Capital spending on process assets, hydro processing, and chemical manufacturing continues to shrink, which in turn has provided the window of opportunity for process manufacturers to optimize existing assets. The advanced process control (APC) and online optimization software and services market has shown sustainable high single-digit growth.

APC demand will increase by the need for production optimization. In the downstream refining and chemicals market, planning and scheduling SMEs are pushing for more stable operations in an effort to close the gap between “plan versus actual.” Dynamic, real-time optimization coordinates multiple units in closed loop by automatically adjusting APC to more closely coordinate plant operations.

This functionality is aimed at the control engineer, sustainability, model maintenance, and simplification of APC implementation services.

Artificial intelligence (AI) and machine learning has begun to play a role in model calibration and accuracy. “Seed models” from process engineering simulation and other planning data models are used as inputs with years of historical data to produce better APC models used in close loop or as inputs to the model calibration and update process. AI and machine learning also help to address process applications with non-linearity in chemicals and polymers industry.

For more information, please visit us at www.arcweb.com/market-studies/.

The advanced process control and online optimization market is in a state of flux as suppliers focus on accommodating evolving users’ needs. This report will help suppliers and users stay on top of these changes. Strategic questions addressed include:

- What are the key issues involved in integrating APC and online optimization software with other applications?
- What are the key elements for success in the APC and online optimization software business?

This research is available as a Market Intelligence Workbook (Excel) and/or a concise, executive-level Market Analysis Report (PDF), with or without detailed charts.

**RESEARCH FOCUS AREAS**

**STRATEGIC ANALYSIS**
- Major Trends
- Economic Factors
- Industry Trends
- Regional Trends
- Strategic Recommendations

**COMPETITIVE ANALYSIS**
- Market Shares of the Leading Suppliers
- Market Shares by Region
  - North America
  - Europe, Middle East, Africa
  - Asia
  - Latin America
- Market Shares by Application
  - Advanced Process Control
  - Online Optimization
- Market Shares by Revenue Category
  - Software and SaaS
  - Implementation Services
  - Maintenance
- Market Shares by Industry
  - Cement & Glass
  - Chemical/Petrochemical
  - Electric Power Generation
  - Food & Beverage
  - Metals

**MARKET FORECASTS & HISTORIES**
- Total Shipments of Advanced Process Control & On-line Optimization
- Shipments by Region
- Shipments by Application
- Shipments by Revenue Category
- Shipments by Industry
- Shipments by Customer Tier
- Shipments by Distribution Channel

**INDUSTRY PARTICIPANTS**
- The research identifies all relevant suppliers serving this market.