**Technical Offer to include:**

1. Company Profile
2. Project Implementation Plan, Management Plan, and Methodology
3. Project Timeline
4. Project Sponsors Experiences
5. Systems Maintenance Plan
6. Company Previous Experiences in the same field
7. Systems and Devices Specifications in details

**Commercial Offer to include:**

1. Commercial Offer Letter
2. Bid Bond (1% of total offer)
3. BoQ table with prices
4. Company official Documents
5. Original Bid bond submittal commitment

Both of them should be in one PDF file, with font size 16.

Bidder should submit recommended payments milestones to be reviewed by Civil Affairs Agency.

**Project Scope:**

Installing and operating time attendance system for the agency and all of its subsidiaries/branches.

1. Should be an end-to-end time attendance solution
   * ANSWER APF:

RKe’s proposal is based on its solution ITYAAN as core of the end to end solution offered to MAOCA. ITYAAN offers a robust core for attendance management based on the following 4 pilars:

* + - Flexible configuration to map employees, shifts, locations, projects/engagements, scheduled attendance, events, notifications, scheduled notifications, reports, user privileges and devices (biometric attendance devices, card readers, BLE devices, Wifi devices, phones…..).
    - Events management architecture to handle attendance events, location events, absence events, assignment events and other customized configured events. The triggering of events is usually involving the triggering of actions as dependencies with other events and notifications. The events are captured from the different devices of its connected network (fingerprint, face recognition, RFID cards reading, barcode reading, QR Codes reading, temperature measures, GPS measures, etc…) but they can be also created due to specific configurations of the managers of the application.
    - Notifications Center to employees and managers. ITYAAN has a complete set of functionalities to configure the notifications to the customer which can be events triggered based, scheduled based, depending on other events or user actions, broadcasting of communications, etc…
    - Inventory based solution. ITYAAN has its own inventory of devices where to allocate all the devices and smartphones registered in the MAOCA’s attendance network. This approach allows ITYAAN to offer rich possibilities for integration with many different devices (REST integration, SDK Integration, Web embedding Integration, Data layer integration, Middleware API integration, ….).
    - Mobile applications for managers and employees.
    - SDK implementation on Biometric Device.

On top of ITYAAN as core of our solution, RKe will implement the needed integrations and customizations in order to meet completely the MAOCA’s requirements (covering minor GAPS, reporting and reporting visualization, configuration … which will be remarked and committed in this offer document), so, we are offering a truly End-To-End solution but not just from the functional and processes perspective, but also from deployment, configuration and data migration perspective, till having ensured clean Ready For Services KPIs.

1. Should cover all attendance methods (biometric devices, mobile GPS, electronic attendance).
   * ANSWER APF:

ITYAAN has a configurable mechanisms of events where the event types can be fully defined. Typically they are face recognition, location GPS events, fence violation events, attendance events, fingerprint events, wifi/BLE indoor location events … In fact ITYAAN offers a very flexible configuration panel that allows to relate events and the events with notifications.

The collection of events is based on the devices network registered in the inventory of ITYAAN (biometric devices, smart phones, wifi, BLE, ….).

1. Should provide an easy-to-use application to submit attendance
   * ANSWER APF:

ITYAAN has included mobile applications (IOS and Android) for employees and managers which allows the creation of attendance events (finger print, face recognition, Wifi registration, BLE registration, barcode reading, QR Reading). The attendance events can be combined with location reading (GPS, BLE, Wifi, Face identification ….), timing (shifts including early entrance and late leave controls).

The mobile applications are very easy to use.

1. Should include some internal and external systems for attendance operations:
   * Should be central
   * Should be capable to create shifts and assignment to employees
   * Should provide reporting and statistics module
   * Should specify locations where employees can submit their attendance
   * ANSWER APF:

ITYAAN is a central solution.

It allows the configuration of shifts and assignments to employees (either long term or short term assignments).

It has a very powerful module for reports (absences, attendance time, attendance requests violations, …). It is highly configurable easy to understand. RKe considers the adaptation of existing reports in order to meet the visualization requirements demanded by this project. Even the creation of some new based on the data structures managed by ITYAAN.

ITYAAN manages the location of the employees through mobile GPS, Wifi registration, BLE devices registration, managers location, face recognition and card RFI recognition by biometric devices. ITYAAN allows the configuration of location of sites and devices, so, this way even by capture in smartphone or collection of events from other located devices, the applications is able to deduct the location of the employee even indoor and outdoor and to create events/notifications according to the configuration.

1. Should have mobile application for employees’ smart phones to mark their attendance and track their check-ins and check-outs.

* ANSWER APF:

ITYAAN has mobile application for employees and managers. Both available in Google Play and Apple Store. The applications are connected to the server in order to assess the different attendance events being captured in the device (check In, early check In, check out, late check out, attendance during normal shifts of the day, attendance out of configured shifts). The attendance events can be configured as attendance requests also in order to ask the employee to perform attendance beyond the normal check in and check out of every shift.

ITYAAN also allows the configuration of repetition intervals inside a configured shifts profile in daily basis, and the time to perform the attendance from the request reception. ITYAAN is also able to handle the situations of offline (lack of server connection of the mobiles) and also the acceptable distance from the reference site of the engagement configured for the employee.

1. Should be compatible with biometric devices that are already available in agency, solution should be sending attendance data directly from biometric devices to central system.

ANSWER APF:

RKe has already integrated ITYAAN with different biometric devices where is specially remarkable our experience to handle the integration with different SDKs of vendors from Android Native.

Beyond SDK integration we have wide experience on the implementation of architectures managing fingers and faces files in different formats. Our know-how in this area and the inventory conception of ITYAAN are very good to allow the performing integration and proper volume management in the biometric devices network. So, the central node of ITYAAN manages the users, locations, and devices in order to ensure a reasonable loading of users data on each device, which at the same time is giving guarantee of proper operations.

1. Should be capable to send alerts, notifications, and SMSs

ANSWER APF:

ITYAAN has a complete Notifications Center module which allows the complete interaction with employees by the exchange of events and notifications.

