

# ANDROID APPLICATION BASED AUTOMATION FOR SALES ORGANIZATION

Manoj A. Patil<sup>1</sup>, Aishwarya Ashtekar<sup>2</sup>, Nikita Jadhav<sup>3</sup>, Namrata Patil<sup>4</sup>, Radhika Bhosale<sup>5</sup>  
 manoj.patil<sup>1</sup>, 1304012<sup>2</sup>, 1304013<sup>3</sup>, 1304048<sup>4</sup>, 1304050<sup>5</sup> @ritindia.edu

Department of Information Technology,  
 Rajarambapu Institute of Technology, 415414

**Abstract :** A web based android application mainly focuses on increasing bonding within the organization by providing transparency in various manners, eventually enhancing work performance, saving time and also bringing multiple advantages to the traditional existing system of entering data manually into the software. The traditional system is in one way or the other, time consuming, a huge responsibility to handle as errors and mistakes will lead towards a loss for the company. So, the solution is a web based android application that stores the entire data online and will be accessible to the needed at the right time and the right place. The application will provide a platform wherein all the employees can enter the necessary information about sales done daily. The sales data will be accessible to the Team Leader (TL), so as to report performance of each employee working under the concerned guidance to the Area Business Manager (ABM). The Area Business Manager will be given authority to monitor or have a look at all the activities of TL and Employees, besides only the ABM can make dynamic changes related to employee assignments whenever required. Maintaining records of all the activities related to sales and monitoring the same is termed as Team Matrix. The application will improve Team Matrix and also enable the organization to work collaboratively and transparently.

**Keywords**— Sanyukt (stay-connected) - Web based android application, TL- Team Leader, ABM- Area Business Manager, Team-Matrix, Sales.

## I. INTRODUCTION

“Application Tracker” software contains a sheet having all the relevant data of a newly joined employee in the organization. It also contains a Team Matrix sheet with mapping of an individual employee under a Team Leader received from the respective ABM.

Although in the existing system drawbacks can be seen as mapping and filling entire details of sales products of employees manually leads to wastage of time. Due to

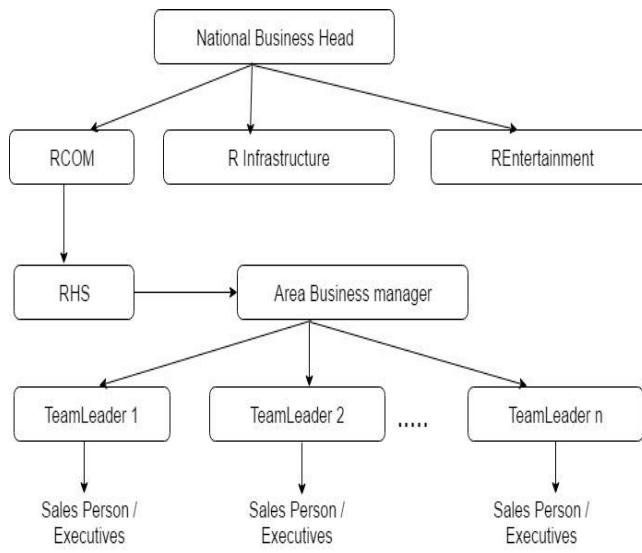


Fig 1.1: Organization flow

Team Matrix problem, sometimes accounting details of sales done by a particular employee is not an easy task. As the salary of the team leader is based on team performance, at times team leaders prevent sending details related to sales of its individual team members having low performance (below the mark) so information of such specific employees cannot be tracked, likewise, to the team where such employees hail from is not identified. Figure 1 depicts the organization flow.

A Web-Based Android application entitled “Sanyukt” can be developed to resolve such problems, saving valuable time, as filling of all relevant sales information into the application will be done by employees/team leaders, daily. Team leader will not have authority of removing team members. Sales report generation and fetching Team Matrix will be enabled at ease of hands. Although ABM can fetch any information irrespective of time and place (as access would be online, independent of the location). Employees and Team Leaders will be provided with facilities to give feedback to ABM, thus providing transparency within the organization.

