
Original Article

Do IT matters matter? IT-related key audit matters in Dutch annual reports

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ABSTRACT After the recent financial crises, regulators have started reform projects for the auditor's report, the part of a company's financial statements that presents the auditor's opinion. One of the reforms is the transition from a standardised auditor's report without any company-specific information to a report that discloses company-specific information in the so-called key audit matters, significant risks of material misstatement in the company's financial statements. In this paper, we investigate whether a specific subset of the key audit matters, namely those that are IT-related, can be a useful source of company-specific information. Information on IT is important for stakeholders: research in the past decades has shown that IT can potentially disrupt industries, affect a company's stock market value, create risks for a company's continuity, or endanger the integrity of the financial statements. Company-specific information on IT is therefore relevant, but it is also scarce, as there are hardly any mandatory disclosures and companies do not frequently disclose IT-related information voluntarily. IT-related key audit matters could fill a gap in information availability for stakeholders such as investors, auditors and academics. We study the auditor's reports in the financial statements of the companies list on the main Dutch stock market, the AEX. This Dutch market regulator has been a frontrunner for the implementation of the new auditor's report: disclosure of key audit matters has been voluntary in 2012, and mandatory since 2013. In the 75 annual reports, we identify 255 key audit matters, 39 of which were IT-related. We find that the IT-related key audit matters already contain useful information for investors.

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However, both auditors and academics can play a role in further development of the value of key audit matter disclosures. We argue that auditors may need to pay more



attention to high-risk areas such as cyber security. We encourage academics to identify and design innovations of the auditor's report proactively.

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INTRODUCTION

Financial statements are one of the means of communication between a company and its investors (Kiss *et al*, 2015). Statutory auditors and audit firms play a vital role in enhancing the integrity and efficiency of financial statements, by giving a pass/fail opinion on whether the financial statements give a true and fair view (Brown and Trainor, 2014; European Commission, 2014). The statutory auditor presents this pass/fail opinion in the auditor's report, which is added to the financial statements. In the past decades, the form and content of the auditor's report have been based on standardised reporting models. The exact form of the report depends on the legislation and regulation of the country in which it is published, but all reports have had in common that they contained no information specific to the company that has been audited (Brown and Trainor, 2014). Given this lack of company-specific information, it is not very surprising that investors deem the *existence* of the auditor's report important, but that they express very little interest in the *contents* of the report. Little evidence is found that the information provided in the auditor's report is actually used in investor decision-making (Turner *et al*, 2010).

Some company-specific information is more relevant for stakeholders in companies than other. One of the areas in which stakeholders may have an increasing interest is the area of information technology (IT). IT can disrupt industries: it has affected the longer-term survival of traditional industries such as the newspaper industry (Karimi and Walter, 2015), but it has also been the basis for new industries such as the social media industry (Sneller, 2016). IT can affect a company's stock market value:

announcements of innovative IT investments or E-commerce initiatives have led to significant above-market stock returns (Dehning *et al*, 2003; Subramani and Walden, 2001). IT can also endanger the integrity of financial statements: deficient IT systems can lead to an inaccurate view of the financial state of the company, and thereby to unfounded management decisions that can even lead to bankruptcy (Harmsen, 2014). Finally, IT can be a risk for a company's continuity, as even a brief disruption in the availability of IT can be devastating (Carr, 2003).

As a result of the public debate on the role of auditors in the accounting and financial crises in the past two decades, standard-setting bodies have redesigned the reporting models for the auditor's report in an effort to improve the information environment for investors (Kiss *et al*, 2015; Lennox *et al*, 2015). One of the proposed enhancements in the new standards is the addition of a reflection in the auditor's report on the specific situation of the company that has been audited (Kiss *et al*, 2015; NBA 2014). In this paper, we investigate whether the company-specific information that auditors disclose in the new auditor's report in The Netherlands can become a useful source of company-specific IT-related information. We aim to answer the following research questions:

RQ1: Which IT-related disclosures do auditors present in their new auditor's report?

