A large target graphic is centered on the page. It features a yellow bullseye in the center, surrounded by several concentric grey rings. The target is set against a background of a grey and white circular pattern that resembles a globe or a large-scale target.

## Improving Regulatory Reporting

Realizing the  
Benefits of XBRL

**A u d i t   a n d   R i s k   A d v i s o r y   S e r v i c e s**

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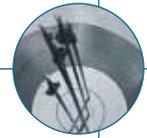




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# INTRODUCTION



Government regulators worldwide face increasing pressures to improve regulatory reporting and their management of the risks associated with it. Regulators face new reporting responsibilities as a result of new regulation, growing demands for improved accountability, accelerated reporting deadlines, and the rapid evolution of Internet-based initiatives designed to help governments improve their interactions with citizens and corporations.

External demand for improved reporting is matched by a growing need within regulatory organizations for performance information that is increasingly timely, accurate, and relevant. Given the costs associated with private sector reporting to regulators—costs that a 1999 European Commission study estimates to be as high as 0.6 percent of GNP<sup>1</sup>—regulators need to know whether their data requests pose a reasonable burden on industry. At the same time, many regulators are asking probing questions about the quality and reliability of the information that is being provided to them and the way that data is being analyzed. Are their reporting processes working appropriately and generating reports that are useful to end-users? Can they trust the information on which their reports are based?

Without information from business, government would all but cease to function.

## Information Quality Determines Decision Quality

Without information from business, government would all but cease to function. From macro-economic data for setting interest rates to the nature and delivery of medical procedures in rural hospitals to aircraft safety reports, the collection and analysis of information is the life-blood of policy making, of regulation, and of program delivery.

Yet for government agencies worldwide, processes for collecting and analyzing information are generally difficult, expensive, and time consuming, and all too often controversial. Resented by countless businesses as expensive “red tape” or “unwarranted intrusion,” information collection is a frequent source of friction between the public and private sectors. Often relegated to the back of an agency’s “back office,” data collection is not provided the attention and resources necessary to ensure that high quality information is always available to decision makers.

## Addressing the Business Problem

To address these challenges, regulators worldwide are increasingly considering how they can improve their data capture and reporting processes as well as the timeliness, accuracy, and relevance of the reports they issue. As part of that process, some regulators (see sidebar on page 4) are evaluating Web-based standard languages that have been shown to improve the value of reported information. XBRL (eXtensible Business Reporting Language) “fills the bill” as an important innovation.

XBRL is a freely available, open standard developed by a 200-member international consortium that includes representatives from accounting firms, regulatory bodies, financial institutions, software vendors, corporations, and government entities (see *Appendix I: Demystifying XBRL*). Use of XBRL helps allow organizations to produce information that is more timely, accurate, and relevant.

This white paper addresses the reporting issues and challenges regulators and other agencies now face. It describes XBRL and discusses how some organizations are realizing its benefits to improve risk management and decision-making. This document also contains suggestions for an approach to improving regulatory reporting using XBRL.

## XBRL: A TOOL, NOT A PANACEA

Use of XBRL allows organizations to 1) “tag” or label information so that it has structure and context, 2) enter it into a system once, and then 3) make it available for multiple purposes. For regulators, XBRL is a standards-based way of:

- ▶ Defining reporting concepts, if necessary in multiple languages
- ▶ Leveraging other reporting concepts such as Generally Accepted Accounting Principles (GAAP)
- ▶ Describing the relationships between reporting concepts
- ▶ Defining the quality edits, or validation rules, that need to be met by data items
- ▶ Defining the way that analytic concepts are derived from other concepts
- ▶ Describing the way that a concept should be used
- ▶ Acquiring information directly from providers’ systems in accordance with established definitions, thus enabling end-to-end integrity
- ▶ Using structured information definitions as a central knowledge repository of reporting concepts, thus improving the comparability and understanding of concepts for internal and external stakeholders alike
- ▶ Providing a basis for automated construction of data entry forms for use by providers that cannot produce the information directly from their systems, thereby simplifying the design and deployment of reporting forms.

This combination of features makes XBRL an ideal format for regulatory reporting. Indeed, XBRL allows subject matter specialists to clearly articulate their reporting requirements in a format that can be understood and freely exchanged by disparate systems.

The emergence of XBRL represents a fundamental breakthrough because it is data-centric, allowing information to be structured in a way that makes it readily accessible at the level of the individual fact, unlike document-centric electronic reports such as PDFs and Web pages. XBRL-enabled reports always carry with them the definitions and references necessary to understand the information, unlike document-centric formats. Additionally, XBRL is an international standard, rapidly being supported by accounting and enterprise reporting software vendors, so that its use is becoming simple as well as increasingly pervasive.

Although XBRL has been heralded as a solution to many of the problems now associated with reporting, its use continues to evolve and be tested. Whatever benefits organizations ultimately realize, the value of XBRL depends on the quality of the information being reported. When proper reporting processes are in place, XBRL can help organizations improve the timeliness, accuracy, and relevance of their reporting. It can also help them change reports to meet new needs (see sidebar on page 4: *How Organizations Are Using XBRL to Improve Information Gathering and Reporting*). To fully realize the potential benefits of standards-based data collection, organizations need to focus on improving their reporting policies and processes as well as managing the risks they face from poor-quality information.



## How Organizations Are Using XBRL to Improve Information Gathering and Reporting

Regulators worldwide are working to improve reporting processes with the help of XBRL. They include the following:

### ***DCCA: Improving Compliance and Transparency***

The Danish Commerce and Companies Agency (DCCA) now allows electronic filing of company financial statements in XBRL format, creating greater visibility and improved transparency for Danish businesses and the framework for improved compliance reviews. The approach provides the DCCA with an automated platform for reviewing corporate compliance with securities law regulations and accounting requirements, which formerly involved the manual review of paper-based accounts—saving time as well as improving accuracy.<sup>2</sup>

### ***FDIC: Reducing Provider Burden and Improving Reporting Relevance***

With cross-agency cooperation, the U.S. Federal Deposit Insurance Corporation (FDIC) is replacing its most important quarterly data collections from banks with mandatory XBRL-based filings, reducing by half the time needed for U.S. bank regulators to process these returns and release information to bank examiners. The development directly affects the approximately 9,000 U.S. banks that must submit the quarterly financial filing forms known as “Call Reports.” The FDIC embedded its validation rules into its XBRL requirements, thereby allowing banks to evaluate their own data before submitting it to regulators. In the past, the U.S. bank regulatory agencies had their own staff do this work, interfacing with banks to clarify and correct submitted information. Systems integration is now under way, and U.S. banks are scheduled to begin filing in this format by the end of 2004.<sup>3</sup>

### ***Inland Revenue: Collaborating with Industry***

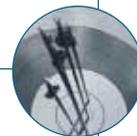
Through an important collaborative effort with industry, the United Kingdom’s Inland Revenue department is developing a business process that streamlines interaction with government and reduces regulatory burden. It has developed a set of XBRL taxonomies that will allow the agency to shift from paper-based to XBRL-based electronic filing of corporate tax returns. The XBRL framework is built on the U.K. GAAP taxonomies, specialist tax computation taxonomies, and company-specific extension taxonomies that allow the use of data unique to a particular taxpayer. This development represents a significant step forward for this regulator and over time should allow the provision of higher-quality service to U.K. companies.<sup>4</sup>

### ***APRA: Consolidating Data Collection to Benefit Regulators and Providers***

Responsible for analyzing the financial regulatory filings provided by Australia’s 12,000 banks, insurers, and pension funds, the Australian Prudential Regulation Authority (APRA) has offered these financial institutions the option of filing in XBRL format since 2001. APRA works with the Reserve Bank of Australia as well as the Australian Bureau of Statistics to reduce overall provider burden by aligning the three agencies’ data requirements, with APRA responsible for all filings. In some areas this approach reduces the overall data count by as much as 40 percent. In Australia, the option of providing a system-to-system filing mechanism proved the catalyst for large numbers of companies to review the way that they create their regulatory returns, benefiting provider and regulator alike.<sup>5</sup>



# THE CURRENT ENVIRONMENT: COLLECTING AND REPORTING VALUABLE INFORMATION



To fulfill their missions, regulators collect a wide range of data that they analyze and then provide to a variety of constituents. The number of these reporting relationships—between, for example, banks and their regulators, or taxpayers and tax authorities—are increasing and becoming more complex.

