

# e-MB & e-Billing EcoSystem

**iNNOMISE**

TECHNOLOGIES PVT. LTD.

# e-MB & e-Billing Ecosystem

**iNNQMISE**  
TECHNOLOGIES PVT. LTD.



## Agenda

Talking point for presentations



## About Us

Get to know more about us



## Introduction

Intelligent Works Management System



## Need of IWMS

Why do you need this?



## Our Solution

The Complete Solution



## Our Success Story

Our Accomplishments

# About Us

Your e-Governance Partner



[www.innomise.com](http://www.innomise.com)



- Innomise Technologies is growing IT solutions Company that offers Quality Services, High End Products to **e-Governance Sector** in India.
- We have been working with a wide array of businesses in different verticals and across different geographies, over the years and providing them innovative and optimized solutions.
- We are motivated and excited about the work we do as there is always something new on technology, solutions or a new client with its challenges and requirements to serve.



## Our Mission

Our Mission is to Bring Disruptive Innovation in e-Governance Sector of India by providing Innovative, Optimized, Cost-effective and User-Friendly Software Solutions to Government Organizations.

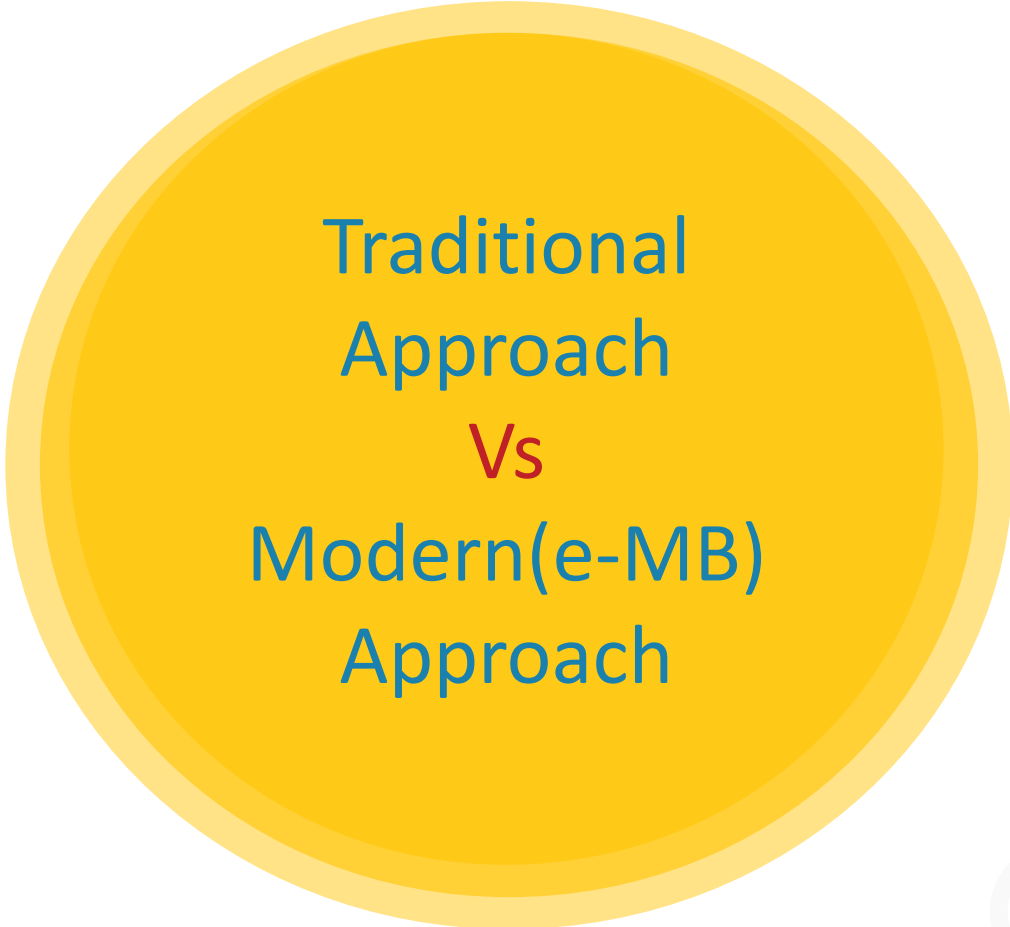
# e-MB & e-Billing Ecosystem Introduction



