

Case Study: Procurement Audit



SPEAKER:

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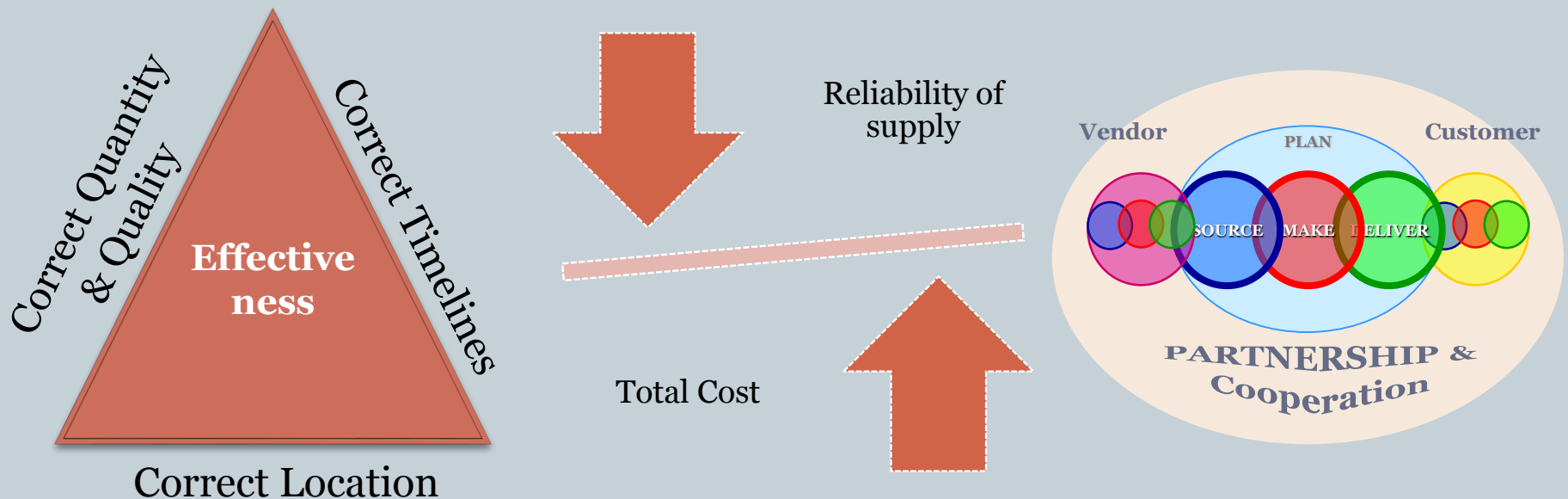
COURSE OF BUSINESS AUDITING
UNIVERSITY OF ROME TOR VERGATA

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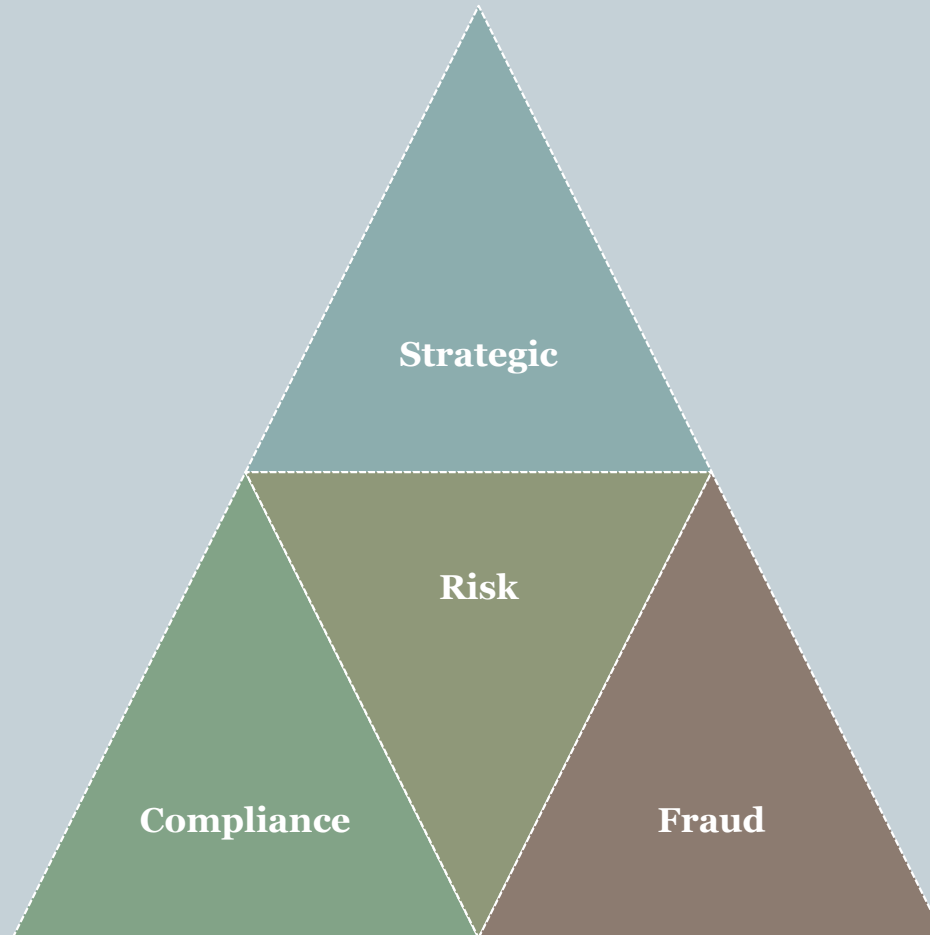
What is procurement?



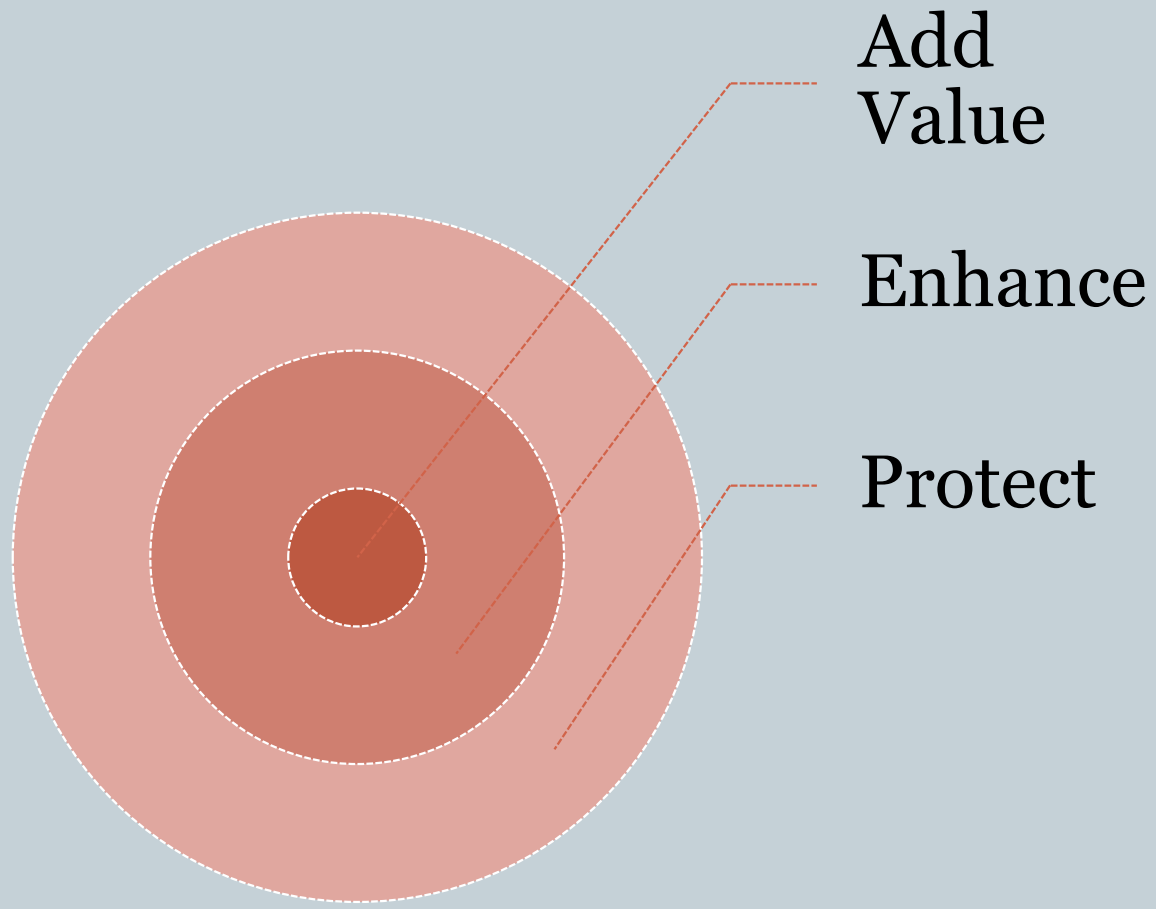
*Process to obtain,
through Contractual Agreement,
Timely and Correct Delivery
of Goods and Services
at Best Value for Money*



