Comparing apples with apples – Helping you make the right choice

by Akira Saito, Chair of ISO/IEC JTC 1/SC 28, Office equipment

Among the various subcommittees of the joint technical committee ISO/IEC JTC 1, Information technology, the most product-oriented is subcommittee SC 28, Office equipment.

One of the subcommittee’s tacit missions is to promote fair trade in the office equipment market. Specifically, ISO/IEC JTC 1/SC 28 serves manufacturers by standardizing the frameworks and processes which they use to evaluate the design, performance and quality of their products, in exactly the same manner as their competitors do. As a result, users are given an opportunity to make informed apple-to-apple comparisons of products in their purchase decisions.

Speed – A vital gauge

The speed with which output pages can be printed is a vital gauge of printer or copier performance, making standards indispensable for productivity measurement methods.

Two such standards developed by subcommittee SC 28 have been available for almost a decade. These are ISO/IEC 14545:1998 for copying machines and ISO/IEC 10561:1999 for low-end printers. However, both these standards are designed for black-and-white analogue machines, and do not take into account job streams and other key factors that may influence the measured throughput rate.

To fill the gap, SC 28 has devoted several years of effort to developing new standards providing methods for measuring productivity for digital printing (ISO/IEC 24734:2009) and digital copying (ISO/IEC 24735:2009). Both just published, the two standards were developed in parallel with minimal deviation from one another.

How many pages to a cartridge?

An important concern among users, which emerged about a decade ago due mainly to the significant cost of cartridges, is the difficulty in estimating cost per printed page when using a particular model of printer. Identifying this market need, SC 28 began to develop a method for measuring yields for printer cartridges in 2001.

This project, initially covering monochrome toner cartridges for electro-photographic (laser) printers, was later extended to colour toner and ink cartridges for inkjet printers. Figure 1 shows the collection of standards in this area, including projects under development.

A question of image quality

How do you evaluate the printed quality of an image when the original is a computer document and there is no hardcopy original for comparison?

ISO/IEC 13660:2001, Information technology – Office equip-
In addition to product performance and quality, market demand has been evolving in recent years to include environmental and other concerns, and the subcommittee has adapted accordingly.

Today, environment-conscious design of office equipment is becoming increasingly important for a sustainable society. Recognizing that SC 28 should squarely address environment issues relating to office equipment, the subcommittee has developed:

- ISO/IEC 24752:2004, Quality and performance of office equipment that contains reused components

Accessibility, too, has become more than a nice-to-have feature, and is of growing importance, especially in an ageing society. In 2008, the new ISO/IEC 10779, Office equipment accessibility guidelines for elderly persons and persons with disabilities, was published. The standard’s guidelines are intended to facilitate evaluation of equipment for operation by persons with the widest range of capabilities, including persons with disabilities, whether permanent or temporary.

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**About the author**

Akira Saito is a part-time advisor to Japan Business Machine and Information System Industries Association. Now retired from IBM, Mr. Saito is in his sixth year as Chair of ISO/IEC JTC 1/SC 28, Office Equipment. In 2004, he received a Blue Ribbon Medal from the Japanese government for his distinguished services in the field of IT standardization over many years.