

Developing Services for the Bottom of the Economic Pyramid:

A Management Challenge and Research Opportunity

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The Challenge

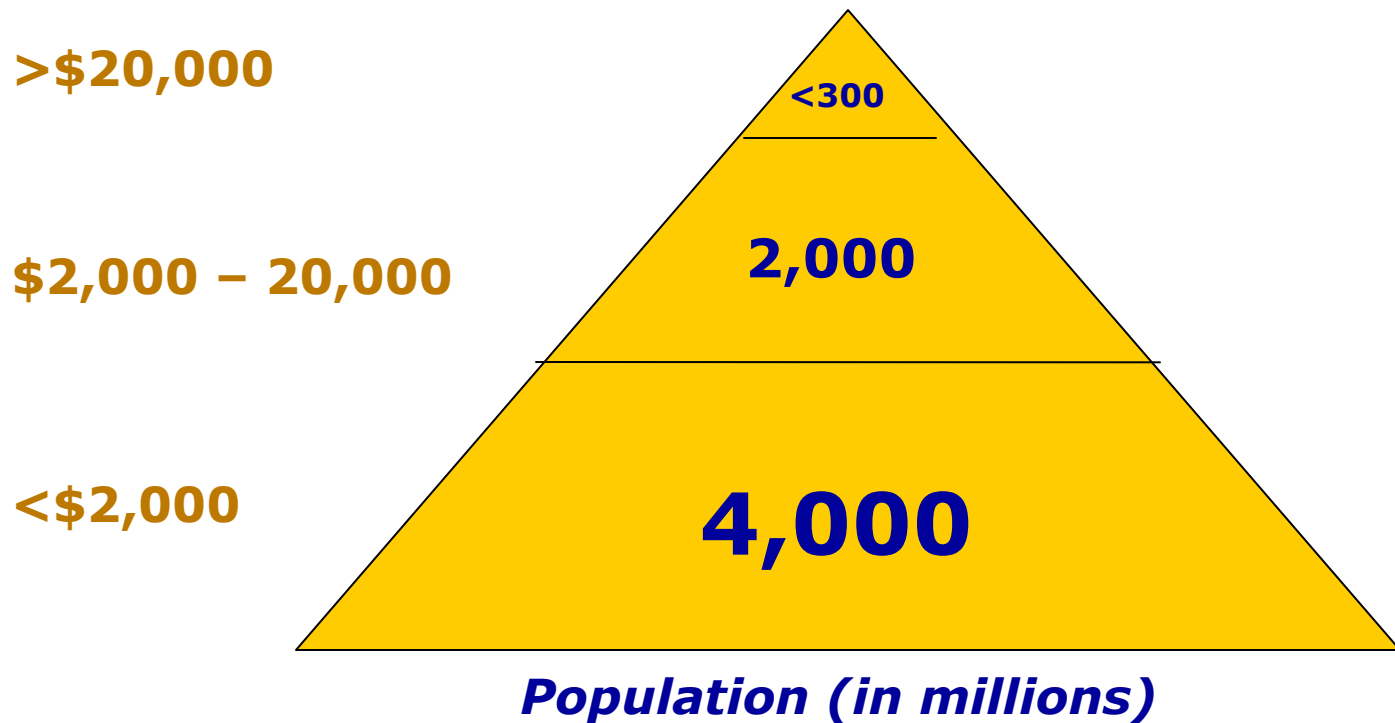
- **C.K.Prahalad first to draw attention to need of poor people around the world for good quality, affordable goods and services, and to the marketing challenges and opportunities this presents**
- **Traditional service research and teaching shows strong bias toward developed countries and even toward upscale services for affluent consumers in those markets**
- **Huge needs for services among billions of people at the bottom of the world's economic pyramid**

The Bias of Affluence

- ❑ **Services research has traditionally focused on advanced economies with well-developed infrastructures.**
- ❑ **Many service firms see most profitable opportunities in:**
 - **upscale offerings to affluent market segments**
 - **value added services**
 - **frequent purchases by loyal customers.**
- ❑ **BUT...An enormous market exists among poor segments of world's population where many needs are not being met**
- ❑ **Need to develop research dialogue, rethink perspectives, concepts, and strategies.**

The World's Market Pyramid: Purchasing Power Parity in US \$

Annual per capital income



So, What About the Lower Layers of the World Economic Pyramid?

