44th World Continuous Auditing and Reporting Symposium

Big data and analytics for nonfinancial information

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The evolution of non-financial information requirements in the EU, and in particular in Spain



October 22nd, 2014

Non-financial information directive

Approval of Directive 2014/95/CE, which modifies Directive 2013/34 /EU

December 13th, 2017

Processing agreement as draft Law

The Congress agrees on the validation of the text and its processing as a draft Law. The amendment process is opened

November 19th, 2018

Senate Amendments

The Senate introduces and approves a series of amendments of the parliamentary groups, and sends the modified text to the Congress

December 29th, 2018

Publication of the Law in the BOE

November 24th, 2017

Royal Decree Law 18/2017

Approval with urgency of the RDL, which transposes the directive and whose application is for the exercises that begin on January 1, 2017

October 23rd, 2018

Approval in Congress

The Congress, with consensus, approves the referral to the Senate of the Law Project of the application for 2018 and following years

December 13th, 2018

Congress Approval

What does it mean for companies in Spain?





500 employees + PIE + Large Company

(Exercises started on January 1, 2018)

Non-financial Statement



Information, contents and specific indicators to report, in the Management Report or referenced separated document External verification



Mandatory

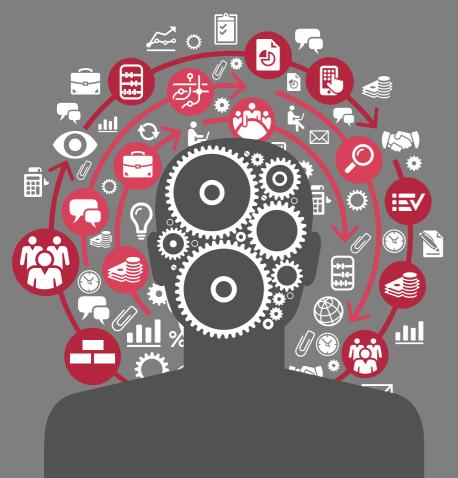
Financial audit report vs. Verification report Approval and publication



Non-financial statement: public and easily accessible on the company website for a period of 5 years

Contents to be included in the non-financial statement

Accurate, comparable and verifiable information related to the following topics, complying with the criteria of comparability, materiality, relevance and reliability:











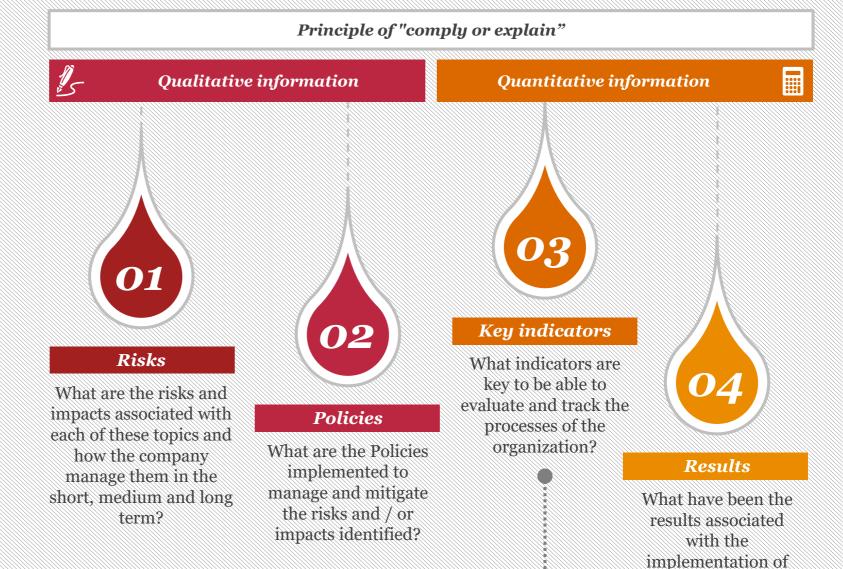


In addition, listed companies must also provide information on:



Contents to be included in the non-financial statement (cont.)

Each of these topics must be analyzed and described throughout the following aspects:



these policies?



GRI (Global Reporting Initiative) is a standard widely used by companies to report key indicators on nonfinancial information

What would you win from Analytics & Automation?





AND PERSONAL PROPERTY.

