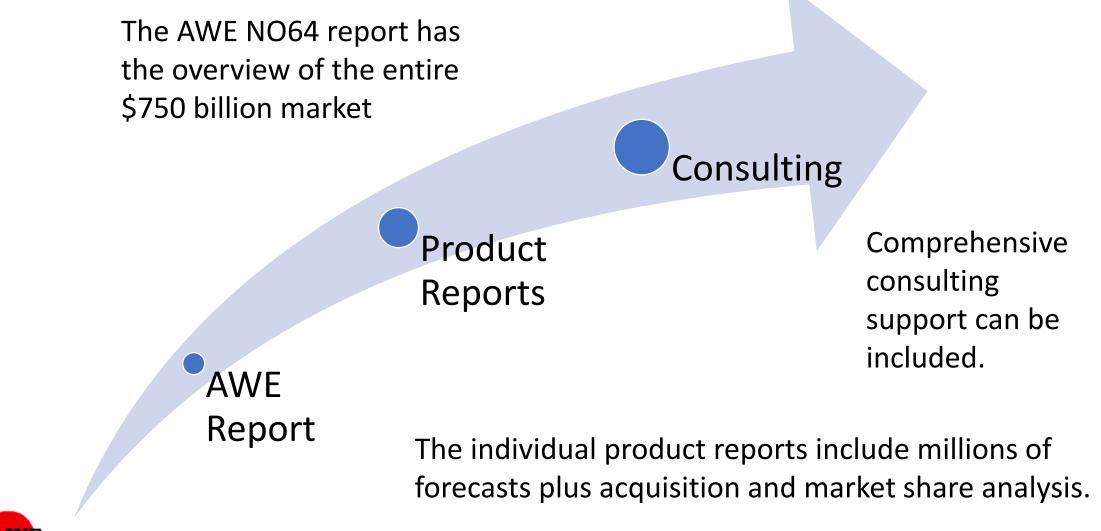
Growth Strategy for the \$750 billion AWE Market



Growth Strategy is Possible with a Comprehensive Structure

- Growth strategies have been characterized as organic, selective, or programmatic. The McIlvaine system is holistic.
- The challenge is analyzing the puzzle pieces without the full picture.
- McIlvaine provides the full picture with an umbrella report and dozens of product reports covering the \$750 billion AWE market.
- Forecasts are supplemented by acquisition databases and analyses covering decades
- Market share analysis is continuous and covers thousands of companies.

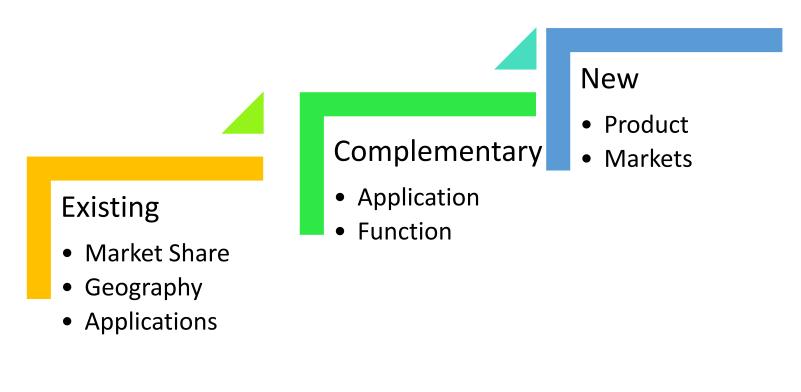






Growth in revenues and EBITDA can come from an existing product where there is an increase in market share, expansion into new geographies or applications.

A pump supplier can expand into complementary valves or instrumentation. The choice may be to seek attractive new products and markets.





Private equity companies and large AWE Suppliers can single out new markets such as biopharmaceuticals or hydrogen. The AWE report along with acquisition and market share databases provide the initial selection followed by one or more product reports.



- Product Report
- Share analysis
- Opportunities

Complementary

- Other reports
- Synergies

New

- AWE Report
- Acquisition Database
- Market Share Database



Product Market Reports

The Total \$750 billion AWE Market						
Air	Liquids	Solutions				
\$150 billion	\$250 billion	\$350 billion				
Fabric Filter	Liquid Filtration	lloT - Guide				
Scrubber	Sedimentation	lloT- Control				
FGD	Centrifugation	lloT - Measure				
DeNOX	Membranes	Cleanroom				
Thermal/Catalytic	Pumps	Hardware				
Air Filtration	Valves	Cleanroom				
Hose And Fittings	Ultrapure Water	Consumables				
Fans, Blowers		Cleanroom Services				
Compressors		Treatment				
		Chemicals				