The notifications can be alerts/requests, notifications related to events, notifications scheduled by managers, broadcasting of notifications to groups of employees by different criteria of grouping, etc…

ITYAAN is managing different channels for communication to employees where we can remark Push Notifications, SMS and emails.

1. Should provide reports and statistics for attendance

ANSWER APF:

ITYAAN has already implemented a rich module of reports where there are already configured reports as attendance/absence reports. The tool allows to access the data by different criterias and filters, so, the data is easily accessible to create new reports and to cross different tables data to create new ones.

Some of the already made reports are including some KPIs that have been defined in the product in other projects, so, RKe considers the normal adaptation of reports to the specific requirements of MAOCA. Even the visualization layer can be easily adapted to other dashboards and tools (as for instance Crystal Reports).

1. Preferred to have mobile GPS attendance with zone definition.

ANSWERED APF:

ITYAAN already has implemented this feature which allows the creation of attendance events and to manage their check over the configuration of shifts, assignments and expected site location. The events based architecture of ITYAAN allows the correlation of different data entries (at least attendance, shifts and location) and to generate other events/notifications according to the configuration.

So, the configuration of ITYAAN allows the register of site locations for each engagement scheduled for the employee. In the managers web application the configured ZONES are represented in a map where, depending on the visualization privileges of the user, the information of the employees and the ZONES are displayed. The ZONES are represented by color coding (TO EXPLAIN THE COLOR CODING OF ZONES).

1. Should provide electronic attendance that allows employee to upload his attendance from any place at any time (system will send attendance location to attendance personal)

ANSWER APF:

ITYAAN as an events-based architecture that allows the register of any employee event configured. Specially the attendance events which can be generated by different means in the Mobile Application, so, the employee can generated those events from any location (having GPS coverage or other device located as a reference). The same with time. Even though the configuration limits the allowed attendance in certain shifts over the shifts profile of a day, the event of attendance can be generated and processed in the server at any time.

1. Should be compatible with all biometric devices as system will send attendance data on real time basis (fingerprint, face, hand, or RFID cards)

ANSWER APF:

RKe has wide experience on integration of different devices using SDK accessible from Android Native. It is also remarkable the experience of managing fingerprint and faces files with different formats and compression algorithms. As well as our experience to create performing architectures where the volume of data in each device is convenient for the operations activity expected for each location/device. We have also great experience on REST integration using Android Native as client and different protocols of communication (https, http, wss, ftp, ….) depending on the context of each project.

ITYAAN is an Attendance Management system that can talk at SDK level, REST API integration level and also Data Integration level.

1. Application should be available on smart phones

ANSWER APF:

ITYAAN already has Mobile APP for employees, Mobile APP for managers (both in IOS and Android and available in Google Play and Apple Store) and Android Client for Biometric Devices (TELPO). The three of them completely integrated with the backend of ITYAAN.

1. Should be compatible to work on agency servers

ANSWER APF:

ITYAAN is fully available for deployment on premises or cloud deployment. Both are allowed. In this offer document we are considering the “On Premises” option. The core of ITYAAN is done on Linux but the deployment can be done on either Microsoft or Linux Operating system.

1. Should be fully integrated with human resources systems agency already has

ANSWER APF:

ITYAAN has already implemented a module to synchronize its database with ERP/HCM/Human Resources systems of Customers. There are defined different use cases with unidirectional or bidirectional flows.

The flows available so far are:

* Synchronize employees in ITYAAN from Human Resources System.
* Synchronize projects in ITYAAN from ERP/Human Resources
* Synchronize employee statuses in ITYAAN from ERP/Human Resources
* Synchronize shifts in ITYAAN from ERP/Human Resources
* Synchronize Assignments in ITYAAN from ERP/Human Resources
* Synchronize Schedules in ITYAAN from ERP/Human Resources
* Synchronize Attendance in ERP/Human Resources from ITYAAN
* Synchronize Schedule in ERP/Human Resources from ITYAAN

The synchronization module (MW) is managing all these use cases and also the configuration of all the mechanisms to trigger and monitor the different flows. So, the flows can be configured to be automatic, scheduled or manual. From the MW console the logs of the different synchronization executions can be monitored.

The fact of having unidirectional or bidirectional flows responds to the requirements of customers, once it is a matter of data governance the final decision of the mastership of data entities in the customer’s system map. ITYAAN admits the direct configuration of human resources entities on its database and the MW module is ready for the synchronization from ITYAAN, but it is a matter of customer requirements to decide the direction to be implemented in each case. MW modules will be able to open the flows in both sides separately or both simultaneously.

RKe has developed this MW module with the purpose of being extended easily as per the integration needs of each customer, so, the automation of new flows and use cases is not complicated at all. This would mean that we will manage our integration approach through this available framework in ITYAAN in order to make a smooth integration with Human Resources systems of MAOCA. Preferred integration interface from this module is REST API, but other mechanisms can be explored and implemented.

1. Should have a dashboard and reporting modules

ANSWER APF:

ITYAAN has already implemented both dashboards and predefined reports. The dashboards tool allows the users to obtain different reports by defining flexible filters as inputs by picking up different fields and defining the filtering criteria for them.

ITYAAN is completely compatible with other visualization tools available in MAOCA as for instance Crystal Reports.

1. Should comply with civil affairs and ministry of human resources regulations to apply procedures and sanctions

ANSWER APF:

ITYAAN is a solution being implemented in Saudi Arabia under the Saudi law and by meeting all the standard of the Kingdom issued by Ministry of Human Resources.

1. Should comply with vacations and holidays, also out-of-office and business trips assignments

ANSWER APF:

ITYAAN is enabling a very configurable approach in order to manage the normal schedule and engagement of employees including absences, vacations, holidays, business trips, specific permissions given by managers, etc … The configuration of the schedule and calendar of employees is being done directly in ITYAAN or it can be synchronized from Human Resources system using our MW module.

1. Should provide a workflow for requests that allows employees to submit excuses and other requests as well

ANSWER APF:

Excuses flow is already available in ITYAAN. User with manager privileges can approve the absence of the any specific employee under his/her responsibility. This absence and excuse accepted by the manager is being registered in ITYAAN and the details can be accessed through web and reports.

Managers role are defined to be in use of a specific mobile application where other requests and management needs are enabled for the manager (as for instance delegation).