RQ2: How can stakeholders use these IT-related disclosures in the next ten years?

- (a) How can investors use the disclosures for better decision-making?
- (b) How can auditors use these disclosures to further improve the auditor's report?



- (c) How can researchers identify and design the next innovations in the auditor's report?

This paper proceeds in the following way. We first give an overview of relevant literature. We then answer RQ1 by presenting our sample of categorised IT-related disclosures. After this, we answer RQ2 by proposing how three important stakeholder groups, namely investors, auditors and researchers, can use this newly available information. We finalise the paper with a summary.

LITERATURE REVIEW

In this literature review, we give an overview of three research areas that are relevant for our research questions. We start with a presentation of the recent reforms of the auditor's report. We then continue with an overview of the proposed changes to this report. We conclude the section with the relevance of IT for the financial statements and the auditor's report.

Reforming the auditor's report

The standardisation approach for the preparation of the auditor's report finds its origin in a strict separation of roles and responsibilities for a company's annual report. The company's management is responsible for preparing the information in the annual report. The external auditor improves the credibility of the information by attesting to it in the auditor's report. The external auditor does not add any company-specific information or insights (Simnett and Huggins, 2014).

The standardisation approach has been challenged in the past fifteen years, as it creates gaps between what the auditor's report could or should provide according to stakeholders, and what it actually provides to them (Simnett and Huggins, 2014).

The first gap is the *expectation gap*, which manifests itself in various forms. It can be the difference between the absolute level of assurance that stakeholders expect and the

reasonable level of assurance that the auditor offers, the difference between the broad scope that stakeholders expect and the narrow scope that auditors provide, or the attribution of responsibility for the adequacy of the financial statements by stakeholders to the external auditor, while it lies with management (Gold *et al.*, 2012). Some stakeholders have legitimately questioned how auditors served investors' needs in the years before and during the recent crises, and the popular press suggests that the auditor's attestation is unduly influenced by the client at the expense of the public interest (Church *et al.*, 2008; CPA, 2011).

The second gap is the *information gap*: the difference between disclosures that users would like to see as part of the auditor's reporting process and the disclosures that are provided (Turner *et al.*, 2010). The auditor's report has been criticised for years for being uninformative, and even though information about the company and its financial reporting process is available to the auditor, it is not disclosed (Brown and Trainor, 2014; Simnett and Huggins, 2014).

The third gap is the *communication gap*: the difference between what stakeholders desire and understand, and what is communicated by the external auditor (Simnett and Huggins, 2014). The auditor's report fails to communicate important detail well (Stringer, 2012). The mystique about what auditors really do should be removed, the roles of management and auditors should be described more clearly, and for investors, it should be more clearly visible where the auditor sees company-specific risks (Marshall, 2014).

The form and content of the auditor's report are determined by the regulators for the accounting profession. After the recent financial crises, the interest for the form and content of the auditor's report became higher than ever (Kiss *et al.*, 2015). In response to the growing criticism, four of the regulators, the Financial Reporting Council (FRC),¹ the International Auditing and Assurance Standards Board (IAASB),² the Public Company Accounting Oversight Board (PCAOB)³ and the European Commission (EC), have started reform projects

for the auditor's report between 2005 and 2010. Before adoption and entry into force of new rules, regulators go through consultation processes with stakeholders (Simnett and Huggins, 2014). Currently, the consultation processes have been largely finalised, new regulations have been adopted by the FRC, the IAASB and the EC, and have entered into force by the FRC for all companies listed in the UK as of September 2013 (Kiss *et al*, 2015; IFAC, 2014a). The current expectation is that adoption and entry into force for all four regulations will be realised in the next few years.

In The Netherlands, the Nederlandse Beroepsorganisatie van Accountants (NBA)⁴ intends to be a frontrunner for the implementation of international reforms of the auditor's report. The NBA has created rules for the new auditor's report based on the proposed IAASB standard, and has allowed auditors to use the new standard as of 2013. The new rules have been mandatory as of 2014 for around one thousand public interest entities in The Netherlands (Bos and Strating, 2014).

