

## Canteen Management System for GMR group

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### Executive Summary

The GMR group is one of the largest and fastest growing infrastructure companies in India. With an experience of more than 30 years in areas of infrastructure development, the GMR group has successfully deployed high-end development project in India and Abroad. With its principal headquarters situated in the capital, the GMR group has shown exceptional growth avenues in areas of Urban Transportation, Infrastructure, Energy, and Airports. The focal points of their work include the Delhi and Hyderabad International Airports, the Mactan Cebu International Airport, and more. Its energy portfolio includes more than 10 operating assets - domestic and international. On the transportation side, it covers 6 highways with more than 2500 km of total work length coverage.



### GMR Group Dilemma

- The GMR group has their business office in Pune wherein it accommodates 500 employees. With a plethora of employee categories like permanent, contractor, and more, it was difficult for the company to monitor the canteen management system for the employees
- The cost of food for various categories is different, and thus it is a problem to calculate the cost for the food items
- As the system was manual or outdated, it could not authenticate or distinguish an employee and visitor, that's where significant miscalculations or losses were observed
- It was very difficult for the canteen management personnel to track the employee count and the subsequent item being consumed.
- The canteen financials were calculated which resulted in manual errors for food consumption and total cost.
- As it was a manual task, it was very difficult to gather data and create monthly or yearly charts for the canteen.
- Taking feedback from employees was another important aspect of canteen management, wherein in the manual phase there was a possibility of people influencing others to provide negative feedback.

## Solution by DAccess

- After perusing their problem, the team at DAccess divided the concerns into various categories and came up with optimum solutions to solve each of them.
- DAccess designed and deployed a web based application in their office network wherein each employee had a unique login and an admin login to supervise the operations. The admin would maintain and perform administrative activities, whilst other employees were not given admin access for stronger security purpose
- The system was set to calculate cost based on the employee type. Two types of payment systems were devised for the employees - prepaid & postpaid. For a prepaid employee, a top-up facility was given to recharge the canteen amount and account so that employees can go for hassle-free meals
- The most important aspect of this canteen management system was "canteen punching", wherein it is mandatory for the employees to use the biometric device or punch authentication to record employee or visitor count
- A web kiosk was deigned to view and generate a slip that is handed over on the counter. This Kiosk has a RFID card reader, finger scanner, & printer for the food slip, and clear display to view available food items
- For add-on meals or extra food items, the web system and the Kiosk could maintain these food items under extra orders that are chargeable separately
- As discussed above in the problem areas, taking feedback from the employees was a crucial problem. With the automated canteen management system, the element of influencing was mitigated, and true feedback was recorded in the system
- All the data was recorded in a secure database, and this data could be used as vital information in the form of reports and charts for employee and meal count, company costing, feedback, and more

## System Flow



- A well designed and managed Kiosk was deployed with an intuitive touch screen display, RFID card reader, finger print scanner, and a thermal printer. Every piece of equipment is mounted for quick and easy access.

- A high quality touch screen display shows the list of items, and allows users to add add-ons to their item list.



- A biometric system or RFID reader is used to authenticate the employee or visitor so that the count is not missed or calculated inappropriately.

- Once the order is placed, the receipt can be handed over on the counter to canteen personnel for the meal to be served.



### **Benefits offered by the system**

- Centralized system and software.
- Intuitive User Interface.
- Biometric Authentication.
- Full-control over all canteen activities.
- Zero system ambiguities.
- Robust software.
- Reduced workforce.
- Zero carbon footprint.
- Completely automated billing and report generation.
- Accurate cost calculation for meals.
- Highly secure database.
- Accurate employee and visitor count.
- Real-time data tracking.
- True feedback system.
- High quality system and peripherals



## **GMR's Future with DAccess**

GMR's future with DAccess rests with the fact that it has completely simplified the canteen management system, and the company would continue to build strategic partnerships for various business verticals like Airport Security, Transportation, Energy, and various other Infrastructure Requirements. DAccess has a long way to go with the GMR group in terms of the security products & services offered by DAccess Security Systems.