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USING COMMUNICATION THEORY TO ANALYZE CORPORATE REPORTING STRATEGIES: LITERATURE REVIEW AND RESEARCH QUESTIONS

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ABSTRACT

Recent regulatory reforms in the U.S., such as Sarbanes Oxley and Regulation Fair Disclosure emphasize the significance of timely and transparent corporate reporting and highlight the problems associated with accurate information disclosure. Analysis of corporate financial disclosures using communication theory can provide useful information to stakeholders and other users of financial reports about the firm’s responses to these disclosures. The users’ aim in analyzing financial statements is to isolate the fundamental operating performance of the business. Thus, financial statements, notes, and Management’s Discussion and Analysis provide a feedback role of accounting information a way to communicate the financial results of an entity.

Communication is a goal-directed activity that involves a purpose and one of the central goals of communication for the corporation is to maintain a positive image (Benoit, 1995). Benoi’t theory of image restoration says that management presents the messages (responses) that are instrumental in obtaining the firm’s goals. This paper’s first objectives are to summarize Benoi’t’s (1995) image restoration typology and to propose its potential use in analyzing management’s communication strategies in financial reporting. The second objective is to suggest potentially fruitful lines of research in using this communication theory in the analysis of management’s reporting and its effects on decision makers.
SHARE PERFORMANCE FOLLOWING SEVERE DECREASES IN ANALYST COVERAGE

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ABSTRACT

This study investigates the share price effects of extreme losses in security analyst coverage. Using a sample of firms that lose more than 50% of their analyst coverage in a single calendar year, we find that abnormal returns in the early months of the subsequent year are strongly positive. The mean abnormal return calculated over the first 60 trading days following the year of coverage loss is 11.6%. Furthermore, the returns in the year following the year of coverage loss are negatively related to the percentage change in analyst coverage during the year of coverage loss. Put differently, firms that lose a greater percent of analysts providing coverage during a single calendar year experience higher share returns in the early months of the subsequent calendar year. These results are obtained after controlling for the effects of firm size, price-book, share price momentum, risk, and trading volume. The most plausible interpretation of our evidence is that investors respond to extreme losses in analyst coverage by selling shares in the coverage loss year and driving stock prices to below their fundamental values. As stock prices recover and move closer to their fundamental values, shares of coverage losing firms experience positive abnormal returns.

The incentive for analysts to primarily provide coverage for stocks that they can recommend for purchase has been widely publicized. Therefore, many investors are likely to view dropped coverage by analysts as an indication that analysts have private, negative information regarding the firm's future prospects. Under this scenario, investors would rationally choose to sell their shares at the time of dropped coverage, before the feared "bad news" becomes publicly revealed. However, analysts have other incentives to drop coverage of firms. These incentives (discussed in the paper) relate to analysts' desire to maximize brokerage and investment banking fees for their own employer firms. If analysts often drop coverage of firms solely because of these other brokerage or investment banking concerns, then investors would often overreact by selling their shares in response to severe coverage loss. The evidence we provide of investors overreacting to analysts dropping firm coverage should be of interest to finance academics who are interested in price discovery, as well as investors who are interested in profitable trading strategies.
THE UNDERREPRESENTATION OF WOMEN IN ACCOUNTING ACADEMIA

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ABSTRACT

Female faculty members in the hard sciences perceive women graduate students as less committed to their work than their male counterparts. This study replicates the science studies in doctoral accounting programs to determine the potential impact of this perception on the current shortage of accounting faculty. Female faculty members are found to rate female accounting doctoral students significantly lower than male students on several measures of commitment. These negative perceptions may lead to a relative lack of support and encouragement that gives women doctoral students a greater incentive to pursue other opportunities compared to male doctoral students.

WOMEN IN INDUSTRY AND ACADEME

Concerns about the small proportion of women in academic careers have been raised over the last 40 years. According to AACSB, in the 2007-2008 academic year the proportion of female faculty was 28 percent overall, and only 15 percent of full professors in business schools were women. The potential self-selection of accounting faculty members based on perceived academic environments, including diversity issues, is discussed in the recent Weisenfeld and Robinson-Backmon (2007) study as being of greater concern given the shortage of accounting professors. The shortage of accounting faculty has been well documented (e.g. Fogarty and Markarian 2007).

