



**POUR ELLE**

BRUSSELS | 20-22 MARCH 2018

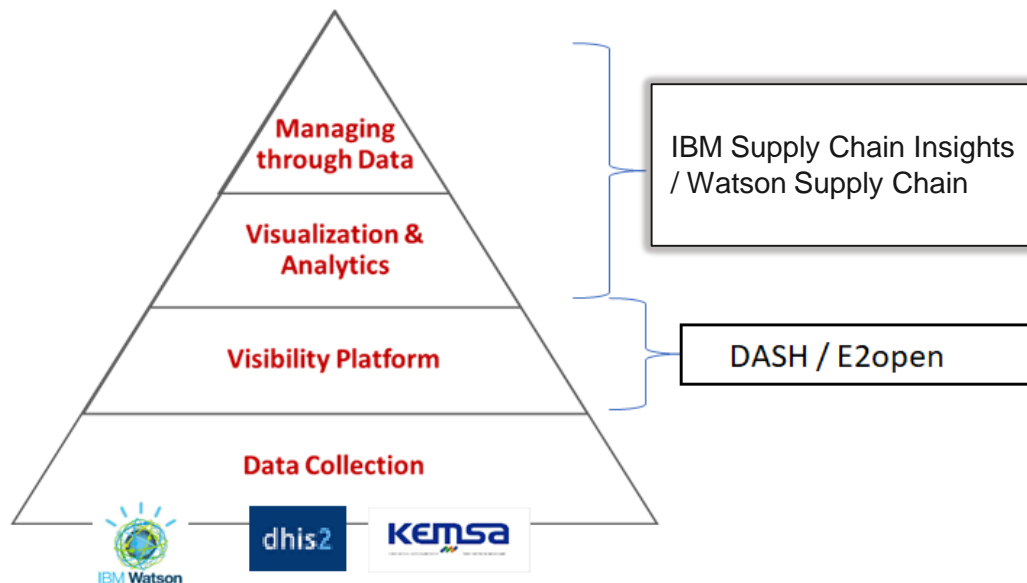
**18<sup>TH</sup> GENERAL MEMBERSHIP MEETING OF THE  
REPRODUCTIVE HEALTH SUPPLIES COALITION**

# Kemsa explores using the IBM Watson Artificial Intelligence (AI) Engine

Dennis Ndwiga, Senior Business Analyst  
Kenya Medical Supplies Authority (KEMSA)

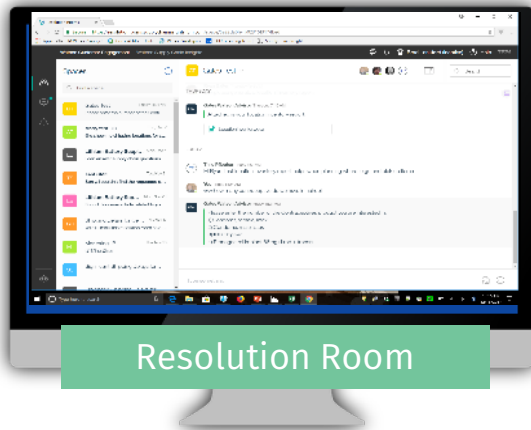
# What if the Kemsas supply chain used artificial intelligence (AI) to aid in decision making?

- Goal: Could a concept like this work in our community now? Or later?
- Vision: Kemsas will have an AI trusted advisor to share insights on causes of stock-outs, preventative measures and identification of relevant resources to improve availability of product by 50%
- Dec/Jan2018: Successful IBM Watson Supply Chain proof of concept with Kemsas sample supply chain data across 24 facilities

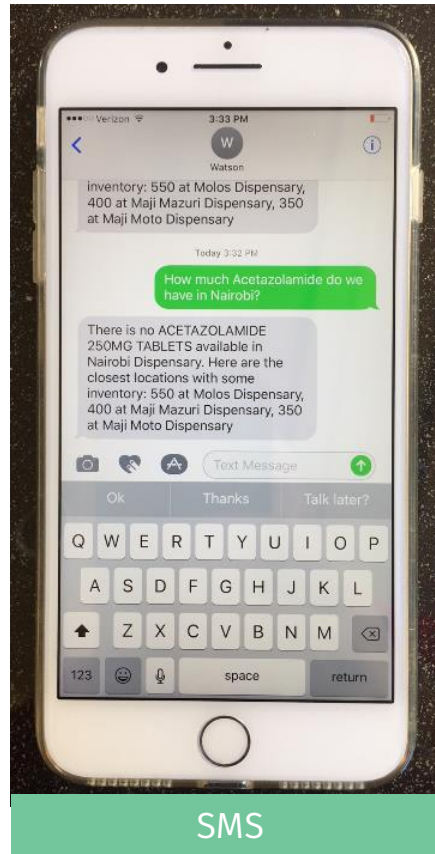


# Key Considerations

- Supply Chain Insights provides various user interaction methods
- Designing for connectivity and hardware challenges



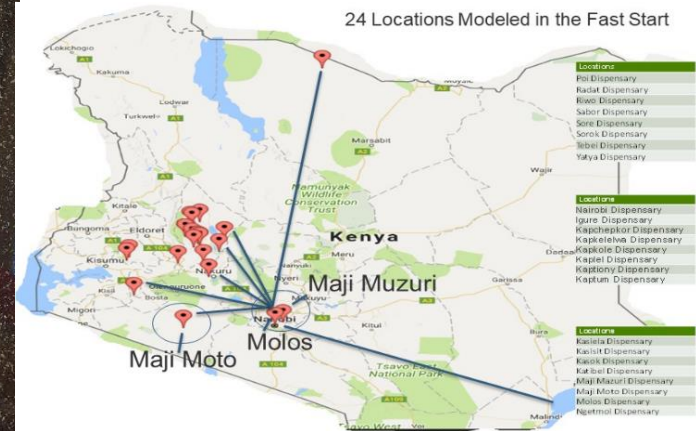
Resolution Room



SMS

**Question:** How much Acetazolamide do we have in Nairobi?

**Watson Answer:** No Inventory for Acetazolamide is found in Nairobi but the nearest locations with inventory are provided in Watson's response



Voice over Mobile Device

# Key Outcomes and Results

Today's AI technology allows us to leverage cognitive capabilities to create a transparent, intelligent and predictive supply chain for Kemsas.

The successful proof of concept has resulted in an expanded focus to pilot with real data at a select set of facilities.

**Moving forward we expect to be able to:**



Analyze both structured and unstructured data for greater insight



Empower people with cognitive knowledge for faster, better actions



Enable comprehensive visibility across the ecosystem with the VAN platform



Enhance existing systems, eLMIS, with cognitive understanding and learning

***Lack of visibility and transparency is the greatest hurdle in achieving the supply chain organization's objectives.***

- IBM IBV Global Chief Supply Chain Officer (CSCO) Study of 400 supply chain leaders

# Challenges Encountered

In the near term, Watson will require:

- Connecting Kemsas supply chain data to Watson using a VAN platform to collect and aggregate at a small number of facilities
- Training the cognitive engine
- A successful pilot using real data
- A sustainable business model

At scale, Watson will require:

- Using all possible data collection methods to obtain last mile data
- Connecting Kemsas supply chain data to Watson using a VAN platform to collect and aggregate data from many sources of data across the 47 counties and ~6000 facilities (for a full roll out)
- Training and maintaining the cognitive engine over time so that it continually generates the best responses to users questions