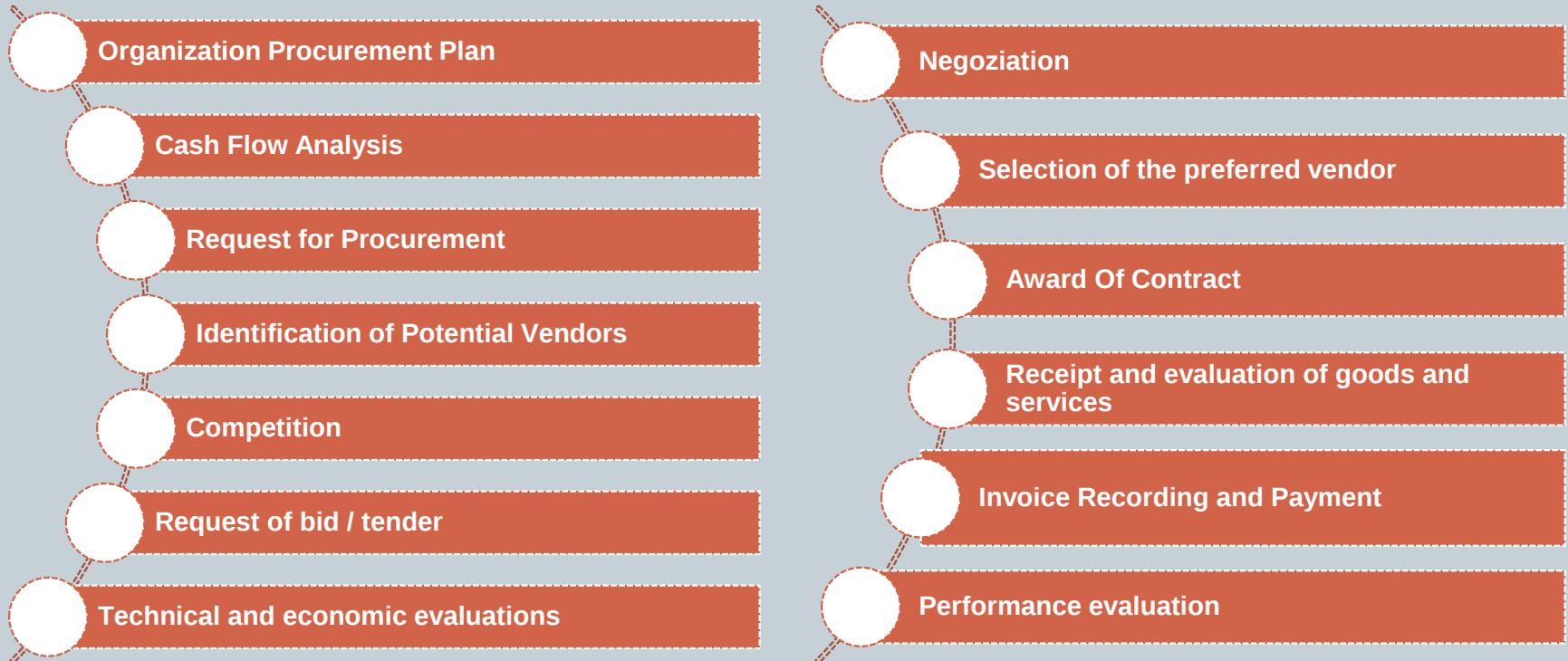
Why Procurement is so important for internal auditing?



Which is the IA role in procurement?

