Aggregations and Disaggregations of Accounting Information

By

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Abstract

The desire of shareholders, regulators, and other stakeholders to have more and better information about the operations of a firm is not new. Whenever there is a financial crisis of some sort there is always a group that contends the problem could be avoided if they only had more information. What is new is that the technology exists to make available a far more complete view of the firm. Both larger and more current corporate information systems make the ability to provide this a complete picture of the firm a reality. When this availability is combined with the capabilities to provide this information over corporate websites it seems easy to make the argument that the time to enhance disclosures is now. There has been some work on what a continuous reporting system might entail and this work has raised some issues. One in particular concerns the ability of user to actually make use of this information. While there are arguments to be made on both sides of this issue there are some more critical issues. First, is how to provide this information? Should users be required to construct their own reports? Another issue involves the protection of information that is sensitive to the success of corporations. To facilitate this communication between the company and any individual requesting information there needs to be a shared model of the underlying data. This paper examines the REA ontology constructs that would support some of these additional disclosures and how the ontology could allow an analysis of the level of detail that would yield information that could change the ability of the firm to compete and the interaction between owners and managers.

I. Introduction

There is a continued interest in providing additional information about the activities of corporations to different groups of stakeholders.   While events such as the problems with Enron and the bankruptcies of firms such as Lehman Brothers may not have been avoided if investors had additional information, they have brought renewed attention to the question of what additionally should be disclosed.   In an advisory report to the SEC (United States Securities and Exchange Commission 2008) there was a discussion of using corporate websites to offer more and different types of information including non-GAAP disclosures and to provide this information on a timelier basis. The non-GAAP disclosures could include such information as executive summaries and key performance indicators. The report also mentions the capability to "drill down" and to allow investors to "... gather information … that is at the level of detail they believe is satisfactory for their purposes…." (p. 81). There are at least three issues that need to be considered before requiring firms to produce timelier information with more detail.

One issue that is usually raised when considering whether to provide additional information to a decision maker is their ability to use it effectively. The general issue is whether this additional information will overload the decision maker and will therefore be of minimal value or even degrade the decision.   As the level of detail or disaggregation becomes more granular a second issue must be considered; the availability of information concerning management actions to shareholders. The problem, for the owners, is that they cannot see or review many of the decisions made by management, and instead must rely on aggregated performance indicators. This principal-agent relationship requires management to provide information to these owners and other user groups as an indication of their performance (Jensen and Meckling 1976). A third, and perhaps more critical issue, is the inadvertent disclosure of sensitive information and requires careful consideration by those parties calling for more disclosure. It has been recognized that the ability to continually request information from a set of data, even if the request is for means or averages, will allow acquisition of individual data (De Jonge 1983). There are some approaches that could be used to keep corporate information secure, but each approach has some deficiencies either because of the nature of business information or because of the collusion problem (Gal 2008).   This research will examine some of the aggregations contained in current financial statements and the level of drill down or disaggregation that could allow either a change to the principal-agent relationship and/or competitors to obtain "sensitive" information.

The continuous reporting environment can be characterized along a number of dimensions; and each will impact either the ability of a user to disaggregate the information, or the users' ability to create and to obtain information about different aspects of the business (Gal 2008). A major dimension that is related to the technological capabilities of the firm is the time lag between any event and the ability of users to obtain information about that event. The other three dimensions of any continuous reporting system are connected to the organization's information structure and the users' perceptions about this structure. First is the expansion of the continuous reporting capabilities to include operational data. Financial statements include predetermined accounts and expansion beyond these accounts would require a shared definition or definitions of operational activities. A third related dimension concerns the level of detail available. Even if detail is available only for traditional financial statement accounts there is an issue of how to describe the activities that alter the balances of these accounts. Finally, the capabilities of the interface available to the users of the website providing the continuous reports need to be formalized. One example might be the structure of any time related queries. These last three issues are intimately connected to the user's view of the organization and the view supported by the organization. In the original REA paper (McCarthy 1982) the central issue attacked was just this problem; how to describe data in a shared environment. In this paper the REA ontology and the proposed extensions (ISO15944- Information Technology - Business Agreement semantic description techniques 2002) are used to describe the underlying issues of a continuous reporting environment.

Works Cited

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