



# The Computerworld Honors Program

Honoring those who use Information Technology to benefit society

## Final Copy of Case Study

**Status:**

Laureate

**Year:**

2013

**Organization Name:**

Frog

**Organization URL:**

[www.frogtrade.com](http://www.frogtrade.com)

**Project Name:**

1BestariNet

**Please select the category in which you are submitting your entry:**

World Good

**Please provide an overview of the nominated project. Describe the problem it was intended to solve, the technology or approach used, how it was innovative and any technical or other challenges that had to be overcome for successful implementation and adoption. (In 300 words or less.)**

The BestariNet project seeks to transform teaching and learning, establishing Malaysia as a model of excellence in integrated, Internet-enabled learning. The project provides all 10,000 state schools and 10 million users with 4G connectivity to Frog's Virtual Learning Environment (VLE), an Internet operating system that gives students and teachers virtual access to education resources such as lesson plans, tests and worksheets. Problem Solving Frog aims to create a level educational playing field, giving each child equal access to technology and resources. This will have a significant impact on social mobility for a generation of children. A good education can lead to better jobs, health and overall improved quality of life. The Technology: A nationwide high-speed wireless 4G mobile network was installed by YTL Communications. The Frog VLE, built specifically for market needs, is delivered through Frogasia – a joint venture between Frog and YTL Communications. Innovation Frog developed FrogOS, a new platform with an ultra-intuitive interface built specifically for tablets and mobile devices. Now every school in Malaysia has a powerful 4G network, mobile devices and a sophisticated

learning platform. Challenges: Coordination of large-scale nationwide rollout to 10,000 schools; developing to tight deadlines a new product with new functionality that is readily accessible to users with varying levels of IT literacy; creating an English/Malaysian interface and help files in both languages; communication between the UK and Malaysian development teams. Solutions: Frog has delivered well in advance of every deadline – by changing the working hours of key employees so issues could be resolve overnight using skype and conference calls The formation of Frogasia in Kuala Lumpur, a local presence, simplified operations, enabled the creation of an English/Malaysian interface and gave real insight into the Malaysian market.

**When was this project implemented or last updated? (Please specify month and year.) Has it incorporated new technologies and/or other innovations since its initial deployment? (In 300 words or less.)**

Implementation: The project was implemented throughout 2012. New Innovations Since Deployment: Since the initial deployment of Frog in Malaysia, Frog has improved integration with other systems to provide a more holistic experience for end users. In this project, Frog integrated with Malaysia NSMI (The National Student Master Index). This is a central database maintained by YTL of consolidated user information, fed by other databases which the schools update. FrogOS allows single sign-on to NSMI from the VLE, and also keeps some basic user information synchronised between the two. This means that end users do not need to leave the platform to manage user details in NSMI.

**Is implementation of the project complete? If no, please describe the project's phases and which phase the project is now in. (In 300 words or less.)**

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**Please provide at least one example of how the technology project has benefited a specific individual or organization. Feel free to include personal quotes from individuals who have directly benefited from the work. (In 300 words or less.)**

Benefits to Convent Bukit Nanas (CBN) secondary school, Bukit Nanas, Kuala Lumpur, Malaysia: Better efficiency. Frog has enabled CBN to become a paperless working environment. The staffroom at CBN has been totally digitized and teachers now access Frog via Google Chromebook computers, which teachers find more efficient than their own laptops. By moving communications and assignments online, Frog is significantly reducing printing costs and helping the school to become more sustainable. A paperless environment also benefits the teachers, saving time on printing and enabling them to concentrate on teaching. Flexible working: Teachers at CBN are now able to work with more flexibility – they simply book a Chromebook and take it home. They can now create and share resources, update lessons plans and mark homework anytime, anywhere.



This has led to enhanced communication and connectivity between teachers and the Senior Leadership Team, which has facilitated more effective decision-making. Students can review learning materials at their own pace and, if they miss a class, log onto the system and get up to speed. Students are even logging onto FrogOS before class to stay on top of their studies. Developing creativity and responsibility: Each teacher has created their own Class Site which is shared with the students acting as Class Monitors and the Monitor Assistants. These students then maintain the site, keeping the information up to date and helping other students use the VLE. Students have set up online records of academic and personal achievement to track their progress. Increased student engagement: Staff have created engaging lessons for students and have put presentation material, notes and worksheets online accessed via the Frog School Dashboard. Students at CBN are also actively using the online forum within FrogOS. The forum allows students to share ideas and has improved the community feel within the school.

**Would this project be considered an innovation, a best practice or other notable advancement that could be adopted by or tailored for other organizations and uses? If yes, please describe that here. (In 300 words or less.)**

Notable advancement: Providing technology on this scale is a notable advancement from which other organizations can learn and benefit. Many areas of the Middle East and Far East are investing heavily in educational technology. Instead of adding to or developing existing technology, which is the case in the developed world, some governments in the emerging world are taking the opportunity to completely transform their education systems. In Malaysia, 4G broadband is now available to almost every single person in the country, in rural areas as well as urban, and all 10,000 state schools in Malaysia have been given Frog's latest learning platform designed specifically for tablet and mobile devices, meaning education can take place anytime, anywhere. Opportunities for other organizations: The result of investment on this scale is that some emerging markets have now become leading nations when it comes to access and efficiency of technology and improved social mobility. There is a great opportunity for companies to make the most of this growth by exporting their products and services to the international market.

**If there are any other details that the judges should know about this project, please note them here. (In 300 words or less.)**

Frog's vision is to expand the Malaysia model on a global scale. Frog is making a huge difference to every school, family, parent and child in Malaysia, and is proud to have such a positive impact on so many lives.