

CellBazaar, a mobile-based e marketplace: Success factors and potential for expansion

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Mobile2.0: Beyond voice
ICA preconference
May 2009

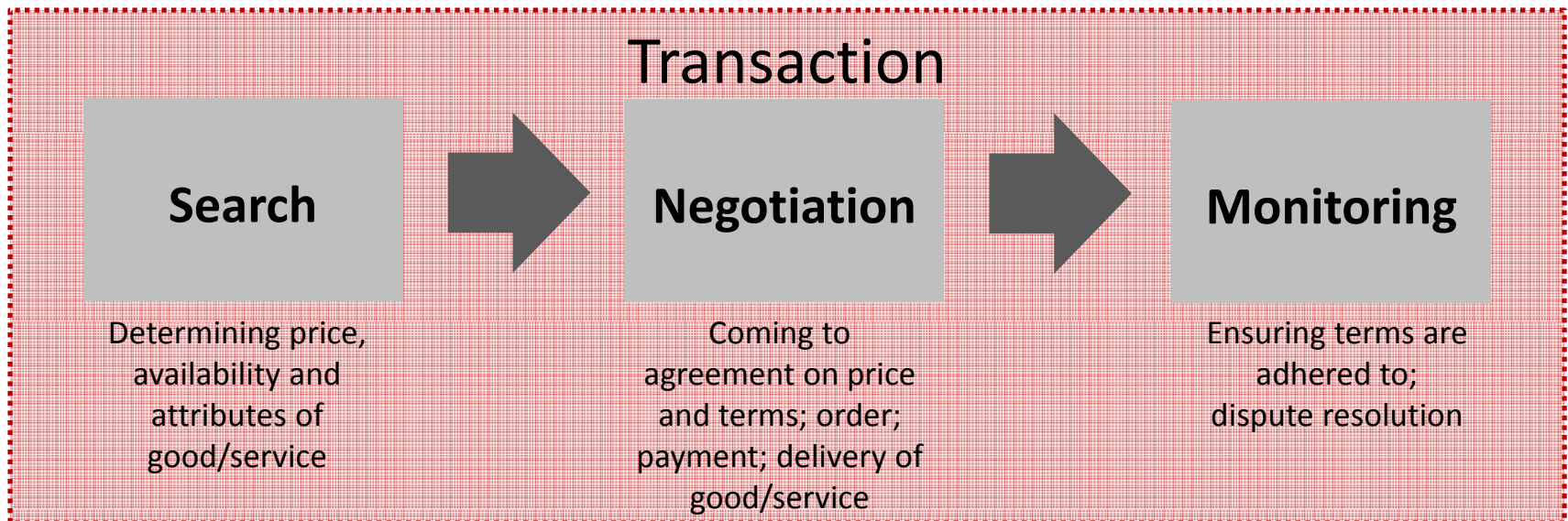


Study rationale and objectives

- E commerce reduces frictions in markets
 - “e marketplaces” → expansion of markets and development of new ones
 - Developing world has lagged behind due to access, affordability and infrastructure (e.g., secure payments)
 - Mobiles offer new opportunities for developing world
- Examine the reality of e marketplaces in developing countries; example of CellBazaar (Bangladesh)
 - Evaluate CellBazaar
 - Evaluate potential for expansion
 - Application as is (success factors)
 - Extension into more of the e commerce domain

E marketplaces defined in this research as:

