



## ICT for disabled

Md. MAHBUBUL ASHRAF

**T**HE information or knowledge-based society is no longer a matter of the future, rather a very contemporary urge of the time. In almost all aspects of our life, we need information and knowledge to get our basic needs met, make decision, move around, participate in social, economic and cultural activities.

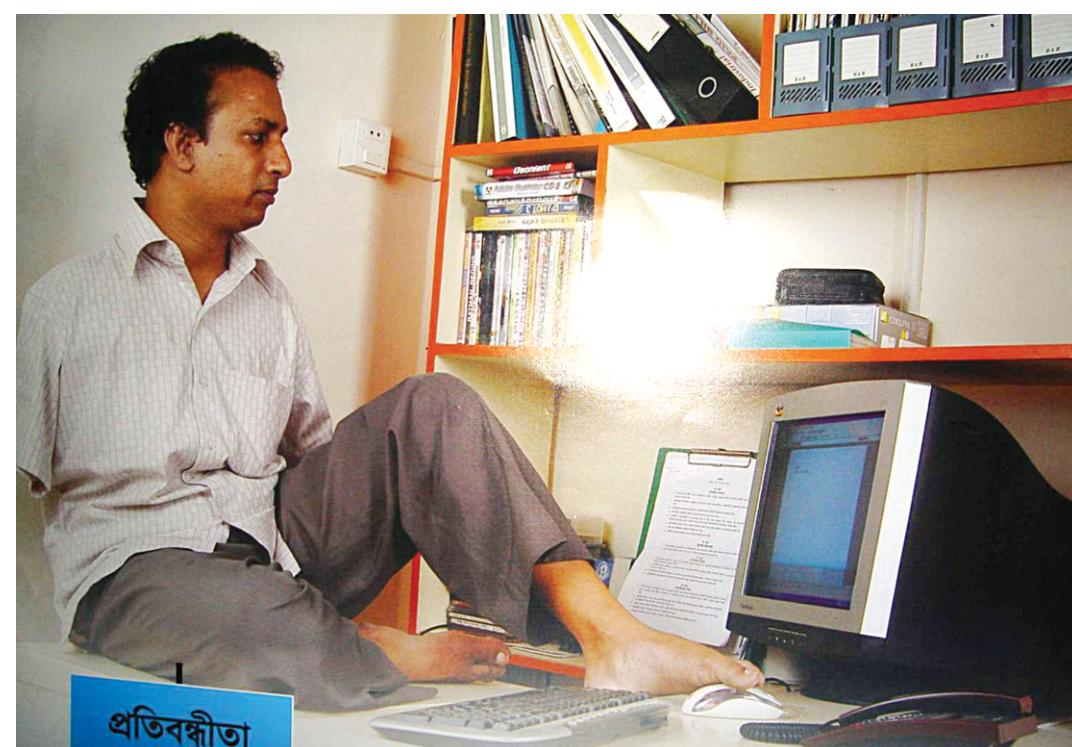
Many countries have laid down their national ICT plan in recent decades to keep up with the new trends of international development. International and regional organisations such as the World Bank, the United Nations, the EU, the Apec and the Asean have come out with studies, guidelines, recommendations and working groups for member countries or economies to follow, participate and share their experiences in ICT.

ICT is of course an enabling technology and we should not loose sight of this fact. If it is not properly planned, managed and implemented, it might throw us into social gaps or the 'digital divide'. I strongly believe that all of us are here because we all agree that none of us should be left out in isolation in this highly useful and challenging digital world. And this is why ICT accessibility is very important to all of us, especially to people with disabilities.

Persons with disabilities in Bangladesh lag far behind the mainstream development because of their disability as well as of our socio-economic and cultural realities. Hence, ICT can be a significant means of bridging this gap. ICT can be compared to a magic stick that will help our disabled people jump forward if utilised in a coordinated, planned and appropriate manner. A well-coordinated and collaborative effort is a must in order to create the optimum ICT accessibility for these people.

Recognising that access to information is a basic human right, the United Nations Economic and Social Commission for Asia and the Pacific (UN-Escap) convened a seminar in June, 2002 to draw "Recommendations on Policy/Legislative Guidelines concerning Information and Communication Technology (ICT) accessibility for Persons with Disabilities in the Asian and Pacific Region". To address the digital divide faced by persons with disabilities in the Asia-Pacific region and to promote the digital opportunities for them, the participants in the seminar adopted a set of recommendations including the definitions of 'Persons with Disabilities', 'Information and Communication Technology (ICT)' and 'Accessibility'.

The recommendations of the seminar have a clear bearing on the Biwako Millennium Framework for Action towards an Inclusive, Barrier-Free and



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ties.

'Information and Communication Technology' (ICT) means all digital as well as analog technology and services that supports human communication, creation, collection and dissemination of knowledge, and other activities for manipulation of information and,

'Accessibility' means the measure or condition of things and services that can readily be reached or used (at the physical, visual, auditory and/or cognitive levels) by people including those with disabilities, which could be achieved through design and/or adaptation irrespective of any types of disabilities.

