Leveraging Last Mile Mobile Solutions for efficient food assistance programming in Kenyan refugee camps

Key Recommendations

- Enhance LMMS system interoperability, comprehensiveness & contextualisation

- Increase the use of LMMS across clusters and countries

- Leverage partnerships to scale-up and jointly improve LMMS

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Introduction

In an age where humanitarian crises have displaced 65 million, effective and efficient action is paramount[1]. For refugees who have fled their homes due to persecution, war or violence, the humanitarian system is a crucial provider of health and well-being. Humanitarian actors have a moral, legal and economic responsibility to ensure high-quality, life-saving food assistance is delivered to the most vulnerable as efficiently as possible. Last Mile Mobile Solution (LMMS) system not only does just that, it also has the potential to transform humanitarian aid service delivery[2].

LMMS is a technology solution, pioneered by World Vision that combines software applications with custom hardware to digitise, and simplify, the processes of remote data collection, beneficiary management, commodity distribution and reporting. LMMS is a set of mission critical capabilities for organisations delivering humanitarian services in the 'last mile' that is the final point of transaction between humanitarian organisations and beneficiaries. As an innovative technology solution, LMMS has been mandated for use across all World Vision Food Assistance projects. The system manages any commodity distribution, from food to cash to vouchers and more.

At World Vision, LMMS is currently used across 29 countries to register and manage more than 4 million beneficiaries. Dozens of other leading humanitarian agencies are also leveraging LMMS in globally. In Kenya alone, as of July, 2016 World Vision is reaching approximately 857,820 beneficiaries across 13 projects, including General Food Distributions (GFD), through in-kind, cash and voucher schemes, as well as Food/Cash for Work/Assets[3]. The GFDs are reaching 91,000 in Kakuma and 113,082 in Dadaab refugee camps in Kenya. The current phase of these projects started in April, 2015 and are currently scheduled to conclude in March, 2017[4]. Dadaab hosts approximately 276,945 refugees[5] and Kakuma is home to an additional 161,387 refugees[6]. Combined, these camps are home to 92.3 per cent of all refugees in Kenya[7].

Historically, LMMS has been used in protracted crises and for internally displaced persons from the Kurdistan Region of Iraq[8] to the Central African Republic[9]. In these circumstances, where a border has not been crossed, the national government still has the responsibility to protect and serve its population. If unwilling, or unable to meet the population's needs, the national government will request support from UN agencies and other humanitarian actors. National governments, or the UN World Food Programme (WFP), who tend to run food assistance programmes in these contexts,

will often share the requisite data with implementing partners, such as World Vision. This data can be directly imported into LMMS and helps ensure efficient and effective aid delivery. While the technology and systems are also able to support refugees, this has yet to happen in practice due to strict legal, political and protection issues – that is until a recent breakthrough.

Challenges

In contexts where persons are forced to flee their home country refugees, the UN High Commissioner for Refugees (UNHCR) is mandated to provide international protection and seek permanent solutions for the challenges of refugees worldwide[10]. In the Kenya context, this has included supporting the government in the registration of asylum seekers and determination of refugee status.

The system used by UNHCR to register refugees provides a beneficiary card linked to an electronic record of demographic information. Apart from work in the Central African Republic[11], this card and digital record have had limited interoperability across other digital systems of implementing humanitarian actors, like World Vision's LMMS. Rightfully so, UNHCR is cautious to protect the identity, dignity and rights of refugees, and as such, had reservations about sharing sensitive demographic data electronically.

This resulted in an extensive process through which UNHCR shared de-identified hard copy manifests with World Vision, who then had to re-digitise the data for management. When it was time for distribution, copies of these manifests were organised by distribution points and printed as check lists used to count beneficiaries and develop reports by hand. Not only was this process redundant and outdated, it also undermined the very reason for existence of the LMMS system. Most importantly, this resulted in slow provision of life-saving services to the most vulnerable.

Clearly, a change was needed. Systems needed to shift in order to ensure beneficiaries received relief assistance quickly and peacefully, the donors received regular, accurate reporting, and the humanitarian actors accomplished their work effectively, all for the benefit of the most vulnerable in extremely hard circumstances. World Vision recognised this challenge and the negative impacts it was wreaking and decided to leverage its expertise in

food assistance, humanitarian innovation and its partnerships to work ever further toward a hunger-free future for refugees.

Innovation

World Vision recognised this challenge, and understood it as an opportunity to significantly impact the lives of refugees for the better. Following countless conversations, demonstrations and modifications, as well as three field tests and one data sharing agreement over the course of three years, LMMS became capable of reading UNHCR cards and their linked data in order to manage the distribution of food assistance. In Kakuma and Dadaab refugee camps, this innovation is in the process of scaling up to support all whom World Vision serves. This is a significant milestone for UNHCR, World Vision and most importantly for the refugees benefiting from life-giving food assistance.

Before the technical coding could be conducted to enable UNHCR data to communicate to World Vision's LMMS system, it was first vital to ensure that all parties were working in an ethical and trustworthy manner to respect and protect the refugees. As a *UNHCR Operational Partner* in Kenya, and a signatory to the *Code of Conduct for the International Red Cross and Red Crescent Movement and NGOs in Disaster Response Programmes*, the *INGO Accountability Charter*, the *Sphere Project*, the *Core Humanitarian Standard Alliance* and the *Active Learning Network for Accountability and Performance in Humanitarian Action*, World Vision has consistently proven it holds itself to the highest standards in governance, management, partnership and accountability[12]. These commitments, to which World Vision is held accountable, helped to quash some of the concerns that were held in relation to child protection and data security.
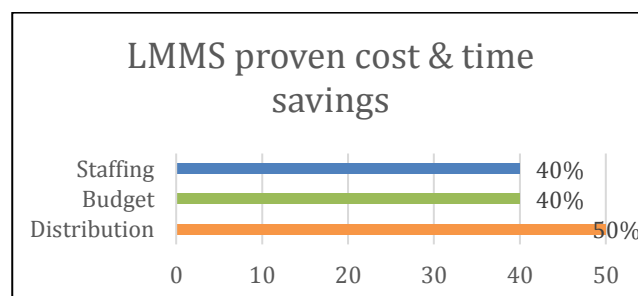

Figure 1: LMMS has proven to significantly reduce the time for registration, distribution and reporting, project budgets and staffing.