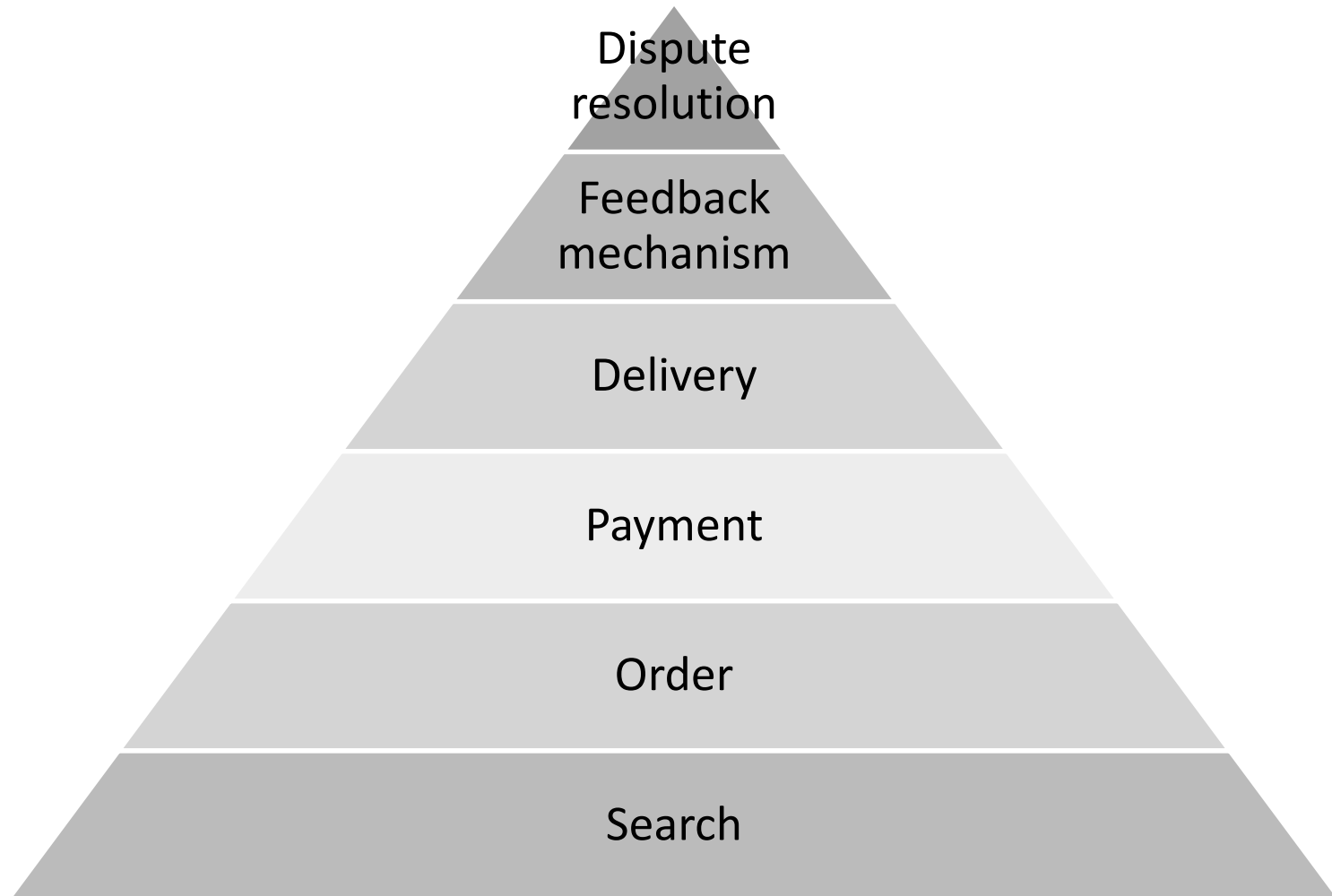
- Any type of application which electronically supports any component of a commercial transaction
 - Can be PC-based, mobile-based, hybrid, etc. (as long as there's some e in any one of the components)



E marketplaces . . .

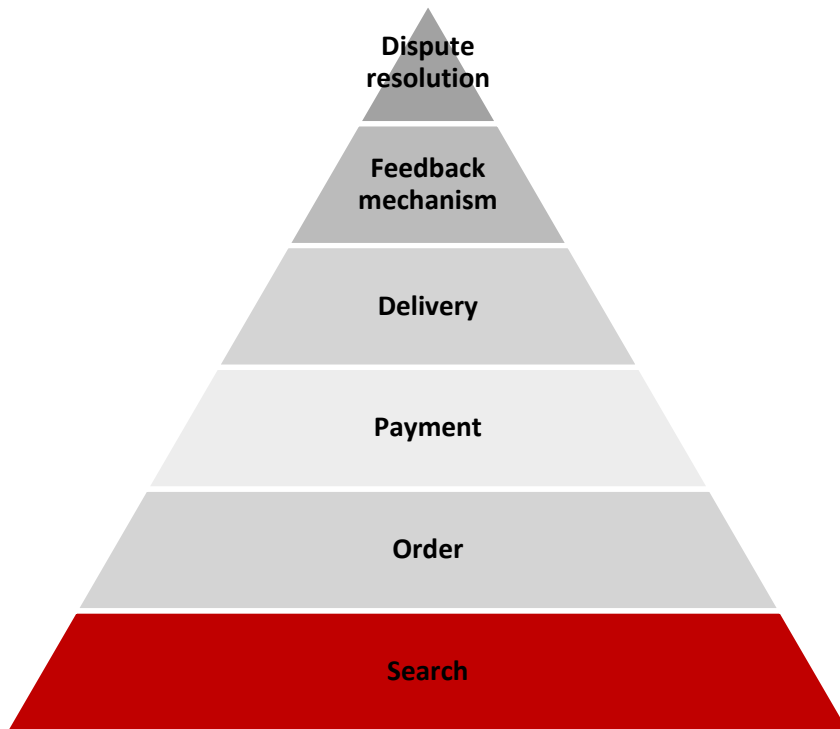
- Reduce transaction costs (costs of making economic exchange)
 - Increase consumer surplus
 - Increase producer surplus
 - Reduce wastage (in the case of perishable goods)
 - New markets opportunities (esp. long-tail products)
 - Reduce cost of setting up shop for small sellers (under certain circumstances)