THE BIAS OF WOMEN AGAINST WOMEN

Several studies have found that women in majority-male work environments perceived themselves as being different from women in general and as pursuing individual goals rather than goals that impacted a group (e.g. Branscombe and Ellemers 1998).

This study explores the following two possible contributors to the underrepresentation of women in accounting academia: (1) differing levels of work commitment of male and female Ph.D. students on average; and (2) faculty perceptions of student levels of work commitment that differ by student gender that result in a lower level of support and encouragement for female students.

Differences between the career paths of men and women could be caused by motivational differences between the sexes. Women, including sole external earners, still perform most of the childcare and household chores, despite whether they perceive their households as traditional or egalitarian (U.S. Department of Labor 2006).

The nature of commitment may differ between men and women. Men are expected to be more individualistic, task-oriented, and competitive, which would correspond to the career-oriented commitment. There is evidence that men emphasize their own work over meeting team goals (Barash 2006).
METHODOLOGY AND DESIGN

Since the gender ratio appears to shift after graduate school, this study focuses on male and female doctoral accounting students at the beginning of their academic careers. The doctoral student questionnaire is designed to assess doctoral accounting students’ self-reported levels of commitment to the doctoral program and their own careers. Inquiries were also made regarding their general work attitudes and the time invested in various activities. The faculty questionnaire male/female versions were randomly assigned. The perceived commitment of male/female doctoral accounting students was the focus of the faculty questionnaire.

COMMITMENT

The commitment statements were designed to measure three forms of commitment: affective program commitment (Meyer and Allen 1991), career-oriented commitment, and team-oriented commitment. Affective program commitment involves emotional reactions to the accounting doctoral program: "I like being a doctoral student in accounting." Achievement is the focus of career-oriented commitment: "I want to move ahead in my career." Finally, team-oriented commitment emphasizes relationships with other doctoral students: "I feel at home with my fellow students in the doctoral accounting program." Similarly, in the faculty version, faculty members were asked to assess the average perceived commitment of either male or female doctoral students as a group along the same three dimensions. Doctoral students were also asked to indicate how they spent their time in an average week.

IMPLEMENTATION

Questionnaires were sent to 558 accounting doctoral students and 1,193 accounting faculty members of doctoral accounting programs in the United States. Each individual email included a link to the third-party survey host website.

Student email addresses were collected from department websites and university directories. This process resulted in 236 useable surveys, a 47% response rate. Of the usable responses, 150 (64%) and 86 (36%) were from male and female students respectively.

The email addresses of faculty member were collected from the Hasselback Accounting Faculty Directory 2006-2007 and department websites. Useful responses were received from 195 faculty members, a response rate of 18% of the total 1,075 surveys delivered. Responses were received from 133 men (68%) and 62 women (32%).

DOCTORAL STUDENT RESULTS

For affective program commitment and team-oriented commitment, there were no significant differences between male and female doctoral student responses. In addition, on average both men and women agree that they want to move ahead in their careers. No significant differences in time usage were found between male and female doctoral students.

FACULTY PERCEIVED COMMITMENT OF DOCTORAL STUDENTS

We conducted 2 (faculty gender) x 2 (doctoral student gender) ANOVAs to examine any gender differences in the perceived commitment of male and female doctoral students. These tests revealed a main effect of faculty gender on affective program commitment (p<.05) and team-oriented commitment (p<.10). These results indicate that there is a reliable difference between the perceptions of male and female professors with regard to these aspects of the commitment of
male and female doctoral students. Profile plots are presented in Figures 1 and 2. Female professors consistently rated female doctoral students as being less committed than male doctoral students.

CONCLUSION

Female faculty members in accounting doctoral programs are found to rate female accounting doctoral students significantly lower than male students on several aspects of commitment. These negative perceptions may lead to a relative lack of support and encouragement that gives women doctoral students a greater incentive to pursue other opportunities compared to male doctoral students.