The recommendations of the seminar have a clear bearing on the Biwako Millennium Framework for Action towards an Inclusive, Barrier-Free and Rights-Based Society for Persons with Disabilities in Asia and the Pacific (2002-2013). By resolution 58/4, governments in the region defined the seven priority policy areas for action, which, inter alia, includes access to information, communications and assistive technologies.

At present the importance of information and communication technologies (ICT) for development has been considered at the highest

level. For example, in the United Nations "Millennium Declaration" (General Assembly resolution 55/2), heads of state and government resolved "to ensure that the benefits of new technologies, especially information and communication technologies, in conformity with recommendations contained in the Ecosoc 2000 Ministerial Declaration, are available to all". As such, reference to people with disabilities does not feature in this resolution, though its text can be applied interpreting the right of equal access to people with disabilities".

As ICT is a global issue and the technology is changing rapidly we cannot keep ourselves from international development. Therefore it is very important for us to continue to watch the recent development of ICT and extend our efforts to adopt those technologies in the country context.

In order to get our people with disabilities involved in ICT or widen ICT accessibility for them, the following issues could be taken into consideration:

- We should have a clear understanding of the existing scenario of ICT facilities, services and practices in the country;
- An overall needs assessment to be carried out in order to set up our course of action;
- All possible efforts should be taken to make optimum utilisation of our existing resources, services and facilities and to make our audience familiar with the in-built accessibility features of the operating system (i.e. sticky keys, filter keys, mouse keys, display contrast);
- Efforts should be taken to design, develop and distribute accessible

services that can readily be reached or used (at the physical, visual, auditory and/or cognitive levels) by people including those with disabilities".

This powerful sector can take this challenge as an opportunity to extend the capacity of ICT to the maximum level of availability, affordability and accessibility.

The third is the most important and dynamic sector, civil society. This sector comprises diverse groups of people with diverse background. It can simultaneously influence the government as well as private/business sectors. Through this sector issues of people with disabilities could be brought into light, having their needs clearly articulated, understood and well recognised by the society at large.

Finally, if we can address this challenge with strong determination and sincere efforts, we can certainly create some opportunities for the people with disabilities. In other words, if we can use this ICT magic stick properly, a dramatic change could take place in terms of ICT accessibility for persons with disabilities in Bangladesh.

The author, a physically challenged person, is the coordinator of Association for the Welfare of the Disabled People (AWDP).

ICT products like transcriber, interface, software and assistive technology products as well as introducing accessibility techniques for all categories of disabled people like visually and physically challenged, hearing and speech impaired, intellectually disabled, autistic children and others.

Efforts should be taken to make best use of the existing policy guidelines and legislative support and tools in this regard. We have our national policy guidelines and legislation on ICT, we have national and international instruments and tools for people with disabilities where issues of the ICT accessibility have been emphasised. And now is the time to intervene. I think there is no alternative to simultaneous initiatives from the government, private sectors and civil society in bringing our vision into reality.

In order to make certain level of control on how to make ICT products and services accessible to all people including the PWDs, the government can play a prime role. The private sector has become more and more important in the society especially under the influence of globalisation. This sector comprises ICT developers, manufacturers, distributors and sellers. The great challenge for this sector is how it could be responsive and even empathetic to various needs of users with or without disability beyond their short-term benefits. This powerful sector can take this challenge as an opportunity to extend the capacity of ICT to the maximum level of availability, affordability and accessibility.

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### 3dfx

3dfx Interactive was a company which specialised in the manufacturing of cutting-edge 3D graphics processing units and, later, graphics cards. After dominating the field for several years in the late 1990s, by the end of 2000 it underwent one of the most high-profile demises in the history of the PC industry. It was headquartered in San Jose, California until, on the verge of bankruptcy, many of its intellectual assets (and many employees) were acquired by its rival, NVIDIA Corporation. 3dfx Interactive filed for bankruptcy on October 15, 2002.