Different e marketplaces provide one or more functions, starting with search

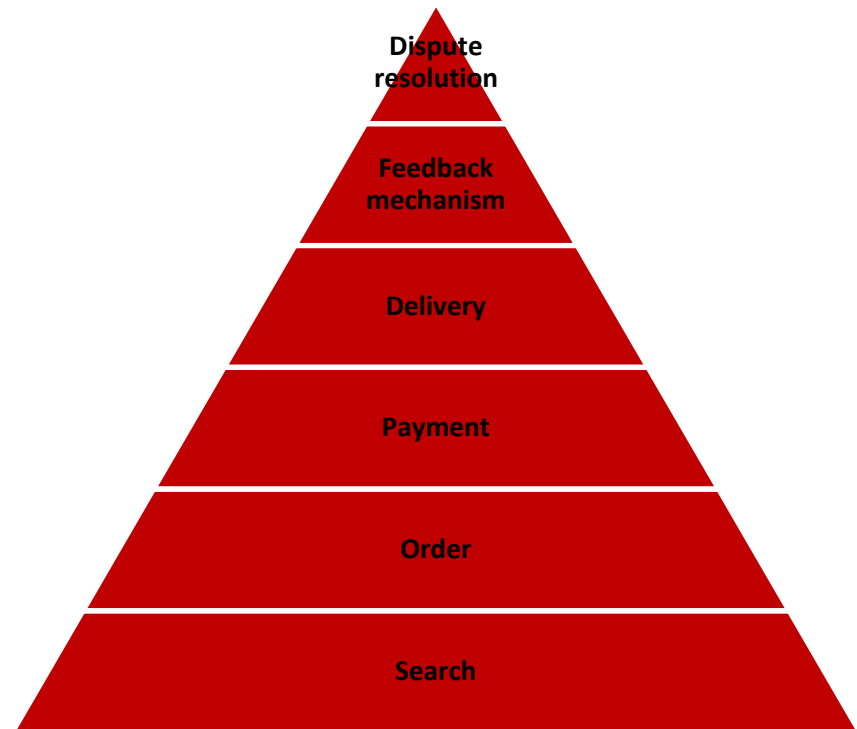


Different e marketplaces provide one or more functions, starting with search

CellBazaar



Amazon Marketplace



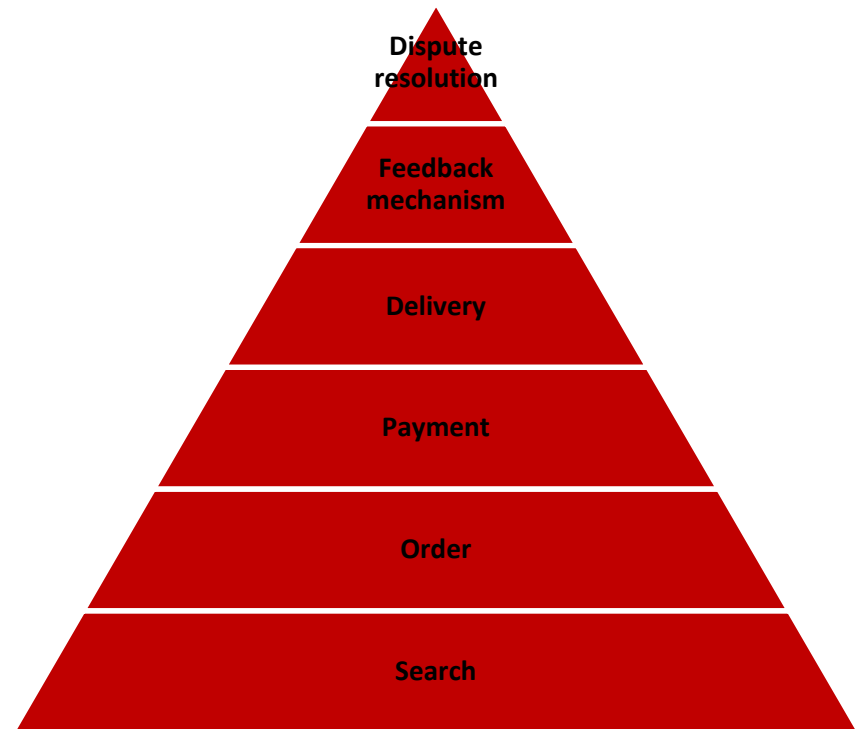
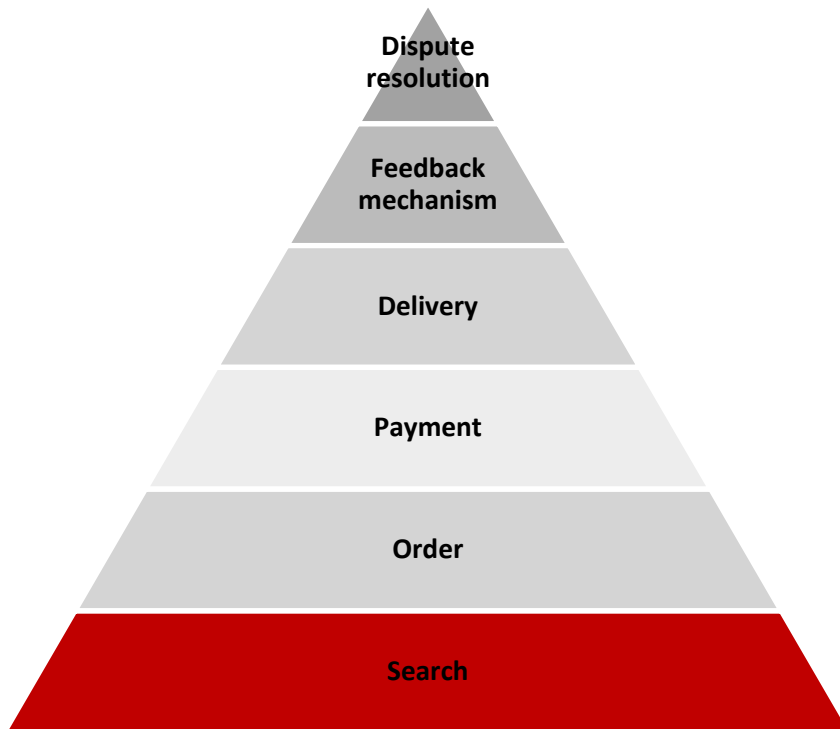
In developing countries . . .