In a rapidly changing environment, in which data seems to proliferate exponentially, many regulators are evaluating what information they gather and from whom. They are considering how they collect, analyze, and report certain information; why they do so; and of what value their reports are for users. Specifically, they want to know:

- ▶ Are the reports they issue relevant—or outdated?
- ▶ Are the processes by which they obtain and provide information appropriate—or burdensome?
- ▶ Are they basing decisions on facts—or data of questionable quality?

## Analyzing the Value of Information: Achieving Utility and Satisfaction

Some regulators and other organizations (such as tax and statistics agencies) are seeking to answer these important questions by evaluating how their organizations gather information. The process of information gathering can be analyzed along two axes: *information value* (the relevance and value of information acquired from third parties) and *provider satisfaction* (the level of tolerance private organizations have for this burden and the degree of satisfaction they have with the reports ultimately generated from the information gathered). Analyzed in this manner, regulators' policies and approach can be depicted as in *Figure 1*.

**Figure 1: Assessing Information Value and Provider Satisfaction**



Source: KPMG International, 2004.

### *The Two Extremes: Desired and Poor Programs*

The “desired program” strikes a balance between the legitimate needs of the organization that acquires information and the legitimate desire of the private sector to go about its business without unreasonable interference.

On the opposite end of the spectrum, a “poor program” is fundamentally flawed. The data collection process imposes high levels of provider burden, resulting in dissatisfied external providers. At the same time, the process fails to deliver information of real value or relevance to users. Poor programs do exist, and agencies need to be vigilant, through regular review, that data collection and reporting of this sort is not a feature of their environment.

An *unbalanced* program is more common than either of the two extremes. Over time, throughout the business cycle and as circumstances change within regulated industries, the emphasis in data collection tends to swing from one extreme to the other. An agency’s regulatory culture can bring about such a swing. That culture tends to be set by the regulated community’s expectations, which can shift from “light touch” to “tight rein” in response to events.

#### Pre- and Post-Crisis

A crisis or failure within a regulated company—be it a bank failure, a health scandal, or an infrastructure collapse—tends to prompt a tightening in regulatory policy and culture. Conversely, a sustained period without problems tends to drive stakeholder and political pressure for reduction in “red tape” and the relaxation of reporting requirements. The two situations can be characterized as

A crisis or failure within a regulated company... tends to prompt a tightening in regulatory policy and culture.

“pre-crisis” and “post-crisis,” as experience tends to justify the view that they are part of an alternating cycle.

In a “pre-crisis” environment, where the regulated industry has been operating without partic-

ular controversy for an extended period, the regulatory reporting requirements impose relatively few inconveniences on the regulated industry. However, the requirements may fail to deliver information of sufficient quality or value, weakening the regulator’s ability to oper-

ate an effective industry surveillance program. In this situation, the information quality tends to have degraded because:

- ▶ **The information is stale**—one of the ways the regulator has relaxed provider burden is to impose constraints around its own policies on change. Where it is extremely difficult to introduce new reporting requirements, data sets tend to become irrelevant over time.
- ▶ **The information is old**—the regulator has relaxed the time-frame in which information must be delivered, reducing the value of the information set.
- ▶ **The information is not used**—whatever the value of the information, the business processes around its systematic analysis have broken down. Such breakdowns tend to occur because the regulatory staff has lost confidence in the information, or because budgetary pressures have resulted in diminished analytic staff or business intelligence infrastructure.

By contrast, in a “post-crisis” scenario, the quality and utility of information available for analysis is initially extremely high. Over the short term, internal and external users of information are satisfied, at the expense of regulated provider organizations, which are operating under particularly onerous reporting requirements. This situation, which is most common immediately after a crisis within the regulated industry, tends to lead fairly quickly to a degraded information set, for one of the following reasons:

- ▶ The data points being sought are well outside that which are used in the management of the company, either for internal control purposes or external, public disclosure reasons. As a result, the regulatory data produced “just for the government” is something to which the company pays little attention and may, in fact, find objectionable. Without substantial (and resented) expenditure on independent or on-site review of this type of information, the chances of sustaining information quality decline considerably.
- ▶ The regulator shortens the *lag* time (the time between the end of the reporting period and the deadline for providing the information to the regulator). Shorter time frames benefit the regulator to the extent that those regulated can actually produce credible information sets. This kind of regulatory approach tends to be perceived as unfair, however, and typically degrades the accuracy of reported information.

Failure to analyze information gathering and make necessary improvements can leave organizations and the industries they regulate open to serious new risks. Indeed, poor information drives poor decision-making, which prevents organizations from being appropriately accountable to stakeholders. Ultimately, faulty data can lead to mission failure. A serious problem occurs, and organizational leaders are unprepared for it.

In an environment in which data are increasing in both volume and complexity, new regulations are evolving, and reporting deadlines are being accelerated, agencies need to make sure that their processes for collecting and reporting information yield valuable (and valued) results (see sidebar: *Six Principles for Better Information Collection*).

The next section describes an approach to improved regulatory reporting using XBRL to help address the issues and challenges organizations now face.

### **Six Principles for Better Information Collection**

Six principles of information design can help organizations achieve a balanced, “desired program” of sustainable, relevant information collection without imposing undue provider burden. These principles can be summarized as follows:

#### ***Timely***

To be useful, information needs to be available within a reasonably short period from the time of measurement. The “rear view mirror” view of any qualitative measure is only useful where information is current—and its currency rapidly fades.

#### ***Accurate***

Information should be free of data anomalies and errors and tested for manipulations.

#### ***Reasonable***

Regulators should seek to minimize provider burden (the amount of effort imposed on the regulated community by the scope of the data collection).

#### ***Relevant***

The definitions and interrelationships between data definitions need to be up to date and as tightly linked to information used for the running of the business as possible.

#### ***Efficient***

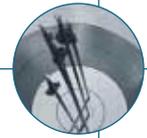
The cost of collecting the information needs to be proportionate to the value of the data collected.

#### ***Transforming***

Legitimate governmental information needs change markedly over time. Sometimes information collections are allowed to go stale as a result of a policy that favors the private sector. Stale information is resented, and eventually ignored by users, or, perhaps worse, is assumed to remain relevant by agency analysts, who quickly become out of touch with industry developments.

Source: KPMG International, 2004.

# AN APPROACH TO IMPROVING REGULATORY REPORTING



The quality of organizational data is a key factor helping to determine the quality of organizational decision-making. Thus, improving regulatory reporting begins with a review of data collection policies, procedures, and systems. For such a review to be effective, a regulator needs to acknowledge that the data function represents a critical interface with regulated companies. Consciously enhancing this interface should deliver substantial business benefits by improving the information that underpins decision-making.

Too often, however, the activity of changing data requirements involves organizational and political upheaval. Negotiating change inside the organization, consulting with external stakeholders, and conducting a systems development project to implement the changes can be disruptive, expensive, error-prone, and time consuming. The effort involved in such projects is such that agencies become less than willing to alter their data collection requirements, increasing the risk that these important information feeds will lose relevance. To address these challenges and risks, organizations need to analyze data requirements as a part of their business operations, rather than a one-time project. Through the use of XBRL—both as a knowledge management aide and a data interchange standard—agencies are able to embark on such projects with greater confidence.

An important aspect of a data collection review should be an effort to enhance the way in which changes are implemented. Agencies need to strive to create an environment in which the everyday business of data collection encompasses:

- ▶ Reviewing the relevance of data requirements
- ▶ Consulting with external stakeholders on such requirements
- ▶ Finalizing requirements and embedding them in data collection systems

This is “adaptive” data collection (see Appendix II for more information on the impact of this kind of transition). Rather than being a special project, data change becomes an everyday, well-understood activity. Treating data collection as an entirely back-office function puts its success at risk. On the other hand, when data collection is clearly understood and supported, it can help improve the trust and confidence of the regulated as well as provide support for the decision-making of the regulator. XBRL helps improve the understanding of all those involved in the data collection process. By classifying information using XBRL, regulators provide internal users, external users, provider organizations, and system vendors that might be assisting provider organizations with:

- ▶ Logical hierarchies of data requirements that can be easily navigated
- ▶ Direct links to instructions, comments, tips, and guidance
- ▶ Clear ways of understanding the relationships between reporting concepts
- ▶ Explicit statements about the validation requirements that regulators have developed to safeguard the quality of the information they receive
- ▶ All relevant technical information about reporting concepts

Thus, XBRL “taxonomies,” like real-time dictionaries, provide a direct way of consulting on information requirements as well as continuously improving their clarity.

