‘Right question leads to right answer’. Framing and designing of an appropriate question is toughest task for all and designers are not exception. If someone succeeds in designing a right question, it is extremely difficult for them to arrange in systematic order for extracting and generating exact desire information. To arrange information in such a way that it flows naturally from desired meanings to further advancement of growth is an extremely difficult task. A question may be either a linguistic expression used to make a request for information, or else the request itself made by such an expression. This information is to be provided with an answer. “There are these four ways of answering questions. Which four? There are questions that should be answered categorically (straightforwardly yes, no, this, that). There are questions that should be answered with an analytical (qualified) answer (defining or redefining the terms). There are questions that should be answered with a counter-question. There are questions that should be put aside. These are the four ways of answering questions”—Buddha. I would further say ‘put aside’ is an act of expressing indifferent attitude or ignoring its importance. Silence is at times golden. It reflects the
character of question or answer based on under what circumstance it is maintain.

We are receiving so many articles, some have natural flow of ideas and it is honest attempt and reflect the sincere efforts of solving the varieties of questions and understood by all without taxing anyone’s brain, but majority of articles are with artificial logic as someone is insisting them to reach for conclusion as an advocate plead his case of his client by arguing based on his own hypothesis, justified and supported by his own created evidences. He keeps on changing his stance as his arguments are questioned by other side of advocate. Sometimes he jumps from one angle to another in defence of his arguments as squirrel behaves or often he designs his questions based on what they wish to get answer from person in witness box. It is called trap because he uses human weaknesses and based on unnatural process. I call this type of questioning a ridiculous and unnatural under the cover of natural flow. It is known to the successful advocate and he presents in most beautiful manner as it appears natural. He might have won the case by unnatural arguments but his bottom of heart is aware he has protected a wrong person by his unscrupulous conduct.

Why do we design the questions? The unexamined life is not worth living... The most important thing is to ask question. “I know you won’t believe me, but the highest form of Human excellence is to question oneself and others- said Socrates.” Designing of question is nothing but it reflects our curiosity or urge to know since it is for our own search from known to unknown. When scientists were curious for sun they were not
equipped technically to probe further. But their quest was questioning and by correcting their arguments they realized what connect the sun and earth. Their answer was sunlight. They designed right question and their probe led them to right paths of investigations. We know curiosity mostly start with no concrete foundation but as we question and gradually refine our thought process, it creates its own foundation. Designers of our generation are facing the same dilemma while probing and work for progress as to ‘where to begin their design that should carry it forward and how to conclude. At the beginning they are unaware what final design will emerge.’ Once they start to finish, conclude their designing activity by questioning themselves ‘Is it good? Is there some flaw in it? Is there any scope for betterment? Are we true to our social responsibility as designers?’ And simultaneously they are correcting and refining their own thoughts and processes. In fact their act is nothing but it is attempt of verifying their own assumptions. ‘Professional culture does not permit for questioning but encourages assumptions.’

‘Why our designers abandon the designing in half way and never put their hearts into project in hand to make it masterpieces?’ Either our present day designer feels he has given his best output and beyond this he does not have anymore capability to improve or he deliberately never allows his best to known to others and let the people should visit him with more business offer and he will unfold as and when commercial benefits will be more or time is pressurizing and forcing him to abandon this project and look for new or he is governed by money power and answer by saying ‘what they have paid I have done their job up to that level.’ These facts
are noticeable in their performances. Impatience, greed and half hearted efforts are reflected in their works. This is the reason our generation is failing to produce the masterpieces. It is advice that ‘Never submits to the trap of market driven forces. Work simply what best you can do. It does not only give the mental satisfaction but enhances your learning process and takes you to that height that it will make other envy.’

Curiosity is essential elements for designer and to calm he is bound to raise questions. As he questions his curiosity multiplies in directly proportion, if it is not cared properly it turns to anxiety. Anxiety may aggravate either by looking at others successes or works, or market forces are pointing and praising others and he feels being ignored by community or he/she fails to give best to the society or they live in illusion they are the best what they design is ultimate. We should educate our designers that ‘do your best. Let others react in their own way. Criticism and praise are part of design. Never be carried away by such acts & emotions and never come under the trap of anxiety because it is the real or apparent cause for not allowing our brains to frame the right questions for right answers. I have seen many young people take such decision that no one can imagine that they will take in their circumstances. It is their hurriedness to win the race with time. ‘How can I be left alone?’ ‘Take your time but be quick about it, because you don’t know what awaits you, said by French philosopher Derrida. My many students are in hurry for earning huge money in their professional life. Market forces have their own rules and it never allows individual or group to mend it for their own ways. Rarely it allows an individual to
grow with principals and accumulate wealth more than what he needs. Majority of time it allows unprincipled person to grow and he/she proves ultimate winner. Our young designers fail to learn the art of earning money with principal and busy in manipulating the market forces for personal gains. Majority of the time they are trapped under unprincipled tactics for earning more than what they need. If someone succeeds, they give their credit to their destiny and do not have confidence to say 'I succeeded because I put my heart and brain in it.' They wish to be successful but not at the cost of hard work and sincerity. They behave in unusual manner when their marriageable age start slipping and when they visit to prospective spouse they pose such nonsense questions that other person feels ashamed in answering but ultimately they marry. Their judgment of framing the questions is lost somewhere in their anxiety and analytical skill lost under biological clock pressure. Both the partners take wrong decisions and repent latter on. It’s account of common human transformation because of elements of danger, urgency and self preservation.

Asking of questions have number of uses. 'Raising a question' may guide the questioner along an avenue of research. A rhetorical question is asked in order to make a point, and does not expect an answer (often the answer is implied or obvious). Pre-suppositional questions, such as "Have you stopped caring your wife?" may be used as a joke or to embarrass an audience, because any answer a person could give would imply more information than he was willing to affirm. Questions can also be titles of works of art and literature (e.g. Leo Tolstoy's short story How Much Land Does a Man Need?"
Question reflects questioners culture. When I visited a restaurant for dinner with visiting professor of China, I asked her as a host ‘Madam, what would you like to have in dinner?’ She answered laughingly, ‘I can take anything which is moving’. I understood her answer but colleague of mine darted toward me in quizzing manner, ‘How can she take insects, animals etc?’ After finishing dinner, I answered that question has popped up in his mind “Question reflects your culture” because you are living in different culture what may be shocking for you it may be normal for her. We question what our culture has taught and it is based on life long experiences. Creative morality draws on the best of our cultural values and the most dignified and sane practices. It is a gift inherited into a community in which all life is regarded as sacred, and protecting the vulnerable is something regarded as commonplace, not extraordinary. When a designer follows this philosophy in his works, he designs nothing but according to concept of modern universal design/ design for all.

When a man meets a woman or vice versa, they have curiosity to know about one another and their conversation begins with questions. The nature of question may be probing but they frame cautiously in such a manner it should not hurt other’s feelings. It is not exercise of knowing one another; in fact it is an act of where both judge their own speculations about what they have thought about other is true what they have anticipated before meeting. If it is turn out to what they have thought they declare meeting is successful and compatibility quotient is good and both agree to live on. Saying something will often or normally, produce certain consequential effects
upon the feelings, thoughts, or actions of the listeners, or of the speakers, or of other persons: and it may be done with the design, intention with the purpose of producing them.

I have come across such sharp politicians that they are well aware of art of question designing. I admire their art and most of the things that appear worst, come out are good for society. When one nation head meets with other head of the nation, both are interested to know the real capability of one another. They converse in such a way that without hurting anyone. One offers limited options to other head and guides him to say what other is interested to know. As the quality of information they extract in negotiation depends on the quality of questions they ask, the challenge is: how can we prepare an effective questioning? Our designers are lacking this art and at the time of interview while developing the products/services for certain classes or groups of people they fail to extract exactly what they need. They keep on questing by framing their own questions under the influence of their own model parameters and others person keeps on answering what he feels in his hearts. Ultimately designers failed to design the products that should be useful for them and there is no appeal of universal design in their products/services. Ensure that you actively listen to the answers provided (this means not responding immediately, but confirming understanding first). Make sure that you use a ‘probe-nurturing’ sequence to uncover further interests. A common person is not trained in art of questioning. It is advisable to our designers that they should device such technique where common person should be less confuse and be able to answer what he wishes to. I always propagate the idea that when you fail to design and
communicate your questions shift to graphical. When we enter in building there is no need to ask anyone if you know the graphical symbol of entrance. No need to ask toilet of men or women. By graphical symbol we can get the answer. It is surprise for me that I have never come across symbol of exit and it is our appeal that designers should come to our platform and design the universal symbol of EXIT.

A friend of mine is a physician and he refused to diagnose a poor person because latter can not afford his fees. I questioned him, if you are drowning in a river and an illiterate diver or boat owner who can save your life, is asking you ‘Do you have money to pay me?’ Before you answer him or a transaction of money does not take place and in the mean time you are drowned. Is it not similar what you have done to poor? ‘Questions are associated with all expression of human life but don’t forget life is above than these questions and answers.’ When I look at individual behavior of questioning of doctor or designer or belongs to any profession it is nothing but reflection of mass thoughts of that profession. Initially individual may be different from rest of the crowd and he wishes to do good for betterment of the society but he always lives under the influence of majority and in due course of time his thought process converts as majority behave. It is in act of dilution of minority by majority or in political language joining main stream.

Religion has influenced common person’s mind to such extent that he lives under such influences that he spends his entire lives in looking for answers of few questions. He looks at parents, teachers and religious preachers and dies without
channelizing his own abundance creative energy for betterment of humanity. His biggest mistakes are his questions are posing to wrong people. We should train our designers that ‘you should be sure before questioning who can answer these questions.’ Selection of right person who can help in searching for your quest is most difficult task. Religions of the world can not answer anyone since these have same character all over the world. These are dogmatic and are based on false data collected over centuries for keeping the people as close minds. Whatever questions may be all answers are vague without any concrete evidences. Every single claim made by religion comes from people: not from sources out in the world that other people can verify, but from the insides of people’s heads. When religion teaches that believing in the invisible is more important than understanding the perceivable... that personal faith is more important than critical thinking... that letting go of questions is a liberating act of love and trust... that believing things with no evidence is not only okay but a positive virtue... that unfalsifiable hypotheses are just ducky... that what God supposedly says about the world is more real what’s in the world itself...Do I need to explain this any further? Do I need to explain how the “Facts take a back seat to faith”. While religion aims for revelation and faith. Don't question God, for He may reply: "If you're so anxious for answers, come up here.

Other side, I always have high regards from my student days to one author S. L Loni who had published series of text books in mathematics and in real sense these books open the faculty of mind who so ever reads seriously. His each book and each chapter have unique questions and demand unique treatment
for solution. He has designed each question in such an intelligent way that topic covers all possible cases and treatment to each problem that needs different techniques of solution. It helps in opening the faculty of minds of the reader. While designing these books he might have that what is the universal thought process of student when he comes to this level of learning. The student will be more motivated to select increasingly challenging tasks when they believe they have the competence to succeed at a particular task. The foremost objective of the book is to document what has happened in past and make the readers to work further for its progress. ‘The question has to catch people where they are, to meet them where there is the most energy and relevance for them, and then use that energy to go deeper. Action will flow naturally from that energy- Finn Voldtofte.’

People are often surprised when I point out that asking questions is actually a listening skill. If I am asking a question, it is an act of listening not talking. We are actually talking for the purpose of listening. We should train our designers for adapting listening attitude. Make a point of using the right mix of questions to confirm facts and obtain information we will automatically become a better listener.

"Be a good listener. Learn the art of listening. Listen the whispering of nature. Attentively listen to the heart beat of human. Listen to what your heart is releasing waves for betterment of the humanity. Those who are master in art of listening he/she does not need what materialistic world is shouting in most ugly & screeching sound and that is misleading the individual as it misguided the Adam & Eve. Adam & Eve did the blunder and failed to choose the right
option and tempted to eat the fruit of Tree of Knowledge of Good & Evil. Adam is perturbed and Eve’s apple is still in her food pipe creating uneasiness. Both are questioning ‘how to come out from existing conditions? and busy in search of true answers which are under many layers’

Dr. Sunil Bhatia
Design For All Institute of India
www.designforall.in
dr_subha@yahoo.com
Tel 91-11-27853470(R)
Content of October 2010 Vol-5, No-10

1. Chairman’s Desk: .................................................2
2. chopot: .................................................................14
3. European Business Conference
   on Inclusive Design: .............................................57

Other Regular features
Nishi has recently graduated as an industrial designer from the Industrial Design Department, School of Planning and Architecture, New Delhi. Prior to this she has studied architecture at Government College of Architecture, Lucknow. As a designer, she is always interested in observing her surroundings and the people around her. She seeks nature as her biggest inspiration and feels it’s the source of all her ideas. Playing with forms is something that she is passionate about. In her spare time she likes to paint her imagination.

Currently, she resides in Bangalore where she works as a User Interface Designer with the Communication Design Group of Infosys Technologies. She can be contacted at nishichauhan83@gmail.com
CHOPOT

A vegetable and fruit chopping devise friendlier to the spastic and autistic people

Research conducted at AADI (Action for Ability Development and Inclusion), formerly called, The Spastics Society of Northern India, New Delhi

NISHI CHAUHAN
Abstract

Design for all or rather, *Universal Design*, is a term that is usually coined in reference to a ‘broad-spectrum solution that produces buildings, products and environments that are usable and effective for everyone, not just people with disabilities’. (Ref: 1) One can draw various implications of the above definition, first, it goes without saying that design solutions for everything in the environment have to be given keeping in mind the disabled first and should then be adapted to the other lot of the population. While, the other way of looking at this definition might be, that instead of producing solutions specifically for disabled, one should consider the whole range of users and accordingly adapt products and services to everyone’s needs. Whichever way, both definitions give priority to disabled people when it comes to thinking about the users for whom services and products are provided. The second explanation looks quite apt and convincing but the question arises, whether this definition of universal design really applies to present day design practices or not. Do people at the end of the spectrum who conceive and provide these solutions and who design them, even think about these words before bringing out their strokes on paper? How many products sold in the market under the tag of universal designs are really universal? Why can’t products be created keeping in mind special needs of people and still be used by all sections of the population, still have an aesthetic appeal that connects to all?

In fact, the situation is quite reverse of it. In the prevalent scheme of things, instead of being at top end of the spectrum,
people with disabilities comprise of the lot that is usually ignored while designing buildings, products and services. Innumerable design solutions are provided and none of them even come near when we think of their workability for disabled. Designers and manufacturers presume that designing for disabled means providing very specific solutions, which would not appeal to rest of the market. But why is it that they do not think of solutions that in-spite of taking care of a specific problem in one case will still be easily and perfectly usable in another case. There has always been a long debate about it and we still have separate schools, institutions and thousands of products specifically for disabled and another thousand of unanswered questions about such products and services.

The research done in the context of this particular project, gropes into finding answers to various such questions throughout the process and tries to come up with an end result that satisfies some of them, if not all. The research is primarily about - how designing for the less or differently abled could potentially result in products that are more universally usable, i.e.- a design that's friendly to less abled people is, in general, friendly to all. The project tries to address a specific issue by creating a product that proves to be universal in the literal meaning of the term. It tries to come face to face with one such section of the society that comes with a tag of ‘special needs’ and hence tries for their inclusion and ability development by starting with a small step, i.e. creating a product keeping in mind their abilities and activities apart from everyone’s’. The research discovers how creating a product that is friendly to less abled people also results in a product that is more usable
by the general population. Hence, universal design, and all of this can be achieved without compromising on aesthetics, production constraints, honesty to materials and the traditions of craftsmanship that are so integral to well designed products.

