Introduction on Procurement Audit

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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

Correct Quantity & Quality

Correct Timelines

Effective ness

Correct Location

Reliability of supply

Total Cost

Vendor

PLAN

Customer

SOURCE MAKE DELIVER

PARTNERSHIP & Cooperation
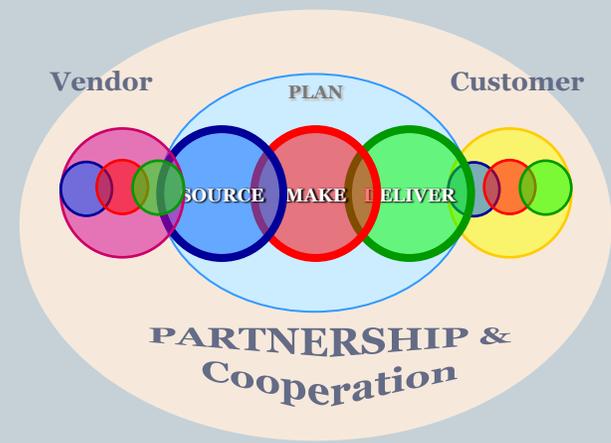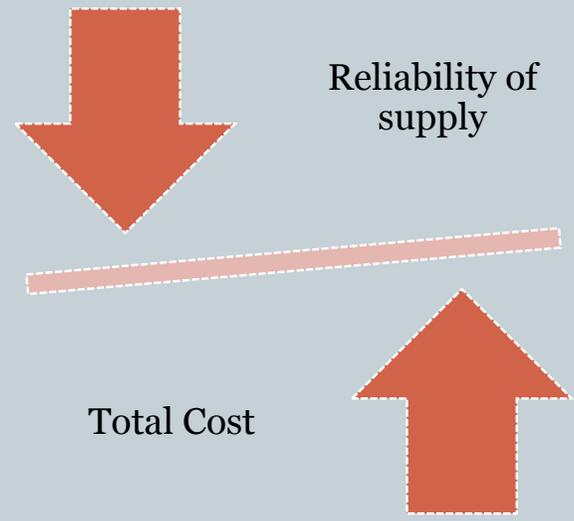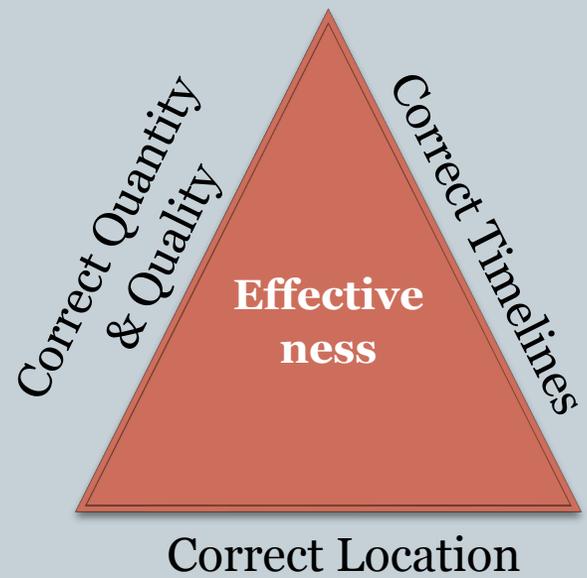
Why Procurement is so important for internal auditing?

Strategic

Risk

Compliance

Fraud
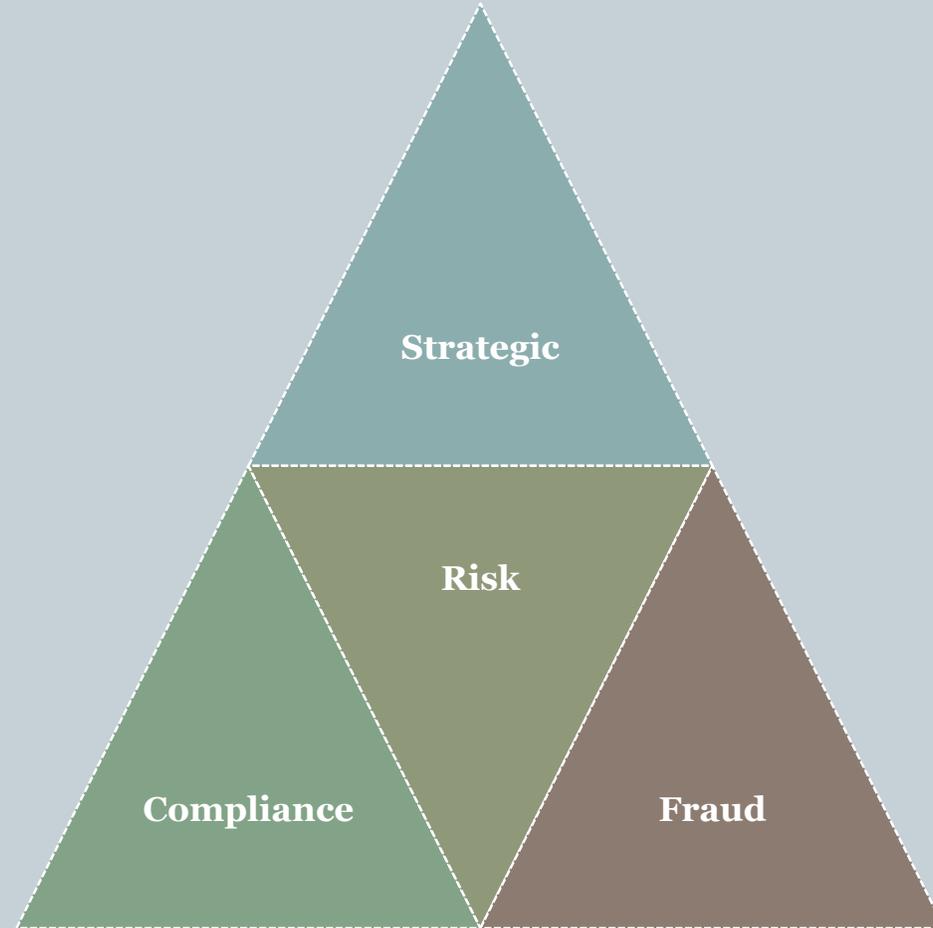
Which is the IA role in procurement?

Add Value

Enhance

Protect

Procurement Cycle

- Organization & Procurement Plan
- Cash Flow Analysis
- Request for Procurement
- Identification of Potential Vendors
- Competition
- Request of bid / tender
- Technical and economic evaluations

- Negoziation
- Selection of the preferred vendor
- Award Of Contract
- Receipt and evaluation of goods and services
- Invoice Recording and Payment
- Performance evaluation

Which are main risks and controls of each phase?

Procurement Strategy

Quadrant 1: Low supply risk, low profit contribution
Strategy: Minimize attention

Quadrant 2: High in supply risk, low in importance to profit
Strategy: Control supply

Quadrant 3: Lower risk of supply, high profit importance
Strategy: Maximize leverage

**Quadrant 4:** Higher risk to supply, higher profit impact
Strategy: Maximize Value

Procurement Strategy

Key Risks	Key Internal Controls	Key IA Questions (Audit Program)
➢ Incosistent and randomic process ➢ Collusion / Frouds (long-term relationships) ➢ Disorganization (informative / systemic ➢ Probity Issues	➢ Setting of Objectives ➢ Procurement Plan ➢ Periodic reconciliations with Budget and Cash Flow Forecast ➢ Identification of critical purchases ➢ Segregation of duties / rotation ➢ Policy / Procedures / IT System ➢ Information and Training Internal and external information flows / Reporting ➢ Sanctions	➢ Is there a procurement strategy coherent with organizational goals? ➢ Have been established and disseminated to all personnel policies and procedures? ➢ Has been assessed the internal and external environment (supply chain, economies of scale, synergy opportunities)? ➢ Has been identified relevant information and has been consequently established a system of reporting? ➢ Is there a formalized system of risk management?

