

Potential Use Cases for AI and GenAI in Electricity Supply Business

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Introduction AI & GenAI

AI focuses on using predefined rules and algorithms to solve specific tasks or make decisions.

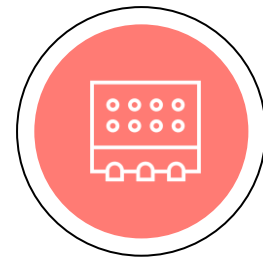
Task-Specific



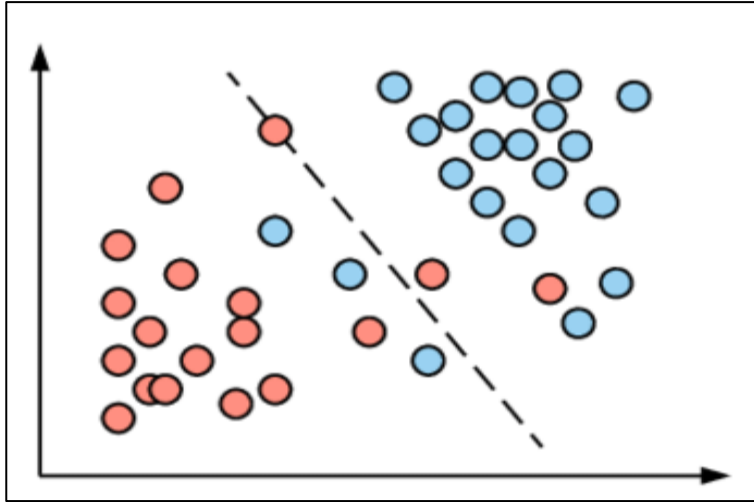
Logic-Based



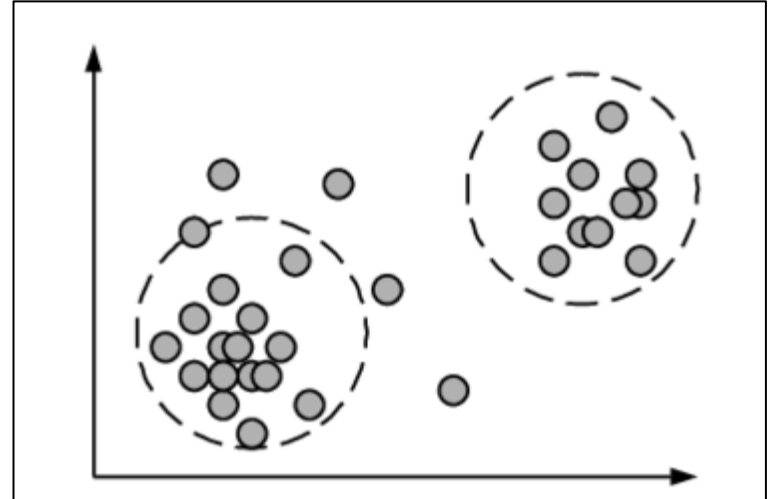
Data-Driven



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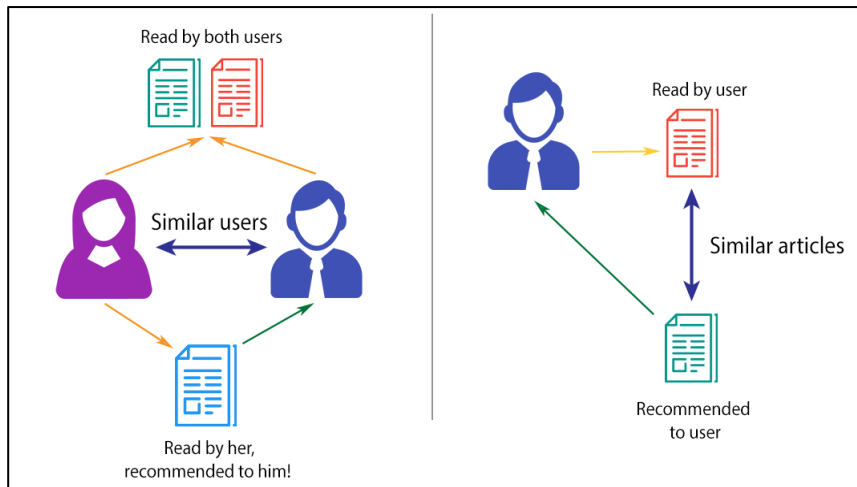