The research and final product are an outcome of the Design Degree Project at Industrial Design Department, School of Planning and Architecture, New Delhi. The research, observations and testing sessions were conducted in collaboration with AADI, Action for Ability Development and Inclusion, formerly called The Spastics Society of Northern India. The whole process has been unfolded stage wise right from project selection to final product in the following pages.

Design Process Overview

18 October 2010, Vol-5 No-10 Design For All Institute of India
Shown above is a glimpse into the design process as it was approached during the course of research and as it has been elaborated upon throughout the paper.

**Project Category Selection**

‘The desire to create something for children’, this very note became the starting point of the project. To create a product for children, more on the lines of toys and games that educate the child and make him/her learn as well as play. But soon after a quick initial research on the toys and games market, it was found that there are numerous products already available, which come under this vast area. Hence, it was thought of making the scope of work more specific by selecting a target audience or giving the product a particular direction. In the meantime, during initial phase of talks with the spastics’ society with whatever had been articulated, after a few discussions and idea generations, Mrs. Madhu Grover, the chairperson, came forward with a suggestion. She suggested that one should just observe the children for sometime, gain clarity and then decide upon what should be taken up as a project area.

So, the first step was to assist Ms. Shahaana, the activity coordinator of students, up-to the age of 14 years, for over a month. The basic aim was to get close to the children and their behavioral patterns, both mental and physical. The spastics’ society targeted at exposing these children to the basics of independent living. Various activities that the children were being taught in classes, reflected at teaching them about life
and its processes in general. These were activities that aimed at imparting them a practical knowledge of everything in life, more hands on experiences that help in developing their motor skills and other body movements. Some of the examples of such activities included sports, playing musical instruments, going for heritage walks, attaining basic knowledge of computers, dealing with products around them in all spheres of life, say in the kitchen through sessions like soup making, preparing natural colours for festivals and various other such sessions that make them aware about their surroundings. Most of these sessions aimed at teaching them team spirit, made them value life, be a better and self-confident person.

All the areas were vigorously studied and documented. Both, where they were using common products adapted to their needs and where problem specific products were being used. Having spent enough time with the children in their classes and activity sessions, it was observed that there were various aspects which required a designer’s intervention to develop products that are more suitable for them and better adapted to their requirements. An analysis of these spheres was conducted to observe how children interacted with the available products around them. Presented here are some of the examples of the adapted products apart from the specific ones.
Understanding the Disability

Apart from observing children and their interaction with the products and environment, it was very important to understand the disability. Hence the technical aspects of cerebral palsy were looked at. It is basically a permanent physical condition that affects body movement. Its effect can be as mild as just a weakness in one hand ranging to almost complete lack of movement in the whole body. ‘It is an umbrella term encompassing a group of non-progressive, non-contagious motor conditions that cause physical disability in human
development, chiefly in the various areas of the body.’ (Ref: 2)

It can be broadly classified in four categories:

‘Spastic: People with this type are hypertonic and have a neuromuscular condition stemming from damage to the corticospinal tract or the motor cortex that affects the nervous system’s ability to receive gamma amino butyric acid in the area(s) affected by the disability.’

‘Ataxic type symptoms can be caused by damage to the cerebellum.’

‘Athetoid/dyskinetic is mixed muscle tone.’

‘Hypotonic cerebral palsy people appear limp and can move only a little or can’t move at all.’ (Ref: 3)

**Finalizing upon the Work Area**

Observing children’s activities and understanding the disability were undoubtedly the first steps to the process, but thinking from a product design perspective, it was equally important to know what all products are already available with respect to people with special needs. So, having studied the products available at AADI, a secondary research was done to see the range of products available worldwide keeping in mind disability in general and spasticity in particular.

*Few examples of products that already exist worldwide in the household, grooming, kitchen and dining areas*
Of all the products available at AADI and from the observations of their usage in respective scenarios, the areas that seemed to need more attention and lacked suitable products were grooming, kitchen and dining. From a close examination of the activity sessions in classes, few products that the children were seen interacting with on a frequent basis, were ones in the kitchen area (spoons, plates and rest of the utensils in cooking classes) apart from mobility equipments, recreational aids, toilets and others. On a parallel note, when we talk of independent living, the two most important areas that were bound to grab ones attention were kitchen and self-grooming. As an obvious fact, being able to feed oneself and being able to groom oneself come under the pre requisites of independency. Since grooming is an area that was difficult to be observed and gained much insight in the case of children at AADI, it mainly being a school and restricting to usual school timings, kitchen came as an automatic and interesting choice for the work area.

The authorities at AADI also suggested that these were two very important areas that need interventions of a designer keeping in mind the local context that is India, and hence let on the research to go ahead with them. Consequently, it was thought of finalizing upon kitchen and dining as the work areas. The spastics’ society themselves had few products related to this area which, after watching closely, were not found to meet the expectations or solve any purposes they were meant for.
Some of the existing product adaptations at AADI in the kitchen and dining area (which were not exactly solving the purpose that they were meant for)

**Data Collection I**

Once the area was decided upon, the main focus was concentrating on all the aspects came within the scope of that particular area, right from observing the children to finding the existing products, available techniques and solutions with respect to both, the local context and otherwise. Hence, an extensive study was conducted on all these aspects.

**First Hand Observation**

The first aim behind the second stage of research was to be a part of more and more such activity sessions where the children were being exposed to cooking, dining and basic pre cooking activities in the kitchen. Making soup, preparing salads and other such tasks that do not really come under rigorous kitchen activities but still teach them basics of interacting with products in the kitchen. The aim of these sessions was to get them familiar with the products and give them experiences of handling the equipments. One such activity session that was observed was when the children were preparing natural colours for ‘holi’. The main insights from this activity were the need of stability in the objects that they were using owing to the lack of balance in their hands and body movements. Weaker grips and shaky hands were the biggest hindrances in
their accomplishing a task. The available products were not helping much as each child had his or her own disability in particular and the products were not even coming near to solving even few of them. Some of these rare products included spoon adaptations, few mugs and dishes.

One of the kitchen and dining activity sessions where the children were being exposed to the preparation of natural colours

Secondary Research

A secondary research was conducted into seeing how people in the past and present have dealt with designing and customizing products as per this particular disability. The results of this section of research were very surprising as some of the products were aimed at integrating the hands with the product, i.e. trying to make the product a part of the hand and minimizing chances of weaker grips. While the other ones, in process of solving the problem, had ended up with results such complicated that a simple product like a spoon looked like a complex machine and hence almost discouraged the user even before he could start using it.
Various local adaptations/makeshift arrangements done in the kitchen and dining products to make them usable, from left: rocker spoon, eating aid which is cam and lever operated, wrist and knuckle retaining straps for cutlery, other spoon adaptations

**Problem Solving on an individual basis**

During the course of research, some products that were encountered were problem specific. Individuals with particular disability were targeted and solutions were designed specifically for them. One such interesting example of these customized products was a knitting aid that had been created for someone with a single hand disability. Other examples of such products included pan stabilizers, eating aids, drinking aids and a few others.

*Problem solving on a specific need basis, from left: pan stabilizers, knitting aid, one finger cup and mechanical eater*
Benchmarking/Competitive Survey:
It was necessary to see what all products exist worldwide with respect to the areas that were being looked into, taking kitchen and dining as prospective areas for developing a product. Hence a competitive survey was conducted to see the various products available. The wide range of products already available was an eye opener and it gave an insight into the sensitivity that was being applied to all the areas in the kitchen, including the smallest of chores. Though the workability of these products was still to be questioned, but the mere fact that they were extended to almost all the activities in the kitchen was astounding. The products ranged from tap openers, bottle/jar openers, tablemats, utensils, gripping aids, cutlery sets, knives to utensil stabilizers and hand extensions. Getting exposed to all of these was learning in itself.

An extensive study of the kitchen products available worldwide
Data Collection II

At this point the research had reached a stage where a lot of information had been already gathered on various areas, on the available products, on disability and on the interaction of children with the immediate surroundings and products. Now, before one could go ahead with applying this knowledge to create something new and to decide what exactly this something new should be, an expert’s advice was needed on the whole scenario, to validate the research and if it was going in the right direction.

In spite of closely watching the children and studying their handgrips and movements it was necessary to gain an insight from the expert on how and why the hand movements in case of these children were the way they were. There were many questions that were cropping up in the process of analyzing the whole knowledge. Why was it that there were certain gestures and movements that few of the kids could perform and few could not? Which were these muscles that caused the hand movements and affected the grips? Were there any common grounds on which the disabilities could be categorized, which meant, were there any common activities/movements that a group of people could perform and others could not. Prof. Nidhi Jalan, a physiotherapist at The School of Rehabilitation Sciences at AADI, was quite a help with the technical knowhow on the subject and in gaining answers to various such questions.
Expert’s Advice

The very first interaction with Prof. Jalan threw more questions back at the research and the limitations that it was bound in. It not only helped in gaining clarity but also questioned the whole point of creating such a product and how the design brief could define what the product aimed at.

“Please reelect on what activities most children can do. What have you observed about the different ways in which people use their hands? What is your information level regarding cerebral palsy? Would be useful for you to do a little reading on this as well? You would also need to use a design, which is universal and therefore takes into consideration the needs of people with other impairments like visual impairments and people with limited sensations also. If that comes under your design brief. It would be useful not to limit by grips, muscles and hand functions.”

“I think you have enough observations to start designing. Again if we think of universal design, you need to keep large grips and simple movements of the shoulder and elbow as starting points. Try and design aids that can be used with one hand only. It would be useful for you to read the United Nations Convention on Rights of Persons with Disability. The definition of disability is wider now, and I think lays a strong case for Universal Design. Again think across disability, I think that will be useful.” - Prof. Jalan
Most of the insights gained from the expert’s advice became the basis of the product.

Interview and discussions

Similarly, parent interviews were conducted which helped to a great extent in knowing the psychology of children and their behaviour at home when it came to taking little responsibilities in the house. Irrespective of the ability/non ability to carry out a particular house chores, do they feel like helping or not, do they actually have the enthusiasm and determination to handle things around in the kitchen or other areas of the house? How do they react to situations, do they come forward to accomplish a task on their own? Are they treated as responsible members of the house? Does their opinion and suggestions are looked up-to? Various such questions became a part of the discussions with parents of few children. The answers from them were utterly surprising, and stated how enthusiastic the children were to try out various new things that they learnt in the activity sessions at school. The disability never stopped them from making efforts and go out of the way in trying to do something. The parents expressed how joyous these moments were for them when the child would want to help them out with a small chore in the house or offered to do something for them.

Thus, this small feedback from the parents’ and experts’ side helped in giving a backbone to the research, based on which one could confidently see the possibility of creating a product that helped in solving a particular problem and assists them a little on the lines of leading an independent life.
Study of grips in particular

Based on the expert’s advise and whatever was studied till now the most important task ahead was to study the grips and hand movements of the children, how they held objects, how tightly they held them and the difficulties they faced in holding products and other articles in their immediate surroundings. It was found that the finger movements and palm portion were the weakest owing to the forceless muscles in the hands. Hence, in most of the cases 360-degree movement of the hand was almost impossible depending upon the level of disability. Similarly other hand movements could not happen due to the lacking motor skills in them. It was only the lower arm and upper arm that cause the whole motion. Shown below is a documentation that represents the hand movements and grips of children.

Grips and movements

The images above clearly depict how varied one particular grip is from another depending upon the muscle functioning/non-
functioning of each child. It was important to know if there is any basis on which the similarities between their grips and holding patterns could be traced, or if any such similarity even existed between them.

Data Interpretation

Now before studying and mapping the various activities in the kitchen that the children/adults can be exposed to, it was essential to interpret the research done till now and translate it into some form of a design brief. The next step was to delve into converting the research into a design brief that in return shaped into a product. It was necessary to start creating a rough boundary in which the product would lie. At this stage it was also very important to know if at all there was a possibility of creating a ‘universal product’ depending upon the vast range of differences in disability amongst people. The experts’ advice came in handy at such point of time. The reason why it was stressed upon knowing a common ground in the level of disabilities was, so that depending upon the similarities between the grips and hand movement patterns of these children, the design could have been approached in a universal way. The initial approach to solving the problem would be keeping in mind the broad grounds of cerebral palsy with small
customizable adaptations for each individual depending upon the difference in disability.

**Initial design brief**

On the basis of the insights gathered at this stage, the initial design brief that shaped up was, designing a product or a range of equipments that help disabled people perform a group of food preparation activities in the kitchen.

**Areas in the Kitchen**

When it came to the kitchen, it was a question of deciding which food preparation activity should the product be dedicated to. Till this point the research had come across a lot of kitchen utensils and equipments for disabled people but here, in the Indian context, only a few of them found a place. So, studying the Indian context and hence developing few products in this area was up next on the task lists. Having studied the grips, hand movements and their limitations, one came down to studying the areas in the kitchen that could have germinated into product ideas. Consequently, various concepts were worked out looking into this aspect. While working on these concepts, incorporating single hand usage in most of the products, taking care of better grips, reducing the precision required in any activity, giving actual importance to the word, ‘Universal Designs’, were the most important concerns that were taken care of.
Grips for utensils, lemon squeezer, other accessories

Potato mashers and other grinders, grinders, chopping equipments

Rocking choppers, tea/coffee sets, lifts for utensils

Table mats, jar openers, peelers, knives and grips for them
The Most Important Thread

While working out these various concepts and finding the direction in which the project was approaching, it was important to constantly go back and forth in the process and try looking at it from all the different perspectives. It was easy to get lost in the step-by-step research and focus on one-minute step that would have easily diverted the course of the project. To avoid that, looking at the bigger picture always helped. It was in one of these re-viewing sessions that the most important thread of the project was realized. It was, that all the activities that had been witnessed at AADI were less of activities and more of therapies for the children. At any stage in their teaching, they never laid stress upon how well those children performed them, but on the fact that they did perform them.

Similarly, the product that this research aimed at creating was something that would prove to be a therapeutic aid for these children/adults. It would be something that engages them in the activity that they are doing for a longer duration of time, something that makes them feel that they are of some helping in the kitchen or pre-cooking activities. They would be able to feel the confidence that they accomplished a task with minimal or no assistance. The end result was not important in this case, the process and what they feel out of it was more important, for e.g. it was not important how nicely the onions get chopped but being able to chop onions was really important.
So, keeping all these in mind, the activities that are performed in the Indian kitchen were reviewed, how frequently they were performed and which is the activity that was performed on a daily basis. What eventually was taken up as the product area was *chopping and dicing vegetables/fruits*. It was an activity that is performed on a daily basis in most of the Indian kitchens as a pre cooking activity. Having decided upon the activity and created a rough outline of what was wanted from it, the next stage was to see what all products were generally available in the market and what all were specifically for disabled people (if there were any).

**Final Design Brief/Objective (after a better understanding of the scenario and the target audience):**

It was this insight that helped in shaping the final design brief, which was: To design a vegetable chopping device, which would be friendlier to the spastic/autistic people. A device that would prove to be a therapeutic aid for them and make them feel that they are of some help in the kitchen; something that would keep them engaged in the activity for a longer duration and give them the confidence that they accomplished a task with minimal or no assistance.

**Initial Concepts & Study Models**

Once chopping and cutting was decided upon as a frequent activity in most Indian kitchens, and also the work area, developing concepts for the most suitable mechanism to be used was next. The mechanism was aimed to be one that amplifies small amount of force that they can apply, that channelizes the large amounts of sudden uncontrollable force.
to use and also that takes care of the general hand movements they can perform. Miscellaneous concepts were developed that took into account all these concerns. All such mechanisms were revisited that aim at amplifying the force, some such concepts suggested using spring action, swivel mechanism, see-saw mechanism and push button mechanism being the simplest of all, among others.