Risks to be Addressed

Procurement Organization

		Strategic Sourcing, Procurement & Asset Mgmt		

Headquarter

Asset Management	Procurement Manager Foreign Country	Procurement Manager Italy	Strategic Sourcing	IT

Area Coordinator

Latin-america

Country

Procurement Branch

Project

Procurement Dept Project (ForeignI

Procurement Dept Project Italy
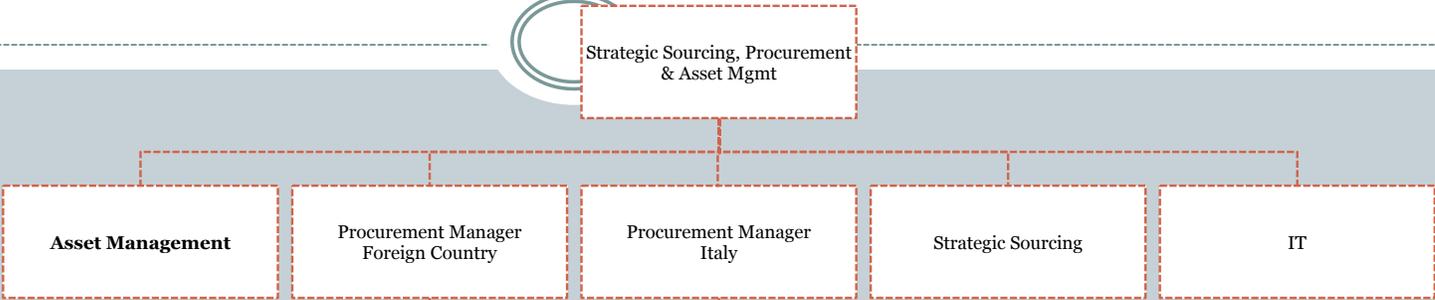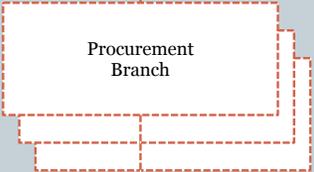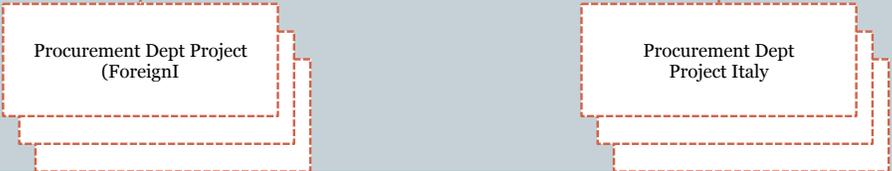
Procurement Organization

Key Risks	Key Internal Controls	Key IA Questions (Audit Program)
➢ Proliferation of purchasing centers ➢ Lack of accountability ➢ Fraud ➢ Conflicts of Interest ➢ Corruption	➢ Definition of organizational structure ➢ Definition of Authorization Matrixes ➢ Periodic organization review	➢ Is the organizational structure sufficiently defined and communicated? ➢ Does the existing organization ensure segregation of duties? ➢ Is there a balance between the responsibilities allocated and recognized powers/authorities?

Risks to be Addressed

Procurement Plan & Cash Flow

Strategy

Budget & Cash Flow

Work Program

SOW + Schedule + Expense Forcast

PRE -Authorization

Funding

Avaibility Risk / Financial imbalance
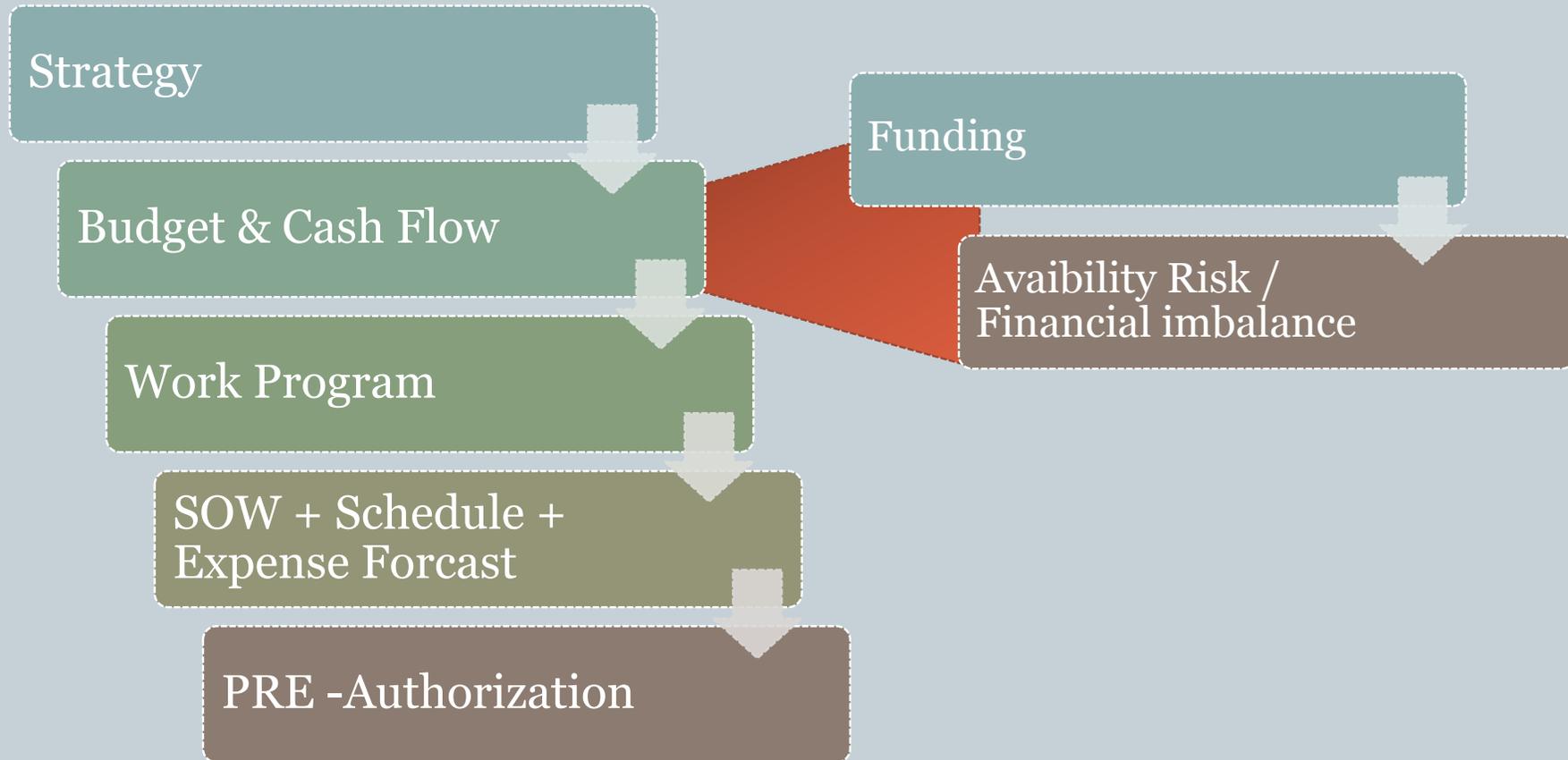
Procurement Plan & Cash Flow

Key Risks	Key Internal Controls	Key IA Questions (Audit Program)
➤ Not realistic timeframe (failure to meet schedule, reduced competition, inadequate offers) ➤ Business interruption ➤ Lacking Funds ➤ Under / over estimation of needs ➤ Pressures, emergency purchases, last-minute transactions, exemptions ➤ Corruption	➤ Pre – authorization of Plan ➤ Continuous update of plan ➤ Control of budget capacity ➤ Definition of the processing time (i.e. safety stock) ➤ Periodic review of appropriate staffing of procurement depts ➤ Escalation for exceptions / emergencies	➤ It has been formally issued a procurement plan, consistent with the strategy, the budget and the programs? ➤ Is plan is approved by appropriate responsible? ➤ Is plan is complete (eg. Supply, investment, subcontracting, etc)? ➤ How often is plan updated and reconciled with budget and cash flow? ➤ Are all emergency purchasing activities justified?

Risks to be Addressed

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.)**

Request for Procurement

Key Risks	Key Internal Controls	Key IA Questions (Audit Program)
➢ Misinterpretation (unnecessary purchases, higher costs, downtime) ➢ Too detailed specifications (reduction of competition, Rigged Specifications) ➢ Inadequate / partial specifications (unsuitable offers, remedial work, unnecessary purchases) ➢ Under / over estimation of needs (needs are not met, over budget) ➢ Non-compliance with legal requirements (HSE, Copyright, Intellectual / Industrial Property) ➢ Corruption	➢ RFP Completeness ➢ Coding, Catalogs & Project management for complex purchase ➢ Specification review matrix ➢ Pre - authorization for sole-vendor ➢ Authorization thresholds ➢ Ban for procurement department to initiate a procurement activity without RFP	➢ Are all purchase activities initiated after a specific authorized request? ➢ Is the requests consistent with the plan? ➢ Are minimum content and specifications of requests defined and observed? ➢ Are specifically approved over-budget / indirect procurement?

