

## FEATURES

# Accessibility in India: An Interview with Shilpi Kapoor

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Mak Pandit interviews Shilpi Kapoor, managing director at BarrierBreak Technologies and Net Systems Informatics, about accessibility in India.

**Mak Pandit:** What made you begin contributing to accessibility issues?

**Shilpi Kapoor:** I was working as a security analyst and networking consultant for a U.S.-based company. I didn't know that my boss was paralyzed until the day there was an issue with his assistive technology. It was a shocking realization that if you are not aware of someone's disability, you treat that individual as equal.

In a country like India, when you hear the word "disabled," everything is negative in context. There were hardly any efforts to use technology for providing much-needed accessibility.

Considering the condition of infrastructure in our country, I thought it was better to use technology to provide people with accessibility rather than work on improving physical infrastructure.

**Mak:** Among various types of impairment, which do you think is the most difficult to cater to? Why?

**Shilpi:** We don't have such a take. There are different problems that people face with different disabilities. Technology can help them overcome some of those problems. We prefer to address the issues rather than figuring out who is more affected. That is our approach.

**Mak:** What are the various challenges you've faced so far?

**Shilpi:** The first challenge we faced was that nobody wanted our service. When we talked with some IT companies, they were not willing to pay for our service. There was no value attributed to our work—it was a zero-demand market. We literally had to create the market by increasing awareness.

The second challenge was the absence of a legal framework that stressed accessibility. The government was not thinking about technology for disabled people when we started. No organizations, neither private nor public, were concerned about providing accessibility for disabled people. They used to say, "We don't have disabled clients." This was shocking. With no legal framework, the IT sector was ignoring the issue of accessibility within their contracts. Unfortunately, the scenario has not changed much to date.

**Mak:** Isn't that strange considering the fact that many IT companies have offices all over the world?

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*satisfy a clients requirements (exclusively mentioned in a contract), then its your mistake. But why be held by contractual obligations? Accessibility is something you can offer as an integral part of your service. I think the IT industry in India should gear up and self-govern.*

**Mak:** Is there any provision of Section 508 in India?

**Shilpi:** We don't have a law yet. We merely have guidelines for Indian government websites (GIGW), hidden within the general guidelines. We are now working on the new "Persons with Disabilities Act." When it is passed, all government websites and private websites related to and concerned with citizens will have to be accessible.

As the new e-governance policies are being implemented, government bodies are becoming more aware about Web content accessibility. For example, in Maharashtra, when a vendor delivers the project, he has to give a duly filled-in checklist that assures the content is accessible. [BarrierBreak is headquartered in Mumbai, the capital of the state of Maharashtra. Mumbai is considered the financial capital of India.]

**Mak:** Can we say that the state governments will apply pressure so organizations will have to comply?

**Shilpi:** Let's hope so! Take the example of Maharashtra state. The income tax department got the vendors trained in accessibility, which is very interesting. They are paneling vendors based on their knowledge of localization. The government is making sure that the vendor is delivering exactly what is asked for before making any payment. That kind of systemic change is what we need.

We don't mind waiting. But it has to be systemic if we are to see true implementation of the principle of accessibility. I hope that we can see noticeable changes in the coming six months.

**Mak:** Isn't anyone looking at this issue at the central government level or in other states?

**Shilpi:** Lately, the governments of Punjab and Madhya Pradesh [two other states in India] released statements about making their websites accessible. The central government is taking positive steps in implementing GIGW, but Maharashtra seems to be the leader and a truly progressive state.

**Mak:** How are assistive technologies being developed at BarrierBreak? Are you inventing them or are you localizing imported solutions?

**Shilpi:** Our approach is not to reinvent the wheel. Instead, we emphasize localizing the products. For example, an English screen reader in India costs Rs. 60,000/- if bought directly. We negotiated for the bulk of requirements for India, localized it in Hindi [India's national language], and brought the price down to Rs. 21,000/-. We plan to localize it into the regional languages as well.

Considering their economic condition, disabled people may not be able to afford the price of equipment. But an employer who employs a disabled person can afford to buy that technology at a slightly higher

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A lot of these products are expensive. When you buy an expensive product, you want warranty, training, and support, which we provide. We are not just selling the technology. We want to bring a systemic change through our products. In the future, we will be developing many products on our own, like mobile apps. We are sure that apps can play a major role in making the world more accessible.

As far as hardware products are concerned, we are not in a position to do much owing to limitations of manufacturing facilities in India. There is one more angle to this. At the moment, we don't have the numbers that can make design and manufacturing feasible. The demand for assistive technology is fairly limited. Many people still think assistive technology means wheelchairs and hearing aids. Hopefully, by educating the masses and subsidizing the products, we can achieve the numbers.

**Mak:** What are the economic aspects of accessibility in India?

**Shilpi:** If we provide a disabled person with assistive technology that gives him mobility and connectivity, he can contribute to society with full potential. Skills of disabled people are grossly underutilized in our country. With assistive technology, job opportunities will open up. Once a person is employable, he would soon become a taxpayer. Thus, assistive technology can certainly increase the state's revenue.

Establishments like restaurants, coffee shops, and cinemas can raise their revenue by providing simple accessibility solutions, such as a restaurant menu in braille.