Key audit matters in the auditor's report

In the proposed new rules, the standardisation approach is abandoned, and company-specific information becomes part of the auditor's report. Which company-specific information is included varies per regulator. In the US, the resistance to the proposed changes is higher than in other parts of the world (Simnett and Huggins, 2014), and the opposition is mainly based on the liability to which disclosures are subject, which audit firms consider too much for the litigious US environment (DeLaurell and Burbage, 2014; Marshall, 2014). As an example: US audit firms oppose the proposal to explicitly disclose the name of the auditor's engagement partner in the auditor's report, as this does not add much value in their view, but increases the auditor's liability.

As a result of this resistance, some of the proposed disclosures that were part of all four

proposed standards will not be part of all four final standards. However, in all four regulations, there are provisions for the presentation of the most significant risks of material misstatement in the company's financial statements and the way the auditor dealt with these risks in the audit (Kiss *et al*, 2015). The exact names for these risks vary per standard: they are called *key audit matters* by the IAASB, while others use the terms *critical accounting policies*, *assessments of risks* or *critical audit matters* (DeLaurell and Burbage, 2014).

In the IAASB standard, key audit matters are defined as "those matters that, in the auditor's professional judgment, were of most significance in the audit of the financial statements of the current period". (IFAC, 2015, p. 3). Key audit matters are selected from all matters communicated with those charged with governance, on the basis of their high risk of material misstatement, the high amount of management or auditor judgment involved, or their relation to significant events or transactions that occurred during the period (IFAC, 2015). The disclosure of each key audit matter will at least contain an appropriate title, a description of the key audit matter and a summary of the audit procedures performed. If relevant, key observations related to the key audit matter and references to information in or notes to the financial statements will be added (NBA, 2014).

Will the inclusion of company-specific key audit matters in the auditor's report reduce the gap between the auditor's report and stakeholders' expectations thereof? Previous reforms of the auditor's report have not always narrowed the gap. One of the most recent changes to the auditor's report was the inclusion of an explanation of auditor versus management responsibilities and of the nature, scope and procedures of the audit in the report. This change, which was designed on the basis of the standardisation approach, became effective in 2006. Research on the impact of this standardised change concludes that the expectation gap appears to be a persistent phenomenon



(Gold *et al.*, 2012). Early findings on the impact of company-specific inclusions in the auditor's report on the information gap are more positive. Research based on the first year of the expanded audit report in the UK shows that investors perceive auditor key audit matter disclosures to be reliable indicators of financial risk (Lennox *et al.*, 2015).

Information technology and the financial statements

Two important relationships exist between a company's financial statements and its IT. Firstly, the accuracy of financial statements depends on the company's information systems. Financial statements prepared by management may contain errors, and the incidence of detected errors varies with assessed control strength: the stronger the internal controls, the fewer errors are found (Wright and Wright, 1996). In the early days of computerisation, more errors were found in companies that applied computerised electronic systems (Bell *et al.*, 1998). In later years, it appeared that despite an increase in the use of information technology, there was a degradation in the control environment (Messier *et al.*, 2004). It was only after the entry into effect of the Sarbanes–Oxley legislation in 2004 in the US that companies that have implemented a specific class of information systems called Enterprise Resource Planning (ERP)⁵ systems became less likely to report internal control weaknesses than companies that do not have such ERP systems (Morris, 2011). Although more research is needed, we may expect that better information technology leads to more accurate financial statements.