- e-MB and e-Billing Ecosystem is a Web-based Application through which Measurement Book (MB) and other bill forms are generated, checked, finalized and stored using a computer system in an effective and efficient manner.
- Contract management and Works Monitoring are effectively done through this system. This system automatically generate various reports.
- This web system strictly followed a predefined state of rules and produces the desired output by proper Data Calculation, Data Handling and Data Management.

e-MB & e-  
Billing  
EcoSystem  
is the Solution.

# Need of e-MB & e-Billing Ecosystem



# Traditional Approach



- **Time Consuming Task** : The measurement book is written by the sectional engineer which includes repetitive writing of item description, eventually takes a lot of time to complete this process.
- **Less Productivity** : Since, majority of time of sectional engineers is wasted in writing measurement book; they are not able to give proper time on site. This eventually reduces their productivity.
- **Difficulty to Edit MB** : Corrections initiated by correcting officer are difficult to correct in measurement book. No rough work is allowed in measurement book.
- **No Automation** : After writing the measurement book, Bill forms and other statements need to be generated manually.

# Traditional Approach (contd...)



- **Prone to Errors** : Since, the entries and calculations written in measurement book and bills are done manually; they are prone to human errors.
- **Delay in Overall Billing Process** : The traditional approach of writing measurement book, bill forms and other statements takes much more time resulting in a delay in overall billing process for the contractors.
- **Limited Data Access** : Access to the recorded data in this approach is very limited and tedious.
- **No Centralized Monitoring** : In manual system, centralized monitoring of works is very difficult.

# Modern(e-MB) Approach



- **Saves Valuable Time:** The entire process of preparing MB becomes faster. Furthermore, statements and reports can be generated instantly at the click of a button. It saves 85% of total time used for generating MB and Bills. Thus, it results in better productivity.
- **Automation :** Since all the calculations are handled by the software, computerized data handling and accounting eliminates many of the time-consuming processes associated with manual system.
- **Accuracy :** This system is designed to be accurate to the minutest detail. Once the data is entered into the system, all the calculations and data processing are done automatically by software.



# Modern(e-MB) Approach (contd..)



- **Construction Tracking** : Since, its an online application; the higher authorities can keep track of works at any given point of time. Also, this application generates useful reports by which finance information can be accessed and analyzed.
- **Zero Pendency** : Since majority of the process is made automated, there would be zero pendency for the works.
- **Data Access** : Since the application is web-based, the users of the system can access and process the data anywhere, anytime .



