

*Technology will be pervasive—but where
will accountants fit in?*

ACCOUNTING IN 2015

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IN BRIEF

What Will the Next 15 Years Bring?

The single greatest change agent facing accounting in the next 15 years is technology. Emerging trends in technology will fundamentally alter the way in which both business and accounting will be conducted. The measurement and reporting of business transactions, long considered a core competency of accountants, will be challenged by the information economy, forcing accountants to justify their role in business. The foundations of the profession will be eroded by the opposing demands of emerging services and established values.

Nevertheless, technology alone cannot give information meaning and relevance. Network software could allow auditing to evolve into a more comprehensive process of continuous assurance, where software constantly monitors the operating and reporting structure and auditors step in when difficulties warrant a strategic correction. The globalization of the financial markets and increasingly specialized demand for business information will certainly challenge traditional accounting and reporting models but will also likely increase the demand and value of the right information presented to the right consumer at the right time. In the convergence of business and technology, the market will have to choose whom it trusts—and accountants can make sure that they remain the trusted professionals.

In the 19th and early 20th centuries in the United States—and in less developed countries today—one of the essential needs of business was the guarantee of physical security of assets from theft and sabotage. The problem was not just to hire guards, but to obtain guards whose integrity was assured. Even today, a retailer like Wal-Mart cannot conduct business without armored car companies. Yet few investors or analysts care about the steps taken to safeguard physical assets, confirming that such an assurance is a necessity of doing business rather than a source of competitive advantage.

While security companies were emerging to physically safeguard assets, the accounting profession was protecting shareholders from financial theft and loss caused by misinformation and fraud. Ultimately, after rampant abuses became obvious during the Depression, that role was codified by legislation mandating audited financial statements of public companies. Accounting firms, taking advantage of their privileged access to businesses, expanded far beyond auditing to provide broader financial and systems services.

Lately there has been a reversal of that trend, with the consulting arms being spun off or sold. If accounting firms once again concentrate solely on audits, that service must provide enough value to escape the fate of the old security firms. If accounting firms cannot use the audit as a means of “up-selling,” will the audit itself be seen as nothing more than a necessity to overcome the friction of information asymmetry? Will accountants become just another service provider?

The Relevance of Accounting and Reporting

The core competencies of CPAs are business measurement, reporting, and assurance. However, over the last half century the profession has progressively abandoned business measurement functions that rely on subjectivity, focusing instead on those with structured measurement rules. The profession has moved away from making judgments, sometimes at the expense of relevance. Rules and processes that were appropriate in the past are showing increasing levels of irrelevancy and have resulted in a profession in turmoil.

The number of accounting majors at U.S. universities has declined 23%, auditing fees have substantially flattened, professional service firms are losing interest in the audit product in favor of other higher margin services, litigation has obstructed the initiative of emerging firms to disclose relevant information, and many companies in other sectors are emerging with quasi-accounting and quasi-audit services, especially in the areas of e-commerce and online trading. Although 70% of retail stock market transactions are made online and by day traders with extremely short investment horizons, we attest on statements once a year, three months after the fiscal year closes.

Central to the future of accounting is the continuing relevance of accounting measurement for corporate management and firm valuation. The rise of new economy companies brings into question the elaborate structure of financial statements audited for conformity with GAAP. The recent market correction notwithstanding, there is undoubtedly a market perception that net income statements are losing ground as reliable indicators of future growth prospects. Unless accountants come up with metrics for new economy firms, their credibility will suffer across the board.

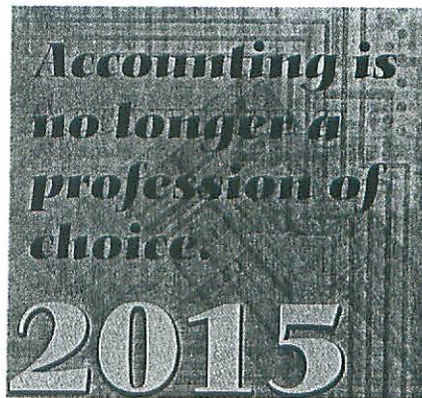
The balance sheet and income statement are ceasing to function as relevant measures of a business as underlying processes undergo profound change:

- Many companies only own research and development (R&D) and outsource distribution and manufacturing.

