

KEY PERFORMANCE INDICATORS. A CASE STUDY ON THE INTEGRATED REPORTS OF AN IT COMPANY**GORGAN CĂTĂLINA***LECTURER, BUCHAREST UNIVERSITY OF ECONOMIC STUDIES**e-mail:catalina.gorgan@cig.ase.ro***DUMITRU VALENTIN FLORENTIN***LECTURER, BUCHAREST UNIVERSITY OF ECONOMIC STUDIES**e-mail:valentin.dumitru@soft-expert.info***GORGAN VASILE***LECTURER, BUCHAREST UNIVERSITY OF ECONOMIC STUDIES**e-mail:vasile.gorgan@cig.ase.ro***Abstract:**

Our analysis relies on the 2011 integrated report published by SAP, a European IT company included in the International Integrated Reporting Committee (IIRC) Pilot Programme Business Network. The research methodology used is the analysis of the content as we search for a number of selected characteristics in the report and also for a set of key performance indicators (KPI). We use as references the guide provided by DVFA (Society of Investment Professionals in Germany) and EFFAS (European Federation of Financial Analysts Societies) – EFFAS (2010) for the software industry. The aim of our study is to analyse the way in which an IT company applies the guidelines recognised by the European Commission to identify and communicate the material nonfinancial information, in order to assess the organization's abilities to create value on a short, medium and long term.

Keywords: *IT, integrated reporting, DVFA/EFFAS, key performance indicators*

JEL classification: *F63; M14*

1. Introduction

More and more companies all around the world are issuing corporate social responsibility reports. From the stakeholders' point of view, these reports show in general little linkage between the financial and nonfinancial information. Integrated reports are meant to overcome this issue. The economic system – which is exclusively focused on the economic performance – is currently going through a stage of global structural changes meant to connect it to the simple values of the community, society and even humanity as a requirement for its survival and development through the sustainable competitive advantage (Miron et al., 2011).

An integrated report should be both concise and complete. So, it should include all the matters that are material for a company (e.g. matters that could substantively affect the organization's ability to create value in the short, medium or long term), without disclosing boilerplate information. In order to do this, the materiality determination process is very important. Also, in the world there are a few bodies who study the key performance indicators that should be disclosed in a report. In Europe, the EFAS and the DVFA published in 2010 guidelines containing the indicators to be reported by companies acting in specific activity domains, that were accepted by the European Commission.

Previous studies (Eccles and Krzus, 2010) argue that the companies should select their key performance indicators according to their activity domain. The Global Reporting Initiative, the EFFAS and DVFA or the Sustainability Accounting Standards Board issued guidelines on different activity domains. In this article we selected an IT company, as we consider that this domain will have an important impact in the further development of the integrated reporting.

In this article we aim to analyse the key performance indicator disclosed by at an IT company, SAP, a European firm which joined the IIRC Pilot Programme Business Network. The remainder of the paper is organized as follows:

- A presentation of the key performance indicators in nonfinancial reporting
- A discussion of the research methodology
- The presentation of the KPIs at SAP, using the EFFAS (2010) guidelines
- The discussion and conclusions.

2. The key performance indicators in nonfinancial reporting

A key issue in the corporate reporting is the *materiality*. Regarding the nonfinancial reporting, key determinants of materiality are whether its existence, omission or misstatement would influence a user's decision, the overall context of quantitative and qualitative information, and the importance of the practitioner's judgment. Even though the supply of sustainability information has increased considerably in the last decade, companies are still failing to disclose material information in a comparable format (Eccles et al., 2012), which can result in inadequate management of important business issues and hidden risks. After discussing the climate change disclosure for companies in six activity sectors, Eccles et al. (2012) conclude that developing sector-specific guidelines on what sustainability issues are material to that sector and the Key Performance Indicators (KPIs) for reporting on them would significantly improve the ability of companies to report on their ESG performance. The GRI (GRI, 2012), the European Federation of Financial Analysts Societies (EFFAS, 2010 – using the Dow Jones Industry Classification Benchmark) and SASB are all considering nonfinancial reporting by sector.

