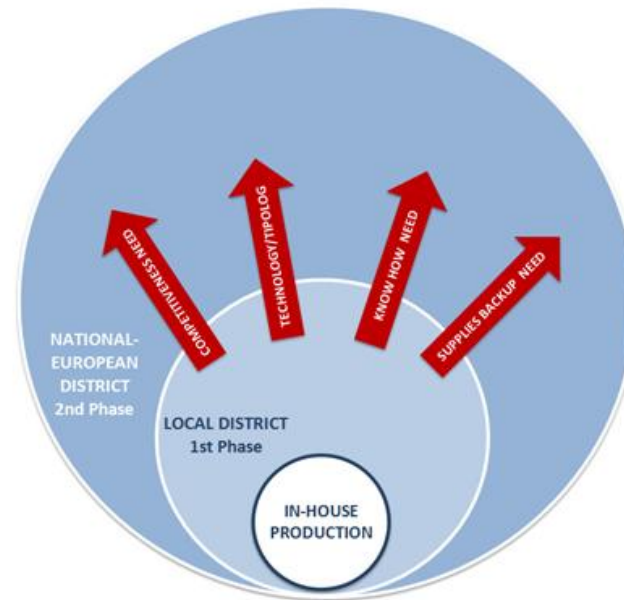


## Module 3

# LOCAL TO GLOBAL: SUPPLIERS MANAGEMENT

## EVOLUTION OF PURCHASING

The passage from the local outsourcing to an internationalized outsourcing generates the **need of a more structured approach to suppliers**. The change of scenario push the company to adopt and define methodologies and reference models for relationships with suppliers.



This new scenario triggers among the most important elements :

- A more **strategic role of Purchasing** than the previous context;
- The need to define the guiding principles and the models which sets criteria for **selection, management and evaluation** of suppliers; criteria shared among company organisation so that the process, become strategic, can ensure the realization of the productions in line with company policy.

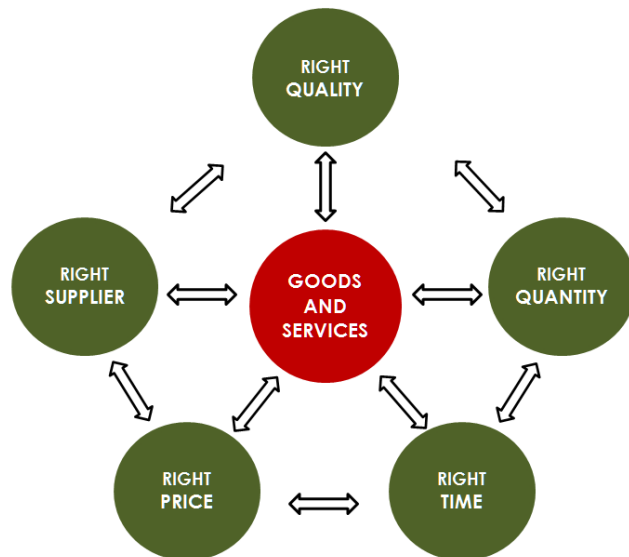
## PROCUREMENT

The activities to obtain the goods or services requested by the suppliers

### PURCHASING

The Purchasing is the set of activities aimed at providing the necessary materials for your organization. In brief operations are summarized in doing **the five right things** :

"The right **quality**, in the right **quantity**, in the right **time**, with the right **price**, from the right **supplier** "



### SUPPLY MANAGEMENT

It's a more structured and wide approach, summarised as follows:

"A **strategic approach to meet current and future needs** of your organization through proper and evolved management of supply sources . "



# Some aspects of the change from the Purchasing and Supply Management

LOCAL TO GLOBAL: SUPPLIERS MANAGEMENT

	PURCHASING	SUPPLY MANAGEMENT
ORGANISATION	<b>Vertical</b> , considered as a separate function	<b>Horizontal</b> , involved in the team, with cross-functional relationships , an integral part of the Supply Chain
PURCHASING FOCUS	<b>Price</b> mainly . <b>We buy what we cannot do</b>	<b>Total cost of acquisition</b> <b>Outsourcing of non- core business processes</b>
SOURCING	<b>Many suppliers</b> <b>Local or national</b>	<b>Reduction of number of suppliers</b> <b>Global</b>
SUPPLIER RELATIONSHIP	<b>Short terms</b> <b>Conflictual, Win-Lose negotiation</b> Poor sharing of information	<b>Long terms</b> <b>Collaborative, Win-Win negotiation</b> Wide sharing of information
STOCKS AND LEAD TIME	<b>High safety stocks</b> <b>Long lead time and not managed</b>	<b>Low , aimed at minimizing lead times, obsolescence and waste</b>
QUALITY and SPECIFICATION	<b>Specification defined by the client</b> Quality control at goods receipt	<b>Specification defined with the collaboration of supplier</b> Certified supplies
PERFORMANCE EVALUATION	Based mainly on <b>cost</b>	Based on <b>value added</b> to the Supply Chain

# OBJECTIVES OF SUPPLY MANAGEMENT

Among the most important objectives of the **Supply Management** :

## Supply base development

- identifying competitive and performing suppliers
- fostering relationships with existing suppliers and improving the performance of non -performing

## Ensuring continuity of supply

- through the supervision and management of the external supply chain
- efficient and effective procurement processes
- evaluating the risks on the supply and developing contingency plans

## Development of purchasing strategy integrated with the business strategy through:

- the continuous monitoring of the supply market and materials in order to understand , predict trends and the possible impact on business strategy
- creating favorable conditions for product development (suppliers availability, critical parts management)
- identification and efficient management of critical purchases which affects company performance
- continuous analysis of possible alternative and competitive supplies on a global basis

The growth of **importance of Supply Management and role of suppliers** can be determined by 5 factors common to most of the companies (*Trent, Monczka, 1998*):

**NEED TO CONTROL PRODUCT COSTS**

**NEED TO REDUCE THE TOTAL COST OF ACQUISITION**

**INCREASED DEPENDENCE FROM SUPPLIERS TO SATISFY THE NEEDS OF COMPANY CUSTOMERS (ESPECIALLY ON THE TIMING)**

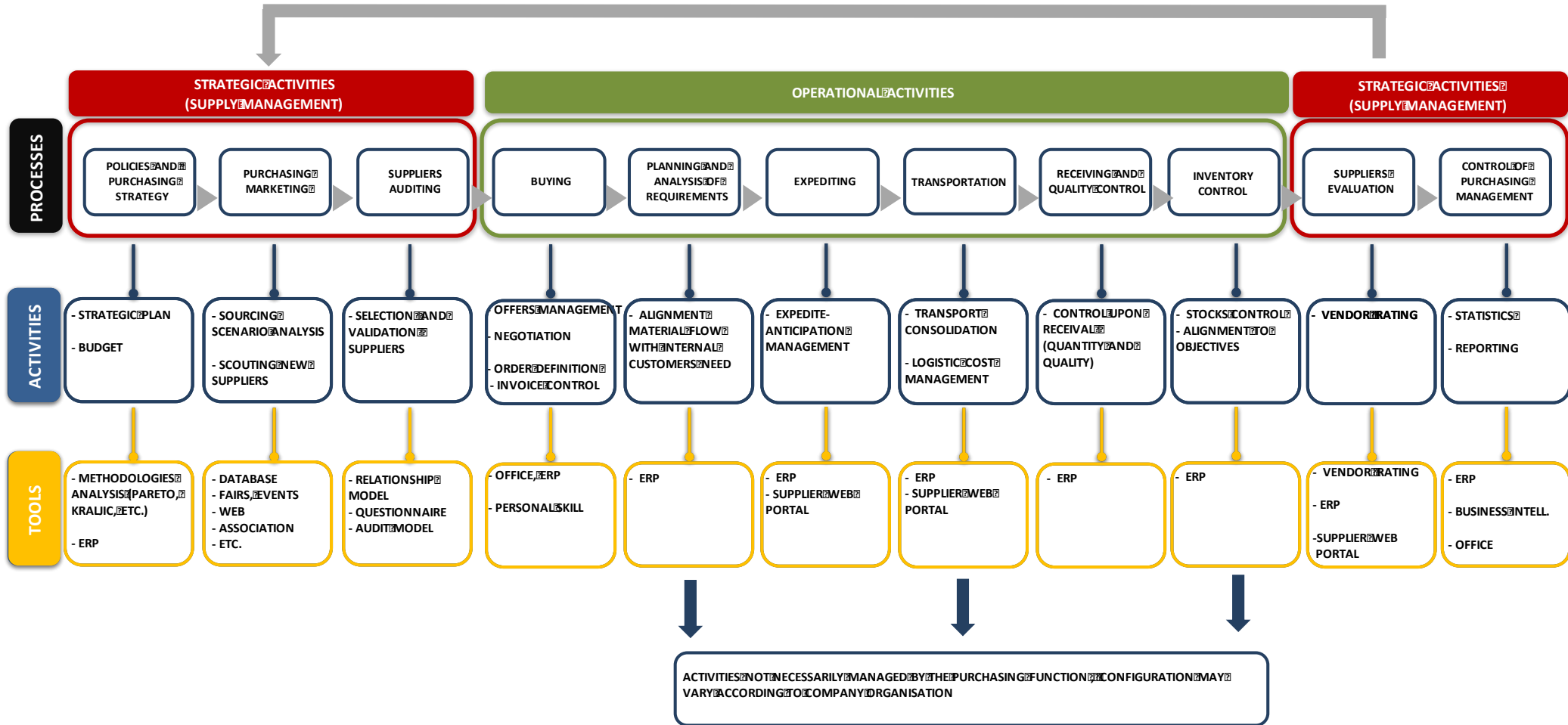
**INCREASED DEPENDENCE ON FEW SUPPLIERS**

**TREND TO USE SUPPLIERS OF SYSTEMS OR ASSEMBLED PARTS**

I would also add that, in recent decades , the volume of goods , materials purchased from a manufacturing company become more and more significant , **with rates 60-80 % of company costs**



# PROCESS AND ACTIVITIES OF SUPPLY MANAGEMENT





**POLICIES AND PURCHASING STRATEGY**

The most critical and relevant activity, **functional to link the company strategy to Purchasing activity**

**PURCHASING MARKETING**

The internationalization of production and the growth of emerging markets makes **strategic** the constant monitoring of the production market and the assessment of their potential ' and adequacy of the company's outsourcing.