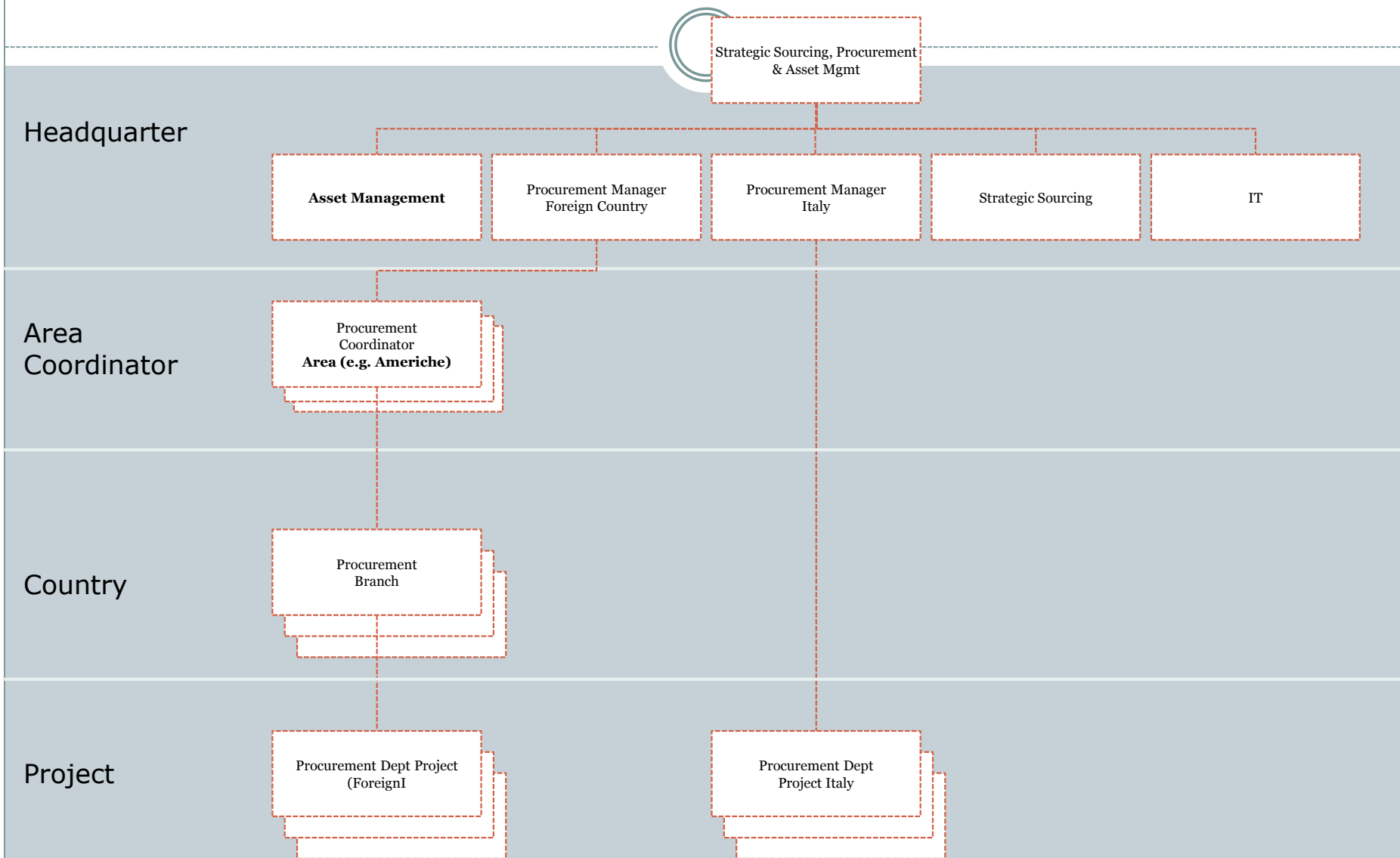


Procurement Cycle

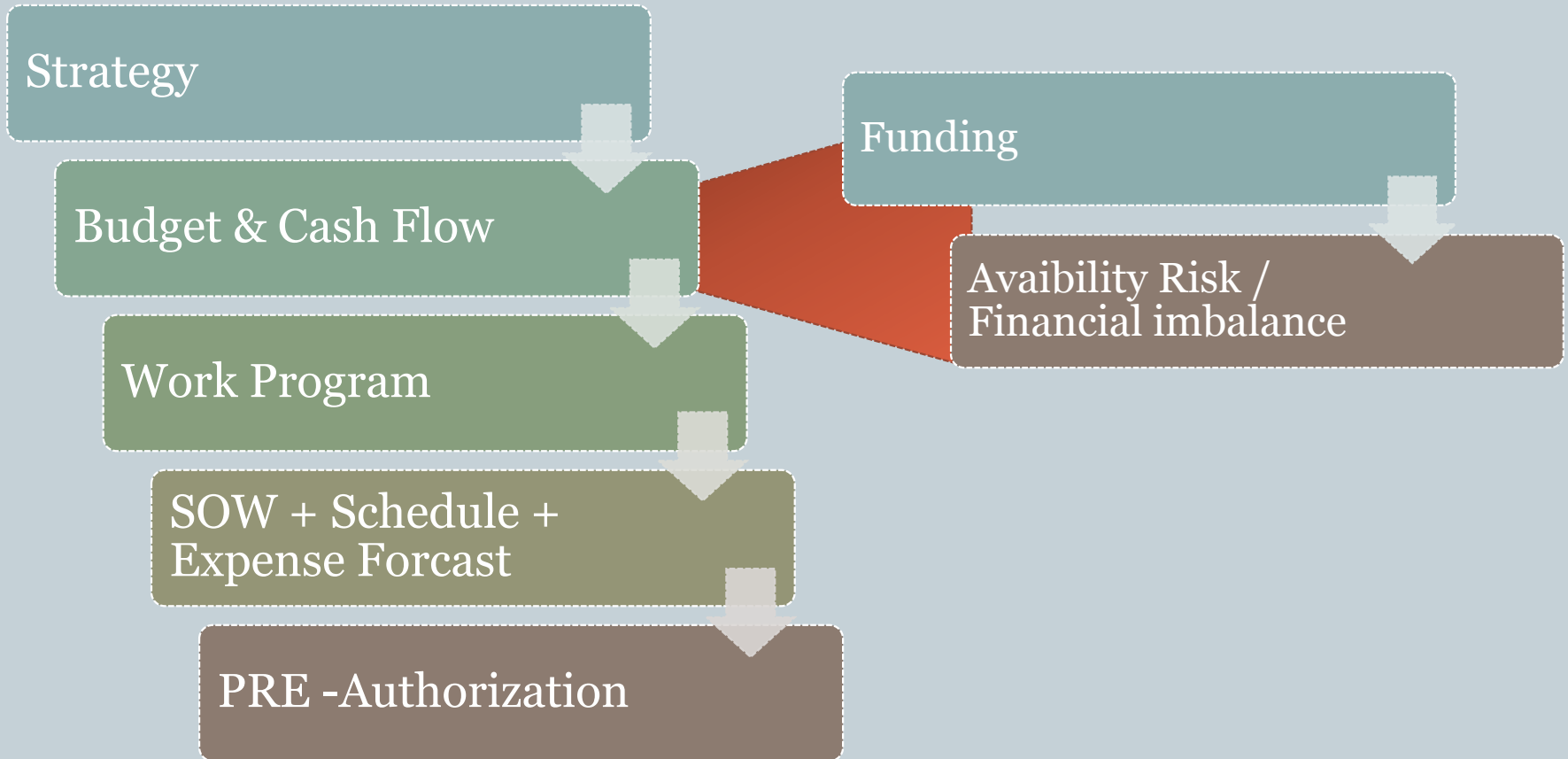


Which are main risks and controls of each phase?

Procurement Organization: an example



Procurement Plan & Cash Flow



Request for Procurement



Must contain all the technical elements (specific) relating to the object of purchase, the conditions required added (eg the delivery or performance of the program) and in general all the elements necessary for the initiation of proper market research

Description, Acceptance Criteria,
Deliverables / Output,
Exclusions, Constraints,
Assumptions

Technical Specifications / Scope
of Work (Annexes)

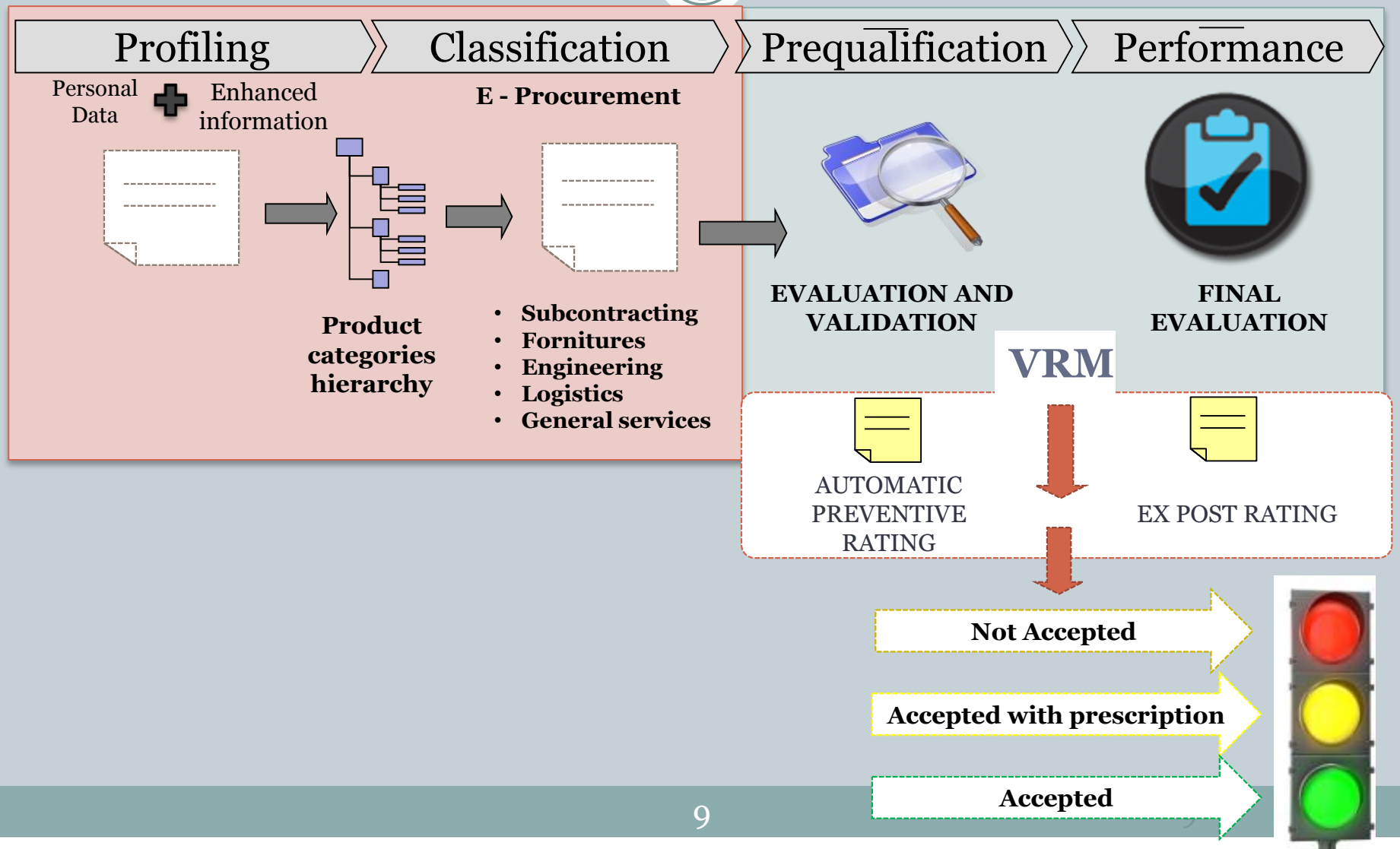
Trigger of procurement activities:
formal request defined into a
standard format / template

Issued by the END USER (note
the Procurement Department /
Buyer)

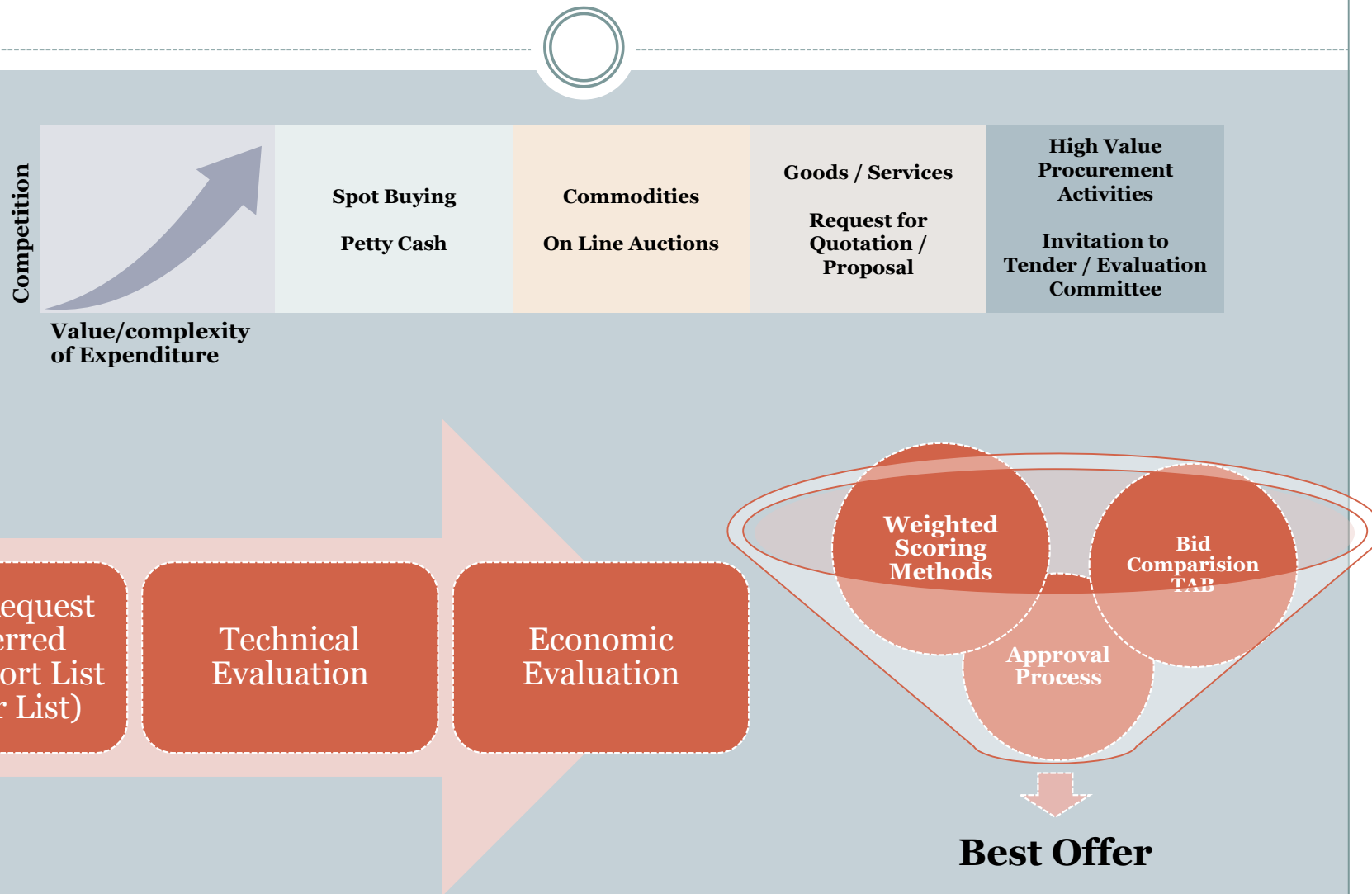
Purchase Request must include:

- ✓ **description of goods / services;**
- ✓ **required amount / time extent;**
- ✓ **unit of measurement;**
- ✓ **in the case of assets, period of expected utilization;**
- ✓ **Budget availability ;**
- ✓ **Schedule and Location;**
- ✓ **Transportation requirements;**
- ✓ **date and signature of the Applicant;**
- ✓ **date and signature for approval of relevant Directorate;**
- ✓ **references to specifications, standards, drawings, etc .;**
- ✓ **certifications required (quality, safety, product, etc.)**

Identification of Potential Vendors



Competition, Request of bid / tender, Technical and economic evaluations



Negotiations and Selection of the preferred vendor



Negotiation

Based on the results of the research, negotiation is limited to a short list of vendors

Negotiation should involve Procurement Department, End Users and any other Activity affected by the purchase to be performed

Pre evaluation of procurement risks through the involvement of other departments:

- Legal (Contractual & Compliance Risks)
- Cost Control (Budget Risks)
- Adm&Fin (Insurance, Liquidity and Credits, Financial Structure Risks)
- HSE (Safety, Environment, CSR Risks)
- ODV (deroghe a standard di controllo)

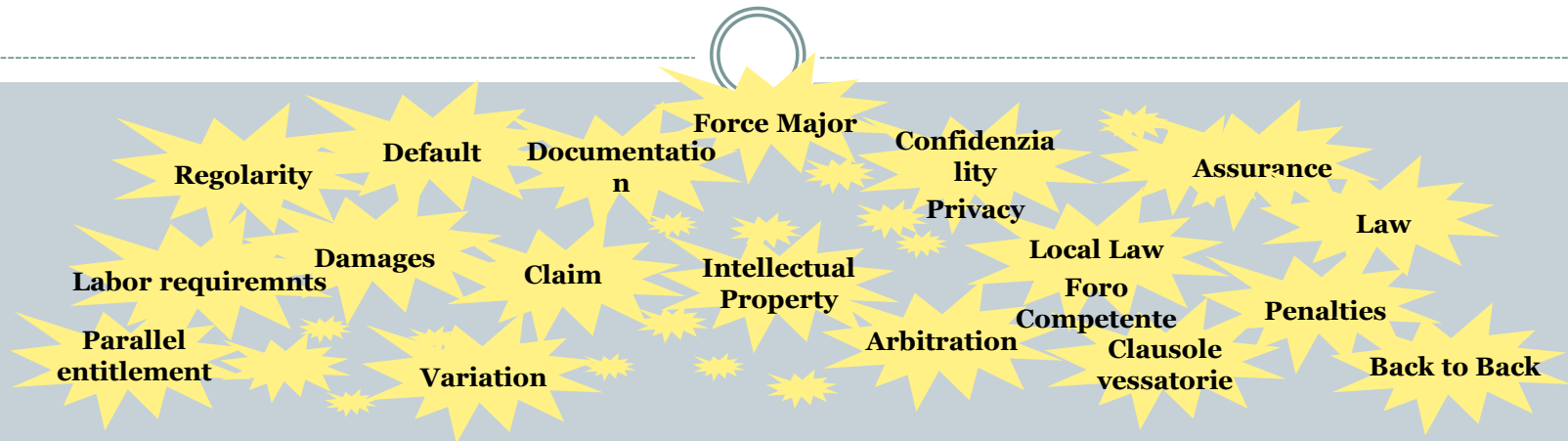
The negotiation phase culminates in the choice of supplier

Criteria for the choice of supplier are not limited to the "best price" but extend to the following cases (for example)

Minimum bid; Technical skills; Engineering capabilities and technological innovation; Financial management; Quality and HSE; 231 Compliance; Intuitu Personae; Presence in the Territory; Professional Specialization.

Selection

Award of Contract



Purchase Order

- Goods/ Simple Services
- Preprinted Template
- General Provisions

Framework Agreement

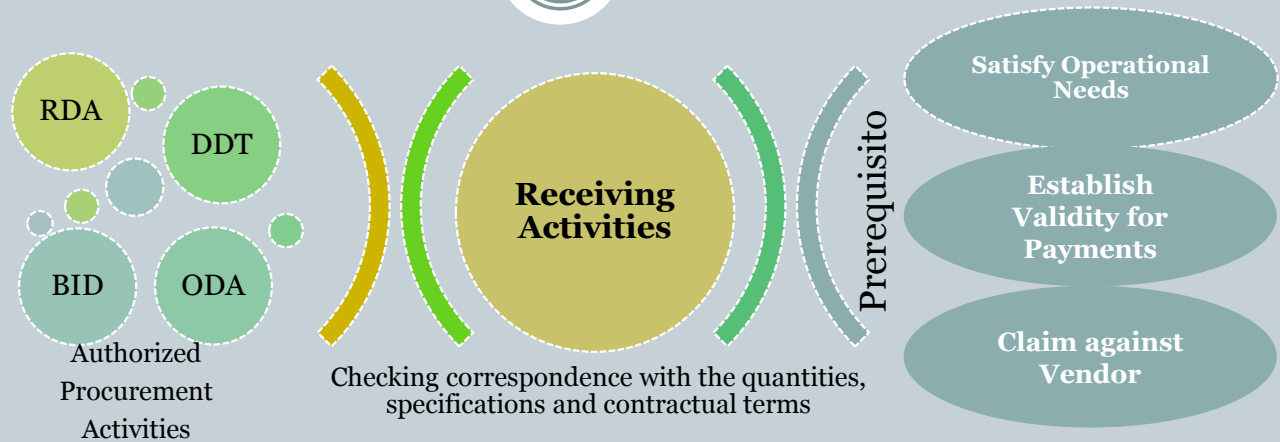
- Recurring goods
- Unit Prices Focused
- Delivery Schedule

Contract Agreement / Subcontract

- Work activities
- Relationship based
- Technical Specification
- Claim Risk

- ✓ Purchase Orders and Contracts are prepared using standard models (typological) generally prepared by the Legal Services in collaboration with the Procurement
- ✓ Include clauses to safeguard the Company
- ✓ Describe the nature and specific characteristics of the object of contract
- ✓ Are signed by Proper Responsible
- ✓ Any exceptions made to the typological standard should be justified and approved later
- ✓ Contracts include the name of Manager for the management of the contract which is entrusted with the responsibility for the proper application of contractual clauses

Receipt and evaluation of goods and services



Receipt

All products supplied, upon arrival at the site, are subject to inspection upon receipt by the Manager of the Warehouse, with the support of any of the other functions of the job order.

In particular, the inspection on receipt essentially consists in verifying:

correspondence between quantity ordered and quantity received;
correspondence between type of product ordered and delivered product;
quality of the product; physical integrity; adequacy of the documents and / or certification; packaging conditions; identification criteria; Price Match between invoice and PO / Contract

Goods

• Inspections

Works / Services

• Valorization

Advisory

• BAP

Invoice Recording and Payment



- When the vendor delivers the items ordered, a Confirmation is processed and posted as a Goods Receipt (GR)
- The Invoice is received from the vendor and posted
- Payment is made once the invoice is matched to the PO and the goods receipt.

Goods Receipt =

Expense Acct	
DR	

GR/IR (Acc. A/P)	
	CR

Invoice Receipt =

GR/IR (Acc. A/P)	
DR	

Vendor Payable	
	CR

Three scenarios affect GR/IR



- Goods receipt without invoice receipt
- Invoice receipt without goods receipt
- Goods receipt AND invoice receipt, difference in quantity
- Invoices will be blocked for payment for one (or more) of three reasons on a line item basis:
 - Price is out of tolerance
 - Quantity is out of tolerance
 - Goods are not confirmed

Audit the Procurement Process



Each audit engagement aims to provide management with an independent and objective evaluation of

**Main inherent risks are managed properly
through control systems that limit the residual relevance within acceptable threshold**

**Risk management and internal control are operating
in compliance with adopted organizational model**

**Therefore, there is a reasonable assurance of the achievement of objectives
Or the need of corrective actions**

Governance

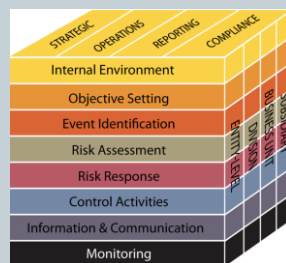
Combination of processes and structures implemented by the board to inform, direct, manage, and monitor the activities of the organization toward the achievement of its objectives



- ✓ Ethical principles and values?
- ✓ Efficient organization and accountability?
- ✓ Information & communication on risks and controls?
- ✓ Coordination and information flows between Key Governance Actors?

