

# The Rationale and Recipe for a Web-Based Accounting Subject

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## ABSTRACT

*This paper discusses the rationale, content, and teaching and learning activities for a new web-based subject at Victoria University. An expansion of course offerings into an array of countries in the Asia-Pacific region plus budgetary and demand pressures on staffing and physical resources have accelerated the need for cost-effective teaching and learning solutions. In response an Accounting Project subject has been developed by the School of Accounting and Finance that allows students at any location to undertake a valuable, interesting and robust course in financial analysis with minimal face-to-face interaction with a supervisor. The first trial of this Web-based delivery method for student-centred learning has resulted in report outputs by students that are topical, are based on very 'fresh' contemporaneous information, and are of a quality and currency that has led to their acceptance at international conferences.*

## INTRODUCTION

This paper discusses the rationale, content, and teaching and learning activities for a new web-based subject at Victoria University. The sheer size and growth of the Victoria University combined with Australian Government fiscal cuts have caused a situation where there is significant pressure to cut discretionary spending and consolidate, rationalise course and subject offerings whilst at the same time coping with burgeoning enrolments, domestic and international geographical spread, and demands of students for flexible, value-for-money, and up-to-date study options. In this context, subjects that can be delivered in a cost-effective are being strongly encouraged. The brief for designing the first web-based Accounting Project covered three main areas: the requirement for a cost-effective teaching and learning solution to geographical spread, human, physical and financial resource constraints; the nature of desired student's modes of study; areas of student interest; and professional accreditation and standards.

A web-based subject was seen as a cost-effective teaching and learning solution to geographical spread, human, physical and financial resource constraints. Students doing any discipline of postgraduate Masters degrees offered by the Faculty of Business and Law, and who have elective options, can study the Accounting Project from any geographical location and at times to suit their private and business schedules. The demand for attendance flexibility is not just geographically driven, as students often have work and travel commitments that make attendance at set times in a conventional class-based mode problematic. The Accounting Project is therefore time and cost-effective for many candidates. Travel time and costs, and the need to commit specific times to attendance are entirely eliminated. The web-based nature of the subject allows for all resources to be obtained without additional cost – hence a significant saving on outlays for conventional resources such as textbooks. The web-based nature of the Accounting Project allows the Faculty to offer it for consumption by any eligible student at any global location in any of our four semesters.

The benefits from the University perspective are the ability to offer an up-to-date subject that is very much in demand globally, and at the same time eliminating the cost associated with providing a physical location for the classes, and allowing one lecturer to deal with student-centred learning candidates in a timely and cost effective manner. The lecturer is allowed about half an hour load for each project student. In simple terms, this actually costs more in academic time per student than a conventional class situation, but there are significant overall net savings in obviating the need for overseas travel expenses and the provision of physical infrastructure.

Financial analysis was chosen as the study area for the first iteration of the Web-based Accounting Project. There is exceptionally keen interest in this field from

postgraduate students studying accounting and finance Masters degrees, and also those doing generalist MBAs and other programs such as Sports Administration. This is largely because of the huge professional demand for accounting and finance professionals with advanced financial analysis skills, and a recognition that managers in any field need competencies with financial management. For example, a sports administration manager may not actually do the financial analysis from their position, but they need to know when it should be done and be able to commission, critique, understand, interpret and apply the financial analysis that is placed before them. So far we have established that the web-based Accounting Project is advantageous from a resourcing point of view, fits with the delivery and content needs of many students, and by centering it around financial analysis, an important dimension in the professional competencies of managers from any discipline is addressed. To make sure that the course content meets professional standards, the subject content is monitored by an advisory group made up of professionals from GE Finance and CPA entities (Certified Practising Accountants). Next we look at the content of financial analysis.

## FINANCIAL ANALYSIS

Useful financial profiles of an entity's performance can only be made by combining the right technical "number-crunching" competencies with critical skills that question: "what is behind the numbers". In addition the effective analysis of a set of financial statements requires their interpretation to be framed by an understanding of the organisation's context. The mechanical financial calculations must be synthesised with concepts from economics, business strategy, accounting and other business disciplines to make sense of the historical numbers, and to make future financial projections. So financial analysis must be framed in the context of the whole business, and extends beyond "the financial numbers" to perspectives such as the core business, the market, operations, past performance, future innovations, and the quality of employees and management. Only by understanding the interrelationships between such perspectives can one make a meaningful financial analysis.