**SUPPLIERS AUDITING**

In addition to the development of appropriate skills , it should also provide the **proper involvement of the other functions in the selection.**

**BUYING**

**Activity finalised to the pursuit of the best purchasing conditions** for the company in terms of total costs

**PLANNING AND ANALYSIS OF REQUIREMENTS**

While the planning activity is now supported by ERP-MRP systems the analysis phase still requires a constant **alignment with the internal customer** in order to regulate the flows of incoming materials

**EXPEDITING**

The relevance of expediting in the organization becomes greater **when the frequency of changes in production plans is high** or **suppliers are not performing**

**TRANSPORTATION**

The allocation of the activity within the Purchasing depends from organizations, in any case the growth of outsourcing in global contexts makes necessary the consolidation of the incoming transport and the constant monitoring of costs

**RECEIVING AND QUALITY CONTROL**

Other activity not directly allocated in Purchasing in some organizations but still relevant and in constant connection with purchasing with the aim to monitor supplier performance

**INVENTORY CONTROL**

Activities which is also supported by ERP systems , aims to monitor the stock levels in relation to business objectives.  
Responsibility of inventory can' be attributed , according to the organization , to purchasing , production, logistics, sales

**SUPPLIERS EVALUATION**

Important process in support of the strategic plan of purchasing and continuous improvement . Based on the Vendor Rating, has **to provide objective elements of assessment**

**CONTROL OF PURCHASING MANAGEMENT**

Activity aimed to control the activities of Purchasing and compiling analysis reports also for the top management

# ROLES IN THE SUPPLY MANAGEMENT

## STRATEGIC BUYER

- Critical analysis of the company's needs (raw materials, critical components, performance, etc .)
- Constantly updated on the costs trends and evolution of suppliers and supply markets
- Proactive, good analytical skills and interpersonal skills
- Working operationally on the objective of maximizing the competitiveness on technology, cost, quality , customer satisfaction

## OPERATIVE BUYER

- Operational activity addressed to one or more product groups
- Constant monitoring of supplier performance and connections with internal customers
- Able to: negotiation with the view of the long-term , interpersonal skills and problem solving
- The operative buyer addressed to web purchases (online catalogs , digital auctions, etc .) it's also referred to e- buyer

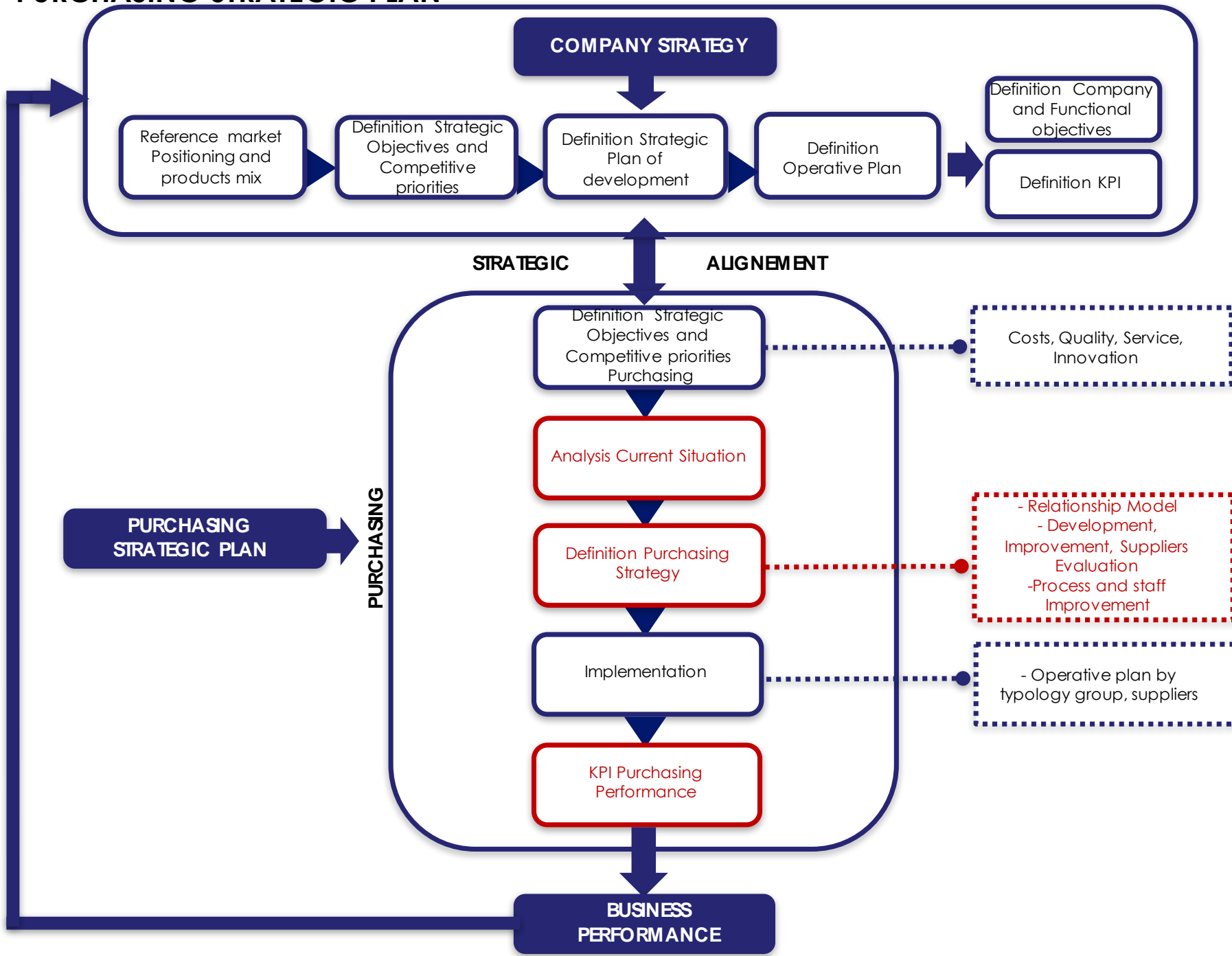
## EXPEDITER (MATERIALS MANAGEMENT)

- Control of the flow of materials in order to ensure the availability as required by planning and subsequent amendments
- Activity focused on order management (sending , periodical check, expedite, advance, etc . ) and management of the delivery and stock of the materials.

## FACILITY MANAGER

- Also termed General Purchases Buyer (or Indirect Material Buyer) , it focuses on the optimization of purchases of services and non-core activities
- Negotiation skills with the perspective of short-term

# PURCHASING STRATEGIC PLAN



LOCAL TO GLOBAL: SUPPLIERS MANAGEMENT

# PURCHASING STRATEGIC PLAN - ANALYSIS CURRENT SITUATION

## Analysis of purchases portfolio

- Analysis of the purchase turnover (ABC of product groups , Products , Suppliers )
- Analysis of the constraints and risks of purchase (mono-supplies, risk/return matrix)
- Analysis of economic trend of materials
- Analysis of the production outsourcing trend (relocation trends, emerging markets, etc.)

## Organisation and process analysis

- Process and management tools analysis
- Analysis of human resources (skills, motivation, professional development)



- **Critical issue on Purchasing (Suppliers, Product typologies, Products)**
  - **Intervention area on outsourcing**
  - **Intervention area on organisation**

The most popular tools that support the analysis :

**ABC Analysis (Pareto)** : Analysis of purchases portfolio through the classification in 3 categories of expenditure . Usually classified 80 % of the yearly purchase value in the class A, 15% in class B and 5% in class C.

	Percentage of items	Yearly percentage of value purchased	
Class A items	~ 20%	~ 80%	Focus on strategies and daily operation activities
Class B items	~ 30%	~ 15%	Periodical review of purchasing strategies
Class C items	~ 50%	~ 5%	Infrequent review

**A fragmentation of the purchase volume in class A on many suppliers** can be a symptom of :

- Lack of strategic purchasing management
- Risk of being poorly competitive
- Waste of resources for the management of an excessive number of suppliers on the priority percentage of products and consequent risk of poor control

**SWOT analysis:** it's a tool for the preliminary analysis of a context (of business, functional, organizational, supply, etc.).

STRENGTHS	WEAKNESSES
THREATS	OPPORTUNITIES

Crossing the internal elements ( strengths and weaknesses ) and external factors ( opportunities and threats ) it's possible to draw a strategic framework on which to operate.

	INTERNAL STRENGTHS What are our STRENGTHS?	INTERNAL WEAKNESSES What are our WEAKNESSES?
EXTERNAL OPPORTUNITIES What are the OPPORTUNITIES we can exploit?	<p><b>S → O</b> <b>Strength → Opportunity strategy</b></p> <p>Strategies that seek to utilise organisational strength to exploit external opportunities</p>	<p><b>W → O</b> <b>Weaknesses → Opportunity strategy</b></p> <p>Strategies that seek to fix organisational weaknesses to exploit external opportunities</p>
EXTERNAL THREATS What are the THREATS affecting our business?	<p><b>S → T</b> <b>Strength → Threats strategy</b></p> <p>Strategies that utilise organisational strength to reduce vulnerability to external threats</p>	<p><b>W → T</b> <b>Weaknesses → Threats strategy</b></p> <p>Strategies that set defensive plans to prevent organisational weaknesses from being vulnerable to external threats</p>

An example of SWOT applied to the current context of outsourcing in my company and its strategic decision:



