Use of Latest Technology in Data Capture for Consumer Prices: Philippine Experience

Abstract

The generation of the Consumer Price Index (CPI) in the Philippines started as early as January 1941. Since then, data capture was through the traditional paper and pencil method. With the advent of modern technology, android devices (tablets) were used in 2015 to enhance recording, validation and transmission of prices data from the district level to the provincial offices and to the Central Office at a faster speed and paperless mode.

This paper presents the development of a system called the CPI Store Merger and Price Tag as tools in the generation of the CPI. The CPI Store Merger is a system that cleans and merges data for the reference files of names of stores/outlets in the current two CPI series (2006-based and 2000-based CPI). The output of the said system is a merged reference file containing all the sample stores in the 2006-based and 2000-based CPI.

On the other hand, the data collection system called Price Tag was also developed to expedite data capture in the field and submission to the Central Office. This system enables the price collector to validate the price data collected on the spot by facilitating data validation at the provincial level and Central Office. The method decreases the errors in transcription of the traditional method of data capture. The system also captures the coordinates of the location of the sample stores visited by the price collectors through the use of the Global Positioning System which can be used by the Central Office staff or the field supervisor to check if price collector actually visited her/his assigned sample outlets/stores. An image for each item in the CPI market basket for each province is developed and incorporated in the system as a guide to the price collectors for purposes of consistency of collecting prices for a specific item.

Problems have been encountered, such as unavailability of Internet connections and security in some areas, the use of tablets in collecting, processing and validating price data nonetheless provided more benefits in terms of reliability of price data, speed and cost efficiency.