Risks to be Addressed

Identification of Potential Vendors

Profiling

Personal Data **+** Enhanced information

Product categories hierarchy

Classification

E - Procurement

- **Subcontracting**
- **Fornitures**
- **Engineering**
- **Logistics**
- **General services**

Prequalification

EVALUATION AND VALIDATION

VRM

AUTOMATIC PREVENTIVE RATING

EX POST RATING

Performance

FINAL EVALUATION

Not Accepted

Accepted with prescription

Accepted

Request for Procurement

Key Risks	Key Internal Controls	Key IA Questions (Audit Program)
➢ Use of non-qualified counterparts ➢ Exclusion of eligible counterparties ➢ Inclusions / exclusions fraudulent ➢ Establishment / maintaining relationships with unreliable counterparties (technically / financially) ➢ Fraud (fictitious supplier / data altered) ➢ Counterparty risk ➢ Corporate crimes: Corruption, Recycling, Terrorism, Transnational, Organized Crime, Safety, Environment ➢ Incorrect / asymmetric information or clarification ➢ poor Competition (Few / Inadequate, Not comparable submissions) ➢ Remedial cost / wasting of time ➢ Fraud (Leaking of Bid Information, Split Purchase, Excluding Qualified Bidders, Unjustified Sole Source Awards, Multiple Offers, Signs) ➢ Corporate Crimes: Corruption Offences counterpart, corruption between private	➢ Objective, fair and transparent process of managing Vendor Master File (VMF) ➢ Periodic updating of VMF ➢ Procedure for register / modify / eliminate vendors from the register ➢ Definition of qualification requirements ➢ Continuous alignment of qualification requirements with binding legislation ➢ Market Analysis / Approval of the vendor list ➢ Standardization of RFQ, clarifications, timing ➢ Selection criteria into the RFQ and Bid Tab (technical evaluation criteria = weights offer technical, economic, administrative) ➢ E-Pocurement / Escalation authorization / IT Security / Bonding	➢ Is there a database with existing and potential counterparts? if so, dos it capture relevant information? ➢ Is inclusion / exclusion process adequately tracked, justified and authorized on the basis of objective requirements, even for the individual vendor list? ➢ Is there a procedure to regulate the periodical review of the database,? ➢ Does the database report information on actual performance? ➢ is information symmetry guaranteed in the different phases of the solicitation and selection process? ➢ Are any reduction of the competition justified?

Risks to be Addressed

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

	Spot Buying Petty Cash	Commodities On Line Auctions	Goods / Services Request for Quotation / Proposal	High Value Procurement Activities Invitation to Tender / Evaluation Committee

Competition

Value/complexity of Expenditure

Formal Request to Preferred Vedor (Short List / Vendor List)

Technical Evaluation

Economic Evaluation

Weighted Scoring Methods

Bid Comparision TAB

Approval Process

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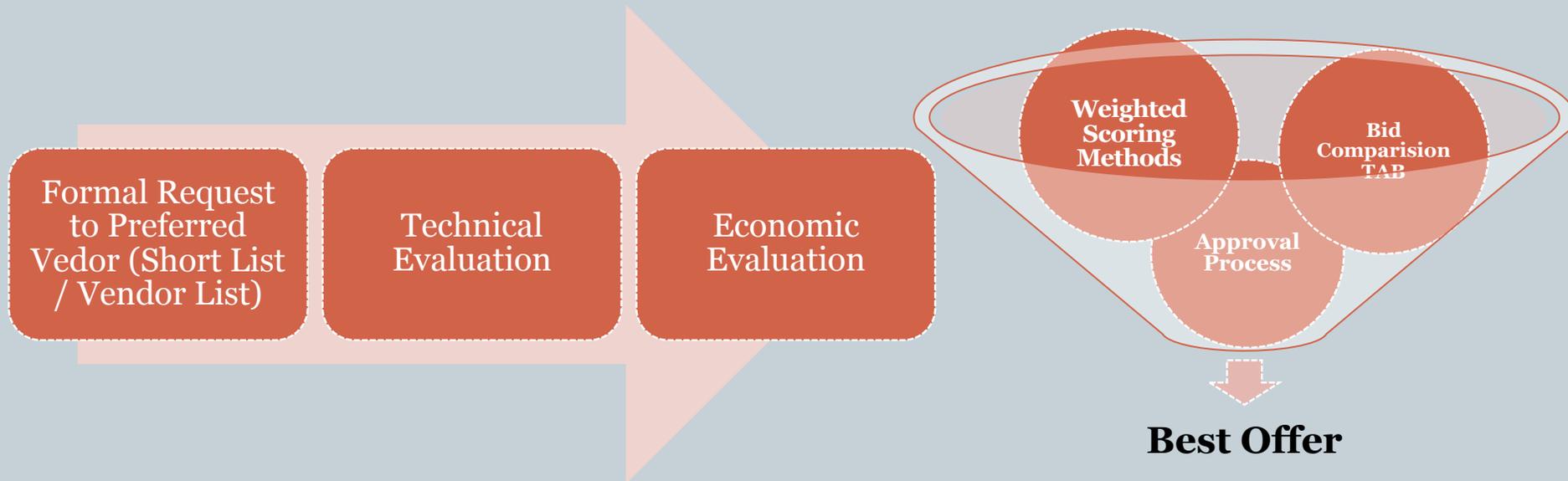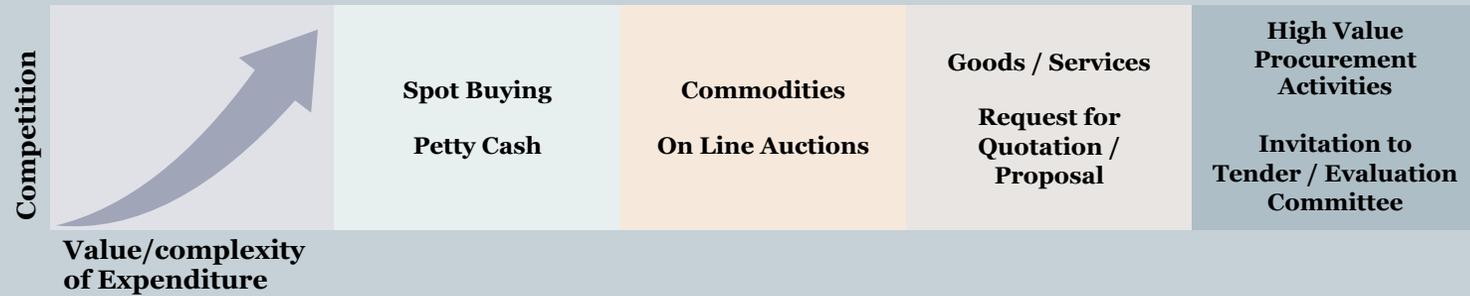
Competition, Request of bid / tender, Technical and economic evaluations

Key Risks	Key Internal Controls	Key IA Questions (Audit Program)
➢ Bad competition (purchase in the worst conditions) ➢ Fraud	➢ Procedure to restrict the buyer discretion ➢ Not to proceed to tender decision approved by an appropriate organizational level ➢ Objective parameters / internal procedures to regulate decision making on intensity of competition defined (number of bidders, race in a closed envelope, thresholds etc.)	➢ Is there a bid solicitation procedures that promote competition? ➢ Have been thresholds established depending on which the procedure of stress of market solicitation varies?
➢ Actual or perceived compromise of confidentiality and information security ➢ Modification of bids ➢ Fraud (Manipulation of bids, Leaking of bid information, Hidden Interests) ➢ Corporate Crime: Corruption, Counterpart Crimes, corruption between private	➢ Procedure for submission handling (focus on telematics offers) ➢ Correspondence log ➢ Setting of deadlines for submission of tenders	➢ Does procedures for treatment and safekeeping of tenders guarantee uniformity and impartiality? ➢ Are confidentiality requirements and system in line with to the type of information being processed and the means of transmission? ➢ Is it guaranteed Integrity / Confidentiality / Confidentiality / Availability?

Risks to be Addressed

Negotiations and Selection of the preferred vendor

Negotiation

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

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

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

-Legal (Contractual & Compliace Risks)

- Cost Control (Budget Risks)

- Adm&Fin (Insurance, Liquidity and Credits, Financial Structure Risks)

- HSE (Safety, Enviroment, CSR Risks)

- ODV (deroghe a standard di controllo)

Selection

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; IntuituPersonae; Presence in the Territory; Professional Specialization.

Negotiations and Selection of the preferred vendor

Key Risks	Key Internal Controls	Key IA Questions (Audit Program)
➢ Not objective Selection criteria / discretionary decisions (higher costs / Claim) ➢ Distortion in evaluations and in the technical and economic scores / abnormal economic offers (Excluding best deals) ➢ Fraud (collusive Bidding, Unbalanced Bidding, Manipulation of Bids) ➢ Corporate Crime: Corruption Crimes counterpart, corruption between individuals, crimes against industry and commerce	➢ Measurable evaluation criteria ➢ Traceability of selection procedures ➢ Separation of duties in the technical / economic evaluation process ➢ Traceability of the selection criteria	➢ Do Procedures and selection criteria ensure integrity, impartiality and accuracy of the evaluation? ➢ Have been total costs considered in the economic offer comparisons? ➢ Are scoring methodologies reasonable and scrolled through?

