

Usability Professionals: You've Come a Long Way, Baby!

Vikram Chauhan | Human Factors International | vikram@humanfactors.com

The number of usability professionals in India has grown considerably these last few years. The demand in Asia has exceeded supply, and the future looks even more user-friendly.

Even as I write this article on the growth of usability professionals in India, somewhere in the US, Microsoft is transferring \$1.7 billion dollars to the Indian subcontinent. Sweet. Following the lead of global technology giants such as Cisco and Intel, Microsoft's chairman and chief software architect Bill Gates recently announced his plans to raise the head count in India from 4,000 to 7,000 by 2008. It has taken a while, but HCI in India has finally come of age. Bill Gates' investment has nothing to do with HCI. It is the overall IT industry that has come of age. HCI may be a part of that investment for Mr. Gates, which we are not sure of.

"In case there was any doubt, the titans of technology believe in India," reported Jay Greene in *BusinessWeek.com* in December '05. "Nothing in the universe is coincidence," reports Tao. And Tao, as always, is right. The usability evolution in India began a couple of years ago.

Case in point: Shashank Deshpande, UCD group lead, Symantec User Engineering, Veritas reports: "Our UCD Group has grown from one to 25 people in just a couple of years. In fact, the growth in India has been higher than in the US. Our group is six years old. On the other hand, our US counterpart is only three people."

That's a phenomenal growth per year. And that's not the only example. From Hyderabad and Bangalore to Mumbai and

Delhi, it's the same war stories being told by the Western grandpas of usability: The number of usability professionals is growing. And we are here to stay. However, it wasn't all that rosy just a few years ago. Things were more challenging, and the stories that are told are not so foreign to the HCI world. Indeed, this author has heard the same story from almost every IT company with a presence in India, including Honeywell Labs, Quark, Oracle, Microsoft, and even the growing number of HCI consultants.

Honeywell Labs. Muthu Kumar, currently with Honeywell Labs and in HCI for the past six years, observes, "Post dot-com burst, people began to question the credibility of Web-site design. In 2001, it was found that the design processes were not mature with respect to user goals and needs. There were no clear documentation requirements and nobody knew who the users were.

"There were a lot of design teams earlier, but no usability teams. Designers were doing usability. They were taking requirements from business and marketing, and were brought in too late in the process. We would test at the end of the lifecycle. To sum it up—quality was tested but not built in. It was in 2002 that our role began. User-centered design started picking up. The development team started seeing the benefit. In 2004 it got centralized. It was slow, yet steady.

"Eventually, we had a proper [usability] designation and a team. We were five earlier. Right now we [the usability team] are about 15."



Photo: Jason Gardner

Quark. At Quark, Inc., Gaurav Lal was experiencing a similar outcome. Currently a project manager with Human Factors International, he recounts his days at Quark: “Just a few years ago technology groups would drive the user interface. We had about four to five people in India and about nine in the US. We would deal with technical people who had read about usability, but never practiced [it]. But now all that has changed. Quark is now 15 HCI professionals in India and 15 in the US.”

Similar growth has been seen in other companies I have spoken with, companies like SAP, Oracle, and Microsoft. But this growth is also noticeable in the HCI Consultant world.

“I have been in this industry for 14 years,” says Symantec’s Deshpande. “I was a freelance consultant earlier. When I started in 1992, until 1999, the software-outsourcing model was not established. So it was difficult to locate [companies that practiced] UCD or usability people.

“I remember the day I walked into Tata Consultancy Services, one of the leading Indian IT consulting firms, to develop a business relationship for one of their products. They had advertised the accounting product in the papers as: ‘So simple, even a panwalla can use it.’ But when I bought and installed it, it was extremely difficult to use. So I met the stakeholder and explained to him the UCD process. He was not convinced. He didn’t see any value in it.”

Deshpande continues, “Things have changed now. In 1999, when I was a lone consultant, there were not more than 25 people in the entire industry. Today, if I do

a rough calculation, I would estimate at least 700 to 800 people.”

Microsoft and Oracle. So what factors influenced the offshoring model? One is the increasing shortage of HCI people. There has been a growing need to leverage talent all over the world as more HCI professionals are being produced in India and as Indian HCI professionals in the States return home. Microsoft and Oracle, to name but two companies, have already experienced this increasing need for talent.

Amit Chowdhary of Microsoft states, “Microsoft believes in tapping talent everywhere. Also, today a lot of people of Indian origin want to return to India from foreign countries. With Microsoft, it is not just about cost reduction, but also about leveraging talents. This is what drove Microsoft to India in the first place.”

