Mastering Operations

Doing the right things... ... and doing them right

Our Value Proposition and the services we offer

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New velocities, new challenges

More complexity than ever
Extended supply Chains structures and dynamics are dramatically changing due to irreversible forces such as:
• Globalization and «center of gravity» shift towards emerging Areas
• Cost volatility
• Fading Customer loyalty
• Growing difficulties in accessing credit
• Higher and segmented service levels
• Product and service lifecycle shortening
• Growing relevance of Merger & Acquisitions

Resilience (i.e. the capability of facing sudden and disruptive changes without worsening the bottom line), is a compelling structural feature of paramount importance for 21st century Operations.

Traditional planning and governance rules Of complex organizations are no longer valid: new Operations models that embed more reactivity, flexibility, capability of rapidly capturing and understanding “weak signals” are a must in order to put in place and coordinate the appropriate response and anticipation initiatives.

All-round vision
Flexibility and resilience don’t come true by chance: they need to be carefully planned by harmonizing and integrating all concerned Business Model features, spanning from innovations processes to operations management, from Marketing to Procurement, Finance, Manufacturing and Distribution strategies.

Foresight and all-round clarity of execution are needed.

Looking ahead and beyond
Besides responsibility in the face of the bottom line and shareholders, Organizations also bear strong responsibilities to a larger set of stakeholders: personnel, social parties, labor unions, environment...

Corporate Social Responsibility in leaving a better world to future generations goes hand-in-hand with Operations design and execution.
The eternal dilemma

**Strategy or Tactics?**

The Operations are extremely concrete by nature: cost optimization, daily hands-on problem solving, unpredictable events and pressure on tangible, short-term results...
The Operations cannot stop for “work in progress”.

This fosters a natural and justified aptitude to tactical thinking in order to provide quick fixes to the issues coming from the field.

Nonetheless, in a scenario characterized by sudden and structural changes addressing symptoms is not enough to stay healthy in the long term (that is the ultimate goal for every business organization): it is mandatory to address the root causes.

An organization survives and flourishes as long as it is capable of generating value for its Customers, at sustainable costs.
The Operations are in charge of making the Customer Value Proposition happen. They are a cornerstone strategic asset that requires being continuously re-engineered in order to keep the pace of a fast-changing business eco-system.

**Combining strategic vision and tactical capabilities** is, nowadays more than ever, a must for Operations managers.

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Strategy without tactics is the longest way to victory.

Tactics without strategy is the noise before defeat.

*(Sun-Tzu, the Art of War)*
The playground

Hot topics

Nowadays business scenarios are leading to a dramatic increase of operations-related topics within Top Executives over-crowded agendas. Just a few examples:

Technology innovation, structural changes in supply and demand markets are challenging the current supply chain state.

- What business processes and organization changes are needed?
- What supply, manufacturing and distribution footprint redesign is required?
- How to properly match cost-efficient and flexible-response operations?

Defining standards is key not only to process control and improvement, but also to appropriately support the negotiation and sharing of the “rules of the game” with concerned Stakeholders (Labor unions, supply chain partners, etc.)

- Have the “right” standards been defined?
- How to set standards for brand-new processes?

Competing and attaining a long-lasting competitive advantage asks for a balanced mix of continuous and disruptive improvement, working on several business areas while coping with resource and time constraints.

- Is it clear where and why focusing?
- Has a comprehensive implementation plan been structured and shared?
- What efforts and benefits are associated to the concerned implementation steps?

The dark side of globalized and interdependent operations is an unavoidable complexity and risk increase.

- How to measure supply chain risk?
- How to establish relationships between risk and business results?
- How to design and monitor the achievement of the appropriate supply chain resilience?
Our Value Proposition

Increasing Operations endeavors are our playground.

Years of experience in highly complex and innovative national and international environments and the cooperation relationships with well-renowned Sector and Academy organizations are the grounding of our all-round approach.

- We support our Clients in designing, optimizing, implementing and monitoring Operations from Supply Chain design to single workplace organization

- We are thought and practice leaders ranging from “turn key” high-complex solutions to single advice on specialized Operational matters

- We offer an all-round geographic coverage to our Clients’ needs thanks to being part of the global PwC Network

- We are able to allow our Clients attaining Operations side-opportunities thanks to the integration with other PwC’s Lines of Service (Tax & Legal, Risk Management, Auditing, M&A)

We operate globally, we connect the dots

- We are recognized global leaders in Operations consulting with 4.000+ practitioners in over 60 countries

- We leverage unparalleled experience and capabilities in all key Operations areas:
  - Operations strategy and transformation
  - Product innovation and development
  - Procurement and sourcing
  - Production and Supply Chain Management
  - Service Operations