RKe considers that in order to attend “other requests” it is possible that is needed to extend the existing flows for absences and the existing functionality of the Mobile APP for managers in order to enable the approval and redirection of different requests following the requested hierarchy defined by MAOCA. In any case, the architecture mechanisms for such a extension are already available in ITYAAN and they will be used to meet the requirements of MAOCA.

1. Should provide team profiles with required qualifications

ANSWERED APF:

ITYAAN keeps a record of users and employees in order to enable their access to the system and they functionalities based on a vector of privileges that can shape in a very precise way the access to the system:

* Functionalities related privileges
* Data columns related privileges
* Data rows related privileges

This flexibibility on the configuration of the different profiles in the system allows the configuration of many different roles in the system. For instance, there are managers with full visibility on all the data and having access to all the functionality and other managers just have access to restricted projects or restricted fields of those projects records.

On the other side the employees entities already keeps a complete profile of the employee. The feature described above allows ITYAAN easily define the privacy of each information on the employee profile which it can include skills.

Then ITYAAN can be easily extended to add more and more professional skills. On the other side the assignment entities could be also extended to consider also matching skills in order to allow the engagement of employees just in the case of matching skills.

RKe can extend the existing functionality in ITYAAN in order to meet the requirements of qualifications matching in MAOCA.

1. Should provide a detailed implementation plan and bidder understanding for requirements

ANSWER APF:

Our plan is included in dedicated section in this document.

1. Should provide risk management plan and SLA for response time to problems

ANSWER APF:

Risk management and SLAs are provided in dedicated sections of this document.

1. Should provide list of previous successful similar projects

ANSWER APF:

Company profile and a list of similar projects executed by RKe are detailed in a dedicated section of this document.

**Project Duration:**

Project to be implemented to in civil affairs agency and all of its subsidiaries/branches.

ANSWERED APF:

Acknowledged.

Project duration is 6 months

ANSWERED APF:

Acknowledged.

**Locations:**

1. Riyadh
2. Jeddah
3. Madinah Al-Munawarah
4. Unaizah
5. Dammam
6. Assir/berk
7. Tabuk
8. Hael
9. Arar
10. Jazan
11. Najran
12. Al Baha
13. Skaka

ANSWERED APF:

Acknowledged.

**Services and Processes implementation methodology:**

1. Should pull coordinates from employees’ devices to prove it based on predefined pull mechanism

ANSWER APF:

ITYAAN solution already has mobile applications (Android and IOS) for employees that allow the creation and sending of attendance events (with their related geographic coordinates) to ITYAAN server.

On the other side the events/notifications based architecture of ITYAAN allows a complete interaction with the MAOCA’s employees, which include the pull of alerts and requests from the server related to the creation of device events as for instance creation of new attendance events after certain period or time.

These mechanisms of interaction between server and devices can be configured and scheduled in ITYAAN in a very flexible way.

1. Should be capable to integrate biometric devices with Active Directory, and updating departments, sections, and employees’ data from system

ANSWER APF:

RKe has wide experience on the integration of biometric devices with ITYAAN by using Native Android in the device and managing the integration with the device SDK, on one side, and with ITYAAN server on the other side. This includes the retrieval of context from server (configuration and employees data as per organization defined). The login process can easily consider the integration with Active Directory.

On the other side the MW module of ITYAAN is responsible of the synchronization of corporative information in MAOCA as departments, sections and employees. The synchronization process in ITYAAN (MW Module) enables the complete consistency of the processes and use cases implemented in ITYAAN with the existing systems in MAOCA (ERP, Human Resources, Active Directory, …)

1. Should be capable to automatically synchronize departments, sections, and employees’ data from Active Directory (includes add, edit, or delete for depts, sections, and employees)

ANSWER APF:

The MW module of ITYAAN is responsible of the synchronization of corporative information in MAOCA as departments, sections and employees. The synchronization process in ITYAAN (MW Module) enables the complete consistency of the processes and use cases implemented in ITYAAN with the existing systems in MAOCA (ERP, Human Resources, Active Directory, …).

The architecture of MW module is based on CRUD definition of unitary services to be orchestrated over the synchronization process.

In order to meet completely the structure of the entities existing in MAOCA, RKe will analyze the mapping in order to adapt the interface to structure and hierarchy of resources in MAOCA’s Human Resources system (depts, sections, employees).

1. Should be capable to perform check-ins and check-outs processes based on employee shift and policy

ANSWER APF:

ITYAAN is a flexible tool that allows the configuration of employee’s engagement, shifts profiles for each day or period of days, check in (including the control of early entry allowed), check out (including the control of the late leave allowed).

ITYAAN also has mobile applications and Android Native integration in devices in order to trigger the different attendance/location/face/RFID/temperature events configured in the system.

So, ITYAAN is managing the complete interaction with the employees at the time it is having a tight control on attendance and whatever events that can occur and that must be reported to the server and to managers.

1. Should provide a scheduled synchronization to migrate check-ins and check-outs to human resources system

ANSWER APF:

ITYAAN has included its module MW that is responsible of synchronization of data with MAOCA’s ERP/Human Resources systems. The integration to be managed is following the configuration of the system that allows bidirectional or unidirectional (can be any of the both possible directions) synchronization or attendances. So far, among others, the following flow is available out to the box in ITYAAN:

* Synchronize Attendance in ERP/Human Resources from ITYAAN

The flow can be configured to be triggered events based, periodically or manually also if wished.

RKe will analyze the interface and the integration possibilities of the existing Human Resources systems in MAOCA.

1. Should provide accumulative and detailed reporting for check-ins and check-outs events for each employee

ANSWER APF:

ITYAAN has a reporting module that offers different options to create dashboards and also to create reports as per the filters configured.

ITYAAN is a central solution with relational database where the attendance events (check.in, check-out, early-entrance, late-leave, attendance-interval repetition, etc…) are stored and later on retrieved from different dashboards and reports. The history of events is stored in the system for a configurable period of time. Once the data keeps a complete granularity the same as it was created at the time of the occurrence of the source events, then the reports can be as detailed and extended as wished. Some reports are also grouping the information as per determined business rules defined in the reporting tool. Those business rules for reporting can be easily adapted by RKe in order to meet the wished reports by MAOCA.

