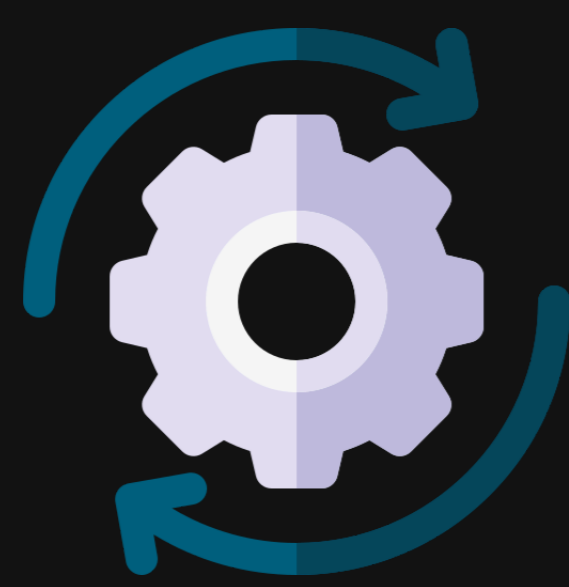
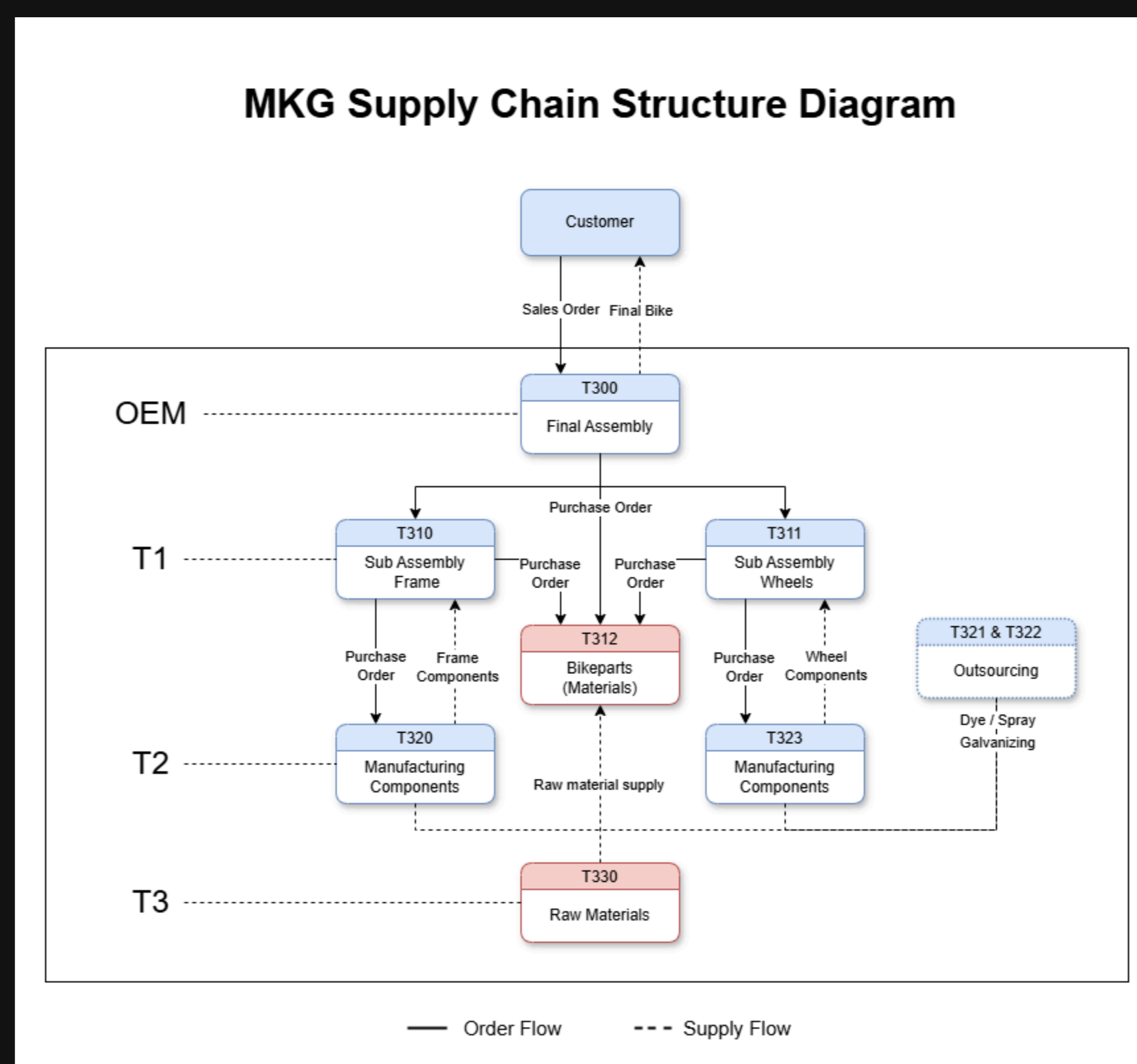
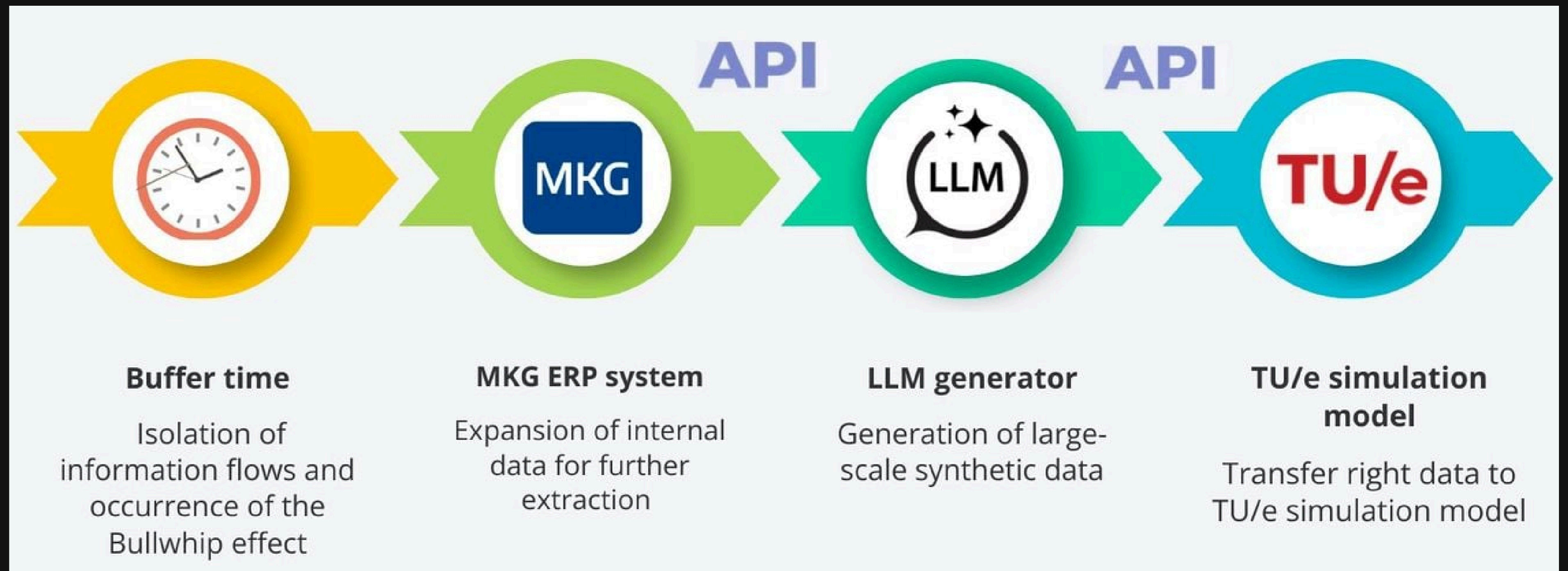


