

### **GREATER HORN OF AFRICA** REGIONAL KNOWLEDGE **SHARING MEETING**

**HUMANITARIAN-DEVELOPMENT-PEACE (HDP) COHERENCE IN FOOD CRISIS CONTEXTS** 









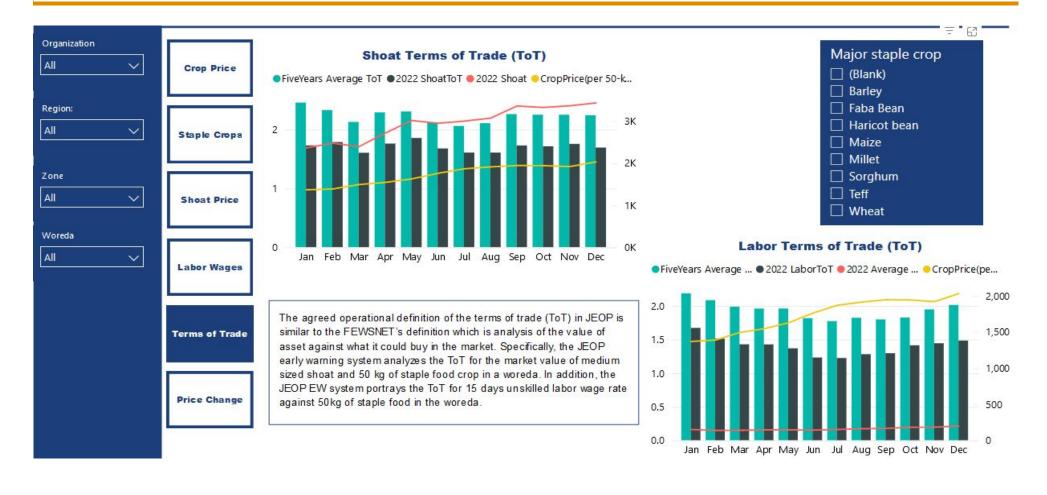
# Technology for Data Sharing: Options for IPs Across HDP Pillars

May 10, 2023





### **JEOP Early Warning System Dashboard**



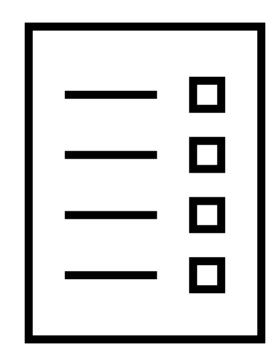
# Process Steps When Selecting the Technology



- Be clear with needs. Our needs were:
  - Introducing automated analysis software
  - Interactive visualizations
  - A software allowing linkage with excels, ArcGIS, and website
  - Accessible
  - User friendly
- Exploring technologies with ICT4D expert
- Testing technologies
- Piloting

### **Considerations Made When Selecting Technologies**

- How much does it cost?
- Is the cost fair to the value the technology returns?
- Is the software company prepared to support?
- Can it be implemented by available skill within the organization?
- Is it customizable to meet our need?
  - \*\*Power BI technology got green light when evaluated with the above criteria



### PROCESS STEPS WENT INTRODUCING THE TECHNOLOGY

- Training ICT4D staffs
  - CRS international ICT4D staff trained Ethiopia based ICT4D staff
- ICT4D and program staff designed visualization together
- First product reviewed and tested by key stakeholders
- The product officially launched
- Stakeholders trained on how to use the power BI dashboard
- The technology always advertised in monthly early warning report, which is shared for wide stakeholder
- Stakeholder activity on the dashboard tracked and those who didn't signed for a while provided closer capacity building support



# **Options for Data Sharing**

Roger Hunwicks: Chief Data Architect, AIR, FEWS NET



# Agenda



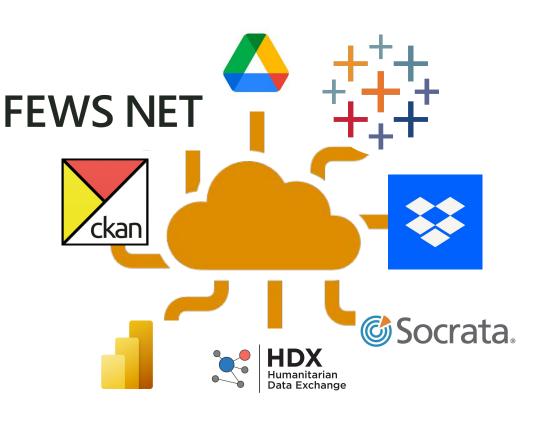
- 1. Technology Options
- 2. How to choose
- 3. Other Considerations



