Star TECH

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startech@thedailystar.net

Power Mac

Power Macintosh, later Power Mac, is a line of Apple MacIntosh workstation-class personal computers based on various models of PowerPC microprocessors that was developed, marketed, and supported by Apple Inc. from March 1994 until August 2006. The first models were the Power Macintosh 6100, 7100, and 8100, which offered speeds ranging from 60 to 110 MHz. These machines replaced Apple's Quadra series of personal computers, and were housed in cases very similar to systems sold by Apple up to that point. In August 2006, the Power Mac's retirement was announced at Apple's Worldwide Developers Conference by Steve Jobs and Phil Schiller, making way for its replacement, the Mac Pro.

TECHFOCUS

Cutting edge disaster management through ICT

EDWARD APURBA SINGHA

IT'S been just about two weeks Cyclone Sidr made landfall in the coastal districts, killing thousands and flattening houses and trees. No doubt the devastation will haunt our collective memory day in, day out.

A vast alluvial delta, Bangladesh is especially prone to acts of God, against which mankind is only helpless. But we could develop a robust disaster management system to reduce casualties, the thing we have seen this time.

But due to a lack of proper information dissemination, hundreds of fishermen downplayed the scale of the danger stalking them. Rescuers have now found many of their floating bodies and many are reported still missing.

The catastrophe has also tore apart the telecommunications services in the affected areas, contributing to the difficulty in shipping emergency services. On-time information could have reduced the extent of the destruction. But weak technological strength and the lack of practical know-how are the main obstacles to implementing this strategy in the country.

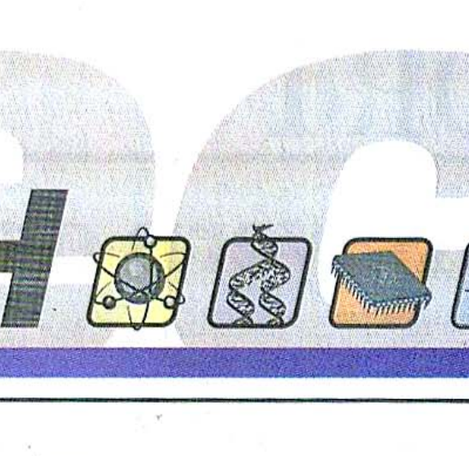
Information and Communication Technology (ICT) greatly adds to an effective disaster management. Disaster management is the discipline that involves preparing, warning, supporting and rebuilding the society when natural or man-made disaster occurs.

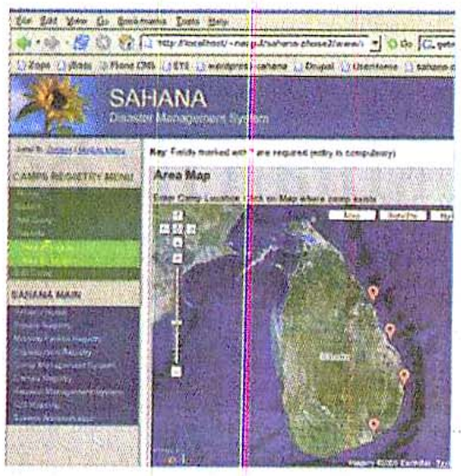
ICT has deep impact on disaster management in all its phases. A state-of-the-art ICT infrastructure helps the government to precisely analyse the weather condition, develop effective warning system and strengthen aid-distribution chain. This article spotlights several ICT-based solutions that could help the government, NGOs and similar organisations to enhance disaster management tactics.

Transforming cyclone centres into internet service centres

The government is planning to establish many cyclone centres across the coastal districts. These shelters can as well be utilised to provide meteorological information for the vulnerable people. In this regard, each centre needs to be connected to cell phone towers to get uninterrupted internet service. The authorities should come forward to develop special websites and relevant contents that would enable people to gather right information at the right time.

The centres will reach emergency news to the rural people through community places such as local school, village market and mosques. As the shelters are always connected to the internet, bucolic people can use IP telephony service to send in their information to district headquarters during any emergency. Cell-phone operators should charge nominal internet-service fees to make the system viable. In normal circumstances, these centres can be used to train people, NGO workers and volunteers for disaster control and preparedness and for creating social awareness.





Clockwise from left: Sidr trail map by Google Maps, Sidr moving north toward Bangladesh on November 15 -- the Moderate Resolution Imaging Spectroradiometer (MODIS) on Nasa's Aqua satellite acquired this photo-like image on November 15, screenshots of Sahana Disaster Management System and Reuters AlertNet.

Developing a central database of available resources

Nowadays a central database of resources is indispensable to well-coordinated relief activities. This database stores information regarding vital elements such as food, medicines, clothes, building materials, etc. If a particular district bears the brunt of Mother Nature's wrath, neighbouring districts can come forward to assess the emergency requirements there by using this database, mobilising available resources instantly.

District authorities will regularly send updated information on their districts to a central server, which could be located in the capital so that high-level government officials could closely monitor and synchronise district-level activities. India Disaster Resource Network (www.idrn.gov.in) is a good example of such a database.