Attaining these benefits requires that the highest levels of agency leadership provide strong, continuous, and responsive sponsorship. Leaders should ask about how information is collected and used inside their organizations. Their questions should include those listed below.

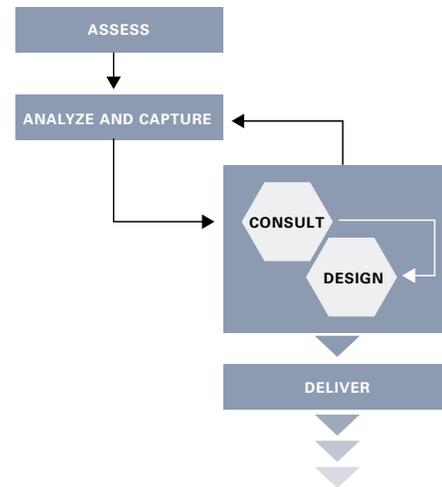
### Questions for Agency Senior Executives

- ▶ Do our information feeds from the private sector truly support relevant decision-making?
- ▶ Do our staff have the right information, at the right time, to identify risk and monitor the behavior of regulated companies?
- ▶ Do external stakeholders rely on the information that we gather from the private sector? Should they?
- ▶ Do we understand the information that we obtain from industry in its totality?
- ▶ Are our data requirements appropriately balanced? Are we getting enough information?
- ▶ Can we justify the costs to industry of the data requirements that we have?
- ▶ Do we have an up-to-date understanding of what companies are able to provide us, and the level of confidence that we should place in that information?
- ▶ How much overlap exists between our information requirements and those of other regulators, and public disclosure obligations?
- ▶ Are we forcing companies to file similar, but slightly different, information over and over again?
- ▶ Do our data requirements change over time? How much does it cost us and our stakeholders to cope with those changes, from the overlapping perspectives of economics, reputation, and effectiveness?
- ▶ Have our e-filing projects or plans paid off? Do we use an open standard that makes it easy for companies to deliver information to us with system-to-system integrity? Or are we creating our own, proprietary system?
- ▶ Are our policies for changing requirements supported both by our own systems and systems used by data providers?
- ▶ Is our e-filing system driving business intelligence directly, or is it simply an improved paper-based process?

Source: KPMG International, 2004.

To answer these and other questions in full, agencies need the resolve to conduct a disciplined review and a potential reform of their data collection processes. Such a review encompasses the steps depicted in *Figure 2*.

**Figure 2: Data Collection Process Flow**



Source: KPMG International, 2004.

### Assessment

The objective of this review is to determine whether a business case can be made for reform, and, assuming it can, to develop a set of high-level objectives, which will vary by organization. The agency should mobilize a project team, and agree on ways that provider burden will be measured and addressed.

The process begins with a top-down review of reporting requirements, examining policy and the legislative basis of data collection, the nature and extent of industry collaboration on which the agency relies, and, in broad terms, the nature and purpose of the data collection. Gaining a full understanding of the maturity of the collection capability is also important. This strategic assessment allows leaders to set or refine objectives and goals for information collection. In many cases, further review will be required to properly understand what is being collected and how it is being used.

Some of the issues that will arise are listed in the table below.

<b>Operational</b>	<ul style="list-style-type: none"> <li>▶ How are our data collection processes managed?</li> <li>▶ How many processes exist? Do they overlap?</li> <li>▶ How is data change managed?</li> <li>▶ What is the culture of our data collection process?</li> <li>▶ What policies do we have?</li> </ul>
<b>Legal</b>	<ul style="list-style-type: none"> <li>▶ What legislative or legal powers guide our data collection?</li> <li>▶ Is enforcement appropriate?</li> </ul>
<b>People</b>	<ul style="list-style-type: none"> <li>▶ Are our people appropriately empowered?</li> <li>▶ Do we have the right skills in the right place?</li> </ul>
<b>Systems</b>	<ul style="list-style-type: none"> <li>▶ Do we have appropriate systems to collect the information that we need?</li> <li>▶ How do we manage the transformation of data needs?</li> </ul>

Source: KPMG International, 2004.

## Analysis and Capture

The assessment is a top-down review of information collection. But business improvement requires that the details be captured. These details, or “metadata” (that is, information about information), comprise the specific concepts as well as their definitions, validations, and inter-relationships that the agency acquires from industry via the data collection process.

The use of XBRL to manage this information allows users to document the requirements (existing or proposed) in a neutral format. Developing detailed XBRL taxonomies of information allows the organization to track and trace its data requirements. Moreover, taxonomy development supports the detailed review of what information is being gathered, its definitions, any overlaps that exist, and the way that the information is being used by the business.

Organizations can accelerate the capture of definitions by obtaining a range of details from existing documentation—such as established regulatory reporting requirements. The process could involve information from a wide variety of sources and can include capturing undocumented but generally accepted practice from subject matter experts. The objective is to pull all of this information together and to unify it so as to allow the uniform management of data requirements and the decentralized navigation of these terms.

The steps in this analysis phase—capturing the existing, or desired, state of information requirements—provide insight into the business issues faced by the regulator and the provider companies. The resultant deliverable, a taxonomy, becomes an important resource through the implementation process.

The regulator’s taxonomy can drive the e-filing process directly, or it can be used as a more traditional “data dictionary.” Taxonomies encourage the iterative improvement of definitions and collaboration between front-line regulators and data specialists. XBRL taxonomies also empower these specialists, enabling them to attain direct control over exactly what is being collected and the manner in which it is validated.

## Consultation

A vital part of ensuring that data requirements are suitable is the use of high-quality consultation processes with external stakeholders. Using taxonomies of data requirements enables improved interactions with providers and users of information. Providers are better able to understand concepts when they can see the relationships between them. Taxonomies also allow agencies to demonstrate the way they will use information that is being sought.

Many regulators complain that their providers do not review new data requirements until it is too late to make changes. The use of focus groups and beta testers along with the involvement of vendors, the audit profession, and other regulators should all be considered in this part of the process. External input will help agencies get the definitions right, and it will highlight those aspects of agency proposals that could prove overly burdensome.

## Design Reform

By leveraging the taxonomy, agencies can design new requirements, rationalize existing ones, and improve the design of desired reports. This phase, which also involves a detailed examination of the business and functional system workflows, results in a functional design that can be used directly by information technology specialists in the delivery stage. The taxonomy becomes the basis for adaptive systems, which can shift relatively easily, as changes are made.

## Delivery

Data collection and e-filing review projects will involve a review of the effectiveness of existing technologies. Sometimes implementing reform can be done with existing infrastructure; in other situations more fundamental modernization is required.

Experience shows that realizing full benefits generally requires a range of change management within the organization. Altering the way things work requires that people understand the reasons for the change, the mechanisms and policies they need to adopt, and the support arrangements that exist to help them adapt. Ignoring these aspects of reform introduces substantial risks.

**Monitoring**

An agency can manage the acquisition and retirement of new data requirements, in a collaborative fashion, using its regulator’s taxon-

omy. With analytics and report design linked directly to the information, agencies are better able to understand which pieces of information they need, and which they do not.

The processes of managing data collection policy and balancing provider burden are ongoing. Leaders enable their organizations to succeed by developing reasonable procedures, sharing them with all stakeholders, leveraging technology so requirements can be better managed, and then monitoring and adjusting the process as necessary over time.

**Improved Information Collection Enabled by XBRL**

In the table below the Six Principles for Better Information Collection introduced on page 7 are mapped to benefits organizations can derive as a result of enabling regulatory reporting with XBRL.