REFERENCES


Figure 1

Estimated Marginal Means of Faculty Perceptions of Doctoral Student Affective Program Commitment

Faculty member perceptions are significantly different by gender at the 5% significance level (n=195).
Faculty member perceptions are significantly different by gender at the 10% significance level (n=195).
A STUDY OF THE IMPLICATIONS FOR THE TAX PROFESSION OF CERTAINTY THRESHOLDS, CLIENT ADVOCACY, FIN 48, AND THE NEW I.R.C. SECTION 694

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ABSTRACT

This paper reports on the results and implications of a case study of tax professional's understanding of and application of certainty threshold criteria when formulating a professional judgment for an ambiguous tax scenario. The results of the study suggest that participants, in general, demonstrated a lack of understanding of certainty threshold criteria. However, contrary to prior research, such lack of understanding of the certainty threshold criteria by participants tended to result in more conservative rather than more aggressive tax judgments, even when controlling for the participant's level of client advocacy. In addition, the results of this study suggest a lack of consensus between subjects on their certainty threshold judgments.

These results have important implications to both tax practice and financial accounting. The lack of consensus with respect to certainty thresholds demonstrated in this study suggests concerns for the equitable application of the increased tax preparer penalties of revised IRC § 6694. In addition, because certainty threshold criteria will now impact financial reporting (Accounting for Uncertainty in Income Taxes (FIN 48)), these results also raise similar concerns for the financial accounting profession.

INTRODUCTION

As tax law becomes increasingly complex and as the number of returns filed by paid preparers increases, so does the importance of understanding the role of tax practitioners in tax compliance. One method the government and the profession have used to limit the aggressiveness of tax practitioners in fulfilling their advocacy function is through the establishment of legal and moral standards of professional behavior. One such standard is the imposition of certainty threshold standards.

This paper reports on the results and implications of a case study of tax practitioner's understanding of and application of these standards for evaluating positions taken on tax issues. The results of the study suggest that participants, on average, lacked understanding of the certainty threshold standards. However, contrary to prior research, such lack of understanding did not seem to cause participants to take overly aggressive tax positions. On the contrary, participants tended to be more conservative on taking tax positions than was required by the standard. In addition, the results suggest a large degree of variability between subjects on their rating of the level of uncertainty (certainty threshold) of a tax issue.

The results of this study have important policy implications and will be of interest to various stakeholders. As a result of recent developments in financial accounting and auditing, accounting firms in general, not just tax professionals should be interested in this study. For instance, the Financial Accounting Standards Board recently issued an interpretation of FASB 109, "Accounting for Uncertainty in Income Taxes" (FIN 48). FIN 48 has potentially far-reaching implications for tax judgments made by tax practitioners. FIN 48 now prescribes methods for the recognition and measurement of all tax positions taken by an entity with GAAP financial statements.
The remainder of this paper will be organized as follows: First, a discussion of the relevant literature and the development of related hypotheses. The methodology used in this experiment will be described next. Then, the results of the study and conclusions and implications will be presented.