- We help our clients elevate the importance of their Operations by enabling:
  - Growth
  - Agility
  - Resilience
  - Productivity

- We bring together all the various skills from across PwC to connect our client’s business strategies with operations in a seamless solution that integrates:
  - Business operations
  - Financial models
  - Organization structures
  - Risk and Tax dimensions
**Doing the right things...**

*Working where it pays off*

Our approach to Operations redesign or improvement starts from a deep understanding of the Business Model and the related Customer Value Proposition of our Clients, in order to set robust and actionable Action Plans targeted on our Clients’ Value Chain.
The starting point

A Supply Chain exists as long as it is capable of generating a Value that Customers perceive and are willing to pay for.

Such Value has several facets, sometimes conflicting each other: likewise for Marketing strategies, there is no single size for Operations strategies and concerned management processes.

Our approach to the Operations starts with a deep understanding of our Clients’ Business Model and their Customer Value Proposition.

No firm can compete successfully on all dimensions of customer value.

A business strategy is about taking a market position with respect to the Customer Value Proposition.

(David Simchi-Levi)

Only through this process it is possible, by means of the appropriate analysis and diagnostics tools, to define where and how the Operations can bring the most contribution to the Customer Value Proposition, making it happen while safeguarding the Bottom Line and other enterprise goals.

Accordingly, Operations gaps and concerned priority areas are highlighted in order to build a robust and actionable Implementation Plan (i.e. Targeted on the Organization’s real needs and capabilities to put in place and digest suggested improvements).

The following is the bedrock of our Roadmap To Value methodologies:

- Selecting and designing the needed Action Items with an all-round vision of the Business and the Operations along the end-to-end Supply Chain
- Qualify and quantify where and how applicable, the outcomes of the aforementioned Action Items in terms of Benefit and Effort
- Set the best-fit implementation approach, according to Business goals and Operations Maturity Level
- Build a well-balanced and actionable Implementation Plan (timeline, resources, implementation modes).

Processes, organization, people, supporting tools and techniques, Supply Chain infrastructure and business partners: nothing can be forgotten or overlooked in order to build a long-lasting success path.
...in the right way

Working in the way it pays off

We have a hands-on approach to Operations improvement, tied up to our Clients’ real needs. Our methodologies are modular by nature, allowing us to perform focused assignments or all-round programs in a highly customized and scalable way.
Using the right tools

Although having reference to general principles, every Client’s need is specific, requiring therefore a target approach.

This is why we developed highly modular and customizable methodologies in terms of:

- Delivery modes
- Focused areas

Combined with years of field-experience, that allows us to craft a form-fitting solution that is able to fulfill at best what our Clients really need, no matter if large multinational organizations or small to medium enterprises..

If all you have is a hammer, everything looks like a nail

(Abraham Maslow)

In terms of delivery modes, our engagement could be classified into three main streams:

- **Diagnostics and check-up**, aiming at defining the Operations Maturity Level, potential value leakages and gaps with regards to the current and future business needs
- **Focused Projects** on one or more Operations areas, aiming at the implementation of specific solutions and improvements with regards to concerned priorities
- **Integrated Programs** of transformation entailing the whole Operations spectrum in order to build a powerful business strategy enabler

In terms of Focus Areas, all key operations building blocks fall within our scope:

- **Innovation Management** and links between the Innovation and the Operations chains
- **Network Design**: location choices, make vs. buy, supply chain risk management
- **World Class Supply Chain Productivity** design and development of competitive and sustainable production systems
- **Organization Models** (organization, roles and responsibilities), industrial relations, gain sharing agreements, education and training with certifications
Understand, design, act

A comprehensive and well-balanced assessment of the Operations current state is the key to structure any improvement initiative that is at the same time:

- coherent with business goals
- actionable by the organization

Our diagnostics and check-up services are the hands-on answer to the aforementioned needs:

- they provide a structured, all-round picture of the Current State
- they set the most appropriate Future State targets in relationship to business specifics
- they set the right improvement priorities, weighting gaps with regards to their relevance for the Customer Value Proposition

This is the grounding for a robust Implementation roadmap that sketches a clear evolution of the Operations maturity level, duly supported by benefit, effort and timeline quantifications.

Business targets, field-based problem solving, supply chain structure key features, process, organization and regulatory issues are fully taken into account and harmonized into a clear and well-balanced blend of strategic and tactical initiatives.