Classification

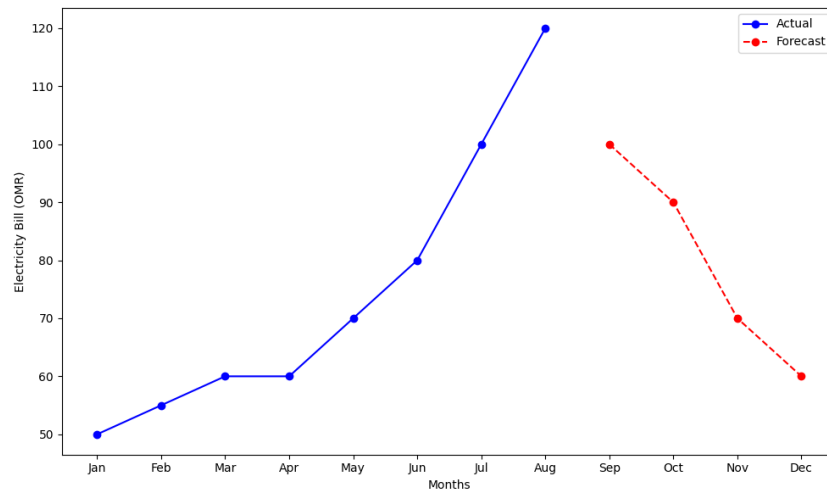


Clustering

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Recommendation



Forecasting

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GenAI GenAI focuses on creating new content (text, images, audio) by learning patterns from existing data

