

## **1. Project Title**              Cell Block Manager

### **2. Problem in Brief**

- ❖ In the current situation, there's very poor communication between RNO Team Requestor and INOC Team Leader and most of the time INOC Team Leader is not aware of their Request.
- ❖ When considering the current system, the occurrence of human errors is ordinary and hard to handle manual data.

### **3. Proposed Solution**

- ❖ We are going to develop a system that facilitates the interconnection between RNO Team Requestor and INOC Team Leader by a web application.
- ❖ It needs a central system to monitor and handle cell block requests properly.
- ❖ Maintain cell block requests.
- ❖ Monitor the response of the cell block requests.
- ❖ Clear view and searching facility of the block requests.
- ❖ Follow up pending works. (pending approval, pending block, pending unblock)
- ❖ Give the beep tone in new pending works.
- ❖ Analysis of cell block request. (request count, block pending request count, deblock pending request count, block count, deblock count)
- ❖ INOC Team Leader marks the request, block or unblock by the system and sending the email to the Requestor.
- ❖ Vendor block requests need to be processed through the RNO Team Requestor. so, through this web, RNO Team Requestor can view vendor requests and approve for the process.

### **4. Requirements identification**

#### **4.1 Functional requirement**

- ❖ Add and remove requests by RNO Team Requestor and Vendor. (single request or multi request)
- ❖ The vendor requests approval by the RNO Team Requestor.
- ❖ View all requests and responses of the requests.
- ❖ View and playing beep tone the new pending block and deblock counts.
- ❖ Keep records and update records of the cell block details. (block or unblock)
- ❖ Update cell block request single and multi-selection. (block or unblock)
- ❖ Search request, view all requests in the log table, view complete requests highlighted
- ❖ Mail and SMS function-> A message is sent to the requestor about the response of the cell block request.
- ❖ Can export the records. (date range or all records as the excel sheet)
- ❖ View the analysis of cell block requests. (request count, block pending request count, deblock pending request count, block count, deblock count)

## 4.2 Non-functional requirements

- ❖ Usability. (Color combination is valid for even color-blind people, User interface responsive to any device)
- ❖ User-friendliness – adding icons and information messages.
- ❖ Increasing Performance. (AJAX form submit use to data insert and search, using table plugging)
- ❖ Security- prevent unauthorized access and SQL injection by using security functions.
- ❖ Data adding and update are not reflecting with other accounts.
- ❖ Reliability.

## 4.3 User levels

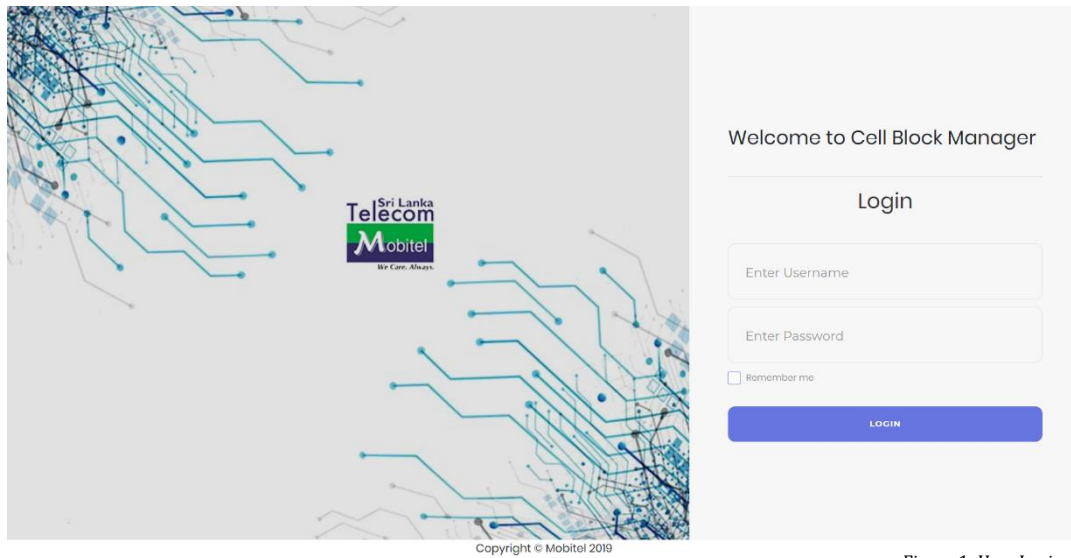
- ❖ Admin
- ❖ INOC Team Leader
- ❖ RNO Team Requestor
- ❖ Vendor