CellBazaar



E marketplace X

?



CellBazaar: The "Craigslist of Bangladesh"

- Potential buyers and sellers can **search for, and post information on** goods and services for sale
 - Price (optional)
 - Description
 - Seller contact info and location
 - Photo (optional)
- Can be used through Grameenphone mobile (SMS/WAP/IVR*) and computer (Internet)
- System operates in English language (except IVR)



Posting and searching through SMSs (min. 5)

WAP and Internet posting also available, but SMS most popular; IVR option also available for search

[Home](#) | [Experience](#) | [Sms Buy](#) | [Sms Sell](#) | [Wap](#)



1. SMS **sell** t
- ▶ Get reply **S**
2. SMS **2** to :
- ▶ Get list of t
3. SMS **7** to :
- ▶ Get list of f
4. SMS **5** to :
- ▶ Get an exa information
- ▶ Delete all e and word "
5. Send edit
- ▶ Get confirm available fc

[Home](#) | [Experience](#) | [Sms Buy](#) | [Sms Sell](#) | [Wap](#)



1. SMS **buy** to **3838**
- ▶ Get reply **Buy what?** followed by list of choices
2. SMS **2** to **3838** to choose used items
- ▶ Get list of used items
3. SMS **3** to **3838** to choose fridges
- ▶ Get list of fridges
4. SMS **6** to **3838** to choose Samsung fridges
- ▶ Get list of price range for Samsung fridges
5. SMS **4** to **3838** to choose items above TK 20000
- ▶ Get full description of item for sale
- ▶ Call phone number of seller



Promote Shop on Facebook!

Search by Mobile 017XXXXXXXXX Search

Search by Item Item name Search

Browse All Categories | Locations

5 items found in Agri-Retail - Camel | Page 1 of 1

Posting: new items first

Narrow Search

- Selected Filters
- Category Indian (5)
 - Price Above 10000 (5)
 - Dhaka Gabtali (5) | Outside Dhaka

<< First < Prev 1 Next > Last >>

Item		Price (Tk)	Posted
8 Teeth 6 Years	Indian From Gabtali	150,000	Mar 26 03:10 AM
Origin Rajasthan	Indian From Gabtali	220,000	Mar 22 06:01 PM
Origin Rajasthan	Indian From Gabtali	190,000-220,000	Mar 22 05:48 PM

Origin Rajasthan Full View | Close

Category [Agri-Retail](#) [Camel](#) [Indian](#) | Location [Gabtali](#)

Tk. 250,000
 Summary
 Origin Rajasthan, 2 Teeth, Weight- 250-300Kg, Height 6', Length 7', Color Brown

Details
 Camel sale only during Qurbani.
 Posted Mar 22, 2009 05:38 PM

Call
 01726027032

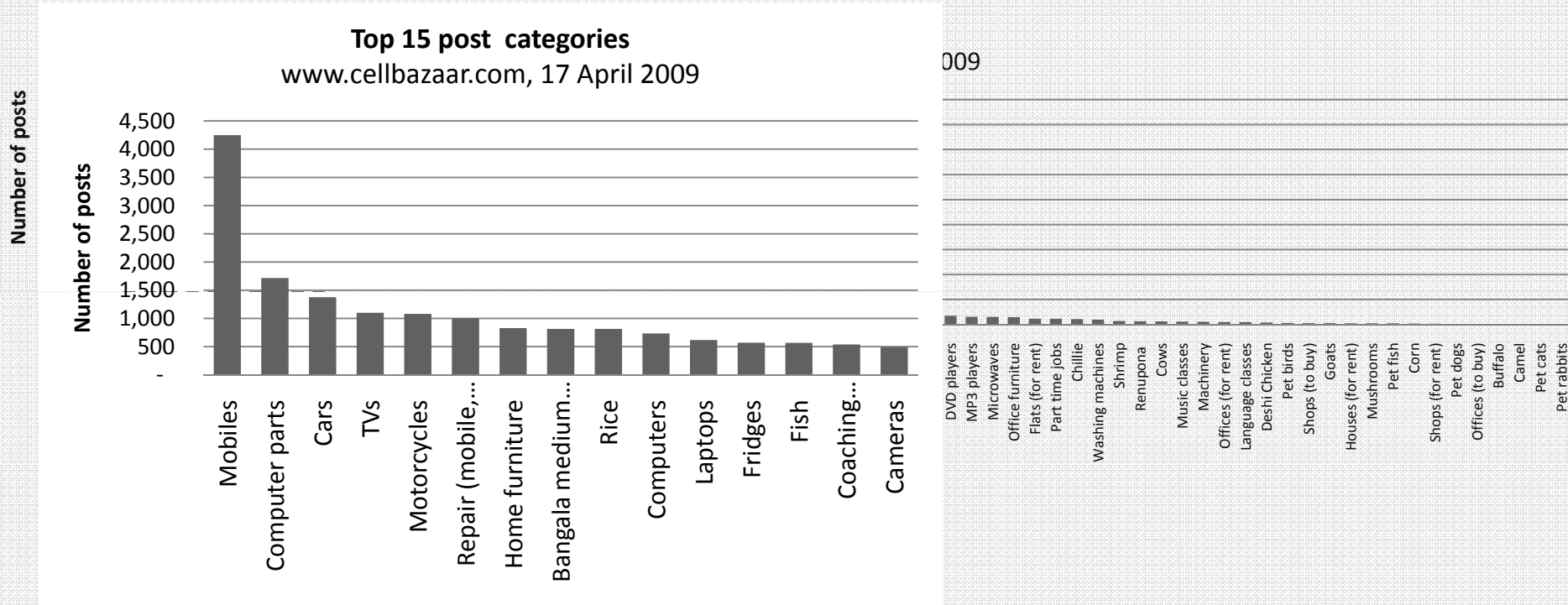
[+](#) Favorite [Seller Shop](#) [SHARE](#)