Using vertical force, spring loaded action or swivel mechanisms to amplify the small amount of force

Transforming the vertical force from vertical movement of hands into slicing/chopping (horizontal movement)

Push button mechanism, See-Saw Mechanism
The final concept that started taking shape was based on converting force produced by the vertical movement of hands, taking elbow and shoulder as the starting points, into the force that helped in chopping. The basic concept was to use the bowl at the bottom as the final collecting device, so as to avoid the unnecessary step of taking out chopped vegetables and putting them in another bowl. The other aspect was applying force from the top using spring-loaded mechanism or hitting/pushing to chop the vegetables (considering the vertical movements of arms), simultaneously trying to amplify the small amount of force into the required force. It had a detachable, flip open lid and other attachments keeping the grips in mind. A stable form (the pre requisite of design), along with addressing other important issues of grips, safety, maintenance and the amount of force required were the key areas that needed to be worked upon at the next level.

Revisiting the Market

While working out various mechanisms and techniques of minimizing force, it was necessary to also take a look at the existing products that were there in the market and to know how well they had solved the basic chopping/dicing issues.
using their respective techniques. It was not much of a surprise to see that most of the products studied did not come under the categorization of universal designs, even though some of them claimed to be, but when tried and tested on various grounds of disability, they seemed to fail. Most of these products included onion choppers, tomato slicers, dicing boards and herb choppers apart from others. Following are some of these products that were documented.

Onion choppers, Tomato Slicers, Spring Loaded Choppers, Seed Corers, Apple Peelers, Hand Held Food Processors

Seeing/Trying/Testing

Up next was trying to actually body-storm some of these products and test out the various available/proposed mechanisms for chopping, cutting and other such activities that these products offered. Having gone ahead and bought various
such products from stores and used them, conscientious effort was put into documenting videos of people using them. It was after using and experiencing them only, that one could decide on the workability front and accordingly judge them if they were actually meant for universal usage or not. Apple corers, vegetable choppers/peelers, dicers, slicers, food processors and many such products were observed.

As the name suggests, in the spring-loaded chopper, it was spring that was in action. It worked on applying force from top with a jerk to push the blades down for cutting. The main insights from using it were that it necessarily required both hand usage, had issues of stability and the force required was comparatively more than other products. In-spite of having a chopping mechanism that was meant to amplify the force, it still needed considerable amount of force to actually achieve chopping. Then came this product that was meant for cutting potatoes into finger chips and the main observation from this one was the enormous amount of force that needed to be applied from top to achieve the task. Again, in this product too, the involvement of fingers and palms was tremendous. Though the issues of stability had been addressed in a better way, still, both hand usages were compulsory.
Applying force from top, swivel mechanism and slicing in action

The next was a product meant for shredding onion/chilies/ginger/garlic and other such vegetables into fine bits and pieces. It worked on applying swivel mechanism from sides and necessarily required both hand usages at the same time to achieve the task and to keep the product in place as well. While the other one called slicer, was mainly meant to slice dry fruits and garlic, ginger or onions into thin slices. Holding the product at the base while applying force from top and sideways as well as, involved strong grips and an enormous amount of force.

The very famous onion chopper was the product to be examined next. It worked on applying force using the lever arm
that had a collecting vessel on top, and the onions below the blades. The main insights being necessity of both hand usage, issues of stability since a lightweight material was not solving the purpose much in case of these children. There were few issues like, the onion would get stuck in the blades (if lifted before it gets cut completely) and the whole arrangement needed to be supported at both the ends to keep it stable. Too much precision was required in changing the blades again and again and in taking out the chopped onions by turning the whole attachment upside down. It was overall a messy product and resulted in onions getting spilled everywhere.

None of the products that were examined were fully done keeping in mind how a disabled person would be interacting with them. Having observed most of these products, it was time to actually make way for the final product. There were two options, one, to pick up any existing chopper and redesign it with respect to disabled people, while another was to come up with another universal product, taking insights from the existing ones. It was chosen to go for the latter option i.e., coming up with a new product/mechanism. It was decided that the product would not be electricity operated, which would have been an easier way of operating, but would involve a mechanical activity instead, since doing that engages them for a longer duration and helps them in doing a little amount of physical activity as well (which was necessary in their case as they needed some amount of muscular movement). Based upon the hand movements suggested by the expert, various concepts were developed for different mechanisms and
products. For that it was needed to see how the children/adults actually interacted with the existing products and mechanisms. Since it needed to be a simple product with a simple, safe and easy usage it was necessary to see their interaction with the already existing products in comparison to what was being thought of proposing for them. An activity session was done where the children dealt with the products and tried to use them. Based upon all these inferences, the final design for the product crystallized.

**Final Concept**

![Step by step testing of the concept model](image)

A basic working model was created to test the mechanism, its stability and the amount of force required to be applied from top while using it. It was tested in the classroom with the children and there were few issues that were resolved and worked upon at the next stage. The design included incorporating a longer lever arm to reduce the amount force that was to be applied manually by hitting/pushing with a jerk. The product allowed one to keep hitting until the vegetable gets pushed down totally and hence gave freedom for more number of trials and curtailed the pressure of performing the task in one go. It had an elongated base to add to the stability.
The heavy base was meant to house the bowl and the blade plate and to add to the stability of the whole configuration at the same time. While working out the design and mechanism, due thought was given to the whole process of emptying the chopped into another bowl and it was thought of omitting this step by integrating a bowl within the design.

**Longer lever arm with support at the base and integrated bowl; allowed any number of trials while using without the pressure of chopping in one go**

**Testing at AADI**

The biggest challenge that lay ahead was to test the mechanism with the children and see if they could actually handle the product and feel confident while using it. As a part of another kitchen session, chopping was integrated in their weekly schedule. It was important for them to be carefree while using it and not think as if they were going through a testing session. Hence, the whole activity was preplanned and a salad preparation session was introduced to them.
Better grips required, single hand usage was a must in Aman’s case

Neha can use both her hands but with very carefully worked out grips, not to forget the stability

Sumit, who can apply a lot of uncontrolled force with a jerk but stability, is a must in his case

Vicky, a very sensitive case, with almost no balance in the body movements but the determination to accomplish a task and the force that he can apply is considerable

Both the products, the one that was being developed and the one already available in the market was taken along and they were asked to try both the products as a part of onion chopping task for the salad. It was surprising to see their excitement for the whole activity and it was with full enthusiasm that they
participated in it. The whole group tried with both the products and the whole session was documented step by step. As the images shown above suggest, few very important observations were made at this stage, which in turn proved to be immensely crucial for the design. Stability was an issue with most of them owing to their unbalanced hand and body movements. Some of them could easily apply tremendous amount of force with a jerk but to tap that enormous energy for getting the task done wasn’t that easy. While the others had trouble applying even the minimal amount of force and needed to amplify it to a great extent. It was apparent after this session that the mechanism being worked upon was on the right track and with a few amendments it could have started modeling into the final product.

**Design Development**

After user testing, it was very clear as to which issues need to be resolved for the design to become refined and more usable on the grounds of disability. The main issues to be dealt with in the design were:

- **Stability (pre-requisite of the design)**
- **Force applied (reducing it)**
- **Safety (enhancing it)**
- **Grips (most important)**
- **Ease in taking out after chopping**
- **Maintenance (should be easy)**
- **Material to be used (keeping in mind the stability)**
The basic working model lacked on few of these grounds. The first one being stability, which was later enhanced by giving it an elongated base. Also, while testing it in front of the experts and class coordinators of the children, a few suggestions had come forward from their side. The first suggestion was to reduce the force applied further and if there could be ways in which the force applied by the user could be lessened. The form needed more work and so was the case with the bowl and blade plate. It was thought of adding more bulk to the handle so that the amount of force is reduced and its the weight of the handle that does more work and applies more force in pushing the vegetables down.

![Basic Form Development showing study models for the form of the base](image1.jpg)

Other constituents like the bowl together with the blade plate and hence the need for indexing

Having worked out the mechanism the main task was finalizing upon the bowl, blade plates, grips and how all the components came together. Various configurations and forms were worked out paying attention to minutest of the details.
Design development, working out the form and functionality

The section of bowl being very important, its edges, how it would be lifted up and how the blade plate fits in it. Also, form development of the handle

The arrangement as seen from top. The images show a gradual development in form and workability.

Section of the whole mechanism and how the vegetables/fruits would be pushed down.
Design Detailing

Working out the sections and the details at each point, in all the dimensions and individual components. The bowl in this case, its rim being very important.

The dimensions of the bowl from top and how/where the blade plate fits in it. Indexing the blade plate with the bowl.

Detailing out the handle, adding more mass to it and making it more comfortable for using. The thin part in the section was meant for gripping while the broad part at the end is flattened out from top for applying force and hitting it from top in whichever manner.

At this stage, it was needed to wrap up the detailing part of the product. The basic framework was ready and the important
guidelines had been laid out. It was now the small small details on which the workability of the product depended. As the photographic documentation above suggests that the bowl, blade plate, base and handle were four components of the product. It was proposed that the base would be manufactured out of wood so that it has enough mass of its own and the form was worked out on the same basis. Instead of adding suction pads or rubber grip at the bottom, it was decided to create the form in a manner that it is stable on its own. Hence, having worked out a stable form, the handle that was to be hinged to the base at one end needed to be crafted. The handle being wooden too was made in a way that its easy to be held and applied force with. While detailing out the handle, adding more mass to it and making it more comfortable for using. The thin part in the section was meant for gripping while the broad part at the end was flattened out from top for applying force and hitting it from top in whichever manner. The handle had teething in the portion where it had to hit the vegetables on the blade plate so as to push them down.

In case of the bowl, it was the rim that was the most crucial part and also the manner in which the blade plate would fit in it. Indexing the blade plate with the bowl was a necessity to avoid chances of any error or failure. For safety reasons, the blade plate was designed in a way that the blades are lowered beyond the reach of the hand while chopping.
Final Product

Top View of the product showing all components
Rubber base at the bottom of the base

The handle and the base with the bowl in between

The bowl and attachments for the blade plate, with blades designed depending upon the purpose that it solves, slicing, dicing or fine chopping
Presented above is a documentation of the drawings, three-dimensional simulations and the prototype of the final product that was designed. The material chosen, as discussed before, for the base and handle was wood to make it more bulky and hence provide increased stability. While for the bowl and blade plate, it was decided to go with a transparent and light weighed material with soft surfaces, no sharp edges and low maintenance. Hence, clear, micro wave-able acrylic came as an automatic choice for both of them so that it allows for transparent vision and keeps the food processes visible to the eye. The other attachments included blade plates with blades designed depending upon the purpose that it solves, slicing, dicing or fine chopping. Care was taken to avoid any particular orientation of the bowl when it goes and sits in the base. One could just fit it in the base whichever way and then the blade plate, owing to indexing, just fitted in it by default in a standard way.
The bowl and blade plate in place when the vegetable/fruit is kept in the depression on the blade plate and force is applied from top; the blade plate out of the bowl once the chopping is done.

The bowl comes out along with the cut vegetables and functions as a regular bowl; the wooden base & handle back in place and require lesser maintenance.

The whole arrangement as seen from the side with the base, bowl, blade plate and force arm attached to the base.
Conclusion

In the book, ‘Universal Design Handbook’, by Wolfgang F. E. Preiser and Elaine Ostroff, John Diesel tries to explain that, over millions of years, the brains of Homo sapiens have developed to cope with the physical world around them in remarkably efficient ways. Certain parts of the brain have developed to make sure people historically and today find their way to food resources, to mates and to get home. Parts of the brain have developed to help people know where they are and others to make sure they know what time it is. Altogether, people have developed to fit into their environment, to read it, and to act on it to help survival and procreation.

Now, as a reaction to this, Design has a choice. One can pay attention to these developments in order to support functioning and survival, or consider the environment independent of people and how they cope with it. Choosing to pay attention makes designers responsible for the effects of their professional actions and encourages collaboration between designers and the social and neural sciences. While, choosing to see design as independent from people frees designers to act as they have since the beginning of design modernism, when breaking with tradition was seen as a requirement for design creativity. Choosing to pay attention, however, does not mean giving up on creativity. Rather, it means to develop new traditions that are both creative and respectful of the human brain and body.
Thus, one can not comment on what choice an individual makes as a design professional but as a responsible design community, it would seem a *holistic change in attitude* if we choose to pay attention and take up the responsibility of what we give to the society. Also, if we get sensitive to our immediate surroundings and constantly try to add value to it using our tools of creativity. Designing for all or Universal Design is one such step that brings us closer to making this choice and creating this new tradition that calls for inclusion of the whole society for right to a better living.
Bibliography:


AADI, Action for Ability Development and Inclusion. “School Brochure.” New Delhi: AADI


Rehabilitation Engineering Unit, “Assertive Devices.” New Delhi: AADI Library


Conacher, Gwen. “Kitchen and disability.”

Onny Eikhaug

Onny Eikhaug is a Programme Leader at the Norwegian Design Council, a national strategic body for design in Norway. She has for a long time been responsible for pioneering the Council's activities in the field of people-centered design and Design for All. Onny is also responsible for the Council's government funded Innovation for All programme promoting Design for All as a practice and as an effective business tool for innovation. The programme runs a wide variety of activities focusing on enabling knowledge transfer to designers, trade and industry. She is committed to sustainable, people focused design and aims to demonstrate the potential of this approach whilst offering motivating and effective methods that can be easily adopted and implemented in everyday practice. She writes, publishes, and lectures both in Norway and internationally, and works closely with designers, education, industry and government using projects and other knowledge transfer mechanisms to achieve this.

She has a broad experience in international marketing, sales, innovation, product development and design management in the fields of personal products, ergonomic lighting, and
contemporary furniture having worked for companies such as Unilever and Luxo across Europe and the US. She was also MD of a Norwegian Graphic design company and holds an MBA from the Norwegian School of Economics and Business Administration.

Onny Eikhaug was responsible for "Innovation for All", The European Business Conference on Inclusive Design which was held in May 2010 as one of the priority events within the Design for All programme. Innovation for All 2010 is the second European Business Conference on Inclusive Design organised by the Norwegian Design Council and its conference partner, The Royal College of Art Helen Hamlyn Centre. The Norwegian Ministry of Children, Equality and Social Inclusion, The Norwegian State Housing Bank, and the Research Council of Norway were this year’s sponsors.

"Inclusive design or people-centred design is an increasingly important part of building better business solutions and achieving social inclusion and sustainability. In short: Where good intentions meet good business!"
The Norwegian Design Council was very pleased to welcome for the second time an international audience to our “European Business Conference on Inclusive Design”. The Norwegian Government has passed some very ambitious legislation on Inclusive Design, and we find it very rewarding to be one of their main partners on this topic, which will become more and more important everywhere in the world. We are very proud to have the active support and participation of HRH Crown Princess Mette-Marit (who is also the Norwegian Design Council’s patron), Minister of Trade and Industry, Mr Trond Giske and Minister of Children, Equality and Social Inclusion, Mr Audun Lysbakken.

“A people-centred design process is not only a strategy to solve problems but a potent strategy for identifying problems to solve.”
About the conference

New international and national legislation concerning Inclusive Design is challenging the development of new products, services and environments. The focus of the 2nd European Business conference 2010 was how to turn this challenge into opportunities, and how to design for the widest possible audience irrespective of age, ability, ethnicity or social background.

The first European Business Conference on Inclusive Design in 2008 was concerning user focused innovation. This year’s conference – Innovation for All 2010 – placed the ideas into practice, aimed at anyone working with design, product development, services, business or project management in both private and public sector. The conference took place over two days from 20th to 21st May at DogA, the Norwegian Centre for Design and Architecture in Norway’s capital city, Oslo.