Integration of automation in business processes



Increased confidence in the data and the effectiveness of the controls



Improvement in the monitoring of anomalies and company performance in the areas required by the Law



Obtaining **information more transparent** and more **frequently**



Reduced **compliance cost** and increased **efficiency**

How to benefit from Analytics & Automation

Analytics and automation techniques can be of benefit either during the preparation process of the non-financial information reporting or during the Automation of indicators through **Data Analytics** verification process through the independent processes reviewer. Quantitative information **O Continuous monitoring of controls (CCM)** around non-financial information Cross-reference Automation of information preparation through information **Robotics Process Automation (RPA)** reported of other companies (if public) **Oualitative** information **Text recognition** techniques

What is Data Analytics?

Information management

Data collection, consolidation and cleaning



Data from internal and external sources

Display of data

The conversion of the data into a more understandable and easy-to-use format



Tableau, QlikView...

Analysis of data

Application of analysis techniques to discover visions from the relevant information



Predictive, descriptive and prescriptive analysis

Global vision

Applying the results for a more effective decision making



Improvement of risks, compliance, margins, productivity, growth, innovation..

Examples of application of Data Analytics in the non-financial information elaboration process

Real-time reporting of non- financial information (internally)
through the generation of dashboards

Mass data analysis of product losses in warehouses or consumption of resources

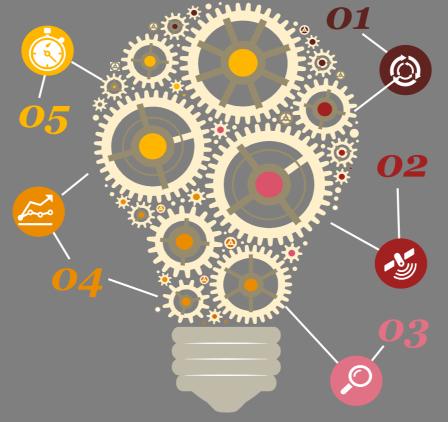
Consolidation of information from several databases (e.g. SAP, Workday, etc.) for the construction of tables according to the criteria and breakdowns required by Law in the field of HR (e.g. salary by gender, type of contract, age, professional categories, etc.)

What is Continuous Control Monitoring (CCM)?

Continuous Monitoring is a mechanism that allows organizations to obtain a **real-time vision of behaviors** that deviate from established norms, reducing the effort of manual verification tasks.

It allows a significant reduction in the cost and times associated with the tasks of evaluating controls and, therefore, audits.

It offers a significant **reduction of the effort in performing the testing of the controls**through the Continuous
Monitoring, changing in focus
from manual controls to
automated controls.



It allows an *automatic transaction monitoring*, importing data from systems to subsequently apply a set of audit analysis rules, in order to identify possible exceptions.

It serves to manage exceptions, by monitoring the deficiencies found in controls and supporting the mitigation process. It is possible to have flows for alerts, revisions, notifications, approvals and other process automation needs

It allows the different organizations of the company, as well as Internal Audit, to access information in real time about the company's status, improving performance monitoring.

Examples of application of CCM in the non-financial information elaboration process

Execution of intermediate automatic reports from automated tools, as a source for the preparation of non-financial information



Analysis of all the payments made to identify payments to nonapproved suppliers and to track expense on local and non-local suppliers



between periods in order to identify possible errors in the data records

Analysis of users' access to specific system or transactions outside of the usual day-to-day operations (e.g. weekend or outside office hours) in order to ensure the reliability of the data stored in the systems



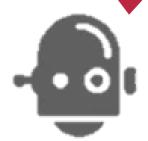




What is Robotics Process Automation (RPA)?

Robotics Process Automation (RPA) allows to automate processes and transactional tasks through the use of robots, which are driven by logic and preprogrammed rules to perform certain activities and analyze structured data through different platforms or systems by imitating human beings

"I'm dedicated to developing repetitive activities that require a lot of data processing" "I am dedicated to interpreting data, previously processed by robots, for making decisions"





Examples of application of RPA in the non-financial information elaboration process



Automatic collection of emission factors from official websites for the automatic calculation of greenhouse gas emissions originated from the activity carried out by the company

Consolidation of information from different locations (for example, employee data by gender and age)

Automatic entry of data into the system, such as energy consumption, from electricity bills or key information from standard contracts

Examples of application of text recognition techniques in the non-financial information reporting process



