Wilson Perumal & Company

*We help companies thrive in a complex world*

- **Premier strategy consulting firm** with significant operations transformation experience, serving private equity, large corporate clients and the US military

- **Unique focus on complexity:** helping companies simplify for profitability and better compete and grow in increasingly complex environments

- **Value-oriented:** with focus on profit, growth and working capital outcomes; results frequently yield a 20-40% improvement in EBITDA

- **Thought-leadership:** authors of leading books, *Waging War on Complexity Costs* and *Growth in the Age of Complexity* (McGraw-Hill)

- **Track record creating value in PE:** unique analytics enable differentiated insights in due diligence and identification of opportunities for significant EBITDA growth
Executive Summary

• WP&C’s approach to diligence includes unique analytics that unlock more aggressive value-creation plans and inform the deal valuation
  – Our Square Root Costing methodology (SRC) builds a rapid view of true product and customer profitability and tees up opportunities on pricing, operational improvements, and EBITDA lift potential
  – In combination with our Operational Capability Maturity Assessment, we identify grounded hypotheses for rapid improvements and a target EBITDA improvement plan, which we then launch Day 1 post-close

• Operational Due Diligence (ODD) adds welcome certainty to your deal thesis
  – Commercial and Financial Diligence are necessary but insufficient areas of pre-deal investigation
  – With median holding periods falling, increasing the speed and magnitude of value capture is critical to achieve target valuations—an operations transformation plan adds an element of certainty by identifying tangible improvement levers not dependent on growth-based assumption
  – Our approach typically leads to 20-40% improvements in EBITDA and 15-25% reductions in working capital within 12 months

• We add value through our analytics, and then by rapidly executing improvement actions
  – In ODD, we identify practical opportunities across complexity reduction, operations improvements, and operating model simplification through the use of our proprietary Operational Capability Maturity Assessment and develop a target EBITDA plan to drive execution
  – Post-close, our team, with deep operations/execution experience, works with your portfolio company to a) immediately launch Quick Win improvements and b) capture the full EBITDA opportunity

Insightful Due Diligence + Aggressive EBITDA Targets + Hands on Execution Support = 20-40% EBITDA improvement in 12 months
Our Operational Due Diligence approach is additive to traditional diligence and ensures value capture

We quickly identify risks and have a greater focus on the path to value creation

- Historical financial view
- Quality of earnings
- Future $ outlook

Financial Due Diligence

- Position of products or services within the market
- Position of company within the market

Commercial Due Diligence

- Operational Capability Maturity Assessment
- Operational risk/scalability
- New go-to-market opportunities

Operational Due Diligence

- Quality of revenues (customers)
- Quality of offering (products/services)
- CapEx and OpEx investment requirements

We better ensure, accelerate, and maximize downstream returns
Three coordinated workstreams form the basis of our ODD approach

1. **Prep Work**
   - Preliminary review
   - Develop hypotheses
   - Data request
   - Interview guides
   - Schedule interviews
   - Industry research

   **Baseline Complexity-Adjusted Costs (SRC)**
   **Costs Buckets to Allocate**
   **SKU, Category, and Customer Profitability**
   **Initial SRC Portfolio Cost Model**

   1-2-day site visit / 3-5-week due diligence

2. **Baseline Portfolio Complexity**
   **5-Facet Portfolio Analysis**
   **SKU/Category Deep Dives**
   **Portfolio Alignment Assessment**
   **SKU/Category Optimization Options** (cut, reprice, mfg)

   **Key Outputs**
   - Direct line of sight to 5+% short-term operating margin improvement
   - Focus areas for deep dive to achieve add’l margin (15+%)
   - High-level portfolio roadmap
   - High-level manufacturing strategy

3. **Baseline Operations/ Fulfillment Performance**
   **E2E Production Assessment**
   **Ops Gaps Deep Dive**
   **Operations Strategy & Execution Assessment**
   **Operations Improvement Roadmap**

   **This work can be completed onsite and/or remotely**

*Operational Capability Maturity Assessment*
Complexity-adjusted Costs – *Square Root Costing*

*Determine complexity cost drivers to understand true profitability*

**Baseline Complexity-Adjusted Costs (SRC)**

**Cost Buckets to Allocate**

**SKU, Category, and Customer Profitability**

**Initial SRC Portfolio Cost Model**

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**Complexity-adjust SKU (or Customer) Profitability**

- **SRC gives an accurate view of product or customer profitability**

- **How well will this part of the business scale going forward?**

- **What is the latent value in this part of the business? How can it be captured?**
  - What can you eliminate to simplify and cut costs or reinvest?
  - Are there pricing opportunities?
  - Can products be redesigned to communize raw materials or simplify production?
  - Is there a different way to go-to-market?
  - Should production be outsourced?

