



# **Using mobile technology for facilitating data collection and analysis in LLIN distribution**

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AMP 2015 Partner's meeting

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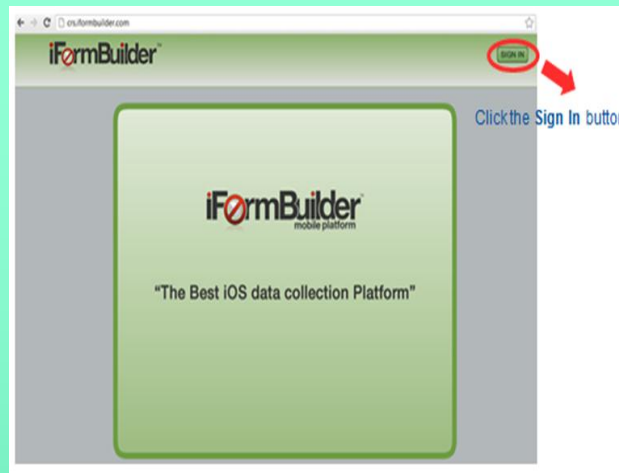
Suzanne Van Hulle, Senior Technical Advisor for Malaria

**faith. action. results.**

# Essential trio



People



Software



Hardware





# How it works – during beneficiary registration

- During the beneficiary registration, information on number of pregnant women in HH, voucher number, type of LLIN to be issued, etc. is collected on the iPad.





# Voucher issued



# How it works – on distribution day

- Once the barcode on the voucher is scanned on the distribution day, the following reminder steps shows up on the iPad

CancelLLIN DistributionSave

Consideration:

1. Collecte the voucher from the beneficiary
2. Scan the voucher bar code
3. Mark the voucher and keep it
4. Provide Net to beneficiary

Scan LLIN voucher number

>

Done

# iFormBuilder

These are the main elements of the iFormBuilder website:

**Main Menu**

**Username**

**Profile ID**

**Logout**

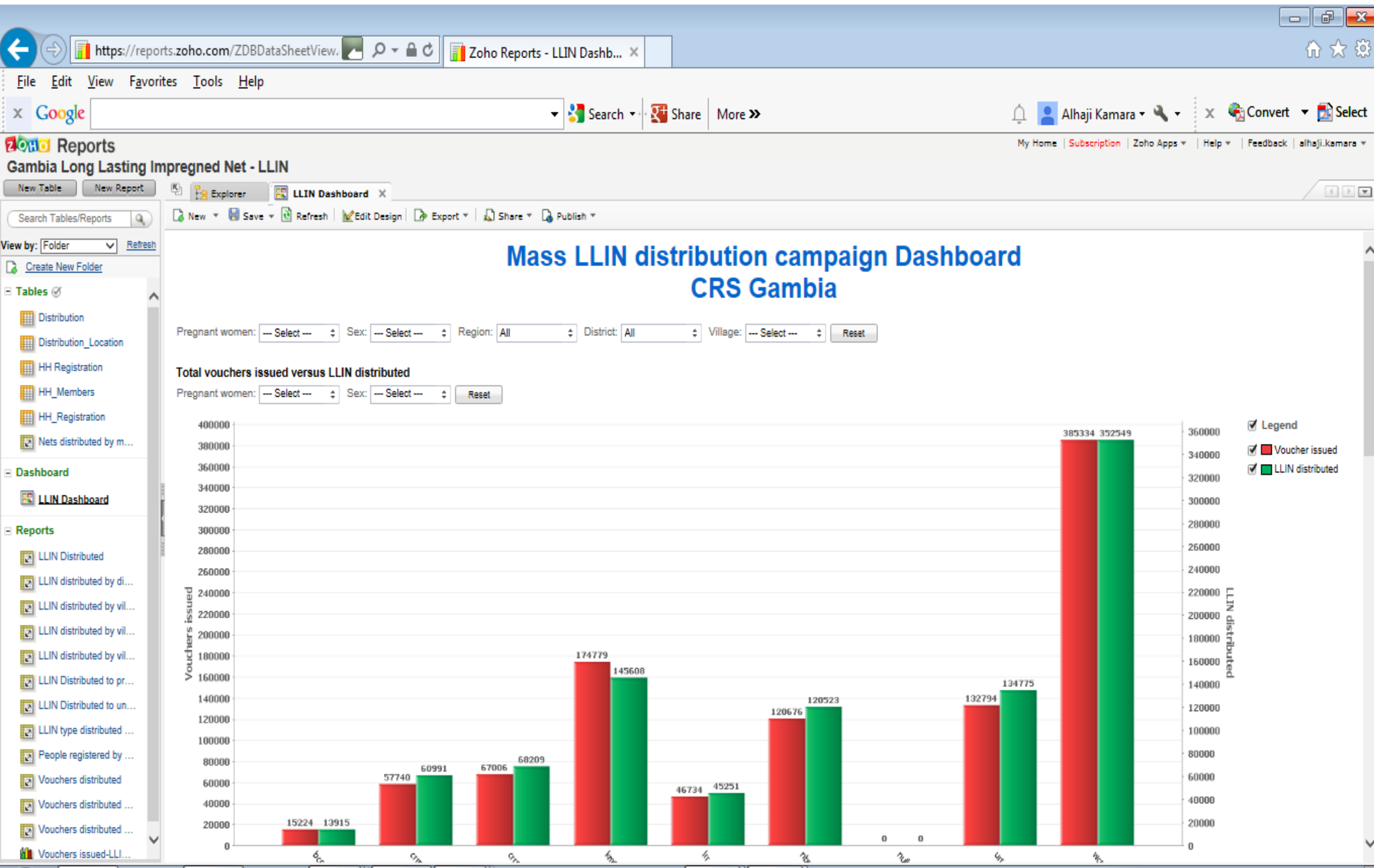
**Knowledge Base**

**Data Grid**

The screenshot shows the iFormBuilder website interface. At the top, the iFormBuilder logo is on the left. To its right is a navigation bar with five buttons: Data, Forms, Users, Company, and Support. Further right, the user is logged in, with the text 'Logged in as ognendtap' and 'Profile [11354]' displayed. A 'Logout' button is located to the right of the profile information. A red box highlights the navigation bar and the user information area. Below the navigation bar, there is a 'Views' section with icons for List, Map, Graph, HTML, Excel, and Excel Flat. To the right of the views are 'Feeds' with various icons. The main content area is a 'Data Grid' table. The table has columns: Filtered?, Form Label, Table Name, Last Modified Date, and Data Record Count. The table contains eight rows of data. A red oval highlights the entire data grid area. At the bottom of the page, there is a search bar with a 'Find' label, a search button, and a 'Reset' button. Below the search bar, it says '(Check the checkbox for exact match)'. At the very bottom, there is a pagination bar showing 'Page 1' and 'Displaying 1 to 10 of 90 items'.

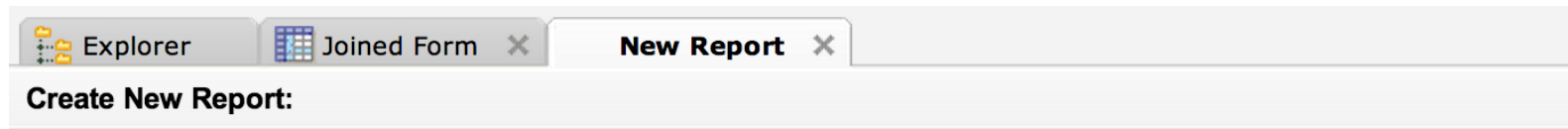
| Filtered? | Form Label                               | Table Name                          | Last Modified Date  | Data Record Count |
|-----------|--|-------------------------------------|---------------------|-------------------|
|           | 10973 CRS Office Location                | crs_office_location_copy            | 2012-08-14 12:36:40 | 1                 |
|           | 10974 Project Registration               | project_registration_main_form_copy | 2012-08-14 12:37:10 | 2                 |
|           | 10975 Project Registration               | project_registration_copy           | 2012-08-14 12:52:46 | 6                 |
|           | 10976 Multi_Country_Project_Registration | multi_country_project_subform_copy  | 2012-07-31 15:19:17 | 15                |
|           | 10977 Partner_program_areas_subform      | partner_program_areas_subform_copy  | 2012-07-31 15:19:44 | 47                |
|           | 10978 Donor Subform                      | donor_subform_copy                  | 2012-07-31 15:19:33 | 7                 |
|           | 10979 Partner Registration               | partner_registration_copy           | 2012-08-15 09:13:49 | 6                 |

# From Iform to Zoho reports!



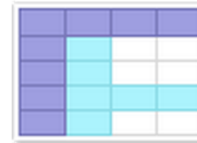


# Zoho reports – various formats



## Chart View

Chart View allows you to create a graphical view using different types of charts.



