



## 2012 Conference on Health and Humanitarian Logistics

### Workshop 4: Information and Communication Technology for Logistics Decisions

1. How can technology enable data gathering and analysis to better describe supply and demand in a humanitarian response?

a. Demand Side: gathering “unstructured” data directly from the affected population through social media, crowdsourcing, etc.; incorporating “structured” data from formal assessments of the affected population, baseline data, etc.

b. Supply Side: information systems to manage data within an organization’s supply chain; technology for sharing data across organizations to enable coordination.

- Established standards, **common nomenclature**
- Thinking **outside the box** and gather data in a different way
- Priorities change, **data is out of date once input**
- Experience and **existing processes important**, why inventing the wheel
- Social media is important but **not always able to have internet**
- Level of penetration of technology in South Sudan
  
- **eBAY (humanitarian)**: matching supply (donors, humanitarian organization) and demand (government), on-line, real time updated – AidMatrix?
- **Social media**: for validating goods that are in the pipeline (triangulating). Use as common platform (since IT systems of agencies are not compatible). More accurate than assessment teams. Also for logistics capacities (ports, transportation). Private businesses affected. Incentives for people to post? For determining trends. Focus group: medical doctors? Context specific additional items (chain saw, underwear). What is “trending”.
- **Google analytics** (determine most probably needed goods)
- **Credit card companies**: what technologies are they using to pick out suspicious transactions, how do they sift through data?
- Migration of people, population estimates (from mobile phone data)
- Online questionnaire on offered relief goods
- Needs to consider what is already being shipped (“in the pipeline”)
  
- Handheld devices to verify beneficiaries
- GIS mapping (document locations)
- Cell phones for need assessments
- Cell phones to share data about supplies
- **Excel databases** for supplies
- **Google.org** tools

## 2. What are the enablers and barriers to rolling out ICT solutions on a larger scale?

### Enablers:

- How to be more sustainable
- [www.basecamp.com](http://www.basecamp.com) project management online
- Investing time upfront to build relevant systems
- Piloting to refine requirements
- people's own mobile phones,
- **interface design,**
- information management,
- feedback from people to **know what is required,**
- **understanding who you are in the system** to make better use of solutions.

### Barriers:

- **"This is just a temporary solution"** (given that is an emergency)
- ICT departments
- Lack of training
- **No evidence as to how the solution will assist** in making better decisions and or facilitate work
- Tracey's experience: Designed ERP system and gave it to a project manager in India through [www.elance.com](http://www.elance.com) (freelancers website). Given her experience, manage the process very tightly. She provided very specific inputs. The ERP included the following modules: Recruitment, CRM, accounts module, standard water down ERP -recruitment module with resources- all for under \$5k
- Trust test the introduction of technology as the **business processes are not formalised**
- Are we there to help people or make software? (*Yes, No...but can use software*)
- Connectivity (**8 USD per megabyte satellite link**)
- need to follow processes and procedures (**people just want the solution**),
- **change management** (at the beginning),
- devices (they cost money),
- too much information (volume),
- gap between people who design the systems and the users ("unnecessary" information),
- **appropriateness of data.**
  
- Risk (crash, errors, etc.) versus flexibility
- [Analysis and validation of data/information, how to use the data.](#)
- [Compatibility between applications.](#)

### 3. What are the keys to making ICT implementations impactful? And how do we measure the impact?

- To be impactful it has to be sold to the users
- Ask what people need
- Completely clear **what problem is to be solved** by the specific solution
- The written policies and processes need to be in place prior to roll out
- It needs to be run on **applications that work in the field - a collection of simple tools**
- Key to optimise the bandwidth
  
- Have clarity about what you expect from the system
- **Monitoring the benefits you were expecting** from the system (financial and nonfinancial)

### 4. What information do you use in making logistics decisions? Create a list, describing the info as clearly as possible (provide web references if that helps).

- Lead time
- Costs
- Accessibility to affected areas
- Demand (location, types of items, quantities)
- Population
- Stock
- Storage capacity
- Transportation capacity
- Damages
- Transportation availability
- Feedback on distribution

### 5. How do we build the analytical capacity in the humanitarian and health sectors that can turn data into valuable information?

- Specifications about what you want to get out of the data, what data can provide you with that, what reports you need, engage all stakeholders
- Central data repository or server, analysis that gives required indicators to make decisions

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