



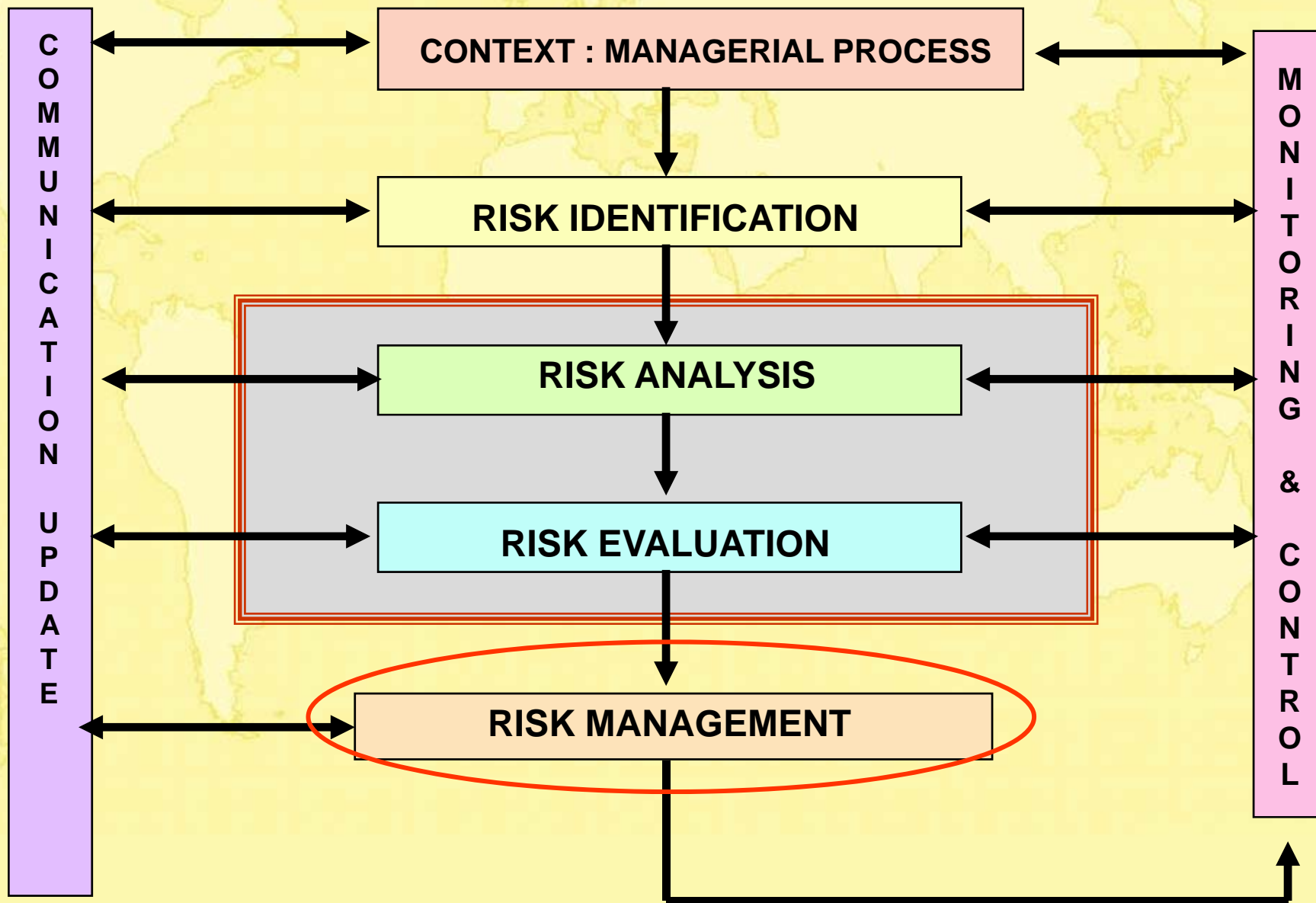
Part 7

Operational risk management tools

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Max Errázuriz
merrazuriz@eys.tie.cl



Risk management global process



A light yellow world map with a grid of latitude and longitude lines. The text 'Operational risk' is centered over the map. A compass rose is located in the bottom left corner.