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**Square Root Costing (SRC) is WP&C’s proprietary methodology to account for cross-subsidization and correct for skewed views of profitability**
Unlock value in the portfolio by looking at the roles & contributions of all products

- Which products are **profitable** at the GP and OP levels?
- What is the cost of complexity?
- What are the **market and regulatory trends**?
- What is the **competitive landscape**?
- Which products drive operational complexity?
- How does each product affect the **supply chain**?
- How does the portfolio leverage **competitive advantage**?
- How does the portfolio meet **customer needs**?
- Does variety enhance or confuse the customer?
- How well does the **portfolio align with strategy**?
Operations Performance – *End-to-end Assessment*

Identify and plan for biggest EBITDA improvement levers, including ‘quick wins’

**S&OP**
- Forecasting
- Demand Planning
- Supply Planning
- Labor Scheduling
- Plant Scheduling
- Inventory Management
- Line Balancing
- Process Flow
- Workflow
- Analytic Batch Sizing

**PRODUCTION**
- Labor – Regular/OT
- Efficiency
- Productivity
- Process
- Tools
- Lean Capabilities
- Management Systems
- ERP Systems
- Plant & Equipment
- R&D

**OEE/CAPACITY**
- Material Availability
- Cycle Time
- Measurement
- Labor Skills
- Labor Scheduling
- Downtime
- Maintenance
- Quality
- Set-ups
- Changeovers

**SUPPLY CHAIN**
- Warehousing
- Transportation
- Material Flow
- Cost
- Make v. Buy
- Labor
- Planning
- Vendor Strategy
- Vendor Constraints
- Vendor Performance

**SCALABILITY**
- Forecasting
- Capacity
- Ops Strategy
- Supply Chain
- Bench Strength
- Mgmt System
- Equipment
- Shift Structure
- Labor Force
- Production System
- Engineering
- Maintenance
- R&D

**OVERHEAD**
- Inventory
- Direct/Indirect Ratio
- Engineering
- Commercialization
- HR
- Mgmt/Supervision
- Maintenance
- QA/QC
- Planning
- Management System
- CIP

Using our *Operational Capability Maturity Assessment*, we take a hypothesis-based approach to ops improvement to move more quickly to what will “move the needle”
The Operational Capability Maturity Assessment identifies critical value opportunities through a comprehensive scan.

Our team of operations experts executes the assessment, identifying gaps and solutions.

<table>
<thead>
<tr>
<th>Scalability</th>
<th>Production</th>
<th>S&amp;OP</th>
<th>Overhead</th>
<th>OEE/Capacity</th>
<th>Supply Chain</th>
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<tr>
<td>Supply Chain</td>
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<td>NPDP Commercialization</td>
<td>Labor Skills</td>
<td>Demand Planning</td>
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<td>Manufacturing capability</td>
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<td>QA/QC</td>
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<td>ERP</td>
<td>Management Review</td>
<td>Maintenance W/O System</td>
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<td>Warehousing Inventory Turns</td>
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<td>Analytic Batch Sizing</td>
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<td>Labor Skills</td>
<td>Productivity</td>
<td>Inventory Accuracy</td>
<td>Labor Dir/ indir</td>
<td>Availability</td>
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<tr>
<td>Quality</td>
<td>Efficiency</td>
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<td>Turns</td>
<td>Downtime</td>
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<td>RAW &amp; WIP</td>
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<td>Quality/ Mix-up/ Returns</td>
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<td>Capacity Utilization</td>
<td>Planning</td>
<td>Availability</td>
<td>Mission, Vision, Values</td>
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<td>Plan</td>
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<td>Demand Planning</td>
<td>Organization</td>
<td>Labor</td>
<td>Functional Capability Goals</td>
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<td>Feedback</td>
<td>Maintenance</td>
<td>HR/ O</td>
<td>Maintenance</td>
<td>Make</td>
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<td>Inventory Management</td>
<td>IT</td>
<td>Quality</td>
<td>Risks</td>
<td>Quality</td>
<td>Customer Responsiveness</td>
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</tbody>
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An overall view of operations quickly focuses on areas of strength and opportunity...

...followed by deep dives in areas of opportunity to refine hypotheses and identify improvement actions.

Our Operational Capability Maturity Assessment covers 6 core areas and 91 unique underlying processes and performance measures.
Our flexible and scalable due diligence support model accelerates transformation and the path to value creation.

