



Market expansion of medical devices into India

Case study

BA developed a market expansion plan for a US-based medical devices manufacturing company for the India market

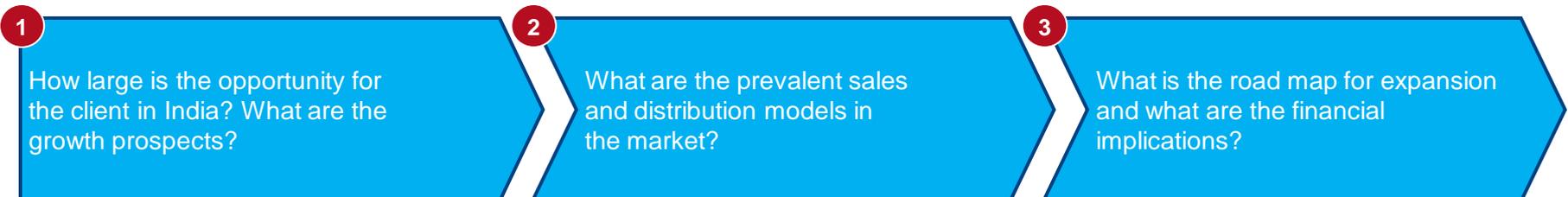
Client Background

- The client is engaged in the design, manufacturing, packaging, distribution and sale of medical, surgical, diagnostic and patient care devices
- Head-quartered in the US the client has a presence in over 100 countries with revenues of ~\$3 B
- While the client is already present in India, it believed it had not penetrated the potential market opportunity with its existing sales force and strategy
- The client wanted to assess the opportunities of expanding its presence in the Indian medical devices market. Additionally, the client wanted to establish a clear understanding of the strategy for expanding in India and the financial implications of the same

Key Highlights

- BA leveraged its primary research panel in India to conduct over 150 interviews with industry experts, customers, doctors and hospital administrators across geographies, medical specializations and competitor companies
- BA developed a 3 pronged approach to market sizing, estimating current, potential and hypothetical market. This approach combined both demand side and supply side elements ensured that the client had a view on both the current as well as future market
- Used relevant proxies to estimate demand characteristics at a granular level e.g., no of relevant hospitals, therapeutic areas, affected patients, relevant procedures and factored in product usage patterns

Key Business Questions



BA first worked to define the relevant market for the client in India both in terms of products and target customer segments

1

How large is the opportunity for the client in India? What are the growth prospects?

2

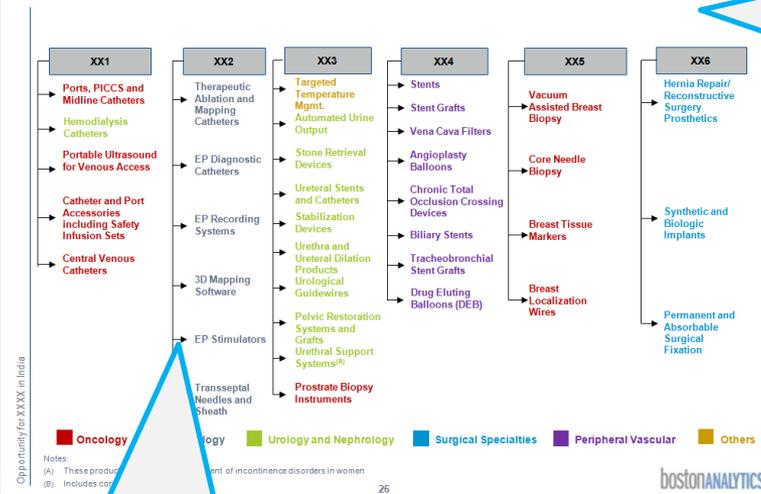
What are the prevalent sales and distribution models in the market?

3

What is the road map for expansion and what are the financial implications?

