

Business model innovations for scaling-up drinking water businesses in developing countries

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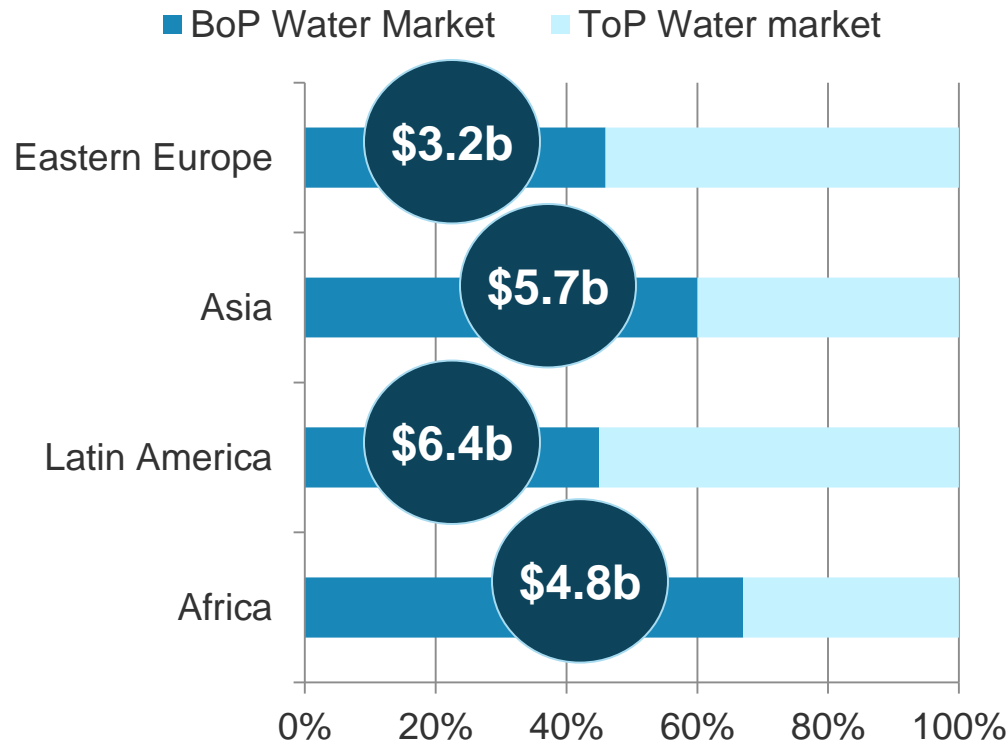
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A viable water market creates business opportunities