Origin Rajasthan	Indian From Gabtali	350,000	Mar 22 05:11 PM
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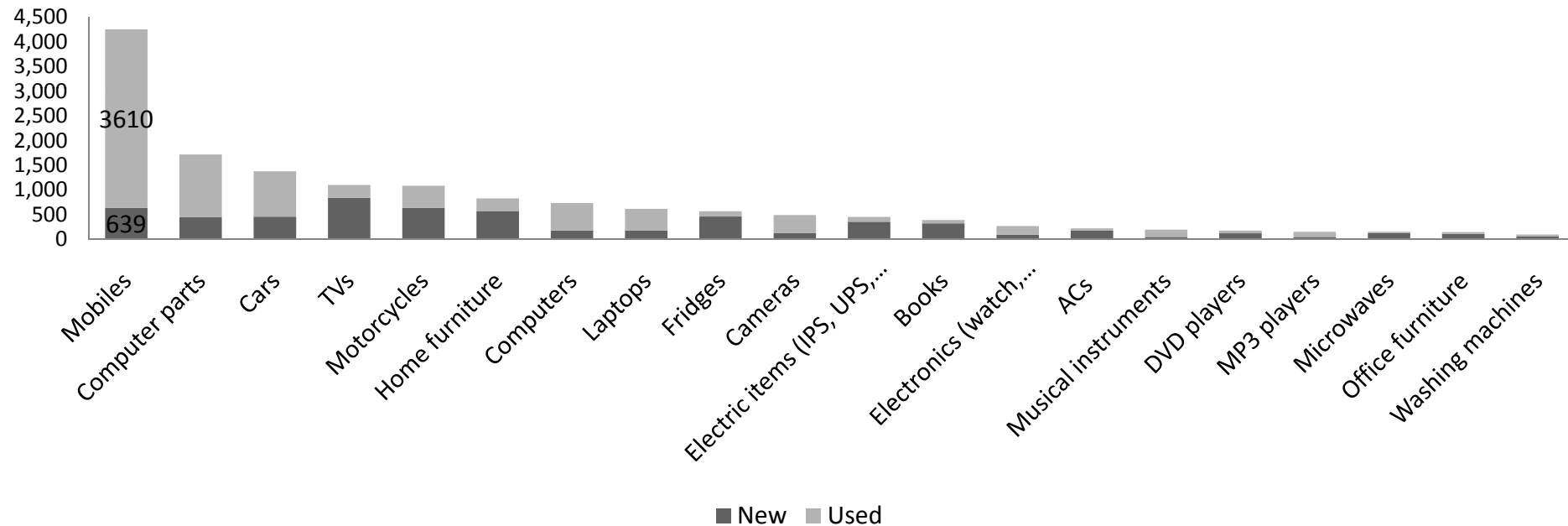
69 predefined categories to select from



- Communication devices (mobiles, computer parts, TVs, computer parts, laptops) constitute 5 of top 15 post categories

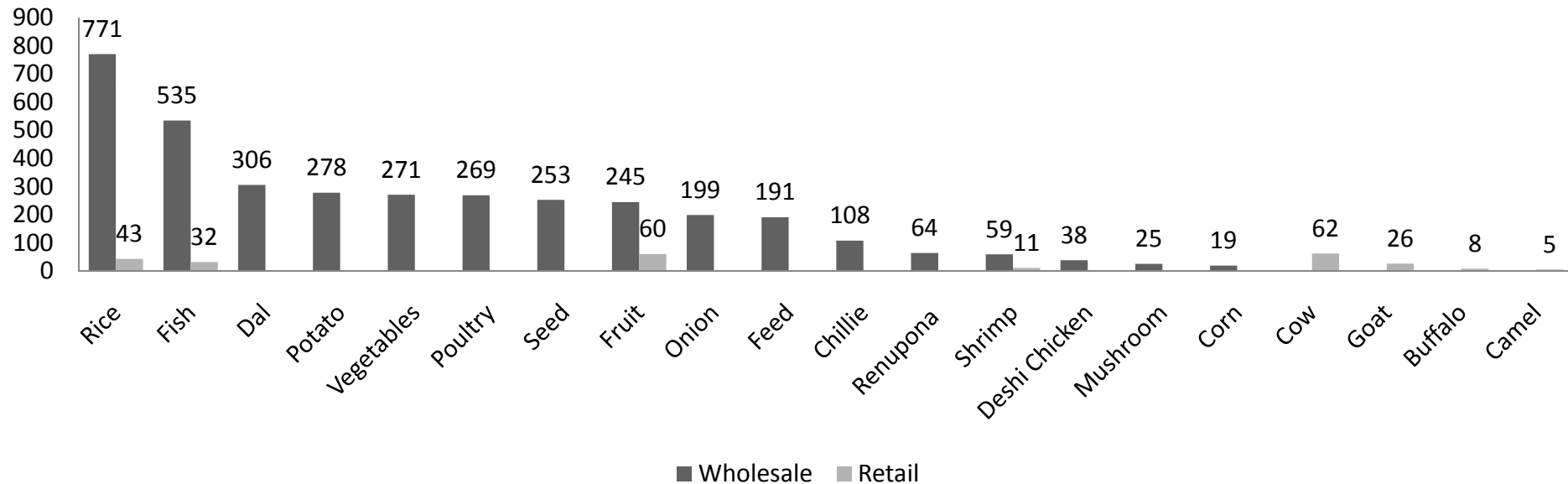
Some categories sub-divided into new and used

