Understanding the Evolution of Accounting for Software: Implications for an IFRS World

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Executive Summary

Software is a relatively new, fast-growing, and ever more integrated part of the US and global economy. Where 20 years ago, software was often a standalone product (e.g., Microsoft Windows), in today’s world software is a key and indivisible part of thousands of products that are sold every day, like Apple’s iPhone and iPad.

The accounting guidance for software revenue recognition in the United States is a relatively new and fast-growing body of literature. Each iteration of software rulemaking has become more precise, diminishing the ability of corporate managements to interpret the literature in diverse ways. For this reason, software exemplifies the “rules-based” model said to be used in the US, attempting to achieve meaningful financial reporting through detailed pronouncements that explicitly address how to interpret accounting principles in specific situations.

In contrast to the United States, international accounting standards are said to be “principles-based,” meaning that they pronounce general guidelines for accounting, without extensive guidance for specific situations, arguably allowing management significant flexibility in interpreting how and when to recognize similar transactions. Certainly, guidance for software in the existing International Financial Reporting Standards is quite sparse, which may lead to a lack of comparability in revenue recognition of the software components of products.

The FASB and IASB are presently working together to develop new guidance that will be applied worldwide, and it is yet to be seen how the two styles of developing accounting pronouncements will be reconciled.

This paper examines the history of software revenue recognition guidance in the United States, and the process of the current project underway to develop standards that will be applied
worldwide. This work brings value to its readers in several ways. First, understanding why a series of pronouncements were created, as well as the impact of a continuing series of pronouncements on companies, their auditors and users, has value in itself. As accounting students, we typically learn the current accounting literature, which appears reasonable and stable. However, we will be entering a professional world that is anything but stable. New products and transactions will inevitably involve accounting decisions that require interpretations of accounting literature. Understanding how software revenue recognition guidance has evolved in response to new products and transactions will enable us to better face the uncertainties of the professional world.

Second, as students we often debate the merits of a "rules-based" accounting environment vs. "principles-based" accounting. The "principles-based" model typically seems much more appealing—who likes "rules" imposed from above? But the software pronouncements in the United States have come as a response to urgent calls for additional guidance from the preparers, auditors and users of financial statements. The software evolution is an opportunity to look more deeply at the merits of accounting governance models.

Finally, the fast pace of software revenue recognition guidance in the United States allows us to speculate about how accounting guidance may develop under IFRS. There are three possible outcomes. First, IFRS may continue to issue only general "principles-based" guidance, which will potentially mean that companies with similar transactions may have the option to account for them in different ways, diminishing comparability in financial reporting. Second, among the choices allowed by international standards, companies may choose to apply the one method allowed by US GAAP. Finally, it is possible that companies, their auditors and financial statement users will clamor for additional guidance from the IASB as they have in the United
States in recent years, and the "principles-based" IFRS may become as detailed and specific as US GAAP is presently.
Chapter 1: Introduction

The transition from GAAP to IFRS has been hotly debated regarding the differences the move would make to comparability, relevance and reliability in the financial statements of U.S. issuers. U.S. Generally Accepted Accounting Principles ("GAAP") are based on a relatively simple set of guiding principles, but rule-makers have developed volumes of implementing guidance and specific rules through time which have narrowed management's flexibility in interpreting principles. In contrast, recently developed International Financial Reporting Standards ("IFRS") is also based on a relatively small amount of guiding principles, but without extensive implementing guidance. This situation suggests that under IFRS, managers will have choices; in the absence of limiting guidance they will be able to interpret IFRS and record transactions consistent with their preferences. This work focuses on the series of relatively recent software revenue recognition pronouncements and discusses how each pronouncement has narrowed the choices that companies and auditors have to record transactions.

How Does Guidance Help?

When accounting rules are not specific, they allow management flexibility in how transactions are recorded. Certain managers may use that flexibility to choose accounting treatment that is consistent with the economic substance of the transactions, leading to valuable, transparent financial statements. Other managers may use flexibility to achieve their own private goals: maximize reported earnings, smooth earnings, earn their own bonuses, minimize regulatory burdens or the like.¹

US guidance has tended to limit manager discretion in accounting. For example, because there is written guidance on how to handle revenue recognition specifically for software

companies and even different types of companies that simply use software in a product, users can have confidence that similar transactions are recorded similarly, enhancing comparability.

IFRS guidance has tended to allow more discretion in authority since it has relatively little implementing guidance. Those in favor of IFRS are pleased that over 100 countries are using the same accounting guidance. Further, the lack of guidance may make it easier to apply, may require managers and auditors to concentrate on the substance of the transaction rather than rules, and is preferred by investors.²

The FASB and IASB Plan

The U.S. Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB) have been working together to develop high quality, compatible accounting standards for the past several years. While the U.S. has not yet implemented a plan to adopt International Financial Reporting Standards (IFRS), convergence is essentially inevitable. The financial crisis that triggered the economic recession illustrated the interconnectedness of capital markets around the world, which emphasizes the imperative to successfully realize a common accounting language. The Group of Twenty Nations (G20) and the U.S. government have both acknowledged the need for a single set of high quality global standards. In addition, the continuing globalization of the capital markets and the Securities and Exchange Commission’s ongoing effort to incorporate IFRS in the U.S. shows that the ultimate goal would be for IFRS as the global standard.

In the process of designing and implementing new standards for U.S. GAAP the past ten years, the FASB has focused on the new standards’ compatibility with IFRS. And yet, while regulators have created an exposure draft for what the new U.S. / IFRS revenue recognition standard will look like, the GAAP standards and the IFRS model have significant differences.

Convergence will mostly affect areas such as financial instruments, revenue, leasing, and financial statement presentation, however changes caused by accounting convergence will go well beyond financial reporting.³ The changes will affect contract terms, tax policy, financial planning, system requirements, communications with shareholders, credit agreements, and compensation structures. Although the scope of this paper does not include many of these particular areas, it takes a closer look at revenue recognition and the transition to the new standards for software companies thus inferring the kinds of changes, problems and benefits that these U.S. companies may see with the upcoming move towards IFRS.

Chapter 2: Getting Revenue Recognition Right

Reported revenues are important to companies' financial statements not only because of the direct relationship they carry to the sales and growth of a company, but also because of the information derived from the various ratios that analysts have created as measures of a company's performance. The revenue recognition principle states that revenues should not be recognized by a company until realized or realizable, and earned by the company. More specifically, GAAP requires that companies meet four criteria before revenue should be recognized: persuasive evidence of an arrangement exists, delivery has occurred, the vendors' fee is fixed or determinable, and collectibility is probable. Consistent, accurate application of the revenue recognition concept is an essential element of the U.S. financial reporting system. Revenue is typically the single largest item reported in a company's financial statements and investors use the trends and growth in the top line of a company's income statement when assessing the company's past and future performance. Consequently, evaluating revenue correctly is necessary in order to value a firm and to enable all users to assess its profitability accurately. Getting the standards for revenue recognition right is key to IFRS convergence.

Different industries vary in how they produce, market, and sell products. Accounting for revenue in conformity with U.S. standards can become extremely complex and with advances in technology as well as the emergence of new challenges, guidance must be developed to address practice issues and concerns. Software products generally involve licensing, contract details and multiple deliverables that make it necessary to create rules specifically for the software industry. Moreover, as embedded software becomes more common in products outside of the software industry, other types of companies find the need to refer to the software revenue recognition

standards. Resources that provide this guidance include the FASB Statements of Financial Accounting Standards, Accounting Research Bulletins (ARB), Accounting Principles Board (APB) opinions, American Institute of Certified Public Accountants (AICPA) Statements of Position (SOP), and Emerging Issues task Force (EITF) Issues. A seemingly overwhelming amount of information and regulations are taken into account when choosing how to record a company’s revenue in accordance with GAAP, software companies in particular.