Principles for Better Information Collection	How XBRL Supports These Principles
<p><b>Timely</b> To be useful, information needs to be available within a reasonably short period from the time of measurement. The “rear view mirror” view of any qualitative measure is only useful where information is current—and its currency rapidly fades.</p>	<p>By delivering data definitions in XBRL format to providers, regulators open the door to system-to-system data transfer, thereby eliminating the delays involved in rekeying and review and potentially reducing the time required for data to be consolidated within providers.</p>
<p><b>Accurate</b> Information should be free of data anomalies and errors and tested for manipulations.</p>	<p>The use of XBRL taxonomies—and especially agency-specific validation rules or “data edits”—improves data accuracy by ensuring that information is properly reviewed prior to leaving the provider. System-to-system data transfer precludes the possibility of data entry errors.</p>
<p><b>Reasonable</b> Regulators should seek to minimize provider burden (the amount of effort imposed on the regulated community by the scope of the data collection).</p>	<p>By drawing on public (generally accounting) taxonomies, and by using the standard as a universal format for data definition and improved cooperation between agencies, regulators are better able to understand, consult on, and mitigate provider burden.</p>
<p><b>Relevant</b> The definitions and interrelationships between data definitions need to be up to date and as tightly linked to information used for the running of the business as possible.</p>	<p>As XBRL accounting taxonomies are used more widely, and XBRL capabilities within the core products of many accounting system vendors rapidly evolve, regulators should be able to improve the relevance of the information that they seek from companies.</p>
<p><b>Efficient</b> The cost of collecting the information needs to be proportionate to the value of the data collected.</p>	<p>With XBRL capabilities being built into many accounting systems, and the improvements that adaptive data collection can bring, XBRL should help agencies control the costs associated with data collection.</p>
<p><b>Transforming</b> Legitimate governmental information needs change markedly over time. Sometimes information collections are allowed to go stale as a result of a policy that favors the private sector. Stale information is resented, and eventually ignored by users, or, perhaps worse, is assumed to remain relevant by agency analysts, who quickly become out of touch with industry developments.</p>	<p>With “living” taxonomies becoming the way that knowledge about regulatory reporting obligations is managed and improved, the capacity of agencies to move their collections with industry developments is substantially enhanced.</p>

## Why Data-Providers Should Adopt XBRL

The arguments for regulators to use XBRL are easily explained and understood. But how do regulated companies benefit from converting or upgrading their systems so they can provide information in XBRL? If making the change is not mandatory, what are the benefits and the incentives? Several reasons stand out.

### Use of XBRL Saves Time at the End of Every Reporting Cycle.

Today every company spends considerable time and effort complying with regulatory reporting demands and changes to reporting requirements. Some of the issues they have to contend with include the following:

- ▶ Compliance with regulatory demands is based on interpretations of paper-based legislation and regulatory guidance. These interpretations need to be made by individuals with high levels of technical skill within the company or outsourced to specialists.
- ▶ Each regulatory report is produced and verified either manually or with the assistance of a company-specific, custom-built technical solution.
- ▶ Despite the fact that companies need to report similar data to different regulators and external stakeholders, the re-use of reported figures for reports and ad hoc analysis can be difficult. Reports are often crafted from scratch if the preparer is uncertain about the definitions of the concepts used.
- ▶ Preparation and distribution of regulatory reports will typically include multiple manual steps as figures are created in one system but need to be reported in a form handled by another system.

XBRL enables reporting processes that have historically required substantial manual effort to be automated, or largely automated, for the first time.

With XBRL definitions provided by regulators and accounting authorities, and with disparate systems able to export XBRL either directly or indirectly, companies can now automate many aspects of regulatory reporting that might previously have been too difficult to automate. As a result, the risk of error and the time and costs associated with required filings are reduced.

### By Providing Information to Regulators in XBRL, Industries can Generate More and Better Benchmarking Information.

Industry-specific benchmarking information can help businesses understand how they are performing in relation to their competitors and industry peers. However, it is often nearly impossible using many older technologies (especially paper-based filings) to obtain consistent, comprehensive benchmarking data.

Where XBRL-formatted information is provided to a regulator, some or all of that information also can be provided to a third party to facilitate industry benchmarking. Such information can be easily combined with XBRL data from other sources, such as that offered by commercial information providers, further enriching the possibilities for analysis. Management benefits through a better understanding of the comparative performance of the organization. That this effort is cost-effective reflects the XBRL principle of “create once, use often.”

### Some Regulators Will Provide Companies with Direct Incentives to Use XBRL.

For some regulators, the advantages of receiving information in a standardized and electronic format are so great that they will offer incentives, such as faster service or useful benchmarking data.

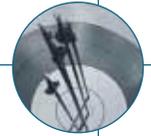
### Use of XBRL Is Rapidly Becoming Relatively Simple.

The process of putting information into XBRL format is becoming simpler. The August 2003 AICPA (American Institute of Certified Public Accountants) survey of software vendors found that 70 percent of relevant software firms either have already incorporated XBRL export capabilities into their accounting, general ledger, or ERP software, or have plans to do so by the end of 2004.<sup>6</sup> Moreover, the release in 2004 of the Microsoft® Office Solution Accelerator for XBRL will allow users of Microsoft® Office 2003 to create XBRL directly out of familiar applications such as Microsoft® Word and Microsoft® Excel.<sup>7</sup>

In summary, XBRL offers an opportunity to:

- ▶ Capture and document the connection between internal corporate reports and regulatory reporting requirements
- ▶ Reuse this setup consistently for every report
- ▶ Identify changes in regulatory reporting demands and to delegate fulfillment throughout the organization
- ▶ Automate (the tedious part of) compliance checking
- ▶ Ease transfer of figures from one system to another
- ▶ Identify definitions of reported concepts, enabling both drill-down and further aggregation
- ▶ Use the regulatory concepts as a skeleton for company-specific extensions of concepts, guidelines, controls, and reports

## CONCLUSION



New regulation, increasing demands for improved accountability, accelerated reporting deadlines, and the rapid evolution of Internet-based government initiatives are creating new pressures on regulatory agencies around the globe. These agencies need performance information that is increasingly timely, accessible, and relevant. They need to reduce the burden their providers experience in reporting to them, trust the information they receive, and, in turn, provide reports that are valued. They need to manage these processes continuously if they are to serve their stakeholders appropriately.

With proper reporting policies and processes in place, use of XBRL can help agencies improve their success at fulfilling these goals. It can help them improve the timeliness, accuracy, and rel-

evance of their reporting. It can also help them change reports to meet new needs. To fully realize the potential benefits of standards-based data collection, however, organizations need to focus on improving their reporting policies and processes as well as the risks they face due to poor-quality information.



### Next Steps

Now that XBRL provides a widely accepted standard for defining, exchanging, and disseminating business reporting information, the data collection process will once again evolve. An adaptive data collection process, built from the ground up around taxonomies, promises to deliver a number of new advantages:

- ▶ Tight integration with industry taxonomies, such as GAAP standards, improving the relevance and reliability of the data
- ▶ Improved potential for data- and concept-sharing across government agencies
- ▶ Strong incentives for providers to deliver information with end-to-end integrity

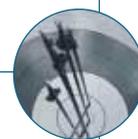
This standards-based technology will, over time, lead to improvements in timeliness, accuracy, and relevance.

Ensuring that the collection is reasonable and that the process is efficient requires well-developed processes, a well-managed consultation framework, and a degree of commerciality in the way that the data collection systems and processes are administered.



## APPENDICES

## APPENDIX I: DEMYSTIFYING XBRL



XBRL is an XML-based<sup>8</sup> format for preparation and publication of business reporting information.

Designed for financial statements and other types of complex business reports, XBRL handles multiple currencies, time periods, and reporting frameworks. Often referred to as “bar codes for financial statements,” XBRL can be compared to the ISBN numbering system used in the publishing industry (see sidebar: *An Analogy—ISBN Bar Codes*).

### Using XBRL

XBRL enables the reporting of information *content* while capturing the relevant information *context*. A hard-copy financial report (or a PDF or Excel file) cannot be fed automatically into a data analysis system. To convey information in context into another report or another system, one has had to either re-key it or produce a customized interface from one system to another that facilitates the proprietary interchange of electronic data. By conveying context at the same time as content, XBRL eliminates the need to re-key information or develop customized information feeds.

### An Analogy—ISBN Bar Codes

The effect of XBRL tags in business reporting is comparable to the effect of bar codes in the publishing industry. Since 1970, the ISBN (the International Standard Book Number) has allowed publishers or group agencies on behalf of publishers to categorize books and other publications, define their content matter, and then assign a unique identifier to them. More recently, and almost ubiquitously, ISBNs have also been printed as bar codes on books and magazines.

Thus, with knowledge of the ISBN, or a bar-code scanner to accurately identify the ISBN, one can identify the author, the date of publication (and which issue is current), the publisher, the subject matter of the publication, and the price.