New vs. old items for sale
www.cellbazaar.com, April 17, 2009



Agri-produce sub-divided into wholesale and retail

Wholesale vs. retail agri-products
www.cellbazaar.com, April 17, 2009



- Posts can be updated as needed

Success?

- 1 million + users (2008)
 - 25% repeat users
- 550+ new posts per day
 - 51% from rural areas (internal market study)
 - “almost all” via mobile
- “Two out of ten sellers surveyed were able to sell their items within ten days of posting” (survey reported by CellBazaar)
 - → Successful transactions?
- Multiple awards (e.g., 2008 GSMA award for best use of mobile for development)
- Said to be cash-flow-positive, but revenues appear modest

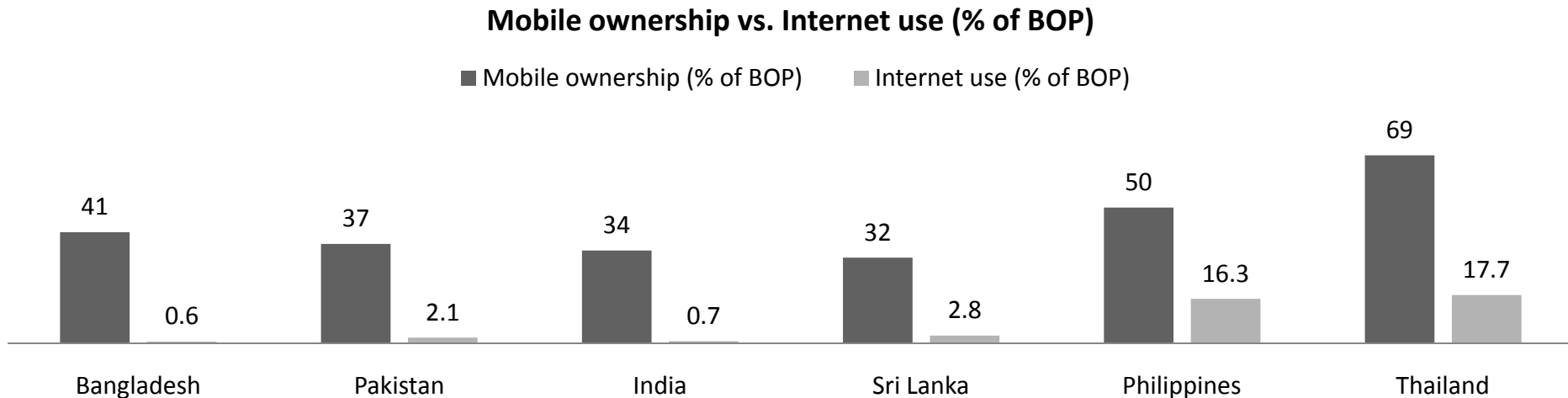
CellBazaar estimated revenue shares (based on LIRNEasia estimates (May, 2008) with information available in public documents)

		<i>Assumptions</i>
Sellers (annual)	200,750	<i>Each ad posted by unique seller</i>
SMS per seller	5	
Seller SMS generated (annual)	1,003,750	
Buyers (annual)	799,250	<i>Total 1 m users (annual)</i>
SMS per buyer	7	<i>At least two posts viewed</i>
Buyer SMS generated (annual)	5,594,750	
Total SMS generated (annual)	6,598,500	
Revenue per SMS (USD)	0.014	
Total SMS revenue (annual, USD)	95,596	
Total SMS revenue (monthly, USD)	7,966	
CellBazaar revenue estimate 1 (monthly, USD)	1,992	<i>25% revenue share with Grameenphone</i>
CellBazaar revenue estimate 2 (monthly, USD)	3,983	<i>50% revenue share with Grameenphone</i>
CellBazaar revenue estimate 3 (monthly, USD)	5,975	<i>75% revenue share with Grameenphone</i>

Can the model work elsewhere? Success factors in Bangladesh

Success factor 1

- High mobile penetration, low Internet penetration
 - Requires minimal mobile handset capabilities (SMS)



Success factor 2a

- Affordable access (handsets)
 - Large market for second hand handsets, with low prices
 - Not the cheapest in T@BOP 3 study countries, but . .