1. Should be capable to link the employee to multiple shifts based on fixed duration or hours

ANSWER APF:

ITYAAN allows the definition of shifts profiles made by the combination of different shifts (with a configurable duration, start time and end time) over the day. The shifts profiles can be assigned to engagements/assignments of employees

1. Should be capable to manage shifts based on agency’s procedures and policies, and to provide the capability to define replacement for any employee in specific shift

ANSWER APF:

ITYAAN already implements the mechanism for assignment of employees to specific projects or engagements. It also manages the control of the employee by interacting using events/notifications, in particular by the control of the attendance events. So, once all these mechanisms are in place ITYAAN can identify the gaps of engagement in the assignments defined by relating absence events (for instance the identification of 3/4 absence events in a particular location by a particular employee). Then the system can be configured to follow a specific protocol using new events and notifications and also the triggering of a request for replacement to a manager to be defined in the system.

1. Should be capable to manage PL that doesn’t relate to vacations balance

ANSWER APF:

QUESTION

1. Should provide unlimited number of users

ANSWER APF:

No limitation on number of users. License of ITYAAN to MAOCA will be flat.

1. Should provide flexible shifts

ANSWER APF:

ITYAAN allows the definition of shifts profiles made by the combination of different shifts (with a configurable duration, start time and end time and no limitation on number and structure of each one) over the day. The shifts profiles can be assigned to engagements/assignments of employees.

There is no limitation on the number of shifts profiles configured and assigned in ITYAAN.

1. Should be local 100%

ANSWER APF:

ITYAAN is a solution done 100% in Saudi Arabia by a Saudi company.

1. Should provide dashboard to managers with privileges based on login

ANSWER APF:

ITYAAN manages different user profiles assigned to different vectors of privileges in order to enable their access to the system. Based on the existing capabilities the vectors of privileges can be shaped in a very precise way the configuration of the following categories of privileges:

* Functionalities related privileges
* Data columns related privileges
* Data rows related privileges

This flexibibility on the configuration of the different profiles in the system allows the configuration of many different roles in the system. For instance, there are managers with full visibility on all the data and having access to all the functionality and other managers just have access to restricted projects or restricted fields of those projects records.

The same concept applies to dashboards and reports, so, on one side the functionality of dashboards and reports depends on the privileges of the user that executes them. On the other side the information retrieved and shown by the reports will depend on the data privileges of the user that executes the query.

So, once both mechanisms are available ITYAAN allows very precise tailoring of reports and the data retrieved by them.

1. Should be compatible with all browsers

ANSWER APF:

ITYAAN is running in most common browsers with no limitations of constraints. No different performance has been identified so far.

1. Should be customized based on agency requirements

ANSWER APF:

Once ITYAAN is full RKe solution, RKe is open to adapt the tool to the specific requirements of MAOCA.

1. Should preserve data even when attendance card loss

ANSWER APF:

ITYAAN is based on central server approach which interacts with all the devices registered in MAOCA’s attendance network. The information of the attendances is not kept in local devices (except in case of eventual offline situations of mobile devices, where the events are temporary stored in local device till new connection is available the full queue of events is sent to the server).

So, the approach of the solution is full real time, so, it doesn’t matter that the card can be loss because no information is stored at card level in our solution.

1. Should provide printing of employees’ cards

ANSWER APF:

RKe includes a specific number of RFI printing devices on its offer.

1. Should provide a flexible and easy-to-use workflow

ANSWER:

ITYAAN is a niche application intended to manage Attendance and every kind of interactions with employees as per specific policies configured. The processes implemented on it are standard and fully adapted to the real processes of the business, so there is pretty much adherence and optimization. So, ITYAAN in a straight forward tool that is flexible, easy-to-use and, at the same time, powerful and very complete.

1. Supplier should supply specific printers for printing of employees’ cards

ANSWER APF:

RKe includes a specific number of RFI printing devices on its offer.

1. Should provide users delegation to other users

ANSWER APF:

ITYAAN provides delegation to managers (using web and using Mobile APP for Managers) so far. RKe will extend that existing functionality to delegation to other users as per the requirements to be discussed deeper with MAOCA.

1. Should provide electronic delegation

ANSWER APF:

ITYAAN provides delegation to managers (using web and using Mobile APP for Managers) so far. RKe will extend that existing functionality to delegation to other users as per the requirements to be discussed deeper with MAOCA.

1. Should provide delegation to upload attendance data

ANSWER APF:

QUESTION

1. Should provide selection of submitted requests and approval

ANSWER APF:

ITYAAN has already implemented a flow for the acceptance of excuses by the manager of certain assigned employees, but MAOCA requires a more extended functionality for other kind of requests. This extended functionality will involve simple flow for approval and some tools in order to access easily the information of requests in the database.

RKe will implement such a extended functionality as per the requirements to be discussed in deep with MAOCA.

1. Should provide request follow-up/inquiry based on managerial hierarchy

ANSWER APF:

MAOCA requires a extended functionality for different employee’s requests. This extended functionality will involve simple flow for approval and some tools in order to access easily the information of requests in the database. The hierarchy of managers and employees will be part of such a extended functionality of ITYAAN.

RKe will implement such a extended functionality as per the requirements to be discussed in deep with MAOCA.

1. Should provide search based on managerial hierarchy tree

ANSWER APF:

ITYAAN already provides a complete access to the employees including managers. The hierarchical view of the organization will be supported on the existing data structures of ITYAAN. The search and navigation over this structure will be supported by the existing data structures of ITYAN as well.

1. Should provide delegation to specific department

ANSWER APF:

QUESTION

1. Should provide edit shifts

ANSWER APF:

Shifts and shifts profiles are fully configurable in ITYAAN.

1. Should provide multiple selection of departments to upload reports

ANSWER APF:

QUESTION.

1. Should provide multiple selection of requests to accept or reject

ANSWER APF:

ITYAAN will include the possibility of accept or reject requests from employees. Those acceptances and rejections would eventually generate configured events/notifications.

