and roles management

3.2.1. REA and MO User Registration

The system shall allow the REA and MO users to register in the system. The fields entered are the following:

- Name.
- Address.
- Email.
- Phone number.
- Password.
- In addition to the additional attributes required for property registration in that country's rules and regulations.

3.2.2. Login

The system shall all the users of the system to login using their **email** and **password**. Each user will have their own permissions and functions based on their role.

Password: the password should be min 6 character. Also, the password could be Numbers & symbol such as &%\$# etc also one capital letter.

3.3. Building management

3.3.1. Create Building

The system shall allow REAs and MOs to create property. The fields entered are the following:

- Building name.
- Building Code (XX) (XX could be numbers or letters or Mix for both. but it has to be entered in a way the owner likes it or the REA)
- Location.
- Number of floors.
- Actual price of the building.
- Name of the evaluator who determined that price.
- Upload attachments
- Number of units or Flats in a level.
- Number of Rooms in the Flats

- Each unit or Flat has:
 - Capital assets.
 - Furniture.
 - Upload attachments

3.3.2. Update Building

The system shall allow REAs and MOs to update the information of properties they're managing. They can update the following fields:

- Building name.
- Number of floors.
- Actual price of the building.
- Name of the evaluator who determined this price.
- Upload attachments
- The number of units or flats in a level.
- Number of the rooms in the units or flats. 20% from the revenue should go to building management
- Details of a unit can be updated include:
 - Capital assets. 15% for facility management
 - Furniture. 5% for property managent
 - Upload attachments.

Facility management should be categorized in capex and opex

3.3.3. Delete Building Change delete to disable

The system shall allow REAs and MOs to delete a building. Deleting a building will delete all its information, in addition to dissociating the owners and staff members from it.

The system shall keep the deleted building for 1 year at least in case of someone deleted it by mistake also, there should be a delete confirmation ... Ex. If I want to delete a building the system should pop on box said are you sure do u want to delete this property with bold font

3.3.4. Assign Owners, Staff, and Tenant to a Property

The system shall allow the REAs and MOs to assign the following to a building:

- Owners (each owner has a **percentage**) But one owner is the representative in the system. Other owners could see what is going on only.

- **Staff** either as:

- Building managers.
- Labors.

- Tenants.

Building could have multiple owners and the percentage of ownership could be defined from the agreement / ورثة , and REA will be the representative and responsible to provide the exact percentage of amount/rent to the owners. Owners has to get verified through sms verification before being an owner. REA will transfer the amount and attach bank receipt, and owners has to verify by agreeing on receiving amount from the system.

3.4. Accounting

3.4.1. Capital expenses (per building and per unit)

3.4.1.1. Create capital expenses

The system shall allow REA/Building Manager/MO to add capital expenses to every building and assign these expenses on the building (the owner) or the tenet, using the following attributes:

- Expenses ID
The ID shall be generated in the following format
(Country/Year/CP/Building Code/ID)
e.g. (SA16CPXX00000)
- Date-time
- Amount Recurring Expenses
- Currency
- Bill number
- Description Category: copex/opex
- Vendor
- Issued to
(to be selected from users (owners, tenant related to the building))
- Building
- Unit (Optional)
- Upload attachments (bills)

The system shall generate a printable receipt and send it to the (Issued to) using the receipt template in Appendix I **UCT 3.4.1.1**

Before issuing maintenace, ticket should be generted from building manger or tenant, and assigned to building manger or owner. Ticket could be closed with zero expense

3.4.1.2. Update capital expenses

The system shall allow REA/Building Manager/MO to update capital expenses to every building and assign these expenses on the building (the owner) or the tenet, using the attributes mentioned in **UC 3.4.1.1**

The system shall generate a printable receipt and send it to the (Issued to)

3.4.1.3. Delete capital expenses

The system shall allow REA/Building Manager/MO to delete capital expenses from any building he can manage.

The system shall send a notification the (Issued to) to inform him about deleting the expenses.