BoP (Base of the Pyramid) market share of total water markets

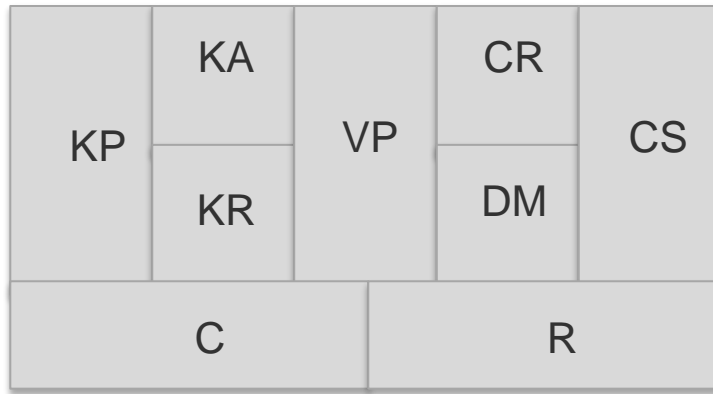


Appropriate water treatment technologies exist

	Household (individual) treatment technologies	Community-based treatment technologies
Small and medium-sized firms (SMEs) or NGOs	<ul style="list-style-type: none"> • Ceramic filters (NGO International Development Enterprises (IDE)) • Tulip siphon filter (Basic water needs) 	<ul style="list-style-type: none"> • Reverse osmosis water kiosks (Naandi, Sarvajal) • Chlorination plants (Aquasure) • Bone char filters (NDC) • Arsenic removal (Trunz)
Multinational enterprises (MNEs)	<ul style="list-style-type: none"> • Unilever Pureit filter • Procter&Gamble with water disinfectant PUR • Tata Swach (rice husk ash, pebbles, and crushed cement) 	<ul style="list-style-type: none"> • Grameen Veolia (arsenic contamination)
Research institutions	<ul style="list-style-type: none"> • SODIS – Safe water through social behavior change • Gravity Driven Membrane (GDM) • Bone char filters (OSHO) 	<ul style="list-style-type: none"> • Bone char filters (OSHO)

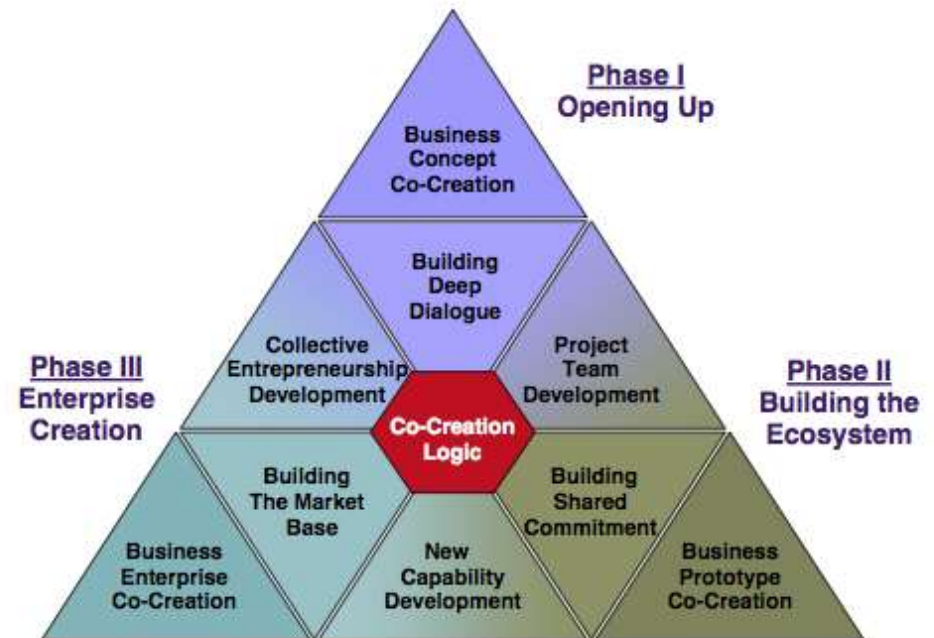
But why is it so difficult to scale-up?

Business model innovation



KP – Key Partner, KA – Key Activities, KR – Key resources, VP – Value proposition, CR - customer relationship, DM – distribution & marketing, Cost – Cost structure, R - Revenues