- Physical possession of inventory becomes meaningless where supply chain management is key.

- Businesses have adopted unorthodox ownership structures emphasizing alliances, tracking stocks, profit sharing agreements, and opportunistic joint ventures.

- Intellectual property is a primary source of a firm's market valuation, but traditional assessment methods understate its value.



The urgent challenge facing accountants is the creation of measurement and assurance processes that address business issues in the next decade. Many strategic and operational decisions are being made in ways that differ markedly from the ones in the traditional CPA toolkit. Exacerbating these pressures is the progressive wave of financial market consolidations around the world. Globalization will induce unrestricted, virtual, and continuous equity flows. Assurance and information will have a major role, but regulation will be challenging.

The Professional Environment

AICPA Chair Robert K. Elliott claims that 90% of CPAs do not perform certification functions, focusing instead on measuring and advising businesses. However, this makes the CPA vulnerable to direct competition from the MBA in general management. At the same time, insurers, appraisers, the Better Business Bureau, consumer groups, and credit card companies are offering assurance products that were once the exclusive domain of the accounting profession.

Accounting firms are caught in a vice between the decreasing relevance of profits of auditing and the increasing calls for auditor independence, forcing the divestiture of growing consulting arms. The consultants, once they are established in their own right, feel that they have nothing to gain from the link to the auditors. The pressure to "up-sell" inevitably creates the perception that auditor independence has been compromised. It is hard to see how this cycle can be avoided when there is so little attraction remaining in auditing—once the primary product of the accounting profession.

Several of the large professional service firms have announced B2B alliances with computer and brick-and-mortar businesses. This trend toward becoming more general business service firms will raise the fundamental issue of what an accountant is. What is remarkable about the divestiture of consulting arms to firms like CapGemini or Hewlett Packard is how the consultants seem to see no value in the original brand name. That is perhaps less surprising when one considers that traditionally-trained CPAs constitute less than half of all new hires by the large "accounting" firms.

Accounting is no longer a profession of choice, a distinction it shared with lawyers and doctors before the rise of engineers and IT professionals. The profession has increased the CPA education requirement to 150 hours not just to create better-trained professionals, but in the hope that the larger investment would serve as a barrier to entry. Unfortunately, the additional year of education to qualify for the CPA exam effectively lowers the relative cost of obtaining a MBA degree. Furthermore, the AICPA has suggested a broader, global business certification as a first step in becoming an accountant, with the CPA license pursued after some years of experience, and then only by those who really need the license. But where would that leave the profession of accounting?

IT Trends with Accounting Implications

Accounting is about providing information for managerial, investment, and financial decisions. When the inform

tion technology was paper, pencil, and abacus, the technological foundation of accounting was paper journals, ledgers, and double-entry bookkeeping. After information technology had progressed to powerful electronic computers and networks, accounting shifted to relational database management systems and enterprise resource planning. What will the technological foundation of accounting be in 15 years? How will it affect the daily life, job functions, and status of accounting professionals?

The major trends in information technology consist of automating procedures, developing more appropriate IT-based processes, and replacing analog with digital information. Progress has enabled revolutionary transformations in information technology. Under Moore's law, the computing power of silicon chips will multiply a thousand-fold in the next 15 years. Price will decrease inversely with performance. Although silicon technology may reach its physical limits within the next 15 years, it is very likely that the computing power will continue to grow exponentially as progress is made in alternative technologies, such as optical, quantum, and even DNA computers.

The progress of telecommunications has been even faster than computing. Most telecommunications network backbones are based on fiber optics, and the bandwidth of fiber is growing beyond the wildest expectations. While less than a decade ago the state-of-the-art long haul telecommunication lines (T-3) could transmit approximately 45 Mbps, today's lines (OC-196) have the bandwidth of 10,000 Mbps (more than 200 times greater). It is widely expected that this pace of development will continue and could even accelerate. It is argued that the value of a communication device is proportional to the square of the number of users (Metcalfe's law). The Internet currently has around 300 million users, and by 2015 it will approach 3 billion users. At that stage, the interconnectivity will reach deeply into personal and organizational activities, such as static receptors in devices (e.g., appliances and machinery, presence sensors, accounting activity sensors), monitoring devices (e.g., security, life support, drug trials), intel-

ligence agents (i.e., software acting on behalf of entities), and individual access devices (e.g., terminals, telephones, portable devices).