3.4.2. Operational expenses (per building and per unit)

3.4.2.1. Create operational expenses

The system shall allow REA/Building Manager/MO to add operational expenses to every building and assign these expenses on the building (the owner) or the tenet, using the following attributes:

- Expenses ID
The ID shall be generated in the following format
(Country/Year/OP/Building Code/ID)
e.g. (SA16OPXX00000)
- Date-time
- Amount Bill will be registerd by the authorized user eg. agent and collected as
- Currency hard copy, and submit details
- Bill number through system,
- Description Vendors will be registerd by the authorized users only with minimum details
- Vendor
- Issued to
(To be selected from users (owners, tenant related to the building))
- Building
- Unit (Optional)
- Upload attachments (bills)

The system shall generate a printable receipt and send it to the (Issued to) using the receipt template in Appendix I **UCT 3.4.1.1**

3.4.2.2. Update operational expenses

The system shall allow REA/Building Manager/MO to update operational expenses to every building and assign these expenses on the building (the owner) or the tenet, using the attributes mentioned in **UC 3.4.2.1**. The system shall generate a printable receipt and send it to the (Issued to).

3.4.2.3. Delete operational expenses

The system shall allow REA/Building Manager/MO to delete operational expenses from any building he can manage. The system shall send a notification the (Issued to) to inform him about deleting the expenses.

3.4.3. Tenant's rent.

3.4.3.1. Record tenant's rent installment transaction

The system shall allow REA/Building Manager/MO to record tenet rent installment transaction, as follows:

- Record ID
The ID shall be generated in the following format
(Country/Year/RC/Building Code/ID)
e.g. (SA16RCXX00000)
- Lease ID (drop down menu, it shows from the system)
- Installment Number
- Barcode for the receipt Tenant will have the complete history of previous rents and previous properties.
- Amount
- Currency
- Status
- Tenant

The system shall generate a printable receipt and send it to the tenant. A notification message should be sent to the owner and the Building Manager. The notification option should be classified in a way all parties agreed from the beginning.

CONSTRAINTS:

The REA/Building Manager/MO could not create a receipt without a valid contract. Tenant can pay rent by different payment methods (monthly, 2 months ... yearly etc. OR fix amount). REA or Owner will define the expenses related to rent eg. REA comission, water bill, insurnce etc. REA and owner will have the report of rent calculation based on all deductions.

3.4.3.2. Update tenant's rent installment transaction

The system shall allow REA/Building Manager/MO to record tenet rent installment transaction attributes as mentions in **UC 3.4.3.1**. The system shall generate a printable receipt and send it to the tenant. A notification message should be sent to the owner.

3.4.3.3. Delete tenant's rent installment transaction

The system shall allow REA/Building Manager/MO to delete tenet rent installment. The system shall allow REA/Building Manager/MO to choose and send a notification to both owner and tenant.

Instead of Delete, User refund amount

3.4.3.4. View Tenant's Payments

The system shall allow REA/Building Manager/MO to view tenant's payment records. The system shall allow REA/Building Manager/MO to filter tenant's payment records based on:

- Date range
- Tenant Add colors for current status of cash payment eg. tenant -> REA-> Owner
- Owner Paymnet has to be mad from AQAR to everyone in 3 working days
- Building
- Unit or flat
- Room optional, but required Unit or flat no. if you would like to view the specific

The system shall allow the REA/Building Manager/MO to see if the payment is marked as paid to the owner or not. **UC 3.4.4.1.**

The System shall allow the owner mark the payment received or not ... if received, then the manager should be notified this payment closed from owner.

3.4.3.5. Alert Due Payments

The system shall alert the tenant about a due payment. The system shall allow the REA/Building Manager/MO to alert tenant about a due payment.

The REA/MO shall be able to set the notification time. The notification could be sent by SMS and/or Email.

Notifuication period could be defined by admin pr who define the contract by email or SMS

3.4.4. REA to Owners.

3.4.4.1. Mark tenant's payment as **paid** to the owner

The system shall allow REA/Building Manager/MO to mark tenant's payments as paid to the owner. A notification message should be sent to the owner.

For MO we don't need to have confirmation, Only for REA/Building Manager.

The system shall send the confirmation of all payments in one link by email... he or she press the link and it open up a page listed all money transferred then he approved it all instead of going through the payment one by one ...