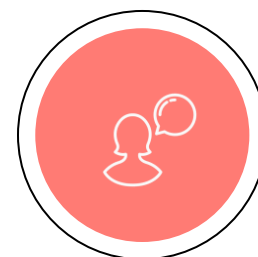
Creative AI



Versatile



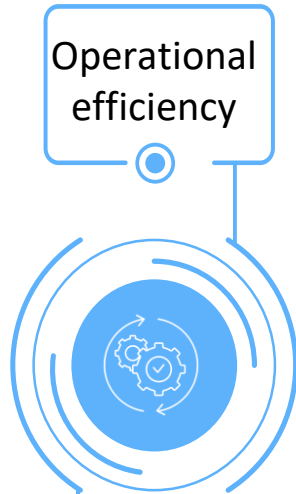
Human-like



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Importance of AI and GenAI

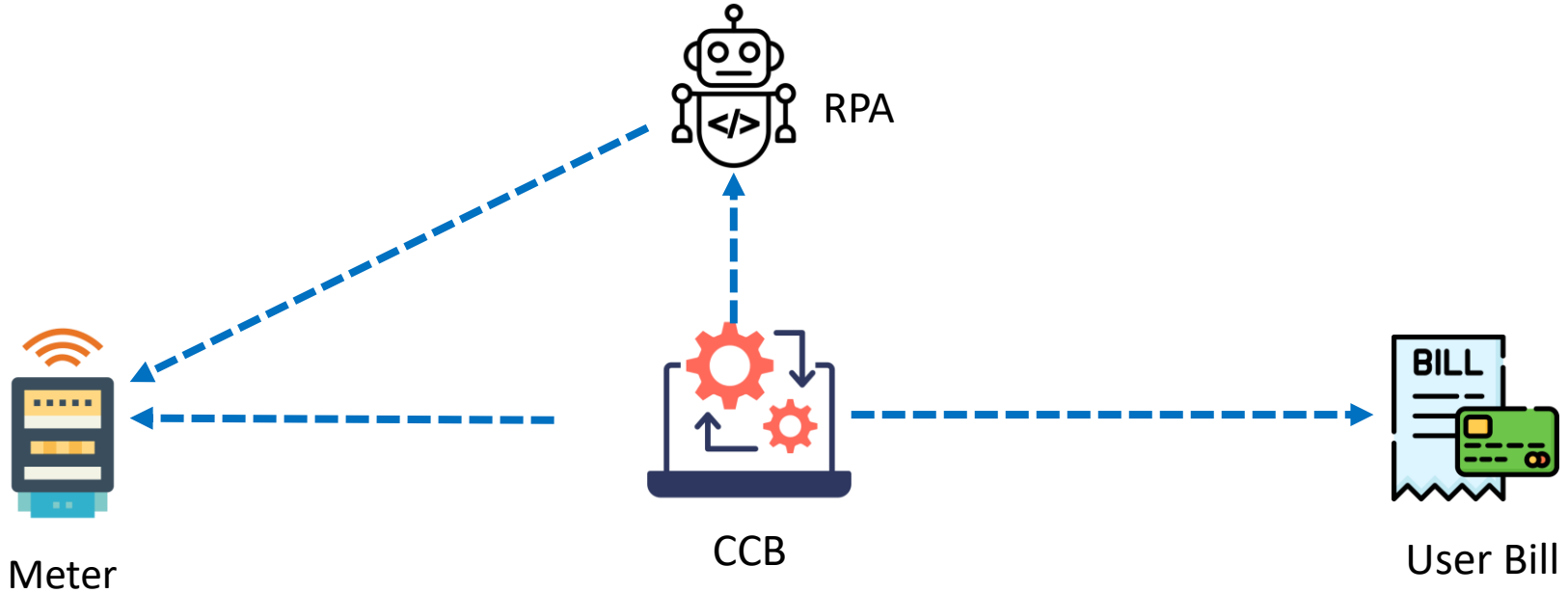


Robotic Process Automation

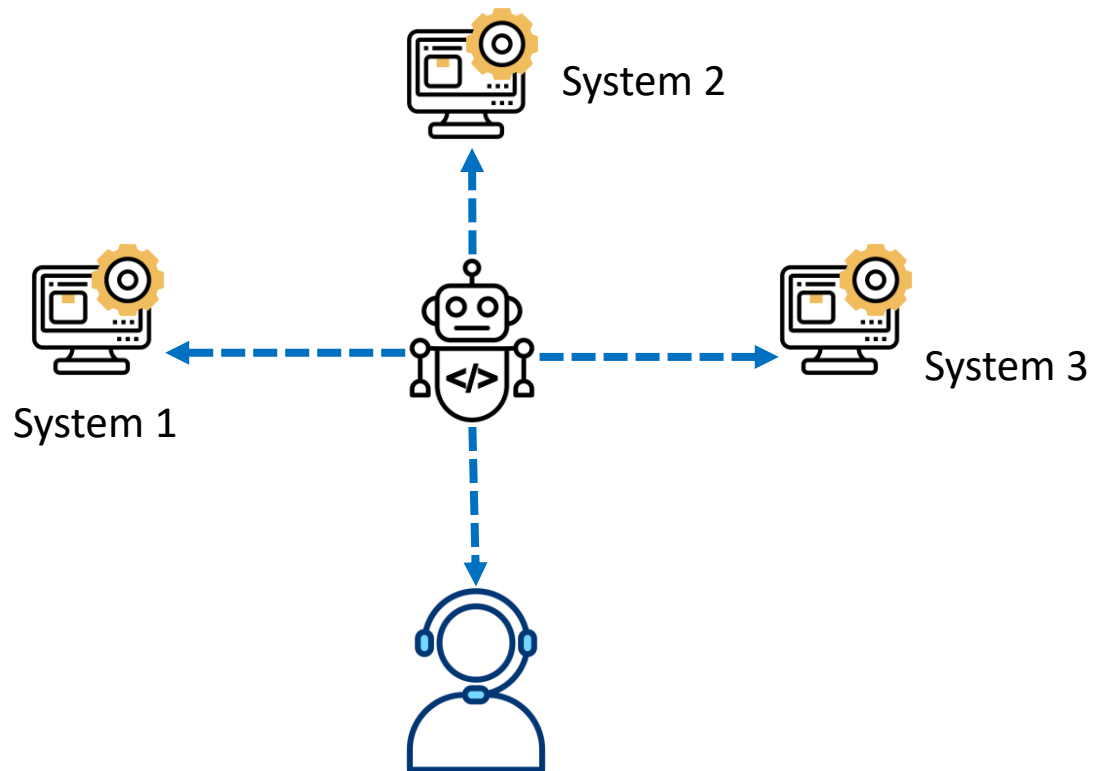
RPA is a technology that enables the automation of **repetitive** and **rule-based** tasks typically performed by humans. RPA uses software bots, or "robots," to mimic human interactions with digital systems.