The usefulness of this ubiquitous interconnectivity is not to be underestimated. On the other hand, the contravening factor is the slowness with which human processes, organizational structures, and legal precepts change. All this interconnectivity will result in a world where, unlike in the past, the main problem will be too much rather than too little information. Is accounting prepared for ubiquitous real-world information, or will it have to fight to retain its relevance? Access to all this information will reduce the need for information middlemen such as accountants, but technology cannot overcome information asymmetries based on one-sided knowledge, and alleviating this disparity could be where accounting retains its traditional and important role.

New Technologies

The major technological advances and their implications for accounting that we are likely to see in the next 15 years include:

■ **Information capture technology.** Numerous types of innovative computerized information capture devices are likely to emerge, ranging from inexpensive and ubiquitous bar code scanners and video cameras to sophisticated biometrics devices such as iris scanners, all of which can be utilized to capture digitized information. Today's modern inventory and warehouse control systems use bar codes extensively. This technology will be surpassed by the introduction of smart item tags (based on the smart card technology) with a chip that uniquely identifies and describes an item and possibly a radio frequency transmitter that can communicate with the warehouse system, enabling the creation of smart warehousing systems that automatically feed up-to-date data into other enterprise systems. This type of tagging will eventually be related to forms of transaction and object tagging under XML and XBRL tagging standards for the account level.

■ **Access and monitoring technology.** Major transformations should be

expected in access control and monitoring technology. The various biometric devices will be integrated into enterprise systems to provide security, safeguard assets, and monitor important activities.

■ **Storage.** Digital storage capacity is growing even faster than chip computing speed. Terabyte storage devices make it possible to collect, store, and analyze numerous attributes of business processes and provide detailed information for decision making. The analysis of such detailed information allows the optimization of business processes both within an enterprise and throughout the supply chain. It will be an important challenge for management accountants to identify which data to capture and store and how to use it for measuring the business processes. Early attempts in this direction can be observed today in the development of such new types of enterprise systems as customer relationship management software. Miniaturization of storage devices will greatly expand the capabilities of next generation PDAs (personal digital assistants).

■ **Telecommunications and inter-networking.** As a result of the exponential growth of available telecommunications bandwidth, real-time multimedia applications will finally become possible in the next 15 years. Desktop video teleconferencing will provide broadcast quality picture and, combined with the progress in data capture devices, will result in a virtual presence that will significantly reduce the amount of travel necessary. Many audit-related activities will be carried out remotely via a virtual presence.

The successor of the current Internet protocol will likely rule the networks of the future, and Internet connectivity will become truly ubiquitous. Not only will every person have access to the Internet, but numerous devices, ranging from warehouse sensors to refrigerators, will also be connected to this next-generation Internet. The ubiquity of Internet connectivity will eliminate most discontinuities in the flow of information and enable the provision of real-time detailed information about business processes that will be used to satisfy and perform assurance functions. These technologies will permit

global auditing and proper documentation of findings.

Wireless communication will become even more common than wired communication. Every "wired" person will be carrying a hybrid device combining the features of a cell phone and a PDA. Many commerce transactions will be wireless-enabled. The bandwidth of wireless links, although remaining intrinsically inferior to that of wires or fibers, will be high enough to allow video communications. Such a device would have an always-on Internet connection and computing power comparable to today's mainframe computers. This computing power will make possible numerous artificial intelligence applications such as accurate speech recognition, negotiating agents, fraud detection agents, and on-the-fly foreign language translation.

■ **Pervasive computing.** The superabundance of computing power and networking will make computing pervasive. Computing devices will become so integrated in regular objects that they will become transparent. Their interconnection by means of both wired and wireless networking will lead to complex systems behavior. Every enterprise will be such a system, and monitoring, measuring, and reporting on such a system will be an ever more difficult task further complicated by the creation of virtual enterprises consisting of units specializing in certain links in the value chain. The enterprise boundaries will become progressively fuzzier due to outsourcing major business processes to application service providers on the one hand and tight integration of business activities with suppliers and customers on the other hand.