„An integrated report should provide concise information that is material to assessing the organization's ability to create value in the short, medium and long term” (IIRC, 2013a, 3.22). For an issue to be considered material, it must be so important and relevant so that it can influence the users of integrated reporting perception on the company's capacity „to create value in the short, medium and long term”. Management and those charged with governance, in determining materiality, should consider if the problem “substantially affects or has the potential to substantially affect the organization's strategy, its business model or one or more of the capitals” they use or influence (IIRC, 2013a, 3.23).

In order to determinate the materiality the following steps must be taken: the identification of relevant issue, the assessment of the importance of each issue and their hierarchy. For this purpose both the positive matters (opportunities, favourable forecasts) as well as the negative ones (risks, unfavourable forecasts) are targeted. Not only financial information is used in determining materiality but also other category of information. The evaluation process of the materiality must be done at least annually. However it is recommended the integration of this one in every day management of the company “as part of a continuous process of review and evaluation by management” (IIRC, 2013a, 3.24, 3.25). When the decision to include an item into an integrated report is taken, its known or supposed potential effect on the value is considered. Not every relevant issue can be considered material. In this context the potential of that specific issue to substantially influence the assessments is evaluated (IIRC, 2013a, 3.29).

After the identification of the significant issue and the determination of materiality, the results must be disclosed to the user in order to understand the methodology used (IIRC, 2013a, 3.37). Organizations should pay particular attention to information published in integrated reports, so that information is concise, but also complete, free of redundancy and comparable. In the same manner, the disclosure of additional detailed information on the company website or using other communication channels is encouraged. (IIRC, 2013a, 3.38). In order to assure a better understanding, many of the respondents to the IIRC's 2011 Discussion Paper (IIRC, 2012) deemed that additional guides that disclose information on identification, assessment and prioritization of significant issues, the definition of the materiality and its reporting must be published.

In financial reporting the information is material if its omission or incorrect presentation could influence the economic decisions of users taken on the basis of financial information about a reporting entity specific (IASB, 2010, QC 11). Application of materiality in an integrated approach is likely to be different from the financial reporting reflecting differences in the views of stakeholders about what is significant.

Many organizations in the Pilot Programme established connections with the interested parties in order to consider their needs, interests and expectations to determine significant aspects. Some companies are connected to internal and external information to determine significant aspects relevant to development strategy. Materiality analysis serves to identify risks (IIRC, 2013b).

There must be noted the remarkable importance of the determination by organizations of the significance threshold and the relevance of assessing the significance of an item from the perspective of intended users. The role of integrated reporting consist in providing the organization ability to understand the users needs and the extent in which they are taken into account.

3. The research methodology

In this article we carried out an analysis of the content of the 2011 integrated report published by SAP. We stand for the idea that empirical research in the field of corporate environmental performance should mostly be about creating a context for discussing a firm's commitment to sustainability, rather than modelling irrelevant cross-sectional data to find similarities between incomparable cases (Dragomir Voicu, 2012).

Our analysis relies on the specifications presented by the IIRC in the International IR Consultation Draft Framework. Also, considering that the nonfinancial information should be connected to the sector of activity we use the DVFA (2010) guidelines.

There are a number of groups actively looking to develop ways for measuring and reporting on ESG, including Asset 4, KLD Research and Analytics, and Trucost. Likewise, the Society of Investment Professionals in Germany (DVFA) and the European Federation of Financial Analysts Societies established a high-level framework based on the

pillars of environmental, social, governance, and long-term viability (Eccles and Krzus, 2010). The last category clearly indicates its interest in the impact of ESG on long-term corporate performance. The DVFA established some generic KPIs considered to be relevant across all industries and also developed industry-specific ESG KPIs for oil & gas, basic materials, industrials, consumer goods, health care, consumer services, telecommunications, utilities, financials, technology. Within each industry, DVFA established entry level indicators (general – e.g. energy efficiency), mid-level indicators (e.g. environmental CapEx for Software) and high level indicators (e.g. Healthcare Pricing Structure in the Pharmaceutical software). Each KPI is accompanied by a clear definition and methodology for calculation, although in *principles-based* rather than *rules-based* form.