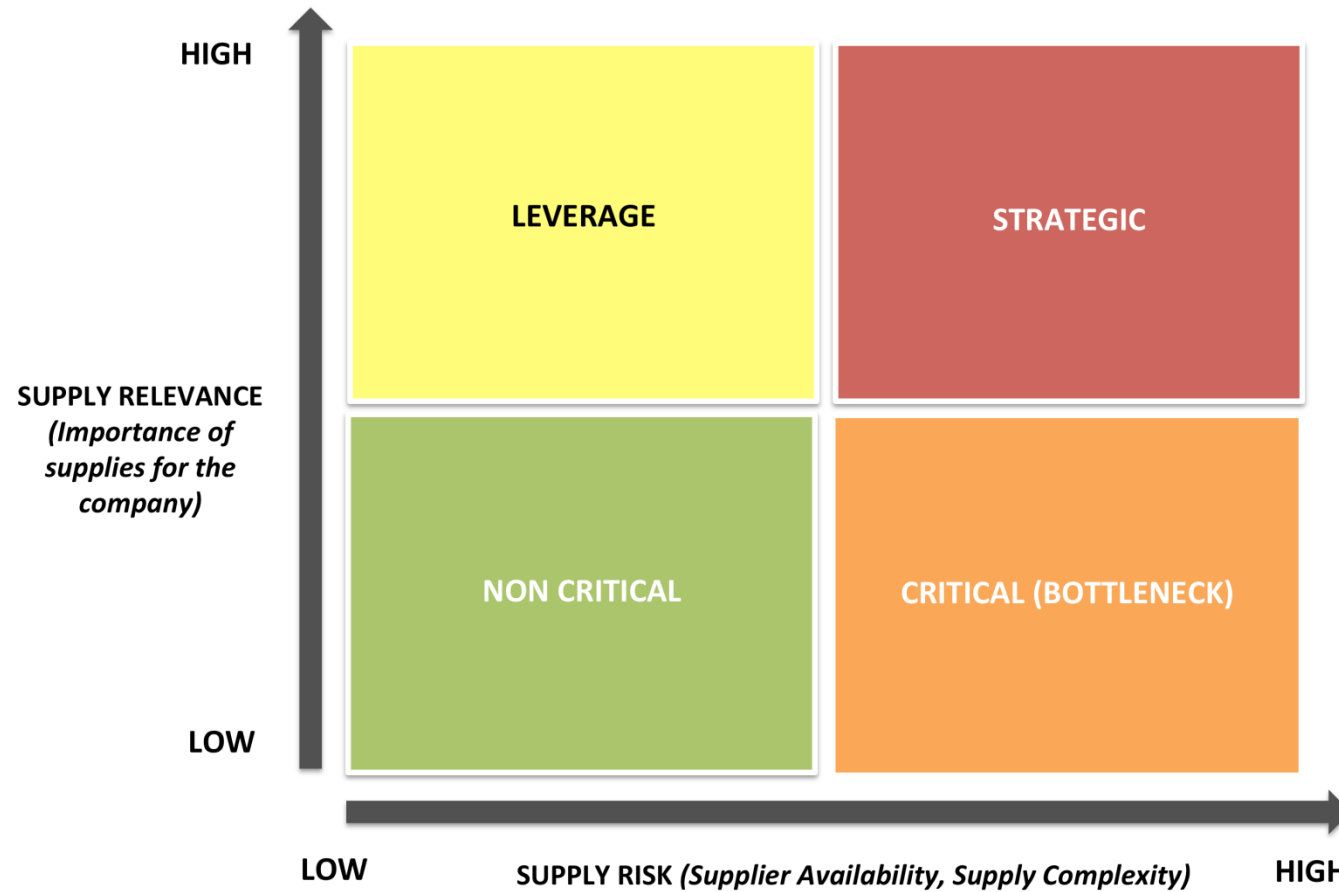
The contraction in volumes and the fragmentation of the catalogue push to a **Weaknesses → Threats strategy**, leading to further tighten the relationships with suppliers and concentrate volumes within a few manufacturers .

In parallel continues the exploration of new markets where the interest of new suppliers remains high even with low volumes and fragmented as they seek to improve their technical-manufacturing know-how through production more challenging (**Strength → Opportunity strategy**)



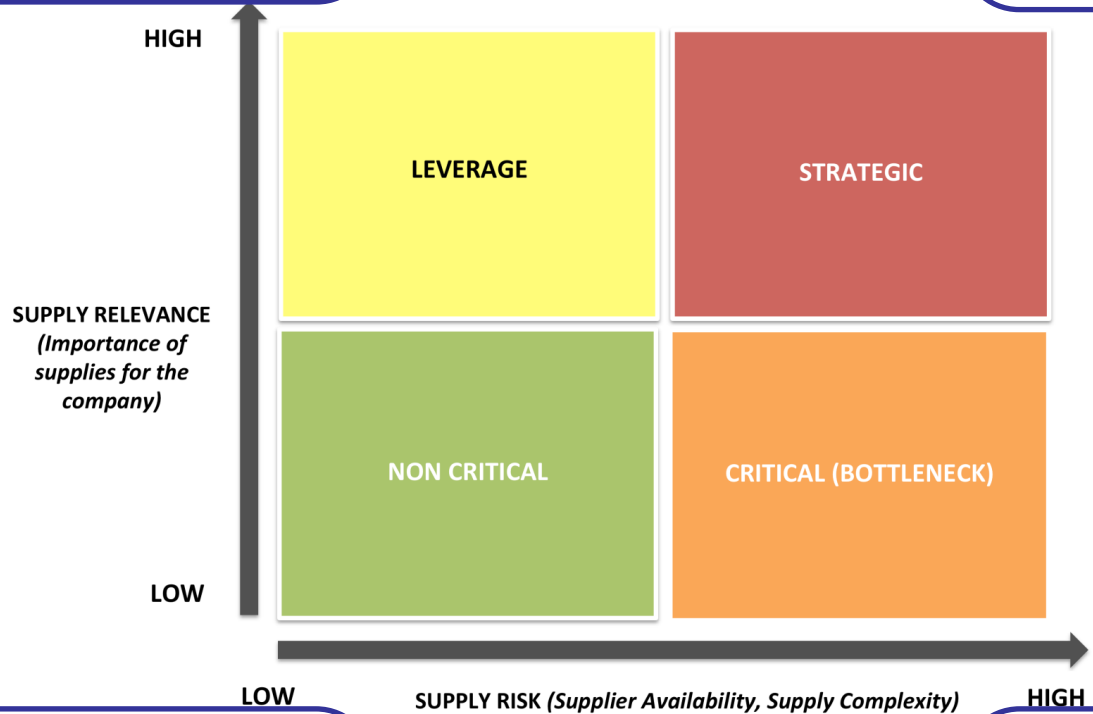
The **Kraljic matrix** ('Purchasing must become Supply Management' 1983) aims to favour the strategic analysis of purchasing portfolio thorough the evaluation of two dimension:

- **The importance of material purchased**
  - **The supply risk**



High purchasing power  
High availability of suppliers  
Easy to replace suppliers and get the best economic conditions  
**BUYER-DOMINATED SEGMENT**

High purchasing risk  
Risk significant due to high dependence from supplier  
Critical for profitability and operations  
Complex, rigid or critical specifications  
**BALANCE OF POWER**

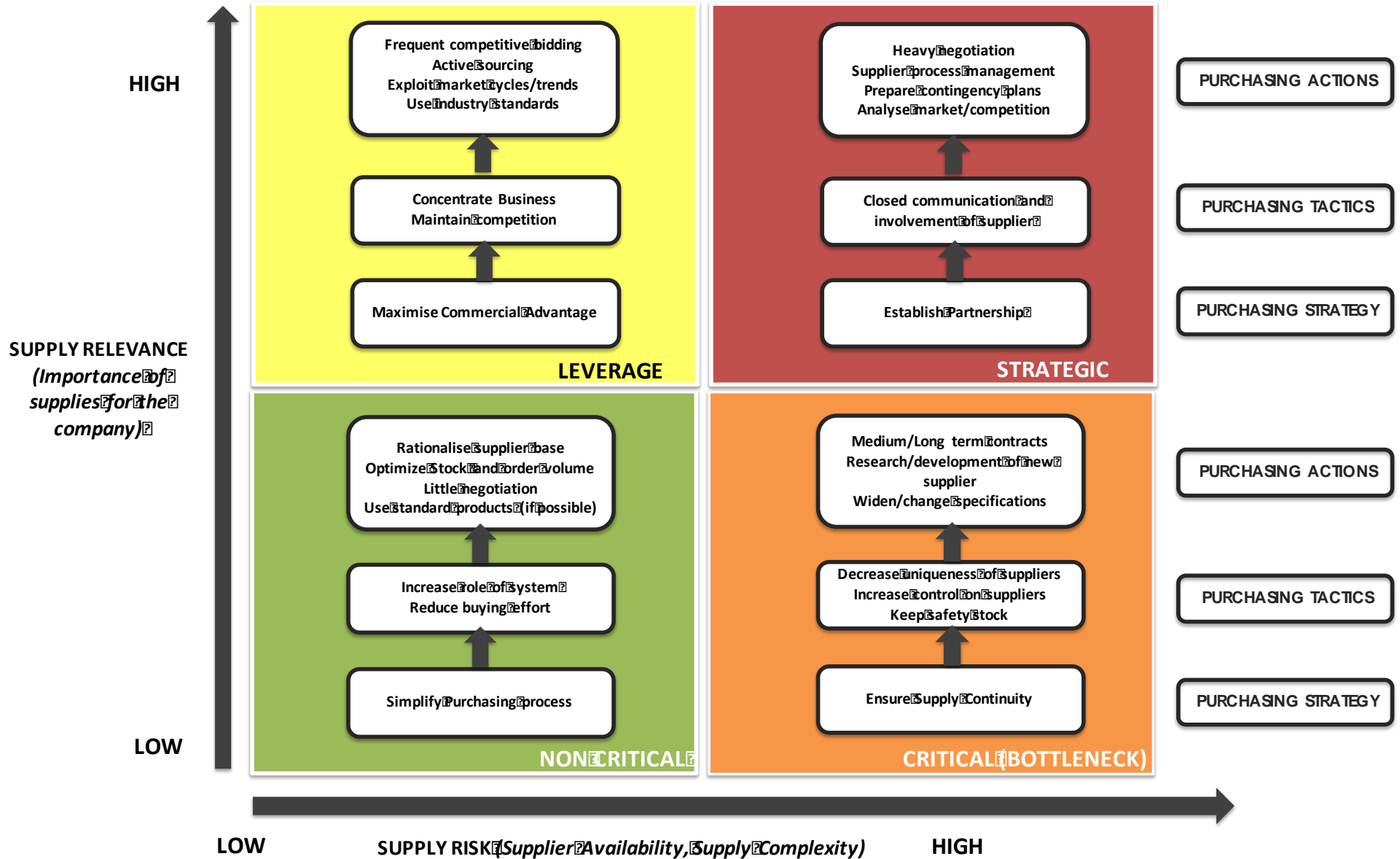


Low purchasing value  
Many sources of supply  
Require low skill to buy it

Complex manufacturing process  
Few sources of supply (or supplier may be technology leader)  
Big impact on operations  
Relatively limited in value but critical if price rise  
**SUPPLIER-DOMINATED SEGMENT**

Example of use of the Kraljic matrix for the drafting of the Purchasing strategy and its tactics and actions

LOCAL TO GLOBAL: SUPPLIERS MANAGEMENT



The strategic analysis of the purchasing portfolio should be carried out periodically since **changes in market supply and demand changes** of course change the classification criteria .

# PURCHASING STRATEGIC PLAN – DEFINITION OF PURCHASING STRATEGY



- Intervention/modality management declined by products groups
- Guiding principles and general policies of relationship (n. suppliers in each strategic area, purchasing turnover quota supplier, etc.)



