

USING A WEB-BASED MODULE TO TEACH INFORMATION LITERACY

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ABSTRACT

The Internet has made accessing information easier for students, but the sheer volume of information available makes assessing that information more difficult. Using a highly structured web-based module helps students learn how to find relevant material and choose which material best fits their research assignments.

INTRODUCTION

The Internet has made it possible for students to find a large number of sources on a given topic, but at the same time made it more difficult for them to do good research because they cannot easily evaluate sources for relevance and value. This paper describes the development of a web-based module to walk students through the process of researching a company. After using this module, students have a framework for finding and evaluating sources for their research papers.

So many sources are available that faculty members need to integrate material into their courses to teach students how to evaluate the information they have gathered. Access is no longer the problem, but rather it is the assessment of information's value. Since information literacy is not the subject of these classes, one way of handling this added material is to develop on-line projects that teach students how to access and assess the information they gather.

BREAKING UP A RESEARCH TASK INTO STEPS

By giving assignments early in the semester, I encourage students to take time to plan research and to assess their sources methodically rather than try to manage the entire task in a short time frame. One assignment asks students to assess the business risk of a company that an accounting firm is considering as an audit client. While students have often analyzed companies in finance classes as to investment value, using stock value and other basic measures, this assignment asks students to look at a variety of larger issues, both internal and external. To help them see these larger issues, students receive a list drawn from *Auditing Organizations Through a Strategic-Systems Lens* by Bell, Marrs, Solomon, and Thomas, KPMG Peat Marwick 1997:

“The auditor should obtain a knowledge of matters that relate to the nature of the entity’s business, its organization, and its operating characteristics.... The auditor should also consider matters affecting the industry in which the entity operates, such as economic conditions, government regulations, and changes in technology, as they relate to the audit. Other matters, such as accounting practices common to the industry, competitive conditions, and, if available, financial trends and ratios should also be considered by the auditor.” (p. 6, from AU 311.08, 1997)

Using what Peat Marwick calls A Global Systems Perspective (p. 27, Exhibit 3; pp. 28-30), students are encouraged to look at the Global Environment (natural resources, cultural advantages, global competition, law regulatory environments); Local Environment (local labor markets, customer/supplier relationships, competitor innovation, direct competition); and Internal Environment (improper organizational configuration, dysfunctional internal culture, inferior competencies, absence of process advantage, ineffective internal communication).

Then students can work with the risks relevant to financial reporting (pp. 76-77, from AU Section 319.29, 1997):

- Changes in operating environment
- New personnel
- New or revamped information systems
- Rapid growth
- New technology
- New lines, products, or activities
- Corporate restructurings
- Foreign operations
- Accounting pronouncements

To get students started on this important individual paper, I break the task into logical steps, as shown in Exhibit 1. These steps are:

1. Analyze the Task Assigned.
2. Find Basic Information First.
3. Widen Your Search to More Distant Sources on the Company.
4. Analyze Your Gathered Material.
5. Write Your Company Risk Analysis.

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If students take time to use these steps, they can write better papers. However, students still need more help in both finding a useful source and using it effectively.

TEACHING STUDENTS HOW TO USE THEIR SOURCES

For example, one excellent source to which our library subscribes is Factiva. To get the most out of this rich source, I have found it helpful to walk students through the use of the material. After the search, students tend to want to rely on lots of lists of what they found, rather than taking the extra step and using the information to create their own analysis of the company's position. Exhibit 2 is a handout that walks students through the use of research findings.

THE STRENGTHS OF STRUCTURING WRITTEN RESEARCH ASSIGNMENTS

Although it may seem as though upper division students ought to be able to perform effective research on their own, we have found that walking students through the process results in better papers. The overwhelming amount of information available on the Internet is just too much to handle without a structured way of sorting out the useful and valid information. The problem is really no longer just one of *access* to research sources, but of the ability to *assess* these sources. Giving students practice in finding and using research sources helps them develop the skills they need later to gather information for work-related research. They can more quickly go to the best sources and use the information there in a more fruitful way.

REFERENCES

- "Alcoa Opens New Automotive Center in Michigan"
Associated Press. <http://80-global.factiva.com> 5
October 2004.
- Bell, Marris, Solomon, and Thomas. *Auditing Organizations
Through a Strategic-Systems Lens*. KPMG Peat
Marwick, 1997.
- "Markets Up Fleetwood Shares on Earnings Report the
Mobile Home-Maker is Helped by Stronger than
Expected Quarter: Hurricane Frances Boosts Sales."
Los Angeles Times (8 September 2004).
www.LATimes.com 8 October 2004.
- SEC Filings and Forms (EDGAR).
[www.http://www.sec.gov/edgar.shtm](http://www.sec.gov/edgar.shtm)
- "Thor Named to *Forbes* Platinum 400 List." *PRNewswire*
10 January 2000.

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Exhibit 1: How Do We Research a Topic?

Step One—Analyze the Task Assigned.

Different assignments ask for different things. The Company Risk Analysis, for example, asks you to gather material generated by the company AND material produced by sources external to the company. You are directed to create as full a picture of the company as possible so your boss can determine if this company would be a good prospective audit client.

Step Two—Find Basic Information First.

To create this company snapshot, you will need internal information that the company regularly provides to outsiders, such as the annual report, SEC filings found electronically on EDGAR (<http://www.sec.gov/edgar.shtml>, which includes a Quick Edgar Tutorial) and press releases sent to newspapers such as the *Wall Street Journal* and trade magazine publications (examples: Chemicals and Insurance).