Secondly, the company's financial situation presented in the financial statements is influenced by the way that company uses IT. As discussed in the introduction to this paper, earlier research shows that IT-related events can impact the stock price of companies. If we stay with the example of ERP systems, we can give various examples of such research. The

implementation of ERP systems has a positive impact on stock returns if a large sample of companies is studied (Ranganathan and Brown, 2006). However, for individual companies such as Fox Meyer Drugs and Hagemeyer, ERP-transformations have led to significant negative results that even endangered the continuity of the companies (Scott, 1999; Sneller and Bots, 2009). A large body of research supports the impact that IT has on the financial position of companies, and therewith on the information presented in their financial statements.

Company-specific information on the use of IT is therefore relevant. However, in most countries, no mandatory disclosure of IT-related information exists, and therefore this information is scarce. The disclosure of key audit matters in the new auditor's report is therefore a promising development, especially if these key audit matters disclose IT-related information.

Which IT-related disclosures do auditors present in their new auditor's report?

Our first research question aims to analyse the IT-related information that auditors present in their new auditor's report. We study this question in The Netherlands, as this country has been a frontrunner for the implementation of international reforms of the auditor's report. The Dutch regulator NBA has allowed auditors to use the new standard as of 2013, and the new rules have been mandatory as of 2014 (Bos and Strating, 2014).

We gathered data for the 25 companies listed on the Dutch main stock market, the AEX. We selected the annual reports for the fiscal years 2013, 2014 and 2015 for these 25 companies, and extracted data from the auditor's reports. Descriptive statistics are presented in Table 1.

In 2013, nine annual reports included a new auditor's report, even though this was not yet mandatory for companies subject to the Dutch

legislation. In 2015, 23 annual reports included a new auditor's report. The two companies that did not include a new auditor's report are ArcelorMittal and Unibail–Rodamco, which are incorporated in Luxemburg and France, respectively, and therefore did not have to comply with the Dutch or UK rules. In total, 54 of the 75 annual reports contained the new auditor's report.

From these reports, we extracted the titles, the descriptions and the summary of the audit procedures performed, which resulted in a set of 255 key audit matters. We then classified these key audit matters as IT-related or not in three steps. In the first step, we carried out the classification individually on the basis of the title, the description and the summary of the audit procedures. In the second step, we compared our individual classifications and refined our classification criteria: we decided to exclude key audit matters that mentioned models and algorithms, but not IT specifically, and we decided to include key audit matters that mentioned transformation programs. In the third step, we classified a few remaining cases for which we did not only use the text of the key audit matter, but we also used the context of the company, such as industry or products. The classification ultimately resulted in 39 IT-related key audit matters over the researched years as shown in Table 1. An example of an IT-related key audit matter is included in the [Appendix](#).

We made a further categorisation of the IT-related key audit matters. We created six categories on the basis of the titles of the key audit matters. If the titles were not meaningful we created a category description on the basis of the texts of the key audit matters. We then carried out the categorisation individually. After this, we compared our categorisations, and found that for 23 of the 39 IT-related key audit matters we used the same category. In thirteen cases, two of us used the same category, while the third coder used a different category; in these cases, we used the category used by the majority of the coders. In the three

cases where we all used a different code, we categorised the key audit matter as "Other risk categorisation". The results of the categorisation are presented in Table 2.

The first three categories of IT-related key audit matters are directly related to the company. They give an indication of the way in which the company applies IT operationally and strategically, and of how the company values its IT. The next two categories focus on the role IT plays in the auditor's work. They describe the way in which the auditor becomes familiar with the company's IT in a new audit engagement, and in the way the auditor applies IT to address risks identified for the audit.

How can stakeholders use IT-related key audit matter disclosures?

Our second research question aims to investigate how three groups of stakeholders, namely investors, auditors and researchers of the annual report can make use of the IT-related key audit matter disclosures.

How can investors use disclosures of IT-related business continuity or transformation risks?