**Typical Diligence Support Timeline**

<table>
<thead>
<tr>
<th>1-2 WEEKS</th>
<th>2-3 WEEKS</th>
<th>8-16 WEEKS</th>
<th>2-12 MONTHS</th>
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<tbody>
<tr>
<td>Baseline &amp; Preliminary Hypotheses</td>
<td>Opportunity Deep Dives &amp; Hypothesis Confirmation</td>
<td>Post-Close Transformation</td>
<td>Achieve Target EBITDA Run Rate</td>
</tr>
<tr>
<td>Square Root Costing (SRC)</td>
<td>5 Facet Portfolio Analysis</td>
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<tr>
<td>Ops Performance Management</td>
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**Baseline & Preliminary Hypotheses Objectives**
- Through Ops Assessment*, interviews, data analyses, observations, develop understanding of:
  - Complexity drivers & impact
  - Portfolio roles & contributions
  - Operational performance
  - Root causes of poor performance
- Develop initial opportunity hypotheses

**Opportunity Deep Dive Objectives**
- Validate/finalize SRC model & product/customer hypotheses; deep dives on target SKUs/categories
- Focus ops analyses on target areas
- Develop size-of-the prize and implementation/value capture roadmap

**Transformation Objectives/Outcomes**
- Align with deal team and management on improvement priorities, resources, expectations
- Finalize improvement actions (portfolio, op model, operations, GTM, etc) & associated EBITDA/WC/operational benefits, effort, strategic alignment
- Develop road map to value creation—identifying passive and action cost-outs and plans to capture
- Assemble internal resources & owners; train and coach them to help drive implementation
- Establish project governance & reporting cadence
- Kick-off and drive ‘quick win’ opportunities to completion and value capture
- Identify and incorporate additional opportunities

**Ongoing monitoring & reporting of performance to plan**

Wilson Perumal & Company, Inc.
Whether onsite or remote, WP&C ODD approach provides expanded insight with each step

### INITIAL HYPOTHESIS

**Activities**
- Advance site visit
- Initial hypotheses and areas of focus
- Data & interview requests development
- Preliminary SRC modeling
- Preliminary operational assessment

**Outputs**
- Preliminary SRC profitability analysis
- Initial hypotheses
- Data & interview requests

### WEEKS 1-2

**Activities**
- Discovery sessions/workshops with SME’s to validate and analyze data
- Validate and adjust cost allocation assumptions for advanced SRC model
- Interviews, tours, observations for Ops Capability Maturity Assessment

**Outputs**
- Portfolio opportunities identified—SKU, category, customers
- Engineering, Manufacturing, and Supply Chain opportunities analyses

### WEEKS 3-5

**Activities**
- Refined hypotheses and findings
- Category & 5-facet review
- Size-of-the-prize, opportunities workstream plan, quick wins development
- Complete Ops Assessment

**Outputs**
- Ops Capability Maturity Assessment
- Finalized SRC model outputs
- Finalized operational assessment
- Improvement roadmap & workplans

### Project Support Resource

<table>
<thead>
<tr>
<th></th>
<th>Hours/Week</th>
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<tbody>
<tr>
<td>Deal Team</td>
<td>2-4</td>
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<tr>
<td>Project Lead</td>
<td>4-6</td>
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</table>

### Functional Stakeholder Support

<table>
<thead>
<tr>
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<th>Hours/Week</th>
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<tbody>
<tr>
<td>Finance</td>
<td>4-6</td>
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<tr>
<td>R&amp;D</td>
<td>2-4</td>
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<tr>
<td>Supply Chain</td>
<td>4-6</td>
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<tr>
<td>Sales &amp; Marketing</td>
<td>4-6</td>
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<tr>
<td>Manufacturing</td>
<td>6-8</td>
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<tr>
<td>Product Mgmt</td>
<td>4-6</td>
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### Data Requirement

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<tbody>
<tr>
<td>P&amp;L financials</td>
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<tr>
<td>Historical sales order data</td>
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<tr>
<td>SKU &amp; customer masters</td>
</tr>
<tr>
<td>Functional &amp; SG&amp;A spend details</td>
</tr>
<tr>
<td>Supply Chain details (transportation, etc.)</td>
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<tr>
<td>Inventory (Raw material, finished goods)</td>
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<tr>
<td>Mfg performance (OEE, yield, scrap, etc.)</td>
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<tr>
<td>Process maps</td>
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<tr>
<td>Organization chart</td>
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</table>
**Sample Outputs** – our analysis reveals opportunities for value creation not attainable through traditional diligence

**Category-SKU Walk Down** identifies value drivers in the business

Revenue density, as a proxy for complexity, provides initial direction for category focus

**Complexity-adjusted SKU profitability Whale Curve** shows profit concentration/distortion

**Operational Capability Maturity Assessment** reveals areas of excellence/opportunity

*sanitized results from an operational due diligence project for a leading US private equity firm in the nutritional supplement industry"
### 20-40% EBITDA Improvement in Less Than 12 Months