The subject aims to provide students with technical and analytical skills in financial statement analysis that informs investment, finance, credit, lending and management decision-making. This subject is designed to reward the student both intellectually and practically through performing financial analysis on actual companies. The analysis extends beyond 'the financial numbers', as sound assessment depends on factors other than comparisons of standard financial ratios. As cases such as Enron, Tyco, Sunbeam and Worldcom in the USA, and HIH, Harris-Scarf and One-Tel in Australia show, only by understanding the what is behind the numbers and how they relate to the organizations context and strategy can one make a meaningful financial analysis.

By the end of the course students should have the capacity to understand; interpret; and critically assess financial statements put out by organizations in light of additional contextual information available. What we needed was a holistic framework that would get students to focus on a myriad of organisational and contextual issues in an organised and integrative way. We now discuss the integrative model through which financial analysis is approached - Price Waterhouse Coopers' Value Reporting Framework.

## PRICE WATERHOUSE COOPERS (PWC) VALUE REPORTING FRAMEWORK.

PWC is the largest of the "Big 4" accounting firms. The insights that PWC has gained from an ongoing research program into the performance measures that

really matter to key stakeholders have been codified into the 'Corporate Reporting Framework' which is alternately badged as the 'Value Reporting Framework' (VRF).

The VRF consists of 'performance measures' about key *elements* of an organisation's context and operations that impact on value creation. This information is required by a range of internal and external stakeholders. These elements are grouped logically into one external category and three internal categories of performance information that all industries and companies share in common: Market Overview, Strategy and Structure, Managing for Value, and Performance. By performance measures, PWC advocates a range of information from financial and non-financial numbers to narrative descriptions (stories) to media like photographs.

These performance measures in the VRF are needed by internal and external stakeholders to reduce uncertainty in decision-making (about past & future performance) and demonstrate accountabilities (improve transparency).

Each of the four broad categories encompasses specific elements (Figure 1) that, according to PWC's research, both companies and investors consider critical to assessing performance.

There are a number of features of the VRF which are persuasive for its application to teaching and learning in accounting as the integrative model for subjects. Firstly there is an elegant simplicity and attractive logic to the model. The VRF works on a logical sequence from left to right. Initially we must examine the external environment that an organization faces. Then we must consider whether the strategy and structure of the organization aligns to these contextual realities. Then there is the issue of whether the drivers required to succeed with the strategy are present and can be managed to achieve the value required. Next, the financial and non-financial performance outcomes must be articulated and evaluated. In this sequence we get logic and a breadth of issues to examine. In all of these considerations, accountants have a potential role and exert influence as practitioners and gatekeepers of financial and non-financial performance and members of multi-disciplinary management and project teams. Also the literature shows the VRF to be the more prevalent form of commercially developed performance management frameworks used in practice at the present time. Finally, the encouragement and support of PWC for the take-up to happen through the comprehensive free resources which it provides as is outlined later in the paper.

The logical sequence of the VRF translates to things students address in their case studies. First we must examine the external environment that an organization faces. Then we must consider whether the strategy and structure of the organization aligns to these contextual realities. Next comes the issue of whether the drivers required to succeed with the strategy are present and can be managed to achieve the value required. Lastly, the financial and non-financial performance outcomes must be articulated and evaluated. In this sequence we get logic and a breadth of issues to examine. Students doing the subject are expected to understand and react to the logic of the model and to cover each of the elements in each of the four sections in framework in their analysis report which compares two companies competing in the same commercial sector. However, students are expected to concentrate on key elements that are of supreme importance to their professional interest and professional development. Hence one student may choose to make a more comprehensive study of contextual external market-related elements whilst covering other elements in lesser detail, and another student might focus more heavily on analysing past financial and economic performance. So using this framework gives the subject a relevant, robust and commercially recognized analysis model that gives the opportunity to combine breadth of issue coverage with depth of analysis that matches student requirements and the problem at hand.

Next we look at the web-based resources used in the Accounting Project.

### WEB-BASED RESOURCES AND REPORT TASKS

The Accounting Project relies entirely on Web-based resources. Firstly students access the subject guide that outlines rationale, tasks, detailed notes and worked examples on calculating and interpreting ratios, subject timelines etc, and many other resources such as articles, subject bulletins, and referencing instructions via the subject's WebCT site at <http://webct6.vu.edu.au/webct>

Then for students to get an introduction to the ValueReporting Framework, they access PWC at <http://www.corporatereporting.com/index.html>. This site provides information on the background and structure of the ValueReporting Framework. Students can register access and obtain examples that bring narrative reporting

alive by showing over 40 real-life examples of what good reporting actually looks like from companies across the globe. Each example contains detailed commentary from our professionals to provide guidance on improving the transparency of financial and non-financial information. This gives students free access to a resource that in hard copy would cost in excess of \$200 US.