The services we offer

Diagnostics and check-up

- Operations Maturity Level Assessment
- Procurement Maturity Level Assessment
- Supply Chain Risk Assessment
- Product Structure Fit Assessment
- Manufacturing & Distribution Fit Assessment
- Operations Software Fit Assessment
- OEE Check-up (Plant efficiency)
- OLE Check-up (Labor productivity)
- Ergonomic Check-up (Biomechanical overload analysis)

Implementation Roadmap

- Impact Matrix build-up
- Future state Waves design
- Implementation Master Plan build-up
- Implementation Risk assessment and mitigation
- Business Case build-up
Managing Innovation

In an increasingly competitive and globalized environment, the capability of innovating and offering product variety is a key strategic factor in order to avoid falling into the vicious circle of price competition.

Gathering, rationalizing and properly funneling explicit or latent customer expectations along the Innovation Chain (from R&D to Industrial Engineering) allows creating products coherent with the Customer Value Proposition.

This is necessary, but not sufficient for ensuring success: the dark side of the moon is the capability of manufacturing and delivering such product variety at competitive costs and service level.

“Managing Innovation” means “being capable of aligning Innovation and Operations”.

Such a goal can be achieved only through a close integration of all concerned processes:

- New Product Development
- Strategic Sourcing and Procurement
- Core Competencies Development and Management
- Process and Industrial Engineering
- Supply Chain Management

The services we offer

Voice of the Customer and TRIZ
- Scoping support
- Integration with Product Portfolio Management and Marketing
- Buy-in, communication and change management
- Achievement monitoring and tuning
- TRIZ matter experts support

Quality Function Deployment
- “Fit to Customer” Assessment
- Integration with New Product Development and Marketing
- Buy-in, communication and change management
- Achievement monitoring and tuning
- QFD matter experts support

Design for “X” (*)
- Design for Assembly (PROKON)
- Product, process and Supply Chain Integration
- Achievement monitoring and tuning

(*) Manufacturing, Assembly, Maintenance...

New Product Introduction
- New Product Introduction design and planning
- New Product Introduction integration
- Project management and active coaching
The Extended Enterprise

A Supply Chain Network is a living and constantly evolving entity that strives to adapt to major driving forces such as:

- Demand “center of gravity” shift
- Acquisition or discontinuation of manufacturing/distribution facilities
- Mergers and Company restructurings
- Variations in manufacturing and supply dynamics, also due to the New product Development process

Should the Network not be capable of keeping the pace of these changes, significant extra-costs and flexibility constraints could arise: the quest for supply chain resilience starts from here.

Pinpointing and mitigating related complex supply chain risks is a cornerstone in the journey to success as well.

Planning for resilience demands for the appropriate identification, quantification and management of the exposure to supply chain risks in order to better manage current endeavors and to capture current and future opportunities.

The services we offer

Strategic Network Design

- Business Model/Value Proposition fit
- Value leaks definition
- Possible Business Scenarios definition
- Alternative Networks definition
- SWOT Analysis
- Best-fit Network definition
- Simulation and resilience analysis
- Buy-in, communication and change management
- Programme and Project Management
- Matter experts support

Supply Chain & Risk Management

- Supply Chain Risks identification
- Resilience needs identification
- Materials Availability
- Supply Chain Risk Management process design (workflow, roles, responsibilities)
- Governance and Control Model design
- Buy-in, communication and change management
- Programme and Project Management
- Matter experts support
Plants and organization

The manufacturing process optimization starts with the appropriate design of the facility that will host it: establishing an effective and efficient materials flow is possible as long as it is supported by a sound plant layout, designed in order to allow a systematic throughput time reduction according to the Just-in-Time philosophy.

An integrated approach to operational flows design (“First Time Right” logics) enables the achievement of goals otherwise unreachable. The redesign of existing manufacturing processes allows a long-lasting reduction of operating costs only in the face of a scientific approach to labor organization that supports lean production concepts and techniques.

When facing disruptive changes in the business ecosystem, the lack of organization tuning, the non-transparency of operating governance and control mechanisms and the limited proactive involvement of the workforce can really make the difference between success and failure.

It is of paramount importance to:

• understand current organization’s fit (structure, size and competences)
• define the Future State according to world class standards
• design and manage an actionable and sustainable change course

The services we offer

Plant design

• Block lay-out design
• Production areas rightsizing
• Ancillary areas rightsizing (*)
• Equipment lay-out optimization
• Alternative scenarios generation and evaluation
• Trade-off and evaluation criteria design
• What-if and resilience analysis
• Programme and Project Management
• Matter experts support

(*) Inter-operational buffers, tools, ...