In [1], information related to the matrix structure in engineering projects and characteristics of work design oriented toward the quality of working life is shared. Matrix demands cooperation and the use of team work which in turn lead to the development of expertise and the fuller integration of the individual in the project.

Figure 1 shows the whole hierarchy of an organization.

In [2], the role and tasks of the project manager within the organization according to some models is discussed. The advantage of the organizational politics model suggests several management development. But the disadvantage is the inequalities in organization leads to environmental pressures for team formation, bargaining, conflict and the evolution of new policies.

In [3], how the project management requires proper planning and control of management is conveyed. Such planning and control can be accomplished with the help of integrated management. Thus, Project management is useful for organizations holding matrix structure.

In [4], conflicts in a structure of matrix have pulled managers in various directions. Due to the newly developed matrix structure, there is flexibility within relationships of every manager's mind. This is helpful for making judgments and negotiating trade-offs may drive organization towards shared strategic objective.

In [5], the significance of teamwork in a matrix structure for a newsroom is described.

In [6], significant information related to the terminology team matrix is shared. So, team matrix is the team in which team members are working for the same functional unit but team members have to report to more than one boss regarding completion of the work.

In [7], data related to team matrix and problems faced in a matrix team, four main challenges for team matrix problems are as follows: 1) Misaligned goals, 2) Conflicting loyalties, 3) Confusion about roles & responsibilities, 4) Delayed decisions.

In [8], the android application named Sales tracker. The application traces daily, weekly, monthly and yearly profit. Sales report will be generated in form of CSV, HTML and excel XML.

In [9], team tracker is an android application in which location tracking of employees is done. The application is useful but it is not providing functionalities like sending the information of sales product and feedback of the respective boss to the higher authority. The missing functionality is added in "Sanyukt" (Web) Application.

In [10], the Employee Attendance Tracker is an android application in which attendance of each employee will be taken. The application provides the facility of setting different time options for daily employee attendance. So it can be a useful functionality for a project of setting different time options for updating status of every day's sales report.

## II. Problem Definition and Proposed Solution:

### A. Problem Definition:

As in the organization, each employee is assigned with a target for product sales; the Team leader maintains all the records of the product sales. The salary of a particular team leader depends on how the team works or responds under guidance. Eventually, if an employee does not complete individual target or makes less number of sales (i.e. an inactive employee), it affects the team leader's salary. To avoid this, the team leader particularly does not mention the work done by inactive employees in the report, which leads

to specific data loss of the company (as it could not track the total number of sales done or occurred and the employee work behavior).

### B. Proposed Solution:

To address the problems of manual processing of the product sales report to its best, a solution is proposed by developing a web based android application that will ease the process and provide additional functionalities to maintain and track the process with effective communication. A web based android application where an Area Business Manager (ABM) will be given the total authority to assign particular team leader (TL) to different employees according to the employee's preferable location using employee id's, further ABM can reassign employees on the basis of the feedback received. Figure 2.1. Depicts the system architecture of the web based application "Sanyukt.

