

OPERATIONAL DUE DILIGENCE

Identifying critical areas of risk and opportunity for Private Equity Investors.



At TriVista, we know operations. Unlike traditional advisory firms, our firm is comprised of industry and functional experts who possess an average of more than 20 years' experience managing mid-market and fortune 1000 companies, including some of the most operationally efficient factories in the world. TriVista serves Private Equity firms through our unique, process-driven approach to identify areas of risk and opportunity in the commercial, operational, and supply chain processes of a client's target investment or acquisition. Our proprietary process helps clients understand every operational aspect of a target acquisition. Obtaining this knowledge and delivering it to clients quickly, clearly, and efficiently affords them the competitive advantage they need in the marketplace.



QUALITY of OPERATIONS™

DUE DILIGENCE

Key Diligence Focus Areas

Sales & Marketing	R&D / NPD	Supply Chain	Production	Logistics	Service
<ul style="list-style-type: none"> Marketing & Sales Process Review Product & Segment Complexity Customer & Channel Profitability Forecast Process & Linkage to Supply Chain, Inventory and Manufacturing 	<ul style="list-style-type: none"> RD&E Spend Analysis R&D Contribution to Revenue Growth Internal Process Review and Efficiency Analysis ROI on RD&E investments 	<ul style="list-style-type: none"> Maturity of Processes Impact of Material Price Fluctuations Inventory Turns & Inv. Management LCC Sourcing Key Supplier Assessments Metrics & Performance 	<ul style="list-style-type: none"> Lean, Best Practice Assessment & KPI Review Footprint and Core/Non-Core Analysis TPM (Total Preventative Maintenance) Fixed/Variable Flexibility Productivity Analysis 	<ul style="list-style-type: none"> Warehouse Operations & Distribution Assessment Inbound/Outbound Freight Analysis Excess & Obsolete Inventory and Disposal Strategy Review 	<ul style="list-style-type: none"> Warranty Costs Cost of Quality & OEE BPO (Business Process Optimization)
Leadership Assessment & Key Man Risk					

100 Day & 2 Year Transformation Plans

- Key Operational Risks
- Carve Out/Integration Plan (if required)
- Launch Improvement and Cost Savings Initiatives
- Critical Staffing Support, Mentoring and Employee Development
- Disciplined Strategy Execution

TriVista's diligence teams follow a disciplined process to ensure every aspect of a potential acquisition target's operations are assessed. Once the formal diligence is complete, we work to develop 100 Day Plans to ensure seamless integration and reduce risk. Leveraging our collective experience of more than 100 acquisitions, we generate tangible value for our clients and are often engaged post-transaction to support the implementation of strategic and tactical initiatives alongside management.

CREATING VALUE

for private equity



TriVista

A UNIQUE FIRM

with a global focus

M&A ADVISORY OPERATIONS CONSULTING GLOBAL SUPPLY CHAIN GLOBAL EXPANSION

A UNIQUE ADVISORY FIRM

TriVista is a management consulting and advisory firm focused on creating value for middle market private equity firms across four main service areas - M&A Advisory, Operations Consulting, Global Supply Chain, and Global Expansion.

We have worked with some of the largest private equity firms in the world to deliver outstanding results. With a focus on identifying risk during due diligence and driving EBITDA expansion post transaction, we apply proven processes to ensure our clients achieve the competitive advantage they need in today's marketplace. Our senior consultants are supported by a global team that has extensive hands-on management experience.

IMPLEMENTING OPERATIONAL EXCELLENCE

Our team of seasoned professionals has deep knowledge in a variety of industry sectors and markets. With an average of more than 20 years of experience implementing operational best practices at some of the world's largest and most respected corporations, we understand what it takes to improve businesses. We focus exclusively on operations, supply chain and engineering to deliver maximum value to our clients.

WITH A GLOBAL FOCUS

In addition to running our own international business, TriVista professionals have managed numerous Fortune 500 companies with operations in more than 15 countries. We have professional experience in nearly every country in Asia, the Americas, and Europe and have helped companies expand into countries throughout these regions for more than 20 years. At TriVista we think globally to help our clients achieve outstanding results wherever their customers or the market may take them.