- ❑ **Almost 2/3 of the world's population earns less than US\$2,000 per year.**
- ❑ **Most live in emerging or less developed economies that lack sophisticated infrastructures.**
- ❑ **How relevant is received wisdom on services marketing in relation to creating and delivering services to these four billion people:**
 - **How can service be delivered cheaply?**
 - **What is potential role of technology in traditional societies?**
 - **What creative, bottom-up approaches to service exist?**
 - **How can service entrepreneurship be facilitated among the poor?**

A New Research Project

- ***Coordinated by Christopher Lovelock, Yale University, and Jochen Wirtz, National University of Singapore***
- ***Additional participants include:***
 - ***Javier Reynoso, Tec de Monterrey, Mexico***
 - ***Lu Xiongwen, Fudan University, Shanghai, China***
- ***In discussion with other researchers in India and Africa***
- ***Phase I: literature review (esp. C.K. Prahalad) and case studies***
- ***Phase II: analysis, interpretation, insights, formulation of hypotheses***
- ***Phase III: Further research***

Need to Combat Misperceptions and False Assumptions about “The Poor”

- ❑ **Have no money to spend.**
- ❑ **Are too concerned with filling basic needs to “waste” money on non-essentials.**
- ❑ **Prices for goods and services they currently purchase must be incredibly low.**
- ❑ **Too backward and uneducated to use advanced technologies.**
- ❑ **Open to exploitation by any multinational company that decided to target this market.**

Source: Prahalad and Hammond (2002)

Misperception #1: The Poor Have No Money

- ❑ **Reality:** Yes, individual incomes are very low.
- ❑ **BUT...individuals** may be wrong unit of analysis for identifying opportunities.
- ❑ Instead, consider aggregate buying power of an *extended family* or a *community* (e.g., a village), which may be significant.
- ❑ **Insight:** Design *shared services* for entire community.

Misperception #2: Basic Needs Crowd Out Non-Essentials

- ❑ ***Reality is different:*** Perceived impossibility of saving for decent shelter and access to running water leaves money available to improve quality of life in other ways.
- ❑ ***Result:*** People in BOP communities often buy what conventional wisdom might describe as “non-essential” consumer goods and services.

Examples of “Luxuries” Owned by Households in an Indian Shanty Town

Percentage of Households in Dharavi, a shanty town in Mumbai (Bombay), owning:

TV set	85%
Pressure cooker and mixer	75
Gas stove	56
Telephone	21

Insight: Conventional wisdom on household budgeting patterns does not apply

Source: Prahalad and Hammond (2002)

Misperception #3: BOP Prices Are Incredibly Low

- ❑ ***Reality:*** People in poor communities usually pay much higher prices for goods and services than middle class consumers.
- ❑ ***Causes:***
 - Inefficient distribution systems and lack of economies of scale drive up costs.
 - Existing suppliers often exploit poor consumers.

Comparing Prices Paid by Urban Poor and Upper Class in Mumbai, India

	Dharavi (Inner-city Shanty town)	Warden Road (upper-class suburb)	<i>Poverty Premium</i>
Credit (annual interest rate)	600-1000%	12-18%	<i>x 53</i>
Municipal-grade water (per cubic meter)	US\$1.12	\$0.03	<i>x 37</i>
Phone call (per minute)	US\$0.04–0.05	\$0.025	<i>x 1.8</i>

Source: Prahalad and Hammond (2002)

Misperception #4: BOP Consumers Can't Use Hi Tech

- ❑ ***Reality:*** Lack of money and education doesn't prevent poor people from quickly learning to use advanced technologies.
- ❑ ***Bonus Point:*** Poor consumers may even accept latest technology faster than some users of existing technologies, who sometimes resist switching.

Examples of Technology Use by BOP Consumers

- ❑ ***Bangladesh:*** Rural women have had no difficulty using mobile phones despite no prior exposure to telephones.
- ❑ ***Kenya:*** Teenagers from slums are being successfully trained as web page designers.
- ❑ ***El Salvador:*** Poor farmers use telecenters to negotiate crop sales by Internet.
- ❑ ***India:*** Women in coastal villages learned in less than 1 week to use PCs to interpret real-time satellite images showing fish concentrations in sea, so that they can direct husbands to best fishing areas.