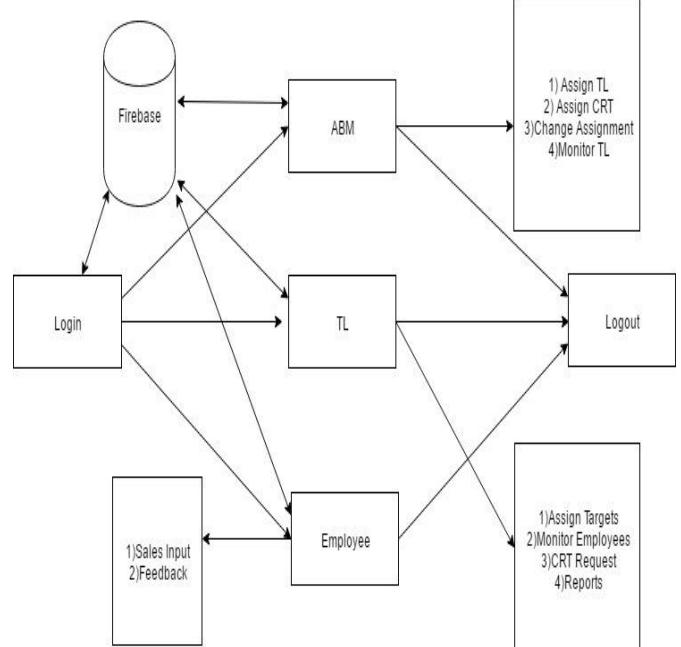


Figure 2.1: System Architecture of Android application 'Sanyukt'

Android application is responsible for supplying CRT Code (A unique code assigned to each employee and team leader), sales are done by using CRT code of employees.

Figure 2.1 A *system architecture* is a model that defines the structure and behavior of the whole system and the representation of a system, organized in a way that supports reasoning about the structures and behaviors of the system.

- Track records of a number of sales done by each employee (active as well as inactive) are demanded by TL on monthly basis or as per requirements.
- TL has the authority to monitor every employee on basis of completion of sales target and declares active, inactive or absconding.

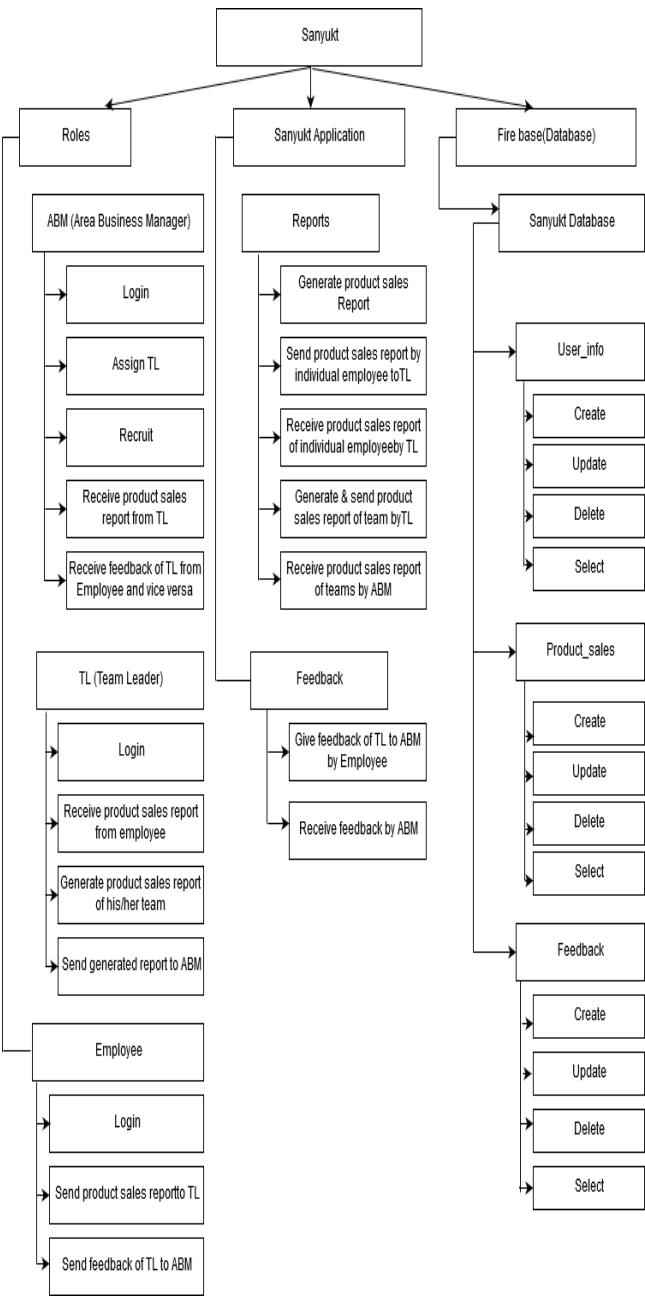


Fig 2.2: Modular Chart Of Android Application 'Sanyukt'.