	Bangladesh		Pakistan		India		Sri Lanka		Philippines		Thailand	
	Brand new	Second hand	Brand new	Second hand	Brand new	Second hand	Brand new	Second hand	Brand new	Second hand	Brand new	Second hand
Mean	58	35	47	27	48	35	65	36	63	28	96	38
Std Deviation	27	24	45	22	36	20	51	32	33	19	83	38
Mode	43	29	39	26	33	33	46	28	54	22	0	0

Success factor 2b

- Affordable access
 - User only pays standard SMS/airtime/WAP charges

SMS charges in South Asia (February 2009)

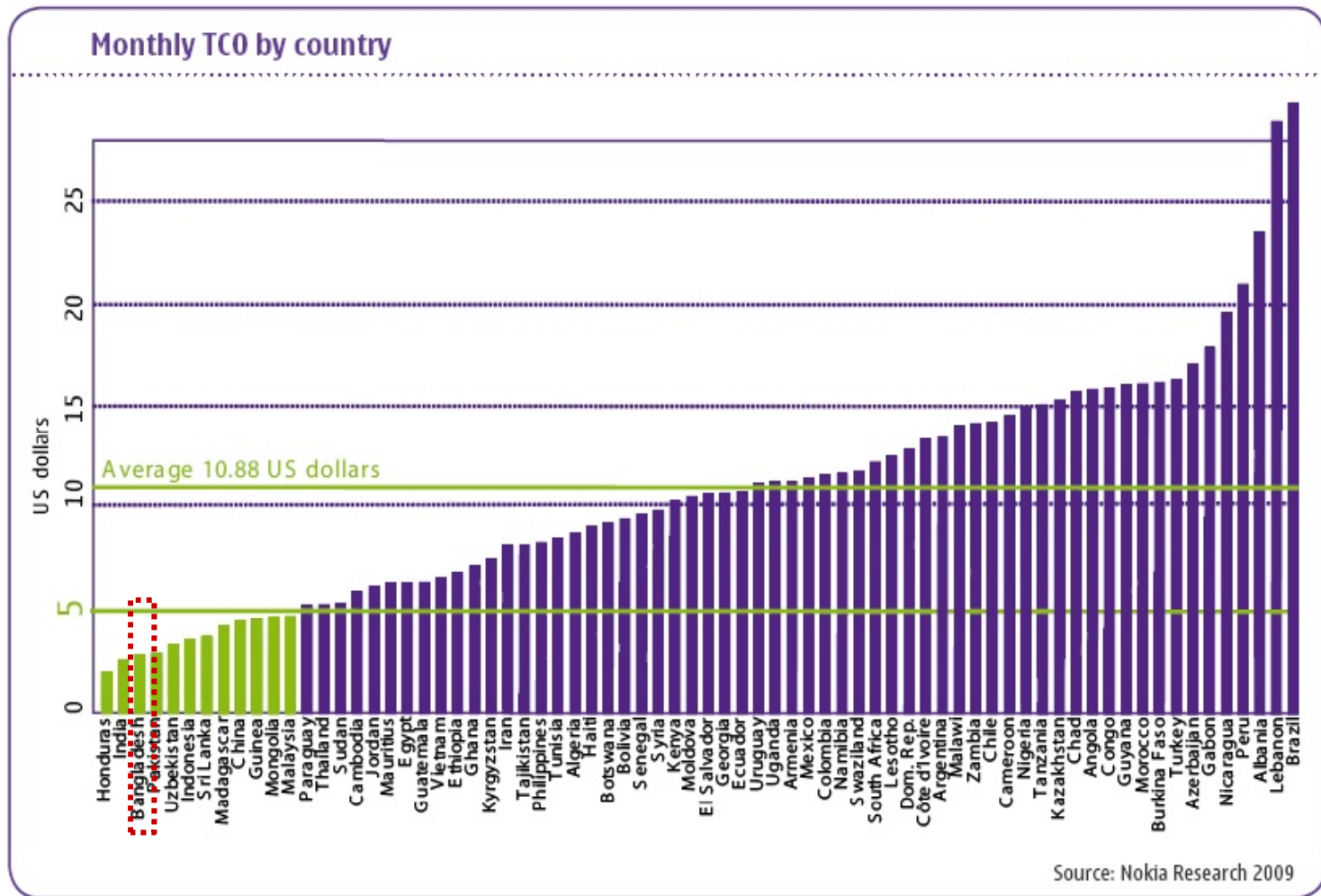
	Afghanistan	Nepal	Bangladesh	Pakistan	India	Bhutan	Sri Lanka	Maldives
On-net	0.048	0.013	0.014	0.013	0.02	0.021	0.009	0.015
Off-net	0.048	0.025	0.014	0.013	0.02	0.021	0.018	0.039

Source: LIRNEasia Mobile Benchmarks

<http://lirneasia.net/wp-content/uploads/2007/08/09-02-sa-baskets-explained-v1-0.pdf>

