



# Medical Device Opportunities in India Today : Marketing, Engineering and More

<http://www.amritt.com/med-device>

*A recorded version will be available at <http://www.amritt.com/Med-Device-Webinar>*

Gunjan Bagla  
Managing Director,  
Amritt, Inc. California

Rajnish Rohatgi  
Senior Med-Tech Advisor  
Amritt, Inc. India

# Chicago Metra Buys 400 Automated External Defibrillators

- \$1 million order on Cardiac Sciences Corp.
- For ~400 PowerHeart G-3 automated external defibrillators
- Cardiac Sciences is owned by Bangalore India-based Opto Circuits, \$64 million M&A



# Medtronic India expands audiology market

August 2013 – Pilot program, ***Shruti***;  
70,000 patient pilot includes

- Medtronic India
- A Mobile health startup with MIT roots
- An Indian design firm
- Dr. Shroff's Charity Eye Hospital, New Delhi, and Health Management & Research Institute, Hyderabad.
- **Goal:**
  - Improve diagnosis and treatment of ear infections



# Helping Medical Device Companies to leverage Emerging Economies

- Working with corporate and business unit leaders at large and emerging device companies in America and Europe
  - Helping them to engage with India/China etc.
- Engage directly with markets or via partners.
- Access technologies, products, tech skills.
  - Directly or via partnerships.

*Amritt Clients include large and small medical technology companies globally*



## Agenda

- 1 Sell *Made in USA* product in India
- 2 Use India's Engineering Skills for Western markets



# Globalize: Reach Next 3 Billion Medical Consumers

## Some Key Characteristics of India Market

- Small wallets (patients, doctors, hospitals)
  - Big chunk of market is out-of-pocket
- Very Low-cost labor (at hospitals, clinics)
- Lower legal risk
- “Radical Redesign” can produce 3x sales multiple compared to “Incremental Cost and price Reduction”



## India is Not China 2.0

- Demand side economy vs. China's supply side situation
  - Creating airlines before airports; cars before highways
- To maximize long term India profit:
  - Reach down to grab the market, before unmet needs are filled by Indian cos.
- Waiting for India to rise up to developed country expectations of price/quality may allow nimble Indian upstarts to eat your lunch.



# India: a Big, Relatively Untapped Market

- 1.2 billion people, \$1.8 trillion economy, growing at ~6%
  - Healthcare market growing at 12-15% annually
  - ~50% of population has no access to western-style healthcare
- Medical Device market is ~\$4 billion in 2013\*
  - Foreign companies have 65% market share by value
- 70% of healthcare expenses are out-of-pocket
- Private Insurance is small, but growing (1% in 2009, ~8% in 2014)
  - Govt. as payer: community insurance for people below poverty line
- Govt. is doubling healthcare spend to 2.5 percent of GDP
  - Most of healthcare is a state (not federal) subject,
  - Low Bidder Wins
- Infectious Diseases still rampant
  - Malaria, Cholera, T.B.
- Lifestyle Diseases are rising rapidly
  - Diabetes, Cardiovascular



\*Amritt estimates



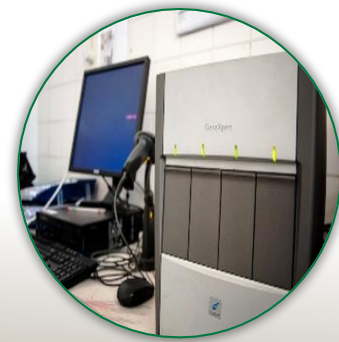
# Recent International Med-tech Entrants

## California's Cepheid, Inc.: \$416 million global sales

- GeneXpert MTB/RIF molecular diagnostic blood test for tuberculosis
  - Cartridge Based Nucleic Acid Amplification Testing
  - Much faster than sputum Culture; also tests for MDRT
  - Special price negotiated by Gates Foundation for Government - \$10
  - If pilot successful at top govt. hospital, national rollout intended
  - Also offered in 15 other countries including Bangladesh, Indonesia, Myanmar, Nepal, Pakistan and Vietnam

## Sweden's Mölnlycke Healthcare: \$1.5 billion global sales

- Wound Care, Consumables (drapes, gowns, masks)
  - Entered in 2012
  - Competes with 3M, Kimberly Clark, India's Romsons ( ~30% of 3M's prices)