- Relationship model with suppliers
- Supplier selection modality
- Partnership agreement definition
- Supplier evaluation



- Training plan for personnel
- Implementation of tools and processes

# MANAGEMENT POLICIES OF PURCHASING AND SUPPLIERS



LOCAL TO GLOBAL: SUPPLIERS MANAGEMENT

**GUIDING PRINCIPLES AND GENERAL POLICIES OF RELATIONSHIP**

➔ To lead the choice of suppliers suitable for the company

**RELATIONSHIP MODELS**

➔ Classify the suppliers, declined in normal, integrated and partner suppliers

**PARTNERSHIP AGREEMENT**

➔ Optional, to be adopted in certain supply conditions

**SUPPLIER EVALUATION CRITERIA**

➔ Criteria and methodology for preliminary evaluation and supplies evaluation

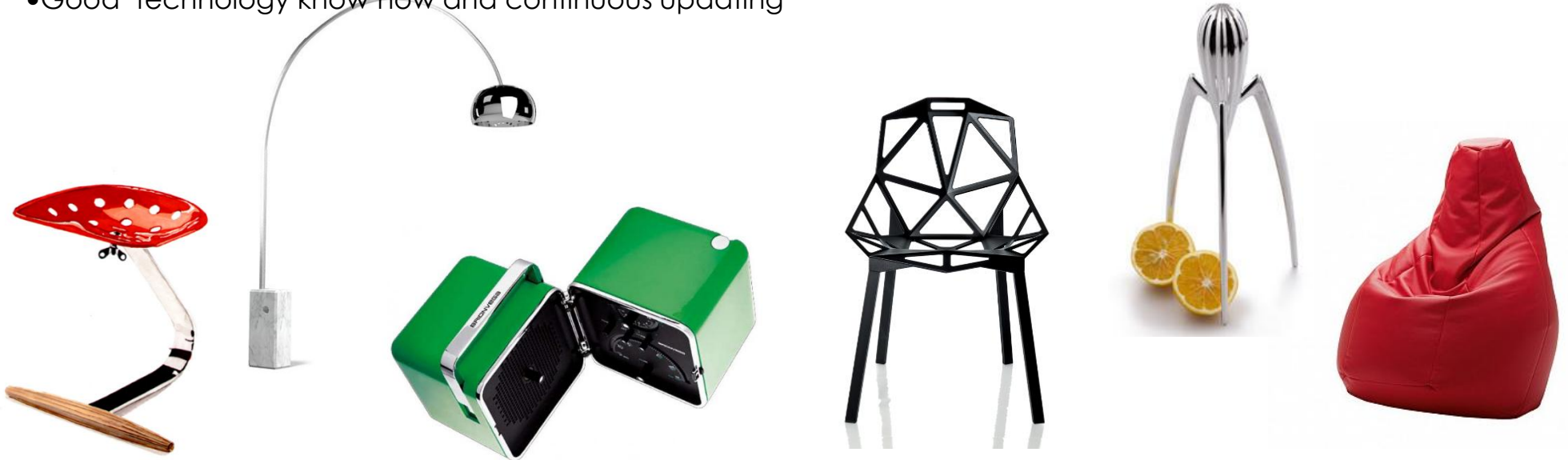
## GUIDING PRINCIPLES AND GENERAL POLICIES OF RELATIONSHIPS (in brief)

The guiding principles and general policies sets the guidelines for the Procurement Dept. to select and manage a supplier.

They are **undoubtedly related to the characteristics of each company**, while other elements may be common to many companies.

For example a Design Based Company give more emphasis to guidelines related to products design and engineering:

- Supplier committed to pursue an industrialization respectful of the **authenticity of the project** avoiding to 'bend it' to production process constraints, unlike to what takes place in the "industries of large scale".
- Supplier willing to **accept changes from designers**, at any time, in the development phase
- Capability to innovate and experiment
- Good technology know how and continuous updating



Other principles can be shared and applied by a wider range of companies, below some examples:

- Capability to assure **high functional and aesthetic quality** from the first production lot and continuous improvement.
- **Overall flexibility** of supplies, related to the level of service the company set towards the final customer or related to expected total stock levels;
- Capability to maintain **competitive total costs** over time, also with joint optimisation activities
- Availability to supply **cost evaluation** transparent and based on cost drivers
- Define the relationship perspective: **stable and long term or based on a short term cooperation**
- Determination of the **number of suppliers** for each outsourced products categories
- **Criteria for periodical benchmarking** between suppliers of the same products categories

- Definition of **maximum purchase volume** from suppliers
- Supplier availability not to work with company competitors (where's possible)
- Criteria of suppliers **financial strenght** to be used during preliminary selection
- **Ethical principles** for suppliers selection
- ....





General policies of relationship are shaped into model of relationships with suppliers, different for each level of cooperation established with the suppliers themselves.

## NORMAL

Emphasis on **"exchange goods-money"**

### Type of Relationship:

essentially based on respect of customers requirements for products and related price negotiation

**("Black-Box" supplier)**

### Type of Agreement:

**Closed orders**

### Performance evaluation :

Evaluation on single supplies

## INTEGRATED

Emphasis on **"capability of process management"**

### Type of relationship:

Based on real cooperation and transparency of information on process management in order to control the total purchasing costs

**(Supplier of operational performances)**

### Type of Agreement:

**Supply agreement/ open orders** with yearly preview

### Performance evaluation :

**Objectives** on operational performances **(Quality, Service, Costs, Technology support)**

## PARTNER

Emphasis on **"capability to grow and make business together"**

### Type of relationship:

Based on strategic plans commonly agreed between customer and supplier with medium to long terms. Customer rely on supplier capability to innovate and improve the process

**(Supplier of technological know-how)**

### Type of Agreement:

**Partnership agreement on medium /long term** as an integration of supply agreement. Supply managed with open orders

### Performance evaluation :

Challenging **objectives estazioni on operational performances**, as well as **organisational** and, eventually, **economic-financial**

The model (**normal, integrated, partner**) is declined in **operational modality** applied to Product Development, Quality, Service and Costs. Here are some brief examples:

### PRODUCT DEVELOPMENT

PARTNERSHIP	OPERATIVE INTEGRATION	NORMAL
<p><b>SUPPLIER:</b></p> <p><b>Included in the project team</b> (involvement in the early stages). Supports all the stages of development stages with high contribution in the engineering</p> <p>Responsible for the <b>project objectives</b> (quality, timing, costs)</p> <p><b>Integrator of external Know How</b></p>	<p><b>COMPANY:</b></p> <p><b>Occasionally involve</b> the supplier in the critical stage of development</p> <p><b>SUPPLIER:</b></p> <p><b>Can support the engineering stages</b> of tooling and manufacturing process</p>	<p><b>COMPANY:</b></p> <p>Defines technical specifications of products and tooling</p> <p><b>SUPPLIER:</b></p> <p><b>Marginally involved in the product development process</b> (receive the technical specification of products to be realised)</p>

### SERVICE (PLANNING-LOGISTIC)

PARTNERSHIP	OPERATIVE INTEGRATION	NORMAL
<p><b>SUPPLIER:</b></p> <p>Has visibility of customer inventory (<b>involved in the responsibility for total stock level</b> )</p> <p><b>Integrated information systems</b> to support planning/orders management (Extranet)</p> <p>Deliveries aligned to <b>“just in time”</b> methodologies on items with high stock rotation</p>	<p><b>COMPANY:</b></p> <p>Has <b>minimum safety stocks</b></p> <p>Deliveries are planned on a yearly horizon (with rolling technique)</p> <p><b>SUPPLIER:</b></p> <p>Has a programming system for orders and forecast aligned to <b>MRP</b> standard or similar to ensure the fulfillment on time of the orders received</p>	<p><b>COMPANY:</b></p> <p>Keeps <b>consistent safety stocks</b></p> <p>Doesn't supply any forecast (orders closed)</p> <p><b>SUPPLIER:</b></p> <p>Lead time are not optimised</p> <p>Doesn't have visibility on customer inventory</p>

## QUALITY

PARTNERSHIP	OPERATIVE INTEGRATION	NORMAL
<p><b>COMPANY:</b></p> <p>Has cleared quality control on deliveries through a <b>consolidated free pass</b> for the supplier</p> <p><b>SUPPLIER:</b></p> <p>Has certified systems or internal procedure able to ensure reliable quality control on production process</p> <p>Apply constantly a <b>continuous quality improvement</b> (cycle NC/AC)</p>	<p><b>COMPANY:</b></p> <p>Accept <b>"free pass" on part of the products</b> supplied</p> <p><b>SUPPLIER:</b></p> <p>Has a good quality control system of products throughout the entire process.</p> <p>Has manufacturing and control plans well documented and shared within the staff.</p>	<p><b>COMPANY:</b></p> <p>Apply quality control on <b>100% of supplies received</b></p> <p><b>SUPPLIER:</b></p> <p>Does not have a documented and applied quality system</p> <p>Main focus on supplies is to respect product specifications.</p>