A publisher with a new book to print can apply a new ISBN to it, upload the new entry to the appropriate catalog, and then print the book with its identifier. Anyone can use that unique identifier to instantly access the catalog information. Since ISBNs are machine readable via a bar code, users can look up the code to learn about the publication with just that code. Whatever the age of the code, its definition can be accessed.

XBRL works in a similar way. Of course, the tags in this environment relate to individual concepts inside a report—a bit like having a different ISBN for every page of a book—but similar properties accrue to XBRL tags. That is, the tags ensure that a single, well-understood definition is available to users of the information so that users with no knowledge of each other can still exchange information, reliably and electronically. Where one of the concepts in common use does not quite fit the bill, creating a new, unique definition that others can access is a straightforward exercise. One can publish the definition and allow unrestricted viewing of the new concept, or keep it inside the organization or within a circle of trusted parties.



Consider the spreadsheet below, *Figure 3*. For a human, it takes only a moment to synthesize the contents of the table and to grasp that cell C9 represents 16,000 in Tangible Assets for the 2003 financial year. Consider how a computer might digest the contents of cell C9. At best, the computer will know that the number 16,000 appears at cell C9. At worst, it will just know “16,000.” XBRL allows computer systems to communicate the entire context that a human needs to fully understand a concept. Up until now it has been necessary to repeatedly re-key data from paper to system, manually cut and paste data from system to system, or write custom interfaces between systems. XBRL, by encapsulating context with content, can bridge the gap between disparate systems.

**Figure 3: Content in Context**

	A	B	C	D
1				
2	<b>Balance Sheet</b>			
3	at September 30, 2003			
4		Note	2003	2002
5			€ 1,000s	€ 1,000s
6				
7	<b>Fixed Assets</b>			
8	Intangible Assets	15	7.3	11.7
9	Tangible Assets	16	16.0	15.3
10	Investments	17	3.5	6.3
11				
12				
13				
14				

Thousands of euros.

The numbers in this column relate to the 2003 financial year.

We are looking at “tangible assets.”

Tangible assets are a type of fixed asset.

There is more information about this number in the notes to the accounts.

Source: KPMG International, 2004.

## Taxonomies

Governed by a formal specification, XBRL can be used to create dictionaries, or “taxonomies,” of data definitions that classify users’ information requirements. Since financial information is usually based on accounting standards—local Generally Accepted Accounting Principles (GAAP), for example, or International Financial Reporting Standards (IFRS)—substantial effort goes into the encapsulation of their disclosure requirements into XBRL taxonomies.

## Approaches to Taxonomy Development

XBRL taxonomies encompass detailed definitions of a regulator’s requirements, including references to authoritative literature, multiple language labels, the relationships between data items, and validation rules that need to be applied to the data. Users, including regulators, can create their own definitions or add their own requirements onto foundation terms published by other groups. In addition, where the receiving organization allows it, companies that are providing business reports can add their own set of definitions that describe specialist or unique aspects of their organization. In other words:

- XBRL can be used to capture the regulator’s requirements alone, in one or more of its own taxonomies. This approach is especially sensible where regulatory requirements and accounting obligations overlap in limited ways (for example, where the performance information being measured is non-financial, such as energy production statistics). This approach can also be used where local accounting concepts have not yet been encapsulated as XBRL taxonomies. Links between official taxonomies and regulatory ones can be created in due course.

- Regulators can use a “building block” approach to add their requirements to those provided by local XBRL or accounting organizations. This approach is used where the reporting obligations imposed on regulated companies include accounting disclosures. Users of this approach would include statistics agencies, financial services regulators, grants administrators, and federal agencies seeking performance reports from local authorities that spend federal funds.
- Where the regulator needs to move beyond the “forms” approach to collecting data, XBRL offers a “building block plus” approach to taxonomy development. In this environment, in addition to defining regulatory “building block” taxonomies, the regulator accepts “extension” taxonomies from reporting companies. This approach allows the transmission of detailed definitions at the same time as conforming data. Typical users would be tax and securities regulators. Such an approach puts the “X” (eXtensible) in XBRL to work, and it demonstrates one of the key purposes of the XBRL standard.

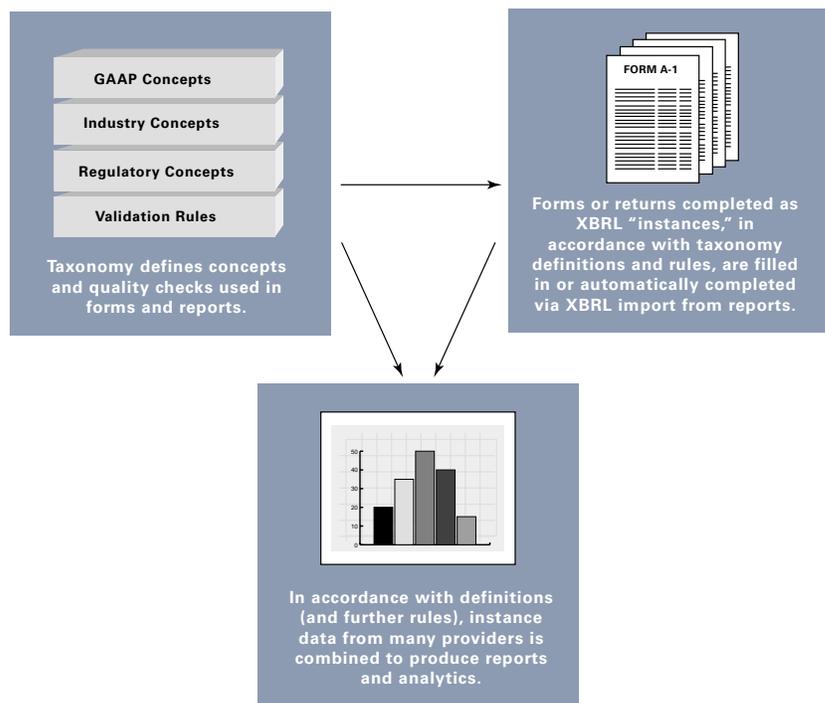
Regulators can use taxonomies as a central repository of definitions about the information they collect. Much as a biological taxonomy helps scientists identify individual plants and animals, XBRL taxonomies help users find the right reporting term.

### Instance Documents

Organizations that need to report to regulators use taxonomies to understand what they need to disclose—and how it is to be presented—often helped along by forms and templates. With the help of XBRL-compliant software, providers create an “instance document,” which identifies the organization, the report’s time period, and similar *contextual* information. *Figure 4* depicts the relationship between a taxonomy, an instance document, and the reports generated from them.

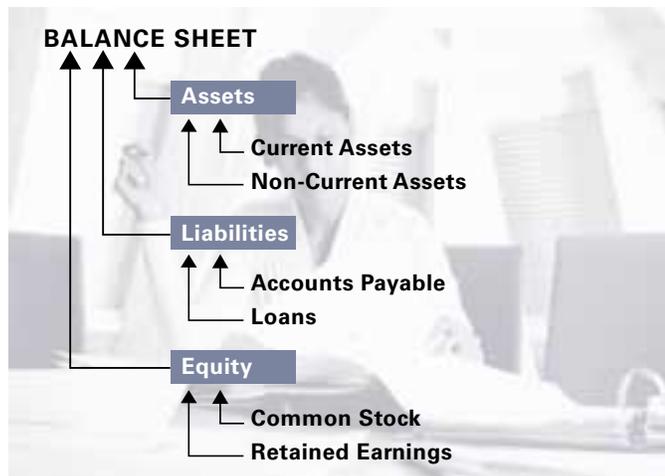
For example, a taxonomy may be created for a simple balance sheet containing the definitions for common concepts such as assets, liabilities, payables, and others. However, the balance sheet is not a collection of jumbled concepts; it has a structure showing the relationship between concepts. *Figure 5* on page 18 shows how a taxonomy document depicts the relationships between the concepts in the balance sheet example.

**Figure 4: The XBRL Specification Provides a Framework for the Production of XBRL Reports**



Source: KPMG International, 2004.

**Figure 5: Example Structure of a Taxonomy Document**



Source: KPMG, 2004.

The actual data in a report is contained in the instance document, which provides the values ascribed to each concept defined in the taxonomy, at a particular “instance”—in currency or in another measure. *Figure 6* shows an example of an instance document for the balance sheet example.