Ralf Frank, Managing Director of DVFA, remarked that his organization’s approach to defining KPIs for ESG was a necessary step to define clear-cut and measurable indicators that portray the expectations of investment professionals. However, the next goal of DVFA is to encourage corporate executives to give those KPIs a sufficient level of recognition: “We would like KPIs for ESG to become an integral part of the annual general report, ideally within the MD&A, and also see them reported in the risk and opportunity section of analyst presentations.” Gunter Verheugen, Vice-President of the European Commission, explained the value of this from an investor’s perspective: “There is indeed no other powerful incentive to consider the strategic role that it plays for the future prosperity and sustainability of a business” (Eccles and Krzus, 2010).

4. The presentation of the KPIs at SAP using the DVFA (2010) guidelines

Brief presentation of SAP

SAP is a global company, the leader in enterprise applications in the world, founded forty years ago. Its products are related to five market categories: applications, analytics, mobile, cloud, and database and technology. It considered the last three market categories for its strategy as a response to global trends. The vision at SAP is that “technology, in particular innovative software such as ours from SAP, can make sense of the digitized world, helping it run better and more sustainably, while improving people’s lives.” It aims to “make the world run better.” Its primary competitors are IBM, Oracle, Microsoft, SAS Institute, Antenna, Spring Wireless, Salesforce.com, Workday, NetSuite. SAP bases its business model around strategies to develop opportunities in response to emerging trends such as changing demographics, shifting consumer preferences and the introduction of technology-enabled possibilities (IIRC, 2013b). SAP integrates in its products the best practices in its customers, being able to offer solutions to lots of new problems that the companies deal with nowadays (for instance, environmental metrics). The business model of SAP Research is based on co-innovation with customers, partners, and other third parties. For SAP, sustainability means the holistic management of environmental, social, and economic risks and opportunities. It has identified sustainability risks in three major areas: functionality of the software; SAP’s own sustainable operations; social investment. It started publishing integrated reports in 2009, and it joined GRI, UNGC and IIRC, but it also presents an online sustainability report. In the CEO’s message the evolution of digital technologies, the revenue growth by main types of products, progress in each of its five market categories, investing in growth markets, investing in its people and taking advantage of the good moment for its business are the key issues. Readers are cautioned not to place undue reliance on the forward looking statements. In 2011, it received various awards and recognitions, including: Carbon Disclosure Leadership Index (Top 10); Carbon Performance Leadership Index (Top 10); Dow Jones Sustainability Index (SAP leads the software industry for the fifth consecutive year); FTSE4Good; Sustainability Award in the category “Recycling paper”; 2011 World Green Design Contribution Award; Global Challenges Index; NASDAQ OMX CRD Global Sustainability 50 Index; Oekom Prime Rating (SAP is first among DAX 30 and Euro Stoxx 50); Global 100 (Corporate Knights Inc. and Innovest Strategic Value Advisors ranking); the German Federal Ministry of Labor and Social Affairs (Bundesministerium für Arbeit und Soziales) Corporate Health Award for exemplary global employee health management.