Risks to be Addressed

Award of Contract

Regolarity   Default   Documentation   Force Major   Confidenziality   Assurance

Privacy   Law

Labor requiremnts   Damages   Claim   Intellectual Property   Local Law   Penalties

Foro Competente

Parallel entitlement   Variation   Arbitration   Clausole vessatorie   Back to Back

Purchase Order
- Goods/ Simple Services
- Preprinted Tample
- General Provisions

Framework Agreement
- Recurring goods
- Unit Prices Focused
- Delivey Schedule

Contract Agreement / Subcontrac
- Work activities
- Relationship based
- Tecnical 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

Award of Contract

Key Risks	Key Internal Controls	Key IA Questions (Audit Program)
➢ Choice of inappropriate suppliers (breach of contract) ➢ Choice of inappropriate products (failure to meet requirements) ➢ Fraud (Split Purchases, Unjustified Sole Source Awards, Failure to Meet Contract Specs) ➢ Mismatch RFP, offer and contract ➢ Inadequate risk allocation ➢ SOW / pricing structure / bond Vagueness ➢ Invalidity of contract / non acceptance / violation of specific rights (eg. Intellectual Property) ➢ Claim / reserves / variations ➢ Excessive Changes order ➢ Failures of contract, due to mismanagement of the contract ➢ Corporate crimes	➢ Traceability of selection criteria ➢ Traceability of rejected offers ➢ Match between request, offer and order / contract ➢ Contract cross functional review contractual formats / standards ➢ Approval in accordance with the authorization procedures and POAs ➢ IT System (automated controls) ➢ Procedure for changes order ➢ IT Controls for avoiding changes in contract / order conditions, except escalation authorization	➢ Is the selection a logical consequence of predetermined and reasonable selection criteria? ➢ Are there predefined contractual standards? ➢ Is there a process of review of the contract and appropriate managers involvement for the assessment of the proper allocation of risks? ➢ Are any agreements with third parties regulated through appropriate written contractual arrangement? ➢ Are fundamental elements of the agreement (scope and prices) always clearly defined?

Risks to be Addressed

Receipt and evaluation of goods and services

RDA

DDT

BID

ODA

Authorized Procurement Activities

Receiving Activities

Checking correspondence with the quantities, specifications and contractual terms

Prerequisito

Satisfy Operational Needs

Establish Validity for Payments

Claim against Vendor
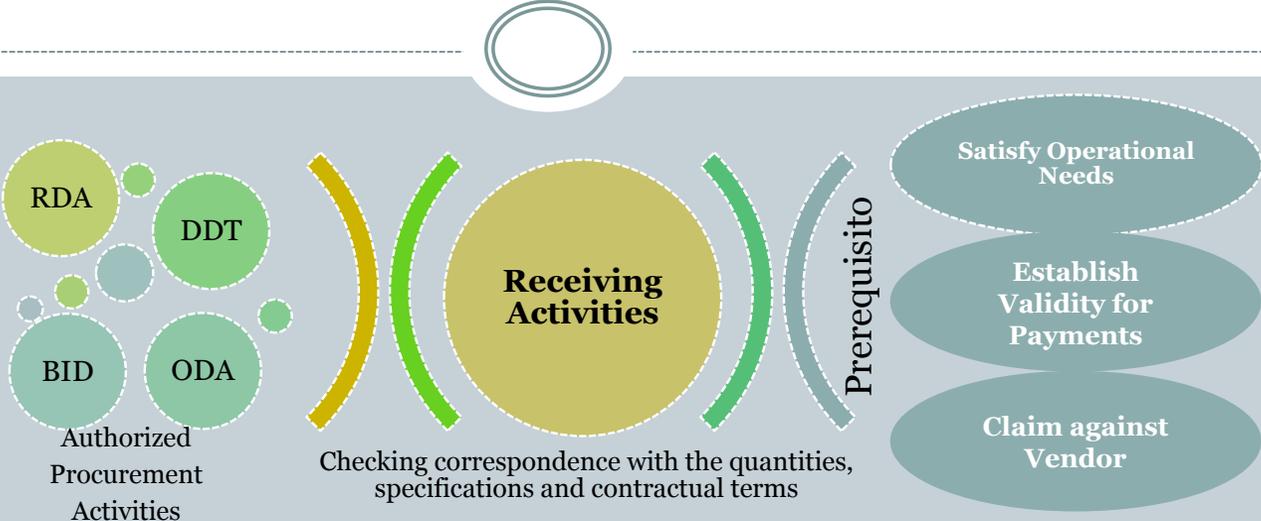
Receipt

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

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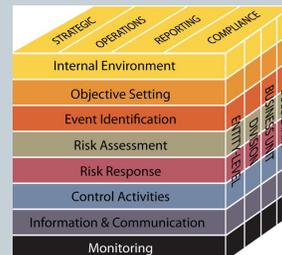
- ✓ Identification of objectives in line with mission?
- ✓ Evaluation of significant risks??
- ✓ Selection of risk response in line with risk appetite?
- ✓ Risk reporting?

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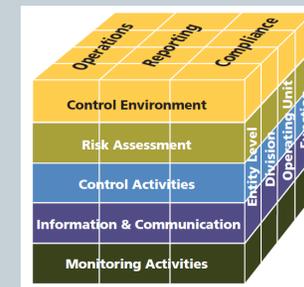
- ✓ Controls proportionated to risks?
- ✓ Controls in line with risk tolerance and acceptance?
- ✓ Reasonable assurance of achieving the objectives (strategic; reliability and integrity of information; effectiveness and efficiency of operations; Safeguard the assets; Compliance)?

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
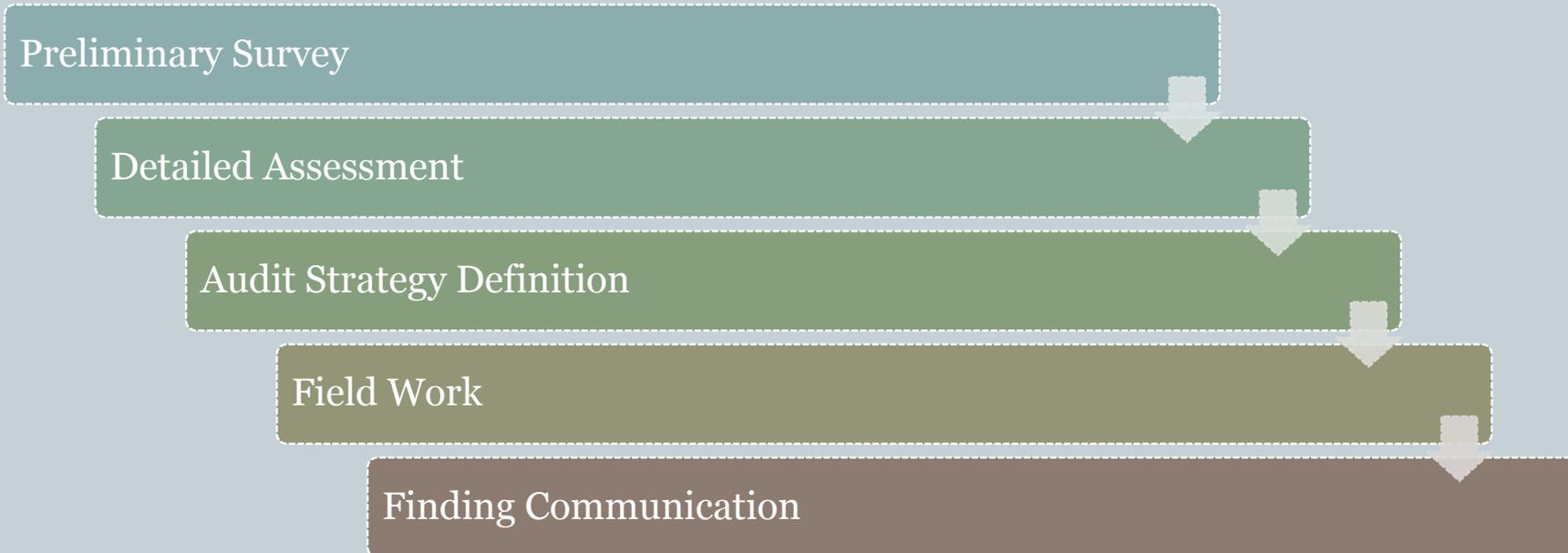
Performance Standards
2200 – Engagement Planning

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

- Objectives of the activity
- Significant risks
- Adequacy of ERM& SCI
- Opportunity of improvememnts

- Risk to be audited
- Criteria to be used
- Errors tollerance

Planning Considerations

What we are going to audit?

Engagement Objectives

Where we should focus?

Engagement Resource Allocation

How to deal with budget constrains and assurance needs?

Engagement Scope

How to achieve engagement aims?

- Evaluation of nature and complexity of each engagement, time constraints, and available resources.