■ **XML standards.** To make the creation of virtual enterprises possible, industry groups will have to establish open standards for both data and processes. The beginning of this process can be seen today in the development of various business protocols and languages on the basis of the Extensible Markup Language (XML). In public financial reporting, this has led to the creation of Extensible Business Reporting Language (XBRL; see www.xbrl.com and the feature article

in this issue of *The CPA Journal*). These technological developments will make it possible to transform business reporting completely. Not only will real-time financial reports become technologically possible, but the scope of the reports will be increased dramatically, approaching the ideal of what used to be called database reporting and allowing end users to run arbitrary ad hoc reports on unfiltered real-time corporate data, drilling it up and down at will.

■ **Cryptography.** The technological capability of providing access to the ever-growing amounts of corporate data does not eliminate the necessity of controlling this access and protecting information integrity. Security will rely on the well-established cryptographic techniques of both secret-key and public-key encryption to ensure the confidentiality of information and authenticate users. The increase in computing power will make it possible to build cryptographic procedures into most parts of corporate information systems without any noticeable degradation in system performance. Digital signatures, often tied to biometric data, will become routinely used in everyday business activities, and internal auditors will be very concerned about protecting secret and private keys. Possibly one of the most profound effects of the cryptographic technology on the accounting profession will be the widespread and ultimately, the exclusive use of digital money. The changeover to offline anonymous digital cash carried on multicurrency smart cards will create new possibilities for both innovative business processes and fraud.

■ **AI agents.** It is very likely that various artificial intelligence (AI) modules will be seamlessly integrated into corporate systems, although their AI pedigree will probably be as recognizable as that of help wizards in today's Microsoft Office. These AI modules will utilize mobile intelligence agents that will roam the corporate networks and engage in multiagent interactions. Although these programs will not completely replace the decision-making role of humans, they will perform many routine and standardized procedures done by humans today. The role of an accounting professional will be to con-

figure such systems and oversee them at a high level. Some of these AI modules will contain built-in auditing routines that will continuously monitor and analyze business activities. Such intelligent audit processing will rely on innovative analytical techniques, such as digital analysis, and on data mining techniques for detecting unusual patterns.

By 2015 the technological developments described above will have the following three main effects on the data processing environment:

■ Large, shared (extranet) cross-enterprise applications will evolve from custom-made applications tailored to a particular business function, to enterprise resource planning (ERP) systems via application service provider (ASP) based systems—inter-networked hybrid ERP/ASP systems managed by neutral parties and placed outside of the organization's traditional boundaries

■ Inter-networked applications will use passive sensors and active controllers to capture data and control processes

■ Numerous small intelligent processes will act as independent intelligent agents for accomplishing restricted tasks.

Already the proliferation of ASPs, which run certain enterprise applications for clients, blurs the boundaries of an enterprise. As numerous business entities focus on their competitive advantages and outsource more of their information systems' functions to ASPs, integrating the services provided by ASPs with in-house ERP systems, it will become more challenging to provide audit assurance for such hybrid entities. With the emergence and maturation of new information technologies, several new assurance and measurement tools will likely evolve, which should help accountants extend their competence:

■ **Automatic confirmation.** Corporate processes will be automatically validated by their partners in the value chain using cryptography, authentication, and event databases to provide a secure, defendable, and automatically assured handshake.

■ **Automatic workpapers.** Most workpapers will be wired into corporate processes and reconciled with high-level analysis. Assurers will come into the engagement and use these

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automatically prepared workpapers as the basis of their review or on-demand work. An evergreen set of workpapers will be available to the assurer at any time.

■ **System monitoring architectures.** Organizations will have continuous process monitoring architectures in place to supervise and evaluate corporate control over their online, real-time electronic business operations. These systems will help to keep processes in balance, manage them, and, as a secondary function, assure some of their outcomes.