In Table 2, we see that two categories constitute 44% of the identified IT-related key audit matters. The first category, reliability and continuity of information technology and systems, indicates the operational risk companies run when they are dependent on IT for their daily operations. Auditors mention this as a key audit matter for ABN AMRO, ING and NN, which are companies in the financial industry, and for KPN and Gemalto, who operate in the telecommunication industry. The second category, transformation programs and new business models, indicates the risks associated with transformational changes. An example of a key audit matter in this category is the planned implementation of organisational change and IT transformation by TNT Express in 2015. The auditor identifies significant

**Table 1:** Key audit matters by company and by year

Ticker	Legal entity	2013		2014		2015		Total	
		Key audit matters	Of which it-related	Key audit matters	Of which it-related	Key audit matters	Of which it-related	Key audit matters	Of which it-related
AALB	Aalberts industries N.V.			4	0	5	2	9	2
ABN	ABN AMRO Group N.V.	3	1	5	1	4	1	12	3
AGN	Aegon N.V.			6	2	5	1	11	3
AH	Koninklijke Ahold N.V.	5	0	5	0	3	0	13	0
AKZA	Akzo Nobel N.V.			4	0	4	1	8	1
ASML	ASML holding N.V.			5	0	4	0	9	0
ATC	ALTICE N.V.					7	1	7	1
MT	ArcelorMittal								
BOKA	Royal Boskalis Westminster N.V.			4	0	5	0	9	0
DSM	Koninklijke DSM N.V.			3	0	5	0	8	0
GTO	Gemalto N.V.			2	1	3	1	5	2
HEIA	Heineken holding N.V.			3	0	6	1	9	1
ING	ING groep N.V.			7	1	6	1	13	2
KPN	Koninklijke KPN N.V.	3	0	5	0	4	2	12	2
NN	NN group N.V.			6	1	5	1	11	2
PHIA	Koninklijke Philips N.V.			5	1	6	1	11	2
RAND	Randstad holding nv	4	1	3	1	3	1	10	3
RDSA	ROYAL DUTCH SHELL PLC	6	1	8	0	6	0	20	1
REN	RELX PLC/RELX NV	4	2	5	2	5	2	14	6
SBMO	SBM offshore N.V.	3	0	6	0	7	0	16	0
TNTE	TNT express N.V.	6	0	7	1	11	2	24	3
UL	Unibail-Rodamco								
UNA	UNILEVER N.V./UNILEVER PLC			3	0	3	0	6	0

Table 1: continued

Ticker	Legal entity	2013		2014		2015		Total	
		Key audit matters	Of which it-related	Key audit matters	Of which it-related	Key audit matters	Of which it-related	Key audit matters	Of which it-related
VPK	Koninklijke Vopak N.V.	4	2	4	0	2	2	10	4
WKL	Wolters Kluwer nv			4	0	4	1	8	1
	Companies with new auditor's report (#)	9		22		23		23	
	Key audit matters (#)	38	7	104	11	113	21	255	39

outsourcing of IT services and the transfer of processes and part of the IT environment to external service providers as key audit matters (TNT Express, 2016).

This information is relevant for investors. Key audit matters that inform investors on IT-related business continuity or transformation risks can support them in making better decisions.

Future developments

Our expectations with respect to the use of IT-related key audit matters by investors in the years are the following. Currently, a digital transformation is taking place that has a disruptive impact on the business models of many companies. We expect that in the next decade, the relevance of these IT-related key audit matters will only increase: companies will become even more dependent on the continuity and reliability of their IT, and even more companies will be involved in transformations and business model renewal. In the next ten years, investors will benefit more and more from IT-related key audit matter disclosures.

How can auditors use these disclosures to further improve the auditor's report?

In Table 1, we see that around 15% of all disclosed key audit matters is IT-related. It is hard to assess whether this is a low or a high percentage, and we therefore dive deeper into one type of risk that has emerged strongly in the years of our study, namely cyber security risk. Cyber security risks are mentioned in four of the 255 key audit matters, and for companies in the financial services only: for the ABN AMRO Bank in 2013, 2014 and 2015, and for the insurance company NN in 2015.