Beyond that, it was necessary to prove the functionality of the LMMS system as well as its ability to enhance the effectiveness and efficiency of beneficiary management and reporting in complex and challenging humanitarian contexts. A diverse and detailed evidence-based report was presented to UNHCR, which documented the efficiency gains, cost benefits and accountability improvements. For example, as compared to manual activities, LMMS in Haiti has been proven to reduce the time for registration, distribution and reporting by at least 50 per cent[13] and project budgets up to 40 per cent[14]. Furthermore, an independent study conducted by the Norwegian Refugee Council in Liberia[15] found a 40 per cent decrease in distribution staffing, office and travel costs and a separate study by Oxfam in the Philippines[16] found a 47 per cent decrease in registration time (figure 1). World Vision was keen to directly demonstrate the power and precision of LMMS in the field to UNHCR and was able to do so on many occasions. Testimonials from other UN Agencies, NGOs and communities who had experience with LMMS proved invaluable. For example, an Emergency Food Advisor from Oxfam GB noted, "This program blew me away. It is amazing and will change the aid sector." While, an elderly food aid recipient from Zimbabwe said, "It is my first time to leave a food distribution before lunch time, in the past we have always left at sunset"[17].

In the Kenyan context where UNCHR had pre-existing beneficiary ID cards linked to an electronic database, World Vision worked to develop a solution which would allow LMMS to read the UNHCR cards and ID numbers, as opposed to printing LMMS specific cards or assigning additional ID numbers. This ensured no duplication of efforts, time or resources. Over the course of several intense weeks, new software code was written to enable the bulk import of the refugee manifest via .CSV files from UNHCR's databases into the LMMS system. The .CSV files excluded some of the detailed demographic data, (e.g. age, gender and marital status of the beneficiaries), to preserve the security and protection of individual refugees. This data was then used to coordinate the logistical planning as well as conduct real time monitoring and evaluations of food distributions. The functionality of this data transfer was tested and quality assurance verified interoperability between the UNCHR and LMMS systems.

As of July, 2016 the link between UNHCR data and World Vision's LMMS system has been scaled up to reach 50 per cent of the refugees World Vision serves in Dadaab and 60 per cent in Kakuma.

A World Vision Food Monitor, scans a UNHCR card in Hagadera, John Magaiwa/World Vision

Impact

The positive impact that LMMS has had on dozens of projects around the globe has finally been able to manifest in camp settings, where previous bottle necks have been eliminated or greatly minimised. Leveraging LMMS enhances efficiency, effectiveness, equity and accountability. This has been evidenced by the deployment of LMMS in the Kurdistan Region of Iraq, where beneficiaries from 16 IDP camps were registered onto a single database by multiple agencies. This case study is another example of LMMS' efficacy and interoperability.

This innovation ensures food assistance is delivered quickly, meaning beneficiaries and humanitarians do not have to wait in line as long, and can use the additional time to pursue other development activities. Fewer staff, printers, paper, cards and other resources are needed to distribute the food assistance, improving costs without cutting corners. The automated calculations, quality assurance checks and reporting mechanisms provided accuracy and integrity that ensures food commodities are distributed equitably to beneficiaries, without double counting or skipping. As Rukundo Feston, the Secretary of one Food Advisory Committee in Kakuma Refugee Camp put it, "Scanning is faster and there is no cheating. A beneficiary can come for two days to receive food. With the technology you can't do this. While at corridor 1, you can't go to corridor 2 to receive food."

Reporting to all relevant stakeholders can be accomplished in near real time; this improves accountability to beneficiaries and donors, as well as enables evidence-based decision making for re-positioning of resources and commodities. "I like the system. It's good and innovative. You can see stock real-time and compare with what is on the ground," said Margaret Kamau a World Vision Logistician working in Kakuma Refugee Camp. Importantly, information and control are placed in the hands of front-line staff, the very persons able to effect change and improve the distributions.

In short, beneficiaries are accurately tracked, rations and supplies are calculated and distributed with precision and web-based reports are immediately available for all stakeholders at the close of activity.

"Why has this technology taken too long to be rolled out in the camps? This is the real solution!" – Dickens Thunde, National Director, World Vision Kenya

Recommendations

In order to provide refugees with life-saving humanitarian support in the most efficient, effective and exceptional manner, World Vision recommends that host governments, UN agencies and clusters, donors, and all humanitarian actors collaborate to:

Enhance LMMS system interoperability, comprehensiveness & contextualisation

- Ensure interoperability of LMMS with UNHCR, WFP and other tools, systems
- Update LMMS system continually to contextualise for complex situations and registration
- Use complete UNHCR data in .CSV format for comprehensive reporting and decision making

Increase the use of LMMS across clusters and countries

- Leverage LMMS for multiple relief clusters including food, WASH, health, education
- Expand geographical scope of LMMS to other refugee and humanitarian contexts
- Establish centralised systems and infrastructure for all implementing agencies, where possible

Leverage partnerships to scale-up and collectively improve LMMS

- Scale-up use of LMMS by other NGOs, UN agencies and humanitarian partners
- Engage in user forums to share lessons learned across agencies and partners

Endnotes

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