■ **Automatic inventory tracking.** Applications with smart chips and wireless technology can provide GIS (geographic information systems) related information with levels of inventory and its deployment. Consequently, at any moment of time continuous reporting can provide comprehensive inventory information.

Measurement and Continuous Reporting

As the perceived value of statutory financial reports declines, the shift by the profession toward more general measurement and decision support will continue. Although the future significance of GAAP is unclear and will depend to a large extent on international political outcomes, accountants—particularly those in industry—will have to fight to retain their relevance to management teams.

Management Accounting: Core or Context?

Management accounting currently faces the same perception problem as financial accounting: Their tools are designed for a strategy of cost-based competition that is not relevant for the time-based new economy firms. Indeed, their tools of costing, budgeting and variance analysis are more likely to hinder such firms than to help them. There is little doubt that traditional cost accounting fails the test of being a strategic necessity in the new economy. Moreover, emerging management tools, such as the Balanced Scorecard, incorporate nonfinancial information far removed from the competitive

EXHIBIT REPORT THAT IMPLIES SOME FUTURITY

We have examined the reliability and financial reports of ABC corporation and have been engaged on a continuous assurance engagement for the fiscal year of xxxx. We will monitor the organization's operations and strategic accomplishments using a wide set of analytics as described in www.ca.com/analytics and other analytics we deem appropriate and will report on an audit by exception basis when more than xx% variance is found in operational and strategic standards or when we deem it appropriate. This exception report will be issued to all customers registered (paying) at www.ca.com/analytics/customers.

advantage of management accountants. With much of the basic bookkeeping now being performed by software or external providers, management accountants face a real threat: Unlike auditors, they have no legislatively protected turf of their own.

Indeed, outsourcing is going to be the single greatest driver of change in the management accounting profession. It will soon be incumbent on all service providers in the organization to prove whether they are "core" to the firm's mission or merely "context" and a candidate for outsourcing. For management accounting to become core it has to develop control systems so intimately tied to the firm's specific activities that they cannot be outsourced without jeopardizing competitiveness.

With the increasing importance of technology, management accountants have tried to stake out their position by becoming hybrid finance/IT managers that provide information and make decisions. Put one way, this is a boost to the "back room" bookkeepers, but put another way, this indicates a lesser need for information "middlemen" because decision-makers can access the information they need directly. Who is to say that accountants are the most capable people to fill these new hybrid positions? Will they have an edge over MBAs or IT managers? When the emphasis shifts from information preparation to information use, it is unclear whether management accountants retain a competitive edge over other business professionals.

In the next 15 years, management accounting (probably under a different

name) will produce a broad set of strategic and operational measurements of which financial accounting is a subset. As firm strategies shift from competing on cost to quality, time, and customer service, many more participants will enter the information marketplace. Engineers, IT professionals, and consulting firms will probably be seen as better providers of specific types of information than management accountants. There will be a need for real-time interpretation of this flood of information, but the challenge to accountants will be to prove their inherent competitive advantage in these changing roles.

Updating the Reporting Function

As statutory financial reports are increasingly perceived as failing the tests of timeliness and relevance, accountants will find it necessary to develop new ways of creating markets for their core competency in the preparation of business reports. The question is not whether there will be new reporting products developed in the future, but whether accountants can extend their franchise to these new, often nonstatutory, reports on both financial and nonfinancial information in the face of stiff competition from various other professionals.

There will be two main trends in financial reporting over the next 15 years:

- Companies will measure a much wider set of variables and
- Reporting will become close to continuous.

Companies currently have online

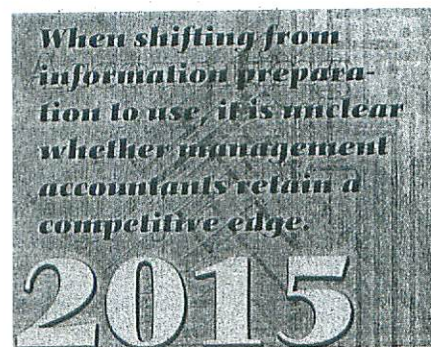
real-time records of cash, accounts receivable, accounts payable, and inventories as well as selected nonfinancial activities in human resources, patents, logistics, and production. While these are currently made available largely only to internal audiences, by 2015 there will be the evolution of a set of external reports of key variables in real time. Accountants have a potentially valuable role to play in deciding which reports are best available in real time and which are potentially misleading in the short term. For example, the more widespread use of ERP will make the preparation of daily income statements, and even balance sheets, routine. However, would that result in a blurring between the income statement and the cash flow statement—and are daily trends in either one meaningful? What about the recent controversy over the short-term focus of U.S. financial markets?