WE PROVIDE

mergers & acquisitions support

M&A ADVISORY SERVICES

OPERATIONAL DUE DILIGENCE

TriVista looks beyond analyzing financials with a process-driven approach that identifies the areas of operational risk and opportunity within private equity clients' target acquisitions. At TriVista, our proprietary method of conducting operational due diligence uncovers every aspect of a target's operations, and delivers data to clients quickly and clearly to keep them ahead of the competition. Our global team of consultants supports both pre letter of intent and post letter of intent diligence, focusing on the following functional disciplines:

- Manufacturing Operations
- Commercial Processes
- Product Design & Development
- Supply Chain
- Management Team

Since our inception, we have advised on transactions with a combined enterprise value of more than \$10 billion and operations in more than 20 countries.

ACQUISITION INTEGRATION

At TriVista we support private equity clients at both the pre-transaction and post-transaction stages, providing guidance and support during bolt-on and tuck-in acquisitions. Our senior leadership team works with leading middle market firms to develop acquisition strategies and assist in the integration of new acquisitions.

WE KNOW

operations

OPERATIONAL PERFORMANCE IMPROVEMENT

OPERATIONAL BEST PRACTICES

TriVista's leadership team works closely with management to identify areas of opportunity post-transaction. Our project teams aim to improve clients' operational activities in engagements that include:

- Manufacturing Process Improvement
- Turnaround & Restructuring
- Lean/Six Sigma
- Inventory & Materials Management
- Global Expansion
- Supply Chain
- Quality Systems
- Strategy Deployment
- Design for Manufacturability
- Lean New Product Development

EBITDA EXPANSION

TriVista works closely with portfolio assets to identify areas of EBITDA expansion and deliver results that drop real dollars to the bottom line. TriVista has worked with some of the largest firms in the world to help realize millions of dollars of shareholder value.

INDUSTRY EXPERIENCE

At TriVista, our leadership has extensive experience in a wide range of industry sectors and markets. Collectively, TriVista's senior staff has advised on platform, bolt-on, and tuck-in acquisitions, implemented operational improvement, and delivered tangible results for clients in industries including:

- Aerospace & Defense
- Automotive
- Consumer Products
- Electromechanical Components
- Industrial Controls
- Industrial Products
- IT & Technology
- Food, Beverage & Consumables
- Marine Products
- Mass Transit
- Mechatronics
- Metal Fabrication
- Motors & Pumps
- Off-Road
- Oil & Gas
- Sensors
- Telecom
- Textiles/ Cut & Sew

WE GLOBALIZE

supply chains

GLOBAL SUPPLY CHAIN

STRATEGIC SOURCING/OUTSOURCING

TriVista's global footprint, coupled with our team's extensive international experience, gives clients a clear competitive advantage in the global marketplace.

TriVista works with clients around the world that are looking toward China and other low-cost countries as a potential source of supply. We help clients identify areas of opportunity specific to their businesses and help them establish robust, low-cost supply chains. Our teams in the United States and China have extensive experience analyzing, establishing and directing supply chain infrastructures and strategies.

LEAN SUPPLY CHAIN

TriVista understands that a company is only as strong as its supply chain partners. Leveraging our global footprint, we work with clients to establish global supply chain improvement strategies. Our teams collaborate with portfolio company supply chain executives to drive improvement projects throughout company and supplier owned factories and operations. Collaborating with supplier management teams, our Lean Six Sigma experts deploy operational best practices that drive down costs, improve delivery performance and enhance overall supplier performance.

INTERNATIONAL EXPERIENCE

We have managed manufacturing facilities in 15 countries and led sales, marketing and R&D operations in more than 20 countries. TriVista's advisors have taken a multitude of Fortune 500 companies to China, Mexico, Costa Rica, and Eastern Europe. In addition to establishing TriVista's own operations in Tianjin, China and Shenzhen, China, our senior leadership has helped relocate a number of manufacturing plants to Singapore, China, Eastern Europe and Mexico. Our leadership has helped to create value for our clients in a number of the world's established and emerging markets. While we have extensive experience in China and Mexico, we continue to develop robust operational strategies for our clients across Southeast Asia, India, Europe, and Central America.