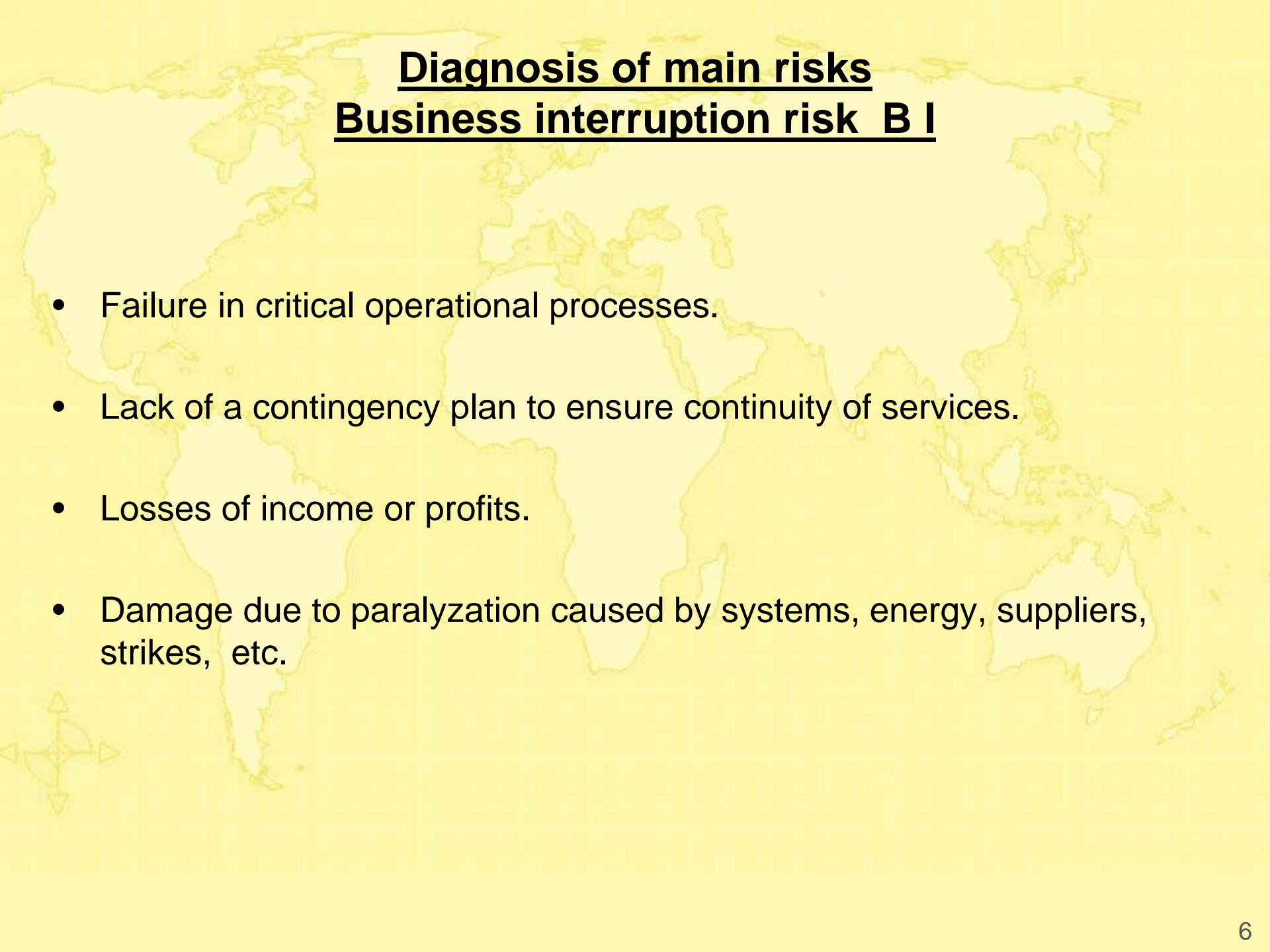
Operational risk

Operational risk

- Potential losses we are responsible or can somewhat control for.
- Because of:
 - Lack of or failures in processes, people, and internal systems or external events.
 - Example:
 - Fraud risk.
 - Security risk: robbery and assault.
 - Strikes.
 - Computer equipment flaws.
 - Power cut.
 - Staff negligence.

Operational risk

- Losses due to errors, process failures, people and internal systems or external events caused by:
 - Transactions without respect to agreements previously made by the credit committee.
 - Procedure failure.
 - Unsuitability to deliver products or services.
 - Incompetence to managing information.