## 4.4 User Roles

- ❖ Admin
  - Admin can handle every user details including insert, delete and update.
  - Show the requests pending count.
  - Search the details of the cell block requests
  - Add or update cell block requests.
  - Export the excel sheet.
  - View the analysis of cell block requests.
  - Add users and reset the password.
- ❖ INOC Team Leader
  - Show the requests pending count.
  - Search the details of the cell block requests.
  - Update cell block requests. (block or deblock)
  - Sent a message to the requestor about the response of the cell block request.
  - Export the excel sheet.
  - View the analysis of cell block requests.
- ❖ RNO Team Requestor
  - Add the requests (single request or multi requests)
  - Remove the wrong requests.
  - View all user's requests and responses of the user requests.
  - Show the pending approval requests.
  - Give approval to the vendor requests.
- ❖ Vendor
  - Add the requests (single request or multi requests).
  - Remove the wrong requests.
  - View all requests and responses of the user requests.



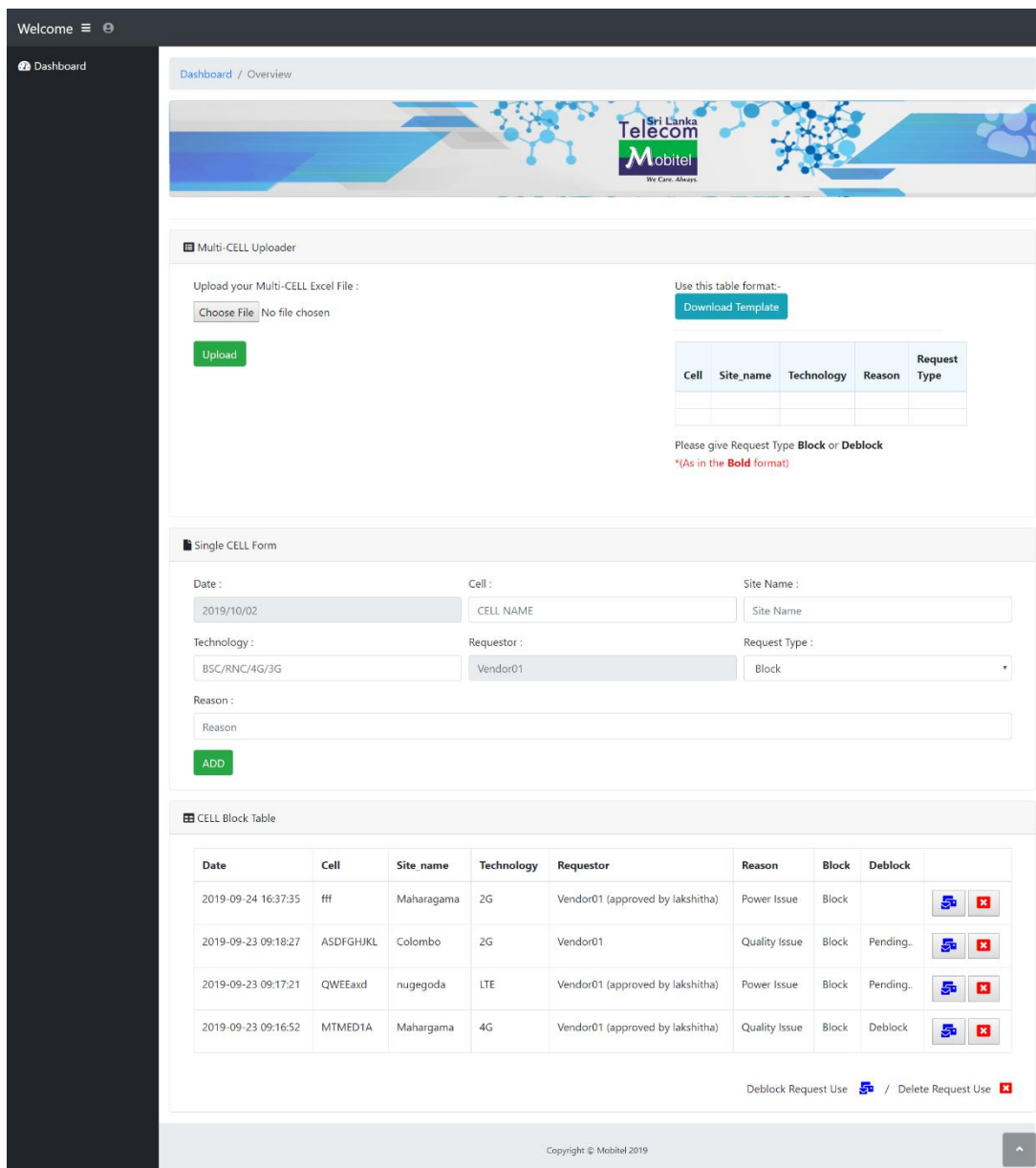
## 5. Interfaces



The login interface features a background image of a circuit board with the Sri Lanka Telecom Mobitel logo. The login form is on the right, titled 'Welcome to Cell Block Manager' and 'Login'. It includes fields for 'Enter Username' and 'Enter Password', a 'Remember me' checkbox, and a 'LOGIN' button.

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Figure 1: User Login



The vendor dashboard has a dark sidebar with 'Welcome' and 'Dashboard' links. The main content area shows 'Dashboard / Overview' and a banner with the Sri Lanka Telecom Mobitel logo. Below the banner are two main sections: 'Multi-CELL Uploader' and 'Single CELL Form'.

**Multi-CELL Uploader**

Upload your Multi-CELL Excel File :

Choose File No file chosen

Upload

Use this table format:-

Download Template