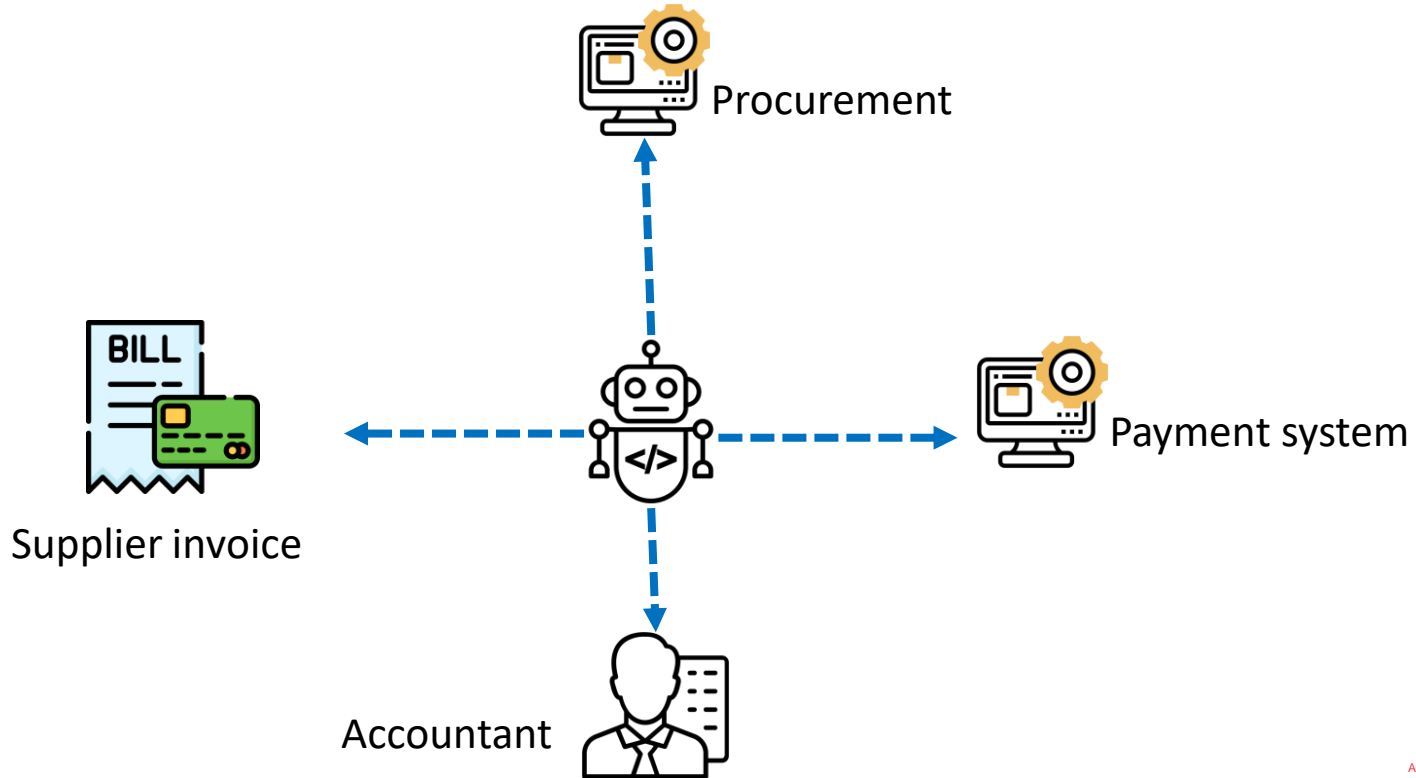
RPA: Bill validation



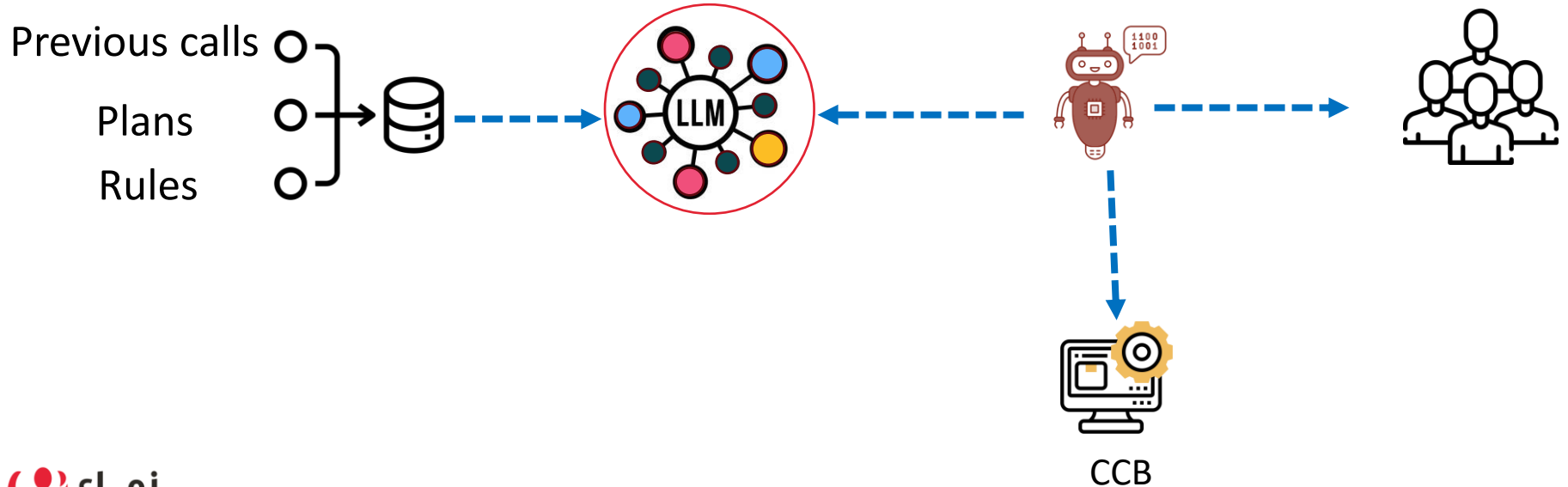
RPA: Customer Service and Support