Fig 2.2 It break downs the entire system into lowest functional modules, describes functions and sub-functions of each module of the system in detail.

- Employee has the authority to give feedback regarding TL, causes prevention of disturbances between each other and everyone will work together as one for all and all for one strategy. Figure 2.2 depicts the modular chart of web based application "Sanyukt".

TABLE I  
ABM MODULE

Activities	Description	Attributes/Nouns
Assign Team Leader	This activity allows ABM to assign employees of the same or nearby areas to the specific area TL and applies the changes on system for the same if required.	1.TL_ID 2.TL_Name 3.TL_Address 4.Employee_ID 5.Employee_Name 6.Employee_Address
CRT Code Supplier employees.	This activity allows ABM to request CRT Code for newly joined employee from RHRs and send to their respective TL's	1.TL_ID 2.TL_Name 3.Employee_ID 4.ABM_ID 5.CRT_code records
Reassign Employees (If necessary).	This activity allows ABM to view the detailed information of feedback of both the TL and Employee under him and then decide to update the assignment as per demand.	1.Actor_Feedback 2.Records
Monitor TL.	This activity allows ABM to view the records under TL and demand for the same at the month end.	1.Month_End_Request record

Table II. Employee is one of the components which simply visit application. The activities performed by Employee is explained in above table:

TABLE II  
EMPLOYEES MODULE

Activities	Description	Attributes/Nouns
Sales input	This activity allows Employee to simply view the application for information purpose and report about the product sales	1.Employee_ID 2.TL_ID
Feedback about their respective Team Leader	This activity allows Employee to request for changing its team leader or give feedback of his guidance.	1.Employee_ID 2.ABM_ID

TABLE III  
TL MODULE

Activities	Description	Attributes/Nouns
Assign Targets to employees.	This activity allows TL to issue Target from ABM and distribute it among employees under him.	1.TL_ID 2. ABM_ID 3.Employee_ID
Track status of employees (Judge active or inactive).	This activity allows TL to evaluate employee performance on basis of daily reporting and declare active, inactive or absconding.	1.TL_ID 2.Employee_ID 3.Employee_CRT
Check or monitor number of sales against each employee (But cannot modify).	This activity allows TL to monitor every employee's sales on basis of completion of sales target and its reporting.	1.TL_ID 2.Employee_ID
Request ABM for CRT	This activity allows TL to Request Area Business Manager for CRT if, after uncounted days CRT is not assigned to a particular employee	1.TL_ID 2.Employee_ID
ABM Request for records	This activity allows TL to send performance of individual employees working under them. They cannot drop any team member's information, when ABM requests.	1.TL_ID 2.ABM_ID

## II. CONCLUSION AND FUTURE WORK

The paper has proposed a solution for real time problems raised in the company. The solution development in the context of a large-scale industry experiment is rooted and allowed for evaluation to avoid business losses. After successful completion of Sanyukt app, tracking of sales records of each employee can be easily tracked, fulfillment of need of automation at the ease of hands and the Team Matrix problem will be resolved.

The future work is required on invades to add incentive model. A Respective employee may receive incentive on the basis of individual sales.

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<https://play.google.com/store/apps/details?id=com.graymatrix.teamtracker>
- [10] Employee Attendance Tracker android application  
<https://play.google.com/store/apps/details?id=com.vervesys.HelloOffice>

Table III: TL is one of the component of the system who can access the services provided for TL. It reports performance of each employee working under their concerned guidance, to the Area Business Manager (ABM).

Table I: The Area Business Manager module will be given authority to monitor or have a look on all the activities of TL and Employees, besides it can make dynamic changes whenever required.