# Our Solution

*e-MB & e-Billing Ecosystem*

Reports

Works Monitoring

Storage

Software Support

Estimation

e-MB & e-Billing Ecosystem

User-Friendly

Web-based Software

Training

# Basic Requirement to Use System



## Hardware

PC with 1 GB RAM, 80 GB HDD and 2.2 GHz Processor

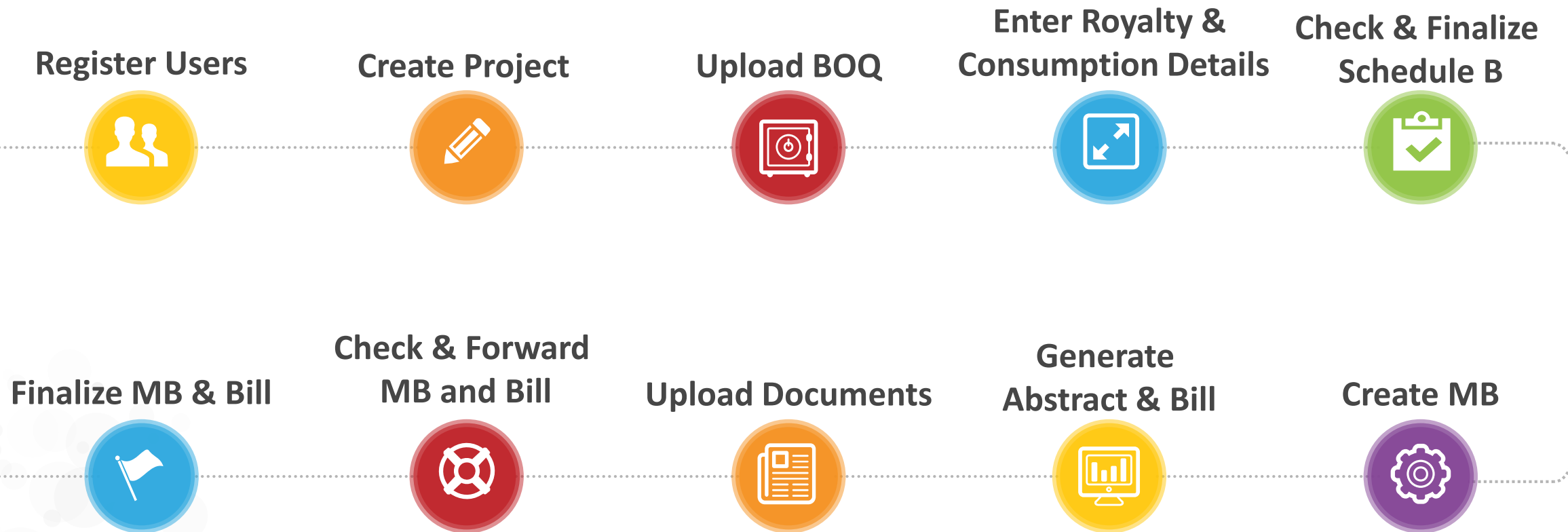
An Active Internet Connection

## Software

Operating System : Windows XP or Above

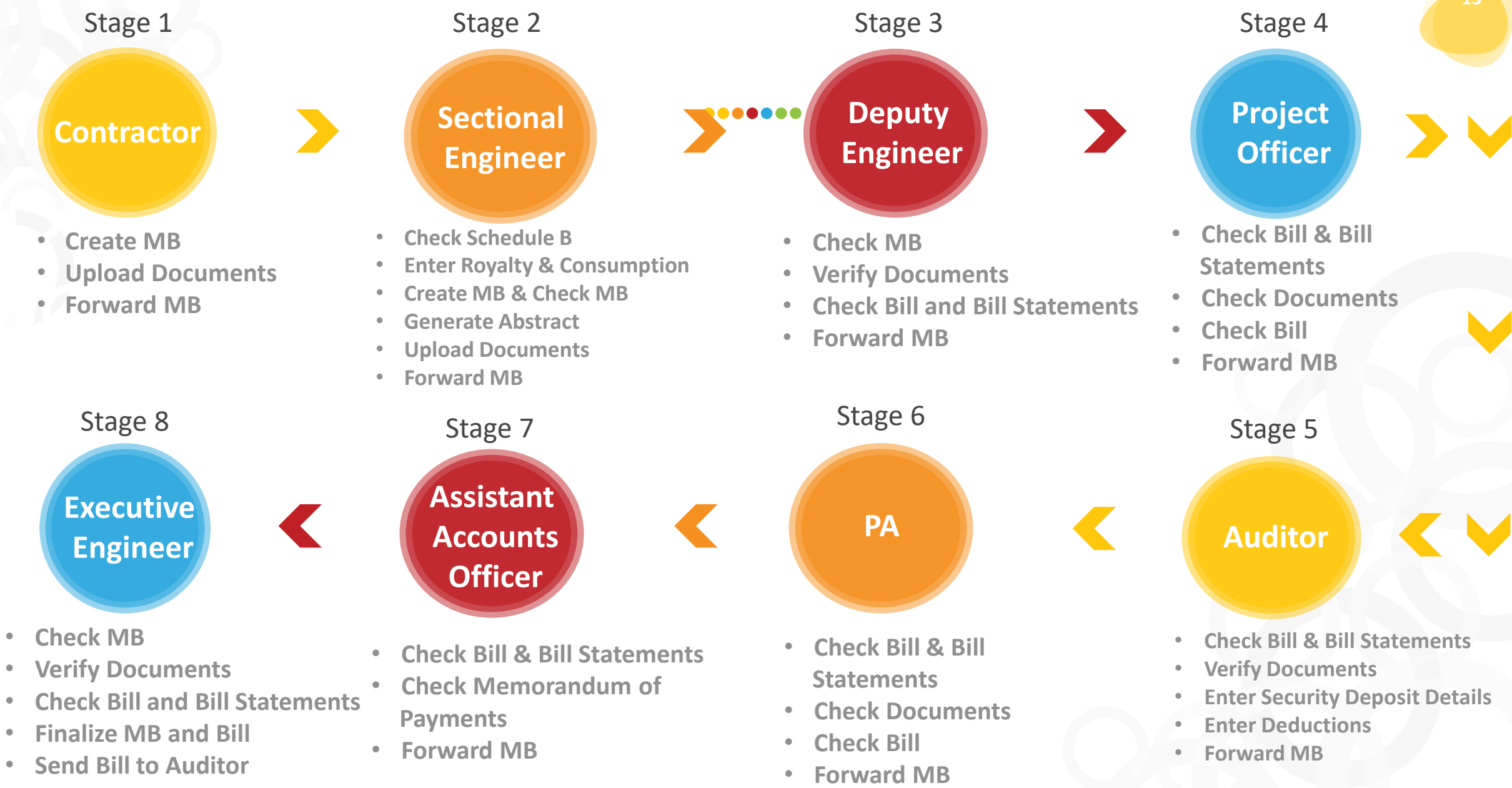
Internet Browser : Firefox or Google Chrome (Latest Version recommended)

