



# Driving supply chain and operations transformation in a nanotechnology, low-volume production environment

**Accelerating measurable, sustainable improvements in operations excellence and procurement for strategic change**





## Summary of results

**As part of its new strategic direction, Oxford Instruments' senior management recognised they needed a partner to help them accelerate operational and procurement improvements across the company's business units in the United Kingdom.**

In this highly complex, low-volume, high-technology environment, Maine Pointe worked side by side with Oxford Instruments' team to achieve the following results:

- Increased revenue by 27% in one site and 16% in another by improving throughput to capitalise on growth opportunities
- Enhanced procurement competitiveness and drove double-digit savings across UK business units
- Improved forecasting, management visibility, lead times and inventory control by embedding a forward looking sales and operations planning (S&OP) process
- Integrated operational excellence and procurement best practices by implementing a new procurement and operations management operating system
- Developed supply chain capabilities through training, processes and changes to organisation structure
- Achieved a 3:1 engagement ROI in year one leading to a 5:1 ROI in year two

This story is for executives who:

1. Operate in a complex, high-tech, low-volume engineering and production environment
2. Need to break through functional silos and align the business to deliver an enhanced customer service experience
3. Want to transform their supply chain and operations to accelerate and drive change and improve EBITDA

*“Working with our leadership, middle management and on-the-ground teams, Maine Pointe helped us deliver significant improvements in operational excellence and implement strategic procurement across our UK businesses. They brought the operating practices and the experience we needed to achieve measurable results for our business and our people.”*

Ian Barkshire, Chief Executive Officer



## Background

Oxford Instruments plc is a leading provider of high technology products and services to the world's leading industrial companies and scientific research communities to image, analyse, and manipulate materials from the micro down to the atomic and molecular level. For over 60 years, the company has empowered customers to accelerate their applied R&D, increase productivity and make new scientific discoveries; providing the basis for innovation across a range of markets and industrial sectors. This has enabled: the shift to a greener economy; improved healthcare; increased connectivity; development of advanced materials and leaps in scientific understanding.

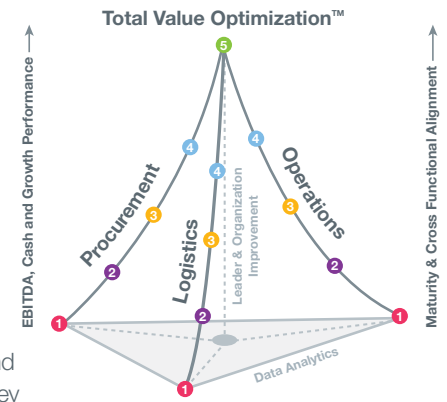
As part of its new strategic direction, senior management and the board recognised the need to improve operational and procurement performance across its business units in the United Kingdom. The organisation had recently announced its new 'Horizon' strategy, which focused on delivering customer-centric solutions to drive long-term sustainable growth and margin improvement. However, leadership were aware that their organisation did not have the internal bandwidth to drive change at the pace they wanted to achieve. As a result, they decided to seek an outside partner to help develop and install a new supply chain founded on fit-for-purpose cross-functional, S&OP, manufacturing and procurement processes, whilst maintaining world-class innovation capabilities.



# Developing a pragmatic journey for rapid improvement

Maine Pointe's analysis team found opportunities to improve the processes and capabilities in both operations and procurement (below level two on the five-level maturity pyramid). There was minimal cross-organisational collaboration in the UK business units and Oxford Instruments did not have in place many of the processes it needed to drive alignment. The 'innovation culture' in the businesses was causing inefficiencies in both operations and procurement.

Maine Pointe's team worked hand-in-hand with Oxford Instruments' people to address these issues and help realise the multimillion-pound savings and improvement opportunities our analysis identified. The key focus of the engagement was to develop and install an enhanced approach to the supply chain founded on a fit-for-purpose cross-functional, S&OP, procurement and operations excellence environment.



## Results

*“We are very happy with what Maine Pointe has done. You achieved in 6 months what we have struggled to achieve in 10 years.”*

Vicki Potter,  
Group HR Director

*“We are very happy with the outcomes of our work with Maine Pointe. By working with and alongside our teams you have helped us to rapidly develop the capabilities to sustain and build on the improvements we have delivered together in the first six months.”*

Vicki Potter, Group HR Director

### Improving throughput to increase growth opportunities

Oxford Instruments was faced with some challenges to reliably deliver products to customers resulting in a significant backlog at one of its major plants. They needed to optimise operations and overcome inefficiencies to improve output and maximise production. Working closely with the Oxford Instruments team, Maine Pointe helped achieve significant labour efficiency and throughput improvements across the business, resulting in:

- **Increased capacity in one plant to enable 27% growth in the current financial year** and potential for a further 20% in the next financial year, representing tens of millions of pounds revenue generation
- **Achieved 27% improvement in throughput** on the production of a family of high-speed confocal microscopy products
- **Achieved 25% throughput improvement** on the production of a family of high technology cameras for microscope and laser applications and eliminated a 15-week backlog (these two product families are responsible for 96% of a key business unit's output)
- **Achieved 16% throughput improvement** at another plant, specializing in dispersive spectroscopy

*“We want to thank the Maine Pointe team for their efforts. We are very happy with the results achieved and can safely say that the engagement had a positive impact on our financial performance.”*

Gavin Hill, Group Finance Director

### Improving procurement competitiveness

The goal was to establish a group-focused approach to strategic sourcing and install a process to deliver annualised cost reductions across the group with a revised fit-for-purpose procurement structure that maintained Oxford Instruments' reputation for innovation.

Maine Pointe performed a market analysis to identify potential suppliers and gather data on the current climate before taking the key categories to market via a strategic supplier forum. This exposed incumbent suppliers to a competitive environment and has driven significant percentage savings and strategic input in all five business units (double digit in most cases and as high as 30%). Maine Pointe and





Oxford Instruments worked together to establish a supplier conditioning protocol and build a customised training plan to elevate the procurement acumen of the cross-functional teams.

- Enhanced procurement competitiveness and drove double-digit savings across five business units
- Installed a procurement management operating system to enhance sourcing performance

*“The work of Maine Pointe’s procurement team has been outstanding, without it we would never have been able to take so many categories to market so quickly with such positive results.”*

Jason Williams, Head of Strategic Sourcing

### Improving forecasting, management visibility, KPIs and control

At the beginning of the engagement, only one of the business units had a recognisable sales & operations planning (S&OP) process in place.

Maine Pointe helped implement an enterprise-wide S&OP approach. This has led to enhanced customer on-time-in-full (OTIF), improved forecasting, better utilisation of working capital and improved categorisation of inventory. We reviewed the parameters through which inventory is planned and put in triggers to identify potentially obsolete inventory and mitigate it. Moreover, the S&OP process has enabled lead-time improvement in the supply chain and helped create a more level demand.

Working closely with Oxford Instruments’ in-house data and information processing team, Maine Pointe used data analytics tools to define new KPIs and re-categorise data. This enabled the creation of a standard management dashboard to establish key measures of performance and unify them across the business to make faster, data-driven decision making.

In addition, Maine Pointe carried out competitive analysis on DSI (day sales of inventory). This provided insights into the company’s position against market competitors, forming the basis of a methodology and unified categorisation for inventory and parts management going forward.

*“Maine Pointe’s operations support enabled my business unit to achieve record output and beat its annual budget.”*

Gary Wilmot, Managing Director, Andor

### Improving people and processes

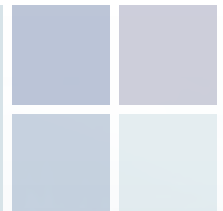
The management operating system (MOS) and procurement management operating system (PMOS) Maine Pointe helped develop and implement provided Oxford Instruments with the tools, structure and behaviours to improve the maturity of its operations and people. Upgrading the capability of supervisors and line managers means they are able to use this system to effectively balance production by improving operations planning, resource allocation and product costing.

*“Our people now have enhanced skills to enable them to sustain the improvements we have achieved through our partnership with Maine Pointe and to realise additional savings and improvements in the year ahead.”*

Simon Holden, Managing Director, Nano Science

### Lessons learned for other executives

- Allowing innovation to lead your business can lead to inefficient behaviour
- If you have an innovation-led business and want to move to more market led, you need to encourage engineering to work in cross-functional teams
- Your engineering teams need to be able to provide clear data and drawings in order to drive rapid change in procurement



Operating in a low-volume, high-tech, environment? Need help to identify and drive out inefficiencies in your supply chain and operations and deliver world-class service to your customers?

Talk it through in a no obligation phone call or meeting with one of our executives

Email [info@mainepointe.com](mailto:info@mainepointe.com) to arrange a call

### About Maine Pointe

Maine Pointe is a global supply chain and operations consulting firm trusted by many chief executives and private equity firms to drive compelling economic returns for their companies. We achieve this by delivering accelerated, sustainable improvements in EBITDA, cash and growth across their procurement, logistics and operations. Our hands-on implementation experts work with executives and their teams to rapidly break through functional silos and transform the buy-make-move-fulfill supply chain to deliver the greatest value to customers and investors at the lowest cost to business. We call this Total Value Optimization (TVO)™.

Maine Pointe’s engagements are results-driven and deliver between 4:1-8:1 ROI. We are so confident in our work and our processes that we provide a unique 100% guarantee of engagement fees based on annualized savings. [www.mainepointe.com](http://www.mainepointe.com)