Cell	Site_name	Technology	Reason	Request Type

Please give Request Type **Block** or **Deblock**  
\*(As in the **Bold** format)

**Single CELL Form**

Date : 2019/10/02

Cell : CELL NAME

Site Name : Site Name

Technology : BSC/RNC/4G/3G









Requestor : Vendor01



Request Type : Block

Reason : Reason

ADD

**CELL Block Table**

Date	Cell	Site_name	Technology	Requestor	Reason	Block	Deblock	
2019-09-24 16:37:35	fff	Maharagama	2G	Vendor01 (approved by lakshitha)	Power Issue	Block		 
2019-09-23 09:18:27	ASDFGHJKL	Colombo	2G	Vendor01	Quality Issue	Block	Pending..	 
2019-09-23 09:17:21	QWEEaxd	nugegoda	LTE	Vendor01 (approved by lakshitha)	Power Issue	Block	Pending..	 
2019-09-23 09:16:52	MTMED1A	Mahargama	4G	Vendor01 (approved by lakshitha)	Quality Issue	Block	Deblock	 

Deblock Request Use  / Delete Request Use 

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Figure 2: Vendor Dashboard

Welcome
Dashboard
Request Log
Vendor Request Log

Dashboard / Overview

1 Approval Pending Block Messages!
Vendors Approval Pending Block Messages Count

2 Approval Pending Deblock Messages!
Vendors Approval Pending Deblock Messages Count

Multi-CELL Uploader

Upload your Multi-CELL Excel File :

Choose File

No file chosen

Upload

Use this table format:-

Download Template

Cell	Site_name	Technology	Reason	Request Type

Please give Request Type **Block** or **Deblock**  
\*(As in the **Block** format)

Single CELL Form

Date :
2019/10/02

Cell :
CELL NAME

Site Name :
Site Name

Technology :
BSC/RNC/4G/3G

Requestor :
lakshitha

Request Type :
Block

Reason :
Reason

ADD

CELL Block Table

Date	Cell	Site_name	Technology	Requestor	Reason	Block	Deblock	
2019-09-23 09:22:50	qw3ertyu	Maharagama	BSC	lakshitha	error	Block		
2019-09-23 09:19:55	MTMED1A	Meddewatta	BSC31	lakshitha	Power Issue	Block		
2019-09-23 09:17:21	QWEEaxd	nugegoda	LTE	Vendor01 (approved by lakshitha)	Power Issue	Block	Pending..	