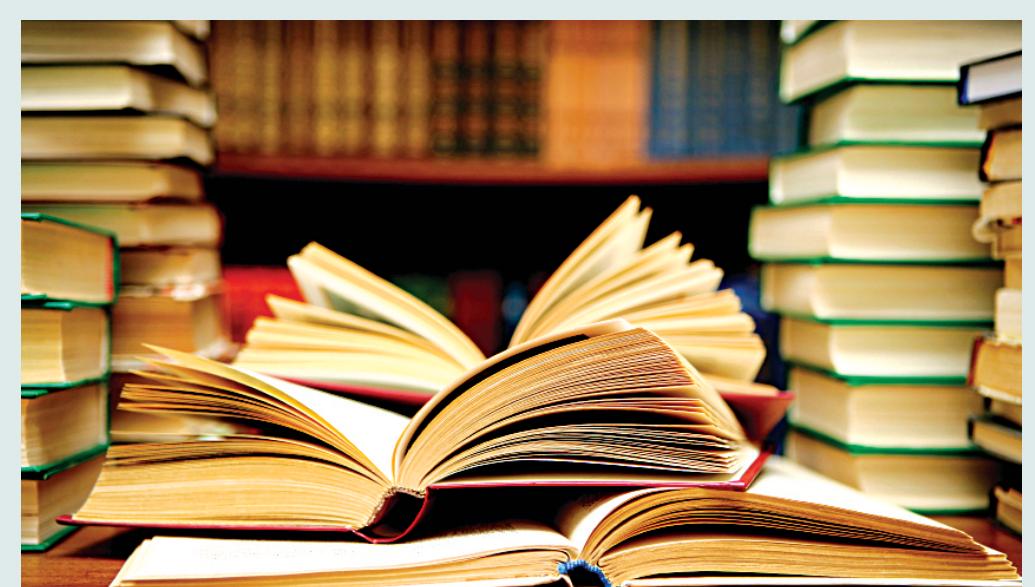


startech@thephilstar.net

### TECHFOCUS

#### Web Content Writing

#### A good option for unemployed



Md. FAROOQUE HOSSAIN KAMRUL

**T**HE internet has opened new doors of opportunities and web content writing is one of them. The question is what content writing means. Well, any writing based on a specific subject is content writing. And when it is web-based it is called web content writing.

The subject of writing depends on the writer's choice, dexterity and the requirements of the site the writing is for. No

matter what you are called - content writer, researcher or journalist -- your writing should be original. As the internet is open to all and access to it is becoming easier, none should insert 'cut-paste' into their script from other sources. Any plagiarising may easily be detected by software like copyscape. In addition, like books every site has its proprietary right, which entails forgery charges against charlatans.

Web content writing should be concise and clear in meaning. As a writer you have got to

going to look over the shoulder of a freelancer! Here are some related portal addresses that you should know.

If your writing is published on [www.writerforcash.com](http://www.writerforcash.com), you will get 15 to 20 US dollars for every write-up. You will have the freedom to choose the content when you are contributing for [www.associatedcontent.com](http://www.associatedcontent.com). This site pays at least 40 US dollars for every 400 words. Photo and video can also be added to this portal.

You can earn from 1 to 5 US dollars to write content for bid on [www.constantcontent.com](http://www.constantcontent.com). In addition, you can earn easily by mailing article directory or blog. For this, you can visit sites like [www.blogger.com](http://www.blogger.com) and [www.ezinearticles.com](http://www.ezinearticles.com).

Keep in mind that your writing must be logical. You have to have a clear idea of what and why you are writing. If the writing is about your pastime, daily life or personal experience, then the beginning of it should have a touch of emotion. In such writing, narrate concisely what actually happened without going into details. Read it several times after you have finished it.

You can share your views with other web writers through email and online chat. Try to bring out something dramatic in your writing. I hope success will woo you if you follow the tips.

### TECHNEWS

#### Scientists aim to barcode world's species

AFP, Taipei

**A** group of Canadian scientists is working on an ambitious project to create a global database of up to half a million of the world's species using DNA barcoding technology.

The scientists are hoping to raise 150 million dollars to fund an initial five-year stage of what they describe as the biodiversity equivalent of launching a rocket to the moon.

DNA barcoding, a technique for characterising a species using only a short DNA sequence, has wide-ranging implications for health and the environment.

It could help remove illegal fish and timber supplies from global markets, get rid of pests such as mosquitoes and even reduce the numbers of collisions between birds and planes.

Paul Hebert, head of the Canadian Centre for DNA Barcoding, is spearheading the plan.

"We're now trying to launch in Canada the International Barcode of Life Project, which has a five-year life span," Hebert told AFP at a three-day

seminar on DNA in Taipei. "We hope to put 150 million US dollars into this through a 25-nation alliance."

"The idea is collectively we would gather five million specimens and 500,000 species within that five-year period," Hebert added, saying the entire project could take 15 years.

The seminar in Taipei has brought together 350 scientists from 45 countries to debate the "barcoding of life" concept.

Scientists estimate that while nearly 1.8 million spe-



SPURS ENGINE

An employee for Japan's Toshiba Corporation demonstrates how to create simulations of 3D real-time transformations of her hair style and make-up by use of a lap-top computer, during a press conference at the company's headquarters in Tokyo on September 20. Toshiba recently developed the new image co-processor called "SpursEngine" and will unveil the prototype at Asia's largest electronics trade show "CEATEC Japan" from October 2.

PHOTO: AFP



A researcher displays an envisioned hand-held device on his computer's monitor that could be used to easily identify living species

cies have already been identified, there may be another 10 million that are not known.

But DNA barcoding technology has progressed so rapidly that scientists predict science fiction-style powers to recognise previously unfamiliar creatures could become reality in a decade.

"Like in the film of Star Trek, anything scanned by such devices could display its image, name and function," said Allen Chen from Taiwan's Academia Sinica.