ICT Solutions for the Agriculture Sector of Sri Lanka: Potential Target Groups and Strategies to Inject into the System

W.M.C.J. Wijekoon, K.K.L.B. Adikaram, M.K.D.K. Piyaratne, A.C.P. Priyankara and G.C. Samaraweera

Faculty of Agriculture, University of Ruhuna.

There is no dispute on the fact that the agriculture sector of the country should march forward abreast of emerging technologies and the global trends. Introducing and promoting products and services based on Information and Communication Technology (ICT) is a remedy to uplift the standards and productivity of the agricultural sector. Numbers of attempts have been made by varying individuals, working groups and organizations by introducing ICT solutions to the agricultural sector in Sri Lanka. However, due to the lack of communication between aforementioned parties and the absence of well-defined standards, the occurrence of repetition of the same project, partially build projects, or abandoned projects is unavoidable. Moreover, the penetrations of these systems into the 27% of the population engaged in the agricultural sector appear to be limited mainly due to two factors: 1) In most cases, there is no direct reward to the user and 2) low degree of trust on the product, the technology, the provider of the product or the technology, or the mode of conveyance of the product or the technology to the end user. Any product that does not overcome the above limitations will not penetrate into the target segment of the community, even with adequate awareness campaigns. Therefore, we find that the strategies adopted in penetrating these solutions should be selected strategically and meticulously. Through this write-up, we wish to share our thoughts on the prospects of injecting ICT solutions into the agriculture of the country.

Selecting the target groups

In most of the discussions regarding the development of the ICT and networking solutions, farmers are the focal point while the market side lies on the other end. Some solutions such as advisory services focus on the extension officers. It is our opinion that, before the farmers are drawn to the ICT solutions, the middle level personnel such as extension officers and the market middlemen should be drawn in. Main reason is that they possess the technical knowhow to use the solutions and has the access to the communication media than farmers. Further, they interact with the farmers than anyone else in the system and, the chances of the solution being gradually transferred to the farmers over the time are high.

Give-away than receiving at the early stages (focusing on extension level personnel)

At the early stages of the system development, the incentives for using the system should be focused. The solution should provide certain essential services at hand. For example, applying leave from duty, the delivery of monthly salary slip, meeting schedules and facilities for excuses can be given. These services would build a bond between the system and the users and, the system becomes indispensable component in their day-to-day life. The rest of the features can then be introduced gradually.

Rewards for using the system (focusing on extension level personnel and other government officers)

The usage data of the system could be used to assign points for the awards, career progression and so forth. For instance, the number of advisory/consultation sessions conducted, number of issues raised in the forums, number of advisory services sought can be taken.

Give a chance to build a name in the sector

It is by nature that people tend to build a name for them among the peers or the society. Provide a chance in the system to earn reward points that are openly visible to the rest of the users in the system. The users would definitely turn to the people with higher ratings (E.g. Seller rating systems in online markets). There could be fake personalities at the beginning and, the users will decide their fate over the time.

Further studies on the psychological aspects of the local users

Most of the application development environments use the pre-built components in system development. For example, the icons in interfaces, how the system is launched, color combinations and so forth. In-detailed studies should be conducted to evaluate the aspirations of the local users and their cultural and social background.

Kiosks to deliver services

Fool-proof, attractive and user-friendly Kiosks placed in farmer gathering places such as farmer community meeting places, office of the agricultural extension officers, farmer markets and hangouts *etc.*, could enable the farmers to explore it as groups rather than individuals. The programs delivered through the unit could be articulately developed to attract the users to the unit on regular basis.

Use a reputed channel as the mode of conveying the product

Reputation of any product can be reinforced by selecting a correct reputed marketing channel. This will allow the product to penetrate rapidly into the target segment with low promotional cost. In the case of ICT based applications, integration with the telecommunication sector or reputed farming equipment distributor could open a trusted mode of conveying the product or the technology.