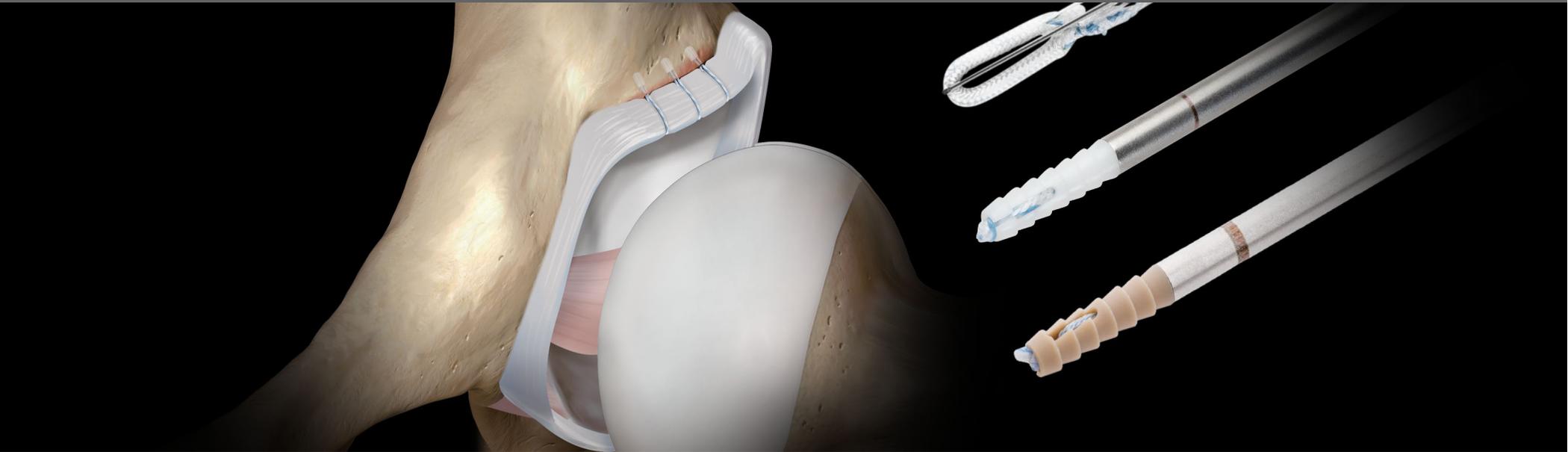




# Arthrex improves quality of life through the power of Predictive Modeling



Arthrex, a global medical device company and leader in new product development and medical education in orthopedics. With a corporate mission of **Helping Surgeons Treat Their Patients Better™**, Arthrex has pioneered the field of arthroscopy and develops more than 1,000 innovative products and procedures each year.

## The Challenge:

Arthrex continues to experience unprecedented growth and demand for their products throughout the world. The prior demand planning process for the international business used a manual, spreadsheet-based approach.

## The Solution:

QueBIT implemented a predictive demand planning which leverages highly accurate demand forecasts generated by predictive models within an intuitive, interactive budgeting and planning interface.

## The Benefit:

Automation reduced manual efforts saving 30+ hours per week while gaining 10% improvement in forecast accuracy.



## About Arthrex

Arthrex's corporate headquarters is located in Naples, Florida where visitors will find a vibrant atmosphere of rapid product innovation, medical research and surgeon collaboration. The sprawling campus houses corporate and manufacturing operations, as well as, Arthrex's premier Medical Education Center, which serves as an education destination for surgeons from around the world to learn about new products and techniques through hands-on surgical skills training programs.

Arthrex's innovative spirit has pioneered the field of arthroscopy and sports medicine, and led to the development of more than 1,000 innovative products and procedures each year. Focused on patient safety and clinical outcomes, Arthrex is also leading the way in fields of orthobiologics and arthroplasty and making breakthroughs in the treatment of arthritis. Additionally, they are developing new technologies with potential multispecialty applications.