- Relevant systems, records, personnel, and physical properties

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

Metodology

Industry Competitive Position Anaysis

Business Model Analysis

Output

Value Proposition
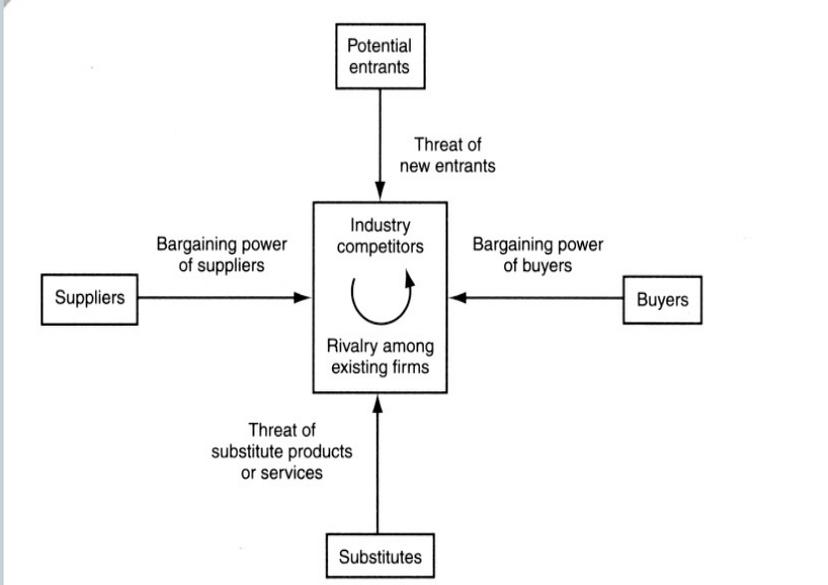
FIGURE 2-2 Porter's Five Forces Model

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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
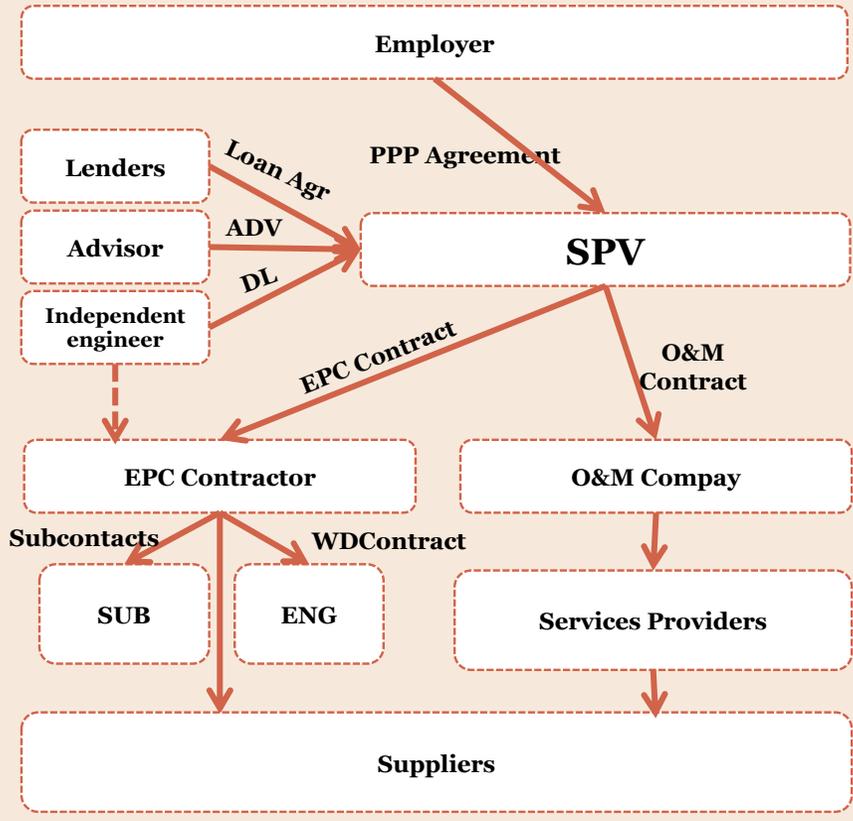
Preliminary Survey

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

Firm Infrastructure					
Human Resource Management					
Technology Development					
Procurement					
Inbound Logistics	Operations	Outbound Logistics	Marketing & Sales	Service	

Support Activities — Primary Activities — Margin

Processi di Governo — **Processi di Business**

PIANIFICAZIONE STRATEGICA E MONITORAGGIO

RICERCA OPPORTUNITÀ — GESTIONE E MONITORAGGIO INIZIATIVE — GESTIONE COMMESSE E MONITORAGGIO — GESTIONE CONSEGNA E POST - PRODUZIONE

Budget annuale e Piano industriale

Iniziative tradizionali / in General Contrator — Stufio e formulazione dell'offerta — Gestione Commesse tradizionali — Chiusura contratto e manuten zione

Iniziative in Project Financing — Studio e formulazione PEF — Realizzazione opera e gestione concessione — Gestione servizi in concessione

Processi di Supporto

- Monitoraggio delle prestazioni
- Ingegneria e Project Control
- Amministrazione e finanza
- Approvvigionamenti, Immobilizzazioni e Logistica
- Servizi Informativi
- Risorse Umane
- Qualità Sicurezza e Ambiente
- Contrattualistica, Legale e Societario

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

Critici 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 mngt
- 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
Metodology	Flow-charting
	Risk Assessment
Output	Risk and contol matrix

RISK ANALYSIS

INTERNAL CONTROL ELAVUATION EX ANTE

Risk Tollerance → Control Objectives ← Risk Appetite

Control Objectives → Adequacy

Flowcharting

Procure to Pay High Level Process Flow
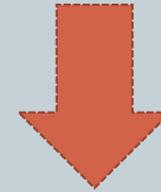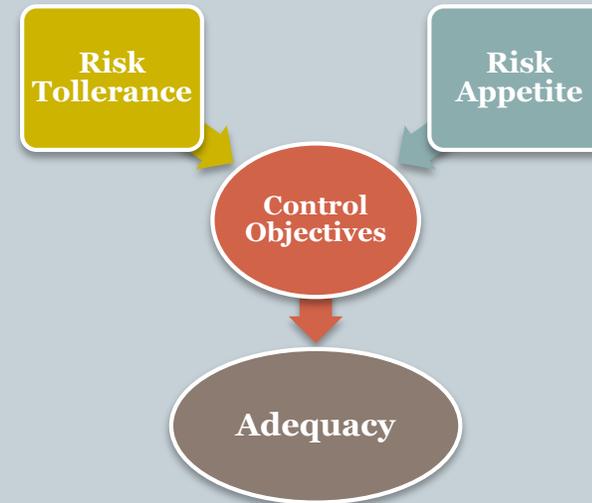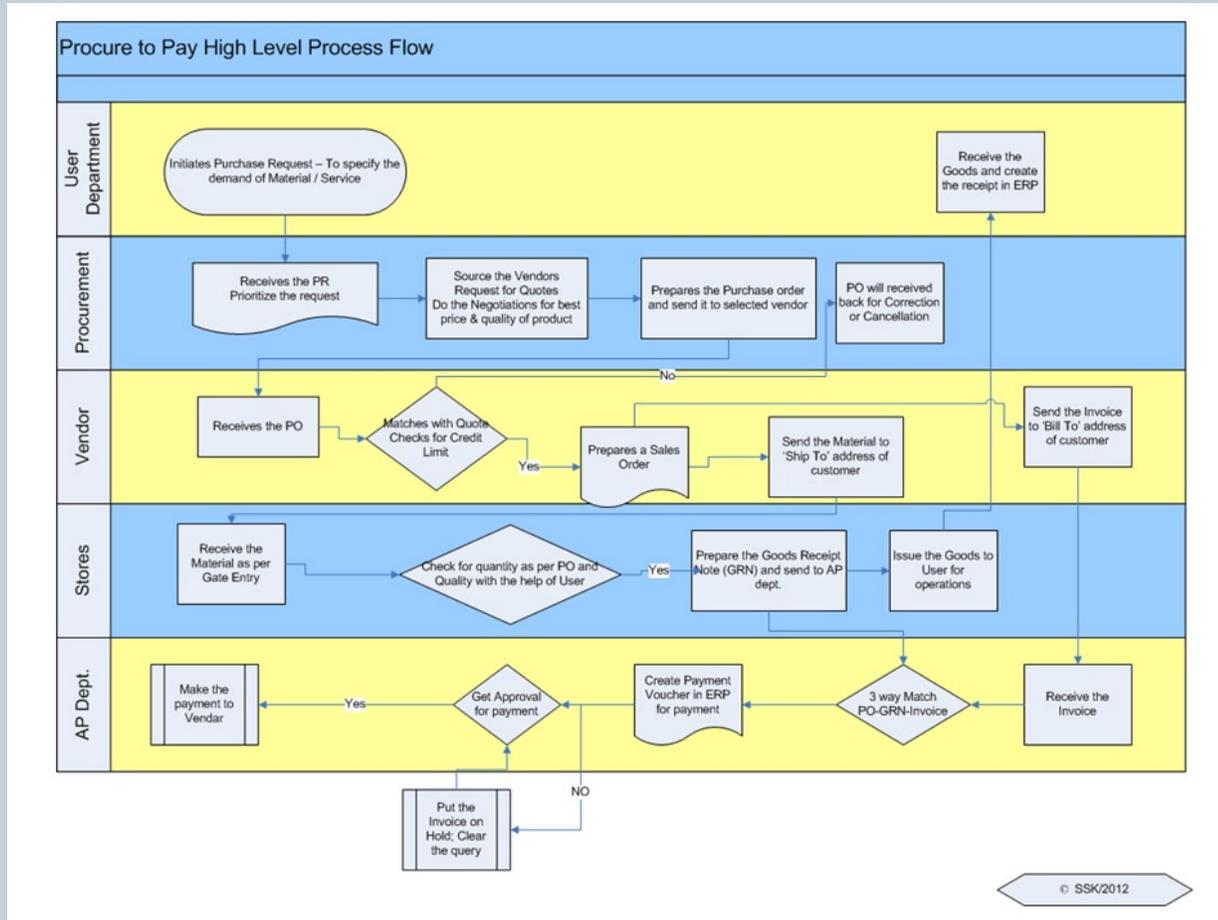
Process Flow
Shows procedural flow of the process and outlines key control points (decision making processes, verification / certification, traceability and documentation, IT databases, etc.)