BoP Protocol 2.0



Simanis and Hart, 2008

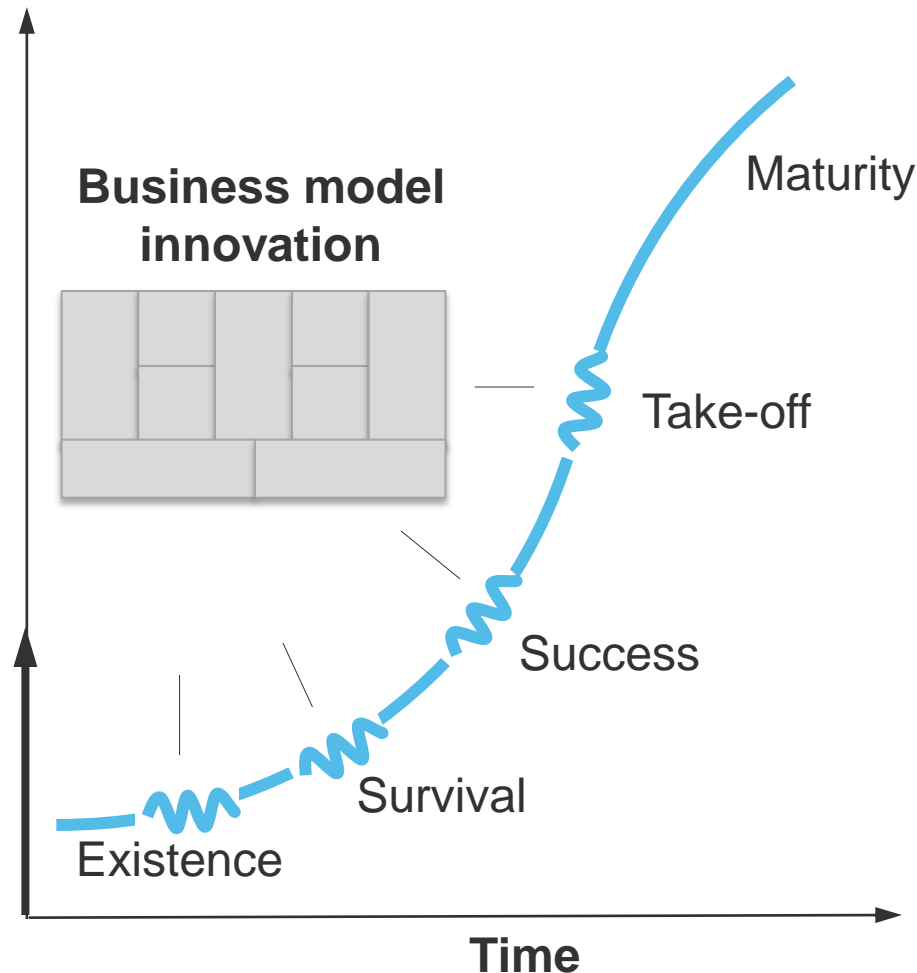
Sampling business ventures in the water market

- **Research methodology** – Qualitative case studies
- **Case characteristics** – **Variety** (type NGO, private firms, size - SMEs, MNEs, or development stage (surviving, successful, or scaling-up))
- **Data collection & analysis**
 - **Primary data** – workshop, interviews, observations
 - **Secondary data** – Reports, presentation
 - **Case study descriptions** – narratives, critical incident techniques
 - **Content analysis** – within-case, cross-case
- **Examples** - Aquasure, Naandi water kiosks, Sarvajal, Unilever Pureit filters, IDE, Medentech, P&G Pur, Antenna Watasol, PSI, 2AEP, AGUATUYA, Healthpoint Services E-Health Points, Inter Aide, IWADCO, Manila Water, PSI Kenya, Osho, Veolia Grameen, Suez Environnement PALYJA