More generally, as the complexity of business increases and the cost of report preparation decreases, there is likely to be an explosion in the demand for specialty reports focusing on distribution, financial realization, logistics, alliances and affiliations, international positions and country risks, owners and managers, joint positions and economic interests, personnel turnover and compensation, covenant satisfaction, insurance taken and claimed, tactical objectives met and missed, and so on.

The increasing number and specialized, nonfinancial nature of these reports is an indication that new economy companies have a diversity of strategic and operational imperatives of interest to investors. The political forces constraining GAAP (and later, the IASC) will make it difficult for the traditional statutory reports to retain their value in this more dynamic environment. The only value of the annual report will likely be to give some degree of stable comparability. Dynamic comparability will have to evolve with substantive judgment and flexible data structures.

Another trend in reporting is the recognition that there is a heterogeneous set of financial market participants that use information beyond the “one-size-fits-all” set of financial

statements. These financial statements are now deemed universal, but financial communication is not. There is a great deal of back channel interaction with analysts, bankers, owners, and affiliates and joint venture partners. Various specialized real-time reports (e.g., burn rate for venture capital funds) are likely to become commonly utilized. Legislation will formalize and open up such communications and create a set of rules for its use, limitations, and liability.



Given the changes taking place in operations because of supply chain management, and in investing because of globalization, we would also expect to see fundamental changes in how accounting reports are prepared. Economic globalization and the integration of the world financial markets will likely lead to the adoption of truly standardized accounting regulations, probably based on a harmonization of U.K. and U.S. rules, and financial reporting in multiple currencies. The aim will be to restore the credibility of accounting reports as indispensable foundations of financial markets. By going to continuous, real-time reports customized for specific customer needs, accounting will try to retain its relevance in decision making.

From Auditing to Continuous Assurance

The principal rationale for the existence of the accounting profession is auditing; and with the usefulness of the boilerplate waiver declining, auditors will have to devise new strategies. Auditors are likely to turn to technology to achieve more real-time auditing, blur-

ring the distinction with management accountants, by expanding the scope of the audit to encompass broader assurance issues. Auditing will evolve into a more comprehensive process that we call “continuous assurance.”

The continuous assurance model will serve many clients and will likely be better tailored to their specific needs. A wide range of special assurance processes and certificates will be made available on such issues as labor conditions, health and safety, and product quality. Statutory justifications will also intrude into the process, as concerns for veracity, privacy, and legal compliance will motivate a set of national and international laws.

Different methods of reimbursement for the output of continuous assurance will likely arise. Accounting firms might independently prepare reports for sale to any interested party, or users might commission them directly, raising issues of access to nonaudit clients. It is unclear how this change in the payment environment will affect independence considerations. The independence problem is likely to remain pertinent for alternative providers of information, whoever they may be, since the pressure will remain strong to convert the assurance engagement into a broader management advisory service.

The assurance process will be guided by data quality considerations, which will determine the relative accuracy of measurement and materiality thresholds. The assurance process will not be restricted to transactions testing and control environments, but will also examine operational processes, as ISO 9000 does today. Assurances will also cover a wider set of quantitative and qualitative nonfinancial data and even external information.

A new tool set will become available to the assurer, linking elements of the value chain with internal nonfinancial processes. These will be incorporated into some of the current auditing methods and many of the new continuous reporting products. Software of different characteristics will emerge to automate the assurance process. The new reporting structure will intensively use intelligent agents to create allocation and analytic data preparation while

merging in continuously captured operations and activity data. Fraud detection agents will replace human supervision, relegating it to secondary analytic-based activities. The continuous assurance model is an element of the strategic monitoring where corporate strategies are qualified and quantified into a numerical and symbolic system. These objectives are compared with actual systemwide metrics; variances will be evaluated against acceptable standards, and the process will stimulate strategic changes and evaluate relationships, keeping a dynamic set of relationships on corporate measurements. The balanced scorecard and its successors will undoubtedly play an important role as the nexus between operational measurement and strategic planning.