Assessment: Activities and Responsabilities

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	CEO	General Manager	Procurement Manager	ADM & FIN MAnager	Legal Department	Wharehouse Manager	Budgeting & Reporting	User Department Responsible	User
Procurement Plan	Define the Procurement Plan	Gray	Red	Green	Green			Blue	Green	
	Market analisys and vendor list management		Gray	Blue		Yellow				
Purchase Request	Define procurement needs								Red	Blue
	Issue the purchase request			Purple				Green	Gray	Blue
Vendor Selection	Qualification of potential vendors		Purple	Blue	Purple	Purple			Yellow	
	Issue the request of quotation			Blue						
	Bid comparision		Red	Blue				Yellow	Green	
	Selection	Gray	Red							

(Company A)

FOCUS:

Segregation of Duties & Accountability

Assessment: Activities and Responsabilities

Responsible: Responsible to perform the task;
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Macro Phase	Activity	Company A								
		CEO	General Manager	Procurement Manager	ADM & FIN MAnager	Legal Department	Wharehouse Manager	Budgeting & Reporting	User Department Responsible	User
Contract Award	Negotiation with preferred vendors		Red	Blue	Purple			Purple	Green	
	Contract preliminary Review				Blue	Blue		Blue		
	Sign of the Contract	Gray	Red	Purple						
Receipt	Exediting and logistic			Purple			Blue			
	Receipt of goods and ispections				Yellow		Blue	Purple		
	Work valorization				Yellow			Purple	Blue	
	Proper servive performance verification (BAP)				Yellow			Purple	Blue	
	Goods Receipt Posting			Purple			Blue			
Invoice Payment	Match invoice with receipt and PO and document the transaction				Blue			Purple		
	Payment schedule	Gray	Red	Yellow	Blue				Green	
	Payment disposal	Gray	Red		Blue			Purple	Yellow	

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 prorement plan and budget	🟩	🟩
	Market analisys and vendor list management	SCM disruption	🟥	Long term partnershiop for critical forniture	🟨	🟨
Purchase Request	Define procurement needs	Requirement not clear	🟥	Predefined merceologia	🟨	🟨
	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 comparision	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 ispections	Not conformity	🟨	Inspection and verification	🟩	🟩
	Work valorization	Cost increase / extra costs	🟨	Work progress analysis and milestone variances monitoring	🟩	🟩
	Proper servive 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	🟨	🟨

Risk Assessment

| Identify Process Activity | Link main inherent risks | Identify Control and evautate residual risk |

Activity

Inherent risk idetified by the company

Evaluation of internal control Design

Identification of residual risk

Definition of Audit Strategy

Definition of Audit Strategy

Inherent Risk

ASSURANCE ACTIVITY AREA
- Walthrough / Detailed Test based on Statistical Sample
- Scan/ CAAT
- Data Analytics & Continuous Auditing

ASSURANCE ACTIVITY AREA
- Walthrough / Detailed Test based on Statistical Sample
- Inrerview
- Auditing Analytical Procure

CONSULTING ACTIVITY AREA
- Root cause analysis
- Gap Analysis
- Action Plan

ASSURANCE ACTIVITY AREA
- Walthrough e Test Based on not statistical sample
- Management Assessment and Management Review

ASSURANCE ACTIVITY AREA
- Walthrough e Test Based on not statistical sample
- Observation / Ispction

CONSULTING ACTIVITY AREA
- Root cause analysis
- Gap Analysis
- Shared Action Plan

NO ACTIVITY AREA
- Esclusion
- Surprise Test

NO ACTIVITY AREA
- Esclusion
- Attestazione Management Assessment

NO ACTIVITY AREA
- Shared Action Plan
- Rotational Tests

Adeguacy of Internal Controls

Performance Standards
2240 – Engagement Work Program

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

Audit Program

Scope

Objectives

Resources allocation

Testing strategies

Evidences collecting

Working papers

Supervision

Performance

Quality

Direction

Execution

Supervision
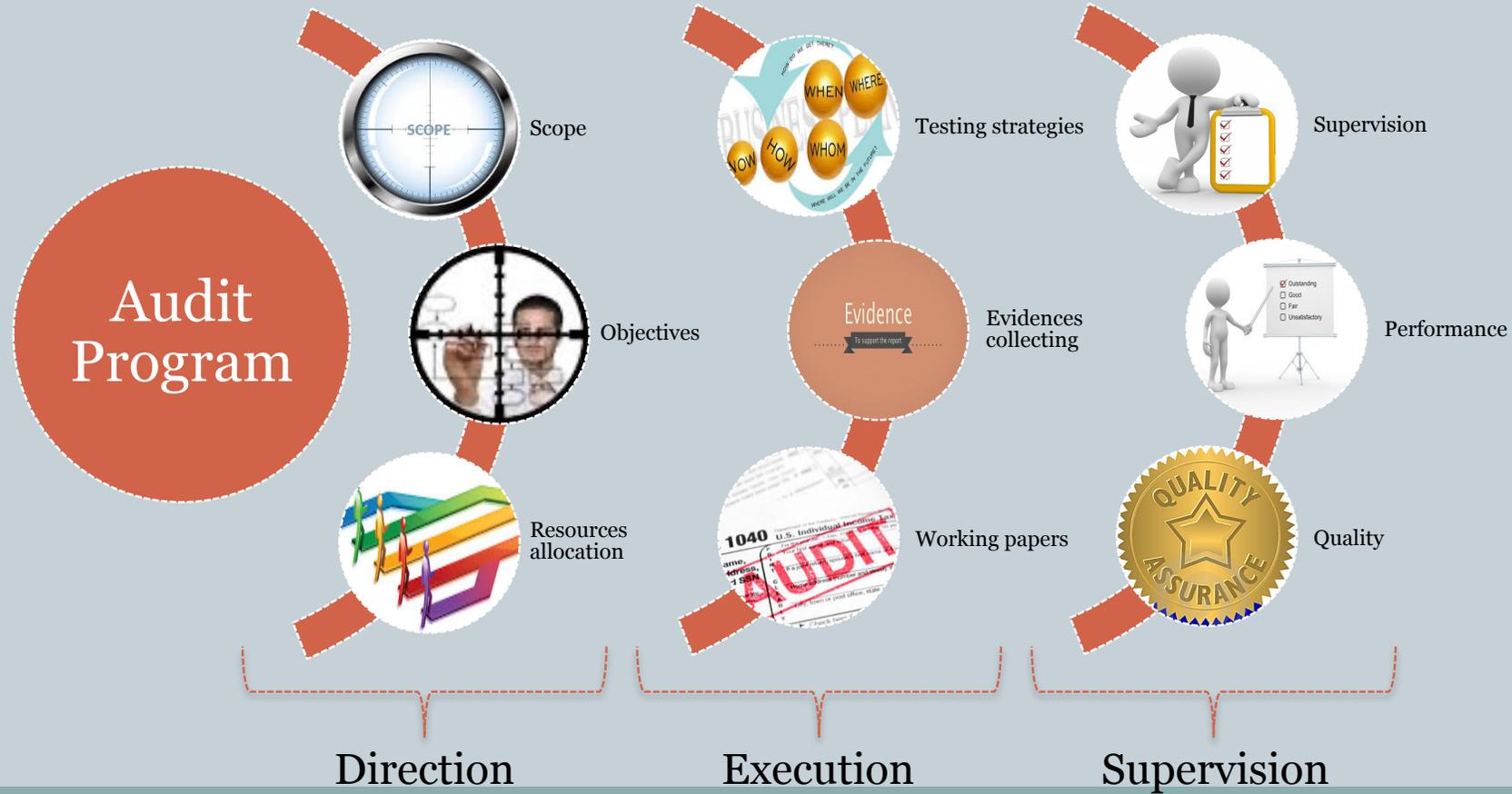
Audit Program Definition

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	➢ Inrerview ➢ Auditing Analytical Procure
Purchase Request	Late request	Check procurment 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

Audit Program Definition

Phase	Risk	AUDIT PROCEDURE	Audit Strategu
Contract Award	Claim	Check the utilization of contractual format including: • technical requirements and millestones; • requirements of quality, safety, environment; • clauses 231 • Penalty / force majeure / assicuzazioni etc ..	➢ Interview ➢ Sample Analysis
	Conflict of inerest	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

Data Analytics Red Flags

Vendor Master File

Requisition → PO → Receipt → Invoice → Payment

Unuseful requests | PO Splitting | PO after receipt | Payment for uncleared PO | Fast / Night processes | Unauthorized approval | BP validity data | SOD Breach | Payment before invoice / terms
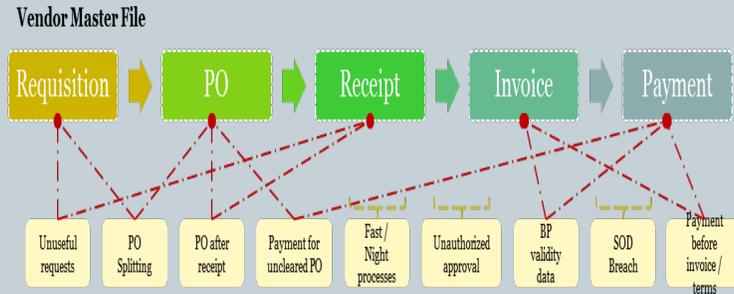
Data analysis as used by internal auditors is the process of identifying, gathering, validating, analyzing, and interpreting various forms of data within an organization to further the purpose and mission of internal auditing throughout enabling technologies such us CAAT