Diagnosis of main risks

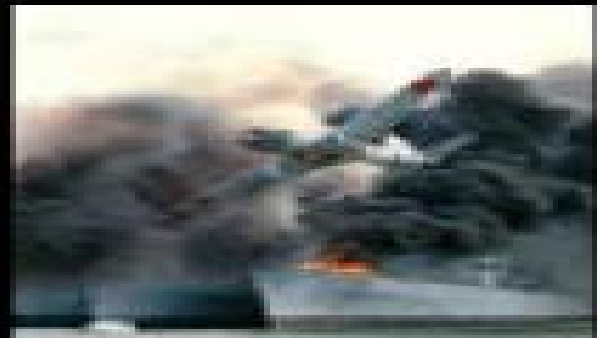
Business interruption risk B I

- Failure in critical operational processes.
- Lack of a contingency plan to ensure continuity of services.
- Losses of income or profits.
- Damage due to paralyzation caused by systems, energy, suppliers, strikes, etc.

Specific tools for risk management

➤ Operational risk

- Operational
- Technological
 - Staff
- Suppliers
 - BI



Specific tools for risk management

Operations risk

- Counting on good internal control:
 - Books and countable registers - precise and complete.
 - Reliable financial reports.
 - Documented control system.
 - The systems have to obey the laws and regulations.
 - A previous control in transactions.
 - With the exceptions and error reports.

Specific tools for risk management

Operations risk

- The right operative and countable procedures.
- Establishing the right countable procedures: enumerated documents, audit tests and limited access to systems.
- Regular checking and reconciliation of transactions and accounts.
- Control of the documentation and monitoring of transactions of manipulation practices.

Specific tools for risk management

Operations risk

- Audit:
 - Creation of an internal audit committee, with the purpose of preventing and detecting the losses, measuring policy compliance, control and procedures.
 - Monitoring of internal audit observations, external auditors and regulator organisms.
 - Realizing an external audit, totally independent and meant to evaluate the most critical sectors of the business.

Specific tools for risk management

Operations risk

- Implementation of security mechanisms and alert devices:
 - Controlled access to restricted areas, guards, alarms, etc.
 - Controlled access to assets and information.
 - Catastrophic prevention devices.
 - Electricity backup equipment.
- Insurance for business interruption .

Specific tools for risk management

Operations risk

- Establishing a separation function as well as interest and opposition.
- Separation of functions between areas of: business, risk, collection and operations.
- Eliminating conflicts of interest.
- Fluid communication between business units, with a separation of functions, controls and supervision.

Specific tools for risk management

Operations risk

- Exception reports – obligation of the report.
- Report systems of anonymous risk.
- Quantification analysis and monitoring of operational errors or frauds that have provoked some losses for the company.
- Obligation to report special situations and limit violations, regulations and policies.
 - Risk events appropriately documented.



Specific tools for risk management

Operations risk

- Establishing processes, criterion and approval of attributions for credits, investment, expenses and contracts.
- Definition of forbidden operations and forbidden opposing parties.

A faint, light-colored world map is visible in the background of the slide. The map shows the outlines of continents and is centered on the Atlantic Ocean. In the bottom-left corner of the map area, there is a small, stylized compass rose with four arrows pointing towards the cardinal directions.

Specific tools for risk management

Operations risk

- Counting with a insurance program.
- Developing some contingency plans as well as crisis management and regularly checking their efficacy.
- Custody policy documentation.



Technological risk

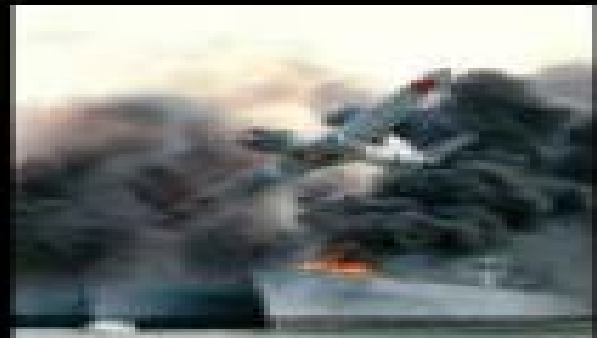
Technological risk

- Losses caused by business paralyzation or technological failures.
- Inappropriate and no integrated information systems:
 - Downfall and system errors.
 - Computer frauds.
 - Robbery of client database.
 - Computer catastrophe.

