SUPPLIER FOOTPRINT OPTIMIZATION
CONNECTING THE DOTS – WHERE STRATEGY MEETS OPERATIONS
Increasing market pressure and new opportunities require the optimization of global manufacturing footprint

**NEED FOR ACTION**

- "Cheap money" ENABLES RISE OF SUPPLIER M&A deal volume and is expected to further increase
- Expansion in NEW MARKETS and development of NEW PRODUCTS to drive revenue growth
- Suppliers look to realize ECONOMIES OF SCALE & MODULARIZE in efficiency improvement and turnaround scenarios
- OEMs and suppliers RELOCATE PRODUCTION to CEE and Asian markets demanding supplier proximity

**FULL POTENTIAL: SMART COMBINATION OF STRATEGY AND OPERATIONS**

- **FOOTPRINT STRATEGY**
  - In focus
  - Know how you want it

- **STAKEHOLDER NEGOTIATION**
  - Know how to sell it

- **FOOTPRINT IMPLEMENTATION**
  - Know how to do it

Source: goetzpartners; P3
Key for success: Unique combination of strategy and operations – Integrated concept ensures feasibility

EXECUTIVE SUMMARY

1. INCREASED MARKET AND COST PRESSURE FORCES SUPPLIERS TO ADAPT
   M&A activities and relocations to CEE & Asian markets result in the need to review the global location footprint

2. goetzpartners & P3 COMBINING STRATEGY AND OPERATIONS TO TACKLE THE CHALLENGES
   Integrating both perspectives from the very beginning ensures a comprehensive and feasible solution – from early strategy to final implementation

3. INITIAL LOCATION STRATEGY ANALYSIS TO DEFINE STRATEGIC GUIDELINES
   - FUTURE TARGET MARKETS: Which products and services need to be offered in which regions
   - FUTURE KEY PROCESSES: Which parts of the value chain need to be covered internally

4. FOOTPRINT EVALUATION WITH A SPECIFIC ASSESSMENT IN STRATEGIC AND OPERATIONAL DIMENSIONS
   - MARKET to set main guidelines
   - OPERATIONS criteria to measure performance
   - RISK criteria to reflect resilience

5. TOOL-BASED VALIDATION FOR THE INDIVIDUALLY OPTIMIZED PRODUCTION SETUP
   Key drivers for the new setup can be markets, products, volumes or a combination of them – these options are simulated in scenario analysis and validated within detailed business cases

6. STRUCTURED IMPLEMENTATION PROCESS TRANSLATES LOCATION STRATEGY INTO ACTION
   The process is orchestrated by a content-heavy project management office to ensure the smooth transition from strategy to operation

OUR SOLUTION:
SYMBIOSIS OF STRATEGIC AND OPERATIONAL CONSULTING

SUCCESS FACTORS

INTEGRATED CONCEPT
The joint approach combines the strength of both worlds: strategic vision and operational excellence, which guarantees a comprehensive solution based on strategic decisions verified and complemented by the operational perspective

JOINT IMPLEMENTATION
The customized concept for the future manufacturing footprint is not designed to collect dust on the shelf – WE ENSURE AND SUPPORT THE IMPLEMENTATION

AUTHORS
Dr. Philipp Kinzler, Partner (goetzpartners)
Rainer Aits, Managing Director (P3)
Claudio Mager, Senior Manager (goetzpartners)
Jonas van Thiel, Operations Expert (P3)

NOTE: goetzpartners and p3 are independent contractors. No corporate or civil law association or partnership exists between them. Source: goetzpartners; P3
Tough challenge: Managing high complexity and multiple tradeoffs – How do we connect the dots?

KEY CHALLENGES

REGULATIONS
Compatibility with regional regulations has to be evaluated

COMPLEXITY
Numerous strategic options with highly complex implications to be assessed for added value and risk

IMPACT
Significant added value has to be compared with associated risk

REQUIRED TRADEOFFS FOR OPTIMIZING THE FOOTPRINT

TRADEOFFS
The optimization of different levers cannot be tackled independently. Due to their contrary nature, tradeoffs should be evaluated and a clear goal prioritization is required

SCALABILITY
CUSTOMER PROXIMITY

Versus

EFFICIENCY
RESILIENCY

Versus

FLEXIBILITY
UTILIZATION

Versus

100%

Source: goetzpartners; P3
Our solution: Symbiosis of strategic and operational consulting