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)

Walkthrough tests
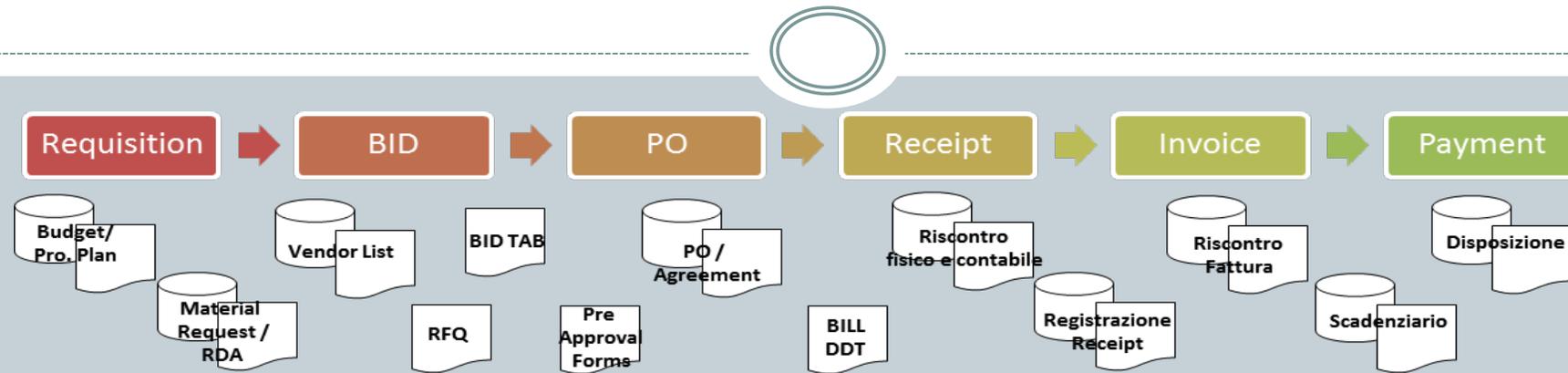
Analysis of the actual occurrence of the transaction and implementation of control by collecting evidence

Root cause analysis

Define the problem/issue

Gather and classify data

Ask «5 Why?»

Identify casual factor e root causes

Promote solutions

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

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

Accurate

Objective

Timely

Clear

Quality of Communications

Complete

Constructive

Concise

Involved Management

Top Management

Board

Disseminating Results

Parties who can ensure that the results are given due consideration

CEO / CFO

Corporate Governance Bodies

Assurance Providers
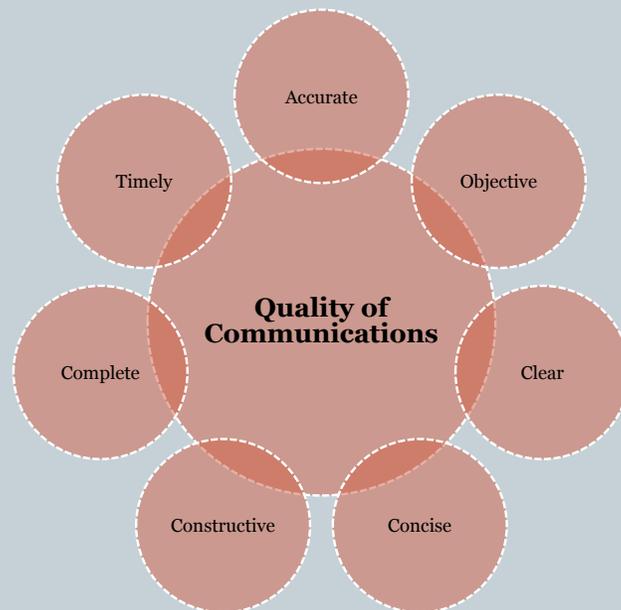
Observations and Recommendations

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 / esimate standard timeframe for processing PR and shipments

What is Corruption?

"The abuse of entrusted power for private gain"
Transparency International (2018)
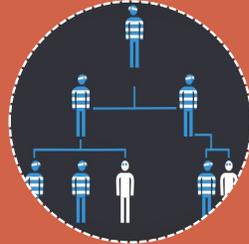
Grand Corruption | **Political Corruption** | **Petty Corruption**
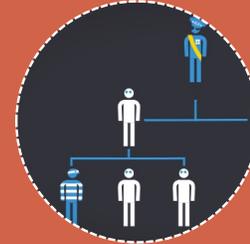
Conflict of Interese VS Trasparency

Integrity Risk into Procurement Cycle

Pre-Tendering

Tendering

Post Award

Needs assessment and market analysis	• Lack of adequate needs assessment • Influence of external actors on officials decisions • Informal agreement on contract
Planning and budgeting	• Poor procurement planning • Procurement not aligned with overall investment decision-making process • Failure to budget realistically or deficiency in the budget
Development of specifications/ requirements	• Technical specifications are tailored for a specific company • Selection criteria is not objectively defined and not established in advance • Requesting unnecessary samples of goods and services • Buying information on the project specifications.
Choice of procurement procedure	• Lack of proper justification for the use of non-competitive procedures • Abuse of non-competitive procedures on the basis of legal exceptions: contract splitting, abuse of extreme urgency, non-supported modifications

Integrity Risk nel Procurement Cycle

Pre-Tendering

Tendering

Post Award

Request for proposal/bid	• Absence of public notice for the invitation to bid • Evaluation and award criteria are not announced • Procurement information isn't disclosed and isn't made public
Bid submission	Lack of competition or cases of collusive bidding (cover bidding, bid suppression, bid rotation, market allocation)

Bid evaluation	• Conflict of interest and corruption in the evaluation process through:
	  ➢ Familiarity with bidders over time
	  ➢ Personal interests such as gifts or future/additional employment
	  ➢ No effective implementation of the "four eyes-principle"

Contract award	• Vendors fail to disclose accurate cost or pricing data in their price proposals, resulting in an increased contract price (i.e. invoice mark-ups, channel stuffing) • Conflict of interest and corruption in the approval process (i.e. no effective separation of financial, contractual and project authorities) • Lack of access to records on the procedure

Integrity Risk nel Procurement Cycle

Pre-Tendering

Tendering

**Post Award**

|	
Contract management/ performance	• Abuses of the supplier in performing the contract, in particular in relation to its quality, price and timing: ➢ Substantial change in contract conditions to allow more time and/or higher prices for the bidder ➢ Product substitution or sub-standard work or service not meeting contract specifications ➢ Theft of new assets before delivery to end-user or before being recorded ➢ Deficient supervision from public officials and/or collusion between contractors and supervising officials ➢ Subcontractors and partners chosen in an on-transparent way or not kept accountable
Order and payment	• Deficient separation of financial duties and/or lack of supervision of public officials leading to: ➢ False accounting and cost misallocation or cost migration between contracts ➢ Late payments of invoices • False or duplicate invoicing for good and services not supplied and for interim payment in advance entitlement