Cost of 5 SMSs within Grameen = USD 0.07

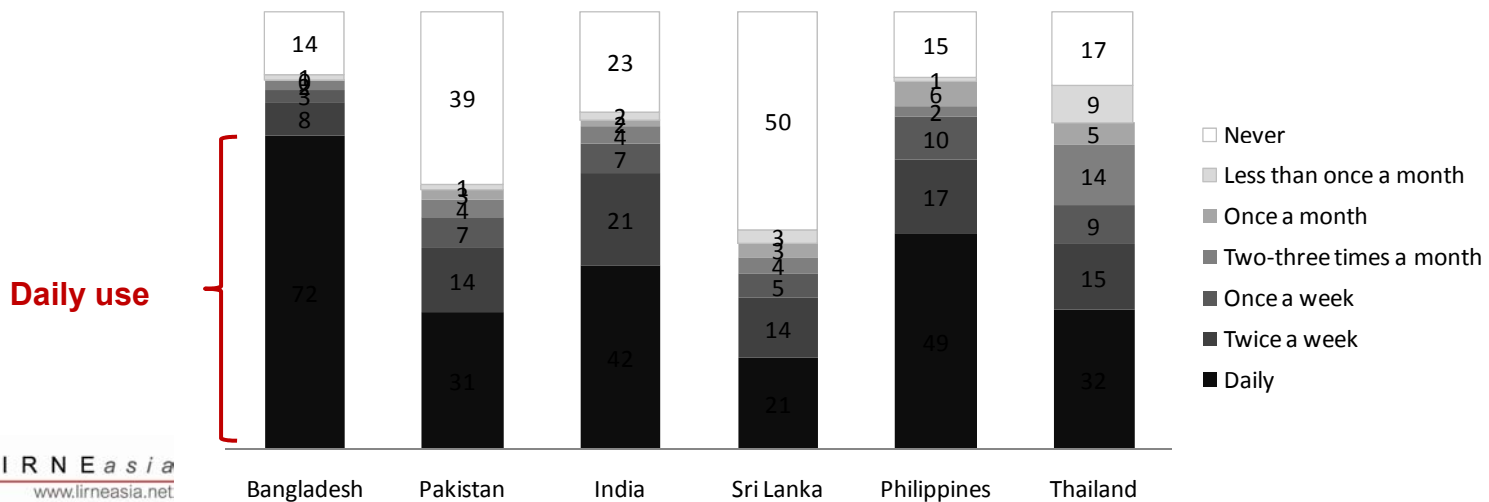
Bangladesh among the lowest priced in the world, according to Nokia and LIRNEasia



Success factor 3

- Exclusively partnered with largest operator
 - 20 million + potential user base, with extensive rural coverage (98% of country plus part of India)
 - Association with established, trusted brand
- Entrepreneurial culture

Use of the phone for financial, business or work-related purposes (% of BOP mobile owners)



Potential for expansion?

(Considering the more complex case of goods)

- What will it take to go from



to



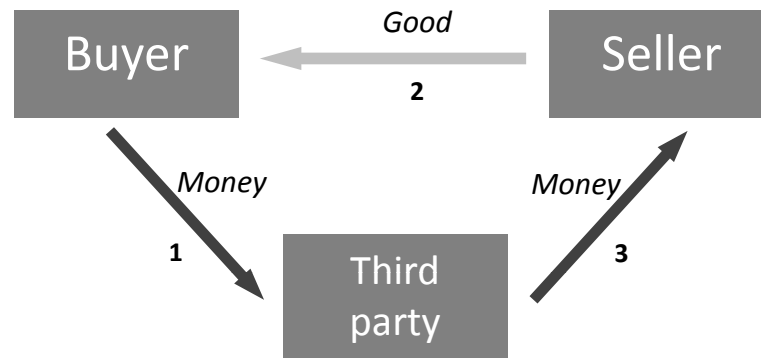
Problems with shopping in e marketplaces

- Asymmetric information
 - Seller has better information than buyer; incentives for
 - False representations (adverse selection)
 - Bad behavior (moral hazard)
 - Problems more pronounced where goods are less standardized and second-hand
- For any commercial transaction trust is necessary
 - Even more in e marketplaces

Pre-transaction concerns and options

Concern	Options
Trustworthiness of seller information	<ul style="list-style-type: none"><li>• Feedback system to regulate seller behavior → feedback on seller's past behavior from a few dispersed past buyers distributed to many potential buyers<li>• Initiation cost (Grameenphone SIM)

Payment concerns and options



Concern	Options
Assurance that seller will deliver; assurance that buyer will pay	<ul style="list-style-type: none">• Introduction of third party guarantor to assure payment and delivery
Trustworthiness and security of payment mechanism; ability to track payment (buyer); promptness of payment (seller)	<ul style="list-style-type: none">• Use of mobile payment system (accessible, affordable). Barriers:<ul style="list-style-type: none">• Lack of policy framework for mobile payments• Possible lack of uptake among BOP

Post-payment concerns and options

Concern	Options
Assurance that seller will deliver within reasonable time; assurance that seller will respond to complaints	<ul style="list-style-type: none">• Feedback system to regulate seller behavior → feedback on seller's past behavior from a few dispersed past buyers distributed to many potential buyers• Initiation cost (Grameenphone SIM)• Dispute resolution options, e.g., cancellation of account
Secure, cost-effective delivery mechanism with tracking options	<ul style="list-style-type: none">• Private courier companies; affordable?• National postal service; reliable? Adaptation and modernization will be required to support e commerce

Conclusions

- Great potential for mobiles to transform e commerce in developing countries
 - Reduced transaction costs across components of a transaction → more efficient markets
 - Limitations in access, security, etc. have thus far precluded uptake
- CellBazaar represents a working form of e commerce for the developing world
 - Further research on economic impacts with respect to agri-products (similar to Jensen (2007) and Aker (2008)) would be useful
- Several issues of trust, infrastructure and policy which need to be overcome to extend the service
 - Infrastructure and policy will be the most problematic