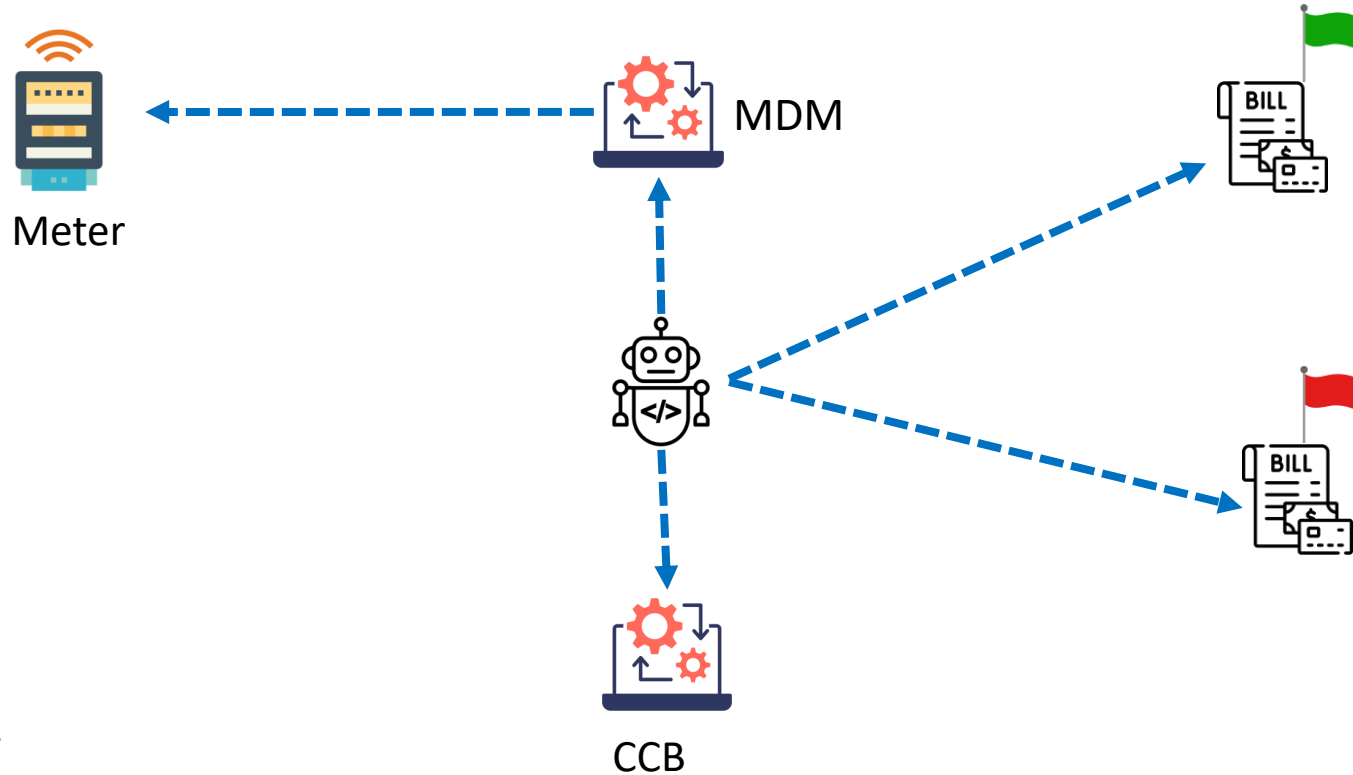
RPA: Accounts Payable and Receivable



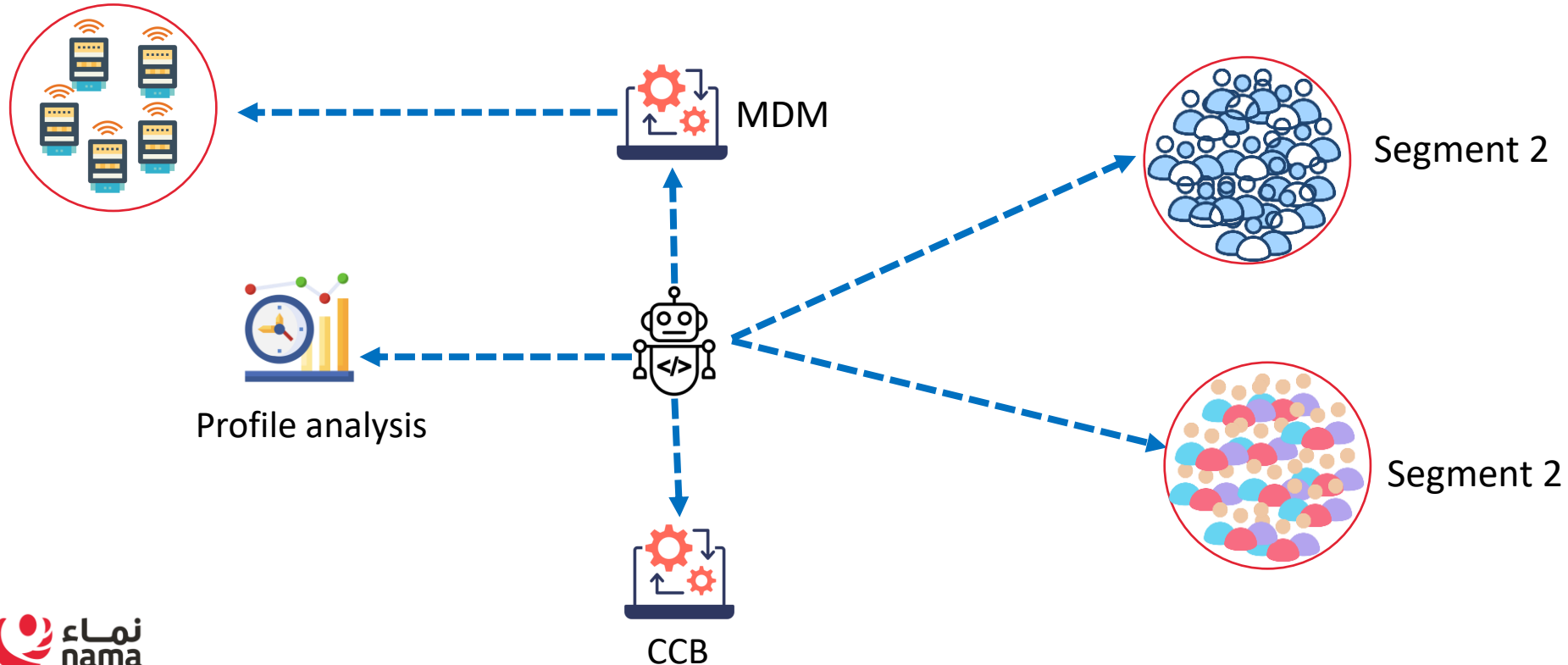
Call Center Agent (Chatbot)