### **Technology Options**

 Cloud Storage, e.g. Dropbox, Google Drive, Microsoft OneDrive,

- Public Data Portal, e.g. HDX
- "Off the shelf" data archive, e.g. CKAN
- Commercial Data Portal, e.g. Socrata
- Enterprise collaboration software, e.g. Microsoft SharePoint or Google Sites
- Data Visualization Platform, e.g. Tableau
- Build your own website or data portal,
   e.g. FEWS NET Data Explorer





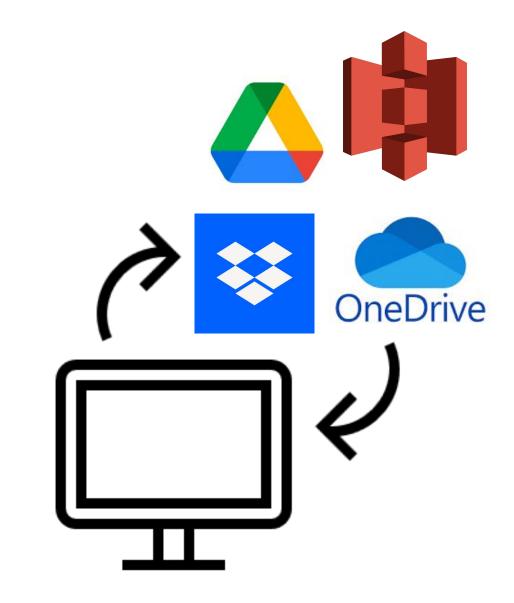
 Examples: Dropbox, Google Drive, Microsoft OneDrive, Amazon S3

#### • Pros:

- Easy to set up and use
- Accessible from anywhere
- Scalable storage options

#### • Cons:

- Security and privacy concerns
- Limited customization
- Potential costs for larger storage needs



### **Public Data Portal**

- Example: HDX (<u>humdata.org</u>), DDL
- Pros
  - Free
  - High visibility
- Cons
  - Public data only



### "Off the Shelf" Data Portal

- Examples: <a href="CKAN">CKAN</a>, <a href="DSpace">DSpace</a>
- Pros
  - "Free"
  - Customizable
- Cons
  - Probably requires some IT capabilities



# DSPACE

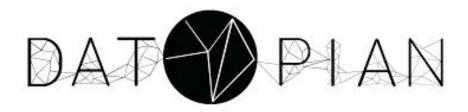


### **Commercial Data Portal**

- Examples: <u>Socrata</u>, <u>ArcGIS Hub</u>, <u>Datopian</u>
- Pros:
  - Easy to use
  - Support
- Cons:
  - May be expensive







# **Enterprise Collaboration Software**

- Examples: Microsoft SharePoint or Google Sites
- Pros:
  - Customizable features and branding
  - Flexible
- Cons:
  - Development and maintenance costs



# Data Visualization Platform

Examples: Tableau, Superset,
 Microsoft Power BI

#### • Pros:

- Visually appealing data presentation
- Interactive and engaging
- Supports various chart types and formats

### • Cons:

- Learning curve for advanced features
- Limited customization in some cases
- Potential costs for premium versions



### **Build Your Own**

- Examples: FEWS NET Data
   Warehouse and Data Explorer
- Pros:
  - Completely customizable features and branding
  - Advanced features specific to your use case
- Cons:
  - Development and maintenance costs
  - Infrastructure costs







### **How to Choose**

- Contract / Grant / Organization Requirements
- Availability of technical support
- Sustainability
- Data Privacy and Security
- Data Update Frequency
- Flexibility
- Other Functionality





### **Other Considerations**

- Personally Identifiable Information (PII)
  - Share redacted data
  - Have a documented process
- Metadata Standards
  - Use agreed standards where possible
  - Think about what your data will be combined with
- Machine Readable Formats
- Data Documentation



### **Closing and Key Takeaways**

### Thank you!











This presentation was made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of the Implementer-led Design, Evidence, Analysis, and Learning (IDEAL) Activity and do not necessarily reflect the views of USAID, the United States Government, the Government of Kenya, or the Intergovernmental Authority on Development.