IFRS generally has less specific guidance than the myriad GAAP references above, causing many observers to claim GAAP is “rules-based” while IFRS is “principles-based.” While both systems are clearly principles based (see the definition of revenue recognition under GAAP on the previous page), the prevailing convention will be used in this paper. To understand the elementary difference between the two, a detailed, transaction-based analysis is required to identify the changes required in financial statements as each new detailed pronouncement was issued. Any differences may have an impact on how a company operates, like how they bundle various products and services in the marketplace, nevertheless IFRS and GAAP seek to support the Revenue Recognition Principle.

U.S. GAAP guidance focuses on revenue being either realized, or realizable, and earned, as well as the requirement that it should not be recognized until an exchange transaction has occurred. Supplementary to these relatively straightforward concepts are numerous detailed rules. For example, the highly specialized guidance for software revenue recognition, which focuses on the need to demonstrate vendor specific objective evidence of selling price in order to separate different software elements in a contract, goes beyond the general selling price requirement of GAAP. GAAP software standards have evolved in part because of the development of new types of products and contracts, but also due to managers’ needs for
Software Revenue Recognition Guidance

With the development of technology has come new guidance that seeks to align accounting for software companies so that their financial statements may be more comparable worldwide. GAAP has developed guidance that attempts to take away management's ability to manipulate revenue recognition, and to properly account for it in agreement with the core principles of accounting. As technology changes and becomes incorporated into different products in every industry, FASB and the EITF have made adjustments to various standards.

Pre SOP 97-2 and SOP 97-2: Software Revenue Recognition

The first Statement of Position (SOP) issued by the AICPA to specifically address software revenue recognition was SOP 91-1 *Software Revenue Recognition* and was created to narrow the range of revenue recognition practices. As most guidance is, it was developed to add some specificity to a unique type of transaction that was becoming more common. Before the issuance of SOP 91-1 there was a great lack of consistency among software companies in their revenue recognition policies which led to an inability for third parties to compare companies.5

SOP 91-1 provided guidance on the timing and amount of revenue recognition and became effective March 15, 1992.6 It applied specifically to revenue earned on products or services containing software that is important to the products or services as a whole. SOP 91-1 used the concept of significant vendor obligations for which, if they existed within an arrangement, revenue could not be recognized until these obligations were satisfactorily met. It also


considered multiple product arrangements and "other vendor obligations," but determining the accounting effect of multiple elements and differences among types of obligations was complex and often resulted in diversity in accounting practices.\(^7\) There were a few problems with this SOP, like there was no clear guidance on how to allocate revenue across various elements. Companies would use surrogate prices, which are competitors’ prices for similar products.\(^8\)

As an example, consider Company XYZ. They sell arrangement W for $1,500, which is a product comprised of software (more than "incidental" or "essential" to the product as a whole) with a hardware component and includes one free year of updates and IT help (PCS). This is a high demand product and is pre-ordered and paid for on November 1\(^{st}\) of year 1. The hardware is delivered December 14\(^{th}\) of year 2 and the software for the arrangement is delivered three weeks later on January 4\(^{th}\) of year 3. The customer will receive two years of updates and free IT from the day the customer activates the product, which, in this case, is also January 4\(^{th}\) of year 3. Because they normally only sell the software with the PCS, XYZ has no standalone value for the hardware, so they must keep the software and hardware combined as one unit and obtain a price from their competitor, Company ABC, who has a similar product (consisting of similar hardware and software) for $1,200. So, Company XYZ would not be able to recognize any revenue until year 3 when they have delivered both the software and hardware because they have no separate allocation for the separate elements. This way, in year 3, the company would recognize $1,200 and then continue to defer the rest of the revenue, $300, to allocate it to the PCS in years 3 and 4 as the whole obligation is met.

\(^8\) Ibid.
Using surrogate prices, however, became an issue because there are differences between elements offered by different vendors. As in the example, if XYZ’s product composed of software that, sold alone, could bring in between $710 and $840 alone, and hardware that could bring in $600 alone, the company is not assigning a realistic number to their product when using Company ABC’s pricing. The elements between the two products are significantly different. Also, say Company XYZ’s actual revenue allocation for the software and hardware product should be $1,368.75; this would cause XYZ to under-recognize revenue in year 3 which, on a larger scale, can have a great (unintended) impact. Over time, concern grew over the accuracy and consistency of accounting within and between software companies. Issues involved vendor obligations, arrangements with multiple delivery elements and how to allocate revenue among those elements, thus, SOP 91-1 was replaced by SOP 97-2, issued on October 27, 1997.

SOP 97-2 included much of its precursor and sought to reduce the inconsistencies that became evident in the application of SOP 91-1. Significant vendor obligations were seen as highly subjective in nature, due mainly to interpretation of the word “significant,” and resulted in inconsistency of application between software companies. Contracts that include customer rights to any combination of additional software deliverables, services, or postcontract customer support are considered to contain multiple elements. SOP 97-2 Software Revenue Recognition cleared up inconsistencies with surrogate pricing, as seen in SOP 91-1, and introduced the process of dividing arrangements with multiple element deliveries into their various elements and then allocating the arrangement’s fee to each individual element based on the vendor specific objective evidence (VSOE) for each object. VSOE was the price charged when the same element was sold separately, or the price established by management having relevant

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9 Ibid.
authority and that is unlikely to change before the separate element is introduced to the marketplace.\(^\text{11}\) It is generally established by accumulating enough discrete sales to ‘sufficiently’ prove that the market thinks the price is fair.

Consider the example from above, with the sale of Company XYZ’s arrangement W for $1,500. Assume the license arrangement for the software always includes one year of “free” PCS (The annual renewal price of PCS is $140). Although there is no VSOE for the hardware aspect, the hardware and software will still be considered one unit. Otherwise, because there is VSOE for the PCS and the software always includes PCS, XYZ could use the difference between the bundled price of the software and PCS, and the renewal price of the PCS to create VSOE and determine the price of the software. In this case though, as long as all of the applicable revenue recognition criteria are met, XYZ would defer revenue of $140 for the PCS until it is fully delivered in year 4 and recognize the rest, $1,360 as revenue in year 3 after the software and hardware have both been delivered. Under SOP 97-2, the hardware and software would still remain one unit, and XYZ would defer all revenue until year 3 when it would recognize $1,360 for that unit. Thus, revenue of $140 would be allocated to the PCS element over years 3 and 4 again. If VSOE did not exist, all revenue would be deferred until VSOE does exist, or until all of the elements of the arrangement have been delivered, so XYZ would have to wait until year 4. Because of the inherent differences between elements offered by various vendors, SOP 97-2’s requirement of VSOE helped to remedy the likely inconsistencies in accounting treatment. It also helped to speed up revenue recognition, as in the case of Company XYZ where they are able to recognize revenue in all four quarters for which they are providing a service rather than deferring everything until Q’4 when the entire arrangement had been delivered.