WE CREATE

value

THE VALUE OF TriVISTA

TriVista is a global-minded consulting firm that understands the harsh realities of achieving alignment and implementing restructuring. Our advisors are not only strategic but also tactical – as quick to advise clients to pursue investment as they are to tell them to walk away.

At TriVista, we are proud of our track record of creating value for private equity clients and are eager to do the same for you. For a pragmatic and thorough operational understanding of your current investment asset or your next target investment, contact us today.



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TriVista

OPERATIONS CONSULTING

for the Middle Market

Manufacturing Operations

Product Development

Global Supply Chain

China & Asia Services

“OPERATIONAL EXCELLENCE

The Value of TriVista

TriVista is an operations consulting firm focused on creating value for middle market manufacturing, distribution and consumer businesses. Our expertise is working with company management teams on strategic, high impact operational challenges. We focus on four key areas - Manufacturing Operations, Product Development, Global Supply Chain, and China and Asia Services - partnering with our customers to execute projects that expand margins, reduce working capital and improve overall performance.

TriVista's global team is comprised of more than 80 consultants across North America and Asia. TriVista's leaders have an

average of 20 years of operational experience in a wide variety of industries. Our global presence allows us to take on projects that span the globe and we work regularly on projects with customers' businesses that span multiple geographies.

TriVista focuses on middle market companies by helping to bring unique process and industry insight and expertise to our customers. From deploying Lean Manufacturing Best Practices on shop floors to supporting Greenfield Startups in Mexico, China and East Asia, TriVista has the resources and experience to help your company achieve its short and long term goals.



MANUFACTURING OPERATIONS

1. Lean Manufacturing Training & Implementation
2. Operational Strategy Development & Deployment
3. Factory Layout Optimization & Factory Relocation
4. Project Management
5. Greenfield Startups
6. Inventory & Materials Management
7. Quality Systems

At TriVista, we truly believe in operational excellence and the utilization and implementation of manufacturing best practices. We work with manufacturers to develop the right operational strategy that fits with the culture of the organization and is aligned with the overarching business goals and objectives. Our team of seasoned professionals work on the ground, in our customers' factories to improve processes and enhance shareholder value.

PRODUCT DEVELOPMENT

1. Stage Gate Process Implementation
2. Metrics & Portfolio Management
3. Customer Value Innovation/VOC
4. Design for Manufacturability (DFM)
5. Cross Functional Team Execution
6. Business Strategy Alignment

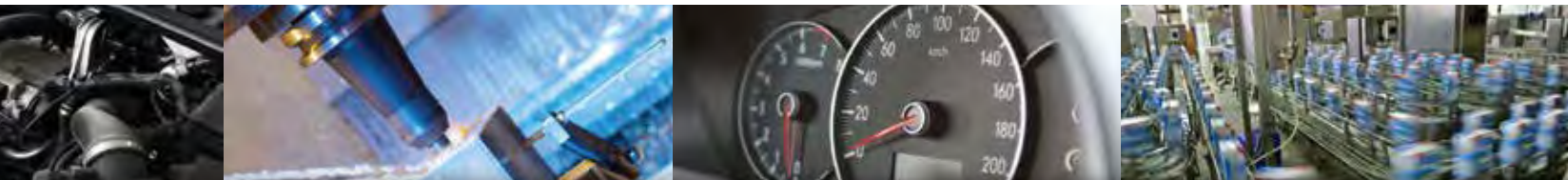
TriVista works with Manufacturers to mentor business leadership teams on how to get the most out of their RD&E investments. TriVista focuses on working with management teams to lay the appropriate skill set foundation that enables the Lean Product Development Process to function within a business. Working alongside cross functional teams, TriVista helps to implement engineering best practices and enhance innovation.

