Smart Data Pricing: Call for Book Chapters

In an era of $10 per GB data plans and 108% annual growth rate of capacity demand, Smart Data Pricing (SDP) will play a major role in the future of mobile, broadband, and content. SDP can refer to (a) usage pricing with throttling/booster, (b) time/location/app/congestion dependent dynamic pricing, (c) two-sided 1-800 pricing, (d) WiFi offloading/proactive caching, (e) quota-aware content distribution, and any combination of the above. It can help create happier consumers/enterprise users, less congestion and better QoE, lower CapEx/OpEx, higher revenue/profit margin, less churn, more consumption and ad revenue to content/app providers. But it also requires smart interfaces among pipe providers and content/app providers, and a combination of smart ideas, smart execution, and smart marketing.

We had the opportunity to bring together a group of academics and industry professionals to discuss these issues and directions at SDP 2012 (http://scenic.princeton.edu/SDP2012/) on July 30-31, 2012. This book is aimed to follow this initiative and reach out to a larger community of readers to encourage further discussion on the evolving trends in broadband access pricing, their effectiveness, and the hardware/software support required to realize such pricing plans.

Audience:

Primary audience:
1. Researchers (faculty of engineering, economics, and business schools, as well as research labs)
2. Network Operators such as AT&T, Verizon, and Comcast (managers, network engineers, network planners, marketing)
3. Network Vendors such as Alcatel-Lucent, Cisco, and Qualcomm (engineers, designers, managers)
4. Students (telecommunication networks, economics, business)
5. Regulators and Planners

Secondary audience:
1. Smart Grid Industry (planning and Pricing, marketing)
2. Application & Software Developers
3. Policy makers, investors, businessmen

Contents:

A proposed Table of Content is attached at the end, organized into five different themes. You may choose to select to write on any of the topics below or suggest titles that you will be interested in contributing.

Kindly let us know by September 14, 2012 your tentative choice of topic(s). And please feel free to contact us for any further details. Looking forward to hearing from you.

Timeline of publication:

Sept 14: Confirmation of interest about contributing a chapter
Nov 15: First draft version of the chapter due
Dec 10: Review comments sent to authors (peer reviews by contributors)
Jan 15: Final version due
Feb-Mar: Copy editing, Production editing by Wiley & Sons

April 1: Printed and ready for purchase

Publisher: John Wiley & Sons. (tentatively)

Editors: Soumya Sen, Carlee Joe-Wong, Sangtae Ha, Mung Chiang

Submission Instruction:
The length of each chapter is expected to be around 15-25 pages (A4 sheets, single spaced, 11 pt font body in Times New Roman). Manuscripts and questions should be forwarded to Soumya Sen (soumyas@princeton.edu) and Mung Chiang (chiangm@princeton.edu).

We invite submissions on a wide range of topics, including, but not limited to:

A. Smart Data Pricing (SDP) – Directions for the future
1. Pricing practices: static & dynamic pricing - pros and cons
2. SDP Trends & Ideas:
* Usage based pricing
* Dynamic time-dependent pricing
* Auction based pricing
* Application based pricing
* Other pricing schemes

B. Monetization of Spectrum Challenges and Trends
1. Challenges for small ISPs
2. Cost models and QoS
3. White-band allocations and pricing
4. The role of multicast in congestion alleviation
5. Lessons from Smart-grid pricing
6. Smart caching and forwarding
7. Quota-aware video adaptation

C. Sponsored Content & Cloud based services
1. Net-neutrality in two-sided markets
2. Sponsored pricing/Reverse billing in e-commerce markets
3. Cloud pricing
4. CDN pricing and caching

D. Hardware Support and the Role of Standardization in Smart Pricing
1. Standardization requirements for SDP
2. Pricing architectures
3. Protocols/interfaces

E. Security, Regulatory, and Consumer Aspects of SDP
1. Consumer interface designs
2. FCC regulations and vision for SDP
3. Security aspects of SDP
4. Consumer aspects of SDP
5. User Psychology and behavioral experiment results on pricing