\(^\text{11}\) Ibid.
EITF Issue 00-21: Revenue Arrangements with Multiple Deliverables

As contracts that require separate delivery of multiple goods became increasingly commonplace, further questions were raised about the appropriate level of disaggregation for each deliverable and separate earnings processes, as well as the amount and timing of revenue recognition for the separate deliverables. These in turn led to the EITF writing Issue 00-21 Revenue Arrangements with Multiple Deliverables which supplied separation criteria to define a deliverable and separate unit of accounting. It was presented in 2003 and included measurement and allocation requirements for the total sales price to the separate units of accounting. Under EITF 00-21 a deliverable should be segmented and accounted for separately if "(1) the delivered item has value to the customer on a standalone basis, (2) there is objective and reliable evidence of fair value of the undelivered items, and (3) the arrangement includes a general right of return for the delivered items and delivery or performance of the undelivered items is considered probable and substantially in control of the vendor." When objective and reliable evidence of fair value is available for all units of accounting in an arrangement, the arrangement consideration has to be allocated to the separate units on the basis of their relative fair values. When such evidence is available for the undelivered items but not for the delivered items, the residual method is used to allocate the arrangement consideration. A "reverse-residual" method is not allowed. So, when VSOE of fair value exists for the undelivered elements, the revenue of the delivered items will be calculated as the total revenue less the revenue from the undelivered items.


13 Ibid.
Again, consider the example of Company XYZ, and its Arrangement W. With EITF 00-21, the Company could use the price of the undelivered elements (software and PCS) to derive a value for the revenue that should be allocated to the delivered element. So if the software and PCS are sold for $850 in other arrangements, Company XYZ could recognize $650 ($1,500-$850) in year 2 when the hardware is delivered. They would then recognize $710 ($850-$140) in year 3 when the software is delivered and $140 over years 3 and 4 for the PCS service period.

As complicated as the guidance seemed to be getting, there were still questions to be answered. While Issue 00-21 became the basis for Accounting Standards Codification (ASC) 605-25 Revenue Recognition - Multiple-Element Arrangements, the EITF continued to look for ways to increase the reliability of accounting for software companies.

**EITF Issue 08-1: Revenue Arrangements with Multiple Deliverables**

The EITF sought to improve upon ASC 605-25 by publishing Issue No. 08-1 Revenue Arrangements with Multiple Deliverables on August 24, 2009. This new guidance eliminated the residual method of arrangement allocation and the need for criterion of objective and reliable evidence of fair value of the undelivered items. It instead required vendors to allocate total transaction revenue to the various elements based on VSOE of the selling price for each element. A hierarchy was created for companies to use when estimating the selling price of deliverables; if there was no VSOE, the vendor would use third party evidence of the selling price, and if that does not exist, they are to use the best estimate of selling price.\(^{14}\)

If Company XYZ could find estimates for selling prices of their hardware and software individually of $600 and $840, they could use the relative selling price method to allocate revenue. The Company will take the proportion of hardware to the aggregate individual selling

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prices, about .3797 \[\frac{.3797 \times 1,500}{600 + 840 + 140}\] to find the amount of revenue, $569.62, that should be allocated to the hardware element. They would use this same method for finding the amount of revenue to be allocated to the software element and PCS as well. So, when the hardware is delivered in year 2, $569.62 would be delivered, $816.46 will be recognized in year 3 when the software is delivered, and $132.91 will be allocated to the PCS over years 3 and 4. Looking at the comparison between EITF Issues 00-21 and 08-1, revenue recognition for arrangements with multiple deliverables are being recognized sooner for some products due to the allowance of estimates in a way that seems to be representing the true economics of the transactions. Even GAAP allows for judgment sometimes, but with the hierarchy it still has structure, so the estimates become the last resort when there is no better option.

EITF 08-1 was the basis for Accounting Standards Update (ASU) 2009-13 *Multiple-Deliverable Revenue Arrangements* which was effective for fiscal years beginning on or after June 15, 2010. Consequently, ASC 605-25 was amended to include the changes in EITF 08-1. With these changes, it is expected that deliverables will meet the separation criteria, and thus be considered a separate unit of accounting more frequently.\(^{15}\) VSOE has found its way into traditionally non-software sectors as embedded software becomes an essential element for cell phone companies, medical device manufacturers, and even car manufacturers that provide GPS services. Because the changes may alter the classification of some items, even more attention is necessary when companies prepare to account for them.

**EITF Issue 09-3: Certain Revenue Arrangements that Include Software Elements**

Issued in October of 2009, just after EITF Issue 08-1, was Issue 09-3 *Certain Revenue Arrangements that Include Software Elements*. This issue focuses on determining which

\(^{15}\) ibid.
arrangements are or are not within the scope of the software revenue guidance in ASC Topic 985-605 (formerly SOP 97-2). EITF 09-3 removes tangible products from the scope of the software revenue guidance if the products contain both software and non-software components that function together to deliver a product's essential functionality and places them under ASC 605-25.16 Before, if a software element was “more than incidental” to a tangible product, it would fall under ASC 985-605. This Codification still allocates revenue based on VSOE of fair value, and if the VSOE of fair value does not exist, revenue recognition is deferred until VSOE exists or all elements are delivered. Instead these products now fall under ASC 605-25 as discussed above. In the past, companies that make devices that blend hardware and software, such as the iPod and iPhone, would have been required to spread the related revenue over the life of the device. When the original rules were written, these types of products were not something the creators envisioned. The new changes will allow the manufacturer to unbundle and record hardware revenue up front. Like EITF 08-1, EITF 09-3 was also to be adopted for fiscal years that began on or after June 15, 2010. Companies have the choice to adopt application retroactively, and although early application is allowed, entities must adopt both EITFs in the same period using the same transition method. In addition, in the initial year of application, companies are required to make qualitative and quantitative disclosures about the impacts of the changes. These disclosures will provide users of financial statements with greater transparency of how a vendor allocates revenue in its arrangements, the significant judgments made and changes to those judgments in allocating that revenue, and how those judgments affect the timing and amount of revenue recognition.

FASB and IFRS are trying to clarify the principles for recognizing revenue and to create a joint revenue recognition standard for U.S. GAAP and IFRS that companies can apply consistently and across various industries and transactions. These changes will impact all entities that have contracts with customers and therefore the effects will reach past companies and their auditors into the financial statements and onto the users. The relationships of those affected are important in determining how they will adapt to the results of the new standards.
Chapter 3: The Convergence Project

Revenue Recognition under IFRS

The basic differences between GAAP and IFRS have been discussed, but what does IFRS say now regarding revenue recognition guidance for software products with multiple elements? Guidance is not specific to address software directly, but there is guidance for more broad categories. Starting with the basics, the description as to when revenue is recognized is much less detailed than it is in GAAP. According to the IASB IAS 18 Revenue, "Revenue is recognized when it is probable that future economic benefits will flow to the entity and these benefits can be measured reliably."\(^{17}\) Next, the recognition criteria are listed for the sale of goods, the rendering of services, and the use by others of entity assets yielding interest, royalties and dividends. The standard does address multiple deliverable elements, however, briefly:

"[I]n certain circumstances, it is necessary to apply the recognition criteria to the separately identifiable components of a single transaction in order to reflect the substance of the transaction. For example, when the selling price of a product includes an identifiable amount for subsequent servicing, that amount is deferred and recognised as revenue over the period during which the service is performed."\(^{18}\)

Revenue is measured by the fair value of the consideration received or receivable and recognized for the sale of goods when all of the following conditions have been met: (1) the significant risks and rewards of ownership of the goods have been transferred to the buyer; (2) the entity no longer has continuing managerial involvement to the degree associated with ownership nor effective control over the good sold; (3) the amount of revenue can be measured reliably; (4) it is


\(^{18}\) Ibid.
probable that the economic benefit will flow to the entity; and the costs incurred or to be occurred regarding the transaction can be measured reliably.\textsuperscript{19}

Revenue may be recognized for the rendering of services when all the following conditions are satisfied: (1) the revenue can be measured reliably; (2) it is probable that the buyer entity will receive the economic benefits associated with the transaction; (3) the entity can reliably measure the stage of completion of the transaction at the end of the reporting period (using the percentage of completion method); and (4) costs incurred for, and to complete, the transaction can be measured reliably.\textsuperscript{20} When the outcome of a service transaction cannot be estimated reliably, only revenue equal to the extent of the expenses recognized that are recoverable may be recognized.