Deblock Request Use / Delete Request Use

Figure 3: Requestor Dashboard

Welcome
Dashboard
Cell Log
Summary
Excel Exporter
User Registration

Dashboard / Overview

0:02 / 0:12

1 Pending Block Messages!
Pending Block Messages Count

0:02 / 0:12

3 Pending Deblock Messages!
Pending Deblock Messages Count

CELL Requests Block/Deblock Pending Table

Update

	Date	Cell	Site_name	Technology	Requestor	Reason	Block	Block_remarks	Deblock	Deblock_remarks
	2019-10-02 11:20:22	MTMED1A	Mahargama	4G	Vendor01 (approved by lakshitha)	Quality Issue	Block		Pending..	
	2019-10-02 11:20:22	MTMED1A	Meddewatta	BSC31	Vendor01 (approved by lakshitha)	Power Issue	Pending..			
	2019-09-23 09:18:27	ASDFGHJKL	Colombo	2G	Vendor01	Quality Issue	Block		Pending..	
	2019-09-23 09:17:21	QWEEaxd	nugegoda	LTE	Vendor01 (approved by lakshitha)	Power Issue	Block	done	Pending..	
	Date	Cell	Site_name	Technology	Requestor	Reason	Block	Block_remarks	Deblock	Deblock_remarks