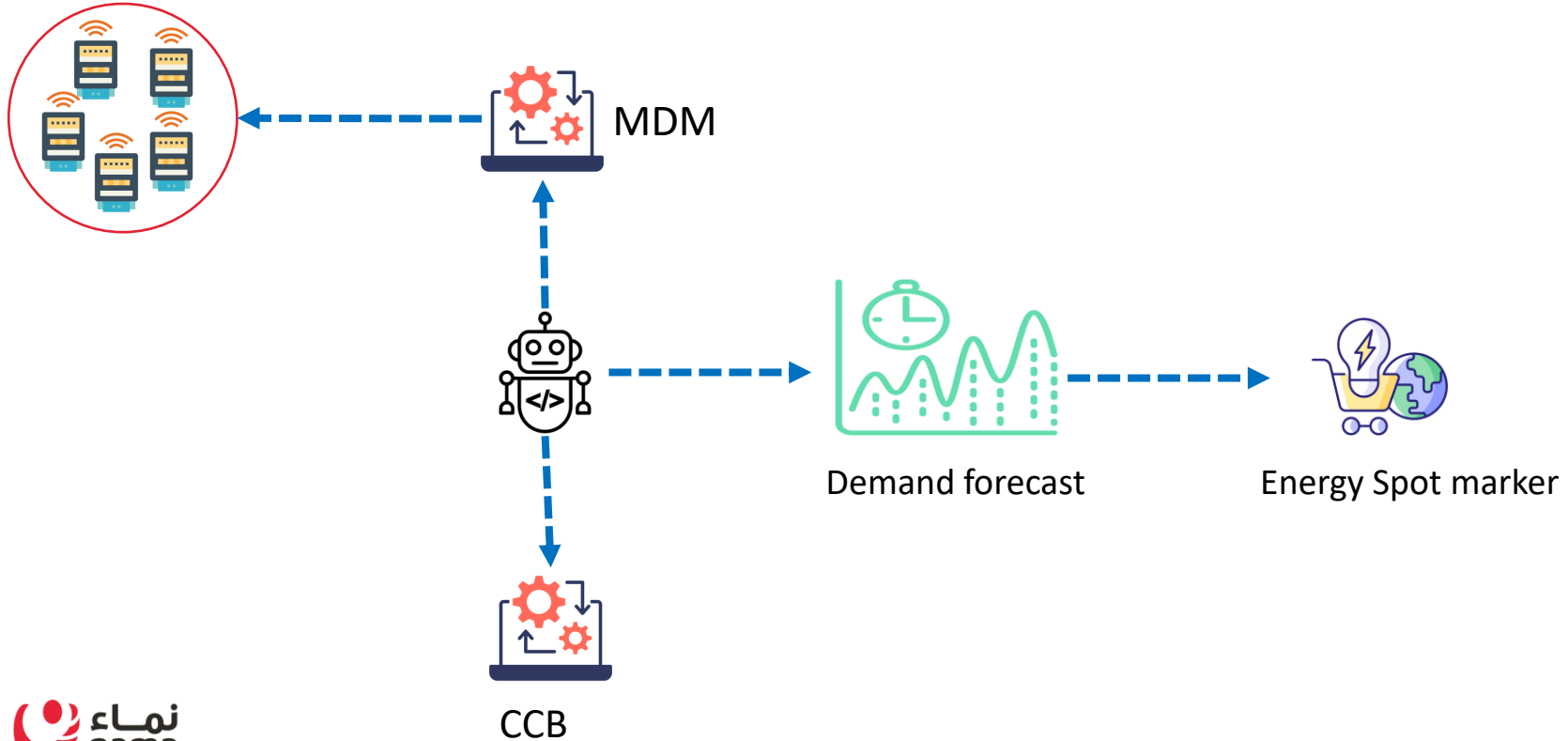
Energy Theft Detection (Classification)