Risk Management

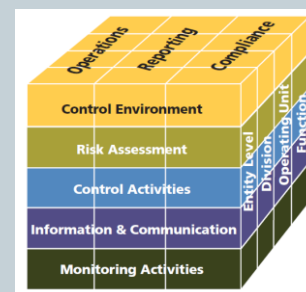
Process, effected by board, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives.



- ✓ Identification of objectives in line with mission?
- ✓ Evaluation of significant risks??
- ✓ Selection of risk response in line with risk appetite?
- ✓ Risk reporting?

Control

Process, effected by an board, management and other personnel, designed to provide reasonable assurance regarding the achievement of objectives relating to operations, reporting, and compliance



- ✓ Controls proportionated to risks?
- ✓ Controls in line with risk tolerance and acceptance?
- ✓ Reasonable assurance of achieving the objectives (strategic; reliability and integrity of information; effectiveness and efficiency of operations; Safeguard the assets; Compliance)?

Systematic, disciplined approach



For the pursuit of its mission, internal auditor should adopt a Systematic, disciplined approach structuring each engagement in a integrated process split into following basic steps:

Preliminary Survey

Detailed Assessment

Audit Strategy Definition

Field Work

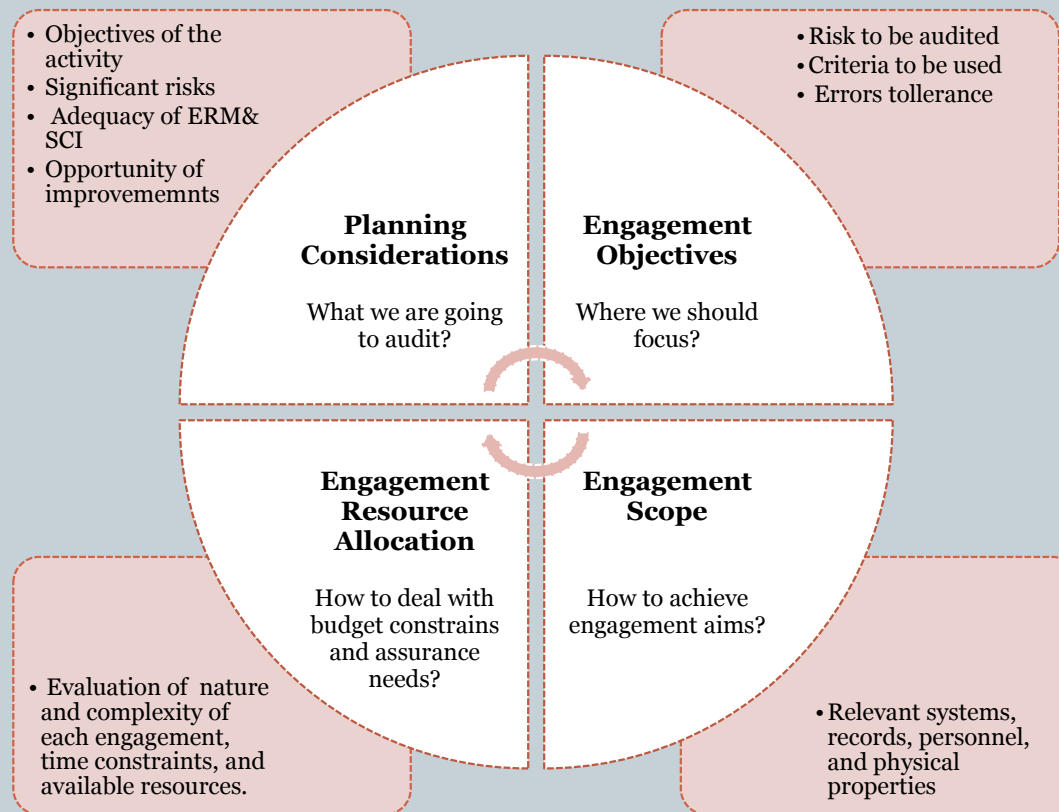
Finding Communication

Performance Standards

2200 – Engagement Planning



*Internal auditors must develop and document a plan for each engagement, including the **engagement's objectives, scope, timing, and resource allocations***



Preliminary Survey



Target

Get aware of main characteristics of the audited area

Guide the planning of the engagement (objectives, scope and extent, work program)

Identify potential risks and most critical areas, where audit should be focused

Methodology

Industry Competitive Position Analysis

Business Model Analysis

Output

Value Proposition

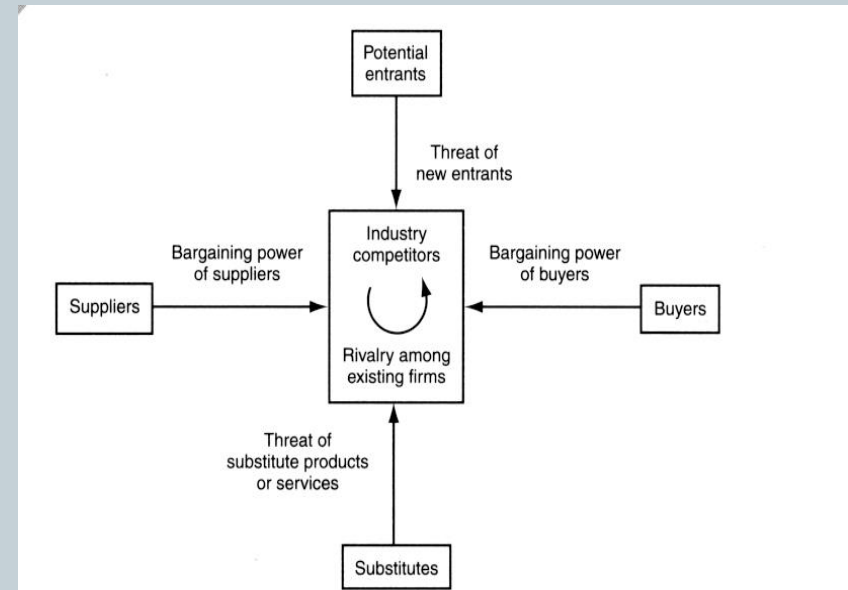


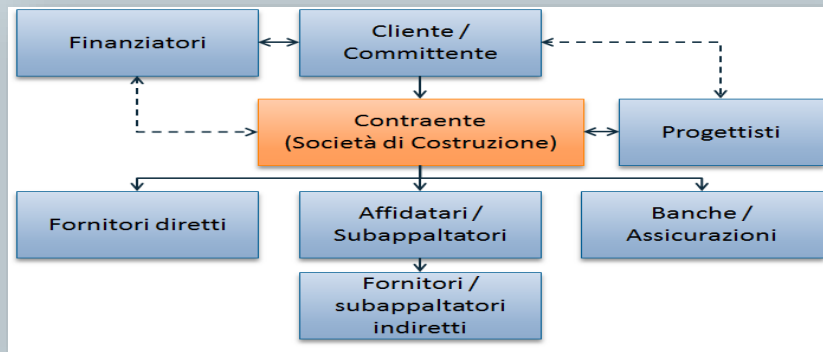
FIGURE 2-2 Porter's Five Forces Model

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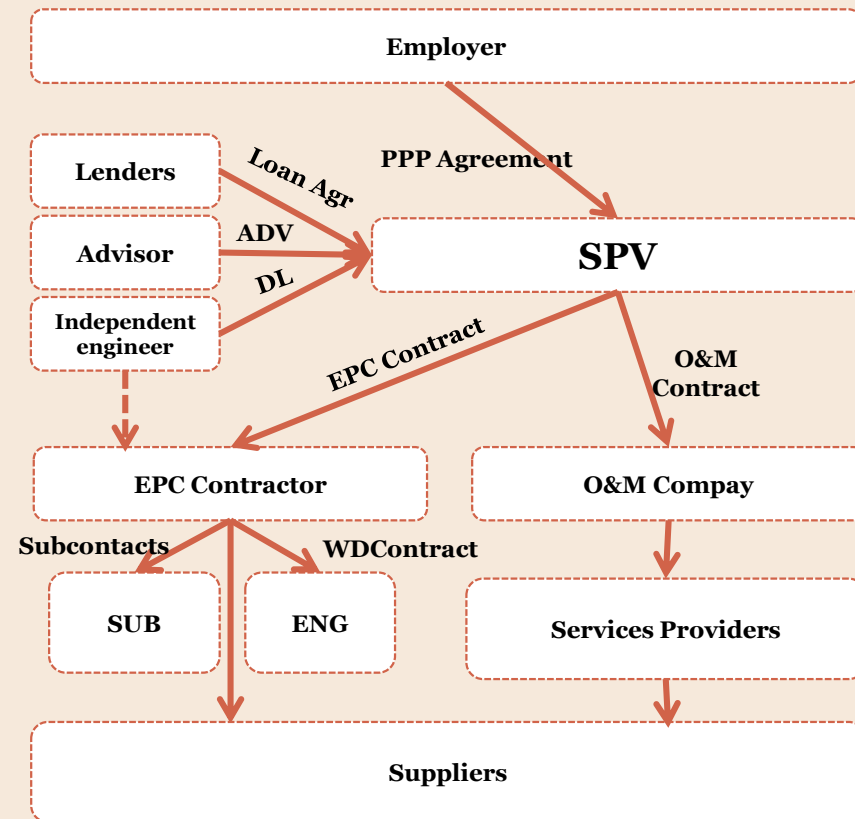
Preliminary Survey