A Single Criminal Scheme

Corruption schemes

```
Offering, giving,
receiving or
soliciting         →    Directly or
                        indirectly        →    Anything of
                                                 value
                                                   ↓
The actions of         ←    To influence
another party               improperly
```
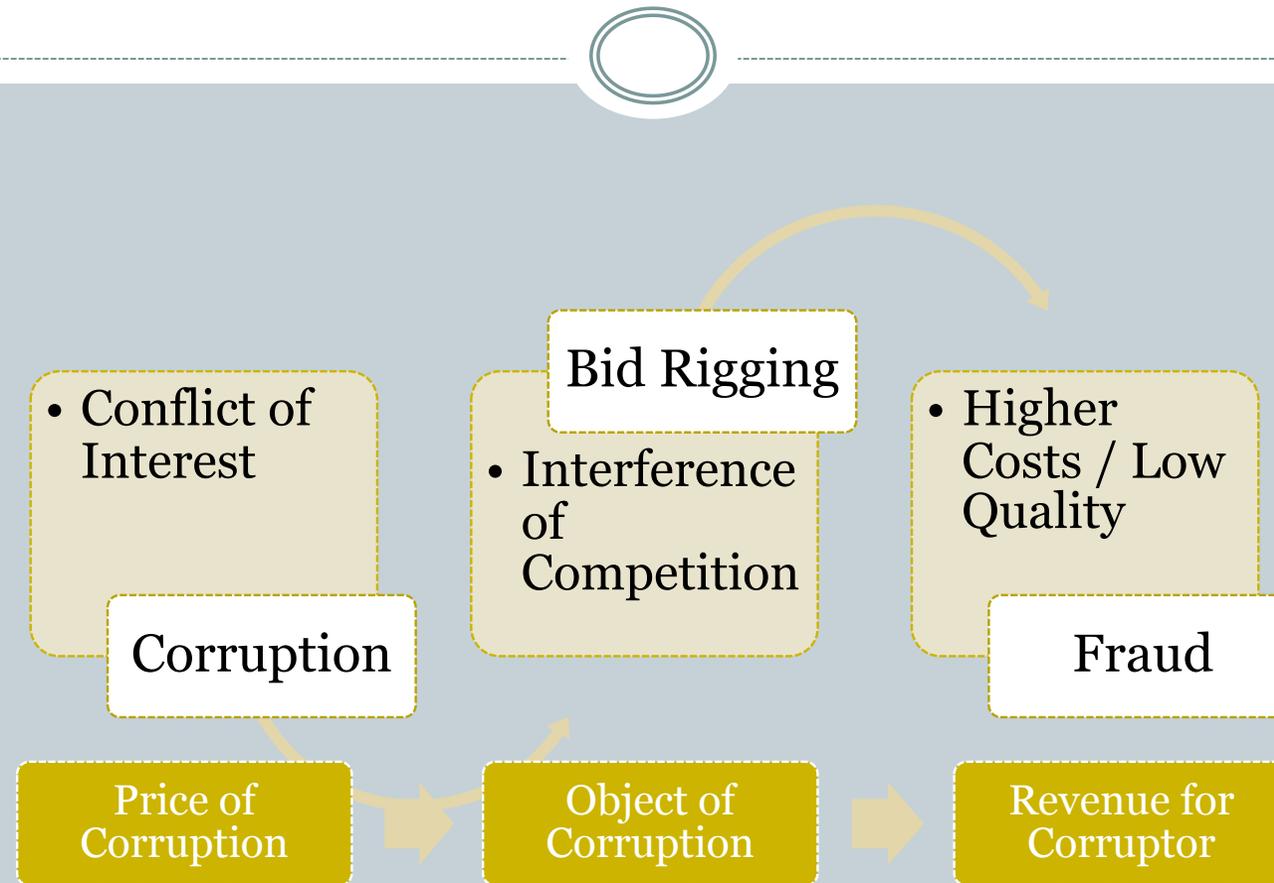
Bribe → **Kickback** → **Hidden Interests**
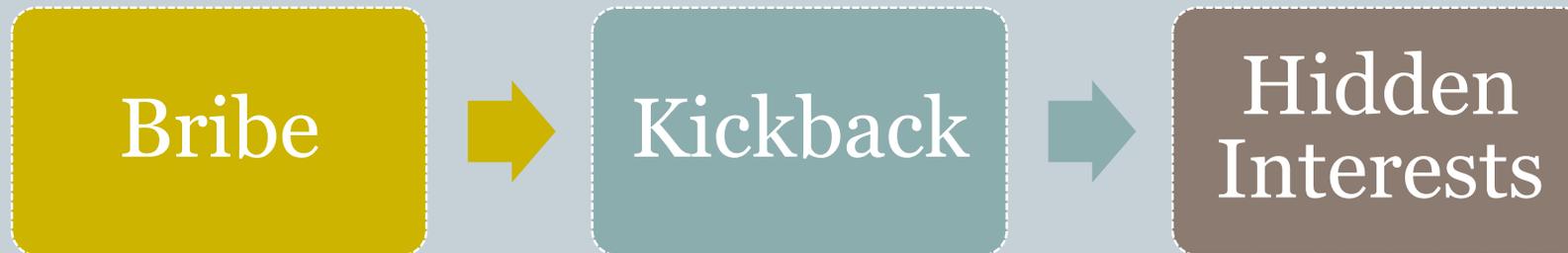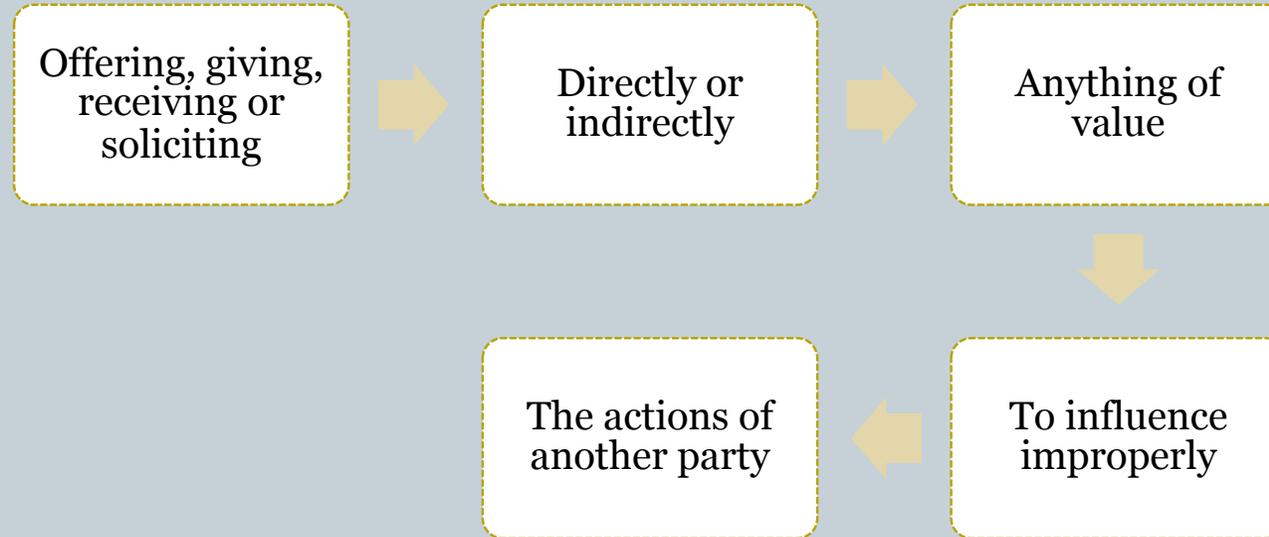
Bid Rigging Schemes (Corrupt influence)

The bid rigging schemes are linked to corruption, as corrupt parties often seek to rig the bidding process to favor the corrupt payer and to exclude other legitimate bidders. As such, bid rigging schemes are both red flags of corruption and evidence of corrupt influence.

Excluding qualified bidders	→	Leaking of Bid Information	→	Manipulation of Bids

Rigged Specifications	→	Split Purchases	→	Unbalanced Bidding	→	Unjustified Sole Source Awards
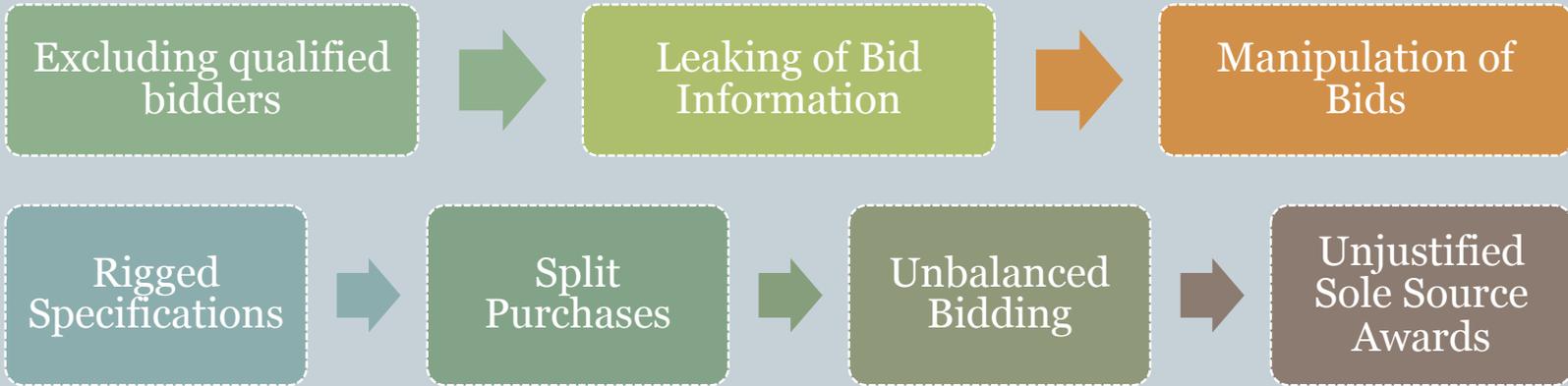
Fraud Schemes

Fraud includes, among other offenses, knowing and willful misrepresentations, the willful omission of material facts, the forgery of signatures or documents, the failure to meet contract specifications and fraudulent billing. In schemes to corruptly influence on-site inspectors or supervisors to accept sub-standard goods, works or materials, corrupt influence can appear as the following schemes

Failure to Meet Contract Specifications	→	Product Substitution	→	Change Order Abuse
False, Inflated and Duplicate Invoices	→	False Statements and Claims	→	Fictitious Contractor

Collusive Bidding by Contractors

Collusive bidding refers to agreements among bidders to submit artificially high priced bids and otherwise defeat competition

Failure to Meet Contract Specifications →	Product Substitution →	Change Order Abuse
False, Inflated and Duplicate Invoices →	False Statements and Claims →	Fictitious Contractor