Scaling-up means continuous business model innovations

Penetrating water markets

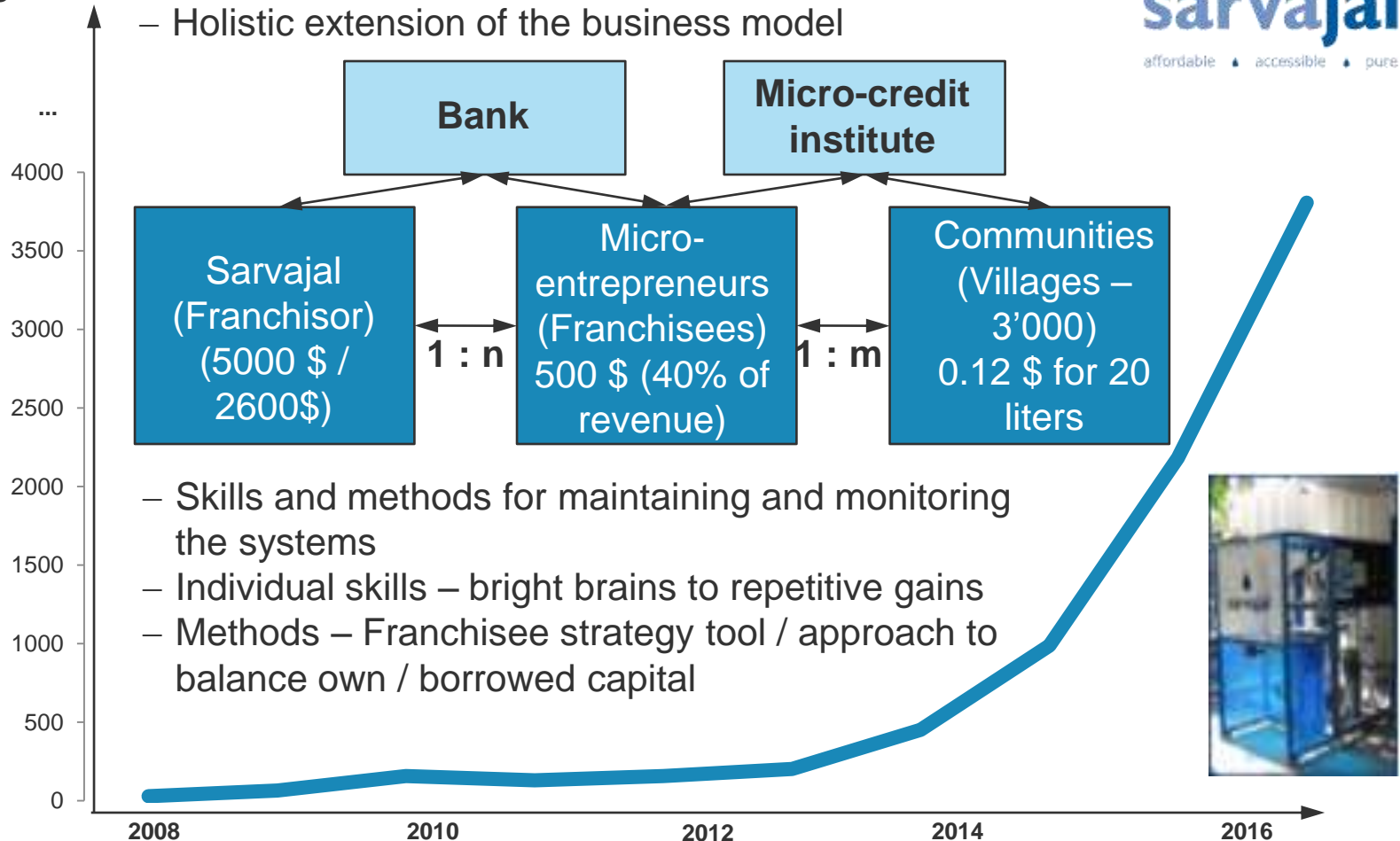
Creating water markets where needs exist



Business model innovation at sarvajal

– affordable, accessible, and pure water

Installed water
systems



Summary of the key finding

- **Strategic planning approaches** (objectives and aims for combining social and profit-oriented goals)
- **Value proposition & marketing** (e.g., PSI as social marketing expert and deep knowledge of BoP customers)
- **Business model extension from the top of the BoP to the bottom** (e.g. Unilever, Tata versus IDE ceramic filters as symbol for poverty)
- Scaling-up as **scaling-out or extending the scope** (e.g., Naandi – small to larger villages, expand the service range to grocery items, mobile phone services and newspapers)
- **Managing a network of micro-entrepreneurs to support the distributions** (e.g. Unilever's 'Shakti' (empowerment) program, micro-entrepreneur disinfecting jerry cans at the lakefront)
- **Micro-credit** (Unilever and Tata) and financial institutions (Aquasure)

**“Experimenting with
business models is a small
step, one giant leap to make
water markets works”**