Organization (re)design

• Value leakages definition
• Target Organization redesign – Manufacturing
• Target Organization redesign – Distribution
• Target Organization redesign – Back-office (**)
• Roles and resonsibilities design (RACI)
• Buy-in, communication and change management
• Programme and Project Management
• Matter experts support

(**) Planning, Procurement, Customer Service...
Operations planning

Together with supply chain visibility, planning processes are Operations Management’s lifeblood.

Spanning from aggregated planning (Sales & Operations Planning) to detailed scheduling, from sales to supply planning, a well-structured and integrated planning process enables the systematic harmonization of the organization’s goals around a “single version of the truth” that drives all operating activities.

There is no control without planning, and there is no improvement without control.

The more the Operations are going global, the more the integrated planning processes are crucial. Their complexity is growing as well, in a more-than-proportional way up to the extent of making them unmanageable if not properly structured and modularized.

The services we offer

Sales & Operations Planning
- S&OP Target setting
- S&OP process design & implementation
- S&OP integration / Global S&OP
- Buy-in, communication and change management

Demand & Distribution Planning
- Forecasting process design & implementation
- Distribution process design & implementation
- S&OP and Master Planning integration
- Downstream collaboration integration
- Buy-in, communication and change management

Master & Materials Planning
- M&M process design & implementation
- Capacity planning design & implementation
- Detailed scheduling integration
- Upstream collaboration integration
- Buy-in, communication and change management

Detailed Scheduling
- Detailed scheduling design & implementation
- M&M integration
- Shop Floor Control integration
- Buy-in, communication and change management
Producing, improving

Competitiveness improvement fosters productivity standards that require a dramatic reduction of all costs generated by any kind of waste within the manufacturing environment: non-quality, excess inventory, unneeded or inefficient production and materials handling activities...

This is not possible without a mindset turnaround aiming at putting in place an excellence-oriented production system (World Class Supply Chain Productivity).

Such a system:
- encompasses all best practices needed to allow its long-lasting sustainability
- is a methodology and improvement tools platform permanently ingrained in the organization
- drives the human capital improvement (technical and soft skills) in the journey towards competitiveness excellence
- strongly supports the achievement of the company’s strategic goals

All the above always bearing in mind the need to design manufacturing process with the due balance between productivity standards and healthy working conditions, according to internationally renowned and accepted criteria.

The services we offer

Process and flow design
- Production System Implementation
- Lean Flow
- Push vs. Pull process integration
- Visual Shop Floor management
- Cost Deployment & Shop Floor Control
- Production factors utilization optimization
- KPIs and scorecard design and implementation
- Matter experts support and change management

Best-fit standards design
- Scientific Work Management (ERGO-MTM)
- Time & Methods (MTM)
- Ergonomic Assessment Worksheet (EAWS)
- Workplace design
- Production and Assembly line design
- Industrial Relations and Labor agreements
- Buy-in, communication and change management
- Matter experts support

Continuous improvement
- 5-s approach implementation
- Focused improvement
- Autonomous Management
- Planned Maintenance
- Progressive Quality
- Matter experts support and change management
Supply chain collaboration

Supply Chain visibility and cooperation goes far beyond mere Order-To-Cash and Procure-To-Pay cycles automation, supported by some kinds of Electronic Data Interchange.

New Product Development and Operations planning are information interchange-intensive processes. Just a few examples:

• Drawings and technical specifications
• Bills Of Materials and routings
• Item masters and price lists
• Procurement and delivery schedules
• Planning and capacity modifications
• Orders and orders acknowledgments
• Delivery information
• Receipt notifications
• Invoices and payment instructions
• Performance measures

Supply chains are heavily relying on information and visibility: an effective approach to the Operations can’t overlook such matter of facts.

However, a “one size fits all” approach does not work, especially when dealing with supply chain collaboration: customer/supplier relationships, collaborative processes maturity, Organization’s size and established “rules of the” game need to be carefully understood and evaluated in order to design the right approach to collaborative supply chain management.

The services we offer

Supply-side collaboration

• Upstream collaboration initiative scoping
• Stakeholder expectations definition
• Value sharing model design (Rules of the Game)
• KPIs and Scorecard design & implementation
• Upstream collaboration process design
• Upstream collaboration Data Model design
• New Product Development integration
• Master & Materials Planning integration
• Procurement and Shop Floor integration
• Buy-in, project and change management
• Matter experts support

Demand-side collaboration

• Downstream collaboration initiative scoping
• Stakeholder expectations definition
• Value sharing model design (Rules of the Game)
• KPIs and Scorecard design & implementation
• Downstream collaboration process design
• Downstream collaboration Data Model design
• New Product Development integration
• Demand Planning integration
• Sales and Demand Management integration
• Buy-in, project and change management
• Matter experts support
Warehouses and inventory

Inventory is the key for operations management, being at the same time a strategic and tactical lever and a significant working capital component.