Specific tools for risk management

➤ Operational risk

- Operational
- Technological
- Staff
- Suppliers
- BI



Specific tools for risk management

Technological risk

- It must count on policies, regulations, formal and documented system procedures. These must have at least:
 - Updated system plans
 - Internal control policies
 - Conflict of interest policies.
 - Information on backup policies (contingency in place) and programs.
 - Contingency plans and regular executions of them.
 - Custody policies, audit and system.
 - Operational procedure manuals.
 - Obey regulation control.
 - Investment budget and systems expenses.

Specific tools for risk management

Technological risk

- Anti-hacker protection, virus and electronic robbery.
- External supplier control policies.
- Information about security management to keep confidentiality, integrity and availability.
- Assurance of the existence of a function within the area of separation.
- A database to establish the impact and recurrence of operational errors and systems, establishing a control in quality goals.

Specific tools for risk management

Technological risk

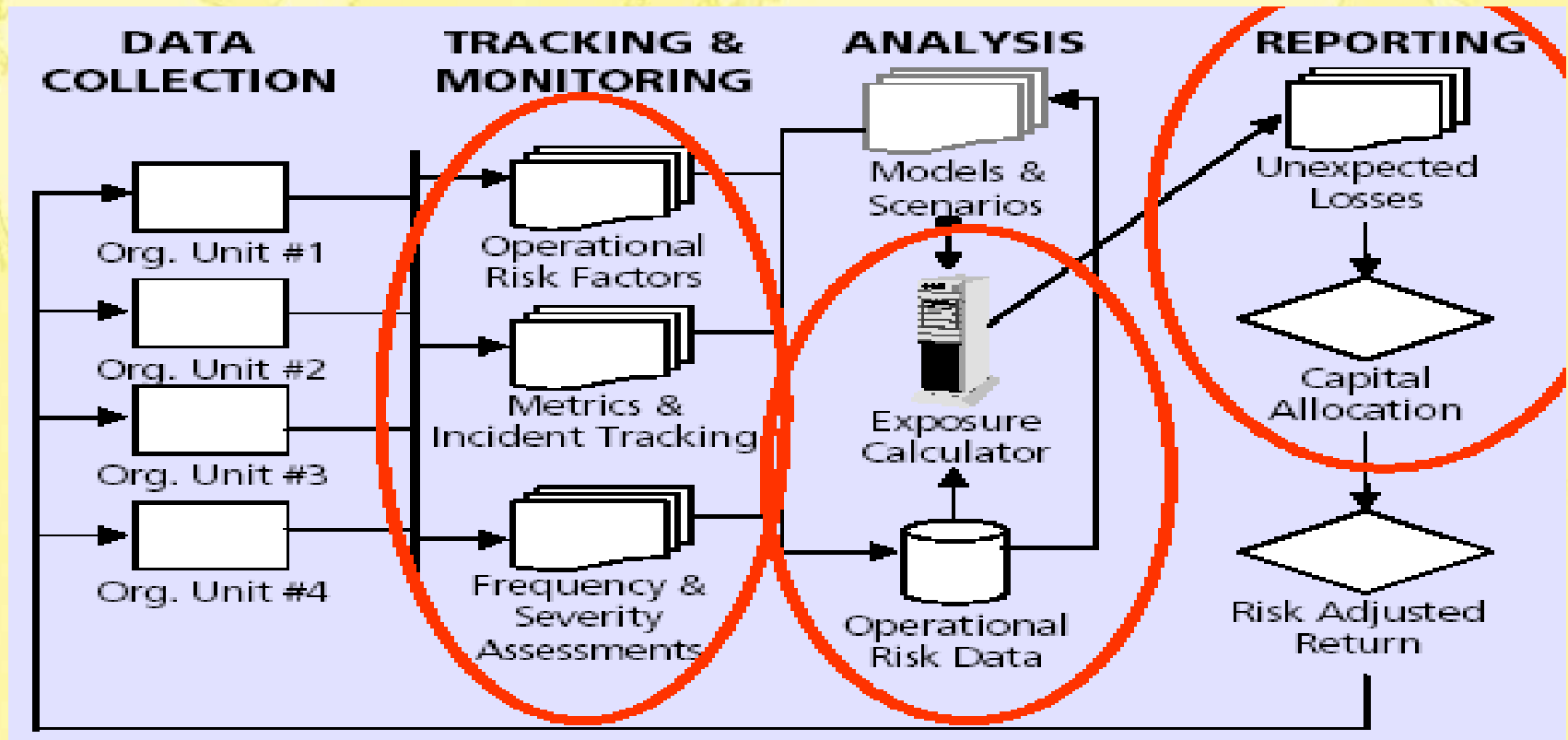
- Standardization, formalization and documentation of processes.
- Making a conciliation between operational amounts and numbers, countable amount and numbers and systems of amount and numbers.
- Corrections and modifications to the updated, as well as the formal systems.
- Protection and custody of procedures.