Chowdhary adds that increasingly, the offshore role has not been limited to assisting development efforts outside the country. More and more products are being developed completely in India.

Chowdhary remarks, “Another factor that has contributed to the growth of usability professionals in India is ownership. Earlier we used to deal with Y2K problems or transferring code. But the servicing industry has matured. Now we talk about end-to-end solutions, not just usability but also content. It has a more empowered role.”

Indeed, Chowdhary is currently working on a product that is being built and designed in India for Microsoft.

Amit Pande of Oracle observes, “More

and more product development work has spread globally with the distributed model. Europe and the US have a lot more confidence in split working. Offshoring is one way of looking at it. But it is more complex than that. We have teams in India reporting to the US and vice versa. So the sheer number of people keeps growing. In some organizations, entire products are being developed in India—from the strategy, marketing and QA. So logically, you need UE resources in India to support these local development teams. Moreover, India has been investing a lot more in production practices. Design is becoming a lot more important and there is a greater awareness of design.”

That is not to say that everything is so upbeat; indeed, now that there is a new appreciation for HCI, there is still the well-known struggle to implement user-centered design as well as other challenges common to the rest of the world: the shortage of HCI professionals.

“Recently, I attended a NASSCOM conference where they had showcased innovative products by Indian companies,” observes Deshpande (Nasscom is the leading organization for the Indian software industry). “A few of them had followed UCD. They were still in the phase where they were thinking in terms of feature innovation. That’s why I feel it is still early in maturity.”

“Another concern,” he continues, “is the quality of people. We need better education. I see a lot of design schools but not many schools teaching anthropology, ethnography, etc.”

This problem is no secret in India. The

THE EAST SIDE STORY: CHINA

India is not the only place where HCI is booming. China is also noticing a gradual growth in both offshore development and design. However, China is suffering more serious growing pains than India.

"I think five years ago there were only a few usability professionals working in China. Today there must be about 500," says Jason Huang, current president of UPA China. "Most of these people are product designers; some have a background in psychology. About 20 of them are *real* usability professionals."

Jin Liang, currently a UI designer with SAP Labs Shanghai, says that things are not so optimistic: "Over the past five years, there has been no change in the number of people in my current and previous company. There are five people in SAP Labs, Shanghai, and two in my previous company. And that hasn't changed. But if you look at the overall market in China, there must have been fewer than 20 people five years ago. But now there could be tens of thousands... if you include the graphic designers who do interaction design as well. They however do not have enough knowledge of interaction design, usability processes, and usability testing. Professionals working on interaction design and usability testing are fewer than 100 in China."

Huang explains, "There are three groups of usability people in China. The first group, which is also the biggest, consists of industrial designers and graphic designers, as Nokia and Motorola discovered usability a while ago. The second group of people are from a famous Chinese university, mostly from the psychology department. They do mostly usability testing, not design. The third group, people like me, have been educated in usability in the USA, the UK, or Australia. These people usually become design leaders or department managers.

"Just a few years ago there were no usability engineers in software companies. The usability awareness is a recent phenomenon. People came to know about usability only in the past year. They just don't know how to do it."

Renee Zhang of Erickson has observed some positive developments that China is making: "Earlier the literature was mainly in English. Now I can find more about the Chinese market in Chinese. Usability is also being promoted and increased dramatically. There is more usability staff doing Web sites, GUI, and design of all related fields...UPA China has about 100 members... In Ericsson the UI team is now almost five to six people in Shanghai and 12 or 15 in Beijing. The teams consist of UI and graphic designers and usability engineers," she adds.

This has resulted in demand being greater than supply—a shortage so acute that some work just cannot be done in China.

"Recently, eBay was interested in doing usability testing in China," reports Huang. "They spent more than six months searching, with five headhunters. Finally they found one person."

One of the detriments to this growth is education. Currently in China there is no education in HCI or usability. So you still have to go abroad to study that. However, Jin Liang observes, "There are good developments happening in universities that have set up education for human factors in the psychology departments."

The Future. As the China market continues to expand, usability and design will continue to grow in importance. Zhang envisions, "More foreign usability engineering organizations will come to China, because the Chinese market is huge. Foreign companies would want to come too. And they will need usability professionals to help them. We will have some national usability offices, and foreign ones too, because they have more experience."