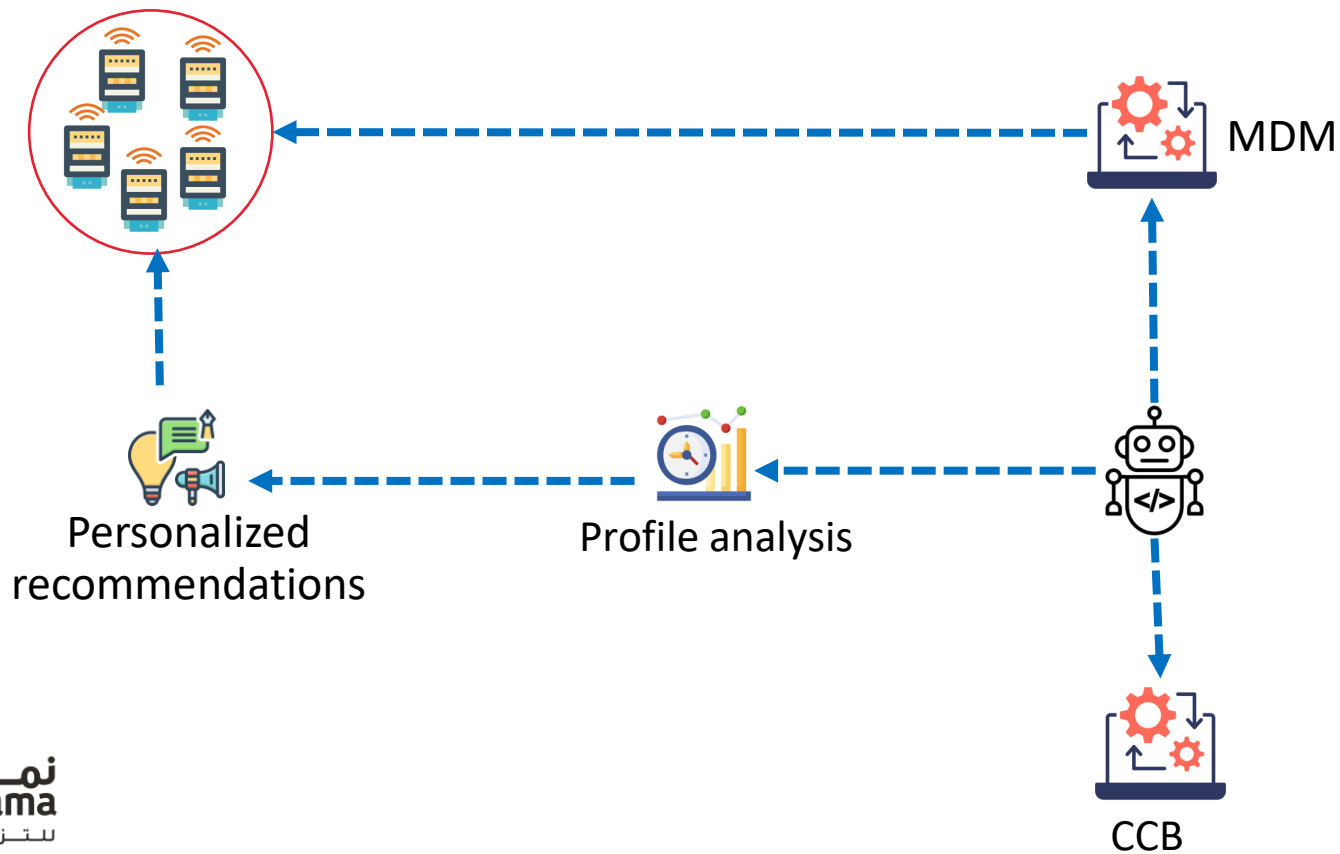
Customer Segmentation(Clustering)