And finally, revenue for interest, royalties and dividends recognized on the following bases: (1) interest is recognized using the effective interest method described in IAS 39, paragraphs 9 and AG5–AG8; (2) royalties are recognized on an accrual basis in accordance with the substance of the relevant agreement; and (c) dividends are recognized when the shareholder’s right to receive payment is established.\textsuperscript{21}

Comparing GAAP and IFRS, the above guidance is relatively scarce compared to the guidance of GAAP. Carrying the example forward, a company may be able to justify either accounting consistent with SOP 91-1 or SOP 97-2, EITF 00-21, EITF 08-1, or EITF 09-3.

Therefore, in the example of Company XYZ’s revenue recognition for the deliverable elements of arrangement W, there would be some substantive differences. Management would be able to choose the treatment that would recognize more, or less, revenue in one year rather than another. In year 2 there management could choose accounting that would recognize $0 or $650 of

\textsuperscript{19} Ibid.
\textsuperscript{20} Ibid.
\textsuperscript{21} Ibid.
revenue; in year 3, specific treatments could cause the allocation of revenue $710 or $1360; and in years 3 and 4, $140 or $300. These show how drastically treatments can cause revenue for one transaction to vary. Open to some interpretation, a concern regarding IAS 18 and its lack of guidance was even mentioned by the IASB.

The Exposure Draft

Within their goal of convergence with IFRS, the FASB and IASB are attempting to develop a single method of revenue recognition for all goods and services, but the exposure draft is still in progress. They are attempting to improve IFRS such that IFRS and GAAP converge—become the same. In late March 2011, Ashwinpaul Sondhi, a member of the Emerging Issues Task Force and main contributor to revenuerecognition.com, discussed the basic model for revenue recognition that the FASB and IASB have created thus far.

The core accounting principle for this standard is the cost principle. It states that the amounts in the accounts and on the financial statements must be actual costs rather than the current value. So, the amount of revenue recognized for an element must match the proportion of the actual cost for the object when it is sold alone. This means that any separate performance obligations (PO), or products with multiple deliverables, can be ‘unbundled’ in order to recognize revenue for delivered services while other services have not yet been delivered, but the revenue recognized must be proportional to the cost of the separate element. U.S. GAAP is based on this same principle, but over time regulators have needed to provide more specific guidance on how exactly managers can go about assigning revenues.

The IFRS basic model has five main steps: (1) identify any contracts, (2) identify the separate performance obligations in each contract, (3) determine the transaction price, (4)

determine the allocation of the transaction price to the separate elements (to be recorded for each obligation as it is satisfied) if there are any, and (5) recognize revenue as each performance obligation is satisfied.\(^{23}\) For the first step the main idea is that managers have persuasive evidence that they have a contract with a customer. However, questions have already been posed regarding the focus of the obligation that arises from these contracts and whether it applies to legal obligation only or if there needs to be something addressing constructive obligation (obligation that arises from conduct and intent rather than a contract).\(^{24}\) This poses the issue of substance over form, qualitative guidance over quantitative – in Sondhi’s opinion, the ideal standard would include both so as to let management use their judgment to find the best treatments to suit the accounting principles and comparability, but use rules to keep management from abusing the flexibility of the guidance. Another question arose on what circumstances would make it appropriate to *combine* two or more contracts.\(^{25}\) With questions like this, one begins to wonder if managers are already worried about the increasing amount of judgment for complex items.

While the standard will be new, the second step comes from a familiar place. Each performance obligation needs a distinct function and profit margins.\(^{26}\) This is similar to the standalone value principle that exists in the multiple element transaction guidance for GAAP. With room for a managers’ judgment in the IFRS draft though, software businesses may see acceleration in their revenue recognition because there is less guidance as to what makes a


\(^{24}\) Ibid.

\(^{25}\) Ibid.

\(^{26}\) Ibid.
separate element for each industry, particularly the software industry, and companies will be more likely to split up their contracts so that they do not have to defer any revenue.  

Step number three involves contractual terms and customary practice to determine the transaction price of the contract. Again, although there is requirement for reasonable estimation of the price using relevant experience, an increase on the reliance of managements’ estimate of selling price with less reference to market data may result in changes in amount and timing of revenue recognition. Also, what if the company cannot find a reasonable estimate? This is going to be a concern for companies dealing with software, intellectual property, leases, and new and future products.

Step number four causes just as much concern over estimations with the allocation of the transaction price to each performance obligation. The best evidence for each PO is set on observable separate transactions for that same PO. If the company does not have observable transactions (like with new products), the company estimates the selling price. Instead of a software company being forced to defer revenue for an element for which they cannot gather VSOE of fair value, they would be able to recognize the estimated revenue at the appropriate time. So the question here becomes: Is acceleration of amount and timing going to happen for every product/service in this standard (Is it given?) or does that acceleration and timing appropriately reflect the way the entity becomes entitled to the arrangement consideration?

Take into consideration Company XYZ from earlier. If they enter into a contract to sell Arrangement W for $1,500, and they still do not have a selling price from observable transactions because it is a new product, they will estimate the selling price. As seen from the past ways alone that revenue has been allocated to the hardware, it may vary from $569.62 to

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28 Ibid.
$650. If XYZ allocates $569.62 to the hardware, there would be a 12.4% difference of revenue recognized in year 2 than if he were to allocate $650 to the hardware. If the Company were to choose a different number it could have even a greater impact. To put this into better perspective, 12.4% taken on a greater scale, like the sale of 300,000 units, is over $24 million ($80.38*300,000).

Finally, the satisfaction of a performance obligation is described as, "when a good or service has been transferred to a customer and that customer has control."29 However, software companies question the definition of control and if it means a customer should be able to have direct use and benefit from the good or service, and if that means they may prevent others from accessing it and benefiting from it. The issue here is intangibles and that one or more entities may be using some assets/software at once while benefiting from them. Certain services and programs are available to an indeterminate number of people, managers need to know when they can be considered fully delivered. To answer some of the questions surrounding the word, the boards have decided in January 2011 that the final standard will describe rather than define control.30 It will list some indicators of when a PO has been satisfied, like an unconditional payment obligation, title transfer, physical possession, and the design or function off of that product or service is customer specific. The boards have also decided that risks and reward of ownership should be another indicator of determining whether control has been transferred.31 Another concern regarding satisfaction of PO's is over the continuous transfer of goods and services. To measure these, it is possible that managers may be able to use output methods (based on units produced over units delivered, milestones, etc.), input methods (efforts

experienced using costs such as labor hours), or passage of time. There are many concerns being heard from every industry over the draft, however the software industry deals with some very unique and complicated dilemmas.

Just like in the GAAP guidance, the exposure draft for U.S. IFRS has guidance regarding products, services, and combinations. The tentative decision is to use a continuous revenue recognition model for services, a discrete model for products, and to treat single PO's that contain both goods and services as services. The continuous model recognizes revenue as the service is performed whereas the discrete model recognizes revenue when control of a good is transferred to the customer. The board is also strongly considering issuing the following indicators that a PO is a service: (1) the customer controls the work-in-process, (2) tasks already completed would not need to be performed again to fulfill the remaining PO, (3) there is an unconditional obligation to pay and the performance to date has no alternative use to the customer, (4) progress toward completion can be measured using inputs, outputs, or time-based measure. This seems like a good deal of guidance, but it is important to remember that the vendor must be able to develop a reasonable estimate of the progress of a services completion. While this IFRS appears to be relatively thorough, there are many questions from GAAP users regarding issues that GAAP has previously covered, but are missing in the exposure draft.

