Operational Risk and Continuous Auditing indicators by GPaolo Voarino
Operational Risk historical approach

The years ’90s Approach to Controls and Audit

Transaction and result monitoring

Continuous audit and strategic monitoring

SOLCO Definition of Microprocesses

Op Risk self-assessment

ASAP database BW

Strategic goals and management actions

Microprocesses

Intranet publication process (TUNE)

KPIs
1999 framework

ICS open and communicated

Organization chart

μicro Processes

ICS theoretical framework
4 levels

Internal Auditing (Process Based)

CPAS
KPIs

Products
Compliance

Op Risk

Sharing of framework

Stakeholders & Supervisors

Intranet

DATA Warehouse

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Integration of Risk management with ORGANIZATION and CONTROLS

Op Risk

all products
all Op Risks
all microprocesses
all rules

Technology driven
Credit
Finance
Home office
Branches retail
Financial Advisors
Supervisor Bankit
Supervisor Cnsob
Supervisor UIF
Supervisor

strategic
legal
reputational
others

laws

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Functionalities

Risks Self Assessment

Owner / Principal
- Web documentation
- Data pool
- Evaluation 5x5
- Analytical Data
- Operational Risk Manager

Agent
- Web documentation
- Data warehouse
- AUDIT

Differential Continuous Auditing (up-gradable)
Strong Theoretic design trough microprocesses and risks

Mutually self-exclusive definitions
### Synoptic of Microprocesses

- Fixed Assets
- Immaterial (impairment tests)
- External documentation
- Papers & magazines
- Web info

### Prism of Risks

- Legal
- Frauds
- Customers’ complaints
- Litigations
- Reputational
- Brand
- Image
Mapping and management of risks

TUNE mgt.
- Masters & Mirror
- Risks Self-assessment
- Continuous Up-dating
- Web info

Audit Work program
- Extended to Risk Process Auditing

Continuous Auditing
- Risk Quantification
- Indicators

Data-warehouse
Levels of RELIABILITY and "Agency Theory"

- LOW
- MEDIUM
- HIGH

Data warehouse

Op Risk Manager

Monitoring (Continuous)
- KPIs
- POIs
- RAlS

Principal

Auditor

Agent

Moral hazard
Evolution of risk information

On-line Maintenance (Principal/Auditor)

Possibility of retroactive versioning (Auditor)

Computation from $5x5$ into $\$

Group Benchmarking

Indicators

KPIs POIs

RAIs $\Rightarrow$ Validation
Extended to risk Process Auditing (EPA)

- The MAv/r = Audit trail CONCEPT
- The RAI's positioning
- The RAI's metrics, analytics and standards
- The RAI's computation
- RAI's and EPA Audit program
KPIs as strategic synthesis at international level
Process Owner Indicators ⇒ the Continuous Auditing experience

- Metrics
- Analytics
- Standards
- Standard of variance
- Alarm continuity equations
Risk Analytical Indicators ⇒ the Continuous Auditing experience

- The MAv/r = Audit trail CONCEPT
- The RAIs positioning
- The RAIs metrics, analytics and standards
- The RAIs computation
- RAIs EPA Audit program
- [Italian Supervisors so called “Vigilanza cartolare” ]

⇒ auditors responsibility is facing the future; not only past and present (CA)
Strong *Commitment* of TOP Management

Aiming at becoming *champions* on Op Risk mgt. in EU
Return On Investment

• Low project costs
  – integration with Organization
  – SarbOx attestation
  – reduction of costs of 4th level control

• Support to operative and strategic decisions
Compliance of theoretical framework to the new ECB requirements

"4-augen-prinzip"

Individual Data

Service Levels

"Info-Promo"

Products

Cost Centers

Clients

External Laws

Information to Supervisory Authorities

Code of Conduct

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the end

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Risk Qualitative Model Maintenance

Nessun microprocesso senza rischi

In caso di disaccordo a priori sui valori (5x5): piccolo tribunale delle stime

In caso di errori/perdite: “tribunaletto dei rischi”

Errori della stima (5x5)
  Errori di progettazione del microprocesso
  Errori di valutazione dei rischi