1. Should provide security certificates for system

ANSWER APF:

ITYAAN is a secured certificate enabled application, so it allows https. Our implementation on premises of MAOCA will include also the needed certification.

1. Should provide data synchronization and migration

ANSWER APF:

Data synchronization is covered by the module MW of ITYAAN. This module can be used also to migrate the existing data needed to enable ITYAAN for real operations in Production environment. So, both are included.

1. Should provide automatic detection/follow-up for absences

ANSWER APF:

ITYAAN is a specialized Attendance Management System and it manages the detection, follow up and reporting of absences.

1. Should provide search and filtering by all properties

ANSWER APF:

ITYAAN has a dashboards and reports module which is very flexible in the format and also the filtering of the search criteria. It allows the selection of multiple fields to configure exactly the wished criteria to filter the data.

1. Supplier should provide training and knowledge transfer in HQ

ANSWER APF:

Our Saudi Office personal will perform the due training included in our offered project plan in the HQ of MAOCA.

1. Should provide electronic attendance by mobile GPS within the boundaries of defined zone

ANSWERED APF:

ITYAAN allows the creation of attendance events and to manage their check over the configuration of shifts, assignments and expected site location. In the managers web application the configured ZONES are represented in a map where, depending on the visualization privileges of the user, the information of the employees and the ZONES are displayed. The ZONES are represented by color coding.

ITYAAN has included mobile APP for employees and mobile APP for managers (both Android and IOS). Both apps manages the GPS permissions from employees in order to generate the proper events and to send them to server for control, follow and reporting purposes.

1. Should develop mobile application supports iOS, Android and Huawei based on specific design and identity of civil affairs agency

ANSWER APF:

ITYAAN has included mobile APP for employees and mobile APP for managers (both Android and IOS). Both apps manages the GPS permissions from employees in order to generate the proper events and to send them to server for control, follow and reporting purposes.

RKe is expert on Mobile APPs implementation, so we are open to create the needed adaptations in our existing APPS in order to adapt the Look and Field to the one defined by MAOCA.

**Integration requirements:**

1. Should provide integration capability with all biometric devices, similar devices, and for all available models

ANSWER APF:

RKe has already integrated ITYAAN with different biometric devices where is specially remarkable our experience to handle the integration with different SDKs of vendors from Android Native.

Beyond SDK integration we have wide experience on the implementation of architectures managing fingers and faces files in different formats. Our know-how in this area and the inventory conception of ITYAAN are very good to allow the performing integration and proper volume management in the biometric devices network. So, the central node of ITYAAN manages the users, locations, and devices in order to ensure a reasonable loading of users data on each device, which at the same time is giving guarantee of proper operations.

QUESTION

1. Should provide bilingual interface (AR and EN)

ANSWER APF:

ITYAAN is multilingual application either web and mobile applications.

1. Should provide remote management using web interface

ANSWER APF:

ITYAAN already includes a web interface for management of the central solution that handles the complete Attendance Network. Its Inventory approach allows it to do so and to have a precise control on the onboarding of devices (smartphones, biometric devices, …) and their control by using an interactive system of events/notifications.

1. Should provide data and biometric prints migration mechanism

ANSWER APF:

ITYAAN manages the fingerprint and faces files either over the enrolment process, the storage in relational database in the server and their distribution over different devices.

QUESTION

**System required features:**

1. Should be capable to create shifts, employee can have multiple shifts

ANSWER APF:

ITYAAN allows the definition of shifts profiles made by the combination of different shifts (with a configurable duration, start time and end time and no limitation on number and structure of each one) over the day. The shifts profiles can be assigned to engagements/assignments of employees, so, one employee can have assigned multiple shifts related to a specific shift profile linked to an assignment, and other side the employee can have multiple assignments with different shifts profiles each.

There is no limitation on the number of shifts profiles configured and assigned in ITYAAN.

ITYAAN has implemented a mechanism for the detection of overlapping situations among different assignments, so, the consistency of the different shifts profiles linked to a specific employee is guaranteed.

1. Should be capable to manage shifts and employees’ assignments in groups, so they can apply it for multiple employees for the same shift in one step

ANSWER APF:

This feature will be implemented in ITYAAN as an extension of the existing functionality for assignment of employees to different projects/assignments.

1. Should be capable to create and manage GPS zones

ANSWER APF:

The equivalent concept in ITYAAN are the SITES which can be associated to assignments/projects and therefore to employee engagements. The SITE is determined by GPS coordinates, which are the references for the proper location attendance of each employee. The SITEs have defined also the radius that determines the acceptable area of proper attendance by the employees assigned to.

1. Manual attendance: should support automatic employee attendance that allows manual attendance for specific cases

ANSWER APF:

ITYAAN has already this feature implemented in the admin web, where a manager can create attendances for an specific employee, and also in the Mobile application for managers, where the same functionality is in place. Once the assignments of a crew are uploaded in the mobile APP, the manager can do attendance on behalf of an absent employee or an employee not having installed the mobile APP for employees and, therefore, not being able to do attendance by his/her means.

1. Attendance reports: should support attendance reports exporting and printing on daily, monthly, or any other specific period

ANSWER APF:

The reports module of ITYAAN has implemented a very flexible approach for filtering of data to be retrieved from the database. This allows ITYAAN to define in a precise way the data universe to be retrieved for the report and also the granularity and level of details of the data set. The filtering criteria of reports included DATE FROM and DATE TO fields in order to determine the period of data to be included in the report.

1. Official vacations: should allow to insertion of official vacations that allow employees to be off

ANSWER APF:

This requirement is met by using the existing configuration features of ITYAAN, where the calendar and availability of the employees can be defined in different assigned periods, which can be labelled as “vacation”, “holidays”, “permission”, etc… The flexibility on the configuration of ITYAAN allows the system to define the days and periods where the employee is allowed to be off including weekends, vacations, holidays, etc…

1. Lateness calculation: should provide search for recorded employees’ lateness with flexible search filters (like employee ID, Name, period, branch, department, or location)

ANSWER APF:

The dashboard and reporting tool of ITYAAN allows the flexible definition of filtering criteria to retrieve the data from database for different reports and dashboards. Almost every field in the database structures can be used for filtering purposes, like employee, name, NID, etc… It is possible that based on the requirements of MAOCA some should be added to the existing ones in order to complete match the wished filtering and search criteria for building up different data sets for reporting definition purposes.