One area that is expected to change quite drastically is the area of linkage, or when managers should combine two or more contracts. This is a pretty significant component of U.S. accounting standards, with Technical Practice Aid 5139 alone governing the linkage of software.

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32 Ibid.
revenue recognition. Contract accounting standards have a great deal of detail pertaining to when two contracts should be linked. There is also information on the conditions under which managers are permitted to segment a contract into two or more. Within the exposure draft, the board has eliminated the requirement to segment a contract. So now the only instance when managers can segment a contract into two PO’s is when they can identify them. The question here is what is required for managers to effectively identify the PO’s? With this the board has introduced a different concept from what they have had before – distinct performance obligations. The attributes are that the PO’s have a distinct function, one is able to separate the risks involved, and there is a different pattern of transfer of control to the customer. While the board has included new concepts they leave others out completely.

It has been decided that perfunctory, or incidental, obligations are not to be included in the new standard. These are actions that are left when the company has substantially completed the rest of its obligation, when the company has a history of completing the remaining tasks in a timely manner and being able to estimate any remaining costs associated with them. This may seem like a simple issue to handle, however one must remember it was included in GAAP for a reason. One way to look at it is that regulators may see areas, like this one, as having been included when the concepts were new due to new developments or technology in the business world and the unfamiliarity of handling them. Now that they have been handled effectively in GAAP for a good deal of time, regulators may assume that managers know how to

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36 Ibid.
37 Ibid.
38 Ibid.
deal with them in general and will keep doing so after the transition to IFRS. Then again, how safe is this assumption?

There are also some interesting changes with respect to product warranties. Vendors must recognize revenue and accrue costs related to quality assurance at the same time rather than by deferring revenue.\(^{40}\) Further, if a latent defect, one that the vendor knows about but the customer has not discovered, existed upon transfer to the customer, instead of deferring the revenue, the vendor recognizes it, but accrues the costs. This is just one more aspect of the new standard that will cause the amount and timing of revenue to change. Warranties are considered separate PO’s if one of the following two conditions is met, (1) the customer has the option to purchase that warranty separately, or (2) the warranty provides service beyond the quality assurance as contractually stated.\(^{41}\) While there are numerous changes from what GAAP required and some areas feel a little thin, the board has added to other areas one of which is cost recognition. Vendors are now required to capitalize incremental direct costs of obtaining a contract if they are expected to be recovered.\(^{42}\) Also, Recognition should be systematic and reflect the pattern of transfer of the PO to which the costs relate. Regulators are really trying to look at the new standard in a way that is comparable with IFRS, but that also doesn’t lose the comprehensive value that GAAP has created.

Ideally the FASB and IASB would like to create one standard to apply to all industries, but they have already decided to make scope exceptions for the new revenue recognition standard for executory and insurance contracts, mining, biological and agricultural assets, financial instruments, and lessors. The revenue recognition standard has some similarities with

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\(^{41}\) Ibid.  
\(^{42}\) Ibid.
GAAP, but its differences are much more obvious. In reality, there is quite a bit of judgment in accounting, it is necessary, so the numerous concerns over involving judgment in revenue recognition may be an overreaction, but the deciding point will be how managers adapt to the changes in IFRS.
Chapter 5: Issues and Implications of Guidance Development: My Speculations

Looking at the U.S.'s past, at all of the changes that were necessary, and at all of the questions that are being asked in regards to this new standard, I believe those affected by the transition will either maintain their old GAAP models for clarity anyway, use the breadth under IFRS to manage earnings, or voice their concerns until more guidance is created.

Even after all of the changes that regulators have made in software revenue recognition guidance for GAAP to quell some of their concerns, not everyone is satisfied in the marketplace. In addition to the costs associated with making amendments to comply, companies may prefer less specific pronouncements because it enables them to interpret the guidance consistent with their own objectives. For example, if management needs additional revenue to earn their bonuses, they could interpret general guidance as enabling revenue recognition. If they have already earned past bonus thresholds, they may wish to defer revenue until a future period, getting a "leg up" on next period's bonus.

Auditors see their work loads increase considerably with each change, and are responsible to companies to understand the impact of each standard and the steps to compliance. Just as well, auditors will surely want specific guidance again so that they will not have to tell a client, "no" without having some reference to point to in writing. And still, while auditors and companies hustle to comply to improve comparability for users, users are put in the position where they must be able to distinguish earnings changes that reflect merely differences in interpretation, from earnings changes that reflect differences in the underlying economics.

Looking at the past and how standards evolve are a very important part of creating a new one. It is imperative to examine what has worked and what has not. In the previous sections the software revenue recognition for GAAP illustrated how more specific guidance has been
developed because it allows for more accurate accounting. This is why, after spending so much time to develop such a detailed model, it seems silly to switch to a ‘principles-based’ model. In the end, FASB may wind up in the same position they have been in with software revenue recognition for the past few years, making it more detailed.

This section of the paper discusses many of the changes that companies, auditors, and users have had to make in complying with the new guidance. With the prospect of a new standard one must think about all of the work companies will have to do to comply with the new standards, but even more so, the costs of the new standards after they are implemented. When the regulators take away much of the rules- based guidance there is a chance that history will repeat itself. People may end up demanding further guidance, in which case, the costs of implementing new standards will be felt yet again.

How Software Companies Have Dealt with Past Changes

Each new GAAP change has forced software companies to identify and consider the implications of new pronouncements to business, accounting, financing, long-term contractual commitments, tax structures, investors, systems, controls, and work-force related issues. In order to know to what extent the new standards would affect their accounting, companies spent a great deal of time assessing the components and contracts of each product to determine how the new guidance applied to them.

One complaint that managers have made regards the increasing complexity of GAAP. Types of transactions that are very similar now have separate guidance on amount and timing. One example PwC provided is how the activation services provided by telecommunications providers are often economically similar to connection services provided by cable television
companies, but the U.S. GAAP guidance is different for these transactions. Consequently, the timing of revenue recognition for these two transactions that are so similar will vary. The changes sometimes seem unnecessary or overcomplicated causing headaches for management. However, one must keep in mind that other companies are using the same specific standards, and thus, often the same treatment of like products. This reassures users that, although sometime it is a complicated process, the details of transactions make financial statements of similar companies more comparable.

Perhaps the most plaguing aspect of the standards is the way they are written. Elgin Frye, a Senior Auditor for Deloitte in their San Jose, California office, shared some of his experiences working to help software clients comply with the newer GAAP standards. Frye brought up the fact that the legal language that the pronouncements use is the client’s and the auditor’s first challenge. They would be that much easier to handle if they used more plain English. Because the guidance does not always provide an example that perfectly applies to the client, the auditor must dissect the standard to get a firm grip on what exactly it will mean for the company. While IFRS may seem to be the more simple set of standards, it too will be written in the same legal language as the GAAP standards, making companies and auditors spend just as much time discerning exactly what the standards mean. Regarding how the companies attempt to handle changes in standards internally, Frye made the observation that the trend is for larger companies to have internal managers to head technical projects that the issuance of new standards would fall under, whereas smaller companies hire consultants to handle the changes. The costs of conversion will vary depending on the size of firms, but after the transition everyone will be clamoring for more extensive guidance.