Selected items from the annual reports of SAP are:

Table 1: Selected characteristics for SAP

Item	SAP
Report's addressees	Shareholders and stakeholders
Number of pages	314
Number of sections in table of contents	4
Notes to financial statements	Yes
Word count of the auditor's opinion	1365
Report Title	2011 Annual Report Financial and Non-Financial Performance Improving People's Lives
GRI	G3.1
AA1000	AA1000 Accountability Principles Standard
UNGC	Yes
Greenhouse gas data	SAP's own internal criteria based on the Greenhouse Gas Protocol
ISO	ISO 14001 (SAP Italy, SAP Labs Israel, SAP Sustainability Labs Germany, SAP Labs Bulgaria)
Assurance Provider	KPMG AG Wirtschaftsprüfungsgesellschaft
Assurance for the nonfinancial information	KPMG Sustainability
Annual Report	PDF/Online
Accounting principles	IFRS

(Source: Annual report for 2011, compiled by the authors)

Environmental reporting

Regarding the environmental reporting, the following indicators are required by DVFA (2010):

Table 2. Environmental KPIs

	KPI and Specification	SAP
1	Energy Efficiency: Energy consumption, total	Total energy consumption = 860 gigawatt hours
2	GHG Emissions: GHG missions, total (scope I, II)	490 kilotons CO ₂

(Source: Annual report for 2011, compiled by the authors)

Commentaries

At SAP the progress on the efficiency of the energy consumption and greenhouse gas emissions is assessed through four key performance indicators:

- Carbon footprint;
- Total energy consumption;
- Data center energy;
- Renewable energy.

The total energy consumption increased with 2% for SAP, due to the consumption in the data centers and corporate cars. The company also registered an increase in data center energy intensity from 2,746 kilowatt hours per FTE (2010) to 2,824 kilowatt hours per FTE in 2011. At the end of 2011, approximately 47% of the total electricity consumption stemmed from renewable sources, up from 45% in 2010. The total energy consumption includes all energy produced or purchased by the organization. The efficiency improved as, for instance, the energy consumed per car decreased. The company also implemented a range of efficiency projects in such areas as buildings and data centers.

The company disclose that reducing the energy consumption enables it to better serve customers that are increasingly focused on exercising energy- and emission-aware purchasing strategies.

SAP's goal is to reduce total greenhouse gas emissions to levels of the year 2000 by 2020. For the fifth consecutive year, it increased its carbon efficiency.

The company has no treatment of waste, processing of wastewaters or emissions, reuse nor recycle for significant volumes of water.

Social reporting

Regarding the social reporting, the following indicators are required by DVFA (2010):

Table 3. Social reporting KPIs

	KPI and Specification	SAP
1	Staff turnover: Percentage of FTE leaving p.a./total FTE	7%
2	Training & qualification: Average expenses on training per FTE p.a.	Only general remarks
3	Maturity of workforce: Age structure/distribution (number of FTEs per age group, 10-year intervals).	No disclosure
4	Remuneration: Total amount of bonuses, incentives and stock options paid out in Euro, \$	The information is disclosed only for the board of directors
5	Share-based payment plan: Total number of FTEs who receive 90% of total amount of bonuses, incentives and stock options.	Share Matching Plan 331 – 56% of all eligible employees participated in 2011
6	Maintenance & Safety: Total spending in monetary terms i.e. currency on maintenance and safety of equipment (incl. fleet, trucks, planes, rail cars).	No disclosure

(Source: Annual report for 2011, compiled by the authors)

Commentaries

In 2011, the average length of service at SAP worldwide was approximately 6.7 years (2010: 6.4 years). In 2011, the employee retention rate was split on regions (Americas, APJ and EMEA). More than 55,000 employees from more than 120 nationalities contribute to the success of SAP, in an environment that values differences in culture, race, ethnicity, age, gender, sexual orientation, gender identity or expression, and physical ability. In 2011, the topic of gender diversity was in the spotlight, as SAP committed to increasing the number of women in management positions from then 18% to 25% by 2017. In 2011, the overall percentage of women in the workforce remained stable at 30%, and the percentage of women in management positions increased from 17.8% to 18.7%. The average age of the employees in 2011 was approximately 39 years (2010: 39 years). In the 2011 internal employee survey, the overall engagement score increased to 77%. The Business Health Culture Index (BHCI) (used for the measurement of the stress/satisfaction balance of employees) was 65% compared to 59% in 2010.