# e-MB & e-Billing Ecosystem Workflow



**Note:** This is a Basic Module Work-flow. It contains various sub-modules and functionalities inside.

# Roles & Responsibilities with System Flow



# e-MB & e-Billing Ecosystem Features



**Technical Features**



**Design Features**



**Security Features**



**User Training & Support**

# Technical Features



❖ **Upload BOQ in Excel Format** : Schedule B of any work can be prepared by directly uploading an excel file of BOQ of that work. This feature eliminates a need to load a complete DSR of items.

Using this unique feature, MB and Bills of other departments like Minor Irrigation Dept.(MID), Rural Water Supply(RWT) are also generated.

❖ **Bulk Upload of Measurement Records** : This is one of the major features of this system. Measurement records are put in the excel sheet first in proper format and then excel file is uploaded to create MB.

❖ **System accepts all types of measurement types** : like measurement for Normal Entry, Steel Entry, Structural Steel Entry, Earth-Work Entry can be recorded through this system.

❖ **Use of Formulae** : Various formulae are provided to calculate area of different shapes for the measurements.

❖ Based on MB and Abstract, all the Bill Forms and Bill Statements are generated automatically by e-MB system.

# Technical Features



- ❖ **MB Flow Information** : This feature shows how the MB/Bill is travelled through various authorities. It displays current status of MB/Bill and pending time at each level along with any remarks if present.
- ❖ **Notifications** : All users of the system are notified about the various activities carried out during the process of MB/Bill through :
  - a) e-MB System Notifications
  - b) Mobile SMS (Short Message Service)

This feature lets contractor know the current status of his/her bill.

- ❖ **Reports** : This e-MB Ecosystem automatically generates various reports as follows –
  - a) 16 Column
  - b) Form No. 53
  - c) Form No. 12
- ❖ **Digital Signature** : The MB forwarded by the authorities is digitally signed . Separate MBs are created at levels of JE, DE and EE.



# Design Features



- ❖ **User Friendly:** The overall User Interface Design is made very user friendly. Menu Navigation is handled properly to ease the navigation between various pages of the system.
- ❖ **Design is Responsive :** This system is designed in such a way that it is viewed over various devices like mobile, tablet and computer of any screen size. This feature allows the users to access this system through their mobile devices also.
- ❖ **Ease of Functional Access :** Pop-ups and notification messages are used effectively wherever necessary. This eases the use of various functions and information.