Industry Competitive Position

Big picture of reporting lines of the various players involved in a construction



Contractual Framework - Concession

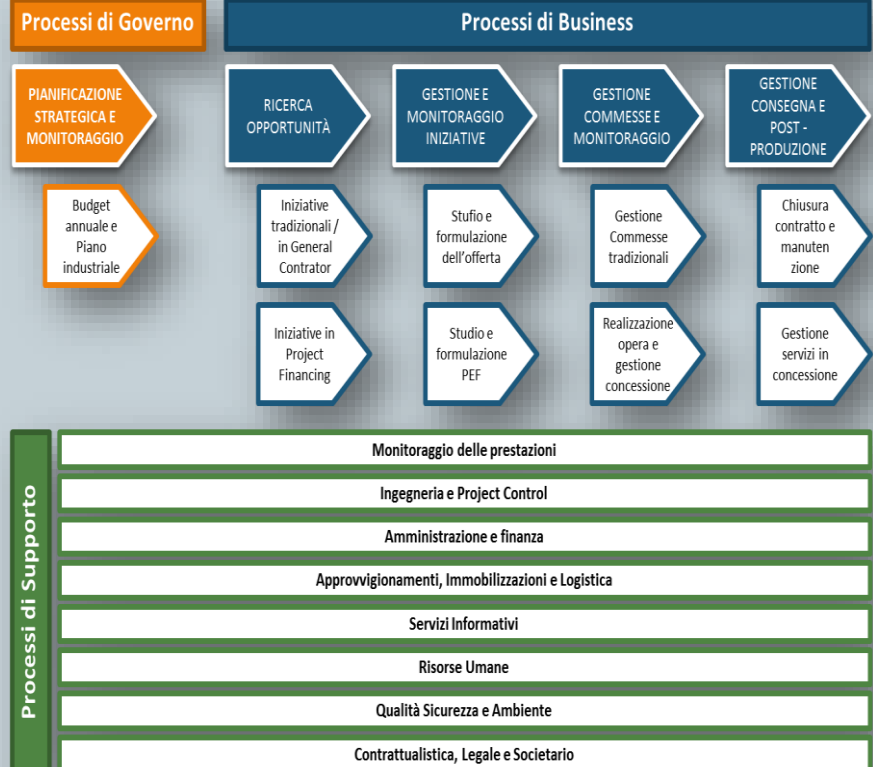


Preliminary Survey

Business Modell Analysis

Hierarchy of business and support processes organized by the company for the creation of value

Figure 1: Porter's Generic Value Chain



Value Proposition



Procurement

Process Objectives

- Efficient allocation of risks
- Synergies to reduce costs
- Quality / timing of deliveries
- Compliance with legislation
- Optimization of financial flows
- Profit / Margin

Critical Success Factor

- Transparency and competitiveness in the purchasing process
- Reliability of Budgeting
- Understanding of customer needs and suppliers
- Synergize supply chain

Key Performance Indicators KPI

- Actual Cost vs Budget cost
- Reducing direct and indirect costs
- SPI / CPI
- Customer Satisfaction
- Reducing claims

Business

- Planning;
- Requirements Planning and purchase request;
- election;
- Award of contract
- Receipt of the goods / service;
- Invoices
- Payments

Supporto

- Management accounting
- General Accounting
- Information Technology
- Industrial services
- Legal services
- Contract Services

External Factors

- Contractual requirements
- Features of the supplier / subcontractor (integrity, professionalism, financial strength);
- Regulatory requirements (eg. Quality, safety, environment)

General Risk

- Availability / quality of supplies
- Contract risk
- Financial risks (and exchange rates)
- Frauds
- Error in record-keeping (required goods - ordered - received)

Risk Response

- Programming and project mnngt
- Competition
- Segregation of duties
- Monitoring supplies / subcontracting
- Optimal Allocation contractual risks (quality, environment, safety)

Detailed Assessment



Target

Perform a detailed assessment of process activities, risks and controls

Identify key officers involved, interrelations, operating procedures, IT tools, specific risks, control layers

Define the audit strategy

Methodology

Flow-charting

Risk Assessment

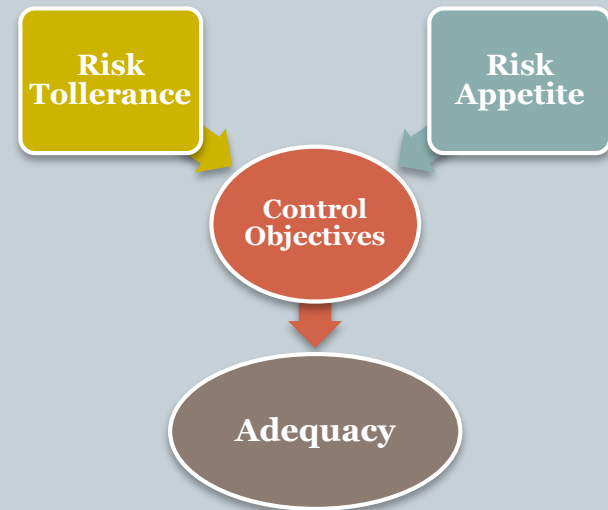
Output

Risk and control matrix

RISK ANALYSIS



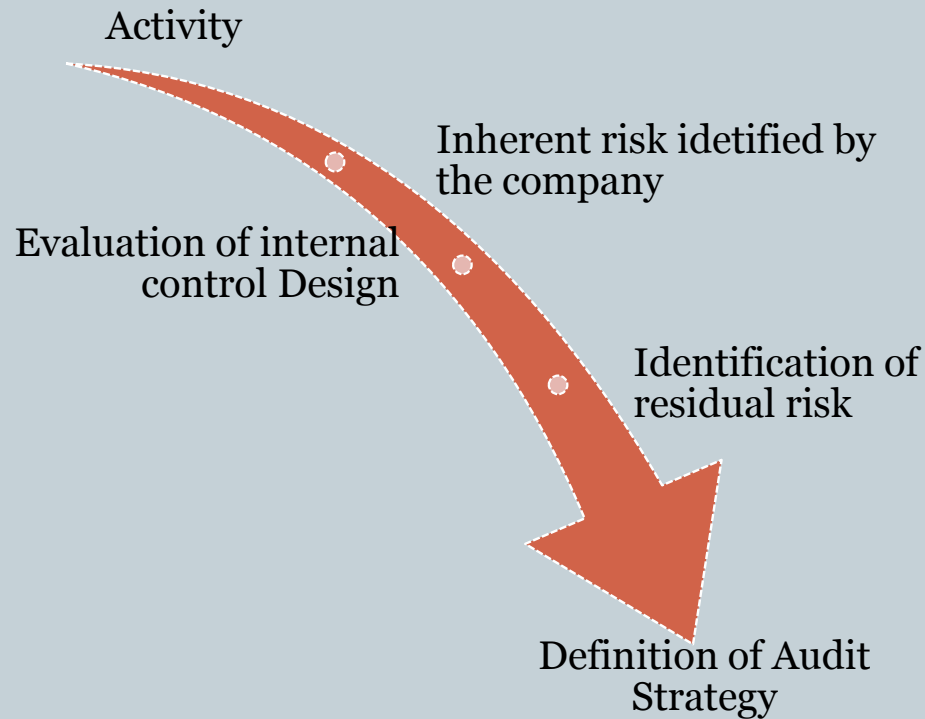
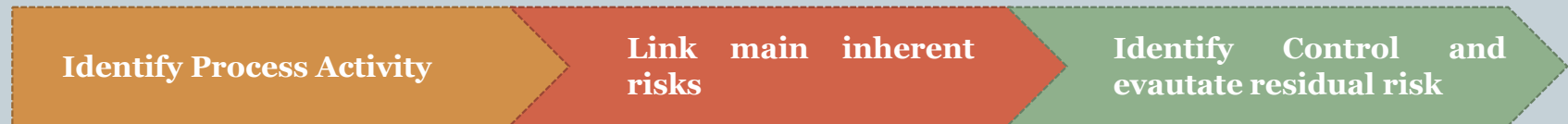
INTERNAL CONTROL EVALUATION EX ANTE





Shows procedural flow of the process and outlines key control points (decision making processes, verification / certification, traceability and documentation, IT databases, etc.)

Risk Assessment



Assessment: Activities and Responsibilities



Responsible: Responsible to perform the task;

Accountable: Responsible for the results / deliverables of activities

Consulted: Collaborate with the responsible activity in execution;

Informed: It has to be informed;

Verified: Check to ensure criteria compliance (if deliverable or the activity need for verification before approval / authorization)

Signatory: Approve / Authorizes the decision (if deliverable or when the business need for approval / authorization).