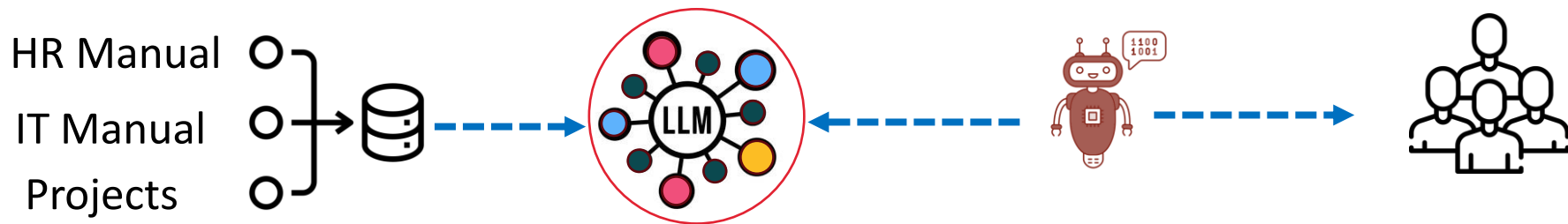
Demand forecast



Personalized energy-saving recommendations



Knowledge base Agent

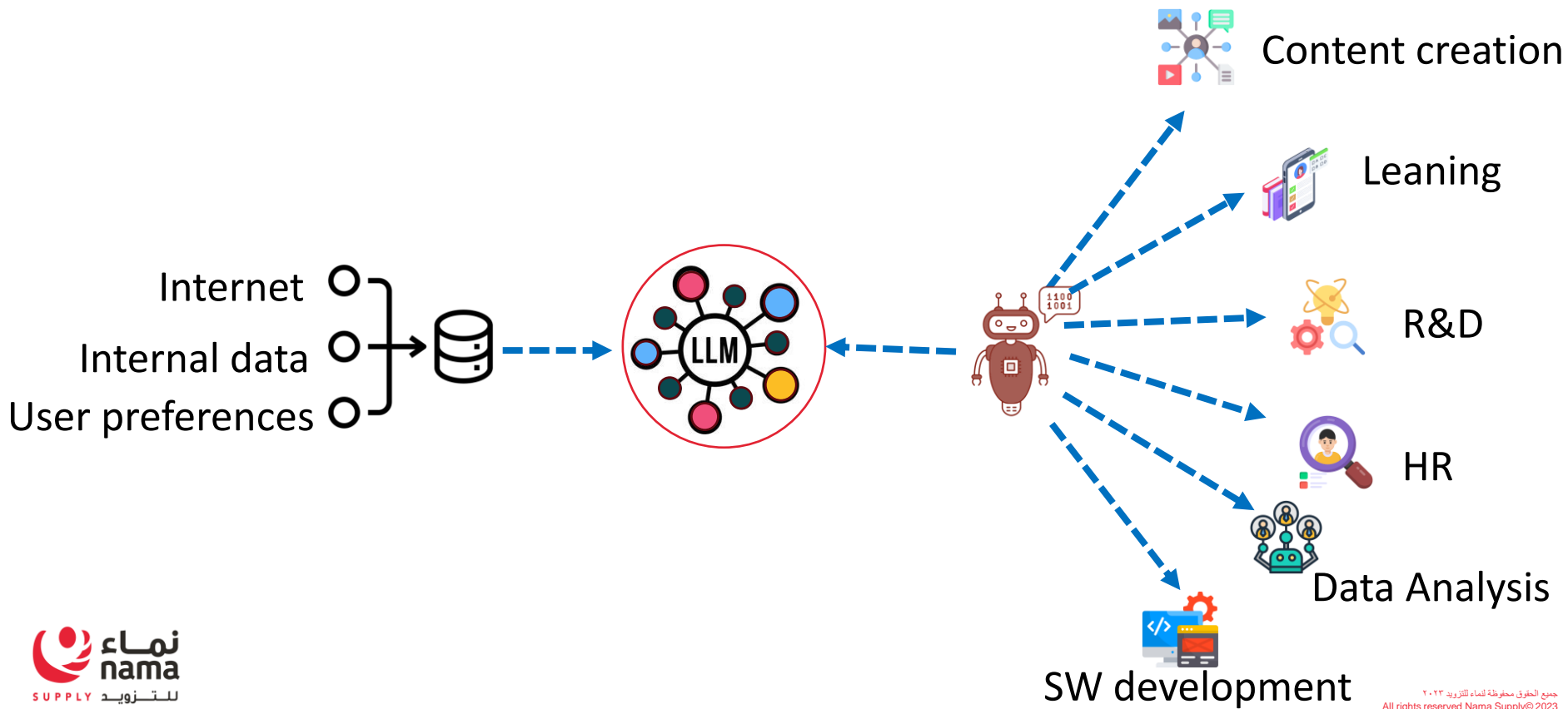


Digital twin

- Customer awareness
- Customer services
- Training



Work environment productivity



Conclusion

- AI & GenAI can play major role at electricity supply business
 - Operational efficiency
 - Customer satisfaction
 - Decision-making
 - Office productivity
- Supply business can be Data and AI driven business
- There is a need to develop “Data & AI” units within supply business
- Several challenges are expected and need to be addressed

Thank you