Prior to the conference a workshop was held the afternoon of 19th May. The pre-conference workshop was delivered by Rama Gheerawo, Royal College of Art Helen Hamlyn Centre, and Sean Donahue, Art Center College of Design in Pasadena, both seasoned professionals with years of practical experience in people-centred design. The workshop was aimed at anyone working within design or business who wants to understand how they can engage more closely with their customers.

Under a four hour session with practical work, the main focus was on how to conduct cost-effective and time-effective research with people and by introducing the art of interpreting
different case studies were outlined to show best practice and give a basic understanding of how to conduct research with people, try out practical tools and methods for using this research as a strategic tool for innovation.

The conference featured world-class speakers from companies and organisations such as: Panasonic, British Telecom, Smart Design, Ge Healthcare, Michael Wolff & Company, Scandic Hotels, Cutlery manufacturer Hardanger Bestikk, Think, Skanska, Helen Hamlyn Centre Royal College of Art, and more. Internationally acclaimed speakers, facilitators and moderators gave insights into the increasingly important and significant theme of people-centered design through the topics of digital inclusion, visual inclusive communication, designing with people, the innovative design process, the inclusive workplace, how the UN convention will affect business, inclusive, sustainable housing, and how concepts can be developed within 24 hours using inclusive design methods.
One of the topics that were in focus during the conference was inclusive design and housing. In the interactive session "Sustainable, Inclusive Housing”, there were four excellent national and international speakers, respectively Fionnuala Rogerson Vice President, International Union of Architects (UIA), Tone Rønnevig, Adviser universal design and usability, National Office of Building Technology and Administration, Morten Longum, System Architect, Skanska Property and Marius Espnes, Architectural MNAL, Universal Design AS.

This session focused on how inclusive design is increasingly affecting the design of housing and outdoor areas, as a result of new legislation and new standards, both in Norway and the EU. The speakers gave both a visionary and practical presentation of the topic and highlighted typical issues that are relevant to both Norwegian and international housing matters. There was also a focus on the opportunities, the economic and market benefits by developing universally designed housing, a theme which was also elaborated in the debate where the audience participated with questions.

Another topic that was focused during the conference was inclusive design and ICT. Several presentations concerned this topic, specifically the lecture held by Liz Williams from BT (British Telecom). Otherwise, ICT was the main theme during the “24 Hour Inclusive Design Challenge”, where the winning team presented an exciting concept for the storage of digital images based on audio files that make filing and tracking of images easier for visually impaired and blind, while being attractive for all users.
Success stories were presented to inspire and engage business and industry delegates, design communities as well as representatives from government authorities, academia and research institutions. The conference aimed to be practical and effective; giving delegates with different backgrounds a fundament to practice Inclusive Design.

Never before has a conference organized by the Norwegian Design Council received similar support with regard to the representation of both the royal family and government. HRH The Crown Princess gave an engaging opening speech which has received much attention in media. The Royal Court distributed her entire speech on YouTube, which also adds extra weight to the importance of this topic. Our Minister of Trade and Industry, Mr Trond Giske obtained a lot of attention due to his speech, which had a clear message that inclusive design is the future. Last but not least, the Minister of Children, Equality and Social Inclusion, Mr Audun Lysbakken gave a very good speech about the importance of design in a
social context. All lectures were of high quality and the speakers were chosen with care to achieve the right mix between business, design and public sectors. All lectures are video recorded and the presentations are available on the NDC’s website for public use. In this way, the conference will have a long afterlife and be useful for a much larger crowd than those who were lucky enough to attend the conference itself!

Design for all is still a relatively new theme for many companies to explore, but we reached a wide audience including our main target groups design, business and trade, and we have obtained high levels of achievement overall. Norwegian Design Council has had a focus on Inclusive Design for almost 7 years and we begin to notice the positive changes as well as increased interest and focus on the theme in business as in society at large.

From left: Trond Giske (Minister of Trade and Industry), Toru Abe (Panasonic), Safak Pavey (United Nations), Dan Formosa (Smart Design), Michael Wolff (Michael Wolff & Company), Liz Williams (British Telecom), Jeremy Myerson (Royal College of Art Helen Hamlyn Centre), Katinka von der Lippe (TH!NK)

The complete list of speakers:
HRH Crown Princess Mette-Marit
Trond Giske (Minister of Trade and Industry)
Audun Lysbakken (Minister of Children and Inclusion)
Jan R. Stavik (Norwegian Design Council)
Michael Wolff (Michael Wolff & Company)
Julia Cassim (Royal College of Art Helen Hamlyn Centre)

64 October 2010, Vol-5 No-10 Design For All Institute of India
Toru Abe (Panasonic)
Dan Formosa (Smart Design)
Liz Williams (British Telecom)
Safak Pavey (United Nations)
Onny Eikhaug (Norwegian Design Council)
Jo-Anne Bichard (RCA, Helen Hamlyn Centre)
Jeremy Myerson (Royal College of Art Helen Hamlyn Centre)
François Lenfant (GE Healthcare)
Magnus Berglund (Scandic Hotels)
Katinka von der Lippe (TH!NK)
Per Finne (Per Finne Industrial Design)
Thomas M. Kristensen (Jordan)
Fionnuala Rogerson (International Union of Architects)
Tone Rønnevig (National Office of Building Technology and Administration)
Morten Longum (Skanska Housing)
Marius Espnes Landheim, (Universal Design LTD)
Rama Gheerawo (RCA Helen Hamlyn Centre)
Sean Donahue (Art Center College of Design in Pasadena)
The Crown Princess, patron of the Norwegian Design Council

HRH Crown Princess Mette-Marit (Photo: Jo Michael, The Royal Court)

Introduction

HRH Crown Princess Mette-Marit gave the Opening Speech at the Innovation for All 2010 conference. The Crown Princess’s public duties cover a broad range of areas. Her involvement in the fields of mental health, design, children and adolescents, and music is reflected in her patronage of organisations such as the Norwegian Red Cross, the Norwegian Design Council, the Oslo International Church Music Festival and the Norwegian Council for Mental Health. In January 2010 the Crown Princess was also appointed Young Global Leader under the World Economic Forum. As patron the Crown Princess is engaged in promoting Inclusive Design for diversity and social inclusion. In addition at the conference, the Minister for Trade and Industry, Trond Giske, held an opening address on the importance of inclusive design.
The opening speech emphasized that good design first and foremost is about function, and that through good design has an inalienable ability to include everyone.

Speech

Minister,
Ladies and gentlemen,

What is the hallmark of good design?
In trying to answer, I will give an example of a new invention I appreciate very much:

I guess many have experienced to stay in a camp, a cabin or a tent – spending the night in a sleeping bag when it’s cold outside. You want to read a little before going to sleep – but that offers a challenge: You must hold the book in the hands outside the sleeping bag – which also means that the whole upper part of the body gets cold. Now someone has been clever enough to solve this problem. A Norwegian sports gear company has started producing sleeping bags designed in a way that you can stick your arms out of the sides of the bag and still be covered all the way up to the cheeks. That – in my opinion – is an example of good design.

Good design is not an aesthetic add-on to a product. It is functional and intuitively understandable for the consumer. It is perfectly adapted to the area of use, it integrates innovation
and increases a company’s competitive edge. And not to forget: good design is cool and can make us happy.

Design represents an important opportunity to include all people – with all our different needs – and to enable everybody to take part in society. This is an opportunity we cannot miss.

The UN Convention on the rights for people with disabilities was signed in 2006 and Norway will ratify it this year. The convention is an important ideological cornerstone, and new legislation for equal rights and inclusion will be based on this.

The Innovation for all programme is an important tool to fulfill this convention. The Norwegian government’s Action Plan for Universal Design and increased accessibility has been a driver in promoting Inclusive Design. Basing social development on these principles can improve quality of life for the entire population. Although historically focused on design for older people and people with disabilities, Inclusive Design is now the main tool for a people-centred approach. Inclusive Design can bring together commercial and social benefits – which ultimately benefits all of us and the societies we live in.

Norway, like other countries, has people of all sizes, shapes, ethnicity, ability, gender and age in our population. Design should recognize this. Business should recognize this. The people-centred approach promoted through Inclusive Design is becoming increasingly important – and it represents a bold strategy for innovation.
The representation of speakers here today reflects how we need to work: Across design disciplines, sectors, professions, and borders. This conference is about bringing together the needs and aspirations of the consumer into the design and development process. It is about good intentions and also about good business. I declare The European Business Conference on Inclusive Design 2010 officially open.

Thank you for listening.
Newspaper article published in Norway prior to the conference:

Making design more people-centred

For every new person who enters the workforce, three people will retire.

“The demand for products and services that can be used by everyone is set to increase” says Onny Eikhaug, programme manager at the Norwegian Design Council, who has just co-authored a groundbreaking book on the subject of inclusive design.

According to Statistics Norway, the number of people in Norway aged over 67 will double over the next 50 years reaching a total of 1.5 million people. In Scandinavia, three people are currently retiring for every new individual entering the workforce, according to a Danish survey.

“Imagine a society where many of these large numbers of older people will require assistance from other people every time they want to get on a bus, book a holiday or open a packet of ham. Such situations – which most of us will encounter at one time or another – are stigmatising for those affected and represent an enormous responsibility for a society with a diminishing workforce” says Onny Eikhaug at the Norwegian Design Council.

She is convinced that this scenario can largely be avoided if both private and public enterprises embrace and use inclusive design as a tool each time new products, services or environments are being planned and developed. For this reason
she has commissioned the book Innovating with People – The Business of Inclusive Design, whose main idea is to lower the threshold for adopting inclusive design as a business strategy.

The average person is a myth

According to Statistics Norway, three in ten Norwegians say they have health problems that affect their everyday lives. “Even today the average user is in many ways a myth. Most of us have one or other ailment or condition that means we have special needs. Nevertheless, many companies make the mistake of designing products and services for the average person, without stopping to think that none of us are actually average in all respects,” Eikhaug says.

By using inclusive design, products and services are developed for both functionally able individuals and people with various disabilities. In this way one ends up with a result that is better for everybody. “I have never heard of anyone who has complained about doors that open automatically or modern taps that can be turned on and off using only one hand,” Eikhaug points out.

A practical recipe for design

The book Innovating with People – The Business of Inclusive Design, which was launched at the Innovation for All 2010 conference, provides an introduction to how inclusive design can be used both in product development and design processes as part of a good business strategy. It is almost like a step-by-step cookery book, according to the writers.
“We show how both public authorities and private enterprises can use inclusive design in practice. We also provide several national and international examples of how the method can result in major competitive advantages” Onny Eikhaug explains.

Success with inclusive cutlery

She cites the cutlery manufacturer Hardangerbestikk as a good example of how inclusive design can lead to better products, increased market penetration and improved profitability. “Hardangerbestikk’s Tuva cutlery, which they developed in collaboration with the industrial designer Per Finne, has a balanced shaft which is better for both children and older people to hold. At the same time it appeals not only to people with reduced grip abilities. One year after the cutlery was launched on the market, more than twice the expected amount has been sold” explains Onny Eikhaug.

I think curiosity about the user is important when you work as a designer” Per Finne, Per Finne Industridesign.
Book launch at Innovation for All 2010

The book "Innovating with people – The business of Inclusive Design" was launched at the European Business conference - Innovation for All 2010. The book gives an introduction as to how Inclusive Design can be used as a strategy for better business.

"In Norway, new legislation has introduced the criteria of Inclusive Design (termed Universal Design by the government) that most products and services will have to meet. This book shows how you can turn this challenge into opportunities for profitable innovation - and aims to inspire and motivate readers to use the techniques to create better products and services". Onny Eikhaug, Programme Leader Innovation for All

"Innovating with people – The business of Inclusive Design" is published by the Norwegian Design Council as part of The Innovation for All Programme and has commissioned leading organisations and designers within the field of Inclusive Design to contribute with the content.

About the book

The idea is to inspire, motivate and to show how industrial and commercial enterprises can integrate a people-centred approach in their own design and development processes. It is a practical guide and manual that contains the basic information you need to understand, debate and practice Inclusive Design.
The content is compiled by individuals who have had extensive, practical experience in working with Inclusive Design in a business context. The book shares insights and learnings gathered over the years and presented in an ‘easy-to-read’ format.

Case studies and examples explain how other companies have benefited from Inclusive Design.

A practice-based guide details nine research techniques for engaging with people and bringing their points of view into the design process.

Who should read it

It is aimed at business leaders, managers, marketers and designers and anyone who is involved in design, development or specification. It explains the Inclusive Design process, making the case for it both commercially and creatively, and provides a practical guide to techniques for applying it.

About the programme

The Norwegian Design Council promotes the use of design as a strategic tool for innovation, in order to achieve greater creation of value in Norwegian trade and industry. The Norwegian Design Council is a national strategic body for design in Norway, mainly funded by the Ministry of Trade and Industry. Our aim is to increase Norwegian enterprises’ understanding, knowledge and use of design.

The Innovation for All programme, arranged under the auspices of the Norwegian Design Council, focuses precisely on
this issue, looking at how your company can develop better, user-friendly products and solutions with little investment. By involving people in your development process, new knowledge about customers can lead you to innovation.

The Norwegian Design Council initiated the Innovation for All programme (IFA) in 2005. The programme directed by Onny Eikhaug aims to demonstrate the potential of an Inclusive Design approach and to enable knowledge transfer by providing business and industry with methodically tools and information to be easily adopted and implemented in everyday practice.

The programme works closely with industry, designers, government and education on both a national and international level.


- Aimed at company leaders, middle management, marketers and designers.
- Is a practical oriented book that provides business-related arguments and methods for practicing inclusive design and a people-centred approach.
- Published by the Norwegian Design, with contributions and support from the Helen Hamlyn Centre at the Royal College of Art, KODE Design and Studiohead.
- Published as part of the Norwegian Design Council’s “Innovation for All” programme.
Can be purchased at DogA in Oslo, and from the Norwegian Design Council’s website for EUR 19,90 or at Amazon.com
**APPEAL:**

1. 
   *Invitation to:*
   **ANKUR 2010 Design Showcase**
   for budding design talent from **DOD @ M S R S A S, BANGALORE**

   *From 9th Oct'2010 till 10th Oct'2010 9:30 AM to 5:30 PM*

   **Displaying Origami, Murals, Toys, Color Charts, and Digital Art**

   *All are welcome*
   Regards
   **Prakash Unakal**
   M S Ramaiyah School of Advanced Studies,
   Bangalore, India
NEWS:

1. From the Desk of the IFA President

Once again we celebrate the International Day of Older Persons (IDOP) on 1 October 2010. And no doubt there is a lot to celebrate since IDOP was established by the United Nations some 20 years ago. Today there are around 600 million persons aged 60 and over with this total expected

2. CELEBRATE AGE AT A WORKSHOP WHERE IT’S NOT COMPULSORY TO ACT YOUR AGE.

1ST OCTOBER, 2010 IS INTERNATIONAL DAY OF OLDER PERSONS.

Max Healthcare in association with Lakshya—towards a society for all ages, is organising a workshop to commemorate the 10th anniversary of, “International Day of Older Persons.”

Programme details

- Welcome speech by Dr. Alaknanda Banerjee
- Lamp Lighting
- Song by the elderly
- Skit
- Experiences of the elderly
- Best dressed competition
- Vote of thanks by Dr. Deepak Kumar

Date: 1st October, 2010
Venue: Community Hall, Sec-19, Part-2, Raill Vihar, Surajpur
Timings: 4:30pm-7:00pm
High Tea and refreshments: 4:30pm to 5:30pm
Programme will be followed from: 5:30pm to 7:00pm

www.maxhealthcare.in
3. World Elder’s Day Celebration and Book Launch

It is with immense pleasure that I would share that I have been awarded a trophy by Dr Kiran Walia, Health Minister of Delhi, on the occasion of World Elderly Day celebrations held at Safdurjung Enclave on 24th October, for our work on the elderly in the community.