**RELEVANT LITERATURE AND DEVELOPMENT OF HYPOTHESES**

As tax law has become increasingly complex, more taxpayers rely on tax preparers for professional judgments on a plethora of tax issues. To discourage tax professionals from taking overly aggressive positions as advocates of the taxpayer, various standards of professional conduct have been implemented. To determine if the professional has met the standard of conduct the professional must determine the strength of the legal authority supporting his position. This judgment of the strength of the tax position taken is predicated upon an estimation of the probability of success if, and when, the tax position is challenged by the IRS (an IRS audit), and ultimately if the position is litigated. Different probabilities of success may be required in different contexts. Thus, when applying tax law to tax scenarios it is incumbent upon the tax professional to be knowledgeable of the various probability standards (certainty threshold criteria) and to use certainty threshold criteria to avoid overly aggressive tax behavior that could have adverse consequences for the taxpayer (taxpayer penalties) and/or the tax preparer (tax preparer penalties). For example, if a tax preparer advocates a position that is judged to be frivolous (the probability of success if audited is close to or equal to zero) than the tax preparer could be subject to penalties under IRC §6694. If instead the tax preparer believes there is a reasonable basis for the position in existing tax law (probability of success something less than 20%) the position may be taken but the position must be disclosed on the face of the tax return. If the appropriate disclosure is not made than the position if taken by the tax preparer will be subject to penalty upon audit. Alternatively, if the tax preparer believes the position has a probability of success of surviving an IRS and/or court challenge of at least 33% the position is said to have a realistic possibility of success. For tax years prior to 2008, a tax preparer will generally not be subject to penalties or sanctions under IRC §6694 for advocating a position that he believes has a realistic possibility of success. However, in May of 2007, Congress revised § 6694 to increase the penalties for non-compliance, expand the definition of a tax preparer, and raise the certainty threshold to 'more-likely-than-not. The more-likely-than-not standard requires a tax preparer to believe a tax position to have at least a 50% probability of success to avoid the tax preparer penalties of IRC §6694. Thus, it is important for tax preparers to be both knowledgeable and competent of the various certainty thresholds and do internalize and integrate the certainty threshold criteria in the professional tax judgments.

In addition, as previously mentioned, for years beginning after December 31, 2006 FASB also introduced the use of the more-likely-than-not standard in determining the implications of uncertain tax positions the financial reporting purposes (FIN 48).

The purpose of this paper is to examine the ability of tax professionals to demonstrate the use of the certainty threshold that has been in effect since 1989, the realistic possibility standard and to distinguish this standard from the other standards (certainty thresholds) that are also part of the US tax system. The study also looks at participants understanding and use of these other certainty thresholds including the more-likely-than-not standard. Extension of the implications of the study to the institution of the more-likely-than-not standard to financial accounting as well as to tax accounting will be proposed (The more-likely-than-not standard is not really new to the tax law but is being used in an expanded fashion).

**Necessary Conditions For Application Of Certainty Thresholds**

Knowledge and internalization of standard. It has been suggested that for a standard based upon certainty threshold criteria to be effective (1) tax preparers must be aware of the penalty and the related standard; and (2) tax preparers must accurately use the standards (regarding the level of
authority required to take a position on a tax return) to make judgments and decisions about tax return positions (Levy 1997).

The above conditions suggest that in order for a standard to be effective it is necessary for tax practitioners to have: (1) an understanding of the standard, and (2) an internalization of those standards by the practitioner.

Hypotheses

Although prior research has reported some results that suggest support for the first condition above (tax practitioners are aware of the realistic possibility standard), it will add strength to that conclusion if those results are amenable to replication in the present study. If those results are not subject to replication, then it would suggest a possible area of further contributions to the literature. Kelliher Bandy, and Judd, and (2001) surveyed AICPA Tax Section members for their interpretation of the phrase "realistic possibility." Bandy et al reported high familiarity with the phrase and fairly consistent interpretation of the phrase from their respondents, although respondents tended to report that the standard required a higher level of support than do official interpretations. This suggests the following hypothesis:

H1: On average, tax practitioners are able to accurately interpret the realistic possibility standard.

The second condition of the model is that the standard influences the practitioners' certainty threshold. When making judgments about tax return positions, the standard, to be effective, must influence the minimum acceptable level of authority (certainty threshold) that the practitioner adheres to when determining vulnerability of a pro taxpayer position in areas of the tax law that are ambiguous.

When a tax professional evaluates authority applicable to a specific situation, the goal is to judge the strength of the evidence both favorable and unfavorable to the client's position (Davis and Mason 2003). To make this judgment, the amount of favorable and unfavorable authority must be determined. The relevant authority must then be compared to the client facts. Finally, a subjective judgment as to the strength of the evidence is made.