JOINT GOETZPARTNERS & P3 APPROACH

- Analysis of current and future market positioning (incl. potential integration scenarios and competitor landscapes) as well as innovation roadmap
- Evaluation of current market performance via financial and operational metrics (revenues, margins, growth, capacity, etc.)
- Definition of target markets, value chain and distribution network
- Definition of company-specific evaluation criteria to account for regional and legal characteristics incl. operational measures (PPMs, OEE)
- Off-site data evaluation and on-site validation of capacities, quality measures and improvement potential
- Direct comparison of locations to derive synergy potentials
- Match of requirements for current and future target markets
- (Hypothesis-driven) development of optimization measures based on flexibility for site setup and strategic archetypes (market/product/volume-based)
- Fact-based and tool-supported validation of the manufacturing footprint via business case and scenario analysis
- Derivation of implementation roadmap incl. timeline, milestones and project organization (incl. e.g. site closures, shifts, efficiency programs)
- Close coordination with stakeholder negotiations to assure feasibility
- Setup and execution of transition activities

Source: goetzpartners; P3
The location strategy provides strategic guidelines by defining future target markets and key processes

**Which Markets to Be In**

*Review Product Patterns of Customers*
Assess customer’s location patterns, volumes of sale per product, customer segment and their respective margins.

*Review Market Segments and Opportunities*
Identify growth opportunities within market segments (preferably for high margin markets) and gauge competitive landscape.

**How to Serve Those Markets**

*Review Production Depth of the Value Chain*
Identify value chain elements that are critical to the unique selling point (USP) of the product and derive parts that could be sourced externally.

Determine CAPEX vs. OPEX limitations (internal build-up of production assets and knowledge vs. sourcing product/service of components).

Know which part of the value chain to cover internally and which to outsource.

Source: goetzpartners; P3
Creating transparency with a company-specific assessment of strategic and operational dimensions

FOOTPRINT EVALUATION DIMENSIONS

- **EVALUATION CRITERIA**
  - **MARKET-DRIVEN**
    - TIER POSITIONING: Closer proximity for lower tiers
    - DELIVERY SCHEDULE: Just-in-sequence (closer proximity) vs. just-in-time (more flexibility)
    - LOGISTICS: Storage costs, transport routes and incurring customs cost
    - TYPE OF PRODUCT: Specific products (selected suppliers) vs. commoditized goods (multiple suppliers)
  - **OPERATIONS-DRIVEN**
    - COSTS: "Landed costs" (e.g. production, logistics, complexity costs), direct and indirect manufacturing costs
    - CAPACITY: e.g. current capacities, potential additions
    - PROCUREMENT: e.g. quality and price of incoming goods
    - FLEXIBILITY: e.g. availability of workers, employment protection, external companies
  - **RISK-DRIVEN**
    - CLIENT DEPENDENCY: Client structure (single client structure creates significant risk exposure)
    - SUPPLY CHAIN & PRODUCTION RESILIENCE: Resistance to e.g. supply shortages, supply disruption, political unrest
    - CAPEX AND OPEX: Investment requirements and running expenses depending on location

- **CHECKLIST**
  - **CLIENT STRUCTURE**
    - Is the client structure diversified (multiple clients and locations vs. single client with few locations)?
  - **PRODUCTS**
    - Are there regional differences with regards to product characteristics?
  - **LEAD TIMES**
    - What are the requirements for lead times?
  - **TECHNOLOGIES**
    - Are production technologies similar across current site portfolio? Are they scalable?
  - **FLEXIBILITY**
    - Are the production assets transferrable? Are site shifts possible?
Multiple options exist – A tool-based validation determines the optimal choice for operational setup

LOCATION SETUP DERIVATION

OPTIMIZATION HYPOTHESES
Optimization measures can be hypothesized by direct comparisons among the existing locations. These measures are combined to create multiple scenarios.

FOOTPRINT SETUP
The future production setup is determined by one of three archetypes and outlined in different scenarios. Optimal production setup can be a combination or variation of the market-based, product-based or volume-based strategy.

TOOL VALIDATION
In a next step, business cases for the derived scenarios are prepared and a tool-based validation is employed to adequately assess costs, benefits and potential risks.

MARKET-BASED PRODUCTION SETUP
Every site serves a defined regional market with all respective products.

PRODUCT-BASED PRODUCTION SETUP
Sites produce only a single product and deliver it worldwide.

VOLUME-BASED PRODUCTION SETUP
Production split is conducted by high runners and low volume parts.

[1] Combination of multiple setups possible and likely to be necessary for optimal production setup
Source: goetzpartners; P3
Lacking structure creates chaos: Clear tasks required to transform strategy into operation

SETUP AND SUPPORT IMPLEMENTATION

PROJECT MANAGEMENT OFFICE (PMO)

FOOTPRINT STRATEGY

FOOTPRINT IMPLEMENTATION

OPERATIONAL EXCELLENCE

ANALYSIS EVALUATION CONCEPTION

SITE SELECTION FACTORY PLANNING FINANCIAL PLANNING SITE SHIFT/CLOSING PRODUCTION RAMP-UP

Partly parallel processes

Kickoff Strategy defined Footprint launched Site strategy implemented

PMO AT A GLANCE

To meet the demand for a CONTENT-HEAVY PROJECT MANAGEMENT OFFICE (PMO), four key tasks are essential