Aloka

4. Join the Campaign for Concrete Change — Every New Home Visitable!

VISIT-ABILITY (Inclusive Home Design)

Our focus is new homes. Not government buildings, restaurants, etc. (important as they are). Our goal is to make **ALL new homes visitable**, not just “special” homes — to be at the party, meeting, and family reunion . . . not isolated. We narrow the emphasis from a long list of access features to the **most essential**: 

79 October 2010, Vol-5 No-10 Design For All Institute of India
entering a home and fitting through the interior doors. So that widespread construction change is more likely to happen quickly. Steps at every entrance of a home shut out people who use wheelchairs or walkers, or have weakness, stiffness or balance problems. A narrow door stops wheelchair users from fitting through the bathroom door in a friend or relative’s home.

Universal, basic access goes beyond visiting. It’s also about the home of a person who develops a disability, whether child, middle-aged or older. Without basic access in place, architecture forces severe choices: Expensive renovations — if a home is even amenable to renovation. Or existing as a virtual prisoner in an unsafe, unhealthy house — unable to exit independently or enter one’s own bathroom. Or the disruption, grief and high financial cost of moving out of one’s community into a nursing home.

To change that reality, three essentials must become routine:
--One zero-step entrance, at the front, back or side of the house.
--All main floor doors, including bathrooms, with at least 32 inches of clear passage space.
--At least a half bath, preferably a full bath, on the main floor.

Builder by builder, city by city, policy by policy, the change is already beginning to happen in parts of Arizona, Texas, Illinois, Georgia and many other locales. Join Concrete Change in advocating these changes to builders, buyers, governments and other housing initiatives. We offer many resources here to help you in your efforts, and welcome your support in our quest for ‘Visitability’.

5.

4.75 Million Project Will Advance Universal Design, Improve Accessibility

Edward Steinfeld is leading a research project to make housing, public buildings and outdoor spaces more accessible for people of diverse abilities.

Contact
Charlotte Hsu
chsu22@buffalo.edu
716-645-4655

Release Date: September 30, 2010

BUFFALO, N.Y. -- The University at Buffalo and Toronto Rehabilitation Institute are partnering on a $4.75 million initiative to make housing, public buildings and outdoor spaces
more accessible for people with disabilities and people of all ages.

The five-year effort, which launches Oct. 1, encompasses multiple research and development projects on topics including home modifications and the design of public rights-of-way such as sidewalks and street crossings.

The U.S. Department of Education's National Institute on Disability and Rehabilitation Research (NIDRR) is funding the work with a grant that establishes UB and the Toronto Rehabilitation Institute as partners in a Rehabilitation Engineering Research Center (RERC) on Universal Design in the Built Environment.

Edward Steinfeld, UB professor of architecture and director of UB's Center for Inclusive Design and Environmental Access (IDeA Center), is principal investigator. James Lenker, UB assistant professor of rehabilitation science, is co-principal investigator. Steinfeld and Lenker are co-directing the new RERC, along with Jordana Maisel, the IDeA Center's director of outreach and policy studies, and Geoff Fernie, the Toronto Rehabilitation Institute's vice president for research.

The support from NIDRR recognizes UB's record of success: The current award is the third consecutive five-year RERC grant for universal design that IDeA Center researchers have received. Universal design refers to the creation of products and environments that are usable for people of diverse abilities.

"Our new grant will continue funding for the only major center of excellence in the field of universal design of the built environment," Steinfeld said. "It represents a continuing commitment by NIDRR to our research program and recognition that the IDeA Center is the leading research and development center in this field.

"The resources provided from this grant will help us initiate new research and development activities," Steinfeld added. "Through a series of partnerships with industry, we will develop several innovative products and bring others, already in the pipeline, to commercialization."

Major goals of the initiative include clarifying and improving the definition of universal design, and improving the evidence base for practice in the field. The effort will help increase the
pool of professionals who practice universal design, with some research dollars supporting advanced graduate assistantships and continuing education.

"It's important research on a societal level because we're striving to improve the usability of home and community environments, particularly for older adults and people with disabilities. At the university level, it's exciting because we have a highly productive and cohesive team that includes faculty and staff with backgrounds in architecture, urban planning, human factors engineering and occupational therapy," said Lenker, who is in UB's School of Public Health and Health Professions. "It's a very stimulating opportunity for our students to work with faculty and students from disciplines outside their own."

The many projects that UB and the Toronto Rehabilitation Institute will complete over the five-year grant cycle include the following:

- An evaluation of the effectiveness of programs that help the elderly and people with disabilities modify their homes to improve accessibility. Danise Levine, architect and assistant director of UB's Center for Inclusive Design and Environmental Access (IDeA Center), has designed nearly 450 home modifications in Western New York since 1996. As part of the NIDRR-funded initiative, UB researchers will interview Levine's past clients and other home modification clients across the country to identify best practices and find out what worked. (Examples of home modifications include removing bathtubs and installing roll-in showers, or installing a ramp or lift to improve usability.)

- A study of the effectiveness of current standards for universal design. UB's William R. Greiner Hall, a residence hall under construction, incorporates universal design principles. To gauge the strength of the design, a UB research team will invite people with disabilities to compare their experiences navigating Greiner Hall to their experiences navigating a building that does not incorporate universal design.

- An examination of the use of universal design in public rights-of-way. Researchers from the Toronto Rehabilitation Institute will study the use of walking and wheeling surfaces in a cold-weather simulation chamber, analyzing how well people with disabilities are able to navigate stairs, sidewalks and curb cuts.
UB researchers will assess the impact of "complete streets" policies by conducting field research and surveying officials of municipalities that have implemented such policies. (Complete streets policies are designed to make streets safe for all users, including drivers, bicyclists and pedestrians of all ages.)

In addition to its work on the RERC grant for universal design, the IDeA Center, part of the School of Architecture and Planning, is also collaborating with colleagues at Carnegie Mellon University on a five-year RERC project to advance public transportation for people with disabilities. (Steinfeld's son, Aaron Steinfeld, a systems scientist at Carnegie Mellon's Robotics Institute, is principal investigator on that initiative, and the two Steinfelds, father and son, are co-directing the project.)

For more information on the IDeA Center, go to http://www.ap.buffalo.edu/idea/

The University at Buffalo is a premier research-intensive public university, a flagship institution in the State University of New York system and its largest and most comprehensive campus. UB's more than 28,000 students pursue their academic interests through more than 300 undergraduate, graduate and professional degree programs. Founded in 1846, the University at Buffalo is a member of the Association of American Universities.

6.

THE DEMENTIA INDIA REPORT 2010: Prevalence, impact, costs and services for dementia - First in Developing Nation: AN EYE OPENER

Meeting the challenge of dementia in India
It is estimated that over 3.7 million people are affected by dementia in our country. This is expected to double by 2030. It is estimated that the cost of taking care of a person with dementia is about 43,000 annually; much of which is met by the families. The financial burden will only increase in the coming years. The challenge posed by dementia as a health and social issue is of a scale we can no longer ignore. Despite the magnitude, there is gross ignorance, neglect and scarce services for people with dementia and their families. We know that dementia is not part of aging and is caused by a variety of diseases. We now have a range of options to treat the symptoms of dementia and offer practical help to those affected.
Alzheimer's and Related Disorders Society of India (ARDSI) the national voluntary organization dedicated to the care, support and research of dementia has been in the forefront to improve the situation since 1992.
ARDSI is committed to developing a society which is dementia friendly and literate. This could only happen if we have the political commitment at all levels to provide a range of solutions that deliver a life with dignity and honour for people with dementia.

The ‘Dementia India Report’ is an ambitious visionary document calling for government and policy makers to recognize dementia as a health and social welfare priority by developing a National Dementia Strategy. The report has been put together after a series of consultations across the country from January 2009 to March 2010. The editors have used these consultations and the data available from the findings of the 10/66 Dementia Research Group worldwide, the ADI’s World Alzheimer Report 2009 and from other research in India.

This is a significant step forward in dementia care movement in our country. Many countries like Australia, England, France, Norway, Netherlands, and South Korea have already recognised the problem and have devised national dementia strategies and have made dementia a national health priority. It is coincidental that the Ministry of Health is about to launch the National Health care programme for the elderly. The Ministry of Social Justice and Empowerment has undertaken the revision of the national policy for older persons. This could be used as an advantage for promoting better dementia care in the country. It is our fervent hope that this report will prompt the government for setting up memory clinics and other care services at the district levels and a National Alzheimer’s Centre at the capital. We sincerely hope that the government will consider the recommendations seriously and include dementia care in the primary healthcare system.

Recommendations:
1. Make dementia a national priority
2. Increase funding for dementia research
3. Increase awareness about dementia
4. Improve dementia identification and care skills
5. Develop community support
6. Guarantee carer support packages
7. Develop comprehensive dementia care models
8. Develop new National Policies and Legislation for PwD

We are facing a public health and social care emergency and immediate action is needed!

Dr. K. Jacob Roy : National Chairman, Alzheimer’s and Related Disorders Society of India (ARDSI)

Read the report in detail and also find pdf file: http://silverinnings.blogspot.com/2010/10/dementia-india-report-2010-first-in.html

---

EIDD granted inclusion certificate to “Eurobank EFG Centre”

One year after the opening of Eurobank EFG Centre in downtown Belgrade, renowned European Institute for Design and Disability – Design for all All Europe (EIDD) has decreed to grant the Inclusion Certificate for this office building. An acknowledgement, for this first time issued for a building in
Serbia confirms adjustability of Eurobank EFG Centre to all people, including disabled persons.

One year after the opening of Eurobank EFG Centre in downtown Belgrade, renowned European Institute for Design and Disability – Design for all Europe (EIDD) has decreed to grant the Inclusion Certificate for this office building. An acknowledgement, for this first time issued for a building in Serbia confirms adjustability of Eurobank EFG Centre to all people, including disabled persons.

In the explanation of the decision to grant the Inclusion Certificate to Eurobank made by members of the Board of Directors and the Executive Committee of EIDD, it is said that Eurobank EFG is granted a special acknowledgment for its exceptional initiative and endeavours invested in creation of accessible working and living environment to all people in its head office building, Eurobank EFG Centre located at in Belgrade.

Upon granting of the Inclusion Certificate to Eurobank EFG, EIDD Board Member for Serbia Aleksandar Bogdanović said: “Adjusted design solutions are necessary starting point in development of inclusive society. With the adoption of Design for All principles, Eurobank EFG has completely adjusted its head office building for work and services to disabled persons, and thus provided positive example to all companies and institutions in this region.”

“A certificate granted by such a renowned institution such as EIDD is a confirmation of our decision to respect all members of the society, and an encouragement to continue with constant investments in the community”, said the President of the Executive Board of Eurobank EFG Mr Philippos Karamanolis and added: “The Design of Eurobank EFG Centre reflects the Bank’s strategic mission and represents strong and reliable banking institution which at the same time does responsible business towards the community, employees and its clients”, said.

Eurobank EFG Centre office building which was opened a year ago in downtown Belgrade represents state-of-the-art office space for over 400 Bank’s employees. Apart from the up-to-date technology and architectonic solution, this smart building has also been constructed in accordance with the UN convention on the Protection and Promotion of the Rights and Dignity of Persons with Disabilities.

In order to provide access for wheelchair users, a vertical platform has been installed at the entrance, sockets are lowered and ATM machines set at an appropriate height. All offices with a stair possess a ramp with an inclined plane. There is a tactile board at the entrance containing instructions for the vision impaired and elevators are equipped with keyboard in Braille Alphabet. Special devices in the main conference hall enable the hearing impaired to hear the speakers well and floor rubber mats highlight communication directions and thus help the vision impaired clients and facilitate their stay in the Bank.

EIDD – Design for all Europe was founded in Dublin in 1993, as European Institute for Design and Disability. The name change in 2006 was conducted with an aim to reinforce its core expertise. The Institute now has organization members in 22 European countries.
AUSTRALIA MISSES THE PLANE ON ACCESSIBLE TOURISM

New Zealand holds its Inaugural Access Tourism Conference recognizing the significance of the growing accessible tourism market.

Last Monday the Auckland University of Technology held New Zealand’s Inaugural Access Tourism Conference. The conference marked a significant shift in thinking acknowledging the economic arguments for Accessible Tourism and moving the focus away from the traditional disability rights of the past. Access Tourism currently represents 11% of the total tourism market and is the most under serviced of the tourism sectors. It is also the fastest growing with it to be estimated to be worth 22% of total tourism expenditure by 2020 as the cash and time rich Baby Boomers approach their mid 70’s and acquire age related disabilities. Travability’s founder, Bill Forrester, was one of two Australian Key Presenters at the conference.

In her opening address the Honourable Tariana Turia, New Zealand Minister for Disabilities said: “Access tourism – the development of tourism opportunities for people with disabilities and for the elderly – is the fastest growing sector overseas. Indeed, it is a high growth industry, expanding and exploiting the potential of a vast market of tourism products. Access tourism embraces tourism, travel and hospitality. It is also a lucrative market, which can do much to boost our future economic growth. And yet access tourism has been a neglected sector in New Zealand – to our distinct disadvantage.”

Australia undertook significant research as part of the CRC on Sustainable Tourism. That research found:

- Some 58% of people with disability take a holiday each year that accounted for some 8.2 million overnight trips.
- The average travel group size for people with a disability is 2.8 people for a domestic overnight trip and 3.4 for a day trip.
- There is a myth that the accessible tourism market does not spend because of economic circumstance and are a significant proportion of each travel market segment.
- They travel on a level comparable with the general population for domestic overnight and day trips.
- The total tourism expenditure attributable to the group is $8bn per year or 11% of overall tourism expenditure.

Australia has an ageing population that is increasingly affected by disabilities. These people are retiring at a younger age and living longer. Based on general population statistics of age acquired disabilities the total expenditure of this group in the travel sector is likely to exceed 22% in ten years time. Not only is this relevant to Australia’s domestic tourism market but the majority of Australia’s inbound tourism is sourced from countries with a similar age demographics.

Over the last 20 years Australia, like most of the rest of the western world, has had building codes and anti discrimination legislation in place that has seen accessible infrastructure built in all locations. Billions of dollars have been spent on the accessible facilities but the tourism industry and key tourism promotion bodies have failed to recognise the value of the market that they have been built for: Bill Forrester said at the conference
“Accessible Tourism facilities are still seen as accommodation for people with a disability, they are not viewed as valuable assets to attract a valuable market segment.”

He went on to say “That accessibility should be seen to be about inclusive marketing not viewed as an obstacle to be overcome or a legislative requirement to be complied with.”

Infrastructure is no longer the issue it is the lack of readily available accessibility information on the mainstream tourism web sites that is holding Australia back in this growing market. It should be being led from the front by Martin Ferguson and Tourism Australia instead of being hidden away on specialist disability travel sites like Nican, especially when Australia’s tourism industry is struggling to recover from the Global Financial Crises and a very strong Australian Dollar.

Australia needs to recognise the significance of this growing market sector and show some real leadership or it runs the risk of being left standing on Tarmac while countries like New Zealand and Canada take the lead and market. People with a disability are now the largest minority group in the world.

