(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :10/07/2025

(21) Application No.202511065916 A
(43) Publication Date : 26/09/2025

(54) Title of the invention : AN INTERACTIVE ELECTION DATA ANALYTICS AND VISUALIZATION SYSTEM USING POWER BI

(51) International classification :G06F0016840000, G06F0011300000, G06F0016250000, G06F0016260000, G06F0016245800
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
**1)NOIDA INSTITUTE OF ENGINEERING & TECHNOLOGY**
Address of Applicant :19, KNOWLEDGE PARK-II, INSTITUTIONAL AREA, GREATER NOIDA-201306, GAUTAM BUDDHA NAGAR, UTTAR PRADESH, INDIA Gautam Buddha Nagar ---------- ----------
**Name of Applicant : NA**
**Address of Applicant : NA**
(72)**Name of Inventor :**
**1)CHANDRAKANT MOHANTY**
Address of Applicant :NOIDA INSTITUTE OF ENGINEERING & TECHNOLOGY, 19, KNOWLEDGE PARK-II, INSTITUTIONAL AREA, GREATER NOIDA-201306, GAUTAM BUDDHA NAGAR, UTTAR PRADESH, INDIA Gautam Buddha Nagar ---------- ----------
**2)AAYUSH MISHRA**
Address of Applicant :NOIDA INSTITUTE OF ENGINEERING & TECHNOLOGY, 19, KNOWLEDGE PARK-II, INSTITUTIONAL AREA, GREATER NOIDA-201306, GAUTAM BUDDHA NAGAR, UTTAR PRADESH, INDIA Gautam Buddha Nagar ---------- ----------
**3)RANU KUMAR**
Address of Applicant :NOIDA INSTITUTE OF ENGINEERING & TECHNOLOGY, 19, KNOWLEDGE PARK-II, INSTITUTIONAL AREA, GREATER NOIDA-201306, GAUTAM BUDDHA NAGAR, UTTAR PRADESH, INDIA Gautam Buddha Nagar ---------- ----------
**4)GARIMA JAIN**
Address of Applicant :NOIDA INSTITUTE OF ENGINEERING & TECHNOLOGY, 19, KNOWLEDGE PARK-II, INSTITUTIONAL AREA, GREATER NOIDA-201306, GAUTAM BUDDHA NAGAR, UTTAR PRADESH, INDIA Gautam Buddha Nagar ---------- ----------

(57) Abstract :
Disclosed herein is an interactive election data analytics and visualization system using power BI (100) comprises a data acquisition module (102) configured to extract structured and semi-structured election-related datasets. The system also includes a data transformation engine (104) handling inconsistent data formats, resolving missing values, and aligning data schema. The system also includes a Power BI-based visualization environment (106) configured to host interactive dashboards. The system also includes a DAX-based computational layer (108) using Data Analysis Expressions for generating derived metrics. The system also includes a user interface unit (110) configured for real-time filtering, drill-down analysis, and cross-data comparison. The system also includes a web-hosted publishing and embedding module (112) adapted to deploy the interactive dashboards over the internet.

No. of Pages : 30 No. of Claims : 10