Source: Prahalad and Hammond (2002)

Misperception #5: Large Companies Exploit the Poor

- ❑ ***Reality:*** Informal economies serving poor communities are full of inefficiencies and exploitative local intermediaries.
- ❑ ***Insights:*** Challenge for new entrants:
 - provide services adapted to BOP needs and cultural preferences;
 - better quality than existing offerings;
 - lower, fairer prices that still cover costs and generate a fair rate of return
 - seek to build community partnerships

Four Case Studies

- *Microfinance for farmers in Bolivia*
- *Retail banking for first-timers in Mexico*
- *Village phone concept, Bangladesh*
- *A logistics cooperative in India*

Microfinance: Low-Cost Business Model for PRODEM'S Services in Bolivia

- ❑ **Challenge: Offer loans to small farmers but reduce marginal cost per customer.**
- ❑ **Customers get smart cards storing personal details, account numbers, transaction records and a fingerprint.**
- ❑ **This information enables cash dispensers to operate without permanent network connections—key issue in remote areas.**
- ❑ **To extend PRODEM's customer base to illiterate and semi-literate people, machines have touch screens and offer voice commands in Spanish and local dialects.**

Banco Azteca: Retail Banking for Small, First-Time Accounts in Mexico

- **Founded 2002 to cater to 16 million households with incomes of US \$250-1300 per month**
- **Combined income of this group is \$120 billion, but existing banks consider small accounts a “nuisance.”**
- **Not surprisingly, only 1 in 12 currently has a savings account**
- **Banco Azteca founded by CEO of a retail-media-telecom empire that includes Grupo Elektra, Mexico’s largest appliance retailer**
- **Slogan: “A bank that is friendly and treats you well”**

Source: Business Week

Banco Azteca: Located in Branches of the Elektra Chain of Appliance Stores

- Takes advantage of Elektra's 50-year experience with consumer credit (70% of merchandise sold on credit)
- Elektra has 97% repayment rate on credit sales and rich database of customer credit histories
- Credit departments in each store converted into Azteca branches with expanded line of services



Banco Azteca (cont.)

- **Simple, non-threatening banking desks installed in back of store next to existing credit office (not shown—it occupies a fortified room to right of picture)**
- **Bank has invested heavily in IT, including hi-tech fingerprint readers that eliminate need for printed IDs or passbooks**
- **Also takes services to people with 3000-strong force of loan officers on motorcycles**



Village Phone Concept from Grameen Telecom, Bangladesh

- ❑ **Challenge: State telecom service in Bangladesh does not serve many rural villages**
- ❑ **Although villagers have per capita incomes of <\$200 per year, demand for telecom service is high to reach relatives working in cities or abroad; also to learn agricultural prices and plan sales of produce**
- ❑ **In response, Grameen Bank set up mobile telecom subsidiary to provide service to unserved rural villages**

Grameen Telecom (cont.)

- ❑ Grameen Bank selects woman of high status in her village with existing credit record. She purchases a mobile phone from Grameen Telecom with aid of a micro-loan from the bank**
- ❑ Grameen Telecom installs necessary (but inexpensive) mobile relay, supplies rate sheet and timer**
- ❑ Villagers rent phone by the minute and calls are timed by the entrepreneur, who pays wholesale rate**
- ❑ Average revenue per community is \$120/month
Entrepreneur nets about \$720/year**

Reliable, Low-Tech Package Delivery: NTBSA in Mumbai (Bombay), India

- ❑ **Nutan Tiffin Box Suppliers Association (NTBSA) of Mumbai (Bombay) delivers 175,000 lunch boxes daily; responds to Indian culture of families providing workers with a hot lunch**
- ❑ **Lunchboxes picked up from customers' homes in suburbs, delivered to workplace in central city; empty boxes then collected and returned to customers' homes—350,000 transactions daily**
- ❑ **In operation since the 1890s**
- ❑ **5000 dubbawallahs work in 200 teams of 20-25 members, each serving up to 30 customers; teams elect an executive committee of 5 to governs entire co-op**

Indian Railways' Suburban Services Provide the System's Transportation Infrastructure

- **Rail network of Mumbai is dense, funnels into compact city centre from outlying suburbs**
- **Trains are frequent and reliable**
- **NTBSA carries lunch packages up to 25 km for monthly service fee of US \$4.00**



The Dubawallahs Emerge from Churchgate Station in Mumbai with Incoming Packages

- **NTBSA employs 5,000 semi-literate (7th grade education) workers known as dubawallahs (package delivery men)**
- **Each dubawallah is an independent businessman who markets service to up to 30 customers**



Inbound Sort: Packages Grouped According to Delivery Areas in City

- **All team members come from same villages, have strong social bonds, common language, pride**



Alphanumeric Coding is Key

- ❑ Coding system requires workers to aggregate and sort boxes twice
- ❑ Minimal errors, on time
- ❑ Each box has a unique code number
- ❑ Better than Six-Sigma record on delivery— one lost box in 6 million transactions!