More than 90% of Arthrex's products are manufactured in the United States and exported to more than 100 countries around the world.

## The Challenge

Arthrex continues to experience unprecedented growth and demand for their products throughout the world. The prior demand planning process for their international business used a manual, spreadsheet-based approach. This process was increasingly cumbersome and with continued company growth, was not sustainable.

Microsoft Excel has long been the favorite software tool of demand planners and operational analysts. There are good reasons for this; 1- it is an excellent presentation tool; 2-dimensional modeling tool, and it enables users to get their jobs done. However, these conveniences expose Excel's greatest weakness. It was never designed to be an enterprise data management and modeling tool, and as it commonly occurs, Excel evolved into precisely that at Arthrex. As a result, many planners and analysts spent time re-keying, checking, and looking for data, instead of analyzing it. This is particularly challenging when Excel is used for demand planning or reporting in a global, distributed organization.

Arthrex sought a way to more accurately forecast demand for their products across the world, reduce the amount of manual effort required by their process, and lay a foundation for integrating operational and financial processes.

*"We had reached the limits of our manual planning processes. Planners were spending more time gathering and cleansing data than they did actually forecasting. The predictive demand planning solution has greatly enhanced our forecasting abilities."*

**-Al Ivaska, Sr. International Demand Planner**

## Delivering the Solution

Arthrex engaged QueBIT to implement a predictive demand planning solution that leverages proprietary predictive models within an intuitive, interactive, planning and reporting interface.

Using the power of predictive modeling, the solution enhanced the process at Arthrex by automating the forecasts. This allowed forecasts to be generated at a more granular level, which identified more opportunities for revenue growth.

Predictive demand planning starts by calculating actual product trends at the lowest level, which is the pattern of increasing/decreasing demand over time. Demand drivers (predictors) can be extracted via data mining and used as inputs to improve trend predictions by applying appropriate weighting at the lowest level. Based on the actual trend, we can predict future trends to determine how much upward (or downward) movement in demand. Seasonality and relevant drivers are applied to generate a system forecast. The system automatically selects the best model to use for each combination based on which is most accurate.

QueBIT's solution leverages available data to forecast demand and develop revenue projections. Forecasts are generated monthly by material and country. Separate methods are used to forecast low velocity demand, new materials, and linked or replacement items. The forecasts are scheduled to run monthly, with the ability to rerun models on demand. Users can override the system forecasts and track changes in a separate version. Reason codes and comments can be entered with the forecast overrides to ensure transparency in the planning process.

Once the adjustments are complete, the forecast is submitted/saved, and copied into an approved version. Once approved, the weekly forecast is automatically uploaded into SAP.

*"The system delivers reliable baseline forecasting for all our global markets. This enables our planners to focus on exception planning and applying local market intelligence to the plan. The integration of financials in local currency into the forecast process has greatly enhanced our S&OP efforts around the world. Our planners can seamlessly work with Finance, Sales, and Logistics within the system."*

**-Al Ivaska, Sr. International Demand Planner**

## Products Used

- QueBIT Euclid Studio & IBM Planning Analytics



## Benefits/Results

- 10% improvement in forecast accuracy
- Ability to provide an operational revenue forecast to their external Distributors and Finance teams
- Automation reduced manual efforts saving 30+ hours per week



### About QueBIT

QueBIT enables organizations to achieve a business-focused integration of Financial and Operational Planning and Analysis, extended with Artificial Intelligence (AI) and Machine Learning (ML). This area of expertise is known as Extended Planning and Analysis (xP&A). QueBIT's collaborative, incremental and business-driven approach is driven by over twenty years of experience in delivering successful xP&A solutions to hundreds of mid-market and large companies across all industry sectors and lines of business. For more information on how your organization can Analyze, Plan and Achieve your own xP&A journey, please check us out at [www.quebit.com](http://www.quebit.com).

