

Guidelines for the ICTHub Master Training

Figure 1 shows our systematic computer aided planning methodology that relies heavily on a powerful computer aided planning and decision support environment, called SPACE (Strategic Planning, Architecture, Controls and Education) and other tools. The first two phases produce a highly customized portal to support different smart hub configurations within hours. The last two phases refine and expand the generated portal into a production rate smart portal.

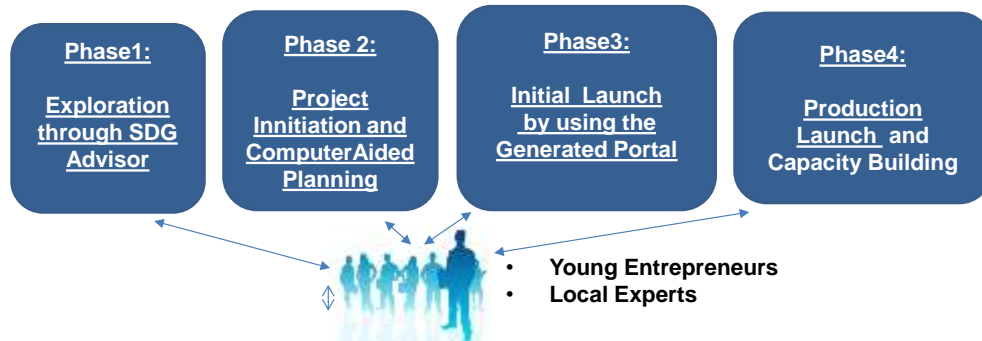


Figure 1: Computer Aided Implementation Methodology for Launching Pilot Projects

In Phase 1 and Phase 2, we will work with the Hub Master to train them on the SDG Advisor and then to generate the initial portal by using the SPACE computer aided platform. This portal will require some customizations and extensions before it is fully operational. Phase 3 and Phase 4 will get you started and will also educate you about running a digital business. Please get someone else involved (e.g., a friend, a potential partner, a possible funder).

To get you started, Section 1 shows a sample Smart Hub that you can review to get the general idea. Then use your own Smart Hub to go through the activities shown in Section 2. Please let your ICT4SIDS POC know when you have gone through the main activities shown in Section 2.

Section 1: A Sample e-Agriculture Smart Hub

An e-Agriculture Smart Hub (or Center/Office) is typically a physical location that provides a set of e-agriculture related services. For example, a small e-agriculture center in a remote area may provide basic e-agriculture services through mobile devices and a website for nearby farmers and populations. A larger e-agriculture center may provide additional services such as quality assurance and crop life cycle management. An even larger center may in fact be a smart global village of farmers from neighboring locations.

Figure 2 shows screenshot of an e-Agriculture Smart Hub for Togo (a small country in Africa). This Hub was generated in a half hour interview with SPACE and includes an administrative portal, an end-user portal and also educational and training resources. This Hub contains most of the e-agriculture capabilities but very basic smart agriculture features are operational due to regional considerations.