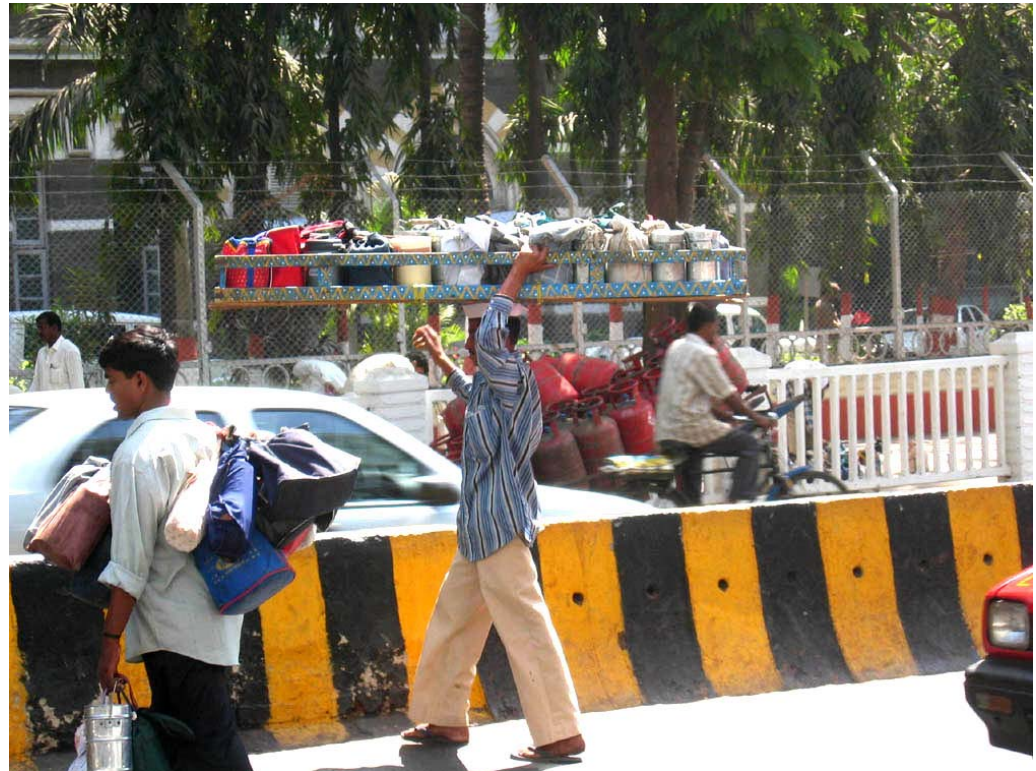
Team Members Help Each Other Load Package Trays on Their Heads

- Tray of lunchboxes weighs up to 80 kilos (176 pounds)
- Carried on dubbawallah's head



Setting Off for Customers' Offices with Their Lunchboxes

- **System's strength reflects common protocols, disciplines, shared agenda**
- **Entire system is self-regulating and totally scalable**



Alternative Carrying Method with Fewer Boxes

- **C.K. Prahalad suggested in HBR article that system might be expanded to other products, other cities**
- **Our conclusion: Wouldn't work on large scale outside Mumbai**
 - **Unique rail system**
 - **Mild winter climate (lunches don't get cold)**
 - **Perfectly balanced volume inbound-outbound**
 - **Stable, predictable demand on each route**
 - **All packages same size--simplicity is key**



Insights from Phase I Will Yield Hypotheses for Future Research

- ❑ **Start thinking about developing concepts and frameworks:**
 - **Community as unit of analysis versus individuals**
 - **Segmentation – rural and urban poor have different needs, options**
 - **Bottom-up *and* top-down approaches**
 - **Focus on costs rather than convenience (use abundant low cost labor and self-service)**
 - **Find creative ways to leverage power of technology**
 - **Keep systems simple and non-threatening, leverage existing channels**
 - **Develop shared access business models – “rental” services replace ownership**
- ❑ **Implications for serving the low end in developed markets – greater efficiency, access to innovation.**

End