In relation with the social programs, SAP Labs engage closely with universities, offering leadership talks, engineering courses, and exchange programs. It takes part in outreach and corporate social responsibility programs such as the FIRST LEGO Leagues and work with local charities. It focuses on education (which “ensures that we have access to a pipeline of talent”) and improving people’s lives.

Governance reporting

Regarding the governance, the DVFA (2010) guidelines for software ask for the disclosure of the contributions to political parties:

Table 4. Governance reporting KPIs

	KPI and Specification	SAP
1	Contributions to political parties: Contributions to political parties as a percentage of total revenues	No disclosure

(Source: Annual report for 2011, compiled by the authors)

Commentaries

The contributions to political parties (or their lack) are not included in the report. At SAP, the governance section of the report includes a large debate regarding the risks of the company.

Long-term viability reporting

DVFA (2010) guidelines for the software industry ask for the presentation of the following long-term viability KPIs:

Table 5. Long-term viability KPIs

	KPI and Specification	SAP
1	Litigation risks: Expenses and fines on filings, law suits related to anti-competitive behavior, anti-trust and monopoly practices.	TomorrowNow litigation
2	Corruption: Percentage of revenues in regions with Transparency International corruption index below 6.0	No disclosure
3	Revenues from new products: Percentage of new products or modified products introduced less than 12 months ago	No disclosure
4.1	Innovation: Total R&D expenses	In 2011, we increased our R&D expense by €210 million, or 12%, to €1,939 million
4.2	Innovation: Total R&D expenses in monetary terms i.e. currency as a percentage of total revenue.	We spent 13.6% of total revenue on R&D in 2011 (2010: 13.9%).
4.3	Innovation: Number of patents registered within last 12 months	In 2011, we obtained 756 granted and validated patents worldwide.
4.4	Innovation: Percentage of patents registered within last 12 months in relation to total number of patents	No disclosure
4.5	Innovation: Total investments in research on ESG relevant aspects of business as defined by company	No disclosure
4.6	Innovation: Percentage of products or services for: <ul style="list-style-type: none"> - increasing eco-efficiency of client applications or operations - developing and using clean technologies - offsetting climate change, carbon emissions, resource depletion - increasing fuel-efficiency - making ESG-relevant products operable (e.g. smart metering, green building technologies) - financing of ESG-relevant products or services 	The experience we gain from our own initiatives helps us develop software to help our customers with its energy efficiency programs, and so contributes to the success of our business.
5	Customer Retention: Share of market by product, product line, segment, region or total.	No disclosure
6	Customer Satisfaction: Percentage of total customers surveyed comprising satisfied customers	On a scale of 1 to 10, overall customer satisfaction remains at a satisfactory level of 7.7 globally (2010: 7.6).
7.1	Human Resource Management: Total number of vacant positions in product development, programming or business development	No. It only presents discussions about vacant positions in the board
7.2	Human Resource Management: Number of vacant positions in product development, programming or business development as a percentage of total FTEs	No disclosure
8	Environmental CapEx: CapEx allocation to investments on ESG relevant aspects of business as defined by the company (referred to Introduction 1.8.1. KPI & Definitions)	No disclosure

(Source: Annual report for 2011, compiled by the authors)

Commentaries

SAP's customer capital continued to grow in 2011. It gained approximately 74,000 new customers in various market segments and strengthened its existing customer relationships. Regarding the new products, in the SAP's annual report is stated that "demand for our new products may not develop as planned."