IS A GROWTH STRATEGY”

TriVista's Focus

TriVista has helped hundreds of manufacturers, importers and entrepreneurs establish and improve business operations in more than 20 countries. From our offices around the globe, we regularly engage on projects in the following industries:

- Aerospace & Defense
- Automotive
- Consumer Products
- Electromechanical Components
- Industrial Controls
- Industrial Products
- IT & Technology
- Food, Beverage & Consumables
- Marine Products
- Mass Transit
- Mechatronics
- Medical Products
- Metal Fabrication
- Motors & Pumps
- Off-Road Vehicles
- Oil & Gas
- Sensors
- Textiles/ Cut & Sew



GLOBAL SUPPLY CHAIN

1. Supply Chain Management
2. Strategic Sourcing
3. Product Line Outsourcing
3. Supplier Development, Continuous Improvement & Training
4. Quality Control & Inspections

TriVista views our customers' supply chains as an area of significant competitive advantage. Through our Supply Chain Practice we work closely with clients to significantly improve global supply chain operations and performance. Focusing on process improvements, quality improvements and risk mitigation, we help customers and suppliers implement operational best practices that drive significant results.

CHINA & ASIA SERVICES

1. Supply Chain Strategy & Development
2. Supplier Quality & Risk Management
3. Market Entry & Strategy
4. Greenfield Startups
5. Due Diligence
6. Senior Management HR & Recruitment Services

TriVista's presence in China and Asia offers clients a significant competitive advantage. Since our inception, we have been helping companies to develop strategies to enter foreign markets, build robust supply chains and set up businesses throughout the region. Our consulting team in China focuses on client projects that span China and beyond.

To read about examples of our work, please visit www.trivista.com/case-studies



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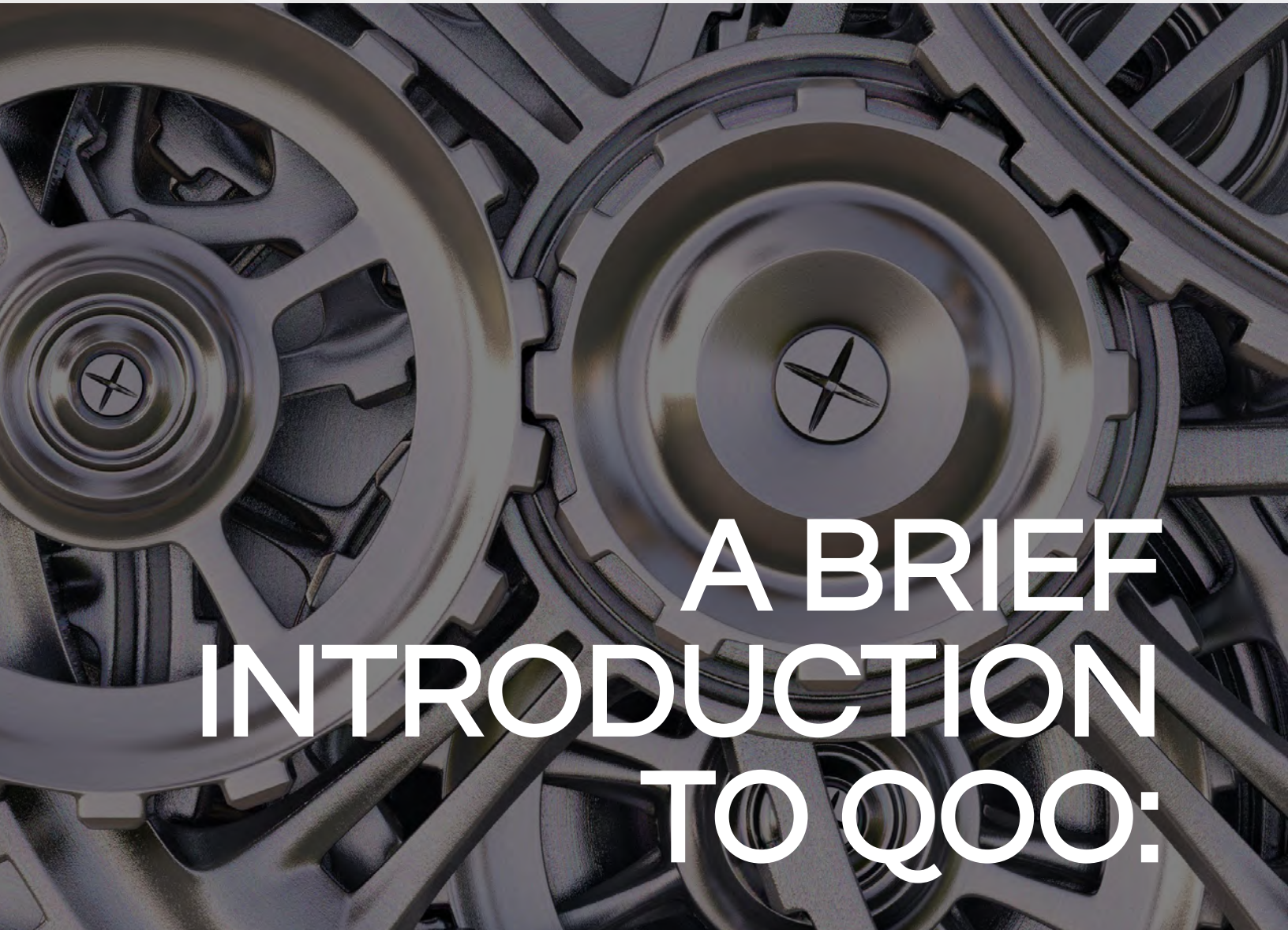
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QUALITY *of* OPERATIONS™