Specific tools for risk management

Technological risk

- Establishment of development policies and software bargains.
- Access control, attribution levels, modification reports and previous certifications.
- System access control.
- Demands on contingency plans, business continuity and for key suppliers.
- Having in the administration human resource personnel with experience.

Information systems to manage risk



- **Compilation:** Gather operational data from across the enterprise.
- **Analysis:** Report and analyze operational data.
- **Management:** Management reporting.

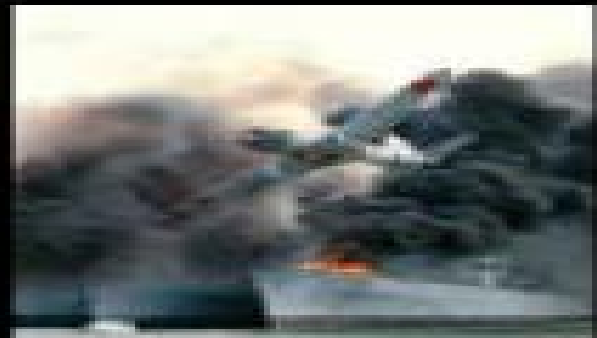
Staff risk

- Losses caused by errors, frauds and robbery committed by staff:
 - Selection quality of staff and executives.
 - Conflicts of interest risk.
 - Staff loss due to accidents or illness.
 - Inappropriate staff behavior.
 - New employees lacking knowledge of policies, procedures, and regulations.

Specific tools for risk management

➤ Operational risk

- Operational
- Technological
- Staff
- Suppliers
- Business Interruption



Specific tools for risk management


Staff risk

- Periodically a report has to be developed regarding suitability, morality with a background on internal and external staff.
- Providing periodic training to the staff.
- Obligation of having some knowledge and following policies.
- Rules and internal regulations for staff.
- Behavior codes and ethics (conflicts of interest).

Specific tools for risk management

Staff risk

- Work teams with experience and training.
- Sudden changes without notice with regard to employee tasks.
- Internal audits without previous notice.
- Incentives for employees, after the achievement of goals.
- Work contracts with a confidentiality commitment.
- Pay attention in case of some indebtedness from the staff.
- Human resource policies.



Diagnosis of main risks

Risk of suppliers and third party:

- Losses and trials caused by failure of another party:
 - Risk or fail of contractors: fail, quality, delay.
 - Inexistence of formal and updated contracts with suppliers, clients, etc.



Specific tools for risk management **Suppliers and third party**

- Outsourcing policies or services to a third person.
- Strict legal contracts.
- Monitoring supplier activities from a third party.
- For critical activities, contingency plans, including availability of a third party, external alternatives.

Specific tools for risk management

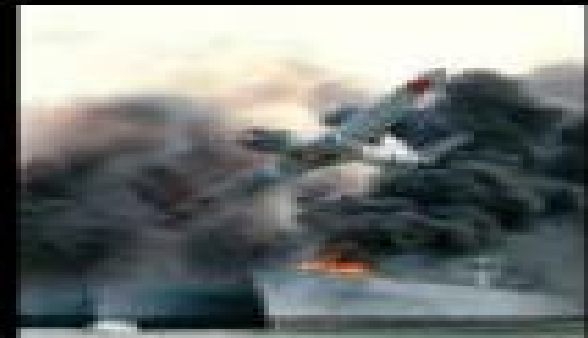
Business Interruption

- Establish contingency plans and business continuity.
- The goals for this plan must be:
 - To safeguard human lives and assets.
 - Minimize the losses of assets and registers.
 - Minimize the effects in critical areas of business.
 - To sum up operations post-disaster.