44 Frye, Elgin. Telephone interview. 28 Jan. 2011
With all of the changes that enterprises have been forced to make under GAAP, it may seem like a waste to try and start over again with IFRS. However, because IFRS was created to support the same principles as GAAP, it may be an option for companies to simply keep the more complicated methods they have been using under GAAP as company policy. Many companies incurred a great deal of costs to comply with GAAP, including redesigning their Enterprise Resource Planning (ERP) systems. If the ERP system allocates revenue for a product in the same amount IFRS would allow it to be allocated, the company may as well keep that system, however more complex it may be, just for the sake of not having to make another change. A cost has been allocated to convergence; an estimated $32 million per company will be incurred in additional costs for their first IFRS-prepared annual reports for the largest U.S. registrants that adopt IFRS early, and it is expected to cost 0.125% to 0.13% of revenue for average sized companies.45 This may not seem like much, but for a company with a 3% profit margin, it represents a natural reduction of earnings. The main reason for the transition to IFRS was for comparability, however, transitioning to a set of standards similar to those of international companies does not mean that comparability is automatically improved and that companies are using similar treatment for like products. If everyone’s judgment varies, financial statements may actually become less comparable when they become judgment-based.

Looking at the effects to enterprises, costs have been discussed more than how exactly the amount and timing of revenue will change. Under the assumption that companies’ products will still sell, revenue will still be earned. The companies are concerned as to how this will affect when they will be allowed to recognize revenue, but this is mainly because they want users to see them in the best light possible. Timing and effects on ratios will be discussed in the 'User' Section.

Auditor Observations During the Evolution

When the EITF announced new guidance regarding software revenue recognition, companies all over Silicon Valley knew they were going to have to make big changes. Elgin, and his client, Shoretel, provide an example of how the changes can cause a great deal of work for the auditors. Shoretel is a telecommunications company made up of about 650 employees that focuses on providing closed-communication networks and products to other businesses. In addition to being based in California, they also have offices in Europe, Australia, and New Zealand, and pulled in over $110 million in revenue in 2010.46

With changes in standards there is a risk that the efficiency of the performance of an audit is affected, which is important to the companies paying for them. Although the work that goes into dealing with the changes in standards does depend on the industry and the area that they make changes to, for Shoretel the standards greatly affected the work load. Frye spoke about the new ERP system that Shoretel needed and why it was necessary to meet the requirements of EITF 08-1. Many companies depend on Enterprise Resource Planning (ERP) systems to manage their financial processes, including revenue timing. The ERP software that Shoretel used in its operations was not written to recognize revenues using the new criteria. To deal with the inability of ERP systems to handle the new requirements, companies must evaluate their systems and work with their vendors to upgrade software, institute work-arounds, or find alternative software that can be layered on top of the existing system.47 Before Shoretel could figure out exactly what kind of adjustments they needed to make to their system, managers had to meet with auditors to go through every bit of the Company’s software products. They discussed

whether or not the software aspect was essential to why customers purchase the product as well as whether it was required to be accounted for under EITF 08-1. The Shoretel audit required about fifty extra audit hours during the most recent quarter due to the change in their revenue model. However, Frye went on to say that the changes in revenue recognition had an immaterial affect of less than $100,000 on the revenue per quarter considering they have over $110 million in total revenue. The question auditors find themselves asking is if the change in standards is likely to cause a material difference. If not materially, this then leads to the question of why exactly there are non material differences and what the total impact of them will be. With all of the changes IFRS is sure to cause, the greatest issue may be how much even the small adjustments will affect the bottom line.

As can be seen by the changes Shoretel was forced to make to its system, companies are forced to incur many costs during implementation of new guidance. It causes managers and auditors to spend extra time sorting out the various adjustments to the company's financial processes, increasing labor and audit costs, and decreasing audit efficiency. Not only did educating employees require time, but the auditor must adjust and rewrite the revenue testing process, which also takes time and consideration. Companies and auditors will have to certify that controls are in place to secure that staff is consistently complying with regulations. This includes motivating employees to follow policy while simultaneously meeting financial goals ethically. After the FASB and EITF have spent so much time and money developing such extensive guidance for software companies and products with multiple deliverables, it is all about to be changed again.

49 Ibid.
Mason Eves, a manager for Deloitte, works in the San Jose office with Frye and has also witnessed the effects that the new guidance has had on clients that the office serves. The real challenge, as Eves commented, is keeping track of the many changes and the effective dates of these standards for the client.\textsuperscript{50} EITF 08-1 has been a pretty big change for some companies, while it has barely impacted others. Eves has a client that had been working on the implementation of 08-1 for the past nine months. He estimates that his audit team put in about 150 hours just to give their input on different matters, not including the actual auditing of their accounting for these revenue transactions.\textsuperscript{51} Companies must invest in systems and education before new standards become effective, so they can comply immediately at the effective date in order to avoid any restatement costs. If new guidance is issued after convergence, the wait begins all over again, and auditors and managers will have to worry about, among other things, getting the necessary changes implemented on time.

Every time new guidance is issued auditors must determine if it is applicable to their clients. If so, it is the auditors' responsibility to educate themselves on all of the possible effects that the guidance may have on their clients' businesses. This new information can create a great deal of new work for an auditor and cause the actual audit to change drastically. As discussed above, there are various costs incurred, however there are a few other challenges auditors have come across besides direct implementation.

The most important step to approaching an audit is understanding the client's business and products. Auditors spend time learning about their client's business before they begin the audit, but this experience gives them a chance to learn a great deal of much more specific detail. When the members of the audit team stay on from year to year, this can be beneficial to the audit

\textsuperscript{50} Eves, Mason. E-mail interview. 27 Jan. 2011
\textsuperscript{51} Ibid.
efficiency in the future. However, if the auditor does not return, the client will no longer receive benefits from the money spent to educate the auditor, and there is also the possibility that in the succeeding couple of years they will have to repeat the process of having a manager educate the new auditor. While convergence brings a sense of job-security for auditors, managers will be concerned over finding an auditor they can work with through the various changes. This also brings up the importance of the client-auditor relationship.

The guidance includes some potential questions as examples for managers, but there are other questions that clients want answered. For instance, a company may ask their auditor what to do if a product’s hardware falls under SOP 97-2 but the software follows EITF 08-1. These questions come up with new pronouncements and with the adjustments that follow, and will presumably be asked in every industry making more work for auditors. Because the standards are so specific in GAAP, auditors spend a great deal of time researching and becoming informed of all of the specifics determining exactly how the guidance should be applied. The transition to IFRS would seemingly cause more work for auditors, however despite the fact that they would be making a change, it would be to a presumably simpler and more flexible system.

Management may believe they have found more than one way to allocate or record revenue that is supportable, and will choose the one that meets their objectives. The auditor will have to evaluate each of these options and decide which one will fairly represent the economics of the company’s transactions. There is a chance the auditor may have to disallow the option preferred by management because it is not the best option to fulfill the auditor’s goal of economic reality, even if the language of the pronouncement does not specifically prohibit management’s choice. This can pose an uncomfortable position for auditors who would much rather be able to point at a specific rule to help support their decision not to allow management’s preferred result. Clients

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52 Eves, Mason. E-mail interview. 27 Jan. 2011.
also come upon questions that auditors cannot answer; Eves said that in this case the auditor generally puts them in touch with other clients that could potentially be having the same problems so that they can brainstorm on the best way to handle the situation. After convergence, companies will not be able to do this as often because companies will rely on their own management's opinions which vary from company to company due to the simple fact that each enterprise has different goals.