Travability was founded in 2007 by Bill Forrester initially as a vehicle to publish accessible travel information. Today, Travability is a part of a worldwide group who’s mission is to create equality in accessibility in the hospitality and travel industries. Bill Forrester believes that true inclusion should just blend in. It operates through its web site http://travability.travel

---

In this issue, we look at the Application of Ergonomics Data. It shows how ergonomics information can be applied during design practice and is referenced from the Uder Adatates handbook. The context of its use is first classified according to product, personal space, physical environment, information, or social environment. An example of the product or environment, followed by the application of ergonomics data is then described. Taking a step further, the handbook recommends relevant data that should be used. For example when developing the controls for a vehicle, the designer should consider the size and ensure that they are located within easy reach. Key information would include the arm length, leg length, sitting height and hand size.

In the previous issue, we reported a new coding scheme where each folder and record has a unique identifier. For example, category of Application of Ergonomics Data is number 9. To further improve the visual clarity, we have used red to represent toilets and dark grey for the context. In addition, the content relating to male ergonomics data is coded in blue and female in pink. It is hoped that this colour code will enable users to identify information in a more efficient way. That’s inclusive design for you.

---

What is ErgoCES?

ErgoCES is a result-oriented database for designers that contain useful information on the use of inclusive design. It provides anthropometric information, age categories, design scenarios and case studies, the People Universe contains a library of human data and the Product Universe provides examples of how ergonomics has been effectively applied when developing products or services. The project is supported by the Engineering and Physical Sciences Research Council (EPSRC) through Grant EP/H031226/1.

Our Progress

Over the last few months, we have introduced the database using the GretaCES Constructor. The database management system allows users to index information, providing a search function, and displaying quantitative data in a visual format that can be customised.

Our Members

Dr. Huo Dong leads the Inclusive Design research group and is the principle Investigator for the ErgoCES project. Email: Huo.Dong@brunel.ac.uk

Professor Bob Macredie has recently joined the research group and brings his expertise towards the area of human-computer interaction.

Dr. Hongyan Chen was responsible for prototyping the database. He now serves as a technical advisor to the team.

Fatemeh Noiropour was involved in the early development of ErgoCES. We congratulate Fatemeh on her promotion to Lecturer.

Dr. Euljin Pei brings a new dimension to ErgoCES by improving the user interface. He is also the editor of ErgoCES news. Email: Euljin.Pei@brunel.ac.uk
ADMISSIONS 2011.12

PGDPD: Post-Graduate Diploma Programme in Design:
245 Seats (including reserved categories)
Candidates having a Bachelor's degree or equivalent (including those who will be appearing for the qualifying examinations during the academic year 2010-11) are eligible for a separate test for PGDPD. (Please refer to the eligibility criteria given for specific disciplines on website/admission brochure). Upper age limit for candidates is 35 years (releasable by 3 years for reserved categories) as on June 01, 2011.

4-year PGDPD programmes are offered at Main Campus, Ahmedabad in the following areas:
- Industrial Design (35)
- Product Design, Furniture & Interior Design, Ceramic & Glass Design
- Communication Design (50)
- Graphic Design, Animation Film Design, Film & Video Communication, Exhibition (Spatial) Design.
- Textile, Apparel & Lifestyle Design (15)
Textile Design.

The tests for PGDPD & PGDP are for eligible candidates will be held at:
- Ahmedabad, Bengaluru, Bhopal, Chennai, Delhi, Guwahati, Hyderabad, Kolkata, Lucknow, Mumbai and Nagpur.

IMPORTANT DATES
Issuing of forms starts from: October 11, 2010
Last date for receiving completed forms at NID: November 12, 2010
Test for PGDPD (at all centres): January 8, 2011
Test for PGDP (at all centres): January 9, 2011

For General Category
Forms can be downloaded from www.nid.edu/downloads & sent along with DD for Rs. 1500/- drawn on any Nationalised Bank in favour of ‘National Institute of Design’ payable at Ahmedabad.

For Reserved Categories (SC/ST/OBC/PH)
Forms can be obtained from Admissions Office, NID, Ahmedabad directly by sending a Demand Draft drawn on any Nationalised Bank in favour of ‘National Institute of Design’ payable at Ahmedabad for Rs. 750/- who should also send in an attached copy of the relevant certificate from competent authority (a) and a self-addressed envelope of 9” x 12” size with Rs. 5/- stamps affixed. Mark your envelope NID “ADMISSIONS 2011.12”.

SC/ST candidates must send their caste certificate.
PH candidates must send disability certificate from the Chief Medical Officer. OCR candidates must send non-cumulative layer certificate from the Collectorate.

Bank of India branches:
- Ahmedabad: Bhadresh, Vidyut, Mahatma Gandhi Road, Ahmedabad
- Bengaluru: Mahatma Gandhi Road, Bengaluru
- Bhopal: Harishchandra Road, Bhopal
- Chennai: Annamalai Road, Chennai
- Delhi: Netaji Subhash Place, Delhi
- Guwahati: Ghatkopar, Guwahati
- Hyderabad: Mahatma Gandhi Road, Hyderabad
- Kolkata: Rabindra Sarani, Kolkata
- Lucknow: 160, Faizabad Road, Lucknow
- Mumbai: Hiranandani, Mumbai
- Nagpur: Dr. Annie Besant Road, Nagpur
- Patna: Dr. B. R. Ambedkar Road, Patna
- Jaipur: Bhatia Road, Jaipur
- Panchkula: Sector 18, Panchkula
- Srinagar: Amphasar, Srinagar
- Surat: Ghatkopar, Surat
- Trivandrum: Near Thiruvananthapuram University, Trivandrum
- Visakhapatnam: Visakhapatnam
- Vishakhapatnam: Vishakhapatnam
- Visakhapatnam: Vishakhapatnam
- Visakhapatnam: Vishakhapatnam

Incomplete forms/forms without required documents/forms received late will be rejected.
PROGRAM & EVENTS:
1. 
Black Designers Seventh International Conference Gathering in Detroit

DesigNation7: Design2Play
Detroit, October 28-31
Greektown Casino Hotel
www.obd.org
More Info: http://obd.org/events.html
To Register: http://obd.org/RegistrationPage.htm

DESIGNATION 7 KEYNOTE SPEAKERS

ED WELBURN, VP of Global Design, General Motors
To date, Ed Welburn holds the highest ranking position as an African American in the automotive industry. He has overseen the development of recent GM products, such as the 2010 Buick LaCrosse, 2010 Chevrolet Camaro, Chevrolet Malibu, Cadillac CTS, and Buick Enclave. As Vice President of Global Design, Welburn has created a network of 10 Design Centers in eight countries around the world. He and his team of over 1,500 men and women are responsible for the design development of every GM concept and production car and truck globally. The Design Centers are located in the United States, Germany, England, Korea, China, Australia, Brazil and India.

FRED LYNN, Principal, The Lynn Group, LLC
Fred Lynn’s skills include site master planning, project programming and management, story writing, attraction design, high rise building design, interior design, theme architecture, special effects lighting, urban planning, hotel and hospitality design, attraction and show film production, resorts development and project finance. Lynn’s work includes: Universal Studios, Florida; Walt Disney World, Creative Entertainment; MGM and United Studios, Phoenix; Sea World, Florida.

CHARLES STONE III, Film Director
The award winning film director, Charles Stone III, is known for films such as Drumline starring Nick Cannon, Mr. 3000 starring Bernie Mac and, Paid in Full. Stone was the creator of the popular United States advertising campaign, Whassup? for Budweiser. He received the Grand Prix Award at the Cannes Advertising Film Festival for the campaign. His latest film project is Paper Wings for which Tom Cruise, Will Smith and Jada Pinkett have read for roles.

The Organization of Black Designers(OBD) is bringing its seventh national design...
conference: **DesigNation7: Design2Play** to Detroit. OBD/DesigNation has over 10,000 members and affiliates nationally and internationally. The conference attendees include some of the world's best Product, Interior, Graphic, Automotive, Architectural, and Apparel designers. Plus a large contingent of design students and design educators.

**DesigNation7: Design2Play** will bring together the world's top designers and manufacturers of sports and recreational products, games, equipment, vehicles and apparel, theme parks and attractions.

This year's theme "**Design2Play**" will explore the influence and universality of sports, active and recreational design. From team to motor sports, sports facility design to post-game glamour we will hear from some of the best in the design world.

Companies like Nike, Oakley, JetSki, Reebok, and a host of other manufacturers from the entire spectrum of the sports and recreational industry -- from skiing to soccer -- from video games to biking will explore the design process that gives us so many exciting and innovative products, environments, and apparel for fun, fitness and recreation. DN7 will also take a look at the visual marketing, advertising, promotion and packaging essential to each project's success.

Join designers, executives, major brands, entertainers and a diverse mix of creative types at DesigNation® 7 International Creative Conference. This multi-discipline design event previously held in cities such as Chicago, Miami, Atlanta and Los Angeles goes to the Motor City, home of globally influential design and talent for most of the 20th Century. Since Henry Ford designed the first automobile Motown has been a known bastion of musical talent but less for its attracting and creating great design and designers from Mies van der Rohe, Frank Lloyd Wright, Albert Khan and Diego Rivera to native talents like Tracy Reese, Kevan Hall, Maurice Malone, Shane & Shawn Ward, John Varvatos and Anna Sui along with brands Carhartt and Pelle Pelle.

OBD is also well aware of the Detroit region’s Creative Economy Initiative and sees having its DesigNation conference in Detroit as a way of supporting that effort and a way to focus attention on the creative-economy assets of the region.

Detroit and Michigan are the present and legendary home of some of the world's greatest design assets. From the automotive design studios to world renown design schools like the College for Creative Studies(CCS), Cranbrook Academy of the Arts, Lawrence Institute of Technology, Kendall College of Design and Wayne State University, University of Michigan and Michigan State.

**COME PLAY WITH US!**

DesigNation(TM) is the "United Nations of Design Conferences"(SM)

**DesigNation Sponsors & Exhibitors Speak**

"Designation's capacity to bring together high-level design professionals creates a wonderful showcase for our products and a great opportunity for Reebok to even recruit design talent."

Michelle Gordon Seemore, Staffing Manager - Reebok International Ltd.

"DesigNation offers the opportunity to reach the people who have the ultimate authority to specify our products - - designers. The multidiscipline nature of the conference exposes Herman Miller to a much wider array of design professionals and potential sales."

Carl Kelly, Manager Supplier Diversity Program - Herman Miller

"Hallmark enthusiastically supports the vision and growing influence of the multidiscipline/multicultural DesigNation Conference. Bringing design professionals from around the world together for stimulating workshops, lectures, demonstration, portfolio reviews, and good dialogue is critical to strengthening the design professions and preparing designers for the new millennium."

**91 October 2010, Vol-5 No-10 Design For All Institute of India**
Jani Mohr, Director Creative Staffing and Development - Hallmark Cards

"DesignNation has become an important element in our design recruitment, sales, and diversity marketing strategy. Why hasn't there been a design conference and trade show like this 'til now?"

Larry Miller, President Brand Jordan Division - Nike

More Info: http://obd.org/events.html

Sponsorship Inquiries:

OBD/DesignNation

Bill Browne: 202-489-4822
obdesign@aol.com, riceman313@gmail.com

To Register: http://obd.org/RegistrationPage.htm
The Society for Accessible Travel & Hospitality (SATH), founded in 1976, is an educational nonprofit membership organization whose mission is to raise awareness of the needs of all travelers with disabilities and to remove physical and attitudinal barriers to free access and expand travel opportunities in the United States and abroad. Members include travel professionals, consumers with disabilities and other individuals and corporations who support our mission. For information on the SATH World Congress call 561-451-0052 or email us at sathworld@bellsouth.com or susan@sath.org.
Eye tracking in Human-Machine Interaction

Conducted by the Chair of Human-Machine Systems of Technical University of Berlin in cooperation with SMI:

25th and 26th of November 2010
Chair of Human-MachineSystems
Franklinstr. 28-29
10587 Berlin

- Why should we use eye tracking in Human-Machine Interaction?
- What are the basic steps and requirements for conducting eye movement studies?
- What kind of parameters of eye movements do exist, and what is their informative value in usability research?

This workshop is addressed to all people, who are considering eye tracking as a method for their research in the area of Human Machine Interaction.

**SMI will grant a 50% course discount for existing SMI customers (max 1 attendee per company or research group). SMI will compensate 50% of the course registration fee with a purchase of SMI eye tracking system within 3 months after the attended course.**

Submission deadlines for conferences

75th ARF Anniversary Conference
March 21-23, 2011
New York City, USA
**Deadline: October 15, 2010**

International Conference on Intelligent User Interfaces (IUI 2011)
February 13, 2011
2nd Workshop on Eye Gaze in Intelligent Human Machine Interaction
Stanford University
Palo Alto, California, USA
**Deadline: November 8, 2010**

GOR: The General Online Research Conference
March 14-16, 2011
Heinrich-Heine University of Düsseldorf
**Deadline: November 15, 2010 (Papers) and 31 January 2011 (Posters)**

ACM CHI Conference on Human Factors in Computing Systems
May 7-12, 2011

**94 October 2010, Vol-5 No-10 Design For All Institute of India**
Vancouver, CA
**Deadline: Oct 8, 2010**

---

**User Experience Hong Kong**
Friday, 18 February 2011

- **Early Bird Prize**
  
  Register before 31st December 2010 and you are eligible to win a return flight from Hong Kong to Australia including a free ticket to attend UX Australia 2011.

- **When**
  
  Fri, 18 Feb 2011 (Presentations, Discussions & Workshops)
  
  Sat, 19 Feb 2011 (Experience Hong Kong with the Speakers)

- **International Speakers**
  
  - Steve Baly (Australia)
  - Janna DeWytter (USA)
  - Rachel Himman (USA)
  - Steve Portigal (USA)
  - Gerry Gaffney (Australia)

- **Pricing**

---

**Incredible India**

www.tourism.gov.in

---

**3rd International Hospitality Fair 2010**

24-25 October 2010; Pragati Maidan, New Delhi

**Vikram Bakshi**

Chairman, International Hospitality Fair 2010

requests the pleasure of your company at the Inaugural Ceremony of the

**3rd International Hospitality Fair 2010**

at 1000 hrs on Thursday, 21 October 2010

at Hall No. 14, Pragati Maidan, New Delhi

**Chief Guest**

**Kumari Selja**

Minister of Tourism

and

Minister of Housing & Urban Poverty Alleviation

Government of India

---

**Rsvp**

Mr. Tarun Upadhyaya
Mobile: 9810172622
Email: tarun.upadhyaya@cii.in

---

95 October 2010, Vol-5 No-10 Design For All Institute of India
JOB OPENNING:

1.
looking for a Product designer to join the team either on a fulltime or freelance basis and am particularly interested in a fresh graduate.

The applicant should have some basic knowledge of 3d surface modeling as well as a working knowledge of 2d softwares such as Photoshop, etc. The ability to sketch and visualize ideas is very important.

Anyone interested should email me a portfolio at: bikram@designtrampoline.com

2.
If anyone having 5+ of years experience in C++ then pls contact at Sapient,
<jkakkar@sapient.com>
jkakkar at sapient dot coma

3.
INTERACTION DESIGNER
* Background in human-computer interaction or related field.
* Bachelors or Masters Degree in Interaction Design or related discipline.
* Strong experience designing usable, complex web-based interfaces.
* Solid understanding of DHTML, scripting, and web technologies
* Strong, clean visual design sense.
* Excellent leadership, communication and teamwork skills.
* Proficiency in process flow diagramming (Omnigraffe or Visio) and wireframing (Omnigraffe, Visio, Fireworks, Illustrator, or Photoshop)

2. Senior UI Engineer
Responsibilities
• You will own user interface development – from page level HTML to client-side JavaScript to the Struts-based framework of action classes and JSPs.
• You will own and champion usability and first-class interaction design. You will put user experience as priority one in everything you do.
• You will build and ensure cross-browser and cross-platform compatibility for our application.
• You will pioneer cutting edge interface development using Web 2.0 principles and Ajax methodologies.