If we reconcile this with information from other sources we suspect that the importance of cyber security risk as a key audit matter is underestimated. Firstly, we think that the number of occurrences of cyber crime is underreported. We know that in 2015, two

**Table 2:** IT-related key audit matters by category and by year

<i>Categorisation</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>	<i>Total</i>	<i>%</i>
Risk: reliability and continuity of information technology and systems	1	3	5	9	23
Risk: transformation programs and new business models	2	2	4	8	21
Risk: capitalisation or valuation of IT assets	1	3	4	8	21
Risk: initial audit engagement		1	5	6	15
Mitigation: auditor addresses key audit matter with IT	2	1	2	5	13
Other risk categorisation	1	1	1	3	8
Total	7	11	21	39	100

companies in our sample had to report that hackers had had access to their systems. On 25 February 2015, Gemalto, the leading provider of SIM cards for mobile telecommunication operators, had to announce that their systems had been intruded in 2010 and 2011. In a press release, the company states that massive theft of SIM encryption keys could not have happened, and that in the case of an eventual key theft, only spying on communication on 2G networks would be possible (Gemalto, 2015). On 27 February 2015, ASML, the manufacturer of lithography machines for the chip manufacturing industry, had to announce that the company had detected unauthorised access to its IT systems. In a press release, the company states that it has found no evidence that anything of value had been compromised (ASML, 2015). Gemalto and ASML have detected and reported these incidents, but other companies may not have reported them, or may not have detected intrusions. The Dutch General Intelligence and Security Service (AIVD) reports that it has observed numerous attacks on companies that operate in economic priority industries. The AIVD also reports that a substantial proportion of the attacked companies were not able to detect the intrusions themselves (AIVD, 2016).

We do not only think that the number of cyber security incidents may be underreported. We also think that the potential impact of the intrusions is underestimated. The AIVD warns that once attackers have gained access to a computer system, it is very difficult to remove

them, and it is even more difficult to establish which parts of the systems have been accessed (AIVD, 2016). This means that all parts of the system can be compromised after a hack, including those that are the basis for the information in the annual report.

Future developments

Our expectations with respect to the auditor's role in improving IT-related key audit matter disclosures in the next decade are the following. In our sample, at least two companies for which cyber risks were not identified as a key audit matter experienced cyber attacks. We expect that in the next ten years cyber attacks will become more frequent and more intrusive. We are of the opinion that by paying more attention to cyber security, auditors can further improve the IT-related key audit matter disclosures.

How can researchers identify and design the next innovations in the auditor's report?

The new auditor's report differs from the previous models as it includes company-specific information. We have found that auditors use key audit matters to disclose company-specific IT-related and not-IT-related key audit matters. We see the following opportunities for research on key audit matters.

Firstly, it is interesting to find out whether the addition of key audit matters in the new auditor's report helps reduce the audit expect-



tation gap. The key audit matters have a specific form: they start with a title, then proceed with a description of the matter, and end with the way in which the audit has addressed the matter. In this form, the responsibilities of the auditor are defined *implicitly*: the auditor has to address key audit matters in the audit. In previous versions of the auditor's report, the responsibilities of the company's management and the auditor were defined *explicitly*. In a research design with experiments similar to Gold *et al* (2012), the effect of this implicit definition of responsibilities on the expectation gap could be studied.

Secondly, the impact of IT-related key audit matters on the information gap is a challenging research area. IT research has always been hampered by a lack of company-specific IT-related information, as in most countries no mandatory IT-related disclosures exist. The IT-related key audit matters that we have found provide information on the continuity and reliability of information technology and systems, and on transformation programs and new business models. This information is an additional source of independent information that has not been available before. The potential reduction of the information gap for research could be tested by relating the disclosure of IT-related key audit matters to stock returns, management's earnings forecasts or other financial information.

Thirdly, the way in which IT-related key audit matters are communicated could be studied and refined. We found that even though we are experienced IT-specialists, we still had difficulties in classifying and categorising IT-related key audit matters in a uniform way. Research into wording, form and content of key audit matters may help reduce the communication gap.