- Next step the owner should go to the link and close it all if he or she received the payment, so the loop is closed 100%

3.4.4.2. Mark tenant's payment as **not paid** to the owner (undo)

The system shall allow REA/Building Manager/MO to mark tenant's payments as not paid to the owner. A notification message should be sent to the owner.

There should be final approval from the owner to UNDO rent paid (Status).

3.4.5. REA & MO to the Country Admin.

3.4.5.1. View MO's Contracts under the Country Admin CR

The system shall allow the admin and country manager to view contracts signed on behalf of the Country Admin. The system shall allow the admin and country manager to see the contract details as well as if the fees that's paid to the Country Admin. The system shall allow the admin and country manager to filter contracts based on:

The system shall show all revenue coming under the country admins

- Date range
- Owner
- Building
- City

USE POWERBI AS A TOOL FOR DASHBOARDS AND REPORTING

3.4.5.2. Mark MO's Contracts Payment as **Paid** to the Country Admin CR

The system shall allow the admin and country admin to mark MO's payments as paid to the holding. A notification message should be sent to the MO.

Receipt should mention received by

3.4.5.3. Mark Tenant's Payment as **Not Paid** to the Owner (Undo)

The system shall allow the admin and country manager to mark MO's payments as not paid to the holding. A notification message should be sent to the MO.

3.4.5.4. Alert Due Payments

The system shall Alert MO about a due payment. The system shall allow the admin and country manager to alert MO about a due payment.

3.5. Leases

3.5.1. Create Lease Contract

The system shall allow REA/MO to create leases for any unit that they manage/own between them and the tenant, in case of the MO they shall use the Country Admin CR. Using the following attribute:

- Lease ID
The lease ID shall be generated in the following format (Country/Year/CT/Building Code/ID)
e.g. (SA16CTXX00000)
- Duration
- Number of Installment
- Creation date
- Starting date
- Barcode for the contract
- Status
- Tenant
- Building
- Unit
- REA/MO
- Lease transcript Previous history, not a field
- CR
- is Automatic Renew (Boolean) **Closing date** (also could be changing automated if the lease not terminated also if the lease renewable ticked box is activated)

3.5.2. Terminate lease

The system shall allow REA/Building Manager/MO to terminate leases for any unit that they manage/own.

The system must promote the REA/ Building Manager/MO to enter their feedback about the tenant as follows:

- Feedback box
- Attachment files (optional) in case of the user who is entering the feedback wants to support the feedback by official documents..
Example a tenant has not paid a rent for a while or annoying neighbors, if the Owner or Manager did official complain they could

upload it to be recorded in the system for the user. The user could not complain in the local admin if there is official document damaging his or her history ...

Only the person who made a comment can delete /edit

3.5.3. Renew lease

The system shall allow REA/MO to renew leases with the same lease terms, using the attributes mentioned in **UC 3.5.1**.

The system shall renew pre-existing lease if it's marked as automatic renew.

3.5.4. Update lease

The system shall allow REA/MO to update leases for any unit that they manage/own.

3.5.5. Alert lease creation/termination/renewal/update

A notification message should be sent along with the new lease generated to the lease parties in event of Create, Terminate, Renew and Update the lease.

3.5.6. Lease Template:

Lease template shall be one of the following:

- Default template.
 - The system shall generate lease inherited from the Default template created by the admin.
- Custom-made template.
 - Each REA/MO can customize their own template from there control panel.

AQARMGT logo will be with the barcode

3.6. Maintenance is called as Facility management (FM) portal

3.6.1. Introduction about this service

Facility Management service is built in for any properties saved in the system, however if you the client needs to use it, the client should register in Facility Management portal and link the designated property to FM. Once the system is linkage the services below is delivered.

3.6.2. Create a Maintenance Request

The system shall allow the tenant or building manager to submit a maintenance request. The following fields will be filled when submitting a request:

- Title.
- Category
 - **Soft Services**
 - Cleaning inside the building
 - Garbage Collection
 - Pest Control
 - Landscaping
 - Catering
 - Wi-Fi Services
 - Security Camera Services
 - Water supply
 - Others
 - **Hard Services**
 - Cradle Cleaning
 - Electrical Work
 - Plumbing work
 - AC work
 - Elevator
 - BMS
 - Fire system & alarms
 - Others
- Photo.
- Description.