Specific tools for risk management

➤ Legal risks and others:

- Legal
- Assets
- Fraud
- Clients
- Capital



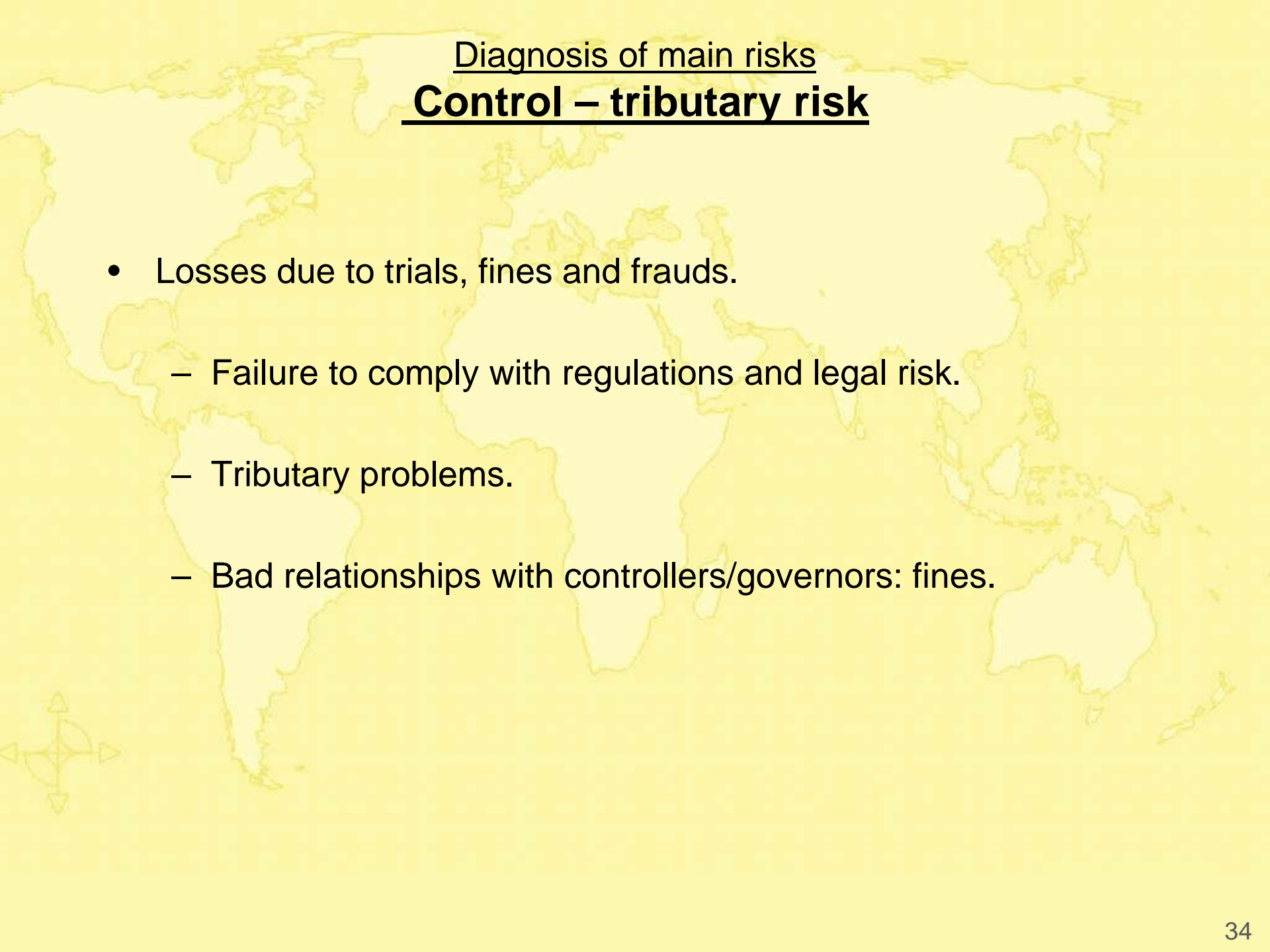
Legal risk

- Losses originated in adverse trials.
- Damaging collection and judicial inefficiencies.
- Loss of legal documents.
- Debtor merger.

