



Market expansion for waterworks products

Case study

BA developed a market assessment of the North American waterworks market for a large distributor to pursue growth opportunities

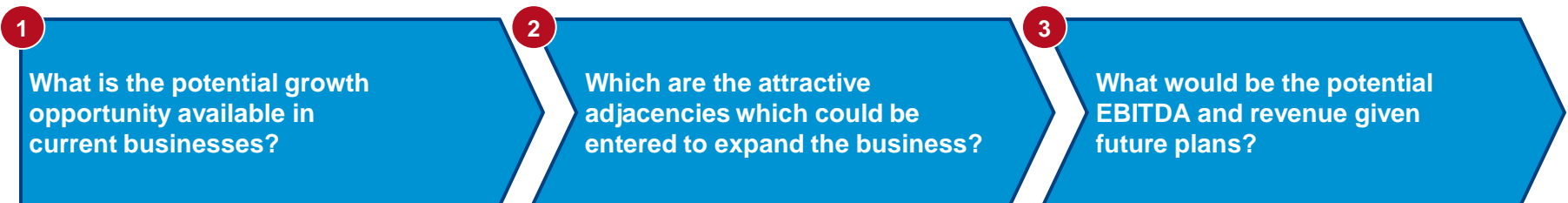
Client Background

- The client is a leading distributor of waterworks and construction material in the US
- The client wanted to double its business and operating margins from its existing levels in next five years
- The client engaged BA to identify areas for expansion in current business and potential new growth opportunities given current capabilities and resources

Key Highlights

- The study entailed an analysis of multiple end-use industries for waterworks products and services, primarily municipal and industrial
- BA provided a detailed assessment of the client's current businesses and a realistic assessment of the opportunities for growth
- In addition, BA identified potential new market opportunities to enter which could enable client to double its EBITDA

Key Business Questions



The market was defined with estimates for market size as per client requirements

1

What is the potential growth opportunity available in current businesses?

2

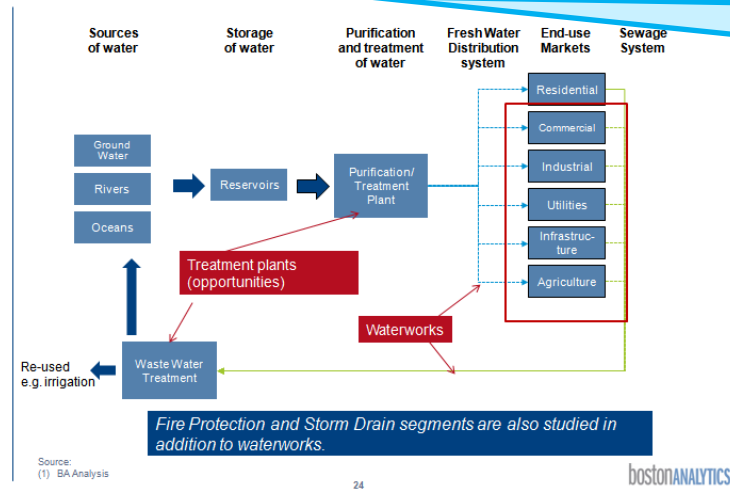
Which are the attractive adjacencies which could be entered to expand the business?

3

What would be the potential EBITDA and revenue given future plans?

Waterworks consists of water supply and sewage removal for multiple end-use markets

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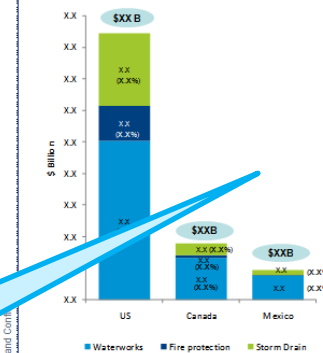
BA segmented the market and end-use industries in order to identify and isolate those areas of greatest interest to our client.

Via extensive secondary and primary research BA sized the relevant market as per the end-use industries.

The North American waterworks market is estimated at \$XXB, with the United States estimated at \$XXB

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North America Waterworks Market, Year T (\$ B)^{(1),(2),(3)}
Figures in brackets denote CAGR ('XX-'YY)



Source: (1) XXXX Construction Data, (2) XXXX XXXX, (3) XXXX, Company A

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Market Sizing and Forecasting Process

- Market sizing process:**
 - Understood scope of the business
 - Interviewed contractors, project management firms, vendors to understand relationship with construction spending
 - Analyzed existing construction data from XXXX
 - Requested additional data from XXXX to clarify questions and build consensus
 - Built dynamic model incorporating assumptions
- Forecasting process:**
 - Studied correlation between construction spending and other macroeconomic indicators
 - Identified non-linear, time dependent relationship between waterworks spending and GDP
 - Conducted Poisson regression to forecast construction spending till Year Z

Future market growth was projected using a number of different statistical tools and techniques

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Projections were derived based on relationships with GDP