# NXTGEN BIC - bike project



## ERP data acquisition & Integration

MKG ERP system is the primary data source within the organization, which integrates production, finance, and resource management into a unified process model..



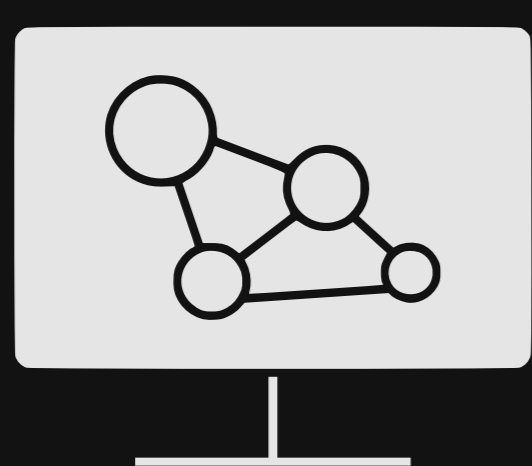
```

=====
VORR
=====
Fetching vorr...
vorr: 87 rows fetched
vorr_num  vorr_num      vorr oms_1  vorr_order_aantal  vorr_eenh_order  t_vorr_dat_order  vorr_dat_gewenst  vorr_leverdatum  vorr
referentie  RowKey RowKeyParent
77 A30240021      4 Ebike V00 - Sub assy buy      1.0      st.      2024-11-13      2024-11-26      2024-12-02      NXTGEN
aftrap - MH 0x00000000e291469
78 A30240022      1 Ebike V00 - Sub assy buy      1.0      st.      2024-11-21      None      2024-12-18
uitleg BMO 0x00000000e2914a2
79 A30240023      1 Ebike V00 - Sub assy buy      1.0      st.      2024-11-26      2024-12-24      2024-12-16
0x00000000e2914c0
80 A30240024      1 Ebike V00 - Sub assy buy      1.0      st.      2024-11-26      2024-12-24      2024-12-16
0x00000000e2914c9
81 A30240025      1 Ebike V00 - Sub assy buy      1.0      st.      2024-11-28      2024-12-24      2024-12-30
0x00000000e2914e7
82 A30240026      1 Ebike V00 - Sub assy buy      20.0     st.      2024-11-29      None      2024-12-31      Fiet
senwinkel X 0x00000000e39c202
83 A30240027      1 Ebike V00 - Sub assy buy      1.0      st.      2024-12-03      2024-12-24      2024-12-23
0x00000000e39c223
84 A30240028      1 Ebike V00 - Sub assy buy      1.0      st.      2024-12-03      None      None
0x00000000e39c242
85 A30240029      1 Ebike V00 - Sub assy buy      1.0      st.      2024-12-10      2025-01-25      2024-12-24
0x00000000e39c2a8
86 A30240030      1 Ebike V00 - Sub assy buy      10.0     st.      2025-01-02      2025-01-21      2025-02-26
Demo SHL 0x00000000e39c2cb
=====
Total rows: 87
    
```



## AI-Driven Data Generation

Large Language Model (LLM) uses real data from ERP systems to generate large-scale synthetic datasets for comprehensive assessment of all supply chain scenarios.



## TU/e Simulation Model

Dynamic Simulation Model — the main objectives include tracking past performance and predicting future results. This system uses synthetic data to recreate supply chain dynamics and conduct "what-if" analysis.