## COSTS

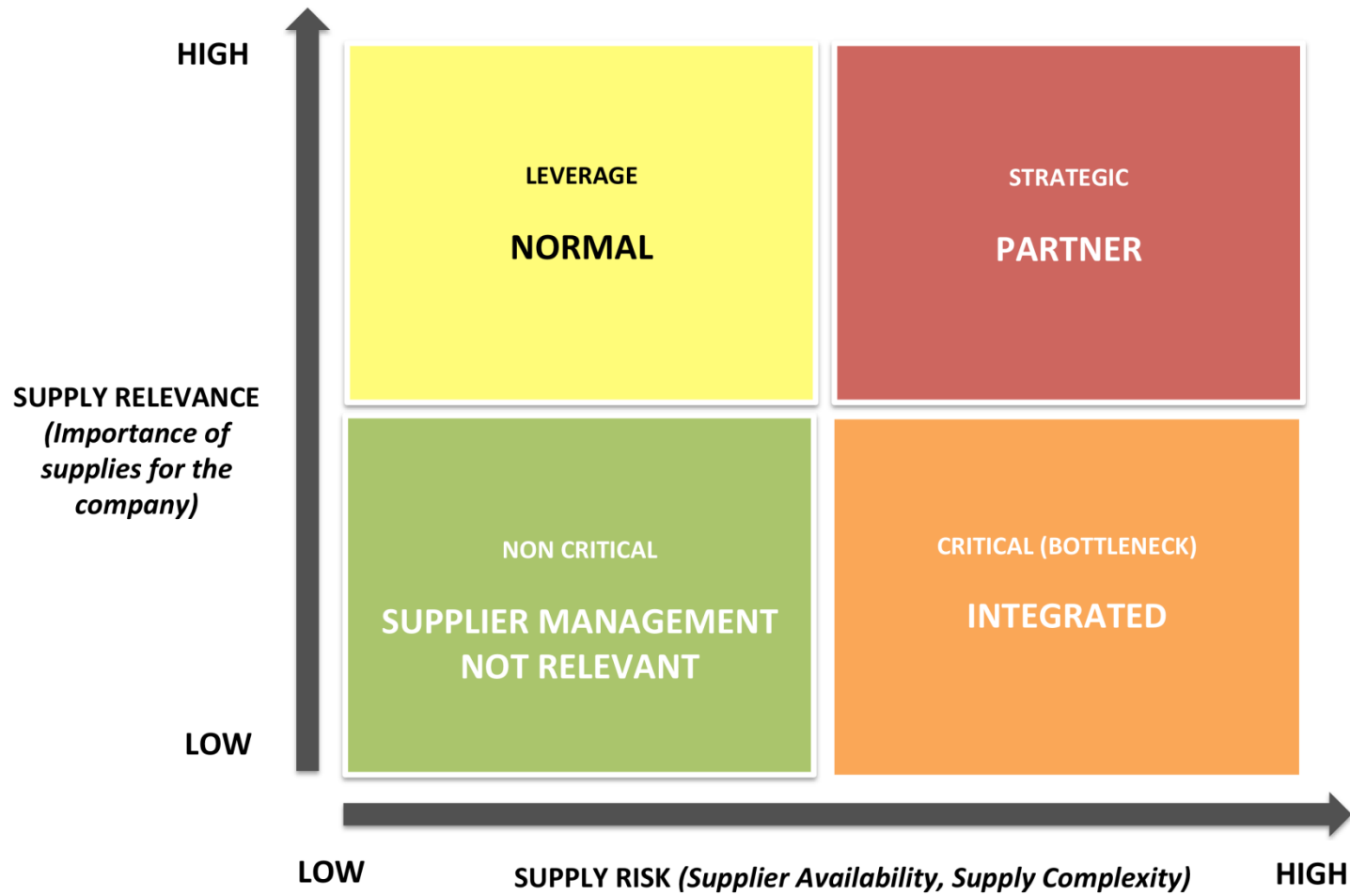
PARTNERSHIP	OPERATIVE INTEGRATION	NORMAL
<p><b>COMPANY:</b></p> <p>Cooperate, supports and guides the supplier in <b>optimizing "total costs"</b></p> <p><b>SUPPLIER:</b></p> <p>Provides <b>full transparency</b> on cost breakdown of the products</p> <p>Maintains a <b>high competitiveness of costs</b> compared to competitors and has high capability to minimize cost increase over time.</p> <p><b>Standard costs</b> management</p>	<p><b>COMPANY:</b></p> <p>Evaluates the <b>trend of reduction/increase</b> of products costs</p> <p><b>SUPPLIER:</b></p> <p>Implements a policy of <b>partial transparency</b> on the product cost</p> <p>Has a low capacity of intervention on product/process for cost reduction.</p>	<p><b>COMPANY:</b></p> <p>Evaluates <b>competitiveness through benchmarking</b> with competitors</p> <p><b>SUPPLIER:</b></p> <p><b>Doesn't provide analysis of costs</b> on products</p> <p>General accounting cost management</p>

## APPLICABILITY OF THE MODEL

The application of the model must take into account the following elements:

- **Strategic importance of the production outsourced**
- Relationship between the **supplier's size** and purchasing turnover.  
Different scale between company and supplier may lead to a different application of the model
- **Availability** of the supplier to establish relationship beyond the simple supplying activity
- **Culture of the supplier's management**  
It's important to analyse the real potential of supplier's management in sharing and understanding the model independently from the statements of intent.
- **Geographical area** of supplier  
The localisation of supplier in specific geographical areas (eg. Far East) affects the application of the model independently of the strategic importance of the product purchased.  
This case will be analysed later in detail.

Based on the previous supplier classification, the chart below shows, based on the strategic position of supplies, the supplier level required.



## PARTNERSHIP AGREEMENT

Establishing a **Partnership** relationship on strategic production with a supplier may lead to a more intensive and challenging way to manage the relationship, especially in case of business growth forecast.

The partnership differs from standard forms of outsourcing :

- The customer-supplier relationship, while on normal outsourcing is focused on costs/performance, in the partnership the **value added and common business objectives** are emphasized
- Outsourcing is managed by a **contract which defining rules , objectives and measurements** , the partnership is governed by a model that **defines the guidelines but above all is based on common trust**

The agreement is based on a long term integration plan settled between company and the supplier, having as objective to cooperate together to reach and maintain the requirements needed to successfully absorb a strategic volume of outsourced production from the company.

One of the possible way to implement the activity provides that, for the duration of the agreement/program there should be:

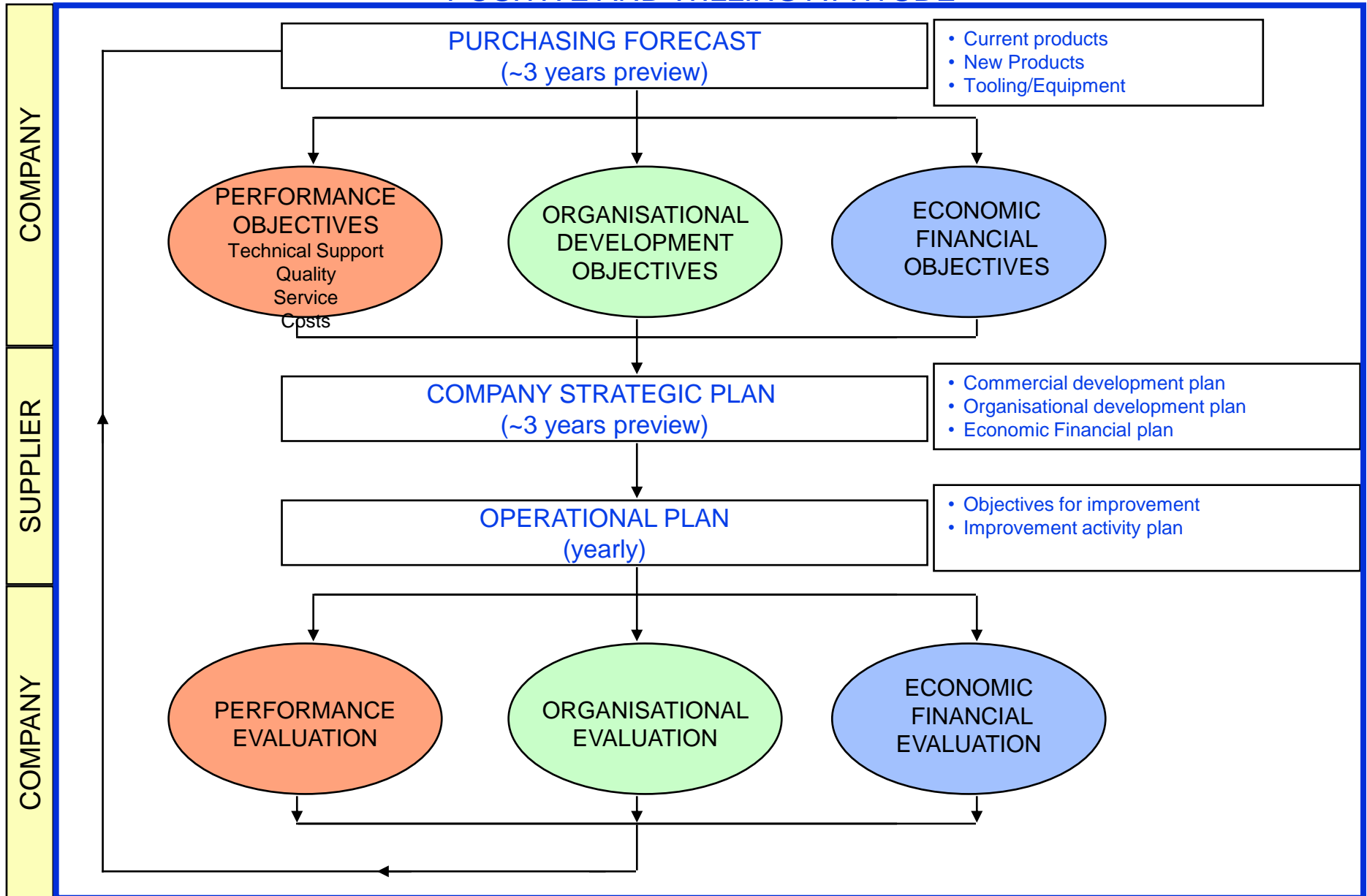
- a **coordination structure** integrated between customer-supplier
- the above structure should perform a **constant and global monitoring of the supplier performance** with the aim to promptly locate the weak point and corrective actions
- Moreover, the coordination structure, has to define and apply the model of **Partnership Planning** which sets the objectives and activities on the long term (see example)

#### **PARTNERSHIP MODEL CONTENTS**

- Purpose of the Partnership
- Performance KPI on Operation, Organisation and Economical
- Business forecast
- Strategic business plan
- Criteria for the annual assessment and continuous improvement policy
- Definition of investments involved (joint and not)

# MODEL OF PARTNERSHIP PLANNING

## POSITIVE AND WILLING ATTITUDE



LOCAL TO GLOBAL: SUPPLIERS MANAGEMENT





The adoption of the partnership agreement has to be considered with great caution by the company and should be based on clear premises:

- Due to the importance of the production outsourced, the agreement should be settled only if both company and supplier sees a clear opportunity to stand on competitors in the long term thanks to the agreement (**competitive advantage**)
- the agreement must be based on **reliable purchasing volumes** and it's also needed to define the guidelines to face high variation of the expected volumes.
- it's important to understand if the supplier is **culturally prepared** for a partnership agreement.
- Evaluation whether the **supplier's strategy is coherent with its own** has to be preliminary made, as well as ensuring that supplier's management has understood the purpose of the agreement and are not driven by different motivation.
- The coordination structure has only the purpose of **assessment** and should be focused on this task avoiding any influence from events may happen within the supplier

	MAIN CAUSES OF PARTNERSHIP FAILURE
MANAGEMENT	<ul style="list-style-type: none"> <li>▪ Corporate culture differences</li> <li>▪ Top management differences</li> <li>▪ Lack of top management support</li> <li>▪ Lack of trust</li> <li>▪ Lack of strategic direction</li> <li>▪ Lack of shared objectives or goal</li> </ul>
ORGANISATION	<ul style="list-style-type: none"> <li>▪ Low capacity and skill of customer purchasing function</li> <li>▪ Poor coordination from the structure</li> <li>▪ Poor communication</li> </ul>
OPERATIONAL	<ul style="list-style-type: none"> <li>▪ Poor forecasting</li> <li>▪ Supplier failure in reaching operative objectives and improvement</li> </ul>
GENERAL	<ul style="list-style-type: none"> <li>▪ Market changes</li> <li>▪ Lack of benefit/risk sharing</li> </ul>