# Devices are Regulated as Drugs in India Today

- **Federal regulations under “CDSCO”**
  - Few limitations on what can be imported/sold
  - Foreign approvals from US FDA or EU’s CE accepted
    - Indian inventors currently at disadvantage on multiple counts
  - Many Indian states have their own FDA, in addition
- **Device regulations discussed since 2005**
  - 3 Indian ministries involved: Health, Electronics, Chemicals
  - Bill to be introduced in Parliament, open for public comment in Jan 2015
    - After bill becomes law, regulations may take a year
    - Amritt prediction: see final regulations in ~2016 or later
  - **Foreign companies worry about surprises**
    - Possible knee-jerk reactions by regulators
- **Takeaway:**
  - You will probably need third-party help in filing your first several approvals
  - The process is best handled by someone who specializes in India, rather than a multi-country service provider, who may not be familiar with processes that are not fully documented in India’s current system



# Vast contrasts in quality of service



## Apollo Hospitals

- Featured as Harvard Case Study
- Largest corporate hospital chain,
- 10,000 beds, 56 hospitals, 1,500 pharmacies
- Dr. Prathap C. Reddy, Founder, awarded India's 2<sup>nd</sup> highest civilian honor



## General Hospital

- Not featured by Harvard
- Run by government
- Overcrowding, hygiene are issues

Photo: The Hindu



# Many large, viable segments

## Skim the wealthy cream or Approach the aspiring middle class

- Inpatient facilities
  - Private (for-profit, or foundations)
    - Global class, Corporate: ~100 high - end locations (5% beds)
      - Medanta, Apollo, Fortis, Asian Heart, Narayana Hrudulaya
    - ~500 medium sized legacy hospitals (15% of beds)
    - Thousands of specialty “nursing homes”
      - < 50 beds , 60% of beds
  - Government (tender); Free, 20 % of beds
    - Teaching, research hospitals (750+ beds)
    - State, District , Community (30 to 300 beds)
    - Autonomous government: Defense, Railways, Utility Companies
- Outpatient Doctor Clinics; > 1 million
- Emerging Home Care solutions



*Legacy hospital from pre-independence days*



# Segmenting creatively can uncover profit

**Intravenous Catheters ~ 300 million units; \$75 million annual sales**

## Insight: Traditional Western Target:

There is a willing hidden market niche within this latter population: Margins are similar to those made in Western countries

- Significant portion of remaining population willing to spend more than the base amount, but less than wealthy new Western entrants



## Aspirators

Currently spend 20¢ for quality domestic brand Western Company Value catheters (15% Vol, 40% Value)

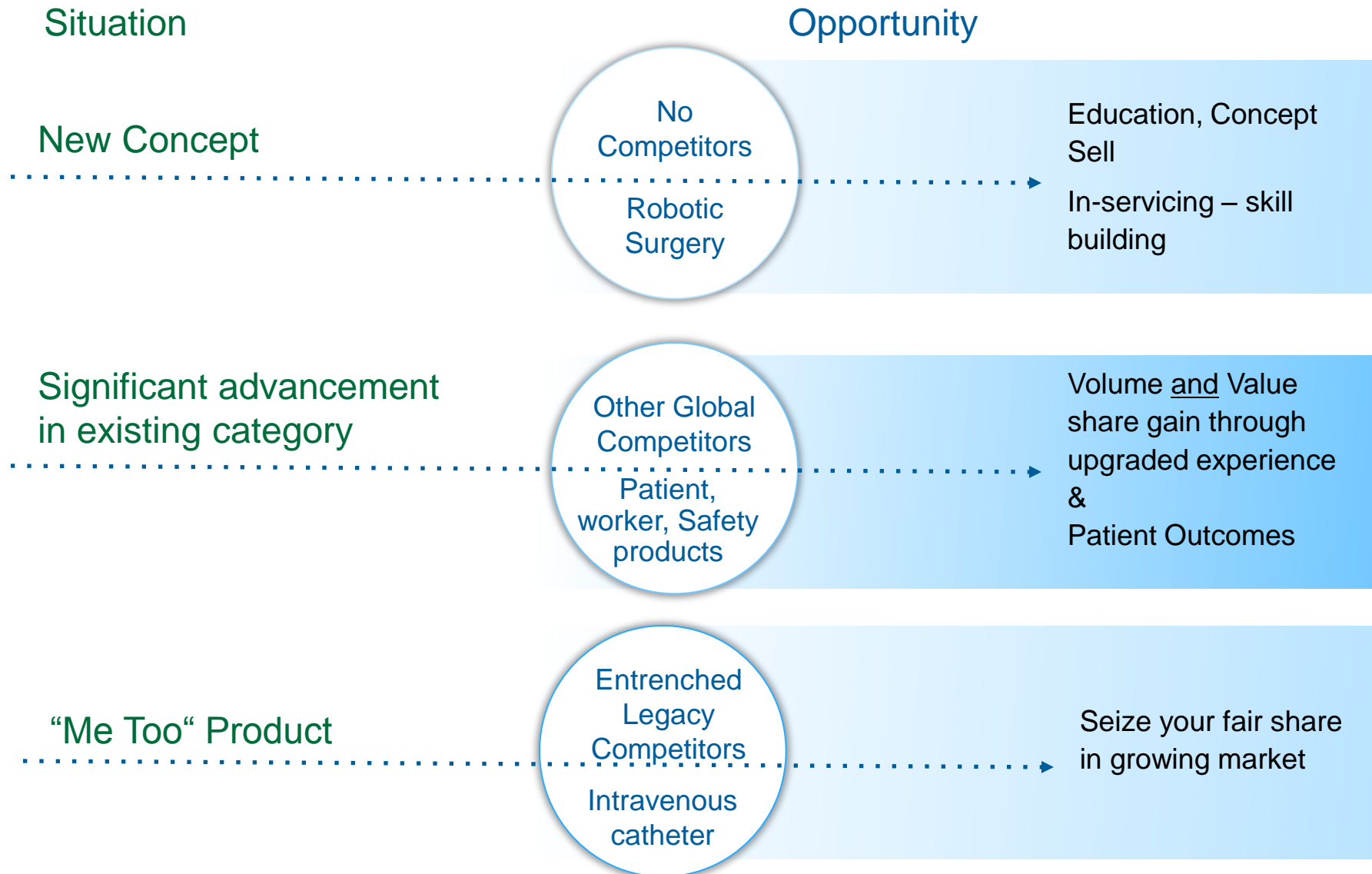
- However, willing to spend a premium for higher, more consistent quality.