Likewise a drug, an abuse or inadequate use exposes the Operations to severe risks, like losing visibility on real requirements or generating obsolescence.

Inventory optimization entails several decision-making steps:
- decoupling points planning
- inventory positioning along the supply chain
- optimal mix (assortment) management

Inventory also means physical objects that need to be handled and stocked making use of facilities, assets and workforce.

A warehouse (no matter if materials or finished goods) is like a manufacturing facility, and thus needs to be properly designed in terms of lay-out, physical & information flows, and operational processes.

Finally, like for workforce in a manufacturing process, every efficiency target in materials handling must take into due account all ergonomic risks while performing concerned tasks.

The services we offer

Warehouse Management
- Block lay-out design
- Warehousing areas rightsizing
- Warehouse Management process design
- Shop Floor Control, Planning and Deployment integration
- Plan For Every Part (PFEP) implementation
- KPIs and scorecard design
- Project and change management
- Matter experts support

Materials Handling
- Time & Methods (MTM Logistics)
- Ergonomic Assessment worksheet (EAWS)
- Workforce rightsizing
- Project and change management
- Matter experts support

Inventory optimization
- Upstream optimization process design
- Decoupling Points design and optimization
- Downstream optimization process design
- Inventory allocation optimization
- KPIs and scorecard design
- Trade-off criteria design and implementation
- Project and change management
- Matter experts support
Focused solutions

We have a long track of successful history in the Operations area. In those years we established best practices and focused solutions for addressing recurring Supply Chain Management hot topics.

Typically, a focused solution is characterized by:
- An inception phase where current state diagnostics is performed and potential improvement gaps are spotted
- A Roadmap design phase that sets the course towards long-lasting performances and the identification of a pilot project
- The pilot project implementation
- The tuning and roll-out of the best-fit solution

Where needed, focused solutions are complemented with analysis and reporting software (either developed by PwC itself or selected among best-of-breed applications).

Should our Customer be interested in acquiring them in order to manage on their own the reiteration of concerned analyses, we will be pleased to provide all the knowledge transfer and start-up support.

The services we offer

Product Lifecycle & Master Data Management
- PLM Business Model design and implementation
- PLM and Master Data Management integration
- Buy-in, project and change management

Product & Customer Portfolio Optimization
- Profitability leakages definition
- Best-fit Product and Customer Portfolio design
- Buy-in, project and change management

Spare Parts Inventory Optimization
- Forecasting and Planning process design
- Best-fit service Inventory optimization
- Buy-in, project and change management

Procurement & Contracting
- Spend analysis and optimization
- Contracting, RFT and RFP /RFQ support
- Buy-in, project and change management
People at the very core

As well designed and implemented as it may be, no solution nor Operations management process will properly work in the lack of duly engaged, motivated and well-trained people who are aware of their own role within the concerned (internal and external) Organizations.

Very often what makes the real difference between success and failure of an initiative is a combination of:

- operating models
- leadership and goals alignment
- roles and responsibilities
- mindset and behaviors
- competencies and skills
- group and communications dynamics

Change management must be put at the very core of whatsoever initiative involving people and systematically pursued.

We support change management by means of a wide range of education and training courses spanning from specific training, to certifications, role-playing games and tailored workshops built around Customer’s real cases. Our education offering provides pragmatic, hands-on and all-round coverage in the Operations area.

We conceive education not as a stand-alone classroom event, but as a learn-and-experience process strongly rooted to the field and a powerful change management catalyst.
We are thought and methodology leaders in the area of Operations.

We harmonize thought of leading academics and professionals in various fields, as they excel in multi-faceted disciplines involved in managing complex and globalized supply chains. That is the ground that makes our professionals recognized for their leading professional and intellectual capabilities.

This is our body of intellectual capital. While a great deal of it is proprietary, there is also much that we wish to share with the larger business community through a series of publications, seminars and knowledge transfer events on best practices.

We embrace the idea of partnering and thought sharing with our clients, the press and the international academia.

At the seminars we recurrently organize, world leaders in supply chain management participate and share their ideas and experience.

Our key strength is to leverage knowledge and ideas into pragmatic professional services that bring long-lasting value to our Clients.
The PwC network in Italy counts about **3,400 professionals** (of whom 136 partners) located in 21 cities.

We are proud to offer to our customers a large and integrated variety of services: from auditing to accounting management, tax and legal consulting.

Thanks to the significant experience matured on the field, a high seniority of our professionals and the valuable support of our international network, we can solve highly complex and borderless problems to our Customers with multi-disciplinary solutions.