SoftTech®

Empowering Transformation

BIMDCR®

COLLABORATIVE BIM BASED CONSTRUCTION PERMIT PLATFORM

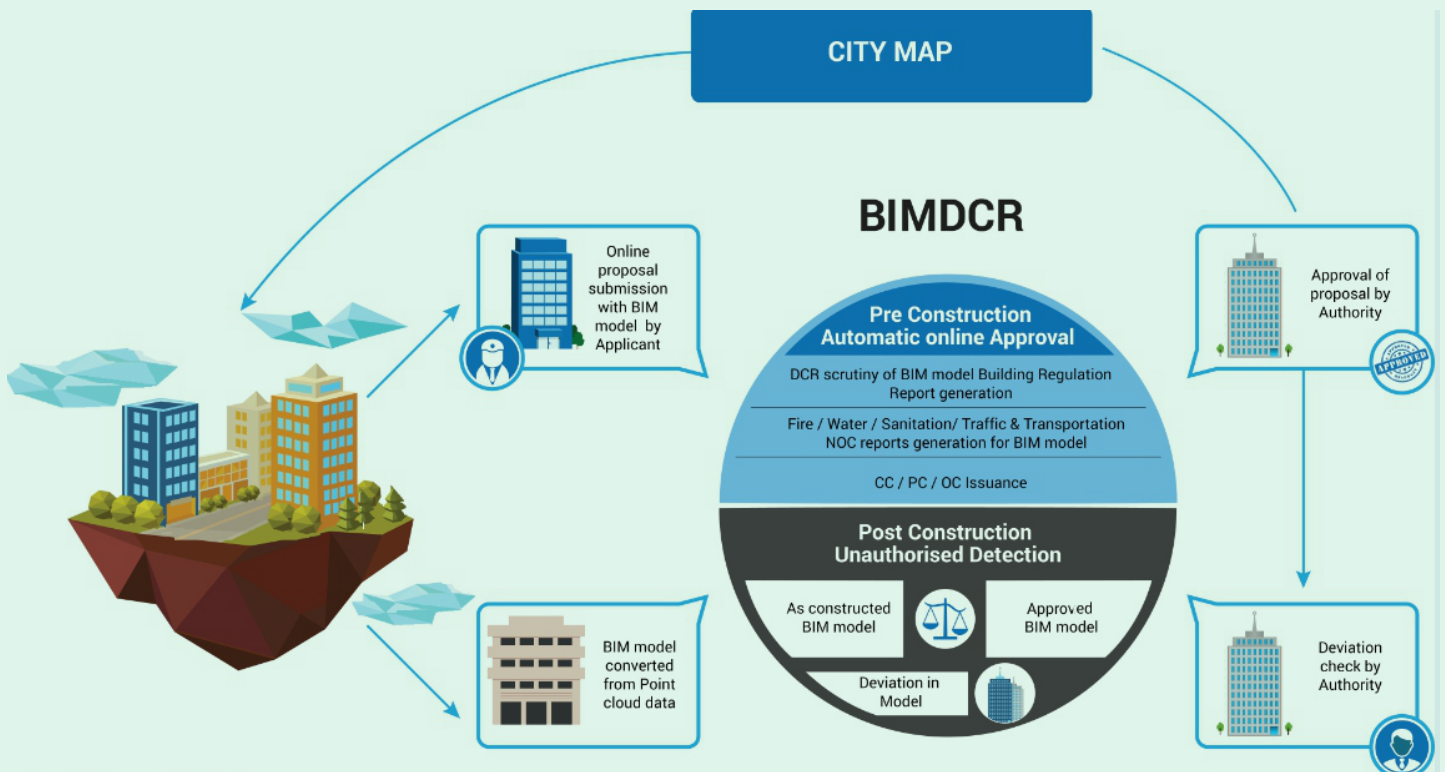## ▶ BIMDCR - An integrated BIM based Online Building Approval System

Building Information Modeling (BIM) is a model-based design concept, in which buildings will be built virtually before they are built in the field. Data models are organized to complete integration of all relevant factors in the building lifecycle which also manages an information exchange between Architects, Engineers and Contractors in the ecosystem, to strengthen interaction and have single source of truth. BIM is a single and shared source of information in decision making during building construction lifecycle. BIM offers enormous gains in saving time & cost with greater accuracy in estimation while making design with less alterations, less rework and maintains consistent data.