Background & Skills
The right candidate will have a proven track-record of Web site design and development, a passion for usability and interaction design, and the ability to go deep into code to find the right solutions.

- Bachelor's Degree in Computer Science (or related technical discipline).
- 3-5 years of Web site and/or software development expertise.
- Proven expertise with HTML, CSS, and JavaScript.
- Experience with Struts framework, JSP tag libraries, and Ajax development.
- Understanding of object oriented programming concepts, Java, and SQL.
- Working knowledge of software development methodology, Web-based programming (server & client), database programming, and Web technology (application & Web servers, databases, networks).

"Must have" skills...

- Expertise in HTML/CSS
- Expertise with JavaScript
- Experience and interest in Ajax
- Knowledge of OOP concepts
- Knowledge of SQL

"Nice to have" skills...

- Experience with core Java
- Experience with Struts
- Experience with Java tag libraries
- Experience with J2EE
- Experience building freelance web sites
- Experience with Graphic design
- Experience with Flash development

Notes

- Expertise - advanced understanding and command, skillful.
- Experience - understanding and proven ability to perform.
- Competent - basic understanding and command.
- Knowledge of - aware of the ideas and theory, not necessarily skilled in implementation.

Attitude & Traits

- Strong analytical and design skills. Detail-oriented; user-focused
- Effective communicator and collaborator – a team player who can both
champion ideas and follow direction.

- Able to thrive in a startup environment, where opportunities are many and bounds few – likes to think strategically and is good at tactical execution.
- Enjoys moving quickly, can make decisions rapidly

Job location: Hyderabad
Compensation: Very competitive
Send resumes with portfolio/work samples to: reachabhiujeet@gmail.com

4.

Sr Designer opening with an Exhibition firm in Mumbai
We are considering you for the role of Sr Designer. Please find company profile and details under here.
Company: Confidential
It is a team professional organizer of International Exhibitions & Conferences.
Designation Sr Designer
Salary Max 6 Lac
Location Mumbai
Job Description
- Having exp in brochure designing/add designing/handling entire exhibitions
- Illustrator
- Corel Draw
- Photoshop
Please feel free to call or mail to know about the position.
In case interested then please send your updated profile mentioning your Current salary details and expectations ASAP.
Recruitment Executive
Auralis Consulting
Auralis.kirti@gmail.com
Ph: 011-41029914

5.

The Next eXperiences Team that is working on Innovation & Future UX applied research at Samsung India Software Operations, Bangalore is looking for SPECIALISTS in the User Research, Interaction Design and Visual Design and Graphic Tools Specialists (Flash Action Scripting, Maya, 3DS Max etc).

98 October 2010, Vol-5 No-10 Design For All Institute of India
People with relevant experience (3-10 years) in the above mentioned areas can mail me back.
Kindly note that we are looking for Specialists not Generalists:-)

6. HeathWallace (HK) Ltd is a subsidiary of HeathWallace Ltd, a leading UK web design and development agency specialized in delivering effective online solutions for global financial services firms and other leading brands in Europe, Asia and North America. Our clients have taken a high-level decision to focus on the internet as a critical channel to engage and service their customers. The solutions we deliver are therefore of strategic importance to our clients.

To support the growth of our business in Asia Pacific, HeathWallace is looking for strong user experience professionals for our Asia Pacific Operations based out of key financial centers in Asia and Australia. This is a challenging regional role with the mission to develop, plan, and deliver user-centric online solutions for our clients in Asia Pacific.

Main Responsibilities
Account management & business consultation
- Prepare proposals and presentations to existing and new clients to support pitches and tenders
- Capture and analyze business requirements from clients (existing and prospective) and assist clients to develop and articulate their online strategy, objectives and priorities
- Develop appropriate methodology and approach to delivering tailored solutions for clients utilizing HeathWallace in-house expertise and those of our partners
- Apply user-centered design principles to help develop client solutions
- Develop project plan and co-ordinate with internal resources such as design and development
- Lead the delivery of projects to clients ensuring integrity of solution as well as client satisfaction
- Contribute to setting the direction, monetising & operationalising the wider HW proposition

User Experience
- Solution Definition-
  - Identify and articulate UX strategy
  - Visualize concepts quickly and cleanly through site-maps, user-journeys and wireframes, transaction flows, diagrams and interface schematics.
  - Present proposed solution with client team. Conduct feasibility analysis with business and technology teams.
- QA Leadership – Managing the process & maintaining standards in the IA deliverables across the team.
- Mentoring – taking responsibility for developing the skills of other specified team members.

Experience and Skills
- 6-8 years of project and account management experience in usability, user research or new media. Preferably in financial services context and with agency background.
- 6-8 years in depth Information Architecture experience. At least 2 years as Lead IA with strong exposure in solution definition and evangelizing usability with business/technology stakeholders and teams.
- Strong program or project management skills – process driven.
Track record in building excellent consultative-driven relationships with clients/stakeholders
Strong experience with user-centered design methodology for designing and developing user-centric online solutions. Excellent knowledge of internet design and build practices, including knowledge of web usability & accessibility
Strong experience creating user research strategy, plan and executing studies
Strong experience on web technologies and their application to create business solutions. Ability to liaise with technology people to deliver an end-to-end solution
Exceptional presentation and writing skills
Financial services experience an advantage
Knowledge of Microsoft Office including Microsoft Project, Adobe Illustrator, Visio
Contact: elisa.lam@heathwallace.com
Account Director
HeathWallace (HK) Ltd.
Email:sushmita.munshi@heathwallace.com
Phone: +852 3586 3483/ +852 98642209
Fax:+852 3586 3587
Website: www.heathwallace.com

Looking for two graphic designers.
The details are as below:
"As I mentioned we are looking for Graphics designers for our Publishing and Printing Business.
We are looking for full time designers – not part time/freelancers.
Location is in Lower Parel (west) Mumbai and working hours are 10 am to 7 pm.
Our current requirement is for one senior designer + one junior level designer.
Softwares we work on are – Indesign + Illustrator + Corel Draw primarily – knowledge of other softwares is an added advantage.
The kind of work is - designing of magazines + brochures + logo designs + posters + flyers + stationary + adaption of artworks + layout and Desktop publishing + design of Invites/event cards + website designing
For further inquires they can contact me on the following numbers – Shyamal Bhojani022 – 2493 5750 or 2493 8653
VSSU Graphics"

An opening with Ritu Kumar, for the position of "Leather Accessory Designer".
Minimum Work Experience required: 3-5 yrs.
Interested candidates may send their cv at: charu.rajpal@ritukumar.com

For an upcoming project UserINNOV is looking for a product designer to join its team in Mumbai for a 3-4 month project. The main responsibilities will be product styling and working together with an industrial designer and interaction designer.
Profile of the company: www.userinnov.com
This engagement will start within the next month. This is a high visibility project and remuneration can be substantial depending on what you bring
to the table.
Send your work samples to info@userinnov.com and call Soumitra@9619921491 or Carolien@9619233429 for an introduction.
Folks in Mumbai preferred.
10.
Spire is an enterprise start-up that empowers businesses, individuals and communities through a pioneering Context Intelligence™ platform. Our research, products and solutions unlock latent potential for sustained growth and advantage. We currently focus on the human capital context of businesses. Our users include CXOs, HR leaders, managers, and employees. We are a strategic partner to leading Fortune 500 companies in IT, telecom, infrastructure, and media. Our founding team includes professionals with proven track records at global corporations, start-ups and academia.
Spire is looking for a Creative Lead and a User Experience Designer to scale the company globally. Interested candidates can email me at pande.amit@gmail.com with a CV and portfolio.
VP | Marketing & Strategy | Spire
Why Spire?
Besides working on interesting business problems, here's why you'll love working here:
• We're passionate about user experience and embrace design thinking in our processes and products
• We are a rapidly growing, revenue generating start-up in an extremely fast paced industry
• We thrive on experimentation and continuous innovation in an informal, non-routine setup
• We are a diverse group of sharp, highly driven, entrepreneurial professionals
• We offer competitive compensation, rapid growth and career accelerating responsibilities
• We work in an open office (no cubes!) and are located in Koramangala, Bangalore, a vibrant neighbourhood with great cafes, pubs, and living spaces
The Creative Lead:
Spire seeks a passionate visual storyteller to market the brand globally. The Creative Lead will take ownership of branding and communication across multiple media and platforms (print, motion, web, social) to produce trusted, differentiated, signature brand and product experiences for businesses and consumers. The ideal candidate will have a broad understanding of business, technology and media.
Key responsibilities
• Create a consistent corporate brand identity system and overall visual design of our products
• Design key assets including corporate logo and brand language, corporate website, corporate presentations and case studies, promotional posters, collateral for product and services
• Deliver content and visual themes for compelling ad campaigns to be rolled out through an integrated media strategy across print, video, digital and social media
• Support both external and internal conversations through design of newsletters, product launches, customer and partner forums, and the look of the Spire office
• Collaborate across disciplines with Marketing, Technology, and Consulting
heads (and if required with external PR and agencies)  
• Define all aspects of visual design of our core products  
Key competencies  
• Unabashedly original ideas and signature work. Ideally, a diversified portfolio of minimum 3-5 years of work on branding and visual design in technology, media, or consulting firms  
• Advanced hands on skills in Illustrator, Photoshop, Dreamweaver, and other digital tools  
• Ability to create global branding and global design across Print, Web, Video and other media  
• Solid grounding in high-concept sketching and art, illustrations, and visual thinking  
• Ability to balance genuine creativity with a deep sensitivity to customer and user needs  
• Master's or Bachelors in Graphic design, Visual design, Visual Communication or the hard-knocks-school-of-life  
• Exposure to popular culture, photography, videography techniques is a plus  

The User Experience Designer:  
Spire is looking for ace problem solver who will spearhead design efforts for our core Context Intelligence platform and enterprise products. The UX designer will blend Interaction design with UI prototyping to create end to end user experiences.  
Key responsibilities  
• Translate market research and trends into new product opportunities and UI requirements  
• Design overall information architecture, user interaction models, and workflows/navigation  
• Define lightweight, productive, highly responsive user interfaces and interactions in close collaboration with Engineering, Marketing, and quick feedback loops with end users  
• Rapidly and flexibly iterate wireframes & prototypes with visual designers towards final product  
• Research next gen information visualizations, charting tools and rich media integrations  
Key competencies  
• Ability to switch modes between idea brainstorming, sketching & creative experimentation and collaborating with stakeholders actively during design thinking and execution  
• Strong problem solving approach and ability to understand new business models, domains, and step into the shoes of different kinds of users through observations and interviews  
• Minimum 2-4 years of experience driving UI as part of product development for web domain. Knowledge of Design patterns, usability, UI best practices and user feedback mechanisms  
• Expertise with low and high fidelity tools for wireframing and prototyping such as Visio, Axure, Adobe suite, Powerpoint, and ideally, HTML and CSS  
• A Master or Bachelor's degree in HCI, Interaction design, Product Design, Human factors/ergonomics, or the hard-knocks-school-of-design  
• A deep abiding curiosity for the consumer web and Front end technologies (Flex, HTML5) is a plus
11. For Instructional Designer Lead, senior Instructional Designer Lead, Learning Architects
Locations: - Pune, Gurgaon, Bangalore
Locations of Interviews: - Any of our interview Locations (Only in INDIA)
Responsibilities:
Instructional Designer Lead, Sr. Instructional Designer Lead
Understanding the training needs, goal analysis, audience analysis and gather and analyze Instructional content.

Generating content, questionnaires, develop storyboards for the course. Conduct design reviews. Interfaces with clients. Training and mentoring Instructional designers.
Learning Architects
Strategize
Manage Instructional Design teams
Design Leadership
Client Interfacing
Experience/Skills:
1. Knowledge of different instructional design methods and interactivity models.
2. Proven project lead expertise & excellent communication skills.

Being conversant in tools such as Lectora, Captivate, Elicitus, Raptivity, etc is preferable.

We can consider technical writers too, but they should have an inclination and interest towards instructional designing. For their ID competence, we would need to evaluate them through a test.
Divya@raventure.com
080-25356030, 41263060, Extn:-105

12. Pune-based company Zensar Technologies is looking for Information Architect/Usability Analyst.
Details about requirements are given below:
*Job Description:*
- Performs research focused on understanding work practice and user behavior as individuals and as part of a work group.
- Interacts with customers, user groups, and marketing to identify functional requirements.
- Works in cross functional teams to translate functional requirements into system design.
- Designs, develop, and document high level and detailed prototypes to effectively communicate designs (including conceptual wireframes, task analysis and UI flow charts)
- Runs design reviews and usability tests with key stakeholders and representative users to validate designs.
- Create and maintain UI standards and guidelines
- Understand and incorporate business needs into overall design aspects
- Provide input and analysis during post-implementation of projects
*Technical Skills and Qualification:*
- 2 to 5 years of relevant work experience in human factors and usability engineering. At least Two year applying these skills to the design and development of web-based systems.
- Creates screen designs using image processing tools like Photoshop, Fireworks and MS Visio.
- Develops functional prototypes using latest technologies.
- Familiar with UI guidelines for relevant development platforms like Windows, Mac OS
- Experience in creating and documenting information architecture
*Other Competencies:*
- Work well with others in a fast-paced environment
- Have strong organizational and problem-solving skills
- Have excellent communication skills, both written and verbal
- Proven analytical and problem solving skills
- Attention to detail
- Ability to work well in a team environment
If interested please email your resumes to l.sapre@zensar.com

13.
we are a young architectural firm in Bangalore ( north )and are in look out for young architects or designers with knowledge of any 3D softwares and graphic softwares for our office.
kindly mail me on subbaiah_t@yahoo.com or call me on 9845107901.

14.
mid-size design and branding agency based out of Bombay, mainly into branding and print.
Graphic designers.
Freshers & Experienced, who can strategies & love playing with colours, typo, graphics to create design innovations.
Candidates from Art/ design background with good software skills may apply.
Experience designers with a good portfolio in their interactive space/ graphic design can also apply.
Working knowledge of Flash and photoshop is must.
Sketching and illustrating skills will add value.
Open to innovation and fresh way of looking at designing and Visualization of Print Ads, Brochures, Identity design, Packaging.
Working knowledge of Photoshop, Corel, and Illustrator is a must.
Freshers can also apply.
Please mail your CVs to dcosta.francis@gmail.com
Also mention your latest CTC and expected CTC.