- The growth percentages are derived based on regression analysis
- Poisson regression analysis was used to forecast the waterworks market where the forecast variable (Y) is given by:

$$Y = \text{EXP}(\alpha + \beta_1 t + \beta_2 x + \beta_3 x^2)$$
 - Y= Variable which is forecasted
 - t=Year
 - x=GDP
 - α and β are coefficients

	2007 (\$B)	2008 (\$B)	2009 (\$B)	2010 (\$B)	2011 (\$B)	2012 (\$B)	CAGR (2007-12)
Residential	XX	XX	XX	XX	XX	XX	XX%
Non-residential							
Commercial	XX	XX	XX	XX	XX	XX	XX%
Industrial	XX	XX	XX	XX	XX	XX	XX%
Infrastructure	XX	XX	XX	XX	XX	XX	XX%
Utility	XX	XX	XX	XX	XX	XX	XX%
Total	XX	XX	XX	XX	XX	XX	XX%

Following values of α , β_1 , β_2 , and β_3 were derived from the regression analysis

	Y	α	β_1	β_2	β_3	X
Residential	Housing start	XX	XX	XX		GDP
Commercial	Construction Spend	XX	XX	XX		GDP
Industrial	Construction Spend	XX	XX	XX		GDP
Infrastructure	Construction Spend	XX	XX	XX		GDP
Utility	Construction Spend	XX	XX	XX		GDP

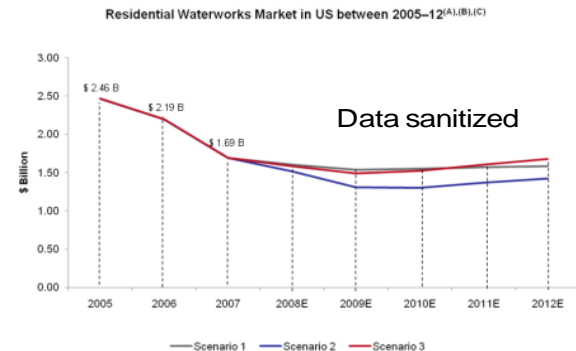
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Given lack of reliable projections, BA used appropriate methodologies and statistical tools to project the future growth of current businesses.

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Based on scenario analysis, the residential waterworks market in the US is expected to be between \$2.7 B in 2012



Note:
 (A) These scenarios are based on different GDP projections. Scenario 1—Economist, Scenario 2—IMF (Financial Shock), Scenario 3—IMF (Baseline). Please refer to sourcing deck slide no. 22, 23, and 24.
 (B) The forecast has been derived using Poisson regression analysis and time series estimate methodology.
 (C) Figures for Residential Waterworks market in US for 2005-2007 are the actual calculated values.

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An exhaustive list of adjacencies was identified and profiled a potential market entry opportunities

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Entry into water treatment plants

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Opportunity Definition

- The treatment plant opportunity includes distribution of pipes, valves, fittings etc. to drinking water and waste water treatment plants
- The opportunity does not include distribution of specialized equipment like holding tanks, filtration equipment etc. Such equipment has traditionally been sold by manufacturers
- Typical treatment plant project sizes range from \$xxM to \$xxM, with pipes, valves, fittings ~xx%-xx% of project cost
- Construction of treatment plants is not as closely tied to economic cycles –
 - In 2005-2007, when construction spending declined, treatment plants grew at an estimated rate of xx% annually
- The demand-supply gap for water is expected to widen, as the demand for fresh water increases and supply keeps shrinking. This will drive growth in the treatment market

Current Market Presence

- ABC does not have presence in this business

Competition

- Manufacturers⁽¹⁾
 - AAA, BBB, CCC, DDD, EEE,
- Distributors⁽¹⁾
 - Etna Supply, Dakota Supply Group; Ferguson and McDade in South east

BA profiled the potential opportunities in terms of size, growth, potential competitors and channel partners.

Key Success Factors for the Storm Drain Market Opportunity

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Key Success Factors	1	2	3	4	Weight
Relationships with local concrete storm drain manufacturers in regions selected for pursuing opportunities		✓			H
Material stocking, handling and transportation expertise to prevent damage			✓		M
Resources that understand relevant specifications				✓	M
Customer relationships			✓		H
Breadth of product offering		✓			M
Weighted Average (denotes ability to execute)					2.2

Rating Key

Data sanitized

Adjacencies were further evaluated based on client capabilities and relative attractiveness