You may wish to find general information on the company and its industry in sources listed as Basic Company Information and Public Company Information (Perkins lists). Guides to the Literature (Perkins) will help you find business information sources that are relevant to your company and industry. It should be comparatively easy for you to find material on a public company such as the one you have been assigned.

Step Three—Widen Your Search to More Distant Sources on the Company.

Once you have a feel for your company (A few questions you need to be able to answer: How well or poorly does the annual report tell you the company is doing? What areas appear to create risk for the company? What new areas is the company pursuing, if any? How does the company appear to rank in its industry?), begin the real digging to find out what people outside the company think about it. How do the experts rank the competitors in the industry? Look for business press overviews of the industry (*Forbes*, *Business Week*, *Fortune*), trade magazines (*Chemical Week*, etc.), and articles.

BE CAREFUL when looking for articles on the company (ABIInform, Wilson Business Abstracts, Lexis/Nexis) to differentiate between press releases (company-generated information slightly rewritten and printed in newspapers, general business magazines, and trade magazines) and actual articles researched and written by industry experts or at least business journalists.

Step Four—Analyze Your Gathered Material.

- Make a list of issues and risks facing your company in the next year. Go beyond the Management's Discussion and Analysis section of the 10K!
- List areas you need more information on and figure out how to get that information.
- Plan the outline of your descriptive section of the report.
- Generate the company/industry ratios for your report's analytical section (you can figure the ratios yourself or use the Comparative Financial Report available in Factiva or other sites).
- Plan graphics that illustrate your conclusions.

Step Five—Write Your Company Risk Analysis.

For your intended audience, write up your company findings so the reader gets as full a picture as possible of the company, its industry and its position in it, its competition, its products, its risks, its future and its likelihood of being a good prospective audit client.

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Exhibit 2: TIPS ON COMPANY RESEARCH

Access Factiva and find your company: From the university website, go to Library, Databases, Factiva. Click on the Companies/Markets tab. Enter the name of your company. Choose the listed version of your company that you plan to research.

Available in Factiva: In the initial company screen, list of key competitors, links to SEC filings, and news on the primary industry of the company (example: for Kelly Services, employment agencies). Moving down the right side of that screen, links to latest news, latest press releases, latest trade articles, then Reports (Financial Snapshot, Financial Snapshot Plus Profile, Comparison Report).

Print out the Financial Snapshot Plus Profile for your company and also the Comparison Report (which lists industry averages for you). The Financial Snapshot Plus Profile gives you a wealth of useful information. The box at the top of the page tells you how many employees the company has, and how that number has changed in the last 12 months. Are the employee growth figures flat? Increasing? Decreasing? Aramark, for example, had 60% growth in 2003. That could mean that it was growing very fast, or that 2002 was a bad year and the company was now catching up to where it was before 9/11.

In this box, you will also find where the company operates (example for Kelly: major cities of North American, Europe, and the Asia-Pacific region). It also gives the SIC code, which may help you find related industry articles in some databases.

Since you are not writing an investment paper, the stock comparisons are not as useful to you as the Key Financial Ratios that come a page later: Relative Valuations, Financial Strength, Profitability, Effectiveness and Efficiency. Compare the latest 12 months, 3-year average, and 5-year average. What can they show you about the company's positives and negatives? You may want to check into a few of the Key Competitors listed after this section. You could run a Comparison Report on a competitor and compare the numbers to those of your company, for example, and also to the Industry Averages.

The rest of the Financial Snapshot Plus Profile report has an Overview (a quick look at what the company does) and a list of Officers (often not too important unless there have been a lot of recent changes), Note under *Products and Operations* what different parts of the company contribute to the whole. For example, for Kelly, U. S. commercial staffing is 47 percent of 2004 sales and International is 30 percent, so you could focus your report on these two areas and compare to competitors, look at the effect of the economy on these sectors, and so on (Factiva 2005). The Profile also includes a company history and recent income statement.

The Comparison Report has a page of stock comparisons that you can skim over, and then the important Financial Strength, Relative Valuations, Effectiveness and Efficiency numbers for your company compared to the Industry averages. This information can form a section of your paper as you discuss why the numbers are different and what that means to the risks your company is facing. You may want to discuss the most meaningful numbers in your three-page-limited discussion of the company and include a more complete graphic as one of your report attachments.

Go to your **company's website**—get the **annual report** and read through it on-line. Look for basics—what does the company do? Is one part of the company responsible for the biggest part of the company's sales? For example, Aramark provides outsourced food and support services, uniforms and career apparel to “business, educational, healthcare and governmental institutions and sports, entertainment and recreational activities” (Factiva 2004). But if you look at the annual report (usually found under investor relations on the company website), 2002 food and support services are 65% of sales, 58% of operating income, etc. So look harder at this segment—what might affect sales here? Look at the economy, at supplier prices, employment levels, whatever you think might help/hurt this type of business.

For example, in the food and support services area, the annual report tells us that Aramark had fairly strong sales growth in the Education Sector and acquired Correctional Foodservice Management, but the Business Services Sector was weak because of the economy and lower employment levels. Sports and Entertainment Sector decreased as attendance was down in 2002. What is the outlook for the economy, employment, sports attendance in 2004?

This is a thinking assignment as much as a gathering-of-proof assignment. You want to be able to produce a balanced view of your company's outlook (that's why you need **external sources** to verify what the company says about itself). You are looking at overall business risk, really--what is the company and its industry doing now and in the near future? Look at macro issues--does your industry have more government regulations than others? more litigation? more labor problems? Each industry has a different set of risks to face and your job is to find out about your industry overall and how your company fits into its industry context. Remember to find out your company's SIC or NAICS code, so you can use it to find related-industry articles that may include your company.