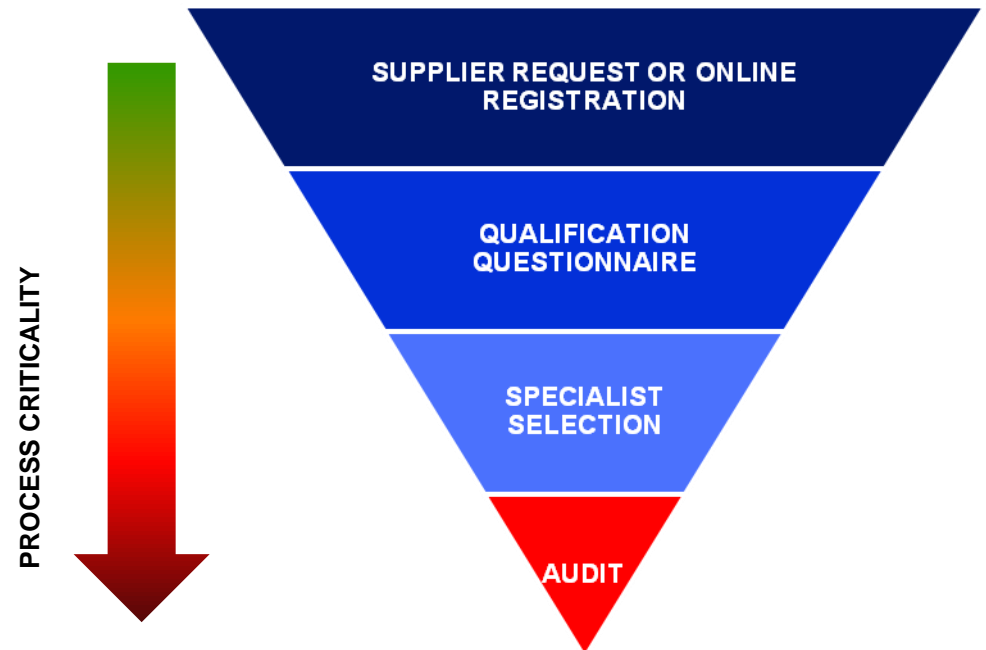
# SELECTION AND EVALUATION OF SUPPLIERS

In a European or Italian environment the supplier research, in some ways, it's easier than an international context (for example in Far East).

The **procurement marketing activity** (we'll talk in detail about this activity later on) is mostly based on known suppliers information and databases. The process to gather information and approach existing suppliers can be summarised as follows:

The **preliminary information** are collected through a questionnaire which contains the basic information on the supplier (type of production, materials, equipment, certifications, main business and customers, etc.)

The questionnaire are evaluated by the procurement specialist to select a **panel of candidate suppliers to be audited**.



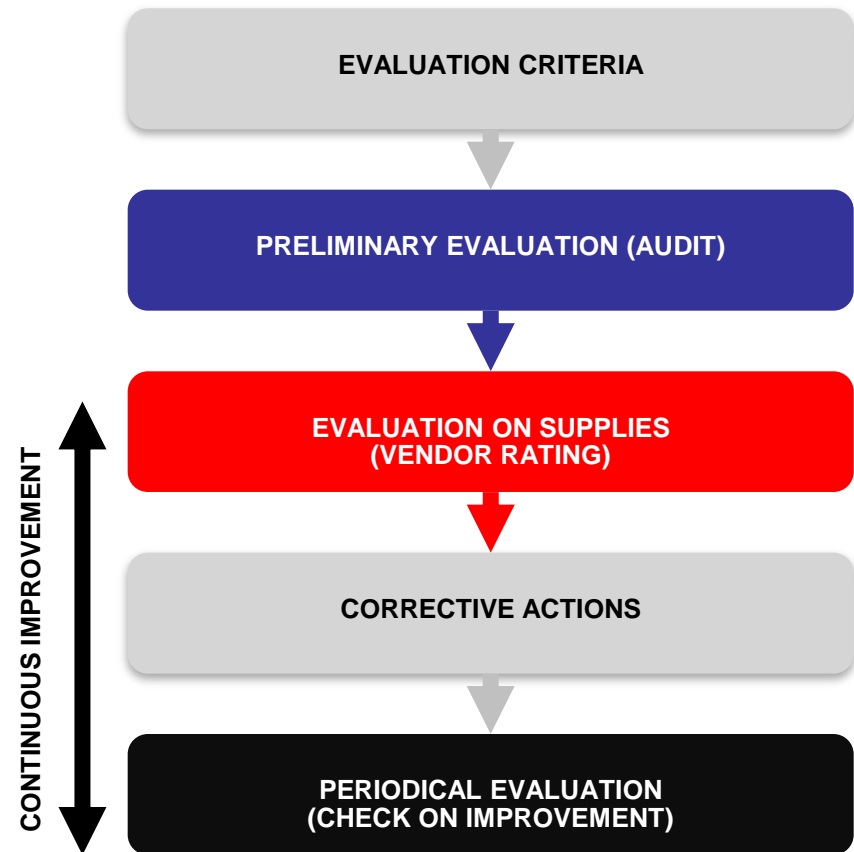
Based on the guidelines and classification of supplier, company need to set the **evaluation criteria** for auditing the supplier.

Based on these criteria, a **Preliminary evaluation (Audit)** will be run at supplier's plant to analyse its organisational structure providing elements to identify critical areas and classify the supplier according to the relational model (normal, integrated, partner).

Once the supplier is approved and added to company **vendor list** the performances are evaluated on each supply (**Vendor Rating**).

The analysis of non conformity on supplies trigger **corrective actions** to be adopted from supplier in order to improve its process.

Improvement are checked through periodical evaluation at supplier's plant.



## SUPPLIER PRELIMINARY EVALUATION (AUDIT)

The auditing process analyse the relevant areas of supplier organisation that may impact on performances on supplies and draw an **alignment score** to customer requirements.

The areas interested in the evaluation **may be different** depending on the company business and requirements, below the common areas interested:

ORGANISATION

MANAGEMENT

PRODUCTION

LOGISTIC

TECHNICAL/ENGINEERING

QUALITY

PROCUREMENT

SALES

Typically the audit report contains the following information:

-Executive summary

-Major non compliance for each area and observation

-Score evidence for each area

-Agreed corrective actions (especially on periodical evaluation auditing)

Some evaluation criteria in brief for each area interested:

## ORGANISATION

PARTNER level compliance	INTEGRATED lev.compliance	NORMAL level compliance	NOT SUITABLE
<p><b>Full empowerment of first level of management</b></p> <p>Training and development plans for staff defined and consistent with the organisational development of the supplier</p> <p>Economic and financial planning on multi-year plans</p> <p><b>Cost control</b> and accounting for cost center. Analysis of costs trends and driver for individual products (<b>standard costs management</b>)</p>	<p><b>Roles clearly defined at all levels</b></p> <p>Enhancement and partial involvement of human resources</p> <p>Cost control on production process</p> <p>Detailed analysis of the product costs</p>	<p>Roles / responsibilities defined <b>but not always clearly</b> known to the organisation</p> <p>Key decision are centralized (<b>marginal empowerment</b>)</p> <p><b>Basic cost</b> (overview on monthly basis on cost and revenue)</p>	<p><b>No clear definition of roles / responsibilities</b></p> <p>Decision highly centralized</p> <p>Only general accounting</p>

## MANAGEMENT

PARTNER level compliance	INTEGRATED lev.compliance	NORMAL level compliance	NOT SUITABLE
<p>Corporate strategic planning</p> <p>Measurement of performances (internal/external)</p> <p>Continuous improvement shared with all the staff</p>	<p>Monitoring and sharing with the staff of the internal performance indicators</p> <p>Widespread culture of prevention at all levels <b>Improvement Plans</b> (top-down)</p>	<p>Monitoring of some key performance indicators (not diffused with the staff)</p>	<p><b>Lack of monitoring</b> of key performance indicators</p> <p>Culture of prevention and improvement almost missing</p> <p>Little attention to human resources</p>

## PRODUCTION

PARTNER level compliance	INTEGRATED lev.compliance	NORMAL level compliance	NOT SUITABLE
<p>Production equipment technologically up to date</p> <p>Maintenance plan scheduled and efficient</p> <p>Production system flexible and synchronised to customers input (quick equipment setup and multifunctional staff)</p> <p><b>High efficiency of production plant</b></p>	<p>Optimised equipment set-up and production system fairly flexible</p> <p>Regular maintenance of the equipment</p> <p>Efficient production flow</p>	<p>Functional equipment not up to date</p> <p>Discrete organization and efficiency of production flow</p>	<p>Lack of scheduled maintenance</p> <p>Lack of instructions and specifications in production</p> <p>Poor multifunctionality and flexibility of staff</p> <p>High times on equipment setup</p>

## LOGISTIC

PARTNER level compliance	INTEGRATED lev.compliance	NORMAL level compliance	NOT SUITABLE
<p>Production planning system integrated with customers (stock and requirements)</p> <p><b>Capability to identify and suggest projects of service improvement</b></p> <p>Material flow and storage efficient</p>	<p>Production planning with MRP</p> <p>Adequate traceability of production lots</p> <p><b>Control on production bottleneck</b></p>	<p><b>Manual programming of orders and material requirements</b></p> <p>Discrete identification of materials and production lots</p>	<p>Lack of production planning</p> <p>Poor identification of material and production lots throughout process</p>

## TECHNICAL-ENGINEERING

PARTNER level compliance	INTEGRATED lev.compliance	NORMAL level compliance	NOT SUITABLE
Alignment of IT system with customer	<b>Effective planning and control system on the projects</b>	Rough planning and control system on the projects	No planning and control system on the projects
Capability to integrate technological skills and know how	High technological competence	Basic knowledge on 3D system	Missing knowledge on design systems
Attitude to innovate and experiment	Careful management of project documentation	Discrete technological expertise and know how	Poor technological expertise and know how
			Severe deficiencies in the project documentation management

## QUALITY

PARTNER level compliance	INTEGRATED lev.compliance	NORMAL level compliance	NOT SUITABLE
Certified Quality System	Provide free pass for most of the items supplies	Statistical quality control inspection before deliveries (sampling plans)	Strong deficiencies in the organization of quality control
Continuous quality improvement cycle (NC / AC)	<b>Proper organization of quality control</b>	<b>Monitoring of returns from customers for quality problems</b>	Emphasis on production volumes rather than on the quality of the product
<b>Measurement of non-quality costs</b>	Constant monitoring of product defects with analysis of causes		



## PROCUREMENT




PARTNER level compliance	INTEGRATED lev.compliance	NORMAL level compliance	NOT SUITABLE
<p>Good knowledge on sub supplies <b>(procurement marketing)</b></p> <p>Definition of procurement policies for class of material</p> <p>Control on the supply chain and related costs</p> <p><b>Extensive use of contracts /</b> purchase orders open</p>	<p>Emphasis on total purchasing costs</p> <p><b>Integration with major suppliers</b> (performance evaluation of quality and service costs and Support)</p> <p>Some purchase contracts in use, orders formalised</p>	<p>Control on purchasing costs (not total costs)</p>	<p><b>Relationship with suppliers purely commercial and administrative</b></p> <p>Poor control of purchasing costs</p> <p><b>Missing of agreements / purchase contracts</b></p> <p>No use of production forecasts for purchases planning</p>