During a disaster, when everything is in complete disarray, software could be used for proper resource management. Sahana is an ideal instance of this kind of software, which was developed in Sri Lanka by a team of ICT volunteers to help tsunami victims and coordinate work among relief organisations during and after that catastrophic disaster. Sahana is a free, open-source software that provides solutions in four segments -- person registry, organisation registry, campus registry and request management system.

An online information system such as AlertNet (www.alertnet.org), developed by Reuters Foundation, is another good example of ICT-based warning and disaster management system. AlertNet started its operation in 1997 and is basically a humanitarian news network that keeps informed relief professionals and general people about the disaster around the globe.

Community radio

Community radio is the radio of rural people. It paves the way for sharing local news, local happenings, weather updates, commodity price, etc. between rural communities. Traditional radio stations broadcast programs that are commercially motivated for which they miss out many contents that have significant impact on the bucolic people. Community radio warns fishermen of bad weather and guides them to safety. It also helps people find out the victims of any disaster and informs them of casualties.

GIS and remote sensing for exact analysis

Geographic Information System (GIS) can be used for scientific analysis, resource management and development planning. Through GIS, researchers can successfully identify and isolate risk-prone geographical areas, as a GIS-based 3D map provides detail information compared to a traditional 2D map. GIS also allows scientists to monitor environmental change, human impact and other natural process in a particular zone from earth-orbiting satellites.

GIS is also helpful to identify the damage and at the same time ensure uniform distribution of emergency supplies at the right place. Remote sensing is a tactic that allows researches to gather information about any object located in a remote place. Generally aircraft, spacecraft, satellite or ship are the prime elements of remote sensing.

SMS and cell broadcasting

Short Message Service (SMS) is a potential way to send any important news. During disaster, when it is not possible to initiate voice calls due to network congestion, people can send SMS as it operates on separate control channel. SMS also has another advantage over voice calls because it can be sent to many people simultaneously.

Cell phone operators nowadays can inform people about any weather warning through the cell broadcasting. In this process, a text message is sent to a particular cell or the entire coverage area.

ICT in disaster management can be another arrow in the government's arsenal to fight against all the negative fallout of a disaster. It also saves lives. It is high time both government and private stakeholders integrated ICT in disaster management tactics.

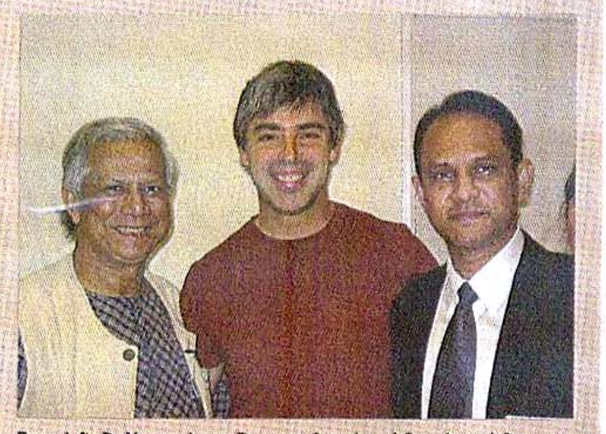
TECHNEWS

Dr Yunus exchange views with Google, Yahoo CEOs

STAR TECH DESK

GRAMEEN Bank chief and Nobel peace laureate Dr Muhammad Yunus recently visited Google and Yahoo! headquarters in California. Internet heavyweight Google invited the microcredit guru to their Mountain View headquarters to share knowledge and seek his suggestion on enriching the firm's operation.

Google CEO Dr Eric Schmidt and co-founder Larry Page wanted to learn about Dr Yunus' views and recommendations on the challenges Google can address. They were interested in his vision about the challenges of hi-tech age. Dr Yunus also interacted with Google team members.



From left: Dr Yunus, Larry Page, co-founder of Google and Grameen Solutions CEO, Kazi Islam

Yahoo co-founder and CEO Jerry Yang, *right*, conducts a session with Dr Yunus in front of Yahoo employees.

CEO of Grameen Solutions Kazi Islam accompanied Dr Yunus and delivered a speech on how eighty percent of the IT-neglected people of the world can access the facilities of info-tech.

"We can develop a field in the country to attract hi-tech giants like Google as they can be inspired to invest in the country. Making such field will employ many IT people as well as we will get better service from the companies", Kazi added.

The other search engine giant Yahoo! also invited Dr Yunus to its HQ in Sunnyvale, California. Dr Yunus attended a meeting of top Yahoo executives, which included Yahoo co-founder and CEO Jerry Yang and Executive Vice president Jeff Weiner. Later Dr Yunus spoke to a full-auditorium Yahoo employees.

Dr Yunus advised Yahoo executives and employees to continue to develop solutions to increase digital inclusion. Yahoo executives thanked the Grameen Bank chief for his advice and suggestions and requested him to visit them again.