**Figure 6: Example Instance Document for a Balance Sheet**

Fact	Value	As of Date
Accounts Payable	90	Dec. 31, 2003
Current Assets	150	Dec. 31, 2003
Loans	25	Dec. 31, 2003
Non-Current Assets	375	Dec. 31, 2003
Retained Earnings	120	Dec. 31, 2003
Common Stock	290	Dec. 31, 2003

Source: KPMG International, 2004.

The concepts at the heart of the report, such as the meaning of “assets,” can also be captured in the taxonomy document through links to reference material, such as the related authoritative accounting standards (GAAP, IFRS), legislation, or regulatory standards. In organizations that develop a taxonomy for use internally, these references could also link to documents such as the accounting procedures manual.

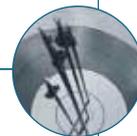
To make sense of the information, the two documents are brought together in a presentation document—a meaningful business report—as shown in *Figure 7* below.

**Figure 7: Example Business Report for the Balance Sheet**

<b>Assets</b>	
Current Assets	150
Non-Current Assets	375
<b>Total Assets</b>	<b>525</b>
<b>Liabilities</b>	
Accounts Payable	90
Loans	25
<b>Total Liabilities</b>	<b>115</b>
<b>Equity</b>	
Common Stock	290
Retained Earnings	120
<b>Total Equities</b>	<b>410</b>
<b>Total Liabilities and Equities</b>	<b>525</b>

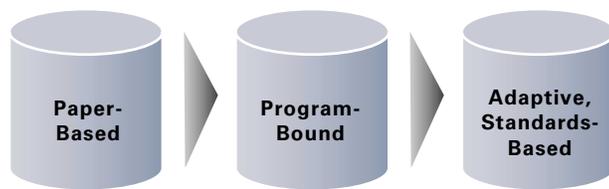
Source: KPMG International, 2004.

## APPENDIX II: HOW DATA COLLECTION PROCESSES ARE EVOLVING



E-government initiatives and general modernization have prompted substantial change in data collection processes in recent years, with a clear spectrum of sophistication and automation in place (see *Figure 8*).

**Figure 8: A Data-Collection Transformation**



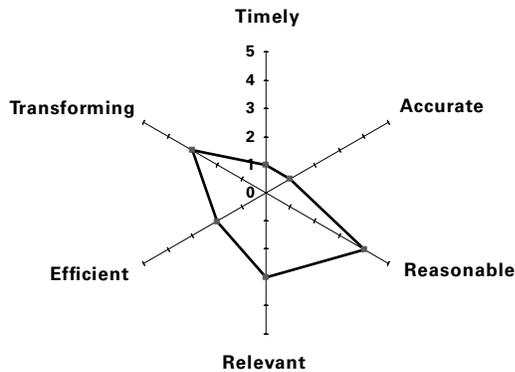
Source: KPMG International, 2004.

In summary:

- ▶ **Paper-based** forms have been the data collection strategy of choice for many regulators for decades. Although such forms are often examined individually, they may also be re-keyed or scanned with OCR (optical character recognition) technology. Paper-based data entry is typically expensive, in terms of the direct costs of data entry and processing, and in terms of the generally poor quality of the end product. Indeed, errors and delays are an inevitable, well-understood aspect of a paper-based approach to data collection.
- ▶ **Program-bound** data collection encompasses the custom creation of electronic versions of paper forms, using either regulator-provided software or, more recently, e-forms within a Web browser. Creating electronic forms is both expensive and error prone—doing it right involves the hand-coding of each form and continual interaction between the subject matter experts and the information technology group—but such forms result in higher-quality data than is produced in a paper-based system.
- ▶ **Adaptive/standards-based** data collection processes refer to the most recent advances in this field, where, through the development of information requirements, the subject matter experts are able to directly drive the creation of the electronic forms required. Further, with standards such as XBRL, agencies facilitate end-to-end integrity in reporting, as information produced by company systems can be securely transferred directly to regulator systems. In this metadata-driven environment, the process of collecting data becomes seamless, and in certain circumstances need not be driven by forms.

The “radar” charts in the sections below help show the relative characteristics of each of these data collection strategies. The scale of each of the charts provides a Likert scale, where “0” is very poor and “5” is very good. Their criteria are based on the six principles for better information collection described on page 7.

**Figure 9: Paper-Based Data Collection**



Source: KPMG International, 2004.

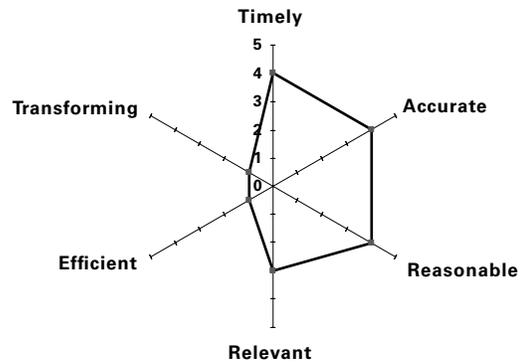
**Paper-Based**

Many organizations continue to acquire information using paper-based forms, or free-format paper-based reports (such as financial statements or tax calculations). They may choose this option because of concerns about the ability of less sophisticated providers to submit information in electronic form or because of an outdated, but difficult to change, legislative restriction. Budget constraints may also explain this choice, especially because the data collection function, while crucial, is often the “poor relation” within agencies. Another driver, particularly for securities regulators and companies’ registrars, tends to be the semi-structured nature of information being provided by the private sector. Full financial statements and similar disclosures cannot readily be bound to a form.

Most paper-based data collection efforts are:

- ▶ **Provider friendly.** The fact that paper is used is often an indication that the information is relatively static and unchanging. The agency has its forms and may be loathe to make changes (although doing so is likely relatively simple). So paper-based systems score well on the “Reasonable” measure, and fit around the middle of the band in relation to the “Relevance” measure (Figure 9).
- ▶ **Neither timely nor accurate.** Where provider information is left on paper, it is inaccessible, and neither comparative nor benchmarking data can be developed from it. On the other hand, where information is keyed or scanned into a database or other information management system, delays and errors become unavoidable and potentially substantial.
- ▶ **Inefficient.** While the absolute costs associated with a paper-based mechanism can be quite low, that low cost tends to be an indication that very little is done with the data once it is available. Moreover, the costs associated with the manual effort to re-key data can be extremely high.

**Figure 10: Program-Bound Data Collection**



Source: KPMG International, 2004.

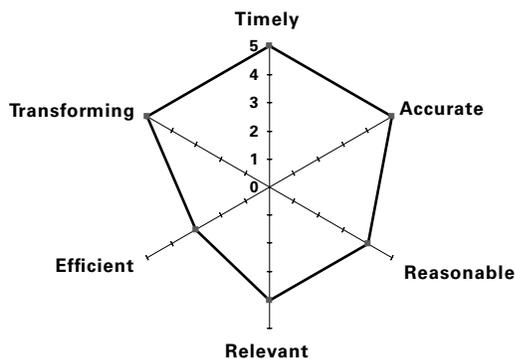
## Program-Bound

In a program-bound environment, the agency has moved to collecting data using electronic forms. Developing such forms involves creating computer programs, which are hand coded and based on the hard copy specifications developed by the regulator's data specialists. Providers generally key data into the forms, although a small number use either custom or EDI-based (electronic document interchange) data transfer protocols.

While such a program represents a major advance from paper-based filings, the mechanism for developing electronic filings tends to be inflexible and can become stale because of the costs involved in making changes. In addition, if the regulator defines the format for providing data, the use of that format is restricted to those companies that invest in building custom mapping processes that align with it.

The strength of these "program-bound" data collection processes is that information arrives at the agency electronically, and agencies have generally imposed certain validation checks "at source." Thus, these processes score reasonably high for "Timely" and "Accurate" (Figure 10). On the other hand, these first-generation data collection processes tend to be difficult and expensive to maintain, with substantial delays and complexities introduced whenever the need arises to alter the information content. Consequently, these processes tend to be relatively inflexible, scoring low on the "Transforming" measure.

**Figure 11: Adaptive/Standards-Based Data Collection**



Source: KPMG International, 2004.

## Adaptive/Standards-Based

Adaptive systems use the current generation of metadata management tools to allow the business specialists who design the data collection, its validation rules, and resultant analytics to develop the collection "specification" in a way that can be directly converted into forms and database tables. These systems are highly efficient, and they address the reality that change is a constant in this field (Figure 11).

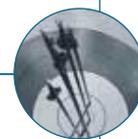
Adaptive systems draw on the metadata to determine:

- ▶ The design of the data warehouse
- ▶ The design of the forms used to collect information
- ▶ The rule applied to collected information
- ▶ The business processes to be triggered on the basis of the data received.