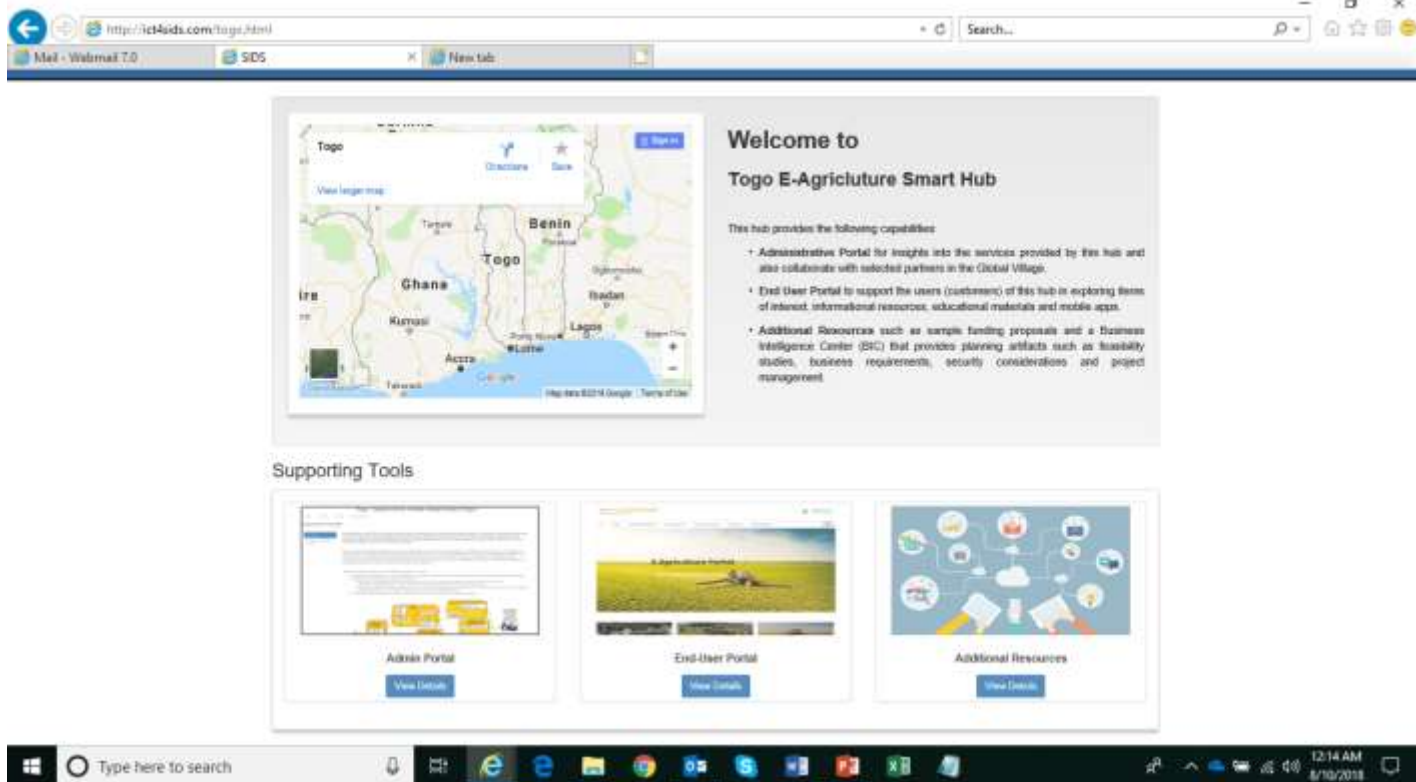


Figure 2: e-Agriculture Smart Hub Home Page View

An e-Agriculture Hub can be customized for smaller or larger populations and may provide the following services:

- e-Commerce for Agriculture: allows the users to buy agricultural products over the web.
- eManagement for Agriculture: allows the farmers to manage the crop logistics and productions, etc.
- Smart Agriculture uses the KDAL (Knowledge, Detection, Adjustment, and Learning) capabilities such as the following:
 - GPS for Agriculture: provide location based *knowledge* and services to farmers (i.e., weather conditions in certain locations)
 - GIS for Agriculture: provide information and *knowledge* based on satellites and other GIS systems
 - RFIDs/sensors for Agriculture: use sensors or RFID devices to *detect* status of crops, etc
 - eServices for food safety: applications that help in the early *detection* of diseases (e.g., in potato fields) and contamination of drinking water
 - Wireless Technologies for Agriculture: inform farmers to adjust based on weather conditions, special sales events, etc by using text messages
 - Machine Learning and Computer Controlled Device Applications for Agriculture
- Supply chains for food distribution: how to distribute food safely with minimum loss. These supply chains are very useful in food distribution to people in Africa and other distressed areas
- Agriculture support system: A comprehensive decision support system that provides capabilities for planning, engineering and management of agricultural resources

Section2: Suggested Activities for the Hub Master

Please use your own Smart Hub to conduct the following simple experiments.

Quick examination of the main sections of your Smart Hub

- Home page of the Smart Hub. Please note down what is working, what is not and which capabilities can be useful to the users and how.
- Resources: this shows you many tools, mobile apps, dashboards and games. Please review all of them and note down what is working, what is not and which capabilities can be useful to the Home page.
- Administration: this shows you how you can administer the portal. You will need an Admin IDPW for this. Please review all capabilities for adding pages, etc and note down what is working, what is not and which capabilities can be useful to the user, when and how.
- Collaboration with other hubs. You must test the collaboration capabilities between your hub and at least one more hub.
- Please send your notes and feedback from this step to your ICT4SIDS POC.

Detailed Walkthrough: The two POCs, and other invited individuals, conduct a detailed walkthrough of the outputs produced by SPACE and make the following decisions:

- what can be used quickly by the end-users without any modifications
- What are the bugs and minor adjustments that need to be made quickly
- What capabilities should be added during the pilot project
- What capabilities are needed but are beyond the scope of the pilot project

Initial Portal Launch: Based on walkthrough results, the Demo Hub is modified and extended to become an operational system. The main idea is to:

- Launch the initial portal to a few customers
- Provide initial services that can be offered to the users (e.g., training materials, mobile apps, basic advisory services, etc).
- Expand the services as needed

Extensions and Use: The Demo Portal is converted into an operational portal through several refinements and extensions based on the initial launch and user feedback.

Exhibit1 provides additional information for Hands on Experiments and learning.

Exhibit1: Additional Information for Hands on Experiments

- The UN ICT4SIDS Partnership site (www.ict4sids.com) provides a great deal of information about work that has been done so far. Especially the section on “Global Center” provides access to a demo site and all hubs and pilot projects that we are supporting at present.

- The “**Collaboration Matrix**” on the home page of ICT4SIDS provides many links to available sample Smart Hubs. Please browse through this Matrix.
- **The SPACE site** (www.space4ict.com) provides complete information about the computer aided platform that is supporting ICT4SIDS. Please visit the SPACE Learning Corner to see how SPACE is being used for education, technical training and computer aided consulting. For hands-on experiments on how SPACE actually works, please login as a guest and conduct different experiments.

Note: These sites are directly supporting a large community of active users and are always evolving with new hubs, case studies and examples being added on a weekly basis. The descriptions in this section reflect the status at the time of this writing.