DUE DILIGENCE



A BRIEF INTRODUCTION TO QOO:



TriVista

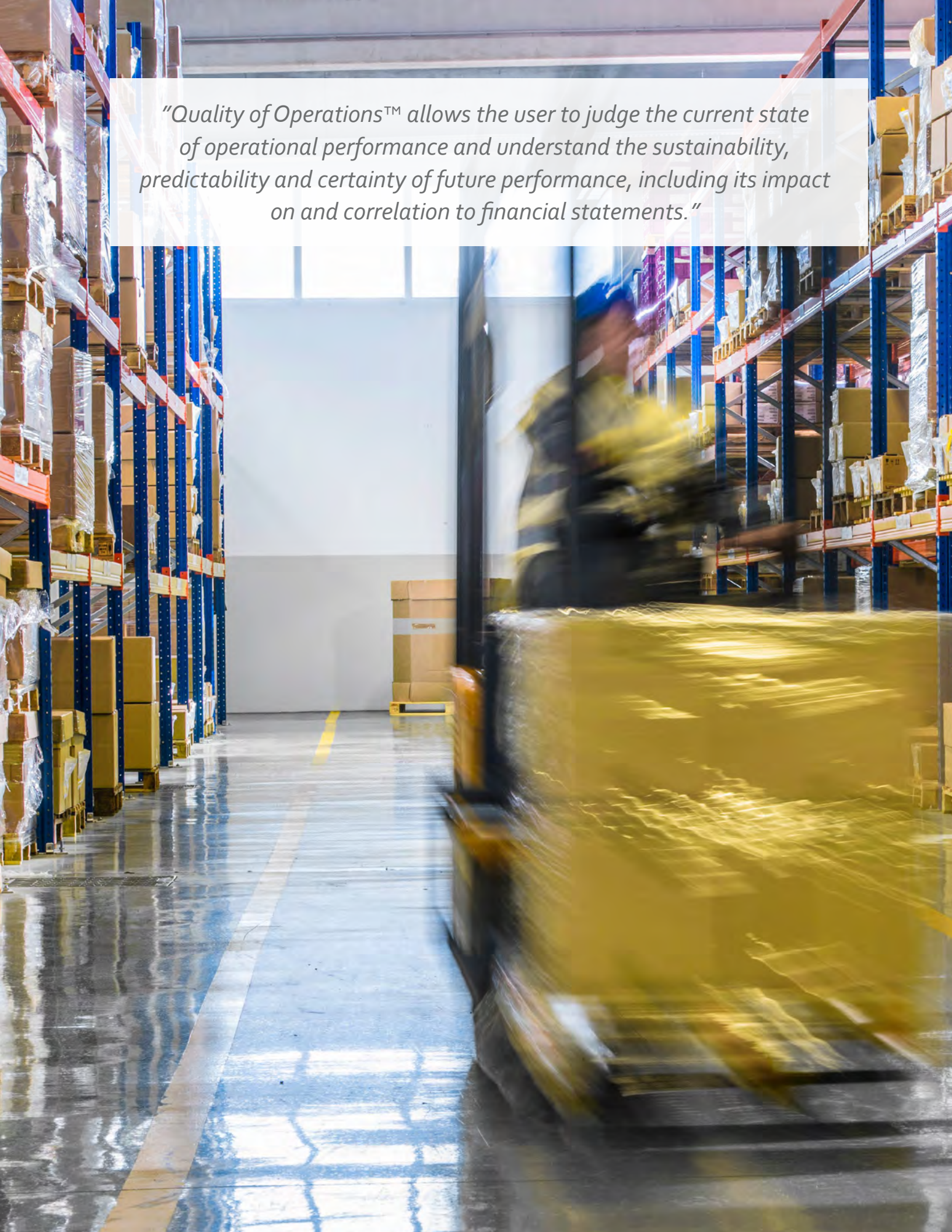
Enterprise Excellence Starts with
Quality of Operations™