## Remaining Population

- Spend 5¢ for winged needle set
- Declining segment



# “Mining” for Med-Tech Treasure in India



# Distributors are fragmented

## Scenario

- Hundreds of “mom-and-pop” regional or metro distributors
- A few claimed “national” distributors
  - Essentially those with stronger finances and ability to handle import licenses. National reach through network of “sub-distributors”
- Box Pushers, wholesalers, limited value added selling
- If your distributor sells your competitors’ products they are less inclined to promote / push yours

## Concerns

- FCPA Compliance
- Disproportionately High Mark-ups
  - Slow share gain
- Transparency in pricing, margins
- Cross channel conflict



# One Creative Amritt Solution

- ***Enter through Distributor..... and combine with a strategic partner***
  - Senior, experienced India-Domain experts, high strategic capability – on a “variable cost” basis
  - Augmented “translational” interface between Company and distributor
  - Custodian of Ethics, Compliance, culture
  - A ready “Sales and Marketing department”
    - Plan, propose, and execute demand generation activities
    - Distributor management, drive commitment to our brand
  - Possible advocacy to shape policy, create long term, multi stakeholder PPPs – positioning company as “knowledge partner”, to address large social health issues, while embedding select technologies as an integral part of the solution





## Agenda

- 1 Sell *Made in USA* product in India
- 2 Use India's Engineering Skills for Western markets



# Engineers in India help Western device companies

## “Captive” Engineering Centers for GE, Siemens, Philips, Covidien, etc.

- GE Lullaby Baby Warmer, a good example
- Designed in and for India, sold in Europe as well
  - External “Engineering Service Providers”
  - For Product design, testing, sustaining engineering
- Clinical Trials of Devices in India
  - Can accelerate time to market in West
- IP and patents in cases above are owned by Western companies