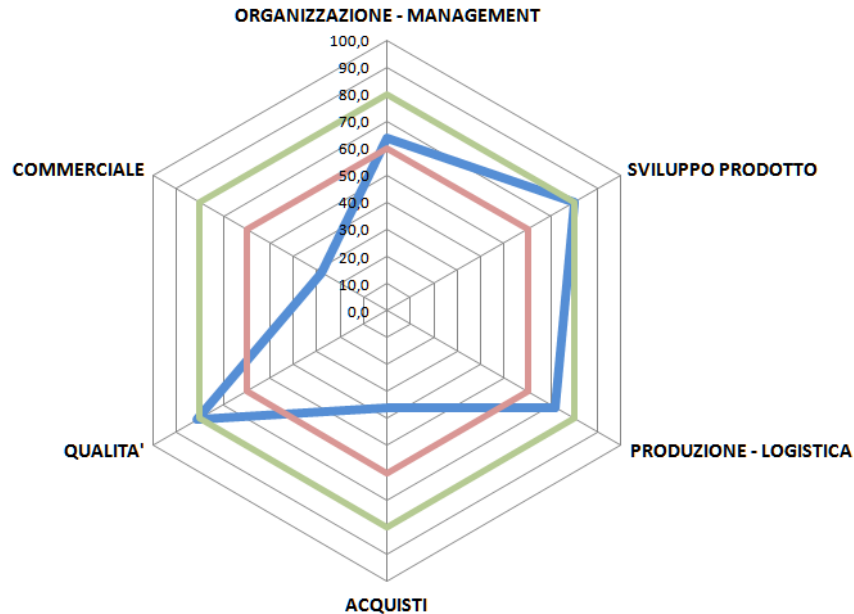
## SALES

PARTNER level compliance	INTEGRATED lev.compliance	NORMAL level compliance	NOT SUITABLE
<p><b>Definition of sales development plans</b> (customers / sectors)</p> <p>Investments in promoting the company on the market</p> <p><b>High customer loyalty</b> and customer satisfaction</p>	<p>Sales initiatives targeted and well organized</p> <p><b>Attention to the process of communication with the customer</b></p>	<p>Customer satisfaction aimed <b>only to resolution of disputes and complaints</b></p>	<p>Emphasis on administrative management of customer orders</p> <p>The relationship with customers <b>is handled only by ownership or executive</b></p>

The resulting evaluation is a report similar to the below:

### SUPPLIER AUDIT

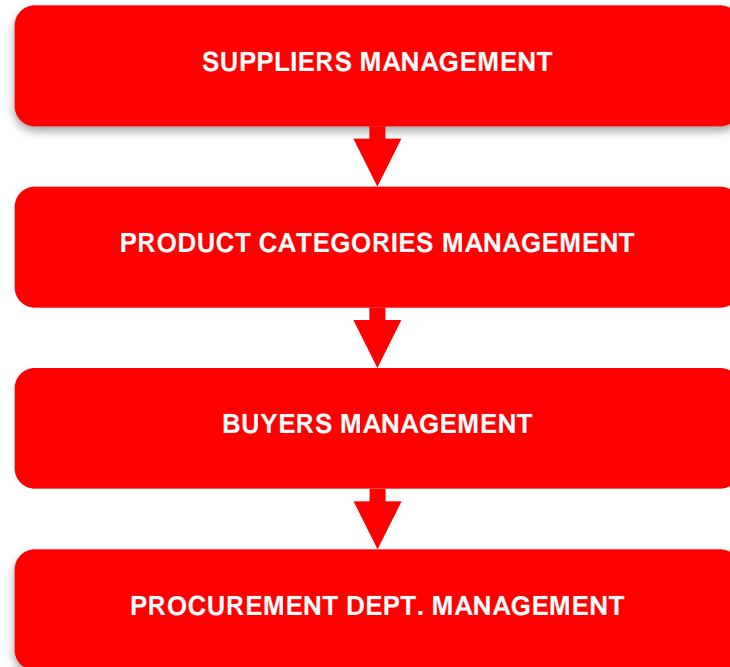
<b>Supplier</b>		<b>Audit team:</b>		<b>Date:</b>		
<b>Plant</b>		<b>Audit type</b> (mark the appropriate choice):		<b>Preliminary audit</b>	<b>Periodical audit</b>	
AREE DI VALUTAZIONE		Grado di rispondenza		Note	Azioni correttive	
		DATO	N.A.			
1	ORGANIZZAZIONE - MANAGEMENT	64,0				
2	SVILUPPO PRODOTTO	80,0				
3	PRODUZIONE - LOGISTICA	72,0				
4	ACQUISTI	36,0				
5	QUALITA'	81,0				
6	COMMERCIALE	28,0				
Punti di verifica esaminati: N=		0				
Punteggio totale G=		0				
<b>Valore area</b> ( $Va = N / G * 100$ ):		<b>NA</b>				
					< 60	Systems unable to meet requirements
					≥ 60,	Systems acceptable, but require action
					≥ 80	Systems meet or exceed requirements.



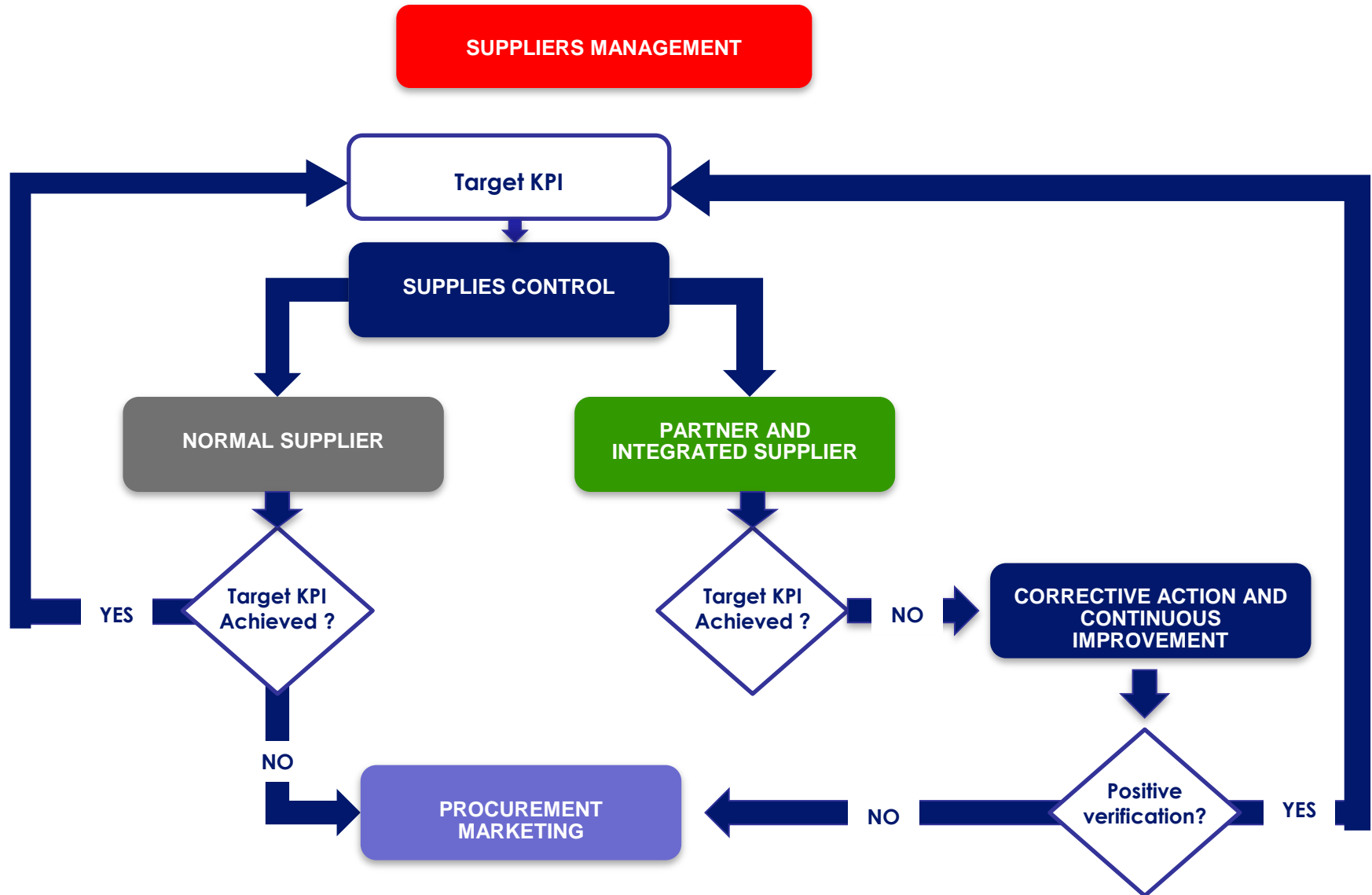
# EVALUATION OF SUPPLIES – VENDOR RATING

The evaluation of supplies, better known with the name of **Vendor Rating**, is a system that measures the operative performances of suppliers

Beside being an efficient way to control supplier performances, allows the company, through the analysis of the results, to have a **decision-making instrument** as well as a database for the **major KPI of the Purchasing** function:



Results of the supplies control gives the necessary elements to trigger the **continuous improvement** within the supplier or, in case of failure to achieve the **agreed target KPI**, it shows evidence to start a new **procurement marketing** activity.



## PRODUCT CATEGORIES MANAGEMENT

The aggregated results on product categories allows:

- a **benchmarking** between different product categories;
- from a point of **cost-based evaluation** it allows to identify the product categories less competitive at total costs.