Macro Phase	Activity	Company A								
		CEO	General Manager	Procurement Manager	ADM & FIN Manager	Legal Department	Warehouse Manager	Budgeting & Reporting	User Department Responsible	User
Procurement Plan	Define the Procurement Plan									
	Market analysis and vendor list management									
Purchase Request	Define procurement needs									
	Issue the purchase request									
Vendor Selection	Qualification of potential vendors									
	Issue the request of quotation									
	Bid comparison									
	Selection									

FOCUS:

Segregation of Duties & Accountability

Assessment: Activities and Responsibilities



Responsible: Responsible to perform the task;

Accountable: Responsible for the results / deliverables of activities

Consulted: Collaborate with the responsible activity in execution;

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Macro Phase	Activity	Company A								
		CEO	General Manager	Procurement Manager	ADM & FIN Manager	Legal Department	Warehouse Manager	Budgeting & Reporting	User Department Responsible	User
Contract Award	Negotiation with preferred vendors									
	Contract preliminary Review									
	Sign of the Contract									
Receipt	Exediting and logistic									
	Receipt of goods and inspections									
	Work valorization									
	Proper servive performance verification (BAP)									
	Goods Receipt Posting									
Invoice Payment	Match invoice with receipt and PO and document the transaction									
	Payment schedule									
	Payment disposal									

Risk and Control Matrix



Phase	Activity	Risk	Inherent	Control	Adequacy ex ante	Residual Risk
Procurement Plan	Define the Procurement Plan	Cost increase / Financial Imbalance		Linkage between procurement plan and budget		
	Market analysis and vendor list management	SCM disruption		Long term partnership for critical furniture		
Purchase Request	Define procurement needs	Requirement not clear		Predefined merchandise		
	Issue the purchase request	Late requests		PAC monitoring		
Vendor Selection	Qualification of potential vendors	Not reliable vendors		Prequalification of potential vendor		
	Issue the request of quotation	Bid doesn't meet the needs		Standard format for RfQ		
	Bid comparison	Not competitive choice		Predefined selection criteria		
	Selection			Traceability of decision making process		

Risk and Control Matrix



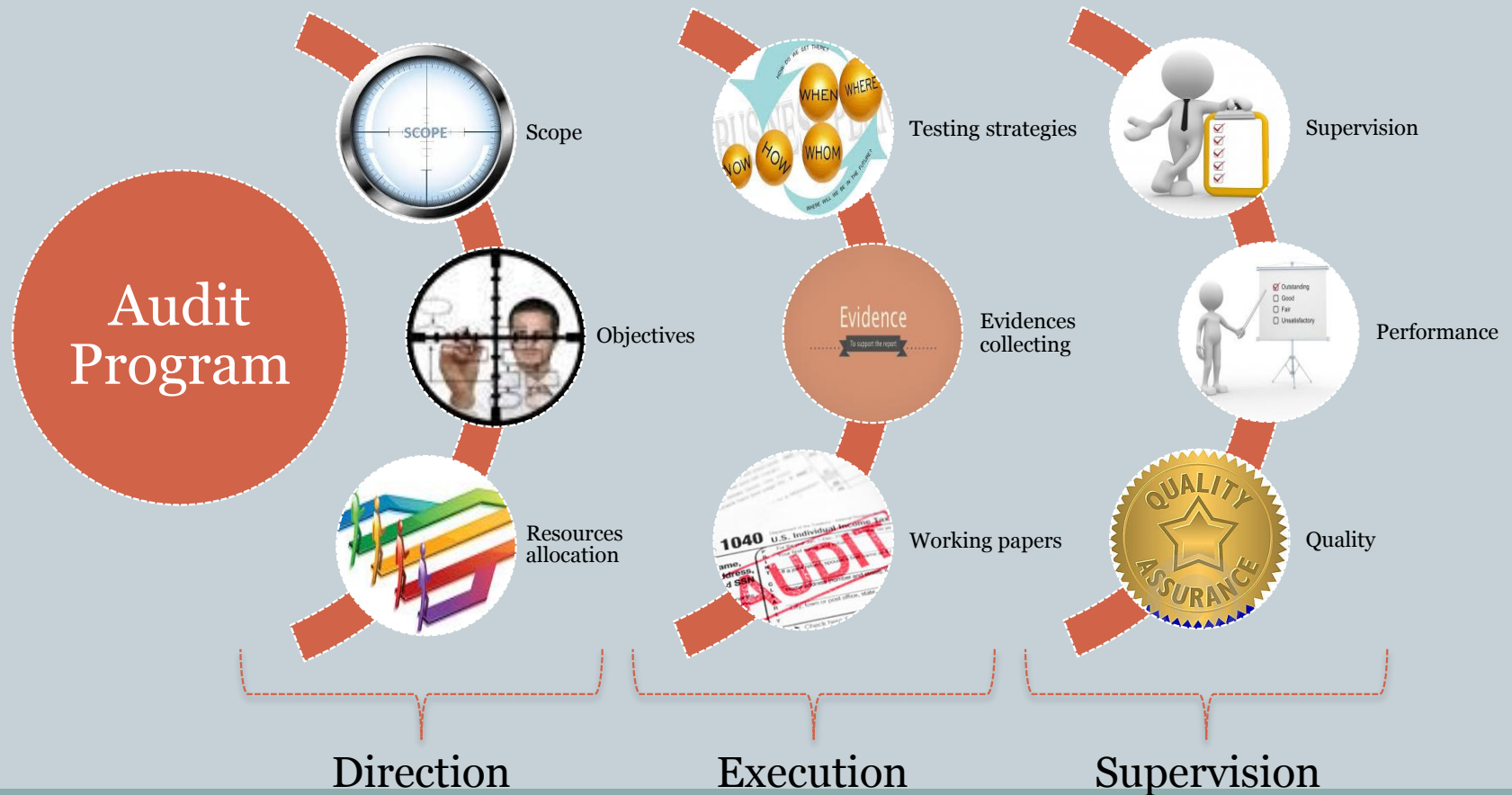
Phase	Activity	Risk	Inherent	Control	Adequacy ex ante	Residual Risk
Contract Award	Negotiation with preferred vendors	Conflict of interests		Bid Tab Approval Process		
	Contract preliminary Review	Claim		Interdepartmental review		
	Sign of the Contract	Risk not properly allocated		Contrat standard		
Receipt	Exediting and logistic	Late delivery		Expediting monitoring		
	Receipt of goods and inspections	Not conformity		Inspection and verification		
	Work valorization	Cost increase / extra costs		Work progress analysis and milestone variances monitoring		
	Proper service performance verification (BAP)	Fictitious indirect procurement activities		Deliverable approval		
	Goods Receipt Posting	Duplicate posting		Automatic EPR System Control		
Invoice Payment	Match invoice with receipt and PO and document the transaction	Duplicate invoices		Automatic EPR System Control		
	Payment schedule	Invoice without PO		Block of not linked invoices		
	Payment disposal	False, Inflated or Duplicate Invoices, Fictitious Contractor		Vendor database management		
		Duplicate payments		Financial traceability		

Performance Standards

2240 – Engagement Work Program



Internal auditors must **develop** and **document** work programs that achieve the engagement objectives.



Audit Program: Audit Strategy



Audit activities should be focused on the significant inherent risks area associated to high level controls

Phase	Risk	AUDIT PROCEDURE	Audit Strategy
Procurement Plan	Cost increase / Financial Imbalance	Match Procurement plan with Budget	➤ Auditing Analytical Procure
	SCM disruption	Verify minimum and safety stocks optimization and monitoring. Check inventories monitoring policies	➤ Interview ➤ Auditing Analytical Procure
Purchase Request	Late request	Check procurement timing and identify any process inefficiencies	➤ Walkthrough tests
		Verify compliance with the internal authorization PR process	➤ Data analytics
Selection	Not competitive choice	Check: - the presence of the approved purchase request; - The sending of the request for quotation to multiple suppliers; - The existence of the tabulation of bids approved by the immediate superior - The presence of selected provided the lists of qualified suppliers	➤ Data analytics ➤ Walkthrough tests

Definizione dell'Audit Program (segue)



Phase	Risk	AUDIT PROCEDURE	Audit Strategy
Contract Award	Claim	Check the utilization of contractual format including: • technical requirements and milestones; • requirements of quality, safety, environment; • clauses 231 • Penalty / force majeure / assicurazioni etc ..	➤ Interview ➤ Sample Analysis
	Conflict of interest	Check the PO matches request of purchase, RFQ, offer received and that there are the levels of authorization required	➤ Data analytics ➤ Walkthrough tests
Ricezione del bene / prestazione	Late delivery	Check the timing of processing of shipments and identify any process inefficiencies	➤ Auditing Analytical Procure
	Not conformity	Match DTT with transport documents, order and PR	➤ Data analytics ➤ Sample Analysis
	Fictitious indirect procurement activities	For all the consulting services, verify the existence of the attestation of successful performance	➤ Data analytics ➤ Sample Analysis
Pagamento del fornitore	Invoice without PO	Ensure the traceability of all documentation and flow of electronic transactions to support payment of the invoice	➤ Walkthrough tests
	False, Inflated or Duplicate Invoices, Fictitious Contractor	Check master data vs payment data	➤ Data analytics
	Duplicate payments	Check the matching of invoices paid and recorded in the general ledger with payments arising from bank transactions	➤ Data analytics

Performance Standards

2300 – Performing the Engagement



Internal auditors must **identify, analyze, evaluate, and document sufficient information** to achieve the engagement's objectives.