1. Shifts: should provide display option for working days for employees based on their shifts.

ANSWER APF:

Shifts are organized in Shifts Profiles which can be flexible assigned to different assignments/projects and therefore to the employees during the period configured for each assignment. This flexibility allows ITYAAN to define the availability of the employee in terms of working/holidays calendar and working hours distributed in as many shifts as needed over the day. ITYAAN has implemented a clever mechanism for overlapping detection that helps on the consistency of the configuration.

1. Absences: should provide absences report for employees based on specific date

ANSWER APF:

Absences reports by different periods, different filtering criteria and different granularity of data are already provided in ITYAAN. RKe will study the specific reporting needs of MAOCA in order to adapt the reporting features of ITYAAN to meet completely the requirements needed.

1. Should allow employees to report and approve time from web interface, data collection device, smart phone, and tablets

ANSWER APF:

ITYAAN provides a complete toolbox to manage attendance of employees. This include the basic mechanisms of generation of attendance events through mobile devices of employees and biometric devices too. But also ITYAAN provides mobile application for managers which can allow the delegation of attendance on behalf of the employees reporting to a specific manager and also the management web application, where having the right user permissions, it is possible to handle manual creation and update of attendance records. Tablets devices can also access to the web admin functions of ITYAAN.

1. Employees self-services: should provide self-services feature that allows employees to review, submit time, and attendance through web interface, smart phones, and tablets

ANSWER APF:

ITYAAN provides a complete toolbox to manage attendance of employees. This include the basic mechanisms of generation of attendance events through mobile devices of employees and biometric devices too. But also ITYAAN provides mobile application for managers which can allow the delegation of attendance on behalf of the employees reporting to a specific manager and also the management web application, where having the right user permissions, it is possible to handle manual creation and update of attendance records. Tablets devices can also access to the web admin functions of ITYAAN.

This features can be enabled or disabled based on the user privileges configuration assigned to the user profile employee in the web.

Probably ITYAAN web will require some adaptations to be used massively for employees by using its self service already available functionalities. Even some customizations will be needed to be implemented over the project execution as per the requirements of MAOCA.

1. Should provide unlimited number of users, so all the employees can access the system

ANSWER APF:

ITYAAN has been designed to allow the flexibility of defining different user profiles with different access to the features and data of ITYAAN. The set of functionalities related to self-employee functions will be grouped properly in profiles where the right privileges configuration will be done by the combination of functional privileges (access or not access to specific functionalities of ITYAAN), vertical data privileges (ability of ITYAAN to show specific columns of its entities to specific users based on their profile assignment) and horizontal privileges (ability of ITYAAN to show specific entity rows related to employee and projects or group of employees and site/projects in the case of managers). By the combination of these features RKe will configure the proper access to employees in order to run the self-employees functionality in the system.

It is possible that over the project is needed to customize some new self employee functionalities in ITYAAN, but it is quite possible that the already existing ones are enough. This point will be discussed at the initial stages of the project in order to define the direction.

ITYAAN license doesn’t have limitations on number of employees to be registered and managed. Based on the volumes estimations of number of users and number of daily access (specially considering rush hours) for each, RKe will size a proper architecture to be able to absorb the traffic estimated. As a tentative analysis of the existing capacity available in MAOCA our team is not afraid about having any kind of bottleneck or performance issues due to lack of capacity.

So, our proposal is not considering any kind of limitation in number of users or restrictions on access by employees.

1. Should provide access to employees based on privileges and hierarchical access

ANSWER APF:

As described above the users configuration module of ITYAAN is very flexible. It is based on the concept of profiles configuration by the selection of proper privileges vectors for each. The granularity of such a vectors considers the fact of selection of individual functionalities, selection of columns to be hidden for specific roles and rows to be hidden for specific roles. This flexible approach allows ITYAAN for instance to define a set of functionalities for specific management profiles as per the hierarchy defined for them, and also to define regional access to data based on locations of projects (no visible data out of assigned projects for instance) or sets of assigned employees. So, the configuration features of ITYAAN are very flexible.

1. Should be capable to compose emails from system and to notifications to be send to employee and direct manager (whenever late entry or early leave)

ANSWER APF:

The notifications module of ITYAAN enables the schedule of messages to employees or groups of employees grouped by different criterias. The notifications can be also events triggering based (messages configured to be sent to specific targets) upon the occurrence of specific events (as for instance, absence, out of time attendance, configuration changes, etc…)).

The messages can be also defined ad-hoc for proactive messaging to employees and managers grouped by different criteria (role, status, projects assignments, manager, dates, ….). The communication of notifications to employees can be defined using SMS, email or Push Notifications.

1. Should be capable to compose SMSs to users when there are exceptions like late entry or early leave …etc.

ANSWER APF:

As mentioned in prior requirement the events based module of ITYAAN allows the link of specific notifications to be triggered to configured destinations. The events exceptions are configured and they cover for sure events related to early entrance, late entrance, absences, early leave, late leave and attendance events out of working hours.

كما هو مذكور في المتطلبات السابقة ، تسمح الوحدة القائمة على الأحداث في اتيان بتشغيل ارتباط إشعارات محددة إلى الوجهات التي تم تكوينها. يتم تكوين استثناءات الأحداث وهي تغطي بالتأكيد الأحداث المتعلقة بالدخول المبكر والدخول المتأخر والغياب والإجازة المبكرة والإجازة المتأخرة وأحداث الحضور خارج ساعات العمل.

1. Should provide flexibility to manage application and devices

ANSWER APF:

ITYAAN is very flexible framework that centralized the management of multiple devices network (biometric devices, smartphones, wifi devices, BLE devices, routers, etc…). Its inventory of devices approach makes it a very powerful solution to handle complex devices networks as the one related to the scope of this project. Its management console is very flexible in order to effectively manage and monitor the proper setup for MAOCA.