Next students access comprehensive examples of good practice reporting which reflects the sections and elements in the elements in the ValueReporting Framework. These relate to a public company listed on stock exchanges (Lintun at <http://www.lintun.org/> or [www.ebr360.org](http://www.ebr360.org)) and a private company (Re-Use at [www.ebr360.org](http://www.ebr360.org)) which has statutory reporting requirements. These cases provide students with practical examples of how the ValueReporting Framework can be operationalised, and a benchmark for comparing their own choices of companies to be studied against good practice. The Re-Use case is also especially valuable in consolidating understanding of ratio and trend analysis obtained by the students from the previously mentioned detailed notes and worked examples on calculating and interpreting ratios that are to be found on the subject's WebCT site.

Next students must decide on their own choice of companies to analyse using the ValueReporting Framework as a structure. The aim is to introduce students to the information contained in the financial reports of companies and to give them the opportunity to use this information in contextual financial analysis via comparative case studies of two international businesses in the same broad industry sector. The specific requirements are that prepare a report in relation to two organizations which operate in the same general industry or commerce groups and present an oral presentation that summarises your findings.

With the Open Source database students can gather in-depth data on more than 100 major industries, including detailed SIC code-level information. They can find companies that match specific criteria--search by size, location or line of business. Students can find public companies via a large selection of variables and get detailed financial information. They can also find key executive contacts and board members by name, location, line of business, job function, biographical details, or company size. It gives access to news, articles, analysts' reports and SEC documents. Students use a basic search interface for quick text searching, whereas more focused searches utilize the Global Business Taxonomy of topics, geographies, and industries, through the precision search interface. By examining the range of information that Open Source provides on most of the world's major companies students obtain two key benefits. Firstly they can see how different analysts select, prioritise, balance and interpret the range of information that connects with each element in the value reporting framework.

Students have additional access to business information via the library's other databases such as Emerald and Ebsco which gives access to leading academic journals, business magazines and newspapers. Students can also access a range of significant information on company performance and prospects via: the Morningstar Financial Analysis and Investing website at [www.morningstar.com](http://www.morningstar.com); business sections of sites such as Yahoo, MSN and Google; and from company websites which contain annual reports, and investor briefings, and other information.

In terms of gaining knowledge and skills in the critical area of sustainability reporting, students access the comprehensive cases and information at the Global Reporting Initiative (GRI) site and the Roberts Environmental Centre.

In preparing their reports, students are asked to send their lecturer (termed 'supervisor') a plan and provide at least monthly feedback on progress. When the report is completed, students submit it electronically for assessment. The report is assessed and graded by the supervisor, and a completion or re-submission report is sent electronically to the student with a maximum 'wing-tip to wing-tip' turnaround time of one week.

To assure originality in content, the paper is submitted through Turnitin (<http://www.turnitin.com/static/index.html>). Turnitin is recognized worldwide as the standard in online plagiarism prevention, and helps educators and students take full advantage of the internet's educational potential. Every paper submitted is returned in the form of a customized Originality Report. Results are based on exhaustive searches of billions of pages from both current and archived instances of the internet, millions of student papers previously submitted to Turnitin, and commercial databases of journal articles and periodicals. Any matches uncovered between submitted papers and source material is detailed in an intuitive and unambiguous format.

### CONCLUSIONS AND FUTURE DIRECTIONS

Ideas travel and are translated into different settings (Solli et al 2005), and so advances into the electronic sphere of teaching and learning need to contain the right mix of 'big steps' and 'baby steps', and should match the needs of the client base. With the initiative described in this paper, the first big step was to recognise the utility to students of the pure web-based form and content, and to subject the idea to a rigorous cost-benefit analysis that included and balanced educational, reputational and economic factors. The baby steps are concerned with technology uptake, and debate about how sophisticated the subject delivery should become. Had the commencement of this subject waited until the more sophisticated features of WebCT and associated technologies were mastered by staff and students for purposes like webcasts and real-time discussions, we believe the momentum could have been lost. If the methodology proposed had looked like requiring significant levels of new or shifted resources, the bureaucracy may well have halted the project on budget constraint and risk-aversion grounds. We learn by doing things in an iterative fashion (Demediuk 2006), and this is especially important to remember with e-learning initiatives. The 'buy-in' by staff and the first batch of students doing the web-based project was largely down to the fact that the time and effort to ramp up with the necessary technical skills were modest compared to perceived returns, and the risks of systems and competencies

failure appeared remote. More sophisticated technological practices will be implemented slowly over time as baby-steps. Student output from the Project has already been accepted in the refereed international conference sphere. Feedback from students in the Accounting Projects suggests that student-centred learning can be productively and cost-effectively extended to subject areas that examine areas of current commercial practice.

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