The Chairman of the Public Company Accounting Oversight Board (PCAOB), Mark Olson, spoke about three key challenges that auditors face as companies transition to new rules involving the accounting and measuring of fair value as per EITF 08-1. The first being, the auditors may not have had the necessary extensive training in valuation techniques.\textsuperscript{53} If the auditor is unfamiliar with how to assess the VSOE properly it could be material to how the audit is carried out and substantially affect the opinion. Second, financial statement preparers can be biased—even unintentionally—in their assessment of fair values.\textsuperscript{54} Simple mistakes may be made because of a person's subjectivity which is difficult for an auditor to detect when they analyze the transaction. Third, internal controls around fair-value measurements may be different from other controls over typical business transactions, further complicating the audit.\textsuperscript{55}

Although Olson made this statement about EITF 08-1, the same things can be said for IFRS. Auditors may not have the proper training to assess a manager's judgment regarding a treatment and determine if it is the best possible choice. Every manager has bias—even in if unintentionally, and IFRS gives them more opportunity to make potentially biased estimates. Also, controls having to deal with the transactions in the business' typical operations may vary.

\textsuperscript{54} Ibid.
\textsuperscript{55} Ibid.
from the controls that are used to make estimates. Instead of being able to view all of the controls as working toward properly recognizing the revenue in one way, auditors must identify how effectively the controls protect the two methods and the products to which they apply.

In addition to those three audit challenges, the PCAOB is monitoring another area of potential risk. While exhibiting the promise of presenting financial statements with greater relevance, fair value accounting can pose heightened audit risk in illiquid markets. These are products that are not readily saleable due to uncertainty about their value or the lack of a market in which they are regularly traded. For the new revenue recognition standard there is a heightened audit risk because there is a greater likelihood that the fair value estimate of an illiquid product is incorrect. The PCAOB communicates with auditors to identify specifics that they should be a little more wary of, but is confident that the fair value method for these types of products is the best. With the IFRS exposure draft and more estimates, this is not stressed and users may lose reliability because the best options to show the economic reality may not be taken by managers due to bias they may have.

How Users Have Been Affected

Software revenue recognition is of concern primarily to the companies and auditors that are forced to follow the specific guidelines in order to comply with GAAP. However, this will affect how users of the financial statements read and interpret the companies' numbers. It is important to know who exactly those that will be affected are. Analysts, banks, investment companies and major stockholders are those who mainly use the financial statements and know how revenue recognition can affect the statements and their comparability. It is important that they know why and how companies' financial ratios change and what it will mean for a company's future.

56 Ibid.
So far it is unlikely that one revenue recognition model for every industry will be
developed, but the IFRS changes that are currently being made are intended to get entities closer
to this objective. These changes, so far, have allowed many companies to recognize revenue
earlier. This will cause an increase in net income and equity for the period, and of course, net
income is extremely important for the profitability ratios and equity for the solvency ratios. The
profitability ratios are generally most important to the analysts and investors, whereas banks
looking to loan to companies are reassured by solvency ratios. The changes will apply to all
companies selling the products that fall within the guidelines of the pronouncements so the
effects may be seen on financial statements, however they are being tailored to improve the
relevance of those statements. Because IFRS is expected to further increase the timing and
amount of certain transactions, creditors, analysts, and investors will all have to spend more time
trying to understand what estimates management has made and the risk of those estimates being
off. There may be more time spent by users to evaluate how far off estimates could be, but there
will be, without a doubt, confusion.

Eves and Frye addressed the issue of whether the change in standards will be beneficial
to the users of the financial statements. One of the most important points that Eves identified
was the fact that analysts and companies often look at the performance of companies using non-
GAAP measures. For example, non-GAAP revenues; Both Eves and Frye agree that in this
example companies discuss 'billings' or 'shipments' on their earnings release calls, which are both
different from GAAP revenue, but “this standard now brings these non-GAAP financial metrics
more in line with what accountants are more concerned about. Financial statement users will
now be able to have more assurance on the numbers that management is measuring the company
by and the numbers analysts frequently use to measure the strength of these companies." That said, a company is not more valuable just because they recognize revenue earlier, if the underlying transaction has not changed, the financial statements may just better reflect a company’s true value. Again, if GAAP has created standards that have improved the reliability of the financial statements, the move to IFRS may frustrate companies who try to remain honest in their estimates when other companies choose to abuse the flexibility of the new standards.

Analysts will still have to see through the accounting to see the similarities or differences in underlying transactions. Financial analysts, as Frye put it, are still going to change the numbers around by ignoring items like stock compensation to create non-GAAP measures, however the particular pronouncements on revenue recognition for Shoretel helps revenue be more aligned with cash collections. The EITF consensus positions allow investors more to rely on the numbers that analysts and managers release. Eves also believes that the new standards create numbers that are more representative of the transactions most companies in the technology industry, and others, are doing. Under the old guidance, companies had to hang a lot of revenue up on the balance sheet under deferred revenue because they did not have fair value for an undelivered element, when the reality was that the majority of the deliverable had been provided. Now companies can estimate the selling price and separate the bundle to recognize each element as it is delivered instead of deferring revenue until the whole bundle is delivered. These factors enable users to have more confidence that the numbers on the financial statements that are being interpreted are also being done so in a way that represents the specific economics of a company since all of the companies had to make the change in accounting.

57 Eves, Mason. E-mail interview. 27 Jan. 2011.
58 Ibid.
Enforcement Activity

Currently, failure to properly recognize revenue, whether intentional or unintentional can significantly mislead financial statement users and cause a company to experience great costs in penalties, restatement efforts, and investor confidence. Various issues have led to the development of regulations for how software companies recognize their revenue. Whether they were caused by fraud or by misunderstanding, these ‘errors’ in revenue recognition have had a great impact on GAAP and how all companies report. With IFRS, the ability to detect misstatements may be hindered by the fact that auditors will have to rely on management to explain their judgment on certain treatments of revenue. Without specific standards, this could make an audit much more challenging. Even after regulators add to the voluminous guidance in GAAP, there is deliberate manipulation by managers to fraudulently obtain a particular result; one can only imagine the breadth that they would have under IFRS. Looking at how companies have made mistakes in the past is important in determining what needs to be changed so that the error is prevented in the future.

In the recent past, various companies have disregarded rules making regulators and auditors more wary regarding the challenges of such audits. Employees of companies like Island Pacific, Inc. might go so far as to violate their company’s revenue recognition policy that is even more strict and specific than SOP97-2. A 2008 case brought on by the SEC verified that in 2004 Island Pacific specifically represented in its Forms 10-K and 10-Q that its conditions for recognizing revenue included “when a license agreement has been signed,” instead of merely requiring persuasive evidence of an arrangement. Nonetheless, Island Pacific recognized revenues even before persuasive evidence existed, much less a signed contract. The Company

overstated its revenues by 140% for the second quarter of 2004, 29% for the nine months ending the third quarter of 2004, and 22% for the 2004 fiscal year. If companies have committed fraud under the strict guidance of GAAP, the risk that they may abuse IFRS increases because of the freedom it gives managers.

In 2006, McAfee fraudulently overstated revenues by 131 percent by improperly recording sales to distributors as revenue. SOP 97-2 was created to address the concerns that were raised regarding companies like McAfee accurately presenting their financial information to users, whether it was a mistake or fraud. SOP97-2 and the other guidance speaking to software companies are in place to help clarify some of the numbers within financial statements, like revenue recognition. By making changes to software revenue recognition standards, FASB has made accounting for these companies not only more clear, but more reliable for all users by eliminating different ways earnings can be managed.