15.
We have the following opening with our company - RMSI Pvt Limited, Noida.
Below is the JD:
• Will be responsible for conceptualizing and designing the User Experience for projects with Design Studio Team. Will be required to carry out following activities –
• User Experience designing activities including conceptualizing, visualization, information architecture and usability, etc.
• Client interactions to interpret client's ideas.
• Degree/ Diploma in Multimedia.
• Proficiency in UI Design tools (CorelDraw, Adobe Illustrator, Photoshop; Animation using Flash & GIF animators)
• Proficiency in XAML and WPF (Expression Blend)
• (X)HTML 1.0 and CSS 2.0 skills (Hand Coding, Dream Weaver)
• JavaScript scripting knowledge will be an added advantage. Competencies
• Strong creative aptitude and good aesthetic sense.
A reputed Business School based in Mumbai & Bangalore is looking forward to recruit for the following position.
*Faculty - Business Design & Innovation (Bangalore Campus)*
The candidate should be a Design graduate followed with a Post Graduation in Business Design / Design Management / Product Service System Design. Candidate with a work experience of 3 to 5 years would be considered.
Interested candidates can write with a CV in pdf to harshadparashare@gmail.com.
16. fabulis (www.fabulis.com) is the network that helps gay men and their friends discover where to go, what to do, and who to meet. The service has a web component and a iphone component (Android app coming soon).
We are seeking rock star talented UX designers to join the web and mobile design teams.
We're looking for someone who is super-scrappy, a go-getter, lives the product, has awesome graphics sense, and who is up-to-date on the latest web trends.
Experience: Fresh graduates or up to 2 year experience
www.fabulis.com
http://blog.fabulis.com
http://www.facebook.com/we.are.fabulis
If interested in discussing more, please email your qualifications along with your portfolio to deepa@truesparrow.com
17. There is an opening for leather accessory designer with RITU KUMAR. Interested candidates can Contact Ms Charu Rajpal.
phone 9910487046
Charu.rajpal@ritukumar.com
18. We are looking for a Cake PHP Developer for Deal Magic to take ownership of website architecture, and ongoing improvements. Please find the JD and required qualifications below.
CAKE PHP GURU
Qualifications:
  a) You should have 3+ years of programming experience, and at last one year of experience with CakePHP
  b) Multiple professional websites designed in CakePHP in a lead architect role. We’d like to see links to these websites
  c) Experience with advanced CakePHP features such as AJAX, sessions, pagination helpers, use of elements and cache, multi-model views, model behaviors (sluggable, polymorphic, sphinx, taggable, containable etc)
  d) CakePHP knowledge is ideal, but we will also consider candidates who are exceptionally strong in PHP, and in another MVC framework similar to CakePHP (eg. Ruby on Rails, Django, Zend etc). Such candidates will find it easy to ramp up on CakePHP, and we’ll give you time to get up to speed
General web-development experience: LAMP (Linux, Apache, MySql, PHP), javascript, HTML/XHTML
B.E in Computer Science, Electrical Engineering or similar degree will be a bonus from a reputable university
Interested candidates please send me your updated CV along with links to your work on this same mail id (rajalakshmi@paperplane.net).

Positions are based in Hyderabad with an US based software product MNC.

Job location: Hyderabad

Compensation: Very competitive

Send resumes with portfolio/work samples to: reachabhijeet@gmail.com

1. INTERACTION DESIGNER
   Background in human-computer interaction or related field.
   * Bachelors or Masters Degree in Interaction Design or related discipline.
   * Strong experience designing usable, complex web-based interfaces.
   * Solid understanding of DHTML, scripting, and web technologies
   * Strong, clean visual design sense.
   * Excellent leadership, communication and teamwork skills.
   * Proficiency in process flow diagramming (Omnigraffle or Visio) and wireframing (Omnigraffle, Visio, Fireworks, Illustrator, or Photoshop)

2. Senior UI Engineer

   Responsibilities
   • You will own user interface development – from page level HTML to client-side JavaScript to the Struts-based framework of action classes and JSPs.
   • You will own and champion usability and first-class interaction design. You will put user experience as priority one in everything you do.
   • You will build and ensure cross-browser and cross-platform compatibility for our application.
   • You will pioneer cutting edge interface development using Web 2.0 principles and Ajax methodologies.

   Background & Skills
   • The right candidate will have a proven track-record of Web site design and development, a passion for usability and interaction design, and the ability to go deep into code to find the right solutions.
   • Bachelor's Degree in Computer Science (or related technical discipline).
   • 3-5 years of Web site and/or software development expertise.
   • Proven expertise with HTML, CSS, and JavaScript.
   • Experience with Struts framework, JSP tag libraries, and Ajax development.
   • Understanding of object oriented programming concepts, Java, and SQL.
   • Working knowledge of software development methodology, Web-based programming (server & client), database programming, and Web technology (application & Web servers, databases, networks).

"Must have" skills...
   • Expertise in HTML/CSS
   • Expertise with JavaScript
   • Experience and interest in Ajax
   • Knowledge of OOP concepts
   • Knowledge of SQL

"Nice to have" skills...
   • Experience with core Java
   • Experience with Struts
   • Experience with Java tag libraries
   • Experience with J2EE
   • Experience building freelance web sites
   • Experience with Graphic design
   • Experience with Flash development
Notes
• Expertise - advanced understanding and command, skillful.
• Experience - understanding and proven ability to perform.
• Competent - basic understanding and command.
• Knowledge of - aware of the ideas and theory, not necessarily skilled in implementation.
• Attitude & Traits
• Strong analytical and design skills. Detail-oriented; user-focused
• Effective communicator and collaborator – a team player who can both champion ideas and follow direction.
• Able to thrive in a startup environment, where opportunities are many and bounds few – likes to think strategically and is good at tactical execution.
• Enjoys moving quickly, can make decisions rapidly
Job location: Hyderabad
Compensation: Very competitive
Send resumes with portfolio/work samples to: reachabhijeet@gmail.com

Minimum Job Qualifications:
# Maximum of 2 years experience in graphic and visual design as position is entry level.
# A graduate or post graduate degree or diploma in graphic/web/multimedia design or design-related field
# High quality design capability is a must with great attention to detail a continuous requirement
# Expert with design tools Adobe Photoshop/Illustrator,Flash and ability to use effects, gradients and other tools to create rich designs
# Comfortable working with a creative brief and references to unleash your own creative instinct
# Experience and knowledge of Silverlight- MS Blend is must have requirement and will be key selection criteria
Your responsibilities will include:
# Communicating conceptual ideas and visual design rationale
# Designing visual design themes and concepts for cutting-edge,Healthcare web applications
# Design of all visual artifacts for example icons, typography and Visual layout
# Define overall styles and imagery, including page layout (screen schematics) and interactions (user paths)
# Define and Update on Styleguide for all products including web and client-server
please send your CV and portfolio details along with other detials like notice period, current and expected CTC to following email: Manoj.Kaushik at isofthealth.com
Company site : www.isofthealth.com

UX Analyst, Full-Time - Bangalore,INDIA
We have urgent openings for User Experience Analyst ; please send your resumes and portfolio details at the email contact at end of this email. The UX Analyst is responsible for all aspects of the user-centered design process, from user research through design implementation. You will design, lead, and analyze user activities and leverage the findings into cohesive application architectures, wireframes, and functional specification documentation for web based enterprise applications. You will collaborate

107 October 2010, Vol-5 No-10 Design For All Institute of India
closely with strategists, designers, and developers to create the best possible user interactions and task flows while being mindful of key branding and marketing concerns.
Main responsibility will be alignment with Silverlight / Prism framework and provide design and technology direction for SOA based UI Design and Principles of the template based UI in close collaboration with Global Development teams.

Responsibilities:
* Design, lead, and analyze user controls and UI framework for SOA based UI application
* Develop personas and scenarios to inform the design process
* Create navigational models that are aligned with the defined, and/or expected, user experience and business requirements
* Create wireframes that illustrate application layout, navigation, controls, and content prioritization
* Articulate user experience issues and concerns and overall design principles to team members and clients
* Translate complex concepts into interactive experiences through the design and/or implementation of application architectures
* Collaborate with designers on visual comps and provide input from an information architecture perspective
* Focus on HCI and user centered design principles and uses these elements as foundation for design solutions and informational approach

Qualifications:
* Experience in Information architecture, User experience architecture, Wireframes, Usability, User Research Plans
* 2-6 years of professional experience as an Interaction Designer
* Ability to lead user-centered design initiatives from inception through implementation
* Ability to collaborate with designers, strategists, managers, and technologists
* Ability to communicate design rationale to internal team as well as clients
* Ability to address user needs in the context of business goals, branding, and requirements
* Extensive experience in information design and user scenarios
* Excellent written and verbal communication skill

Preferred:
* BE/BTech required; related field preferred
* Your portfolio URL
* Your CTC, expected CTC, and notice period

Contact details:
Manoj.Kaushik at isofthealth.com
company site: www.isofthealth.com

22.

Good opening with a leading Digital & Entertainment company based at Mumbai for the post of User Interface Designers / Interaction Designers.
Requirements:
• Execute the User Interface design projects successfully.
• Ability to convert the requirement into wire-frames.
• Creating high and low-fidelity wire-frames, task analysis and work flows.
• Good understanding of usability and User centered design principles.
• Ability to analyse product, gather user feedback through methodologies
like task analysis, usability audit and usability methods.
• As a UI designer you will work closely with Visual Designers and if required with development teams to assist with user interface and specifications.
• Ability to work independently and in a team.

Basic skills required:
• Strong time management, communication and interpersonal skills.
• Working knowledge of UI prototyping tools, such as Axure, Photoshop, MS Office and other related tools.
• Excellent written and verbal communications.
• Bachelors in Visual Communication or any design related field.

All the positions will be based in Mumbai and Pune.

Please send your CV and portfolio details to shweta@ideazci.com

23.
There is a requirement for Interaction Designers with 2+ years (designation varies with years of experience) in an MNC based out of Hyd. Please contact me for more details at usha.vikas.patri@gmail.com

24.
Looking for Interactive Art Directors/User Interface Designers / Interaction Designers to work with a large media conglomerate.

Minimum Job Qualifications:
- Strong design aptitude with flair for working in a diverse workplace.
- Designing mock-ups and developing prototypes while integrating feedback from the product teams and end-users.
- Strong experience designing usable, complex web-based interfaces.
- Solid understanding of DHTML, scripting, and web technologies
- Strong, clean visual design sense.
- Excellent leadership, communication and teamwork skills.
- The right candidate will have a proven track-record of Graphic and UI Design

Please send your CV and portfolio details along with other details like notice period, current and expected CTC to following email: jai.wadhwani@web18.in

25.

Honeywell Technology Solutions - Design Innovation Team, Bangalore, is looking for a sr. Team Lead.

Responsibilities

• Provide leadership to a large team of experienced and fresh designers
• Build and maintain relationship with various partners and stakeholders.
• Set clear expectations and design goals in the beginning of the project
• Conduct regular design reviews and build mechanism for continuous improvements of deliverables
• Look for new opportunities with existing and new partners
- Participate directly in large and complex projects
- Drive design in product development from initial concept to final implementation
- Lead or championed the creation of a multi-year UX vision for multiple products or product lines
- Build a culture within the team which inspire and motivate each individual to excel

Requirements/ Qualification

- 7+ years of experience in interaction design, product design/industrial design
- MDes in industrial design, visual communication and interaction design from IITs or equivalent from NID or any other internationally reputed institute.
- Passion for design and strong command of interaction design, visual design and HF principles
- Experience of handling large teams and complex projects
- Experience of managing customer expectations and ensuring consistent quality output.
- Experience in resolving complex design issues by working collaboratively with multidisciplinary groups such as application development, testing and program management
- Knowledge of design tools used for interaction design, visualization and rapid prototyping

Please send your resume to our hiring focal Beena:
beena.nagaraja@honeywell.com

All candidates must send a portfolio or work samples along with their inquiries. Please indicate your specific roles and contributions for each project submitted as part of the portfolio.

About Design Team

22 designers with diversified background like Industrial design, Interaction design, Arts/ Graphic Design.

Designers are from premiere institute of design like IITs and NID and art schools. Good blend of experience; have people
with experience of more than 12 years as well as young designers with 1 to 3 years of experience.

Team work with across businesses and locations and takes ownership in following areas

Interaction design, creative research, scenario planning, industrial design and usability testing.

In the past few years design team has won few international awards and have been awarded various patents.

Excellent environment with challenging work and fun loving people.

Our Vision is to take ownership of all human facing attributes such as usability, aesthetics, cognition etc to create a complete and satisfying user experience for Honeywell's customers.

This team works in domains like Home and Building Solutions, Access Control & Security Video Surveillance Systems, Aerospace, Process Solutions etc.

The Design Innovation team also conceptualizes new products and solutions which address human-system interface needs and achieve required effectiveness of human performance during system operation and maintenance

About Honeywell: www.honeywell.com

Location: Hyderabad
Experience: 5+ years (Candidates with lesser experience may be considered if they have good portfolios)
Requirements: Knowledge of HTML, Javascript, Photoshop, Visio (or any other wireframing tool) is required
Bachelors or Masters degree in HCI field is preferred
Good understanding of User-centered design principles is expected
Ability to create impressive visual designs is a plus
Responsibilities:
Gather User requirements by interacting with Users
Brainstorm with other team members in defining the solution
Come up with multiple design solutions, if required, and able to weigh pros and cons of each approach
Conduct Usability testing to validate design solutions
Work together with developers and help them implement design solution
Please send your resumes to anirudh_ojha@mahindrasatyam.com

Principal Consultant
User Experience Management
Mahindra Satyam
Web developer (Internet Product Startup)
Location: Bangalore
Desired Skills:
1. Should have strong hold on open source programming languages and frameworks
2. With Experience in database architecture and the ability to build highly scalable applications.
3. Technical skills with JavaScript, Flash, and Java skills are all pluses.
4. Enthusiasm for solving interesting problems and good analytical skills.
5. Technical Skills with - Ruby, rails framework, Python, jquery, HTML 5, CSS

How to apply:
Please send:
(a) A brief bio
(b) Sample work or projects worked on
(c) Expression of interest
(d) Payment Terms and conditions
To: healthocean@live.com
IMPORTANT ANNOUNCEMENT:

We have released a video film of approximately 40 minutes on concept of Universal/ Design For All/ Inclusive Design in the Month of June 2009 and speakers are

Prof Peter Zec of Red Dot, Germany,
Prof Jim Sandhu, U.k
Mr Mike Brucks, ICDRI
Prof Lalit Das, India
Mr John Salmen of Universal Designers & Consultants, Inc. USA
Mr Pete Kercher, Ambassdor EIDD (2nd Volume)
Prof Ricard Duncan, USA,(2nd Volume)
Ms Onny Eiklong, Norweign Design Council(2nd Volume)

Those who are interseted in free DVD kindly write to us along with their postal address or you can download from our website www.designforall.in or download from below links for single clipping
If you wish to download the film kindly click the below link of your choice

Prof Peter Zec of Red Dot Min -8
http://www.youtube.com/watch?v=3JML2EbzxDM

Mr. Mike Brucks of ICDRI Min 1.5
http://www.youtube.com/watch?v=4_7CbkLOkWc

Prof Jim Sandhu, UK Min-8
http://www.youtube.com/watch?v=Std4PuK4CmM

Index of the film Min-1.2
http://www.youtube.com/watch?v=kFyCLPuQgxk

John Salmen of UD Min-3
Universal Designers & Consultants, Inc
http://www.youtube.com/watch?v=bU770Vqu19o

Indian Example of Sari (female dress)
and Dhoti( Male dress) Min-4
http://www.youtube.com/watch?v=_vmAmRUFptE

Mr. Francesc Aragall Min- 5
http://www.youtube.com/watch?v=d-D3JH_ JGpA

Welcome note of Design For All
Institute of India Min-1.3
http://www.youtube.com/watch?v=yqW2vR- 3kRg

We solicit your cooperation and looking for feedback at
Dr_subha@yahoo.com
Dear Friends,
We need your feedback on our publication and your support for popularizing the concept of our social movement of Design For All/ Universal/ Barrier Free/ Inclusive Design. It is our further request kindly submit your latest articles, research findings, news and events with us for publication in our newsletter.
With regards
Dr. Sunil Bhalla
Design For All Institute of India
www.designforall.in
dr_subha@yahoo.com
Tel:91-11-27853470(R).

For free Registration: write to subscribe@designforall.in

Write to us about change of e-mail address: address@designforall.in

Advertising:
To advertise in digital Newsletter advertisement@designforall.in
Acceptance of advertisement does not mean our endorsement of the products or services by the Design for All Institute of India

News and Views:
Regarding new products or events or seminars/conferences /workshops. News@designforall.in

Feedback:
Readers are requested to express their views about our newsletter to the Editor Feedback@designforall.in
Contributors:

Nishi Chauhan

Onny Eikhaug

Jan R. Stavik