Assistive technology can make a large part of the population more productive. With income, their standard of living will improve and so will the demand for appliances and lifestyle products. Consider the total untapped purchasing potential of this population segment. It will be a boost to the country's economy! This is as true about the rest of the world as it is for India.

**Mak:** How can training in assistive technology be improved in India?

**Shilpi:** We need to train the people with disabilities at an early age, say, from school level. We must train the educators for effective implementation of assistive technology.

Currently, schools are not teaching assistive technology. Nonprofit organizations are doing this job. The problem is that by the time a disabled child meets a nonprofit organization, he or she is 14 to 16 years old, which is too late.

What we need is standardized training across the country. The government should work with the corporate sector to design a curriculum for this training program for teachers. Everyone will benefit as a result.

**Mak:** What is the role of technical communicators and developers in ensuring accessibility?

**Shilpi:** Technical communicators are producing a considerable part of the content being consumed today. It is their responsibility to develop accessible content. In fact, everybody creating content has to

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**Mak:** India is considered a development hub. What do you think about accessibility training for developers in India?

**Shilpi:** Training for developers is a must. But IT companies should realize this. Accessibility is considered an add-on, not an essential entity. SDLC [software development lifecycle] should include testing and assessment for accessibility. We must understand that it is not about a separate disability sector but about mainstream industries.

**Mak:** What do you expect from government bodies, NGOs, and international organizations that want to work with BarrierBreak?

**Shilpi:** We are willing to work with any organization with matching or overlapping goals. Our only hurdle is resources. Collective efforts of NGOs and international organizations will be of great help. There are so many segments where we cannot reach. Any proposal from NGOs or international organizations is most welcome.

**Mak:** Is BarrierBreak teaming up with any e-commerce sites?

**Shilpi:** E-commerce sites must realize that they could be the preferred buying mechanism for a large part of the disabled population. They should not only make their shopping carts accessible, but also stock a lot of assistive technology products. The conventional stores may not be able to stock such products for the lower demand and limited rack-space. We are talking with some e-commerce sites and hoping for positive results very soon.

**Mak:** How do you sell your imported technology solutions?

**Shilpi:** We largely sell to government, corporate, and NGOs. We have outlets in Mumbai, Delhi, and Bangalore. We are now looking at setting up a dealer network. In the past, we tried using nonprofits to provide technology, but had limited success.

Our product section has become entirely an e-commerce site. Very soon, customers will be able to buy our products online. We are also providing many software products.

Though a large part of our sales comes from government and NGOs, we like to see our products available in mainstream market. We cannot achieve this by sticking with the nonprofit sector.

Another reason for going mainstream is the mentality of Indian parents. They tend to be secretive about their child's disabilities and would rarely make a direct call and ask for our product. However, if a product is available at a retail outlet, they quickly buy it.

We are also in discussion with hospitals and government organizations regarding making our products available through them.

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#### SHORT- OR LONG-TERM:

**Shilpi:** First and foremost, don't look at this as a charity. Look at this as a sustainable business. Considering it as a charity is killing the sector. Charity is what you do only once and out of extra income. Making a product accessible is a one-time action. Keeping it accessible is a continuous process.

For short-term, pick a focus area and work not only with nonprofits, but also with mainstream organizations to push your idea. That is what we are lacking. When any assistive technology product comes to India, they are talking only with the disability domain. To make people aware of your product, you must work with mainstream business. That is what is going to change the entire field.

For long-term, show organizations the value associated with providing accessibility to users. Show them the economies of scale. You need to invest time for collecting data and demographics. If more data is available, a lot of business and government policy decisions will be easy and quick.

**Mak:** How can EPUB 3.0 help to improve accessibility?

**Shilpi:** EPUB 3.0 is the latest standard for eBooks. Until now, books for disabled were published separately. EPUB 3.0 is a format that is accessible for disabled as well as non-disabled people. EPUB 3.0 is an important step toward mainstreaming accessibility. It eliminates the need for a separate version.

Currently, a separate version is published for disabled readers. Then some nonprofit organization converts it, prints it, and distributes it. A book published in EPUB 3.0 format is a common version for all users. Thus, there will be a great reduction in cost and time. This will increase the number of buyers and hence encourage the publishers to publish more.

EPUB 3.0 is certainly a major development that will have a far-reaching impact. It is capable of bringing about a revolutionary change.

**Mak:** Among the numerous electronic gadgets available today, which one do you think is most useful?

**Shilpi:** All of them are useful. These devices enable you to access any information, anytime, and from anywhere.

Recently I saw a "talking TV" in London on sale in a retail outlet. I instantly thought, "I want it in India." We need that kind of technology right now, but many of the available devices need to be a lot more user-friendly. For example, almost all set-top boxes in India have manual and screen instructions in English. These things must be localized because half of the population using them does not understand English. Most of them cannot even read the local language. A "talking menu" will be of great help to them.

**Mak:** Any concluding remarks?

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**Shilpi Kapoor** is managing director at BarrierBreak Technologies & Net Systems Informatics. She was previously working with [National Centre for Promotion of Employment for Disabled People](#) and [Indian Association for the Visually Handicapped](#). For more information, visit <http://in.linkedin.com/pub/dir/Shilpi/Kapoor>.

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