اتيان هو إطار عمل مرن للغاية يجعل إدارة شبكة الأجهزة المتعددة مركزية (أجهزة المقاييس الحيوية ، الهواتف الذكية ، أجهزة wifi ، أجهزة BLE ، Routers ، إلخ ...). يجعل منهج تخزين الأجهزة حلاً قويًا للغاية للتعامل مع شبكات الأجهزة المعقدة مثل تلك المتعلقة بنطاق هذا المشروع. وحدة التحكم الإدارية الخاصة بها مرنة للغاية من أجل إدارة ومراقبة الإعداد المناسب لـ MAOCA بشكل فعال.

1. Should provide admin to control, manage, and display status of devices easily through system

ANSWER APF:

The inventory module of ITYAAN allows the system to manage effectively the different devices registered in the system. ITYAAN is also a events management based system that allows the proper identification of problems or misfunctions all over the registered devices network.

تسمح وحدة التخزين في اتيان للنظام بإدارة الأجهزة المختلفة المسجلة في النظام بشكل فعال. اتيان هو أيضًا نظام قائم على إدارة الأحداث يسمح بالتعرف الصحيح على المشكلات أو الأعطال في جميع أنحاء شبكة الأجهزة المسجلة.

1. Should provide configuration of vacation calendars as part of system configurations

ANSWER APF:

ITYAAN has a very flexible configuration console that allows the configuration of vacations, holidays, business trips, etc…

لدى اتيان وحدة تحكم مرنة للغاية تتيح تكوين الإجازات والعطلات ورحلات العمل ، إلخ ...

1. Should support multi-level workflow easily to implement and use

ANSWER APF:

ITYAAN is properly optimized for the processes of attendance related to MAOCA. There are workflows implemented already in the solution and other processes can be configured easily in the system. RKe will discuss the requirements related to processes with MAOCA at the beginning of the project in order to properly plan configuration and even customizations if any is required to be out of the existing functionalities of ITYAAN.

تم تحسين اتيان بشكل صحيح لعمليات الحضور المتعلقة بـ MAOCA. هناك مهام سير عمل تم تنفيذها بالفعل في الحل ويمكن تكوين عمليات أخرى بسهولة في النظام. ستناقش RKe المتطلبات المتعلقة بالعمليات مع MAOCA في بداية المشروع من أجل التخطيط الصحيح للتكوين وحتى التخصيصات إذا كان أي منها مطلوبًا ليكون خارج الوظائف الحالية لـ اتيان.

1. Workflow should support approval for absence, late entry, and vacation …etc. so employee can submit his request easily and in few steps

ANSWER APF:

The configuration of ITYAAN already has implemented workflows for approval of absences, late entry permissions and others. Vacation permissions must be configured and perhaps will require minor updates to meet the requirements of MAOCA.

قام تكوين اتيان بالفعل بتنفيذ مهام سير العمل للموافقة على الغياب واستئذان الدخول المتأخر وغيرها. يجب تكوين استئذان الإجازة وربما تتطلب تحديثات طفيفة لتلبية متطلبات MAOCA.

1. Should be developed and supported locally

ANSWER APF:

ITYAAN is 100% Saudi made product. Development and maintenance team is located in Riyadh.

اتيان منتج سعودي 100٪. يقع فريق التطوير والصيانة في مدينة الرياض.

1. Supplier should have local development and support teams on site

ANSWER APF:

ANSWER APF:

ITYAAN is 100% Saudi made product. Development and maintenance team is located in Riyadh from where the operations and support will be managed. In case of needed local support in any of the locations defined in the scope, RKe’s team will attend the requests as per SLAs defined.

اتيان منتج سعودي 100٪. يقع فريق التطوير والصيانة في الرياض حيث سيتم إدارة العمليات والدعم. في حالة الحاجة إلى الدعم المحلي في أي من المواقع المحددة في النطاق ، سيحضر فريق RKe الطلبات وفقًا لاتفاقيات مستوى الخدمة المحددة.

1. Supplier should be able to customize solution based on agency requirements

ANSWER APF:

ITYAAN is 100% Saudi made product. Development and maintenance team is located in Riyadh. Our development team is perfectly able to make all the needed customizations in the tool as per MAOCA’s requirements.

اتيان منتج سعودي 100٪. يقع فريق التطوير والصيانة في مدينة الرياض. فريق التطوير لدينا قادر تمامًا على إجراء جميع التخصيصات المطلوبة في الأداة وفقًا لمتطلبات MAOCA.

1. Interface should be in Arabic

ANSWER APF:

Available interfaces of applications (web, mobiles) are English and Arabic.

واجهات التطبيقات المتاحة (الويب والهواتف المحمولة) باللغتين الإنجليزية والعربية.

1. Dashboard should allow managers to review and decide if there is a need for any action/procedure when they login to system

ANSWER APF:

The admin console of ITYAAN configured for manager will enable the configuration of the specific features and data universe that is better adapted to each management level. This configuration includes the reports. The functionalities enabled for each level will allow the execution of functions needed for the proper management of the network (configuration of events triggering, configuration of notifications, creation of attendance events, authorization/rejection of requests from employees, assignment changes, configuration of new projects, new shift profiles, etc…).

ستعمل وحدة تحكم المسؤول الخاصة بـ اتيان التي تم تكوينها للمدير على تمكين تكوين الميزات المحددة وعالم البيانات الذي يتكيف بشكل أفضل مع كل مستوى إدارة. يتضمن هذا التكوين التقارير. ستسمح الوظائف الممكّنة لكل مستوى بتنفيذ الوظائف اللازمة للإدارة السليمة للشبكة (تكوين الأحداث ، وتكوين الإشعارات ، وإنشاء أحداث الحضور ، وتفويض / رفض الطلبات من الموظفين ، وتغييرات التخصيص ، وتكوين المشاريع الجديدة ، ملفات تعريف التحول الجديدة ، إلخ ...).

**Programming Languages:**

1. Main programming language: ASP.NET

ANSWER APF:

RKe offers is already made and ready to manage attendance solution ITYAAN which is open and highly configurable to get adapted to the requirements of MAOCA. However, the customizations needs and needed add-ons required to fully meet the requirements of this project will consider the use of ASP.NET as main programming language whenever is suitable technology option for the overall architecture.