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"Quality of Operations™ allows the user to judge the current state of operational performance and understand the sustainability, predictability and certainty of future performance, including its impact on and correlation to financial statements."





AN ESSENTIAL GUIDE TO: QUALITY OF OPERATIONS™

Prospective investors recognize the direct link between business operations and financial performance. EBITDA, cash, and revenue are all attributed to underlying process flows and business operations, despite being financial and not operational, metrics.

Even so, middle-market investors have historically relied on traditional accounting due diligence to understand earnings and financial performance by solely using Quality of Earnings reports.

In the early 2000s, however, the investment industry started to put more emphasis on operations and value enhancement, recognizing that financial engineering alone could not deliver required returns.

Quality of Operations™ Analysis, also known as an operational due diligence analysis, is now becoming an important additional requirement prior to most transactions. Investors value QOO as much, if not more, than its financial counterpart.

IS QUALITY OF EARNINGS STILL IMPORTANT?

There is no single definition of QOE, and no agreed-upon industry standard. Its roots trace back to the 1970s and 80s, when professional investors needed to ascertain company valuations based on true earnings, not accounting anomalies. At that time, the

industry lacked a universal, objective measurement.

The general consensus today is that the goal of the QOE is to allow the user to draw conclusions about current income and projections for the future. The Quality of Earnings can largely be summarized as the extent to which earnings and expenses are:

- cash or non-cash
- recurring or non-recurring
- based on precise measurement or estimates subject to change.

Essentially, the QOE helps quantify and qualify historical earnings, while providing important insight into actual earnings and identifying value-destroying activities.

It does not show the true capabilities of the organization or determine how to turn challenges into opportunities for improvement.

INCORPORATING THE QUALITY OF OPERATIONS APPROACH™

Quality of Operations™ allows the user to judge the current state of operational performance and understand the sustainability, predictability and certainty of an investment's future performance, including its impact on and correlation to financial statements.

The Quality of Operations™ can generally be

summarized as the degree to which operations are:

- Optimized for excellence
- Sustainable at current / planned capacity and margins
- Performing at/near/above benchmarks within an industry (in terms of Inventory, cycle time, etc.)
- Efficiently deploying capital (working capital, human capital and intellectual capital)
- Supported by reliable fixed assets or at risk of unplanned capital expenditures
- Producing/delivering high quality products that meet known customer expectations
- Led by a competent leadership team focused on continuous improvement.

The more detailed and disciplined the QOO approach is up front, the more successful the investor, since decision-making is executed against an investment thesis grounded in a realistic view of an organization's capabilities and prospects for operational improvement. You want to make sure that your Quality of Operations™ advisors have relative industry specific experience, but ensuring you take a process driven approach to the operational diligence is a key element.

TriVista advisers recently employed QOO to support a \$500-million private equity fund evaluating a \$100-million transaction. Our approach allowed us to identify opportunities for \$2.5 million in EBITDA expansion and \$7.5 million of working capital improvement.