## Tabular View

Tabular View provides you a way to list your values in a simple tabular format.



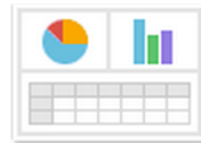
## Pivot View (Matrix View)

Pivot View allows you to view data summarized in a grid both in horizontal and vertical columns.



## Summary View

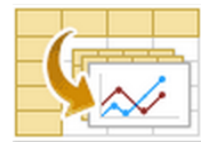
Summary View allows you to view data with grouping and subtotals.



## Dashboard

Dashboard allows you to combine multiple reports in a single page for a quick overview

## Auto Generate Reports:



## Similar to Another Table

Will generate reports for the selected table, similar to what is available for another table in this database.

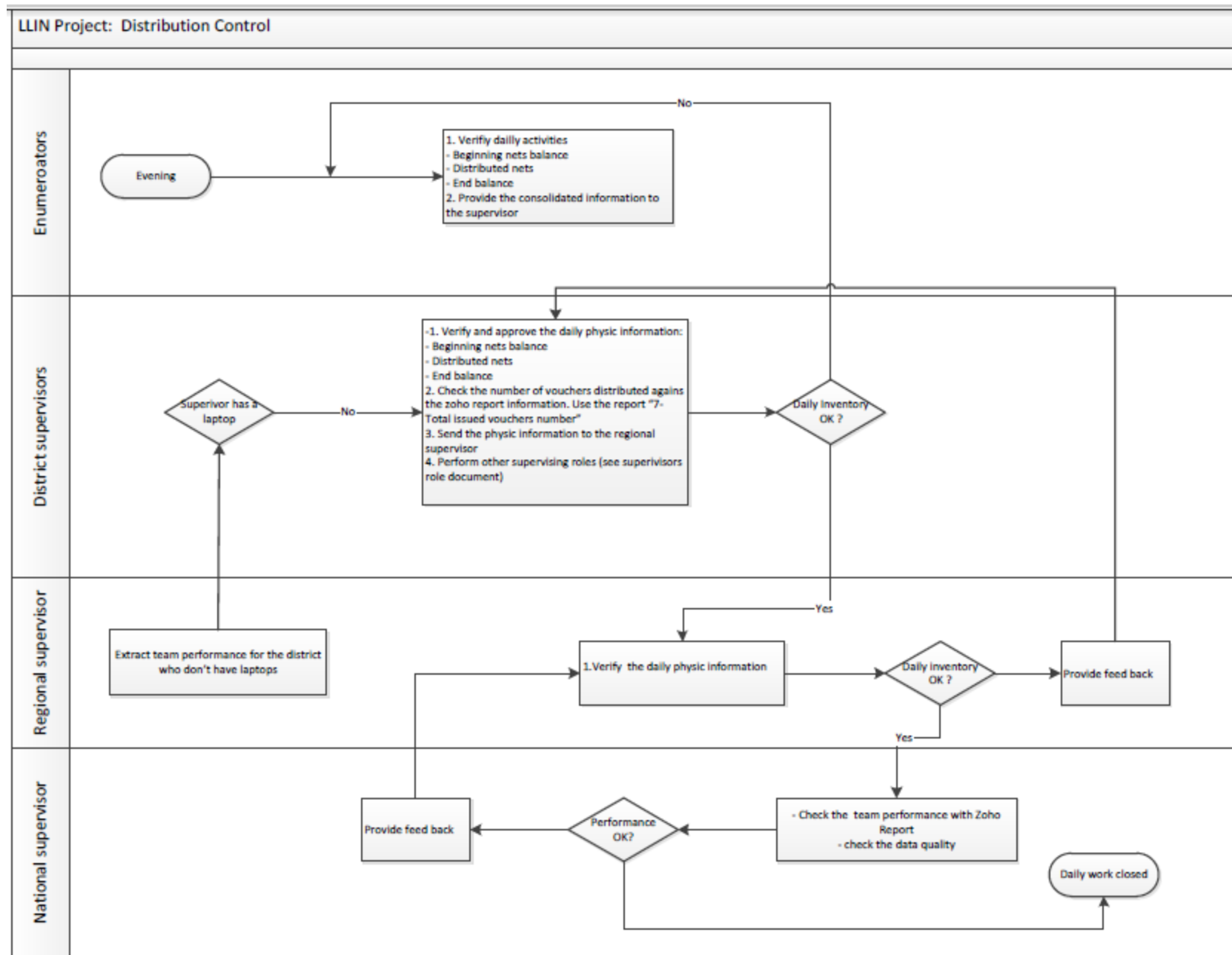


## With Auto Analysis

Will auto generate reports for the selected table, by analyzing & applying advanced rules on the data in the table.



## Business Processes ...



# What does it cost?

| 1.5 ICT4D Budget for Malaria Phase 2 LLIN Mass Distribution Campaign - May 2014 |   |           |          |                   |
|---|---|-----------|----------|-------------------|
| Hardware and Licenses   | Comments  | Unit Cost | Quantity | Total Cost (US\$) |
| iPad mini WiFi + 3G With Protective Case  | Data collection device                                      | 479       | 100      | 47,900            |
| Barcode Scanner   | Provides the ability to scan barcodes in IDs                | 280       | 100      | 28,000            |
| Voltaics Amp Solar Charger  | To recharge devices when electricity is not available       | 100       | 50       | 5,000             |
| iFormBuilder Licenses   | License per user per year. Both (# of users and # of years) | 50        | 100      | 5,000             |
| Barcode Software  | Provides the ability to issue IDs with barcodes             | 300       | 1        | 300               |
| Zoho Reporting  | Per month/per user (12 Months)                              | 72        | 3        | 216               |
| SIM Card  | For use with the iPad mini for data uploads                 | 1.5       | 100      | 150               |
| 3G or GPRS data cost  | Country-specific cost of using a data package               | 64        | 100      | 6,400             |
| Sub-Total   |   |           |          | 92,966            |
| Labor   | Comments  | Unit Cost | Quantity | Total Cost        |