She continues: "The number of persons will continue to rise. Now we have some software companies and usability companies. They will bridge the gap between designers and users. Training will be welcomed by many persons. It is a hot working area. Education and training will be wanted every half-year for the professionals to keep themselves updated."

So while the economics of design in India are driving HCI growth in India, in China, it is more the growth of the Chinese economy itself that is bringing HCI into China.

—VC with inputs from Carolien Klep

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Hindustan Times reported in November '05 "With a shortfall of almost 60,000 usability professionals, Indian IT and ITES companies presently face a real threat of missing the current boom in this sector."

Infosys Communication Design Group's associate vice president Sridhar Marri was quoted in *The Economic Times* in November saying, "We have around 100 usability professionals at this junction and have decided to hire 100 more people in the next two years. That's about two per-

cent of the number required. There are around 3,000 projects happening right now and only 150 usability professionals produced in a year. Despite that there is no professional institute to train such students right now."

There is a demand-supply gap since the number of design professional being churned out by NID (National Institute of Design in Ahmedabad), IDC (the design school of the India Institute of Technology), and other design schools are less than a few hundred

Organization	2000	2005	2008*
Honeywell	5	15	60
Veritas	1	25	NA
Quark	4-5	15	NA
Microsoft	3	5	NA
Oracle	2-3	10-15	NA
Infosys	NA	100	200
HFI	10	85	300

*Internal Projections

Figure 1: Number of usability professionals in India as indicated by internal research. Note: All figures and years are indicative and not exact.

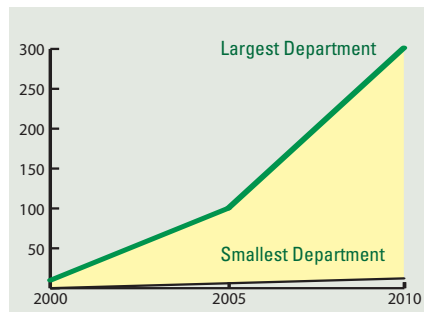
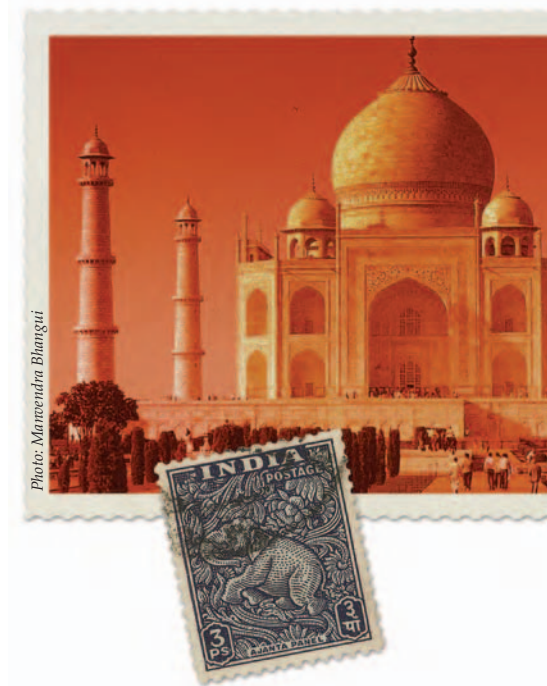


Figure 2: Approximate number of usability professionals per department in India as indicated by internal research. Note: All figures and years are indicative and not exact.

However, things are improving academically. Initially there were no specialized courses for HCI or usability engineering in Indian universities or schools. Therefore most of the people were generalists who knew a little bit of everything (graphics, technology, product goals, user requirements, etc.). It was detrimental to the industry, as there was a strong requirement for interaction designers, but specialized people were not available. However, now there are many schools/universities offering courses in HCI.

What does the future have in store for the growth of usability professionals in India? Though not without its problems, almost everyone predicts continued growth in the Indian HCI world.

Gaurav Lal sums it up philosophically: "The future looks good. It is ingrained in the Indian system to think about the other person first. In the Indian culture, it is truly UI—You before I. With proper training and education, India has what it takes."



ABOUT THE AUTHOR Vikram began his career with All India Radio and then The Indian Express, where he was a creative writer for two years. He then joined Channel [V], one of Asia's leading music channels, to launch their Web site. The next two years were spent in Dubai working for Gulf News Online and then The Times of India Group as a usability consultant. Presently, he works as a Center of Excellence Lead with Human Factors International, Mumbai. You can reach him at vikram@humanfactors.com

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