For this engagement, the market has been defined and segmented using a select group of products within each of XXXX's divisions

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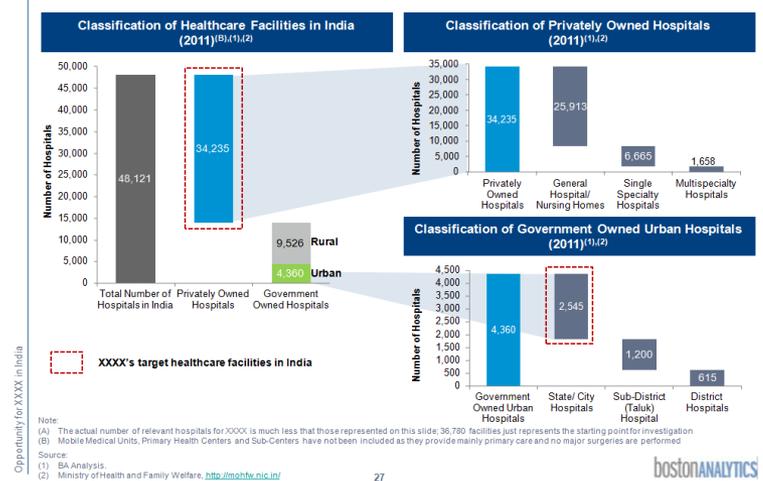
BA identified the products that the client wanted to consider for market sizing and segmented the medical devices market based on these products and the related therapeutic conditions in order to identify the relevant market for the client.

Given the lack of secondary data in India and the wide portfolio of highly specialized products, BA had to identify and triangulate multiple sources of data in order to calculate the size of the product wise market sizes.

BA used various filtering criteria such as number of beds, location, facilities available, treatment capabilities etc. to arrive at the number of relevant and target customer segments.

The focus of the opportunity for this engagement is on those ~36,780 hospitals believed to be of interest to XXXX (A)

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A methodology was created to calculate the size of current, accessible and hypothetical markets

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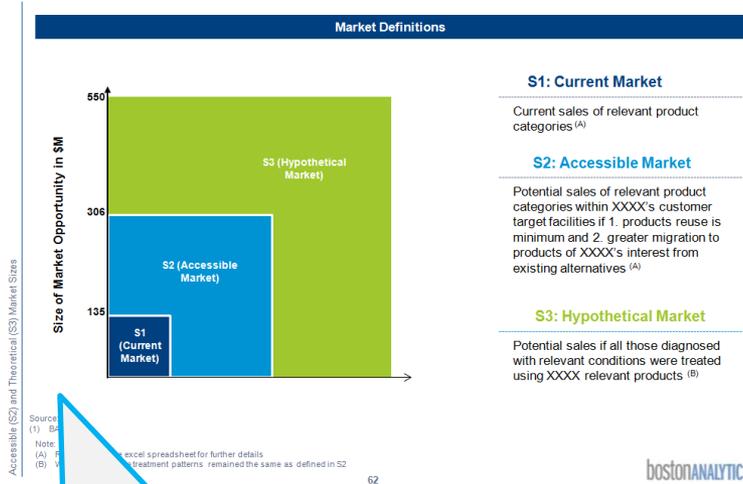
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What is the road map for expansion and what are the financial implications?

The current, accessible and hypothetical market opportunity for XXXX India will be \$135M, \$306M and \$550M respectively, in 2016

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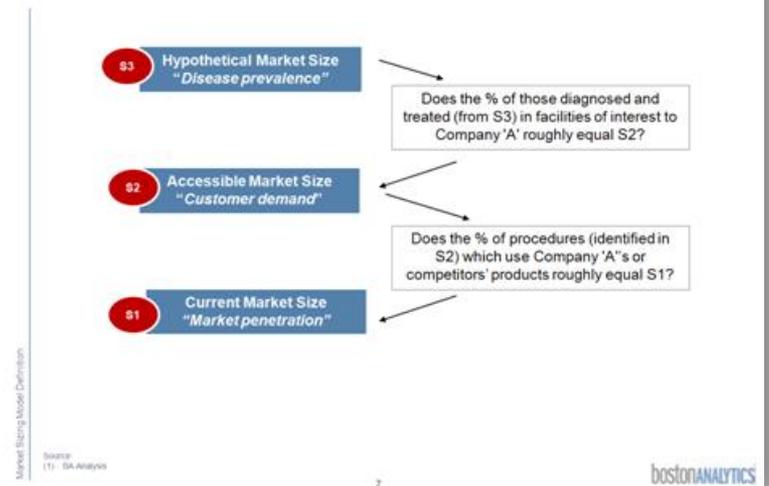


BA's methodology calculated three target market sizes for each product segment – current market size, accessible market size and the hypothetical market size.

Market sizes from different methodologies were triangulated to arrive at a common consensus.