Identifying Information

Sufficient

Reliable

Relevant

Useful

Analysis and Evaluation

Data Analytics &
Continuous Auditing

Detailed testin and
Walthrough

Analytical procedures

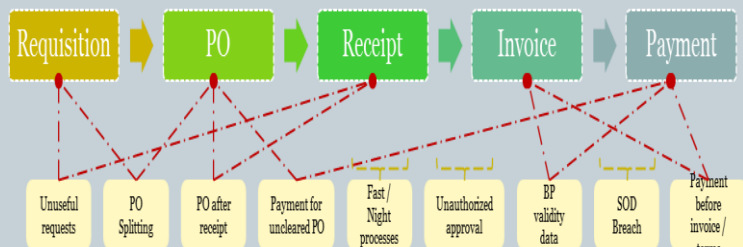
Root cause analysis

Documenting Information

Relevant information to support the conclusions and engagement results

Data Analytics Red Flags

Vendor Master File



Data analysis as used by internal auditors is the process of identifying, gathering, validating, analyzing, and interpreting various forms of data within an organization to further the purpose and mission of internal auditing throughout enabling technologies such as CAAT

GTAG® 16 Data Analysis Technologies

Area	Control	Data Analytics
Purchasing of goods	Application will not allow a duplicate payment to be processed.	Obtain purchase order data Validate that no duplicate payments (same vendor/same account) were processed.
	The person who creates the PO can't release/approve the same PO.	Obtain a list of all POs created (by originator) Obtain a list of all POs released or approved Determine if any inappropriate segregation of duties (SOD) existed.
Receiving of goods	All goods received (GR) are validated against PO.	Obtain a list of all GR and all POs placed Validate that quantities are the same.
	The person who created the PO can't process any goods that are received.	Obtain a list of who signed for the GR (processor) Obtain a list of who created the PO Determine if any inappropriate SODs existed.
Invoicing	PO should be created before supplier invoice is received.	Compare PO dates against invoice dates and make sure there are no POs dated after invoices dates.
	Amount on PO should agree with amount on invoice.	Compare the PO amount against the invoice amount Validate that there are no differences.
	Segregation of duties (SOD).	Obtain a list of who has processed invoices and who created the PO Determine if any inappropriate SODs existed.
Payment	Application should not allow duplicate payments.	Obtain a list of all payments that have been made to vendors in the last 12 months Determine if duplicate payments have been made, for example: • Same vendor ID and amount but different invoice number. • Same vendor ID and invoice number but different amounts. • Different vendor ID with same bank account detail.
	Segregation of duties (SOD).	Obtain a list of who has processed payment and of who created the PO Determine if any inappropriate SODs existed.
Updating vendor records and adding new vendor files	Ensure that duties are properly segregated to guarantee appropriate control.	Obtain the procurement end-user list (users that have access to the procurement application and the functions that each user has) Determine what functions are conflicting and create a report that identifies those users.
	Audit trail that documents what detail was changed when and by what user.	Obtain the audit trails that contain the details of changes that were made to vendor records Determine if only authorized people made changes Identify possible trends of those who are making changes the most.
	Identify key fields (e.g. bank account detail that should be monitored through management sign-off).	Obtain a list of staff bank accounts with direct deposit Compare account information with the bank detail that was updated on the vendor record
Sufficient application controls to ensure accurate input, processing, and output	1. Valid code test. 2. Check digit. 3. Field check. 4. Limit test. 5. Reasonableness check. 6. Sequence check. 7. Batch control totals.	1. Obtain a monthly download of program code within the procurement application. Determine if any changes were made to the code through data analysis. 2. Obtain the standing data of vendors. Validate that the Income Tax number captured is the correct length. 3. Obtain the standing data of vendors. Validate that only numerical values are captured in the bank account and phone number fields. 4. Obtain a list of all procurements that were made in a month. Validate that all payments above a certain amount (e.g., US \$50,000) were authorized by the appropriate user. 5. Obtain a list of all procurements made in a month. Create a trend analysis, per vendor or per procurement type, to identify transactions out of the ordinary.
Value adding services to organizational users	N/A	1. Total dollars spent. 2. Average transaction amount. 3. Transactions per vendor. 4. Dollars spent per vendor. 5. Sort transactions by vendor or commodity. 6. Trend analysis (e.g., seasonal products). 7. Budget vs. actual 8. Age analysis (e.g. GR vs. invoice date)



The screenshot displays a Microsoft Excel spreadsheet titled "16.Processi di supporto_Approvigionamenti.xlsx". The interface shows the standard Excel ribbon with tabs: File, Home, Insert, Layout of page, Formulas, Data, Revision, Visualizza, and Acrobat. The "Home" tab is active, showing options for font (Times New Roman, size 12), paragraph (text alignment, bullet points), styles (Normal, Normal 2, Normal 3), and editing (Insert, Delete, Format). The spreadsheet itself has a grid with columns labeled A through Z and rows numbered 1 through 14. The first row (row 1) is a header row with blue cells containing the following text: "Processo di supporto principale", "Approvvigionamenti, immobilizzazioni e logistica", and "Approvvigionamenti, immobilizzazioni e logistica". The subsequent rows (rows 2-14) are data rows. The first column (column A) contains the text "SRN". The second column (column B) contains the text "MIP's ref". The third column (column C) contains the text "Post. Test". The fourth column (column D) contains the text "Post. Test". The rest of the grid is empty. A large, semi-transparent watermark "Pagina 1" is centered over the spreadsheet. The status bar at the bottom shows "Pronto" and the date "16/12/2015".

Root cause analysis



Define the problem/issue

Gather and classify data

Ask «5 Why?»

Identify casual factor e root causes

Promote solutions

Performance Standards

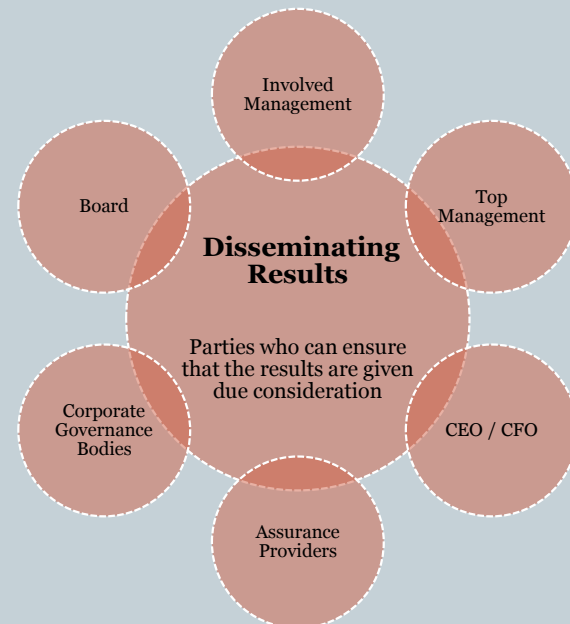
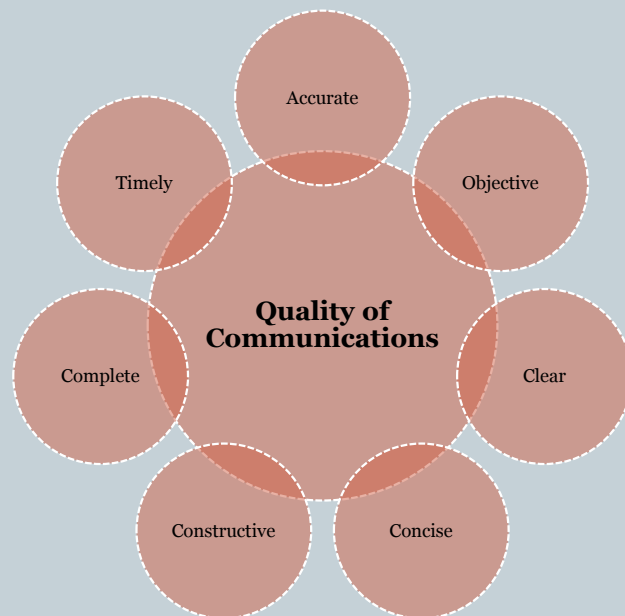
2400 – Communicating Results



Internal auditors **must communicate** the results of engagements.

Observations and recommendations are based on the following attributes:

- ✓ **Criteria:** The standards, measures, or expectations used in making an evaluation and/or verification TO BE
- ✓ **Condition:** The factual evidence that the internal auditor found in the course of the examination AS IS
- ✓ **Cause:** The reason for the difference between expected and actual conditions.
- ✓ **Effect:** The risk or exposure the organization and/or others encounter because of the gaps (the impact of the difference)
- ✓ **Recommendations:** based on the cause



Observations and Recommendations



Improper allocation of responsibilities

Criteria
Segregation of Duties

Condition:
Research and selection of suppliers are managed by End Users

Cause:
Lack of training on the procedures and failure to automate the purchasing process

Risk:
Conflict of interest / low Competition/ Fraud

Recommendations: communicate procedures / Define automatic control for processing orders / invoices / payments (access criteria)

Delay in delivering With consequent Business interruption

Criteria
Work Program

Condition:
Goods not available

Cause:
Lead time in processing PR

Risk:
Penalties

Recommendations: Link the procurement plan to work / estimate standard timeframe for processing PR and shipments