1. CONTENT SUPPORT & CHALLENGER
   Challenge work streams on content level and manage priorities and interdependencies

2. STAKEHOLDER MANAGEMENT
   Develop tailor-made messages to every stakeholder group and assure the right timing

3. PEOPLE EMPOWERMENT
   Drive change, engage the top management and involve key employees across functions

4. REPORTING & CONTROLLING
   Set up baseline, define targets, monitor the achievement and define required counteractions

Source: goetzpartners; P3
Strong track record in the field of strategic and operational projects

CLIENT EXAMPLE I

INITIAL SITUATION & RESULTS
- Technological Swiss group wants to form a global leader by merging its largest division with a major competitor
- Key challenge to assess and realize synergies by optimizing the merged production footprint
  - MULTIPLE PRODUCTION FACILITIES IN EUROPE; limited expansion opportunities
  - OVERLAPPING PRODUCTION SETUP IN NORTH AMERICA; low value-added chain depth

KEY RESULTS
- €120 M turnover consolidated
- +15% capacity utilization
- ~20% synergies realized (run-rate)

Source: goetzpartners; P3

CLIENT EXAMPLE II

INITIAL SITUATION & RESULTS
- German automotive OEM needs to ensure supply of different production sites with exterior parts for various models
- Key challenge to ensure stable production at OEM
  - Built up TRANSPARENCY throughout the supply chain
  - Assess and OPTIMIZE relevant PRODUCTION AND QUALITY PROCESSES
  - Implement RISK MANAGEMENT for various scenarios (e.g. blackmailing)
  - SHIFT complete PRODUCTION TO 3 competitors in CHINA and GERMANY

KEY RESULTS
- PRODUCTION at OEM sites ENSURED AT ALL TIMES

Source: goetzpartners; P3
goetzpartners is an independent advisory firm for all key issues of entrepreneurial activity: STRATEGY, M&A, TRANSFORMATION. With more than 350 professionals operating out of 14 OFFICES IN 11 COUNTRIES, we advise clients worldwide in all key industries. The company ranks among THE 10 BEST-PERFORMING GERMAN ADVISORY FIRMS (Lünendonk®). goetzpartners has received awards three years in a row as part of the “Best of Consulting” contest by the renowned German magazine “WirtschaftsWoche”, most recently in the “Project Excellence” category (2016).

goetzpartners experts have worked with numerous OEMs and suppliers. The projects ranging from acquisition phase to exit phase served financial and strategic decision-makers. Our wide SERVICE PORTFOLIO HOLISTICALLY SUPPORTS ALL AREAS ALONG THE VALUE CHAIN.

WE CONSTANTLY ANALYZE THE MARKET, e.g., with our annual GEAR automotive study. For the study, more than 100 managers of automotive suppliers were interviewed on how satisfied they are in regards to working together with OEMs. The outcomes from the study and from other research are used to adapt our methods to make sure you get the best services possible.

P3 group is a technical consulting company focused on emerging technology many topic areas in AVIATION, AUTOMOTIVE, COMMUNICATION, and DIGITAL. With more than 3600 professionals operating out of 38 OFFICES IN 14 COUNTRIES, we not only focus on the strategy and recommendations but also the INTEGRATION AND LAUNCH of new products and services. We can tackle the largest of projects including the global launch of new telematics services for an automotive OEM with a MULTI-DISCIPLINARY TEAM but can also be hyper-focused to find hidden patterns in your data through machine learning.

We are passionate about technology and empower our consultants to explore new ideas and concepts every day. When these ideas get big enough, they are spun off into their own start-ups to continue to foster the ENTREPRENUERIAL SPIRIT THAT DRIVES OUR COMPANY.

Our broad portfolio of services allows us to DELIVER MULTIPLE SERVICES OUT OF ONE HAND WITH THE SUPPORT OF A GLOBAL NETWORK that can be leveraged for subject matter expertise in your area of need. Whether it is exploring a new market, adapting to change, or defending your market share, P3 IS YOUR GLOBAL PARTNER FOR OVERCOMING OBSTACLES.
CONTACT

MARKUS SCHMID
Managing Director, goetzpartners
Markus.Schmid@goetzpartners.com
T +49-89-290725-809

DR. PHILIPP KINZLER
Partner, goetzpartners
Philipp.Kinzler@goetzpartners.com
T +49-89-290725-504

CLAUDIO MAGER
Senior Manager, goetzpartners
Claudio.Mager@goetzpartners.com
T +49-89-290725-169

RAINER AITS
Managing Director, P3 Group
Rainer.Aits@p3-group.com
T +49-163-7533770

JONAS VAN THIEL
Operations Expert, P3 Group
Jonas.vanThiel@p3-group.com
T +49-151-276 54 719

SILVIO SCHELLENBERGER
Manufacturing Engineering Expert, P3 Group
Silvio.Schellenberger@p3-group.com
T +49-151-571 33 505