<table>
<thead>
<tr>
<th>TYPICAL TRANSFORMATION HYPOTHESES</th>
<th>ACTIONS TO REALIZE BENEFIT</th>
<th>TIME TO FULL VALUE</th>
<th>100-DAY POTENTIAL</th>
</tr>
</thead>
</table>
| Improve EBITDA by optimizing SKU, category, and customer portfolios | • Align customer service levels with customer value; stop overserving low-value customers  
• Adjust pricing to align with costs & customer value  
• Exit unprofitable markets and/or channels  
• Rethink Make v. Buy and Make-to-order v. Make-to-stock  
• Rationalize/repurpose SG&A support, footprint, and inventory  
• Focus sales & marketing on profitable core products | 6-12 months |  
| Improve EBITDA by consolidating SKUs to address production- and customer-driven complexity costs | • Develop “profit pools” by product category  
• Consolidate products with high substitutability  
• Simplify SKU variation (size, color, flavor, etc)  
• Rethink margin-neutral products—rationalize or reprice  
• Eliminate unprofitable products/segments & associated costs  
• Commonize platforms/raw materials  
• Address portfolio gaps | 6-9 months |  
| Improve EBITDA by optimizing operations and realigning with revised portfolio | • Reduce complexity across entire value stream  
• Design E2E S&OP process on top of current planning process  
• Run batch optimization scenarios to determine best production schedule strategy  
• Implement shop floor production system & Lean tools  
• Enhance Leadership & Supervision effectiveness  
• Align Labor utilization and skillset with demand  
• Identify and operationalize automation opportunities | 6-12 months |  

Transformations are designed to be self-financing within year of execution and return >300% ROI within 2 years
WP&C’s team members bring years of real-world operations experience

Select members of the WP&C Team

**Stephen Wilson, Managing Partner**
- Founder and managing partner of WP&C
- Co-author of “Growth in the Age of Complexity”, and “Waging War on Complexity Costs”
- Extensive portfolio simplification experience
- MBA in Finance and Strategy from Wharton

**David Toth, Partner**
- 20+ years industry, consulting, and entrepreneurial experience across telecom, food services, and retail
- Operations due diligence experience with PE clients in the US and Europe
- BS/MS Industrial Engineering, Purdue

**Scott Stallbaum, Manager**
- Deep project experience applying WP&C’s SRC and portfolio optimization methods across industries
- Former mfg engineer & product launch mgr at Ford; manufacturing leader in med device industry
- MBA, Harvard Business School; BSME, Bucknell

**Kristine McCarthy, Consultant**
- Extensive experience implementing operations improvements (large corporate and PE-owned comp.)
- Led rapid ops transformation for US footwear manufacturer–drove down costs, scrap, late shipments
- BS, Buffalo State College

**Hundley Elliott, Partner**
- Significant large-scale operations transformation experience
- Prior Interim CEO in PE consumer Apparel company
- Co-author of Building High Performance Government
- MBA in Marketing and Finance, Indiana University

**Colm Hendrick, Manager**
- Senior executive focused on operational performance & business transformation
- Successfully completed 100s of operational assessments, restructurings, business turnarounds
- University College, Cork, Ireland

**Mel Lager, Senior Consultant**
- Expertise in business transformation & culture change
- Former c-level manufacturing leader with significant operations & turnaround experience with Alcoa, Alcan, and Cargill
- MBA, Duke University; BSEET, Point Park University

**Cody Hostuttler, Consultant**
- Focus on operations optimization, manufacturing leadership, and business transformation
- Former engineering manager & operations acceleration program manager at Nestle Purina
- MBA, Olin School of Business; BSIE, WVU
WP&C has significant experience helping portfolio firms identify and capture profitability and growth opportunities

*Sample PE-sponsored projects and outcomes:*

For a **high-tech product provider**, assessed current operations as well as customer & product profitability to assess ability to meet 2x revenue target and grow profit margin; found over 40% savings. Assessed and redesigned warehouse and manufacturing workspace and process flow to reduce labor costs and backlog.

For a **home-based behavioral health provider**, increased clinical fulfillment by >18% in 2.5 months via quick wins while working to transform clinical operations to gain an additional 20% improvement, targeting 2x EBIT improvement.

For a **global clinical research organization (CRO)**, supported rationalization of therapeutic areas while rethinking op model, resource planning, and performance management for late phase trials. Helped overcome $5M EBIT shortfall to realize best year in terms of profit and revenue.

For a **construction materials manufacturer**, reevaluated profitability in its 3 divisions. Transformed front-office and go-to-market approach of all 3 to target +25% EBIT improvement (Exec team sign-off with BOD). Very successful exit ~9 months later.
CASE STUDIES
Complexity Costing for a Major Beverage Company
Portfolio Optimization at a European Food Company
Restructuring for Growth at a Tech Company
Assessing Complexity at a Powersports Vehicle Company

RESOURCES
Square Root Costing: Revealing the Cost of Complexity
Customer and Product Profitability Overview
Cost Reduction Overview
Operating Model Redesign Overview