Figure 4: INOC/Admin Dashboard

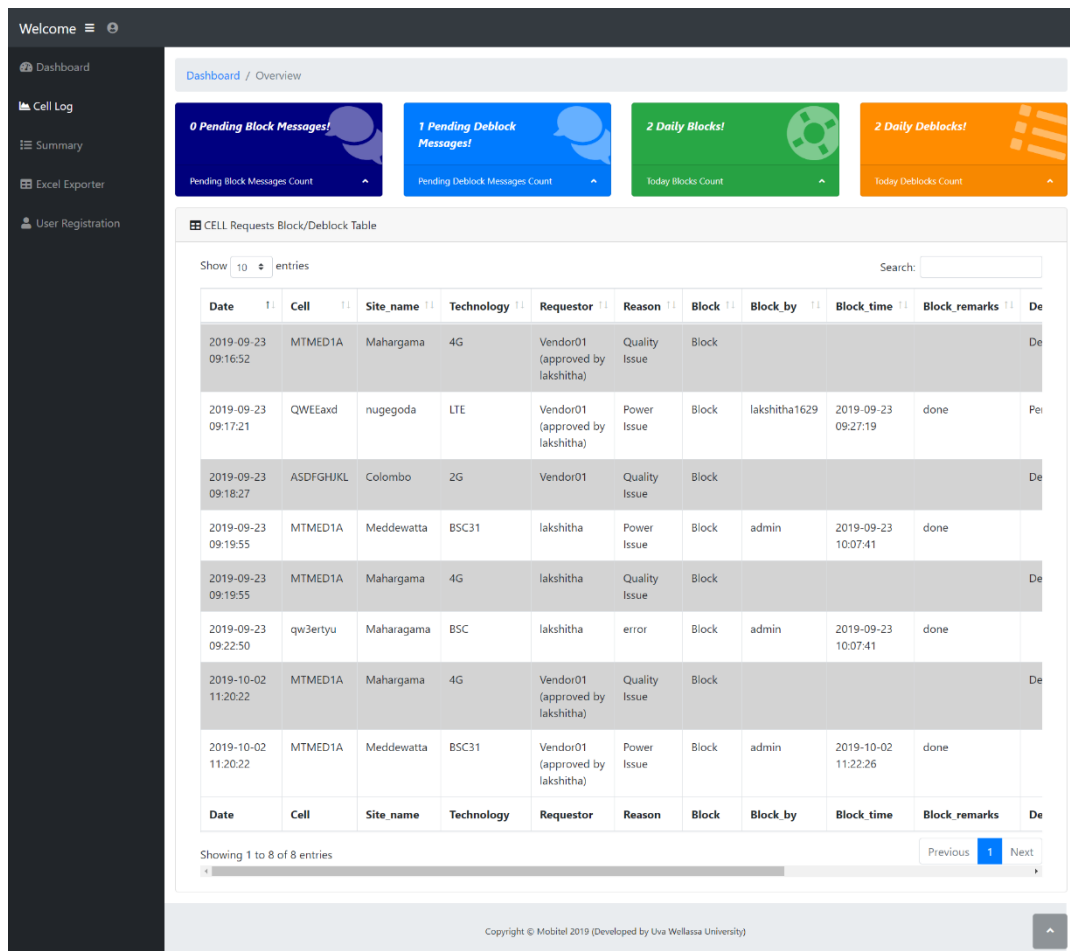


Figure 5: INOC/Admin Cell Log

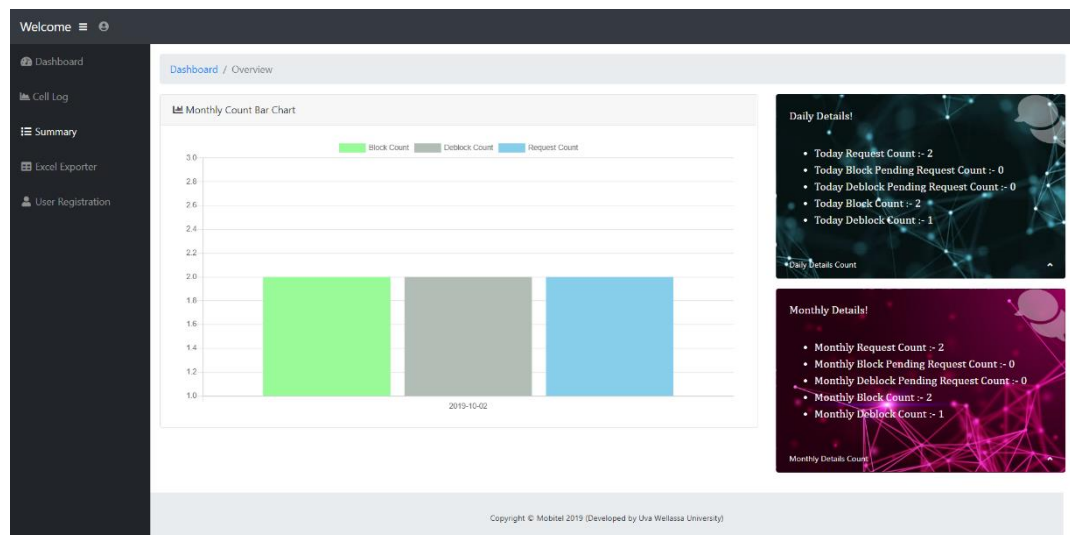


Figure 6: INOC/Admin Summary

Welcome

- Dashboard
- Cell Log
- Summary
- Excel Exporter
- User Registration

Dashboard / Overview

Date Range Excel Exporter

Export Cell Details Form

Date Range :  to 

Export

Full Cell Table Excel Exporter

Export Cell Details Form

Export Full File: 

Export

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Figure 7: INOC/Admin Excel Exporter

Welcome

- Dashboard
- Daily Report
- Summary
- Excel Exporter
- User Registration

Dashboard / Overview

Registration Form

Username :

Enter the username

Password :

Enter the password

Confirm Password :

Enter the password again

User Type :

Choose User Type

ADD

Password Reset Form

Username :

Enter the username

Password :

Enter the password

Confirm Password :

Enter the password again

Reset

User Table

Show 10 entries

Search:

Username	User_Type	Activate	
lakshitha	RNO Team Requestor	Activate	Activate / Deactivate
lakshitha1629	INOC Team Leader	Activate	Activate / Deactivate
perera	RNO Team Requestor	Activate	Activate / Deactivate
Vendor01	Vendor	Activate	Activate / Deactivate

Showing 1 to 4 of 4 entries

Previous

1

Next

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Figure 8: User Registration