Request will be generated from either tenant or REA/MO and forwarded to FM service provider as email OR SMS.

3.6.3. Receive a Maintenance Request

The system shall the building manager for assigned staff member to receive the maintenance request, it shall have the following fields:

- Tenant name.
- Tenant mobile number.
- Tenant building, level and unit.
- Photo.
- Description.
- Location link
- Priority: Low (Has to be closes within 48hrs), Mid (24 hrs), High (3 hrs) in the working days

3.6.4. Classify a Maintenance Request

The system shall allow the REA/MO/Building Manager to classify the request under the following types of expenses:

The ticket opens from client then to manager so, either he is going to do the job or assign it to employee or third party once the job is finished the ticket needs to be closed from the 1st one assigned and then he or she could have classified the job as capital or operating expenses. however, there should be a link sent to the client and he has to close it by choosing either resolved or not resolved, if it is not resolved the ticket will go to the owner or the manager ONLY to be investigated:

- Capital expense
- Operational expense

Only the requester can close the ticket after confirmation

3.6.5. Charge a Maintenance Request

The system shall allow the REA/Manager/MO to charge the cost of the request to the owner or the tenant.

3.6.6. Assign Staff to a Maintenance Request

The system shall allow the building manager to assign building staff to a maintenance request. A notification shall be sent to the staff member and the tenant.

Request should be assigned to lower level users only.

3.6.7. Change the Status of a Maintenance Request

The system shall allow the building manager to set and change the status of the request:

- New.
- Assigned.
- Resolved. Should be from facility management portal with receipt or 0 (ZERO) cost

The manager could close the request as resolved after month from issuing the request. Canceled Statement

3.7. Notification Hub

3.7.1. Notifications channels

The System shall allow the user to choose receive a notifications through one or all the following channels.

- Email
- SMS

- These options will be managed under country Admin Account and through his Opex

3.7.2. System notifications

The system shall send notifications to users in the following events:

- The creation of their accounts.
- REAs when their CR is about to expire.
- Tenant when the contract is signed
- Tenant when the payment due is near.
- Tenant when the payment is due.
- Building manager when maintenance is requested.
- Building staff when they're assigned to a maintenance request.
- Tenants/Manager when the maintenance request is completed.
- Tenants, REAs/MOs when the contract is about to expire.
- Tenants, REAs/MOs when the contract expires.
- REAs/MOs when tenants submit their feedback.
- Owners, building managers and staff when they're assigned to a building.

3.7.3. Notifications Template:

Notifications template shall be one of the following:

- Default template.
 - The system shall generate notifications inherited from the Default template created by the admin.
- Custom-made template.
 - Each REA/MO can customize their own template from their control panel.

3.8. Reporting

3.8.1. Generate a report

3.8.1.1. Income and expenses reports

The system shall allow the REA/MO/Owner to generate a reports that show the income and the expenses per user, building, or unit for a period of time.

3.8.1.2. Available units

The system shall allow the REA/MO/Owner to generate a reports that show the available units per user, or building for a period of time.

There should be index on the lift taps shows the performance indicator with %, so if the building fully occupied the indicator shows 100%.

System should send weekly reports

Dashboard reports duration (time period) could be defined from admin

3.8.1.3. Tenant history

The system shall allow the REA/MO/Owner to generate reports that show leases, payments, maintenance request per user for a period of time.

3.8.1.4. Unit history

The system shall allow the REA/MO/Owner to generate reports that show leases, payments, maintenance request per unit for a period of time.

3.8.1.5. Payments.

The system shall allow the REA/MO/Owner/tenant to generate reports that show payments, and the states of every payment per lease for a period of time.

3.8.1.6. Maintenance

The system shall allow the REA/MO/Owner/building manager to generate reports that show maintenance request per unit, or a building for a period of time.

3.8.1.7. Actual income compared to the business plan income.

The system shall allow the REA/MO/Owner to generate reports that show income, expenses per unit, user, or a building for a period of time.