TECHNEWS

Robot teaches dentists to feel people's pain

AFP, *Tokyo*

Japan's future dentists may soon be able to better appreciate patients' pain by training on a humanoid robot that can mumble "ouch" when the drill hits a nerve.

The robot, resembling an attractive young woman with long black hair and a pink sweater, also can listen to instructions and react to pain by moving her eyes or hands.

A group of robot and computer makers presented the high-tech dental patient in Tokyo at the 2007 International Robot Exhibition, a four-day technology showcase that opened Wednesday.

The medical simulation robot, named "Simroid," is designed to be used for clinical training at dental schools, said Tatsuo Matsuzaki, an official at robot maker Kokoro Company Ltd., which developed the body and control system.

The 160-centimeter (five-foot-three) robot can say "it hurts" and frown when it feels uncomfortable from the dental drill.

"The point is that we can share people's pain without hurting people," Matsuzaki said.

Naotake Shibui, a professor at Nippon Medical School, which introduced the robot in September, said Simroid can help dentists "learn how to communicate with patients."

TECHNEWS

JAN Associates gets Canon ICP distributorship

STAR TECH DESK

JAN Associates, one of country's leading IT accessories vendor has become the authorised distributor of Canon ICP (Image Communication Products). To mark the occasion JAN organised a press briefing in the city on Nov 22.

At the event, Abdullah H Kafi, chief executive officer (CEO) of JAN Associates, envisaged that their initiative will add a new dimension in country's ongoing digital photography trend.

"We know that our country has many talented and professional photographers. As we introduce Canon camera accepting yet another challenge to develop its market, a significant portion of which targets the media itself, we urge the government through media to support us break the divide and allow a friendly market," he added.

"We are delighted to see the present market response regarding Canon cameras and hope JAN will play a significant role to drive this craze to high", Wrixon Wong, manager, Consumer Imaging & Information, Products Division, South & Southeast Asia, Canon Singapore Pte Ltd. told the journalists.

By the end of January 2008, JAN Associates will officially launch full range Canon ICP products in the country.

HP rolls out next-gen notebooks

IT was a mild evening in Dhaka on Nov 25 when Hewlett Packard (HP), the global technology giant, warmed up the local IT market by unveiling seven new notebooks for the corporate executives.

In a mind blowing launching ceremony at a local hotel HP exhibited these high-end gadgets to the attendees. According to HP, these notebooks are based on new age technologies that will enable users to enjoy ultra-high performance with extended battery life.

HP categorised these notebooks into three segments such as 'ultra-light business notebooks', 'balanced mobility business notebooks' and 'high-performance business notebooks'.

In the 'ultra-light' category HP unveiled two models -- HP Compaq 2710p and HP Compaq 2510p. HP Compaq 2710p is versatile which gives the uses an option to transform this notebook into pen-based tablet PC. This model comes with an extra lightweight battery, which provides up to 10 combined hours of battery life. Other important features include ultra-slim docking solution, integrated camera system and business card reader software.

HP Compaq 2510p is the smallest and lightest business notebook with an integrated optical drive. Dual pointing devices, both a touch pad with scroll zone and point-stick offer users greater flexibility.

In the 'balanced mobility' category HP launched two models -- HP Compaq 6910p and HP Compaq 6710 series. HP Compaq 6910p conserves power up to five hours and forty-five minutes and is designed to match with on the move activities. The ultra-slim Multibay II drive bay allows users to swap optical drives for increased storage or optimal travel weight. On the other hand, the HP Compaq 6710 series offers large display, value and extensive connectivity. A windscreen 15.4-inch diagonal windscreen display with a choice of anti-glare or HP Bright View display options are bundled with this notebook.

HP Compaq 8710 series and HP Compaq 8510 series falls under the 'high-performance' category. The 8710 series is the HP's most powerful business notebook PC and mobile workstation that encompasses independent software vendor certified NVIDIA 3D graphics, a high-resolution 17-inch diagonal windscreen display and a full-size keyboard with numeric pad. Advanced users can work in a true 64-bit computing environment with support for up to 4 gigabytes of memory to run rich applications. The mobile workstation offers HP Performance Tuning Framework, a free, easy-to-use tool that guides workstation set-up and custom configures workstations to better match user's requirements.

The other HP Compaq 8510 series offers a choice of intense graphics from ATI and NVIDIA. Users can also develop, record, re-write and playback hi-defination video, as well as store up to 50 GB of data, with optional Blu-ray DVD+/-RW SuperMulti DL Drive with any of the new high-performance notebook PCs and mobile workstations. HP apprised *StarTech* that very soon it will incorporate WiMAX technology to its notebooks.

Edward Apurba Singha

PHOTOTECH

WOULD YOU LIKE SOME BREAD?

The new humanoid robot "Twendy-one", developed by Japan's Waseda University, picks up a piece of bread from a toaster during a demonstration at Waseda's laboratory in Tokyo on November 27. The Twendy-one, equipped with 47 actuators and two CCD on its 111kg body, has been developed for nursery and household assistance work.

PHOTO: AFP