Team members in China and North America simultaneously assessed operational capabilities and weaknesses using procedures that included data room analysis, personal interviews, on-site observations and fact checking to analyze key areas of operations, including:

- Operational leadership and management skill sets

- CapEx planning and future requirements
- Engineering and new product development
- S&OP and inventory management
- Sourcing and supply chain management
- Continuous improvement programs
- Capacity by site

TriVista's global teams maintained daily communication with investors, flagging critical risks to the transaction. They produced a key findings report, which synthesized post-close risks and prioritized improvements, determining that the organization lacked an Enterprise Improvement Program. TriVista's QOO due diligence process gave the investors the confidence to proceed with the transaction.

Using QOO, TriVista's cross-functional teams were able to quickly and efficiently understand the organization's operations piece by piece, and presented the investors with information critical to the operation's stability and growth.

The private equity fund and its target acquisition were both so satisfied with TriVista's operational due diligence efforts that they retained the firm to implement the identified post-close improvement opportunities and have since hired TriVista to support multiple acquisitions.

QOE AND QOO: BETTER WAYS TO ASSESS VALUE

As this example illustrates, the Quality of Operations™ dovetails nicely with QOE. QOE provides perspective on the historical financials, while the QOO provides a bird's-eye view of what levers can be pulled to drive positive change (i.e., increased cash flow and EBITDA).

An investor using both methods obtains a holistic view of financial metrics, while identifying key operational enhancement initiatives (i.e., Lean, supply chain, new product development) to improve those metrics. ■



A close-up, artistic photograph of a compass rose. The compass is dark, possibly black or dark blue, with a prominent blue arrow pointing towards the upper right. The word "QUALITY" is written in large, bold, blue capital letters across the top of the compass face. Below the word, there are concentric circular lines and tick marks, suggesting a scale or measurement. The background is a soft, out-of-focus blue and white, giving the image a clean, professional feel.

QUALITY

"Capital preservation, EBITDA expansion and working capital improvement are the outputs of a robust QOO process."



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ABOUT TRIVISTA

TriVista's global team of operational advisers represents the largest dedicated operational advisory team to the M&A industry. Since our inception, we have advised on more than 150 M&A transactions servicing both Private Equity firms and large multinationals. Focusing on Quality of Operations™ Due Diligence and Post Merger Integration, TriVista applies a unique, process-driven approach to identify areas of risk and opportunity for clients that often can't be uncovered through traditional forms of due diligence.

To learn more about our services, visit www.trivista.com
call (888) 694-1484 or email info@trivista.com.



TIM RISTOFF

CEO & MANAGING DIRECTOR



Operational Due Diligence: USA & China

Identifying Risk & Value Creation Opportunities in a Cross-Border Deal

The Client

A \$700 Million Private Equity fund

Project Results

- Identified EBITDA expansion opportunities of \$2.5 Million
- Identified Working Capital Improvement opportunities of \$7.5 Million
- Retained by client to implement post-close improvement activities

Download this and other case studies at TriVista.com/case-studies



TriVista

Case Study

The Business Challenge

A \$700 Million Private Equity fund was interested in acquiring a \$100 Million industrial components manufacturer with a US and China presence. Given their limited experience in cross-border deals, the PEG retained TriVista to conduct a detailed Operational Due Diligence in both the US & China.

The Approach

TriVista mobilized project teams in China and North America to simultaneously assess operational capabilities and weaknesses throughout the organization. TriVista worked directly with the target acquisition, adhering to strict requirements of confidentiality and investigative rapport surrounding the sensitivity of the transaction. TriVista's due diligence included the following key areas of operations through data room analysis, personal interviews, and onsite observation/ fact checking:

- Operational Leadership & Management Skillsets
- Engineering & New Product Development
- S&OP & Inventory Management
- Sourcing & Supply Chain Management
- Continuous Improvement Programs

Daily communication with investors highlighted critical risks that could halt the transaction. TriVista's global team

collaboratively produced the key findings report, synthesizing post-close risks and improvement priorities.

Our Impact

TriVista's Operational Due Diligence Process equipped the Private Equity fund with the confidence to proceed with the transaction and provided an operational roadmap of near, mid, and long term improvements that would help justify the EBITDA multiple. TriVista presented the investors with quantifiable cash and EBITDA improvements, post-close, that could be leveraged to increase the enterprise value of the business.

TriVista's cross-functional team of subject matter experts were able to quickly and efficiently understand the organization's operations, piece by piece, and presented the investors with only the information critical to the operations stability and growth.