Specific tools for risk management

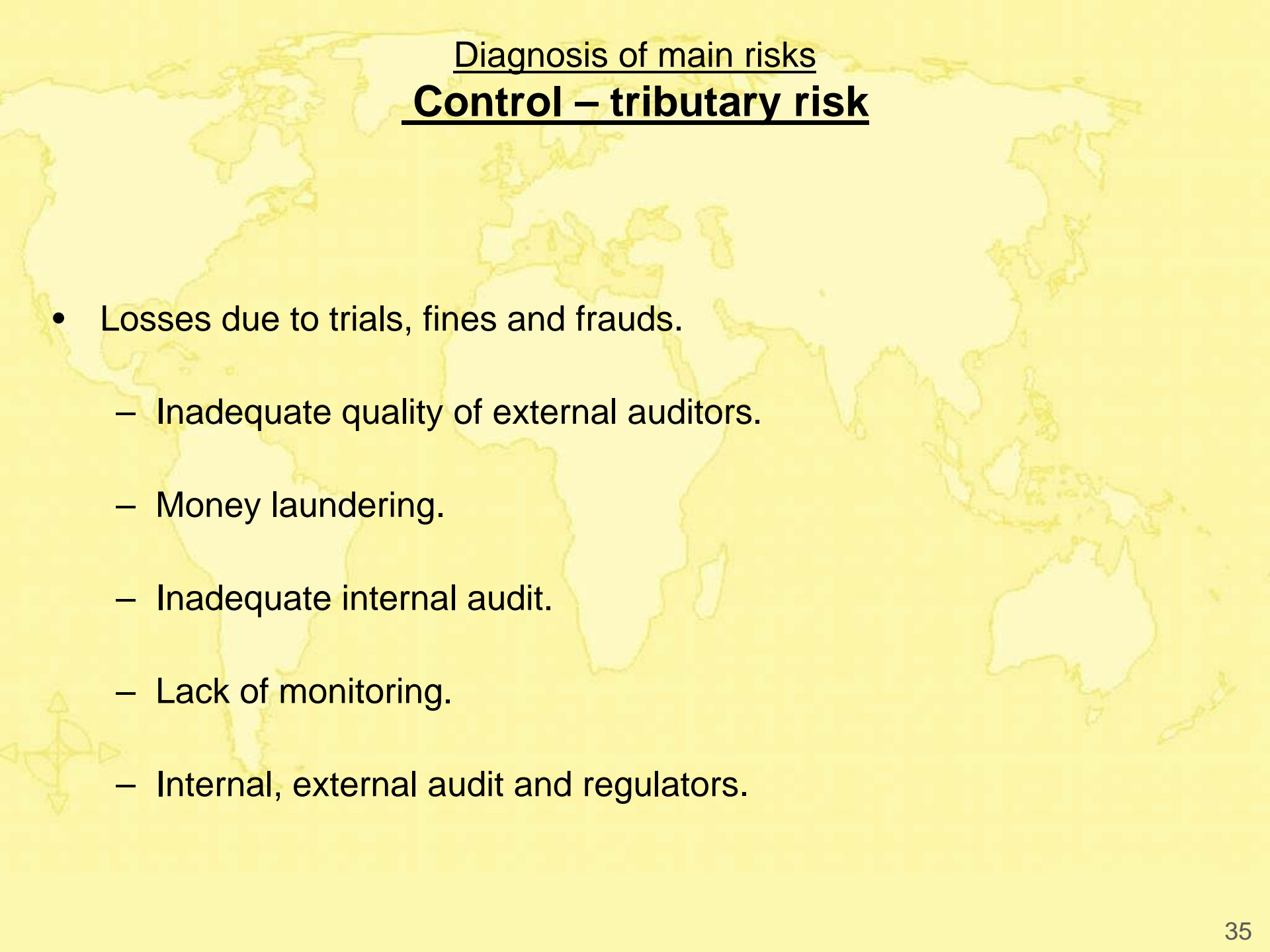
Legal risk

- Checking and updating of contracts.
- Establishing policies concerning money laundering.
- Establishing policies regarding insurance management.
- Civil responsibility.
- Participation in bank and financial institution associations.



Diagnosis of main risks
Control – tributary risk

- Losses due to trials, fines and frauds.
 - Failure to comply with regulations and legal risk.
 - Tributary problems.
 - Bad relationships with controllers/governors: fines.