MicroStrategy, Inc. is a software company that came out with an IPO in June 1998. Its main competitors were IBM and Oracle, and at the time, it was seen as a successful growing company with positive net income. On March 20, 2000, MicroStrategy announced that it would restate financial statements from the date of its initial public offering causing its share price to fall 62%, from $260 to $86.30 and knocking about $11 billion off its market value. The main reason for the company's restatements was the premature recognition of revenue arising from an error in the application of AICPA SOP 97-2. The misapplication had to do with multiple

63 Ibid.
deliverable deals in which the company was unable to separate significant future products or services from the up-front sale of a license to the company’s software products. It was determined under SEC investigation that the company recognized revenue earlier than allowed under GAAP, contrary to what their policy stated:

"Product license revenues are generally recognized upon the execution of a contract and shipment of the related software product, provided that no significant Company obligations remain outstanding and the resulting receivable is deemed collectible by management. [...] Fees for our maintenance and support plans are recorded as deferred revenue when billed to the customer and recognized ratably over the term of the maintenance and support agreement, which is typically one year."

In order to reach the quarterly goal, the company also manipulated contract dates and held contracts that had been signed by customers but not yet signed by the company until after the company determined the desired financial results. GAAP and MicroStrategy’s own accounting policies required the signature of both the company and the customer prior to recognizing revenue. The company was found to be involved in violations of reporting provisions, violation of record-keeping provisions, and violation of internal control provisions.

Looking at Table 1 below, prior to 2000, the share prices of MicroStrategy, IBM, and Oracle were all in the same relative range, each taking its own turn with volatility. If MicroStrategy had not tampered with their revenue recognition their prices would likely have remained consistent with Oracle and IBM. The Table illustrates the significant drop in value of the Company and its effort to regain its strength as a company honestly. MicroStrategy was,

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65 Ibid.
66 Ibid.
after all, turning out good products; As of September 30, 2001 a product won the PC Magazine Editors' Choice award as the best business intelligence software. Instead of competing legally with its competitors, the company made decisions that in the end cost them a great deal of time and money.

Table 1

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Part of the SEC's ruling for MicroStrategy included adding an additional director to the Board, a Director of Internal Audit, and an Internal Audit Department. The changes were costly, but vital to become a trustworthy company and thus a successful business. With the effort FASB has put into preventing fraud and creating a better image for the business world, IFRS may have an affect on the trustworthiness of these businesses. If users are not able to understand exactly where enterprises are getting their numbers, they may become even less trusting of companies and therefore their likelihood of investing or loaning may decrease.

67 Ibid.
Conclusion: What Should Be Done Now

This paper is a student’s perspective, and when the research began, a ‘principles-based’ set of standards seemed very appealing. With the same goals as GAAP, to create reliable, relevant, and internationally comparable financial statements, a less complex set of standards may appear easier to someone just learning about the systems, and seems like it would reduce the work for managers and auditors. However, after further research, the problems of a loss in guidance become more apparent. In fact, it can be contended that IFRS will be more work for not only managers and auditors, but users as well. Looking at the depth of its standards, it is clear why some see GAAP as, “the gold standard.” The U.S. has spent an amazing effort on creating a set of standards that provides their users with answers to questions that they may come across. GAAP guidance includes extensive lists of illustrative examples to help users with various situations. For students, homework is always easier with examples because they put things in perspective; the examples included in GAAP guidance have the same effect. While the stigma is that rules are restrictive and people want the freedom to be able to use judgment, financial accounting is just the place to show how rules are needed and should be appreciated. Try as they might, managers cannot avoid bias. Rules are an attempt to decrease the harmful effects of bias and keep ‘numbers’ closer to what is needed to meet the users’ needs. Auditors use rules as support in their decisions to accept or decline a manager’s treatment of certain items. And most importantly, users of the financial statements benefit by being able to have greater confidence in the accuracy of a company’s filings. Rules help create and maintain transparency so users are better able to understand management’s treatment of special items. As the U.S. moves toward a principles-based set of standards, it is of the utmost importance to consider how the different groups will react to the changes.
While there have been several meetings held by the FASB and EITF to discuss the Exposure Draft for Revenue Recognition, a decision has not been made as to exactly what it will consist of and when it will be applied. For now, companies, auditors and clients can only try to prepare as best they can for a smooth transition when it comes.

While speaking about the types of problems that Eves has seen, he made the observation that “some [new standards] have little to no effect on companies while others can be sweeping changes to the way companies account for things.” He used the example of the SEC with the current exposure draft that will fundamentally change the way all companies report financial results. “The balance sheet, income statement, and cash flow statement would look nothing like we are used to today.” The purpose of the design of many pronouncements is to enhance disclosures to the financial statement reader. With the transition into IFRS, the goals will be the same but the changes that companies will have to make will have effects varying from inconsequential to radical. It is important that the shift to IFRS is not a step back, U.S. regulators have learned from various ‘mistakes’ over time, and have built standards around protecting against them happening again. Most importantly, it is the users of the financial statements that will determine if IFRS is successful. Conversion was proposed to increase comparability, but if the standards are so general the investors and creditors do not perceive that different enterprises record transactions in similar ways, there will not be actual comparability.

In a letter to the Director of Research and Technical Activities of the Financial Accounting Standards Board from Lynn E. Turner, the SEC Chief Accountant, it was made clear that “developing guidance for revenue recognition related to multiple element arrangements is a broad project with many implications that has ‘outgrown’ the size and nature of a project

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69 Eves, Mason. E-mail interview. 27 Jan. 2011.
70 Ibid.
contemplated by the mission of the EITF." The call for a global set of standards is one that will never go away until it is satisfied.

The costs of convergence as the AICPA sees them have been presented, as were some of the unforeseen costs. Their take on the benefits of convergence is that by adopting IFRS, a business can present its financial statements on the same basis as its foreign competitors, making comparisons easier. They also stated that "companies with subsidiaries in countries that require or permit IFRS may be able to use one accounting language company-wide." The last advantage of convergence that they gave is that companies may also benefit by using IFRS if they wish to raise capital abroad. While the immediate costs to converge can be estimated and the future costs of convergence can be theorized using information from the past, the benefits of convergence do not seem to have been quantitatively estimated. Without a doubt the U.S. must get on the same page as the rest of the world, but stepping down to do so may not be the best way. As can be seen by the extensive examination of how GAAP's software revenue recognition standards have evolved over the past several years is important in showing how much work the U.S. has put into creating the best guidance possible. U.S. GAAP is considered

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72 Ibid.
the gold standard, and by compromising the quality of standards to match the rest of the world is just not worth it. It seems more advantageous to the global quality of accounting for the world to adopt a system like GAAP. The costs of transitioning for other companies will be estimable, but most of all, the benefits will be more certain—a guarantee that, not just comparability, but that quality of reporting will improve for companies abroad.

The goal of this paper was to illustrate how a GAAP standard evolves, why it must evolve, the work that goes into compliance with that standard, and who determines its success. In my opinion, the transition into IFRS is likely to cause the following three things to happen, perhaps in isolated occurrences, but more likely as a result of each other. First, with a decrease in detail and guidance, U.S. companies may find it easier to maintain their current systems which are in compliance with GAAP standards and are among the choices allowed by IFRS. To the extent that current GAAP is a subset of IFRS, they would minimize the costs of adoption and the uncertainty caused by manager choice. If their methods are within the narrow confines of GAAP, their auditors will have little difficulty signing off. Users will have confidence that the perceived comparability under IFRS is matched with substantive comparability from GAAP.

Other companies may use the freedom that IFRS gives them through its flexibility to manage earnings. To the extent IFRS offers management more choices, they may choose the option that benefits the firm, or themselves, to the maximum extent. This may increase their implementation costs, their auditor costs, and uncertainty among users. Finally, in the U.S. when there was uncertainty about how to recognize software revenue, users, managers and auditors called for more guidance. It could be that the same thing will happen globally and universally due to uncertainties resulting from broad IFRS standards. As it may turn out, IFRS
could merely be a transition mechanism to obtain accounting standards that are, indeed, used globally; they may just be very similar to what the US currently has in GAAP.