Both the Private Equity Fund and the target acquisition were so satisfied with our team's operational Due Diligence efforts, they retained TriVista again to implement the identified post-close improvement opportunities and have since engaged TriVista to support multiple bolt-on acquisitions.



About TriVista

TriVista is a global management consulting firm focused on operations advisory to the middle-market through Operational Due Diligence, Performance Improvement and Global Supply Chain Management. The firm has offices throughout the United States and China.

Contact Us

For more information please call 949.218.4830 or email us at info@trivista.com. Visit us online at www.TriVista.com.





Lean Implementation: Industrial Equipment

TriVista led efforts to drive process improvement, expand capacity and reduce inventory at a leading industrial equipment manufacturer.

The Client

A private equity owned \$65 million industrial equipment manufacturer

Project Results

- Delivered 200bps improvement to EBITDA
- Reduced Inventory by \$1.55 million (18%)
- 25% Work In Process Inventory Reduction
- 50% Increase in Capacity with no additional direct labor
- Manufacturing Cycle Time Reduction of 39%
- Reduction of utilized floor space by 25%

Download this and other success stories at TriVista.com/success-stories



TriVista

Case Study

The Business Challenge

TriVista's client was a private equity owned \$65 million manufacturer of industrial equipment. The company was trying to explore ways to increase capacity without adding additional roofline – max capacity was reached at their existing facility and management didn't want to relocate. TriVista was retained to explore capacity expansion opportunities and redesign the facility layout.

At the beginning of the engagement, TriVista consultants realized that there were other significant issues impacting the business. Excess inventory, lack of useful metrics, excess material movement and insufficient training for shop floor employees were only a handful of the issues our team encountered early on.

Through our initial diagnostic process, we identified the following key challenges:

- Lack of accurate measurement system to track direct labor hours
- Excess product movement
- Excess WIP in the manufacturing process
- Excess inventory
- Excess non-value added time in the manufacturing process
- An average of only 70% first pass yield on all mechanical/electrical drawings

- Lack of visibility in the manufacturing process
- Extremely risk and change adverse
- Used to not implementing change unless 100% sure it will work
- Lack of factory employee training and knowledge of factory process
- Non-empowered employees

How TriVista Helped

With backlog continuing to build, the TriVista team needed to respond quickly to increase capacity and fulfill customer orders.


TriVista rapidly designed collaborative projects that would address these key issues, and set goals for the projects:

- Increase output by 50%
- Optimize Material Flow
- Increase Visibility of Processes (Visual Management)
- Reduce WIP
- Reduce Manufacturing Cycle Time
- Implement 5S throughout facility (including front office)
- Reduce Inventory by \$1.4 Million
- Increase EBITDA by 200 basis points

Our Collaborative Impact

By using Lean and Six Sigma tools such as +QDIP visual management, the 5 Why's, Value Stream Mapping, Line





"TriVista delivered a 200bps improvement to EBITDA and reduced inventory by \$1.55 million."

Balancing, Spaghetti Diagrams, Operation Equipment Efficiency and D.M.A.I.C principles, our team of Lean Champions worked alongside management for 3 months to identify, design and implement the necessary changes to the factory. The executive management team and their private equity partner were extremely satisfied with the results.

Not only was the inventory in process reduced by at least \$250,000 (25%), but a system was implemented such that WIP and stationary inventory could be monitored continuously. Visibility throughout the factory was increased such that the any issue that arose could be seen and dealt with immediately. Capacity increased by 50%, along with a proposal and plans to increase capacity by 100% in the same manufacturing footprint.

Measured savings included:

- Delivered 200bps improvement to EBITDA
- Reduced Inventory by \$1.55 million (18%)
- 25% Work In Process Inventory Reduction - resulted in annual savings of more than \$250,000
- 50% Increase in Capacity with no additional direct labor and 100% with no additional capital investments
- Reduced drawing errors by 50%
- Manufacturing Cycle Time Reduction of 39%

- Reduction of utilized floor space by 25%
- Reduction of product movement 20% - 60% (depending on SKU)
- Additional Accumulated savings of more than \$80,000

Contact Us

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