

## **Presentation Proposal for Grace Hopper Conference 2004**

### **ICT Innovations for Emerging Economies**

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It is now widely recognized that we are in an era in which information is the fuel for economic and social transformations. The information revolution in developed countries has radically transformed how people, live, work, play, learn and govern, and has led to the explosive creation of new wealth. However, emerging economies have so far seen relatively little benefit of the information revolution. Most have articulated ambitious goals for achieving levels of development that will provide their people with opportunities to achieve prosperity and high quality of life. These goals can only be achieved by harnessing the power of information and communication technologies (ICT).

The full benefit of ICT for emerging economies cannot be realized by simply taking products and solutions designed for western requirements and applying them to developing country needs. In addition to basic challenges such as lack of widespread communications infrastructure, affordability of access devices and lack of local language information and services, products need to be designed to make sense in the local context and to solve problems relevant to the local context. Finally, the economic sustainability of the product or solution needs to be considered and new business models implemented. Ultimately, to have widespread impact, businesses need to be profitable selling information technologies to the billions of people underserved by technology today.

The presentation will cover this topic in depth over 90 minutes (including Q&A) and provide perspectives on

- What is the digital divide? Is there money to spend on providing more widespread access to information technologies?
- What are the basic barriers to widespread use of ICT?
- Need for multidisciplinary approach to research for emerging economies addressing social, cultural, contextual, economic and technological factors
- Some of the research programs addressing this area – HP Labs India; IIT Madras, Chennai; Citris, UC Berkeley
- Some examples of products and solutions designed for emerging markets and their research challenges
- Can a multinational company address these new markets in a profitable way?

The talk is suitable for a general audience regardless of background. I believe this is one of the key research areas facing us as researchers for the next 10 years. However, this area is yet to become main-stream in research departments. HP set up a lab to focus on this topic 2 years ago. MIT Media Lab started a program with the government of India 2 years ago but that has since been discontinued. UC Berkeley has just received an NSF grant on “IT for Developing Regions”

The goal is to show the audience the huge opportunity for research in this area and generate more passion and energy around solving problems blocking the widespread application of information technologies.

## **Bio of speaker**

Gita Gopal is currently Associate Director for HP Labs India, and is located in Palo Alto. She is responsible for creating and managing a multi-disciplinary research program to generate innovations for emerging markets.

Prior to this, from 1999-2001, Gita managed the CoolTown ubiquitous computing research program at HP Labs. CoolTown is a simple, pragmatic, yet imaginative way to provide appliance-based, context-specific e-services leveraging Web standards. From 1995-1999, Gita was responsible for creating and building up the HP Labs program on Internet Service Management, aimed at researching tools to measure, manage and control service quality for end-to-end Internet services.

Gita received her PhD in Computer Science from the University of Waterloo, Canada in 1985. From 1985-1995, Gita was at the Applied Research Labs at Bellcore, New Jersey, where she conducted and managed research on massively parallel database architectures, linking directories to provide integrated communications, and architectural support for multi-media services. Gita has over 30 publications in conferences and journals, and 3 patents.