Future developments

In the next few years, we see many opportunities for research. Interesting areas of research are the impact of IT-related key audit matters

on stock price, stock volatility or other financial performance measures, and the impact of differences between the various new auditor's reporting models on the expectation, information or communication gaps.

We also hope that researchers take these research opportunities quickly. Innovations in the auditor's reports have been researched in the past. However, at least six years have always passed between an innovation and the first published research on the impact of the innovation. This means that the role that research plays in innovations in the auditor's report has been reactive and descriptive at best. In the next few years, key audit matter disclosures will become available in most countries. We hope that researchers will take the opportunity to identify and design innovations of the auditor's report, by publishing on the impact of the new disclosures soon.

SUMMARY

A new auditor's report has been introduced, in which company-specific information is included in the so-called key audit matters. We studied the auditor's reports in annual reports of AEX-listed companies for the years 2013–2015. In these auditor's reports, we found 255 key audit matters, 39 of which are IT-related. We subdivided these IT-related key audit matters into six categories. Five categories concern risks: risks of reliability and continuity of information technology and systems, risks of transformation programs and new business models, risks of capitalisation or valuation of IT assets, risks of initial audit engagements and other risks. The last category consists of the use of information technology by auditors to address key audit matters.

Future developments

In the next decade, stakeholders can benefit from the information in the IT-related key audit matters. Investors can use them to make better-informed decisions on the value of



companies. The auditing profession has to work hard to improve its quality and reputation; by investigating and disclosing IT-risks they can serve the public interest. Researchers can influence the public debate by studying the impact of the new auditor's report on the expectation gap, the information gap and the communication gap that are inherent to auditor's report.

On the basis of our study, we are of the opinion that the expansion of the auditor's report with key audit matters in general, and IT-related key audit matters in particular, is interesting and beneficial for stakeholders. Following the digital transformation of companies and industries, we expect a further and significant increase of IT-related key audit matters in the annual reports over the coming years.

NOTES

- 1 The FRC is the UK's independent regulator and standard setter for corporate reporting.
- 2 The IAASB is an independent standard-setting body that sets international standards for auditing, assurance and other related areas.
- 3 The PCAOB is the regulator for the US public securities market.
- 4 The NBA is the professional body for accountants in The Netherlands. It assists accountants in fulfilling their crucial role in society, both today and in the future.
- 5 Enterprise Resource Planning (ERP) systems are information systems with two important characteristics: data integration and support for best practice processes. Data integration enables a company to use data that have been entered once throughout the company. A best practice process is a generally accepted operating procedure that has been proven in practice. Examples of ERP systems are SAP, ORACLE and Microsoft Dynamics (Sneller, 2016).

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APPENDIX: EXAMPLE OF AN IT-RELATED KEY AUDIT MATTER

Key Audit Matter

Ticker: ABN, company: ABN AMRO Group N.V., fiscal year: 2013, key audit matter: 3

Key audit matter information

Title

Reliability and continuity of the electronic data processing

Description

The Group is heavily dependent on its IT infrastructure for the continuity of its operations. The Group has significantly invested in its IT systems and processes as part of the integration of the two predecessor banks. The Group is continuously improving the efficiency and effectiveness of the IT infrastructure and the reliability and continuity of the electronic data processing, for example, to remediate identified weaknesses and inefficiencies and to accommodate the ongoing regulatory changes imposed on the banking industry such as Basel III and CRD IV and external threats such as cybercrime

How the audit addressed the issue

We have assessed the reliability and continuity of the electronic data processing, to the extent as necessary within the scope of our audit. For that purpose, we included IT auditors in our audit team. Our procedures included the assessment of developments in the IT domain and testing of the relevant internal controls with respect to IT systems and processes, insofar as relevant to our audit. We provided the Executive Board recommendations for further enhancements to the IT controls and data quality initiatives. More information is provided in the Supervisory Board report

Source: (ABN Amro Group, [2014](#))