There should be index on left tab that shows the Financial statistics where it could illustrate the actual income y1 axes with the business plan income axis also we can integrate the performance indicator on y2 axes and the time is X-axes

Vertical bar graph

business plan will be 70% of the expected total revenue % amount would be define able by the admin based on location of property.

3.8.2. Exporting reports

The system shall allow the user to export a printable report and send it to email in the following formats:

- Spreadsheet.
- PDF.

3.8.3. Reports Template:

Reports template shall be one of the following:

- Default template.
 - The system shall generate notifications inherited from the Default template created by the admin.
- Custom-made template.
 - Each REA/MO can customize their own template from there control panel. Layout user-friendly reports

3.9. Rules and regulations

3.9.1. Global Rules and regulations.

3.9.1.1. Default Currency

The system default currency shall be US Dollar (\$).

3.9.2. Country Rules and regulations.

3.9.2.1. Create Country

The system shall allow the system admin to create a country, using the following attribute:

- Name
- Currency
- Currency Rete to USD
- Subscription Pricing & Rates

3.10. Subscriptions and promotion codes management

The System is following Software as a Service (SaaS) Model based on number of transaction for ever contract or receipt is made by the REA or MO.

System could offer free wallet credit based on certain criteria, it should be from Holding(super admin) ONLY

3.10.1.Set Transaction Price for REA

The system shall allow the country admin to set the price for the number of transactions to be bought by the REA.

FM provider will be charger some certain amount based on each completed ticket. The pricing has a **discounted rate** that lower the price as the number of transaction increased.

The system shall allow the country admin to determine the **weight** of every type of transactions for REA. E.g. 1 Contract = 1 transaction.

The REA subscription settings has the following attributes:

- Transaction Price
- Discounted Rate Ignore completely
- Contract Transaction Weight
- Receipt Transaction Weight

3.10.2.Update Transaction Price for REA

The system shall allow the country admin to update the price for the number of transactions to be bought by the REA. The attributes to be updated by the counter Admin is mentioned in UC 3.10.1

3.10.3.Set Transaction Price for MO

The system shall allow the country admin to set the price for the number of transactions to be bought by the MO.

The pricing has a **discounted rate** that lower the price as the number of transaction increased.

The system shall allow the country admin to determine the **weight** of every type of transactions for MO. E.g. 1 Contract = 100 transaction.

The MO subscription settings has the following attributes:

- Transaction Price
- Discounted Rate
- Contract Transaction Weight
- Receipt Transaction Weight

3.10.4.Update Transaction Price for MO

The system shall allow the country admin to update the price for the number of transactions to be bought by the MO. The attributes to be updated by the counter admin is mentioned in **UC 3.10.3**

3.10.5.Set Promotion Code

The system shall allow the system country admin to add two type of promotion codes:

- Fixed Amount discount
- Percentage discount

These two type of Promotion codes has the following attributes:

- Code Name
- Amount
- Starting Date
- Ending Date
- Max Usage
- Status (Active, Used, Expired)

3.10.6.View Promotion Codes

The system shall allow the system country admin view list of all Promotion codes.

3.10.7.Update Promotion Code

The system shall allow the system country admin to update existing promotion codes. The attributes to be updated by the counter Admin is mentioned in **UC 3.10.5**

3.10.8. Buy Transactions

The system shall allow the REA/MO to buy a number of transactions, Based on the pricing model for each type of users. The system shall allow REA/MO to add a promotion code if available.

in case of low wallet credit, send notifications.

4. Facility Management (FM) Portal:

4.1.1. Introduction

This service will be totally different than Property management as I mentioned above. This service is additional to PM, as example this will provide maintenance database and services for properties also, this will be provided either by MO, REA, Individuals (IND) ,or ~~Facility Management Agent (FMA)~~. All maintenance employee who are classified under the MO account could utilize this service, and it could be the property management staff is the same facility management staff but this is not recommended for medium and large scale assets. The PM & FM staff could be the same if the assets classified as small business.