The continuous assurance model will turn the audit process into audit by exception: The timing, process, and outcomes of the audit will be changed. Process models (for one or many interrelated organizations) will be set up during the development of processes/systems. These models will encompass data flows, metrics, analytics, allowable variances, adjustment procedures, learning diagnostics, and remedial action scripts. An auditing (assurance) control center will monitor exceptions. The auditors will spring into action when remedial scripts and automatic diagnostics do not work and management is unable to overcome the difficulties. While waiting for exceptions to be triggered, the auditor will perform value-added analyses to support strategic evaluation.

Some futurity is implied in the continuous assurance opinion. The assurer will issue (or maintain evergreen) reports, and a part of such report will be a disclosure of a monitoring period and a set of clients, analytics, allowable discrepancies, and monitored disclosures. Consequently, if substantive discrepancies arise, different stakeholders will be notified. *Exhibit* displays a hypothetical opinion to be offered in assurance engagements.

Nevertheless, when auditors move into the general assurance field, they will face the same competitive pressures as management accountants. Once the legally mandated audit prod-

uct is left behind, there is no guarantee that accountants will have any competitive edge over other information specialists. Hence, it may make strategic sense for the output of the continuous assurance model to be more, not less, closely linked to the standard audit boilerplate. But, unless the standard audit is seen as relevant and useful in its own right, such an association carries considerable risks.

Realistically, the decline in the relevance of the standard audit product necessitates auditors rebranding themselves as general assurance providers, despite the risk to their competitive position. The Elliott Committee (AICPA Special Committee on Assurance Services) suggested some 200 information-based assurance services that auditors can provide as a way of retaining their relevance in a changing business environment. Considering some of these suggestions, it is very clear that accountants will not automatically have a competitive edge against other professionals. One of the major differences in the next 15 years is that accountants will face stiff competition in new services. In an information-based economy, the title of primary information processor is too valuable to be undisputed. The decreasing relevance of the statutory audit reduces the privilege by association that accountants have long enjoyed and, to date, leveraged within the management consulting field.

The Challenge

Accounting is facing the same types of pressures and threats as many other established industries. The rationale for its existence has been undermined by the rise of the digital economy and technological disintermediation. Many new investors simply see no great value in the kind of conservative reports than accountants produce, and that perception is the real threat to the future of the profession. The best scenario for the next 15 years would see the accounting profession developing in the way that the medical profession has. A century ago, doctors consisted almost entirely of general practitioners. Now the medical profession has fragmented into hundreds of specialists, from surgeons to radiologists, that really have little in common

with each other apart from some basic training. But they all operate under the general title of doctors and belong to the AMA. The question is whether the emerging information processing, business measurement, reporting, and assurance specialists will feel that they have anything to gain from being known as accountants. Accountants must raise their prestige, and this can only happen if—as once happened with auditing—they are seen as sole providers of an indispensable service.

In this regard, accountants have only made their own position more tenuous by seemingly running away from auditing and towards generic consulting—where they enjoy no protection from competition with other professions. When accountants feel that they have little to offer as accountants, that is an invitation for customers and entrants to view more broadly the possible providers of financial information.

Of course, from one perspective, the prospects for accountants have never looked better: There is a growing demand for the provision and analysis of information in the new economy. But the value chain that accountants used to dominate, that between the firm and the long-term shareholder, is now on the margins of a wider environment marked by day traders, continuous media coverage, and rapid equity shifts. Accountants have yet to come up with a strategy, much less products, for how they will take a larger share of this marketplace. While continuous reporting and assurance are promising, there is no guarantee that the market will grant accountants a monopoly on these products; their legally protected role as auditors might actually be an artificial barrier to tackling competitive threats head on. It makes little difference to the emerging global economy whether its information processing needs are carried out by professionals called “accountants” or someone else. But that choice will clearly determine the future of the profession. □

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