## BUYER MANAGEMENT

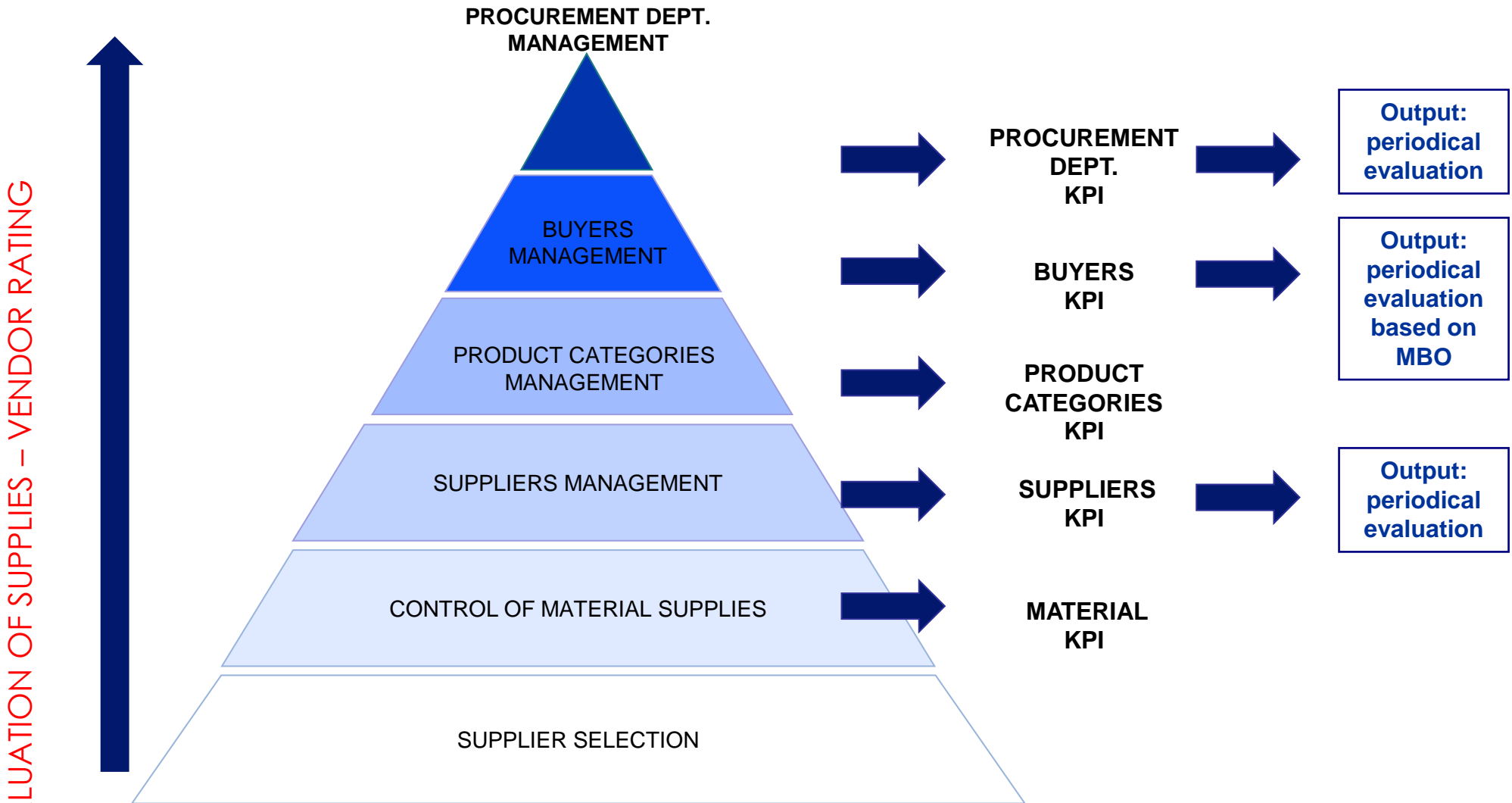
The aggregated results on suppliers managed by a single buyer allows to evaluate the buyer performances as well as using some KPI to relate them to the assigned MBO objectively, as well as:

- to evaluate the buyer effectiveness based on the **continuous improvement** on the product categories managed;
- to **better distribute** the suppliers and product categories between the buyers based on the effective management complexity.

## PROCUREMENT DEPT. MANAGEMENT

Finally, the aggregation of data on all the purchasing, provides a range of **performance indicators** of the Purchasing Dept., providing greater visibility of the function performance to the company and general management.

Below the picture of what explained previously, on each level, KPI targets are determined and periodically confronted with the effective performances.



The conditions needed to correctly apply the evaluation of purchases are:

- **Sharing the assessment methodology with those who will be evaluated.** Suppliers need to be involved in the definition of the evaluation process, in order to have a constructive process for both.
- **Objective KPIs.** The KPIs on which the assessments will be carried out must be the most objective as possible; built on measurable results (% pieces rejected at QC, days of late delivery, etc.), limiting the number of KPI based on a subjective judgment.
- The **target must be defined and agreed before** the start of the evaluation period. They should be clear, ambitious but achievable.
- A **solid data collection**, through a reliable database to avoid errors that may cause the loss of credibility of the evaluation method by whom is evaluated.

Vendor Rating rely on **KPIs** that the company should set based on its business needs, the most common used indicator are related to the below performance areas:

## QUALITY

**Customers quality**-complaints from customers

**Supplies quality**- lot rejected

## COSTS

**Cost efficiency during time**- Costs trend

**Terms of payment** - in days

**Cost transparency level** – subjective eval.

## SERVICE

**Products delivered on delay %**

**Average days of delay**

**Flexibility** -lead time in days

**Flexibility** –minimum q.ty in pieces

**Flexibility** –availability and fulfillment  
rescheduling required

## TECHNICAL SUPPORT

**Development Flexibility** -lead time in weeks

**Compliance of technical specification**

**Technical solution proposal**

**Problem solving capability**



QUALITY	
KPI	KPI DETAILS
<b>Customers quality</b> returns from customers %	$\frac{\text{Pieces returned from customers}}{\text{Pieces sold}} \times 100$ Rolling indicator related to the previous 12 months
<b>Supplies quality</b> % pieces rejected on incoming QC inspection	$\frac{\text{Rejected pieces (on incoming QC)} + \text{defective pcs. found in production line (on lot accepted)}}{\text{Pieces received}} \times 100$

COSTS	
KPI	KPI DETAILS
<b>Costs variation Year on Year</b> % variation over previous year	$\frac{\text{Current year pricelist value}}{\text{Previous year pricelist value}} \times 100$ Evaluation should be made on equal yearly quantity
<b>Terms of payment</b> Days of payment	<b>Average days payment</b>
<b>Transparency level</b> Cost details based on request	<b>Subjective evaluation</b>

SERVICE	
<i>KPI</i>	<i>KPI DETAILS</i>
<b>Reliability on deliveries</b> % quantity delivered on delay	$\frac{\text{Pieces delayed}}{\text{Pieces delivered}} * 100$
<b>Reliability on deliveries</b> Days of delay	<b>Average delay on pieces delivered</b>
<b>Flexibility</b> Lead time in days	<b>Average lead time on products</b>
<b>Flexibility</b> Minimum q.ty in pieces	<b>Average MOQ on products</b>
<b>Flexibility</b> Availability on rescheduling	<b>Subjective evaluation on number of rescheduling accepted</b>

TECHNICAL SUPPORT	
<i>KPI</i>	<i>KPI DETAILS</i>
<b>Development flexibility</b> Lead time in weeks	<b>Subjective evaluation</b> Evaluation shared with company technical dept.
<b>Compliance of technical specs</b>	<b>Subjective evaluation</b> Evaluation shared with company technical dept.
<b>Technical solution proposal - Innovation</b>	<b>Subjective evaluation</b> Evaluation shared with company technical dept.
<b>Problem solving capability</b>	<b>Subjective evaluation</b> Evaluation shared with company technical dept.

## VENDOR RATING – IMPLEMENTATION EXAMPLE

The evaluation output is a **weighted KPI** determined through a scale of values which assign a numeric value to any evaluation (objective and subjective) as follows:

Insufficient	= 1
Sufficient	= 2
Discrete	= 3
Good	= 4
Excellent	= 5

While is not a problem to input a value for a **subjective evaluation**, for the objective evaluation based on data collection this value should be obtained through a conversion table that contains for each KPI a range of results which correspond to the previous scale of values, for example:

QUALITY	5	4	3	2	1
<b>KPI</b>					
<b>Customers quality</b> - returns from customers %	< 0,1	0,1-0,2	0,21-0,3	0,31-0,35	> 0,35
<b>Supplies quality</b> - % pieces rejected on incoming QC inspection	< 0,3	0,3-0,6	0,61-0,9	0,91-1,0	> 1,00

SERVICE	5	4	3	2	1
<b>KPI</b>					
<b>Reliability on deliveries</b> - % quantity delivered on delay	< 5	5 - 7	7,1- 10	10,1- 15	> 15
<b>Reliability on deliveries</b> - Days of delay	< 7	7 - 10	11- 14	15 - 18	> 18

The above values are the **targets previously agreed** with the supplier for evaluating the performance. Such targets should be **defined also for each product categories and buyer**.

A **weighted table** contains the weight assigned to every KPI expressed in hundreds. Such table it's essential in order to obtain the weighted evaluation.

For example, the situation we can have after assigning the weight and converting the operational results with the conversion table on previous page could be:

QUALITY		WEIGHT
KPI		
Customers quality	- returns from customers %	35
Supplies quality	- % pieces rejected on incoming QC inspection	25

SERVICE		WEIGHT
KPI		
Reliability on deliveries	- % quantity delivered on delay	15
Reliability on deliveries	- Days of delay	25
TOTAL		100

SUPPLIERS		
A	B	C
3	4	5
5	3	3

3	1	4
2	1	5

The **weighted evaluation** for each supplier results as follow:

$$\frac{\text{KPI weight} * \text{Conversion value indicator}}{\text{Maximum evaluation rate (5)}}$$

For example considering supplier A on Customers quality we have:

$$\frac{35 \text{ (weight)} * 3 \text{ (value conv.)}}{5 \text{ (max evaluation)}} = 21$$




QUALITY		WEIGHT
KPI		
Customers quality - returns from customers %		35
Supplies quality - % pieces rejected on incoming QC inspection		25

SERVICE		WEIGHT
KPI		
Reliability on deliveries - % quantity delivered on delay		15
Reliability on deliveries - Days of delay		25
<b>TOTAL</b>		<b>100</b>

SUPPLIERS		
A	B	C
3 21	4 28	5 35
5 25	3 15	3 15

3 9	1 3	4 12
2 10	1 5	5 25
<b>65</b>	<b>51</b>	<b>87</b>

The final result is a **Vendor Ranking** of the suppliers organised for each product categories (since target KPI could be different between product categories):

VENDOR RANKING PRODUCT CATEGORY A											
	Customers Quality		Supplies Quality		% Delivered on Delay		Days of Delay		2015	2014	
	Value	KPI	Value	KPI	Value	KPI	Value	KPI	RESULTS	RESULTS	
SUPPLIER C	0,08	5	0,7	3	6,2	4	4	5	87	75	
SUPPLIER A	0,25	3	0,25	5	8,3	3	12	2	65	80	
SUPPLIER B	0,15	4	0,75	3	16,5	1	20	1	51	58	

It's necessary to point out that the final goal of Vendor Rating evaluation it's not the ranking but to implement a methodology on which every supplier can take incentive to improve performances.

As mentioned earlier the Vendor Rating triggers the purchase marketing process . The representation of the Vendor Ranking as shown below in the chart shows the areas of intervention on the supply base .