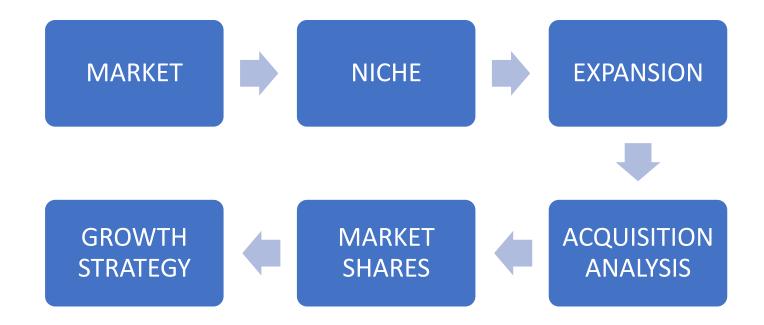
Contents of the Product Reports

- Each of the product reports forecasts multiple products for each industry in each country.
- The five-year future forecasts include extensive analysis of the purchasing industries.
- Consulting services and reports for system suppliers, users and governments provide McIlvaine with the application intelligence needed in the product forecasts.
- Market share and acquisition indices from the individual reports are also available for those involved in the new product analysis.



Existing Product Focus

Millions of forecasts by product, industry and country allow a company to set targets for increasing market share in the specific niches which are ranked as most potentially profitable.





Acquisition and Revenue Historical Analyses

- McIlvaine has forecasts of markets by product and country from 1990 to present.
- Acquisition activity and market share data has been retained since 2004.
- The database format provides an index to detailed articles.
- This allows unique analysis as shown in the following Curtiss Wright example.
- A number of acquisitions have been followed by divestitures. Present Curtiss Wright valve sales are less than the 2012 sales of one of the companies they just sold.
- The detailed background information has data on the valve types and markets.
- The conclusion is that the company is a major player in safety relief valves for nuclear and process but not in other valve types or industries.



Curtiss Wright Valve Acquisitions and Revenues

Valve Acquisitions					
Year	Acquirer	Acquired			
1999	Curtiss Wright	Farris			
2001	Phönix	Strack			
2001	Curtiss Wright	Solent & Pratt			
2011	Phönix	Daume			
2013	Curtiss Wright	Phönix			
2020	Curtiss Wright	Dynaflow			
2022	Liberta	Phönix			
2022	Liberta	Solent & Pratt			

Valve Revenues							
Company	Rev \$ mil	Year					
Phönix	62	2012					
Dynaflow	25	2020					
Curtiss Wright	60	2022					



Curtiss Wright Market Share

- Given just the information revealed in CW acquisitions and divestitures it can b e guesstimate that present safety valve sales are around \$40 million.
- At least half the total is in the power industry.
- This leads to an estimate that
 - CW has a 0.1% share of the total valve market
 - Safety relief valve share is 3%
 - Power industry safety relief valve share is 6%.
 - The nuclear share is likely more than 15%



Curtiss Wright Safety Relief Valve Market Share

Industry	2016	2017	2018	2019	2020	2021	CW	%
Total	1,170.46	1,204.74	1,240.96	1,280.57	1,320.32	1,362.84	40	3
Chemical	148.92	155.17	161.93	169.25	177.20	185.82		
Electronics	5.64	5.83	6.01	6.21	6.38	6.55		
Food	36.63	37.99	39.44	40.99	42.65	44.41		
Iron & Steel	111.62	111.44	111.44	111.61	111.96	112.48		
Metals	11.91	12.34	12.81	13.32	13.86	14.44		
Mining	25.47	26.76	28.16	29.66	31.27	32.99		
Oil & Gas	161.15	165.02	169.44	174.39	179.86	185.89		
Other Electronics	6.54	6.87	7.21	7.57	7.95	8.35		
Other Industries	146.35	151.74	157.52	163.70	170.29	177.31		
Pharmaceutical	24.15	25.01	25.95	26.97	26.97	28.13		
Power	277.39	286.62	295.50	305.33	313.99	321.71	20	6



15,000 Market Niches Averaging \$50 Million

- The \$750 billion AWE market can be divided into 15,000 segments of \$50 million each. Curtiss Wright has a 15% market share in a \$100 million nuclear power plant safety relief valve market.
- There is the opportunity for high margins when a company has a 15% market share.
- For Curtiss Wright one such market is not significant compared to its total revenues.
- However, companies such as IDEX have generated high market shares in many small markets and are obtaining EBITDA of 30%.
- Nuclear is a highly specialized market with a significant cost of entry.
- As reported in our September *Valve Acquisitions nd Market Shares* Curtiss Wright is bullish about the nuclear future due to climate change and small modular reactors.



Power of Detailed Forecasts, Market Shares and Acquisition Data

- The organization of information such as displayed for safety relief valves in the nuclear power industry allows tentative conclusions without any significant effort.
- This data greatly reduces the amount of effort needed to provide more accurate information.
- Other acquisition data is also relevant. Emerson bought Tyco which in turn had purchased Crosby. Crosby is a major supplier of safety relief valves to the nuclear industry.
- So, the data provided at the time of these acquisitions will be useful in an assessment of the nuclear safety relief valve market shares.

