

Briefing paper on

Computer Hardware and Software



Background

A 'computer' is the integration of hardware- a physical or mechanical object, device, instrument or technology - with software - the art or knowledge required to run that technology. Computers are used in businesses, government and households. Computer use has increased significantly over the past few years. Smaller version of computers are today being widely used including tablets, mobile phones, mini computers and gadgets. The number of computers being imported into Nepal has increased significantly in recent years fuelled by the growing accessibility of internet services. It is however difficult to estimate the number of hardware and software imports into Nepal because the database has not been maintained.

This collaborative research between Institute for Social and Environmental Transition-Nepal (ISET-Nepal), Federation of Computer Association Nepal (CAN) and Japan International Cooperation Agency (JICA) aims to address this gap by conducting a survey, the first of its kind, on the imports and exports of computers and its peripherals. The aim is to produce a status report depicting the current situation of Nepal's computer market. As this is a summary, it will only present highlights from the research rather than a detailed analysis. The full version of the report will be available from ISET-Nepal and CAN upon printing.

Study Method

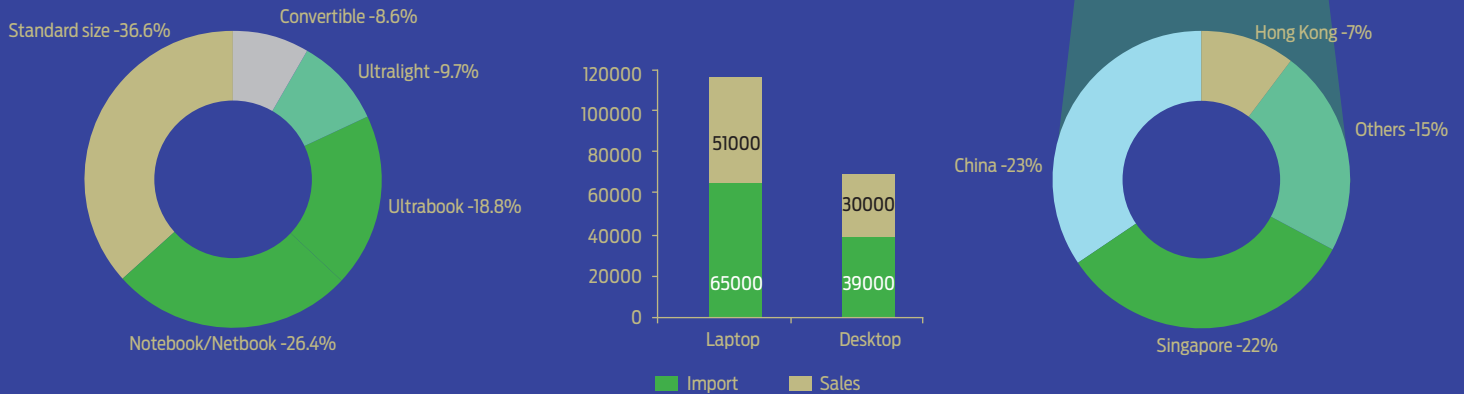
This study used an exploratory method to gather information as baseline information was not readily available. Purposive sampling of the respondents was undertaken. Respondents were selected from CAN's network. From CAN's 1900 registered members, 82 respondents were selected for hardware questionnaire survey and another 82 respondents for software. Two sets of questions were designed and circulated among the respondents of each category. There were 144 questions for the hardware component and 112 questions for the software component. The objective was to better understand the different components of hardware and software. Since the major Information, Communication and Technology (ICT) businesses are concentrated in the inner core of Kathmandu, the respondents were selected from the core area particularly New Road, Putalisadak and New Baneshwor. The survey was conducted between March and September 2014.