# Security Features



- ❖ **SSL Certificate** : This feature enables the high security measure. It prevents a web application from potential security threat.
  
- ❖ **Two-Step Authentication** : This feature is achieved by following two steps of user authentication –
  - a) By validating Login Credentials
  - b) By One Time Password (OTP) via mobile SMS.
  
- ❖ **Data Encryption** : Sensitive data is stored in encrypted form in the database.
  
- ❖ **Site Locker** : This feature prevents the web application from hackers.

# User Training & Support



- ❖ User training plays an important role in the successful execution of any new software system. We understand the users' point of view.
- ❖ Our training pattern is set and is very successful to train the users of this system.
- ❖ Our Domain Expert Trainers provide on-site training to system users.
- ❖ We also provide the user manuals, online help files to get better understanding of the system.
- ❖ Our Prompt Technical Support Team is always up and ready to provide technical support to all the System Users.

# Additional Features



- ❖ **Mobile App** : We have also developed the Android App for e-MB Ecosystem. By using this App, users of this system would be able to perform following functionalities :
  - a) View status of the MB/Bill on mobile
  - b) Forward/Sent Back MB/Bill
  - c) Check MB
  - d) Upload/View documents
  - e) Attach GPS location
  - f) Download bill PDFs
  
- ❖ **Get Information through QR Code** : QR code of each Bill would be displayed on bill. When a user would scan that QR code through his/her mobile, all the important information regarding that bill would be displayed on user's mobile screen.

# Bill Compliances by e-MB Ecosystem



1. **Is Administrative Approval taken?** : Yes. This is taken care of auditor at the time of project creation.
2. **Is Technical Sanctioning taken?** : Yes. This is taken care of auditor at the time of project creation.
3. **Is Tender Approval taken?** : Yes. This is taken care of auditor at the time of project creation.
4. **Is Bill Form in order?** : Yes. e-MB system does it automatically.
5. **Are all the fields in Bill filled?** : Yes. e-MB system does not allow any field to be left blank.
6. **Is contractor's sign present on MB/Bill ?** : Yes. When contractor accepts MB and Bill, his sign is automatically gets printed on MB/Bill.
7. **Is measurement date present on MB/Bill ?** : Yes. e-MB system displays these dates on MB/Bill as per recording.
8. **Is extension for work period is taken ?** : Yes. This is checked by auditor and required document is uploaded.

## Bill Compliances by e-MB Ecosystem (contd..)



9. **Are all details in Bill correct and are date, sign on bill present?** : Yes. All these things are made mandatory in e-MB system. Without this compliance, system doesn't allow to forward a Bill.
10. **Are calculations in Bill are correct ?** : Yes. Since, all the mathematical calculations are done by the computer system, there is a pin-point accuracy in end-results.
11. **Is percentage checking of Deputy Engineer and Executive Engineer as per norms ?** : Yes. Without this compliance, system does not allow DE and EE to forward/finalize the bill.
12. **Is excess-saving statement attached with final Bill ?** : Yes. e-MB system automatically generates this Bill Statement.
13. **Are consumption statements for cement, steel, bitumen attached with bill ?** : Yes. All these bills are auto-generated by e-Mb system.
14. **Is correct fine taken from contractor ?** : Yes. Based on certain criteria, the total fine is calculated by the system itself.

# Success Story

Pune ZP e-MB & e-Billing  
Ecosystem

# We have Achieved Amazing Numbers at Pune ZP



In Execution Since **2.4 Years**



More than **4000 Bills** have been successfully passed through this System.



Total No. of Registered Users **1278**



Overall Billing Process Boosted Up By **100%**



Accuracy Achieved in Output : **99.99%**



# Our Esteemed Government Clients



**Pune Zilla Parishad**



**Pune Metropolitan Region Development Authority (PMRDA)**



**Kolhapur Zilla Parishad**



**Maharashtra Tourism Development Corporation (MTDC)**



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THANK YOU