1

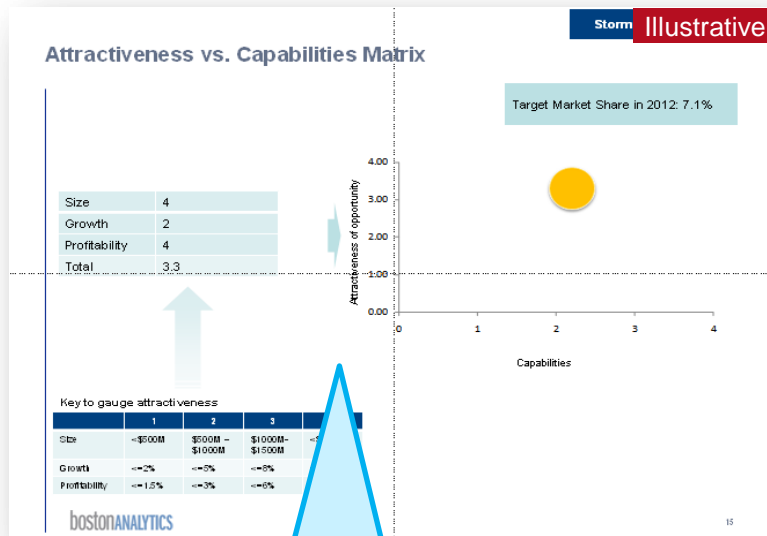
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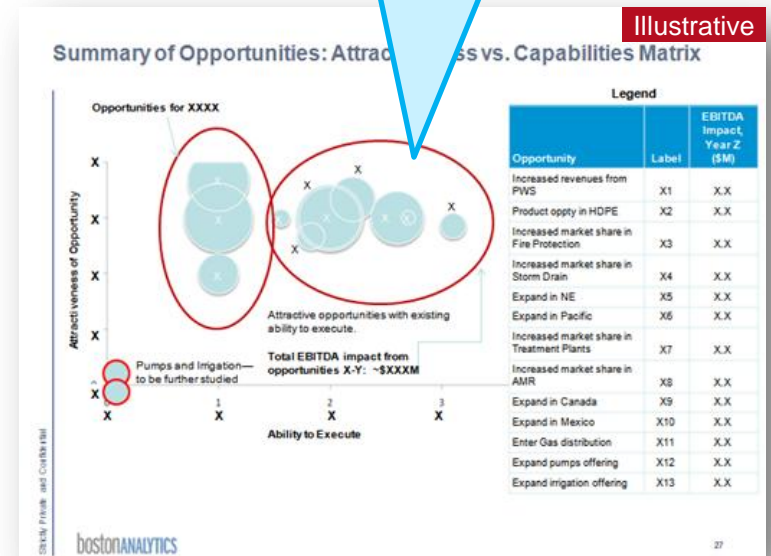
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What would be the potential EBITDA and revenue given future plans?



Potential opportunities were further evaluated based on current capabilities of client and key success factors.

The relative attractiveness of each opportunities was determined to shortlist and prioritize segments.



In addition, BA built an Excel model to project potential revenue and EBITDA

1

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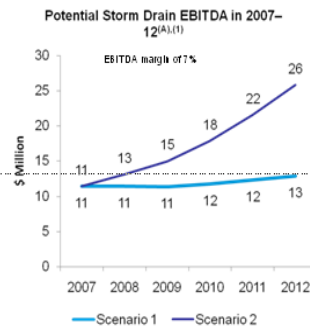
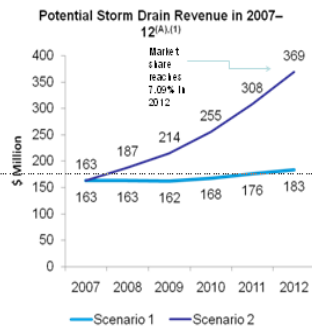
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Assuming market share grows at 15% YoY to 7.1% in 2012, double the current share of 3.5%, the EBITDA impact is estimated at \$ 26 M in 2012



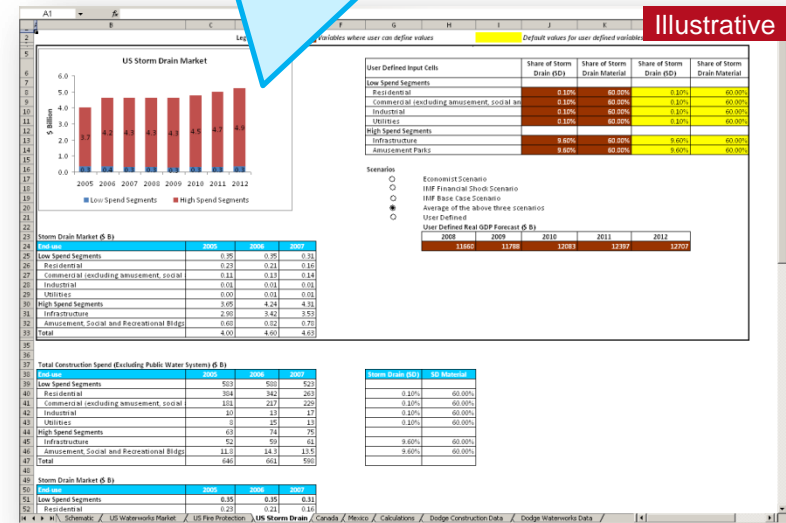
Notes:
 (A) Scenario 1 implies that HD Supply maintain current market share of 3.52% in the US storm drain market. Scenario 2 implies YoY increase of 15% in HD Supply's market share which reaches 7.09% in 2012.
 Source: Boston Analytics Analysis
 (1)

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In addition, BA conducted a workshop with the client's strategy team to further evaluate opportunities. BA developed a user defined dynamic market model to facilitate the brainstorming.

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BA estimated the potential revenue and EBITDA of the different options.

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