So, simply I will explain the users in bullet points:

- MO (the owner of building could have under his management a team)
- REA (the real estate could have under his super vision a team)
- Individuals (IND)(those people who are working for himself as professionals and they deliver services for the market) mainly they are specialized based on the hard & soft skills mentioned above.
- PMA (this is a third party services, serve all market, they could select the services that they are providing in specific and they could select the area that they are covering)

5. How does the cost calculated in FM and how does the work flow defined..?

The country admin is collecting fees from Property Management (PM) and through Facility Management (FM). For PM we mentioned it, and the FM will be collected based on

- The MO, REA, IND and Facility Management Agent (FMA).
 - MO services, it will add charge 5 USD per month per building to the FM account in the local admin so, the charge as 5, 10, 20, and 30 USD for 1-10, 1-50, 1-100, and 1-500 employee respectively in the organization chart.
 - REA services, it will add charge 5 USD per month per building from the FM account, and 5, 10, 20, and 30 USD for 1-10, 1-50, 1-100, and 1-500 employee respectively in the organization chart.
 - IND services, those will be charged 1 USD per service they providing per month and the diameter of their services is 50 KM if he needs another 50KM so he or she will add 1 USD. All IND has the option to build their profile and they but all work they have done in their work profile. They could be linked by Facebook, Instagram, twitter, linked in , WhatsApp, and (abdulrahman Ayiadh app)
 - For FMA, the cost will be different the FMA will be as a third party and cost will be for no. of employee, to hold all services for tracking employee performance and tracking you company car and employee vacation schedule... Also you will be nominated as third party provider. In addition to that you will choose your services in particular area. The request will be from either MO and his staff, REA and his staff, anyone in the region that you have chosen. The cost will be 5, 10, 20 , and 30 USD for 1-10, 1-20, and 1-30, 1-50 employee respectively. The request will be sent from clients and the provider has 5 minutes to accept or reject. Any provider will have status as free or busy ... the status free the request will be directed and if the status is busy it will go to the next agent in the queue. The client has option to select the provider automatically or he could do it manually to choose the optimum provider.
 - ❖ Services that could be created under FMA:
 - Profile for the company & Headquarter
 - All bills registered for the company and each employee could have the ATM machine and the ref.

no in the receipt could be stored in addition to the receipt no. Also, the payment could be cash or online paid.

- The FMA has option for annual contract and agreement online between customer & Agent and contract has a number ... the contract has options..
 - The client pay lump sum with spare part and without
 - Per visit excluding space parts
 - The spare parts charge could be 10%, 20%, or 30% above the origin price and there should be uploaded for the origin bill.
 - The charge per hour and the minimum hours should be highlighted
- There should be store inventory.
- Employee job title and each employee has tools registered.
- Backup strategy for any employee who is willing to take a vacation. (acting loop)
- After completing the job for the employee, there should be a feedback launched publicly and the ticket can not be closed without the code sent to client.
- ❖ The client when he or she open a service portal, the first option he could select what he wants, either from IND or from FMA.
- ❖ If he select IND, then he should select the services provided, if so then he press search and he will see the available IND provider, he could send him WhatsApp or any active social media in the region under the local admin, and even he could send him the location of the client. Also, the client could see the people locations on map like Uber services style
- ❖ If the job completed, the client has the option to close the ticket without feedback and he could ask the IND to give the client the code sent to IND that allowed the client to

write a feedback. The feedback will increase the professional skills. If the IND did not give the client the code, he should consider the job free and he should report it to the local admin to deactivate his or her account.

- ❖ If the client chose the FMA, then he has option to select the services provided, after that he could select either manual search or auto search. If manual he or she will choose the service provider. But if the client chose the service auto then the system in back end has a queue and will choose the client based on the queue order and after sending the request the provider has less than 3 minutes to accept or reject the order. If the provider accepted the order then the work should be done.
 - ❖ If the FMA & IND accepted the job there should be discussion portal by chat & by voice like WhatsApp but inside the app then if they agreed on the job the quotation will be sent to the client after that the client accepted the job then the work starts. After finalizing the job the records should be safe.
 - ❖ The client could be a person or a company.
- Store inventory online for MO, REA, and FMA only
 - The store specification will be highlighted later on ... but there is tracking for every item in & out from the store also, in which project consumed.

Ignore all above points last three pages

6. Conclusion

6.1.1. This project has to change the world vision in terms of PM & FM. We are open for any enhancement in this project.