At SAP, at the end of 2011, the total full-time equivalent (FTE) count in development work was 15,861 (2010: 15,884). Measured in FTEs, the R&D headcount was 28% of total headcount (2010: 30%). Total R&D expense includes not only its own personnel costs but also the external cost of works and services from the providers and cooperation partners. It also incurs external costs for translating, localizing, and testing products, for obtaining certification for them in different markets, patent attorney services, strategy consulting, and the professional development of the R&D workforce. It considers that its "software innovations continue to strengthen our market position in enterprise solutions and services. [Its] portfolio includes patent families covering, for example, SAP Business Suite software, SAP BusinessObjects products, SAP Business ByDesign, and Sybase products."

5. Conclusions

SAP's annual report is not at all "user friendly," as it is very difficult to read it. It uses just a few colours, not too many graphics, the characters are very small, it doesn't have too many links; even the charts are grey. The sustainability report is available just on line, not in pdf. It writes several things more than once (for instance, the description of the products, the governance issues). The assurance report for the nonfinancial information is mentioned in the annual report, but it is not presented. SAP includes in its annual report most of the KPIs suggested by DVFA (2010), even though it does not say within the report that it is using this guide. Yet, after reading the annual report, one may feel that it doesn't disclose too much in addition.

The company integrated the results of its efforts regarding the environmental and social accounting in its products.

The annual report summarizes material issues, KPIs and future targets.

SAP makes no presentation on the assessment of the materiality. Considering the length of the report, it didn't do a too good job in respect of the conciseness.

There are KPIs fully disclosed (e.g. GHG emissions), not disclosed (e.g. total investments in research on ESG relevant aspects of business as defined by company), or disclosed in other forms (e.g. number of patents).

We consider that we described a good example for the companies who wish to start the journey of integrated reporting. SAP is a relevant model for all the companies, as, by its products, it interacts with most of the big businesses worldwide along their supply chains, modelling their business processes.

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6. References

- [1] **Dragomir, V.D.** (2012) „The disclosure of industrial greenhouse gas emissions: a critical assessment of corporate sustainability reports”, *Journal of Cleaner Production*, vol. 29-30, pp. 222-237
- [2] **Eccles, R. and Krzus, M.** (2010) *One Report: Integrated Reporting for a Sustainable Strategy*, John Wiley & Sons
- [3] **Eccles, R., Krzus, M., Rogers, J. and Serafeim, G.** (2012) „The Need for Sector-Specific Materiality and Sustainability Reporting Standards”, *Journal of Applied Corporate Finance*, vol. 24, No. 2: 8-14
- [4] http://www.effas-esg.com/wp-content/uploads/2011/07/KPIs_for_ESG_3_0_Final.pdf, accessed February 12, 2013
- [5] <https://www.globalreporting.org/reporting/sector-guidance/Pages/default.aspx>, accessed February 12, 2013
<http://www.sap.com/corporate-en/investors/newsandreports/reports/index.epx>, accessed February, 2013
- [6] IASB (2010) „The Conceptual Framework for Financial Reporting”, available on-line at <http://www.ifrs.org/IFRSs/Pages/IAS.aspx>, accessed October 2012
- [7] **International Integrated Reporting Committee** (2012) “Summary of Responses to the September 2011 Discussion Paper and Next Steps”, available on-line at <http://www.theiirc.org/wp-content/uploads/2012/06/Discussion-Paper-Summary1.pdf>, accessed October, 2012
- [8] **International Integrated Reporting Committee** (2013a) “International <IR> Framework Consultation Draft”, available on-line at <http://www.theiirc.org/wp-content/uploads/2013/02/WG-20130212-ITEM-4-FRAMEWORK-2-CONSULTATION-DRAFT-1.pdf>, accessed February, 2013

- [9] **International Integrated Reporting Committee** (2013b) “Building the Business Case for Integrated Reporting”, available on-line at <http://www.theiirc.org/resources-2/other-publications/building-the-business-case-for-integrated-reporting/>, accessed February, 2013
- [10] **Miron, D., Petcu, M. and Sobolevschi, I.M.** (2011) “Corporate social responsibility and the sustainable competitive advantage”, *Amfiteatru Economic*, vol. XIII, no. 29: 162-179