Diagnosis of main risks
Control – tributary risk

- Losses due to trials, fines and frauds.
 - Inadequate quality of external auditors.
 - Money laundering.
 - Inadequate internal audit.
 - Lack of monitoring.
 - Internal, external audit and regulators.

Specific tools for risk management

Fixed assets risk

- Policies and program regarding insurance management.
- Measures of prevention and mitigation; guards, etc.
- Safes and strongboxes(security).
- Alarm systems.

Specific tools for risk management

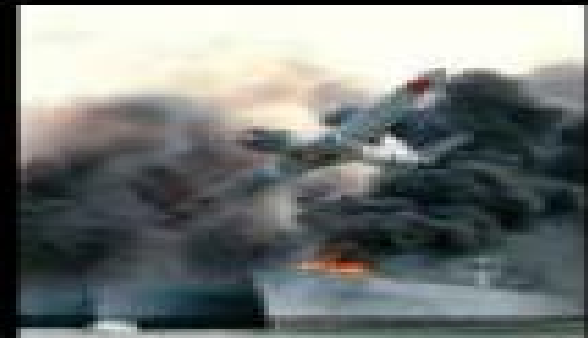
Fraud risk

- Control mechanisms, environment of control and security.
- Compliance of regulations from the internal and external staff.
- Staff member insurance scam.
- Audits and internal control routines.
- Establishing policies and formal procedures about how and who to report frauds.
- Control for cash management and estimation.

Specific tools for risk management

➤ Strategic and business risks

- Clients
- Capital
- Strategies
- Reputation
- Prices



Diagnosis of main risks

Client risk

Losses originated in conflicts with clients or client scope:


- Lawsuits for public about installation insecurity.
- Client replacement.
- Database robbery.



Specific tools for risk management

Client risk

- Identity fraud.
- Meeting your clients.
- Avoiding excessive concentrations
- Paying attention to some quality audits.
- New business must obey all the risk levels.
- Client education.
- Avoiding transactions related to conflicts of interest.



Diagnosis of main risks

Capital risks

- Minimum capital requirement.
- Capital increases strategies.
- Competitive threat.
- Regulatory or Funders requirements

Specific tools for risk management

Capital risk

- Indebtedness limit and maximum growth.
- Assign capital for each business line.
- RAROC (risk adjusted return over capital).
- Avoid abrupt or excessive growth.
- Maximum values of index of:
 - Arrears
 - Liquidity
 - Leverage
 - Reserves, provisions
 - Minimum patrimony
 - Capital increase plans

Diagnosis of main risks

Strategic risk

- Bank unsuitability to execute its strategic plan.
- Lack of Capital to execute the strategy.
- New business or secondary risk.
- Acquisition plans.
- Opportunities.
- Geographic dispersion.
- Wrong competitive strategy.
- Business choice - clients – wrong regions.

Diagnosis of main risks

Reputation risks

- Losses because of corporative image deterioration:
 - Corporate image deterioration: prestige, seriousness.
 - Image and quality of suppliers and clients.
 - Consequences of conflicts and scandals.

Diagnosis of main risks

Reputation risks

- Losses due to corporative image deterioration:
 - Bad relationships with banks risk, investors and suppliers.
 - Inadequate business practices.
 - Institution classification risk reduction.

Diagnosis of main risks

Prices risk

Failures in price fixation:

- Failure to incorporate risk and operation costs in prices.
- Frequent in cases of:
 - Price wars.
 - When growth its privileged over profitability.



Specific tools for risk management

Role of insurance

Insurance is an effective tool to mitigate risks.

This reduces the size of losses when they occur. It is an important operation risk and legal management tool.

Specific tools for risk management

Role of insurance

- Policies which are often used are:
 - Property: general insurance, protects fixed assets.
 - Robbery: protection against robberies and assaults.
 - Computer fraud: protects unauthorized transactions.
 - Civil responsibility: indemnity that protects against damage and injury.
 - Values transport: protects against assaults.
 - Staff member fidelity/loyalty: protects against thefts.
 - Director and executives: protects against civil indemnities.
 - Errors and omissions: protects against civil indemnities.

Specific tools for risk management

Role of insurance

- Risks that insurance does not cover:
 - Illegal activities.
 - Fines and sanctions.
 - Credit risk (except credit insurances).
 - Market risks (except derivatives).
 - Strategic risks.
 - Etc.