تم تقديم عروض RKe بالفعل وهي جاهزة لإدارة حل الحضور اتيان وهو مفتوح وقابل للتهيئة بدرجة عالية للتكيف مع متطلبات MAOCA. ومع ذلك ، فإن احتياجات التخصيص والوظائف الإضافية المطلوبة لتلبية متطلبات هذا المشروع بشكل كامل ستأخذ في الاعتبار استخدام ASP.NET كلغة برمجة رئيسية كلما كان ذلك خيارًا تقنيًا مناسبًا للبنية الشاملة.

1. Database: SQL Database

ANSWER APF:

ITYAAN is made on relational database. So, far it is using MySQL, but other alternatives can be discussed and easily agree with MAOCA for the definitive setup of the architecture of the solution in MAOCA’s premises.

اتيان مصنوع على قاعدة بيانات علائقية. حتى الآن ، تستخدم MySQL ، ولكن يمكن مناقشة البدائل الأخرى والاتفاق بسهولة مع MAOCA من أجل الإعداد النهائي لهيكل الحل في MAOCA.

1. Reports: Crystal Report

ANSWER APF:

ITYAAN already offers its own module for dashboards and reports, but its open conception easily supports the data integration with other available in MAOCA tools as for instance Crystal Reports. The architecture approach that is more suitable for the project will be discussed and easily agree at the initial stages of the project.

قدم اتيان بالفعل الوحدة النمطية الخاصة بها للوحات المعلومات والتقارير ، لكن مفهومها المفتوح يدعم بسهولة تكامل البيانات مع أدوات أخرى متوفرة في أدوات MAOCA مثل تقارير Crystal. ستتم مناقشة نهج العمارة الأكثر ملاءمة للمشروع والموافقة عليه بسهولة في المراحل الأولى من المشروع.

1. Supportive language: HTML

ANSWER APF:

HTML is supported and used by ITYAAN.

يدعم ITYAAN لغة HTML ويستخدمها.

1. Supportive language: CSS

ANSWER APF:

CSS is supported and used by ITYAAN.

يتم دعم CSS واستخدامه من قبل ITYAAN.

1. Supportive language: JAVASCRIPT

ANSWER APF:

Javascript is supported and used by ITYAAN.

Javascript مدعوم ومستخدم من قبل ITYAAN.

1. Supportive language: J-QUERY

ANSWER APF:

J-Query is supported and used by ITYAAN.

يتم دعم J-Query واستخدامه بواسطة ITYAAN.

1. Supportive language: AJAX

ANSWER APF:

RKe offers is already made and ready to manage attendance solution ITYAAN which is open and highly configurable to get adapted to the requirements of MAOCA. However, the customizations needs and needed add-ons required to fully meet the requirements of this project will consider the use of AJAX as programming language whenever is suitable technology option for the overall architecture.

تم تقديم عروض RKe بالفعل وهي جاهزة لإدارة حل الحضور اتيان وهو مفتوح وقابل للتهيئة بدرجة عالية للتكيف مع متطلبات MAOCA. ومع ذلك ، فإن احتياجات التخصيص والإضافات المطلوبة اللازمة لتلبية متطلبات هذا المشروع بشكل كامل ستأخذ في الاعتبار استخدام AJAX كلغة برمجة كلما كان ذلك خيارًا تقنيًا مناسبًا للبنية الشاملة.

**Design Technologies to be used:**

1. Adobe Photoshop

ANSWER APF:

Acknowledged. Adobe Photoshop will be adopted as design tool.

أقر. سيتم اعتماد Adobe Photoshop كأداة تصميم.

1. Adobe Illustrator

ANSWER APF:

Acknowledged. Adobe Illustrator will be adopted as design tool.

أقر. سيتم اعتماد Adobe Illustrator كأداة تصميم.

1. Adobe Dreamweaver

ANSWER APF:

Acknowledged. Adobe Dreamweaver will be adopted as design tool.

أقر. سيتم اعتماد Adobe Dreamweaver كأداة تصميم.

**Biometric Devices Specifications:**

1. Authentication Options Face + Finger +Card + Pin
2. High Speed Processor Cortex-A9 Quad Core 3.4GHz
3. Operating System Android 7.1.2
4. Memory 32GB Flash + DDR3 2GB x 4 (8GB)
5. Recognition Distance 0.2 to 4.5
6. Face Live Detection Yes
7. Face Pre Registration via mobile phone YES, Can be used for employees or visitors
8. IP Rating IP65
9. Mask Detection (on/off ) Yes
10. Display Temperature Yes
11. Temperature Sent to Software Yes
12. Thermal Camera attachment Yes
13. Anti-spoofing Yes
14. Touch Display 4.80 inch
15. BLE (Bluetooth feature ) Yes
16. RS-485 Yes
17. Door Contact Monitor Yes
18. Lock Output Yes
19. Exit Button Input Yes
20. Embedded Camera Yes
21. Wiegand Output Yes
22. Network Interface/TCP/IP Yes
23. Interface USB Type C
24. Patented Fake Fingerprint Detection Sensor Yes
25. Fingerprint Templates Yes
26. Fingerprint Capacity (1:N) / (I:1) Yes
27. User/Card Capacity (1:1) 850000 users
28. Face Capacity (1:N) / (1:1) 50,000 both users
29. Event Capacity 30,000,000
30. Face matching speed
31. High Ambient light Conditions Built in IR Illuminance of up to 35,000LUX
32. Visible light technology Yes IR technology
33. Good to work with low and high condition YES
34. Image Event Capacity 35,000
35. Card Type Mifare, RF- dual Card, optional (HID Prox, Iclass)
36. Operating Temperature -20c to 60c
37. FP Sensor (Platen Area) Yes
38. FRR / FAR 0.1% / 0.0001%
39. Operation Software Alpeta Web base application
40. Certifications KC, CE, FCC
41. Walk-Through method Face Recognition at a distance up to 3m
42. Face Authentication under Illuminance up to 35,000 Lux
43. Liveness Detection
44. PoE, HID Prox, iClass
45. Anti-Spoofing attacks against photos, videos & 3D mask
46. Easy Face Enrollment using Camera or Phone Pictures
47. Temperature Detection combines Face Recognition system