Findings

HARDWARE

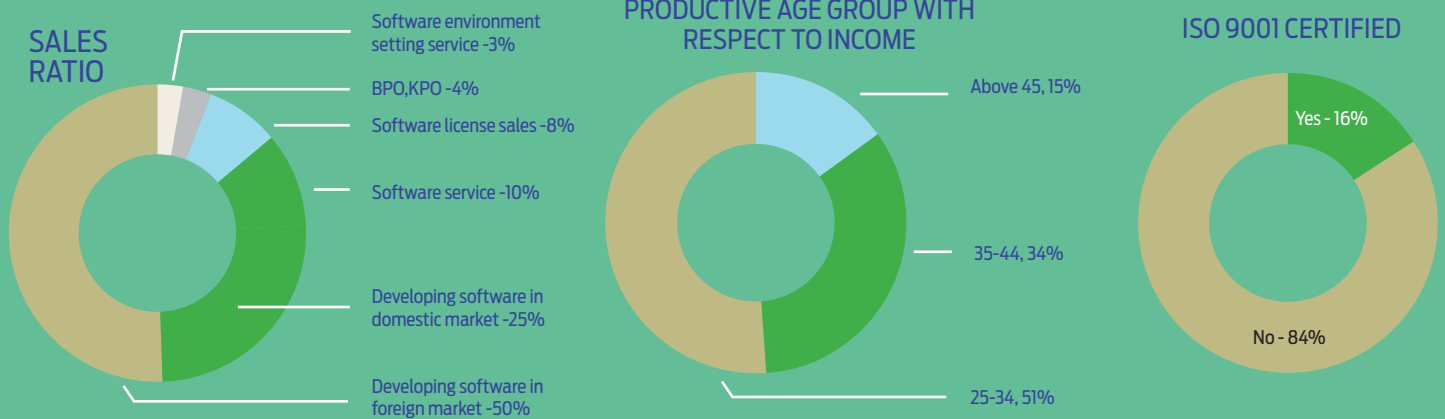
Findings showed an overall scenario of computer imports and sales in Kathmandu valley. Computers and other accessories were predominantly imported from China and Singapore. About 67% of the respondent said they import from abroad, whereas the remaining 33% purchased from local distributors. Hardware imports were higher than the sales rate forcing distributors and retailers to store their products, taking a risk that the product might become outdated and unsellable.



SOFTWARE

The Nepali market is full of projects from both the domestic and offshore sectors. The rising demand for software applications has created employment opportunities. The private software development industry has the potential to earn foreign currency because of the opportunities created by outsourcing software and application.

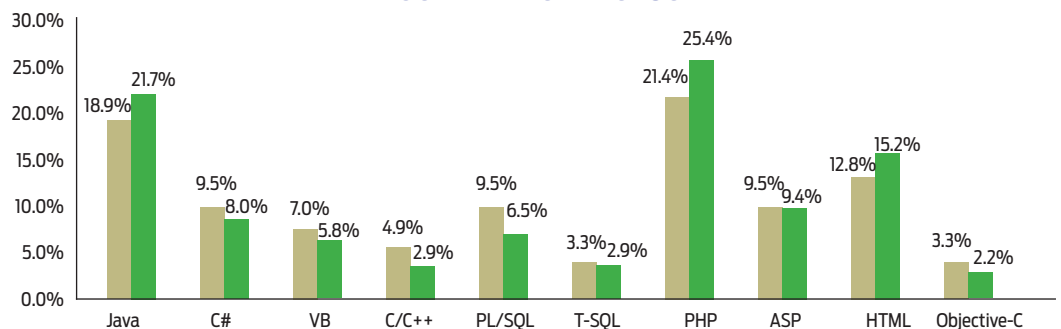
- ▶ The sales ratio of software development in the foreign market is about 50%, whereas, it is 25% for the domestic market.
- ▶ The most productive and the highest earning age-group (51%) ranges from 25-34.
- ▶ Only 16% of the companies have received ISO (International Standard Organization) certification 9001.



WAYS FORWARD

1. Government of Nepal should implement policy changes to prioritize ICT.
2. This survey shows the possibility of recognizing ICT as an industry.
3. Determine the potential of software exports.
4. Scope of the research can be broadened in future by including relevant businesses from regions across Nepal.

PROGRAMMING LANGUAGE



PHP is the most popular programming language for both offshore and domestic projects where 21.4% of domestic projects and 25.4% of offshore projects use the language. JAVA is the second most popular language followed by HTML.