The three market estimates were then triangulated to ensure the estimates reconcile

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Multi-level criteria was used to develop a model to estimate the market sizes for the client's products in India

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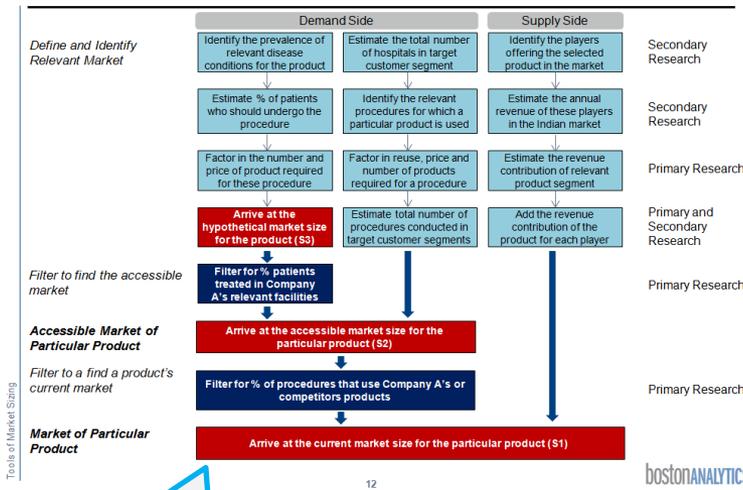
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What is the road map for expansion and what are the financial implications?

BA used multi-level criteria to estimate and triangulate the market size for specific medical device product segments

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BA's model calculated the market size (\$/INR M) and estimated growth for each product being considered for market sizing.

Summary of Market Sizes for Existing Products

Product	Current Market Size (\$1) Calculated based on revenue of players (2016)			Accessible Market Size Calculated based on demand from customers (hospitals) (2016)		
	2012 E	2016E	CAGR	2012 E	2016E	CAGR
BARD ACCESS SYSTEMS (BAS)						
EPICs	0.87	1.65	17.5%	6.48	9.73	
Midlines	0.61	0.97	12.1%	4.50	8.27	
POBTs	2.28	3.77	13.2%	14.48	29.31	
CICs	19.64	27.07	8.9%	221.90	589.46	
Hemodialysis Catheters	2.73	3.52	6.5%	4.24	3.61	
Portable Ultrasound for venous access	1.60	2.62	13.1%	3.71		
POBT Accessories	1.09	1.79	12.2%	2.46	4.76	
Total market / opportunity size for BAS products	28.81	41.98	9.4%	259.19	631.21	
ELECTROPHYSIOLOGICAL (BEP)						
Ablation and Mapping Catheters (including EP Diagnostic Catheters)	3.73	4.78	6.3%	21.27	43.01	
EP Workstations (Recording Systems, Stimulators etc.)	10.56	13.51	6.3%	17.53		
Total market / opportunity size for BEP products	14.29	18.29	6.3%	38.80	43.01	
IMMEDIATE MEDICAL DEVICES (BMD)						
Automated Urine Output Devices	0.10	0.20	19.0%	0.32	0.35	
Stone Retrieval Devices	2.58	4.41	14.3%	20.72	36.29	
Urethral Stents, Catheters, Guide Wires & Stabilization Devices	11.97	16.56	6.7%	17.60	55.06	
Urethra and Ureteral Dilators	0.58	1.01	14.3%	3.35	11.37	
Urethral Support Systems (Pelvic restoration systems - ProLapse)	6.75	11.54	11.3%	22.10	35.82	

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BA's detailed multi-level criteria was modeled to arrive at the market sizes defined in the methodology employed for market sizing.

The growth rates were estimated based on changing access, affordability, awareness, product adaption and changing treatment patterns.

BA elaborated the various growth options available for the client to expand based on competitor analysis and best practices in India