| Form Desing and Build   | Includes services from GKIM                                 | 350       | 5        | 1,750             |
| Report Desing & Build   | Includes services from GKIM                                 | 350       | 5        | 1,750             |
| Geospatial Analysis Design & Build  | Includes services from GKIM                                 | 350       | 5        | 1,750             |
| Training  | Includes services from GKIM                                 | 350       | 15       | 5,250             |
| Sub-Total   |   |           |          | 10,500            |
| Onsite Training   | Comments  | Unit Cost | Quantity | Total Cost        |
| Airfare to and from   | Dependent on destination                                    | 2,000     | 1        | 2,000             |
| Accomodation  | Dependent on destination & number of days                   | 120       | 15       | 1,800             |
| Per Diem  | Dependent on destination & number of days                   | 41        | 240      | 9,840             |
| Incidentals & Others  | Visa fees, vaccinations, etc.                               | 500       | 1        | 500               |
| Sub-Total   |   |           |          | 14,140            |
| TOTAL COST  |   |           |          | 117,606           |

# Main challenges encountered...

| Challenges  | Recommendations  |
|---|--|
| In-built batteries in Apple devices can run out after a few hours                   | Purchase one solar charger per iPad                                    |
| Connection between Zoho Reports & iFormBuilder                                      | Pre-test with larger data in iFormBuilder                              |
| Failure of barcode scanners to connect to their iPads                               | More time required for training to address issues like troubleshooting |
| Limited mobile coverage in the remote settlements affected timely uploading of data | Note books can be provided   |



# Main advantages of using mobile technology for monitoring LLINs

- Decreased need for many monitoring teams with real-time data availability
  - Ability to know exactly what is going on in real-time
  - Timely decision-making during campaign
  - Easy to provide periodic feedback to teams
- Reduced costs for storage of and retrieval from the field of paper forms
- Reduced recording errors
- Faster compilation, analysis, and reporting of data