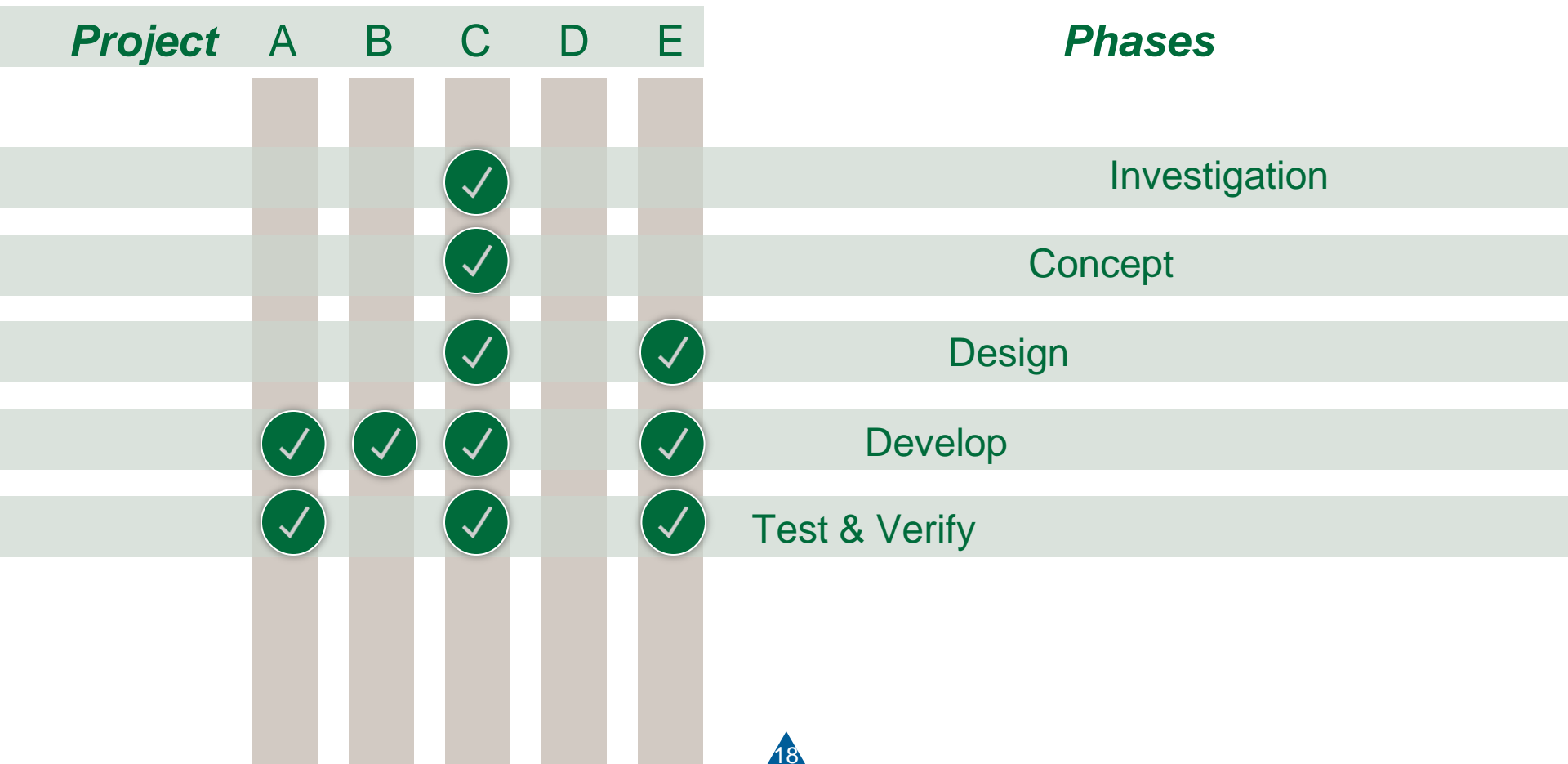


*Lullaby Baby Warmer*

# Selecting the portion of the development lifecycle you can offshore or outsource

Many companies start with offshoring or outsourcing design verification or analytical testing to India/China.

Over time they move upstream in the product development process lifecycle



# Extend U.S. R&D team

(Release US team for higher value projects)



Why captive model selected

- Cost arbitrage
- Establish brand presence
- Improve Time-to-Market



Geographies considered

- Japan
- China
- India



Potential locations in India

- Bangalore
- Hyderabad
- Chennai



Project selection strategy

- Bangalore
- Hyderabad
- Chennai



Path to Captive R&D Center

- Established captive center from the beginning, but outsourced first to start process.
- Benefits of flexibility of outsource resulted in a hybrid model later

---

Company A Case Study

---

# Gain R&D Footprint in Local Economy

(Outsource first – hybrid model later)



Why captive model selected

- Quick ramp to functionality
- Cost arbitrage
- (Later) Maintain some resource flexibility