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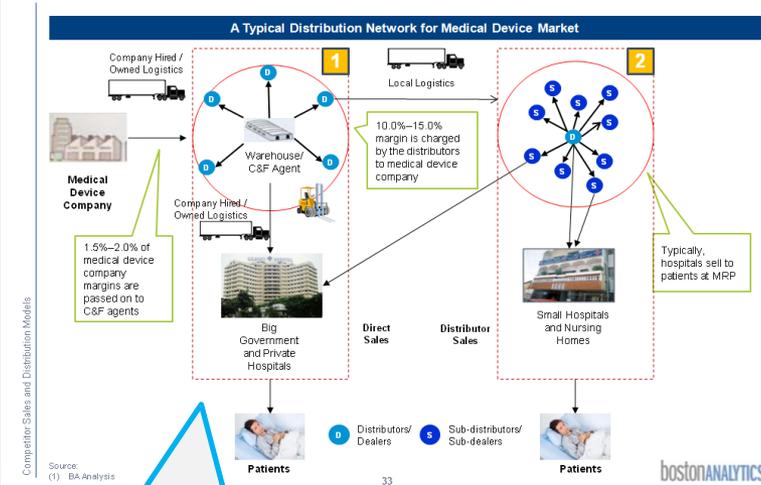
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What is the road map for expansion and what are the financial implications?

The distribution network for the Indian medical device market primarily contains two pathways

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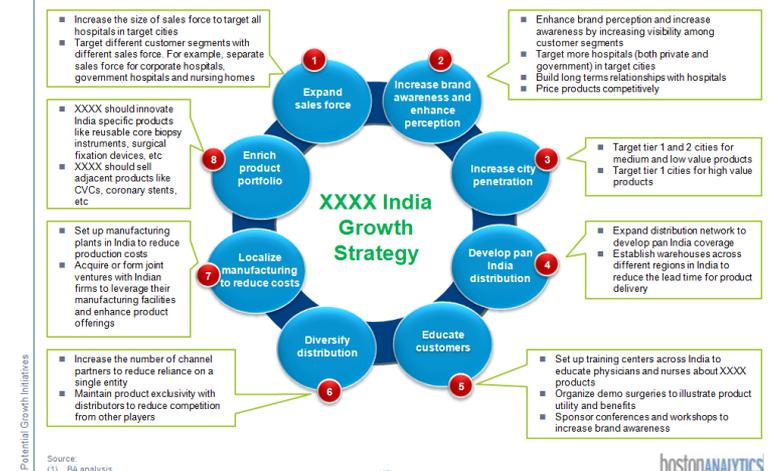


BA assessed the prevalent sales and distribution models and the competitor strategies in India.

BA made several preliminary recommendations for growth and shortlisted the ones to pursue for further analysis based on feasibility assessment with client teams.

BA has considered eight preliminary growth initiatives for XXXX India to increase its footprint

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Having shortlisted the growth options, a detailed execution road map was created for the client to implement prioritized initiatives

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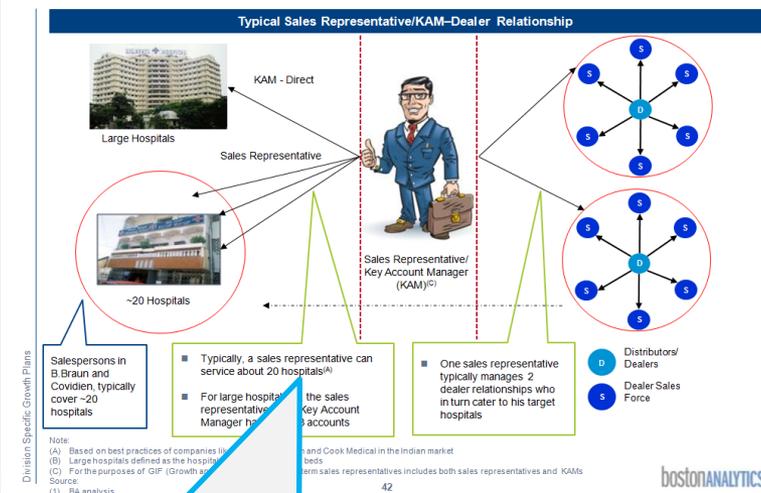
What are the prevalent sales and distribution models in the market?

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What is the road map for expansion and what are the financial implications?

