R&D Champion of the Year

By Sol E. Solomon, ZDNet Asia Thursday, December 04 2008 04:07 PM

FAST FACTS

RadianTrust

CEO and Founder
Tang Weng Sing
Year founded
2002
Headquarters
Singapore
Web site
www.radiantrust.com
Employees
27

Technology innovation
Phildélity is touted as a cost-effective security tool that protects paper-based documents against threats such as counterfeiting and forgery. These documents can be printed using normal printers, ink and paper, and do not require special printing procedures.

Deserves the R&D Champion award because...
RadianTrust's technology is practical and effective in today's world that still primarily relies on original paper documents in both the business and public sectors. Its technology tackles real problems that exist today.

Despite the increasing digitization of businesses today, paper-based documentation continues to be the predominant form of trusted communication. However, counterfeiting of hard-copy documents is becoming easier with today's highly advanced computers, scanners, printers and copiers capable of making copied documents visually indistinguishable from their originals.

Realizing the need for verification of document authenticity in the corporate world, Singapore-based RadianTrust developed security technology for printed documents that business users can easily incorporate in their work environment. The company's flagship product, Phildélity, addresses threats such as counterfeiting, forgery and unauthorized information disclosure without the need for organizations to invest in new printers, ink and paper, or change their printing procedures.

One security feature, Optical WaterMark, comprises two layers--a visible watermark and an invisible one. The visible watermark could be a company logo, while the invisible watermark may be a word such as "COPY".

A document produced by a laser printer would have both watermarks embedded on it. However, when the document is photocopied, the visible watermark appears faded while the 'invisible' watermark becomes obvious. To verify if a document is a photocopy, one only has to perform a visual check, to confirm that the visible watermark is not clearly visible, or the hidden watermark is clearly seen.

Another security feature, Transactional Micro-Print, involves very tiny imprints of dynamically generated text such as a serial number, on the printed document. Such text, which can only be viewed clearly under a magnifying glass, will appear distorted when an attempt is made to duplicate the document, thus revealing any unauthorized reproduction.

These and the other security features found in Phildélity, are testament to RadianTrust's strong commitment to research and development (R&D). More than 60 percent of the company's staff are dedicated to product development. In addition, RadianTrust allocates 70 percent of its revenue to R&D.

According to Tang Weng Sing, general manager of RadianTrust, investing significant resources on R&D helps ensure the company keeps up with counterfeiting technology that is fast changing.

"As technology advances at an increasing rate, potential attackers can attempt to use better imaging technology to create fake documents (or) modify existing ones," Tang told ZDNet Asia in an e-mail interview. "Like the 'arms race', we need to constantly strengthen the technology to be able to withstand the ever-increasing perpetration on printed documents."

Building new competencies and strengthening the product's existing competencies through R&D, also enables RadianTrust to leapfrog the competition with each software release, he said. "It's about looking at seemingly unrelated parallel tracks of technology and applying them innovatively, to create disruptive innovations that enhance the value to all stakeholders.

RadianTrust's strong dedication to R&D also helps the company to attract talent with a passion for developing world-class products, he noted. This builds a "conducive and self-enforcing culture for innovation and R&D".

Security oversight in paper documents

People, according to Tang, tend to overlook the importance of security of printed documents although they recognize the authenticity of documents such as bank notes, education certificates and permits, is invaluable.

One reason for this is the overheads associated with technologies that require the use of special consumables, devices and, sometimes, even specialized skills, he noted. In addition, vendors have also been successful in promoting the importance of protecting digital documents.

"This could divert the focus to securing the digital assets only, and not paying any attention to the physical documents as well," explained Tang. "Paper is very 'low-tech', with few vendors promoting solutions addressing the associated security issues. Thus, most people would not be aware that such items can be protected via a software-based solution."

With greater industry recognition, RadianTrust can further educate organizations and create awareness of the need to have printed document security, said Tang. "The award is a strong testimony and recognition to the real need that RadianTrust's product is addressing, and that the product is world-class in terms of innovation, value and quality."

Concurring, Paul Jung, Top Tech 50 advisor, described RadianTrust's technology as "very practical and effective" in an environment where the business and public sectors are primarily reliant on original paper documents.

"This technology tackles real problems that exist today," said Jung, who is the regional head of emerging products and technology at Visa International Asia-Pacific.

Going forward, RadianTrust intends to market Phidélity outside of Asia. According to Tang, the company aims to create a global "sphere of trust" in secure printed documents.

The award reinforces RadianTrust's emphasis on R&D and validates the company's investment in innovation. "That gives us confidence and assurance in persevering on this path," he said.