These capabilities contrast with program-bound approaches, in which such decisions are hard-wired into the supporting IT infrastructure. By enabling the customization at the metadata level, rather than at the systems level, XBRL allows organizations to:

- ▶ Accelerate the availability of systems to support new data collection requirements; instead of defining the metadata and then working through a long and costly systems development process, adaptive systems reduce the effort of changing data collection requirements to a metadata refinement exercise
- ▶ Avoid the need to maintain IT support for ongoing system-level changes
- ▶ Use more generic COTS (common off the shelf) software alternatives
- ▶ Ensure that the documentation of data collection requirements is synchronized with the actual data collection and the processes that it drives.

## APPENDIX III: INTERVIEW WITH MICHAEL RUGAARD, DANISH COMMERCE AND COMPANIES AGENCY



Michael Rugaard is XBRL project manager at the Danish Commerce and Companies Agency (DCCA), which has developed an XBRL application to allow companies to file their financial statements electronically. Mr. Rugaard discusses how DCCA's efforts should increase visibility and improve transparency for Danish businesses.<sup>9</sup>

### **What are your goals and challenges in implementing XBRL?**

We have had two major challenges. Number one is that today, it's extremely easy for businesses to report to us. Their accountants finish their annual reporting, photocopy it, and send it to us, and we scan the printed pages. So when we tell businesses and accountants that we would like to get their information as structured data in a digital way, we're asking them to do more work. Most businesses now have structured data in their ERP systems, and they communicate frequently with their accountants in a structured digital way—but not in XBRL. If we could encourage the accountants to adopt XBRL, they could map the data with our taxonomy and send instance documents to us. But it's still very easy for them to just send us a photocopy of the annual report.

The other challenge has been to create a technical solution that will allow for all the varieties of XBRL use. The market hasn't had many tools on which to base the solution, but they're emerging now. We have had to develop something from scratch, but we now have a solution that will validate XBRL in a way that satisfies our needs. We're testing it, and we're going to have to stress-test it as well, and next year we'll be able to receive as many XBRL instance documents as we can possibly get—which leads us to our next challenge: why should anybody bother to send us structured data? The answer will be that over time, they will benefit from doing so, and provider burden will decline.

### **How will the use of XBRL help DCCA reduce the level of provider burden its requirements may pose?**

Overall provider burden will decrease when a significant number of participants in the digital supply chain are using XBRL. We are trying to create a situation in which participants ask for XBRL instance documents as reports. We're speaking to banks, accountants, and various trade organizations to encourage them to ask for XBRL data, rather than paper-based data, from their members or clients or customers. Our goal is to make XBRL the format in Denmark for exchanging financial data—which will provide a number of reasons for businesses and/or accountants to use it. That way, in two to five years, it will be an advantage for businesses and accountants to start working with XBRL—they'll be able to use it with a number of agencies and private-sector participants. We're currently working with Statistics Denmark and the tax authorities, and they have agreed that XBRL will be the digital format for providing financial data as well as for communicating changes in the law—what data they want and how they want it.

Our goal for 2004 is to have three percent of everything filed with us to be in XBRL. In 2005 the goal is 25 percent and 60 percent in 2006. But for small companies, filing with us in any format is considered a burden. They don't necessarily understand that filing with us is something you do for the market, not the government. The data we collect is used much more by private-sector agencies than by other government agencies. So, it's actually the consumers of data who benefit from our developing an XBRL application and collecting structured data. It is not going to save us much time or money; we do it for data consumers and to support the digital supply chain on the financial data side.

### **How is encouraging market adoption part of your strategy?**

We're not only working with accountants and trade organizations; we're also speaking with ERP and accounting software vendors about how they could implement XBRL. How we develop our taxonomy could influence the way the software vendors create their solutions.

Microsoft, for example, is coming out with an "accelerator" in Excel and Word that incorporates XBRL. They want to make sure their accelerator will work with our taxonomy, because they'd like the first examples of the use of this taxonomy to come out in an Excel form. That's actually very good for us, because the small accountancy firms that provide the bulk of everything that's reported to us use Word and Excel. We want them to either use the Excel version with the Accelerator to make an instance document or, alternatively, use our little Web-based application, which will import their Excel data and export it as paper as well as XBRL. They can edit a little bit in it, so the data will look the way they want it to, and they can easily send it to us even if they lack an email system. Our goal is not that people use our little application but rather that they make their annual filings in a digital structured way.

### **How will XBRL help you be more responsive to your stakeholders? How will it benefit the market as a whole?**

If we meet our goal in three years' time and 60 percent of all companies file with us digitally, the market will gain quick insight into much more data, of higher quality, than it has access to today. When somebody files with us, we scan the document and make it available on the Web, for anybody who wants to pay for it. Next year we'll be able to provide it as structured data, which makes it a lot more valuable for any analytical purpose. Nobody needs to retype the data, which means no input errors and much higher quality. Not only will there be more useful data, I believe it will also be cheaper for anyone to use.

We don't expect to create user interfaces for people to do stock analysis or benchmark analysis or surveillance of competition. We can't do all those interfaces in a way that would work for everybody. So we're going to make open, system-to-system interfaces, so that third-party vendors can create customized interfaces for their customers. It could be banks that have portals for investors or clients, or industry units, or accounting firms—anyone who wants to provide a user interface for XBRL data. They gain instant access to fresh data in the way they want it, and they can analyze in exactly the way they want.

That will make business data a lot more interactive, and it may also make certain companies more attractive in the international markets. Say there's a business analyst in Paris or New York trying to develop equity investment recommendations. He or she is not going to go around the world scouting for paper documents, or scanned documents. If he or she can get XBRL documents instantly, those documents will be ones examined.

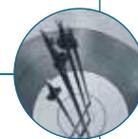
### **How will use of XBRL improve the visibility of Danish companies? How else might they benefit?**

Danish financial data will be a lot more exposed than ever before, and that's going to create a different market situation for some companies. I think it will certainly affect new and small companies for whom raising capital is an issue. They'll be able to attract new capital more readily.

### **Over time, will those who use XBRL need to make changes in their business plans?**

If I'm right the data will be more exposed and more interesting to more people. Consequently, there will be a greater openness about how businesses perform, and that may lead to demands about how reports are produced. If you're a small bike shop you may not have to change your business plan, but if you're a small manufacturer of bicycles then you may want to do so because all of a sudden a lot more people are interested in your performance data and they have access to it and they can compare it with your competitors'. This openness about financial data may lead to a different way of operating your company. I don't think it's going to mean much to the very small businesses—and we have a number of those in Denmark—but for midsize businesses it might have an impact. It might also lead to changes in the law regarding how companies should file with us.

## APPENDIX IV: INTERVIEW WITH DON INSCOE, FEDERAL DEPOSIT INSURANCE CORPORATION



The United States' FFIEC<sup>10</sup> banking agencies—the Federal Deposit Insurance Corporation (FDIC), the Office of the Comptroller of the Currency, and the Federal Reserve—have contracted the development of an XBRL-based process to collect, validate, and distribute Call Report data. The Call Report—the commonly used term for the Consolidated Reports of Condition and Income—is a document all U.S. banks must submit quarterly to their primary federal regulator. Don Inscoe, Associate Director of the FDIC's Division of Insurance and Research, talks here about the effort to use XBRL to enhance the Call Report process as well as other initiatives the FDIC is participating in to modernize the information exchange and reduce regulatory burden.<sup>11</sup>

### **How do you expect that the providers and users of the FDIC's Call Report will benefit from the use of XBRL?**

Using XBRL within this new Call Report submission process will enable banking regulators to collect more accurate data from banks faster and to publish the data sooner. The new system will provide bankers with better information and capabilities to validate their reports before they submit them.

Every bank is required to have three officers attest to the accuracy of its Call Report. Once the report is sent in, questions often arise concerning the data. XBRL will be used to distribute validation criteria to banks during the Call Report preparation process. With the XBRL-based system, banks will have an improved understanding of the reporting requirements and will be more confident that what their officers have attested to is correct. Banks and other interested parties, including bank regulators, policy makers and the public, will benefit from having more timely and accurate data. Banks will have better information to formulate strategies, establish performance benchmarks, and become more competitive. Regulators rely on Call Report data to assess overall industry condition as well as individual bank risk. Policy makers and the public use the data to make investment decisions, provide services, and to make informed public policy

decisions. More timely and accurate data will facilitate better decisions on the part of banks and their stakeholders. The industry will be a stronger industry and the public will be better informed.