In India, a typical sales representative is expected to manage ~20 hospitals and ~2 dealers while a KAM may manage 2-3 large hospitals for direct sales

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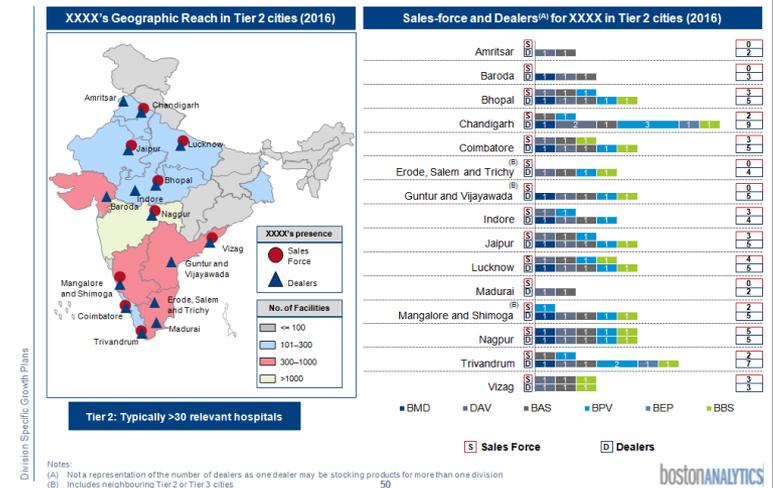


BA defined the role that a typical sales representative would play and how many hospitals he would cover.

BA provided a detailed roll-out plan including how many sales representatives to hire and which cities (Tier 1, 2 and 3) should be targeted.

XXXX must increase its footprint across Tier 2 cities, especially for XX6 and XX3 by hiring new sales representatives and dealers

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Finally, BA evaluated the financial implications of implementing the growth initiatives with projected profitability over the next 5 years

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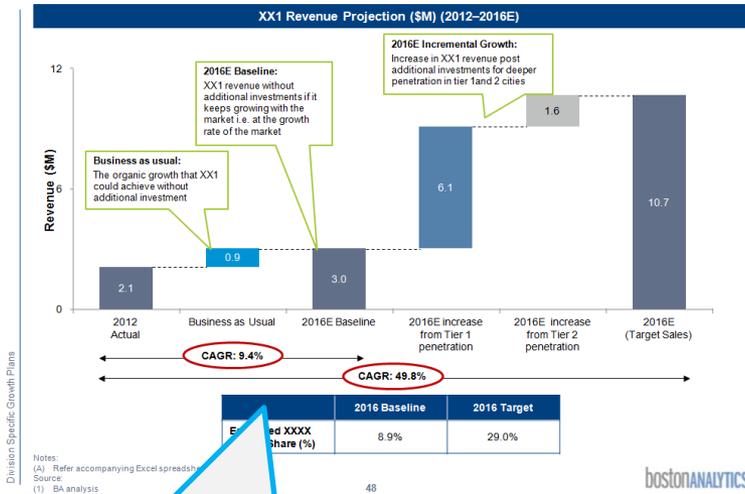
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With increase in penetration in Tier 1 and Tier 2 cities, XX1 revenue is likely to increase by ~\$7.7M to reach ~\$10.7M in 2016



BA estimated the growth in revenues driven by the phase wise implementation of sales force ramp-up.

BA provided a detailed financial model to assess the implications of the growth initiatives.

In USD		Q4 2012	Total 2013	Total 2014	Total 2015
Incremental GIF P&L					
GIF Total Revenues		1,220,948	6,391,448	13,468,242	22,889,621
GIF Growth % (Quarter on Quarter)					
Cost of GIF Goods Sold		476,473	2,497,286	5,122,256	8,586,151
Standard Gross Profit ¹		744,775	3,894,163	8,345,986	14,303,469
Gross Profit %		61.0%	60.9%	62.0%	62.5%
Distribution Expense - ²		24,419	127,829	269,365	457,792
Total GIF Gross Profit		720,356	3,766,334	8,076,621	13,845,677
Total Gross Profit %		59.0%	58.9%	60.0%	60.5%
GIF Expenses					
Selling Expenses		733,330	1,961,916	3,382,876	4,146,544
Marketing Expenses		652,000	910,400	1,065,840	1,124,824
Administration Expenses		809,214	993,134	1,101,980	1,123,805
Regulatory Expenses		176,000	193,600	212,960	234,256
Total GIF Operating Expenses		2,370,544	4,059,050	5,763,656	6,629,429
GIF Income from Customers		(1,650,188)	(292,716)	2,312,965	7,216,248
GIF Income from Customers %		-135.2%	-4.6%	17.2%	31.5%
P&L Statement %					
Total GIF Revenues		100%	100%	100%	100%
Cost of GIF Goods Sold		39%	39%	38%	38%
Standard Gross Profit ¹					
Gross Profit %		61%	61%	62%	62%
Distribution Expense - ²		2%	2%	2%	2%

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