BIMDCR is an innovative 3D Building Model based Online SINGLE WINDOW system. This is BIM based integrated Building Approval System which enables automatic scrutiny of building proposal by reading Building Models submitted by Applicant/Architect.
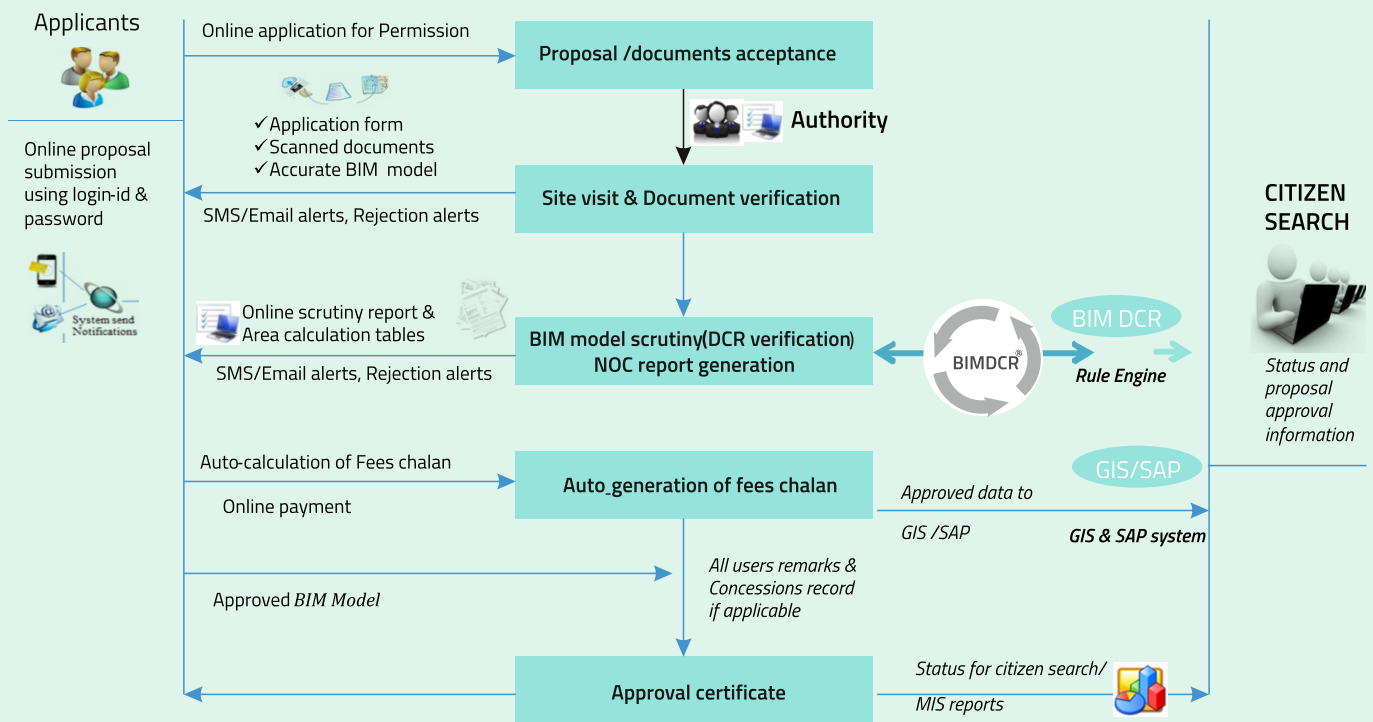

▶ BIMDCR Workflow

Web based framework of BIMDCR Approval Management system manages the process flow between Applicants and the approval Authority. Architects/ Applicant can submit application online (24 X 7) along with 3D integrated BIM model and required scanned copies of documents

System should generate fees memo/ demand notes automatically based on submitted Building Model & design documents.
System should havenecessary interfaces for Fees collection and receipts generation.
The workflow is seamlessly integrated with BIM based scrutiny Engine. The flow of the application can be depicted as under:

BIMDCR Features

Auto Scrutiny
▶ Automatic Building Plan Approval System can be developed as per the Development Control (DC) rules and regulations of various Municipal Corporations along with the local language support.
▶ Automatically reads and identifies building plan and layout objects from the building model
▶ Maps the objects in the building model file to development control rules
▶ Verifies DC rules to find variance

Auto zooming facility
▶ Clear view and easy analysis of the failed objects in the list stating the reason of failure.

Dynamic reports
▶ Reports are customized and produced in regional language
▶ Plot area report, MIS report, Failed item reports
▶ Detailed report along with associated rules

Automated workflow and alerts
▶ Approval process can be mapped dynamically using rule based template
▶ Scrutiny of documents classified as ownership, NOC and affidavits
▶ Email or SMS bases alerts and notifications
▶ Hand held devices (PDA) integrated to capture information at site

Flexibility of customization
▶ Customization as per specifications of corporations
▶ Local language support

▶ BIMDCR Advantages

- ▶ Single BIM model submission to various municipal department
- ▶ Improved collaboration between Architects, Engineers and Contractors in the ecosystem
- ▶ Offers complete integration of all relevant factors in the building lifecycle
- ▶ Enables automatic scrutiny of building proposal by reading Building Models submitted by Applicant/Architect
- ▶ No deviations in building plan approved by different department
- ▶ All deviations are highlighted on the same model as per regulations
- ▶ Approval at various stages made easy with comparing
- ▶ 3D Visualization provides a better picture what a structure may look like in a plot/GIS city map
- ▶ Provides information on Green Building Code compliance
- ▶ Offers CFD Simulation

▶ BIMDCR is the first of its kind in the country, which offers:

- ▶ Smart city permission system
- ▶ Multi-departmental integrated signal window approval
- ▶ Bringing together GIS enabled City mapping system with Multi departmental permissions
- ▶ End-to-end solution that caters to permission from design approval to construction
- ▶ Identifies, reports and marks unauthorized constructions

Safety, facility, disaster management

Enhanced 3D visualization of city's development

MIS report showing integrated data

BIM DCR® benefits

Through checking of parameters and increase in revenue

Easy comparison of model versions to identify un-authorized construction

Standard model format and simplified processes