Geographies considered

- Germany
- China
- Japan
- India



Potential locations in India

- Bangalore
- Hyderabad
- Delhi
- Gurgaon
- Pune



Project selection strategy

- Extension of US teams – Design & Test phases



Path to Captive R&D Center

- Initially outsourced. Moved some work in-house later

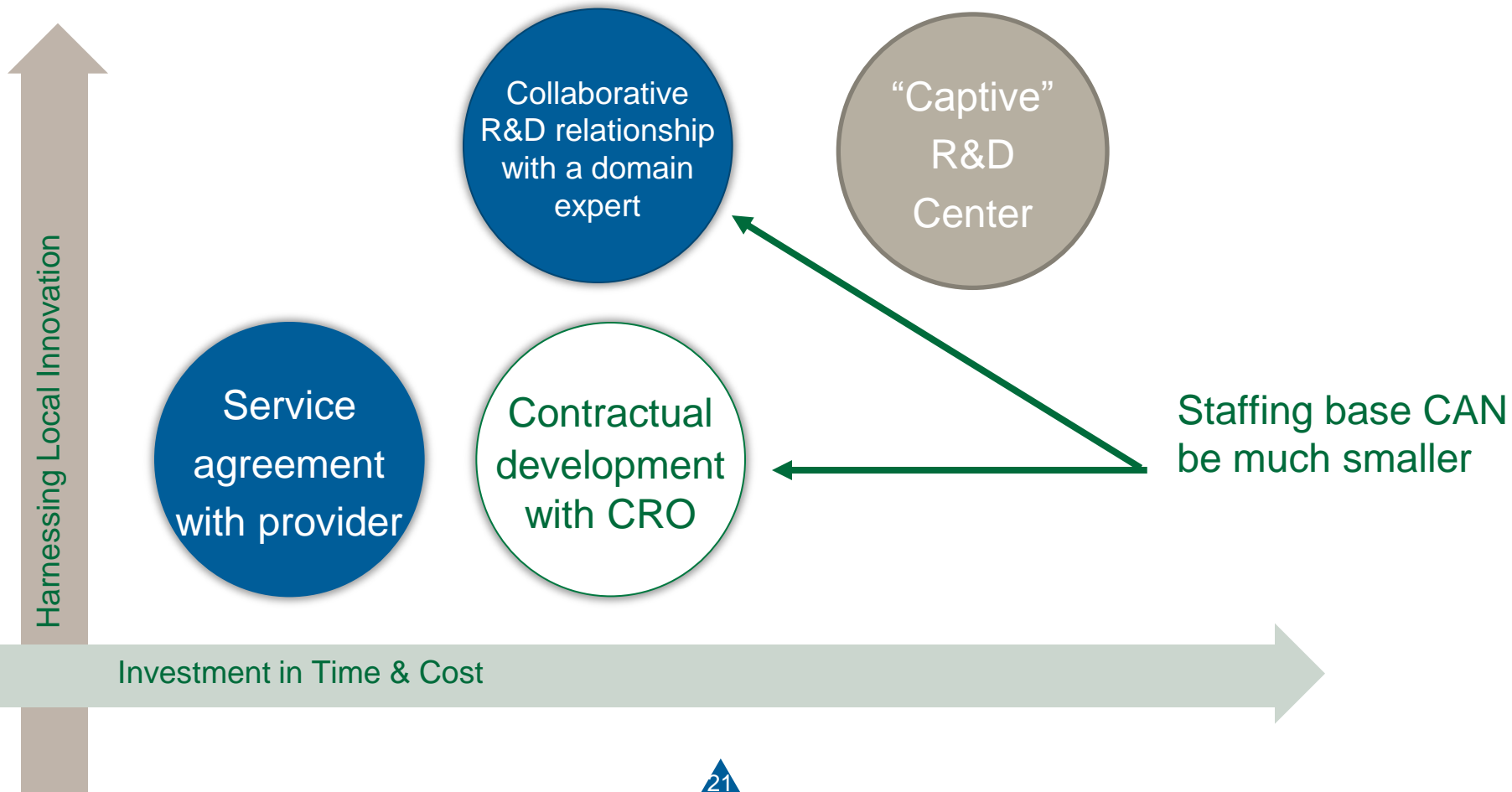
---

Company R Case Study

---

# Balancing Global Medical Device R&D Capabilities

## *Size and Access to Local Innovation*



# India: a Source of Innovation?

- Software talents driving some innovation
  - iPhone Apps, ERP integration, embedded capability
- “Frugal innovation” driven by local needs
  - Use models (pay per use, share, 24x7 operation)
  - Re-usable rather than disposable systems
  - Tele-diagnosis
    - Leapfrogging the landline
    - Fewer legal liability hassles
- A few venture-funded Indian startups address global markets from India
- In these cases patents/IP owned by Indian companies





# Next Steps for Success in India

Send email to request:

Harvard Business Review article on  
*"How U.S. Businesses Can Succeed in India in 2015"*

MedDevice Insights, December 2014:

Pot of Gold or Fool's Gold: Opportunities in India's Medical Device Ecosystem

***Contact us for any questions, advice , guidance on entering,  
on expanding into India's Med-Tech market,  
on sourcing from India or  
on using India's engineering talent***

Amritt, Inc.

[usa@amritt.com](mailto:usa@amritt.com)

(562) 402 - 4435