We have already implemented improvements to the process so that Call Reports are released earlier and in more useful formats. You can see the results on agency web sites that provide capabilities to develop customized reports with unique peer group comparisons and download databases into common formats for further use. The new XBRL-based process will further shorten the amount of time required to disclose Call Reports. Ultimately the new process should also reduce the industry's costs incurred to report data to their regulators and should make the data more useful for a wider variety of purposes.

### **Why is "real time," or perhaps "realistic time," reporting, important to banks as well as their regulators and consumers?**

Banks use Call Report information primarily for competitive analysis to provide context for assessing and improving their own performance. The more timely the data, the more relevant it is to banks' planning and decision making. The Call Reports are based on Generally Accepted Accounting Principles (GAAP). The standardization of bank financial reports has permitted the creation of extensive and detailed compilations of comparative performance data for this industry. However, there has been little progress so far in extending this data comparability beyond the banking industry, even though an increasing share of the competition that banks face is coming from nonbank entities. Mapping data across different types of financial reports with consistency and full comparability today is a laborious and ultimately limited exercise that is fraught with difficulties. The promise that XBRL holds out is a future where data consistency and comparability are the fundamental building blocks of financial reporting for a wide range of commercial enterprises.

Call Report data has become essential to almost every aspect of our business. More accurate and timely data will help ensure that we are seeing the correct and most up-to-date picture of individual banks and industry groups. Collectively the regulators use the data to support both off- and on-site supervision of banks, including safety and soundness examinations, and to gauge compliance with laws and regulations.

The FDIC, unlike the other bank regulatory agencies, uses the data to support its unique deposit insurance mission. In this regard, we use Call Report data to help identify banks that might fail and to estimate our costs to cover depositors in the event of failure. The other banking agencies also use the data to supervise banks, and the Federal Reserve uses it as input for monetary policy considerations. Consumers can use the information to verify that a bank that is seeking their business is covered by FDIC deposit insurance and to locate a convenient banking location. Consumers, where they are exposed to risk, can monitor the health of banks they do business with.

In a speech to the American Bankers Association on September 21, 2003, Chairman Don Powell spoke about risks that banks need to now consider. He spoke of the trends in banks balance-sheet risks as well as broader generational and cultural shifts, such as the move away from banks and thrifts for non-bank intermediated lending and investing. As a key industry regulator, presumably these are areas that the FDIC needs to monitor as well. How do you envision your organization continuing to manage this complex process of gathering and analyzing the information you need in a way that ensures you can see both the big picture and the details?

Chairman Powell often shares his belief that we at the FDIC must be poised to meet the needs of the 21st century and 21st century consumers. The benefits of the Call Report Modernization project and the capabilities provided by XBRL will better position us to meet those needs. It will help us move closer to quality real-time data by providing more timely access to, and greater confidence in, the financial information we require from banks. It will also permit banks to perform a broader analysis of their performance vis-à-vis their non-bank competitors.

We're in the process of enhancing our risk management activities at the FDIC. Last year, the FDIC commissioned an independent evaluation of the processes and methodologies we use to determine the amount of reserves that we need to hold against possible future bank failures. This is important, because holding too much in reserve for problems that could occur in the future reduces the resources available to banks to support the economy. If reserves are too low, then the FDIC probably would have to assess the banking industry during less prosperous times when they can least afford higher costs. This concern is not hypothetical. Deposit insurance assessments increased threefold in the early 1990s when banks were failing in large numbers and the industry's profitability was diminished.

Today we are also implementing new business processes that increase our reliance on models that require good information. These models are used to estimate the probability of bank failures and how much it would cost the FDIC to protect insured depositors if a bank fails. In order for this system to really work as intended, we need good data from the bank's data that is both more accurate and more timely. XBRL will help us accomplish these goals.

**How much pressure do the FDIC and other regulators come under to minimize red tape and regulatory burden, in terms of the reports that banks need to provide to you? How do you manage this delicate balance?**

When federal agencies propose to expand the amount of information they collect from the private sector, they must consider the potential burden of their proposals in accordance with highly structured formal statutory requirements. A process involving several steps is in place for implementing changes to the Call Reports as a result of The Paperwork Reduction Act. This process requires extensive debate and interaction between the agency and industry, and any changes must ultimately be approved by the U.S. Office of Management and Budget. There have been a number of ongoing initiatives to reduce regulatory burden on banks. The agencies are required to review their regulations every 10 years to eliminate unnecessary regulations. Our missions require interaction with the industry, and these interactions impose cost on the private sector.

The new XBRL-based technology could ultimately affect bank operations in a number of ways. At the outset, banks will not have to modify their internal systems to use the new system. Virtually all banks are currently using Call Report preparation software purchased from private sector vendors. Vendors providing this service to banks are already modifying these tools to obtain and apply Call Report business rules, or taxonomies, which are expressed in XBRL format.

The new process should enable institutions to have better information and tools to submit their data, and it should make the data more useful to them as it becomes more timely and reliable. And while there may be some up-front costs to some of the participants in the information supply chain, we believe that over time it will lower costs for both regulators and banks. Banks will be required to explain “edit exceptions” before they submit their report, not after.

In the longer term, we expect that there will be business advantages to revamping systems to take advantage of XBRL capabilities to manage, consume, and share information. As with any new technology, adoption becomes compelling when it becomes justified by cost-benefit business analysis. Ultimately, the amount of benefit—which includes cost savings—will depend in part on the development and adoption of standard taxonomies. The development of the BASI and C&I taxonomies for banks, thrifts, and commercial entities is an important beginning to this process.

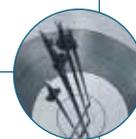
#### **How does this shift towards end-to-end integrity, and getting information to regulators and executive decision-makers faster, help the FDIC and the other bank regulatory agencies in your work?**

There are many implications for all constituents. With XBRL standards-based technology, businesses could move to more integrated systems increasingly quickly, especially when the standards become widely used. Easier sharing of information means more processing could be performed by third-party providers. Stovepipe systems within an organization could be replaced by open systems with proprietary services, regardless of who owns the system. Organizations will own data but will not have to own all of the systems that manage the data. As a result, we might expect to see new information business niches that contribute to the efficiency of the banking industry and the economy.

Open systems and standard taxonomies will further enable globalization of many business processes. For example, developing countries might find opportunities to modernize business process to achieve efficiency and become competitive more quickly than they might have been able to do without XBRL technology.

As for the FDIC, we will restructure our internal processes for collecting and validating information. The cost to validate the information will decrease, and analysis can be moved to an earlier stage in the information collection chain—improving the usefulness and potential value of the information for all those who rely on Call Report data.

## ENDNOTES



- <sup>1</sup> [http://europa.eu.int/comm/eurostat/research/index.htm?  
http://europa.eu.int/en/comm/eurostat/research/dosis/teler/&1](http://europa.eu.int/comm/eurostat/research/index.htm?http://europa.eu.int/en/comm/eurostat/research/dosis/teler/&1)
- <sup>2</sup> <http://www.eogs.dk/sw660.asp>
- <sup>3</sup> *American Banker*, "FDIC to Debut System to Speed Disclosure," September 23, 2002.
- <sup>4</sup> Discussion with Jeff Smith, Service Development Leader for Companies, U.K. Inland Revenue, December 2, 2003.
- <sup>5</sup> *Australian Financial Review*, October 25, 2001.
- <sup>6</sup> <http://www.xbrl.org/resourcecenter/whitepapers.asp?sid=22>
- <sup>7</sup> <http://www.microsoft.com/office/solutions/accelerators/default.msp>
- <sup>8</sup> XML refers to Extensible Markup Language, "a simple, very flexible text format derived from SGML [Standard Generalized Markup Language].... Originally designed to meet the challenges of large-scale electronic publishing, XML is also playing an increasingly important role in the exchange of a wide variety of data on the Web and elsewhere." <http://www.w3c.org/xml>
- <sup>9</sup> Telephone interview with Michael Rugaard conducted on October 13, 2003.
- <sup>10</sup> Federal Financial Institutions Examination Council
- <sup>11</sup> Telephone interview with Don Inscoe conducted on November 23, 2003.



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Carole Law

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Campbell Pryde

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