Once evidence has been evaluated, the strength of the evidence supporting the favorable position should be compared to the applicable threshold or standard (see Johnson, 1993). The model does not specify the standard or applicable threshold to be used. It may be argued that practitioner's knowledge of and perceptions about the realistic possibility standard should at a minimum influence the standard that is used. In particular, if the standard is effective in encouraging tax compliance, it is anticipated that familiarity with the realistic possibility standard should operate as a 'floor' to the standard that is used by the practitioner. Furthermore, since the apparent motivation for raising the applicable legal standard and imposing preparer penalties for failure to meet the standard was due to the belief that the previous standard was too low and was subject to abuse, it is argued that the findings of Kelliher, Bandy, and Judd will be replicated in this study. Kelliher et al measured familiarity with the standard by asking the participants to indicate on a 7 point likert scale their "familiarity with the realistic possibility standard". Kelliher et al did not attempt to test participants' knowledge of the standard, did not seek to obtain information on practitioners' threshold of certainty, nor did they report any information on practitioners' level of client advocacy. The current study contributes to the literature by seeking to obtain a more direct measure of practitioner's familiarity with the standard and then to test the influence of both familiarity with the standard and client advocacy on the practitioner's reported threshold of certainty.

Prior research has reported that tax practitioner judgment is influenced by the practitioner's level of advocacy. Davis and Mason (2003) reported that when evaluating precedent "taxpayer
advocacy influences professionals' views of both similarity and authority." In addition, the tax practitioners who participated in the Davis and Mason study demonstrated a large degree of variability in their level of advocacy (see also Mason and Levy 2001). It is anticipated then that the practitioner's threshold of certainty will be influenced by both familiarity with the standard and by a practitioner's level of advocacy.

According to the model of evidence evaluation, tax practitioners should use a threshold amount of authoritative support to determine the appropriate position and recommendation to the client. The threshold amount will be influenced by their knowledge of the standard and by their level of advocacy. The above discussion suggests the following hypothesis:

H2: Tax practitioners' threshold of amount of authoritative support will depend upon their familiarity with the realistic possibility standard and their level of advocacy.

Since, as previously mentioned, some prior literature suggested tax practitioners tend to be overly aggressive, it may be anticipated that the standard required to avoid the penalty is a comparatively high standard as compared to what, historically, was the standard of the practitioner. Thus, it might be argued that knowledge of the penalty should exert a moderating influence on practitioner certainty thresholds. Tax practitioners reporting higher levels of advocacy are expected to have lower thresholds than those reporting lower levels of advocacy. Conversely, tax practitioners reporting more familiarity with the realistic possibility standard are anticipated to report higher thresholds than practitioners with less familiarity with the realistic possibility standard.

Kelliher, Bandy, and Judd (2001) reported that practitioner aggressiveness was inversely related to familiarity with the standard. Kelliher et al reported that participants who were less familiar with the standard tended to be more aggressive than those who were more familiar with the standard. Familiarity with the standard was measured by asking the participants to rate themselves on their familiarity with the standard. No attempt was made to measure familiarity with the standard.

However, a competing argument from the psychology literature of heuristics and biases would argue that lack of knowledge regarding the legal standard for the certainty threshold tends to result in participants becoming overly conservative in their estimate of the threshold. When applied to the current domain of interest, this would suggest that practitioners with less familiarity with the standard would tend to be less aggressive rather than more aggressive with respect to their certainty threshold.

**METHODOLOGY**

To gather evidence on H1 and H2, a questionnaire was administered to 42 tax practitioners incorporating a case-study approach similar to that used in Davis and Mason (2003). A case from Davis and Mason, which was constructed from prior court decisions addressing the categorization of financial instruments as debt or equity, was used in the present study. Forty-two practitioners participated in the study.

**RESULTS OF STUDY**

Participants were tax practitioners at three of the Big four accounting firms. All but 2 of the participants had passed the CPA exam. Experience in the tax area ranged from 1 to 35 years with an average of 11 years in tax. Three-fourths of the participants had 4 or more years of experience. Twenty-six of the 42 participants reported they had had at least 1 tax research class. Seventeen of the participants indicated they had 1 or more graduate degrees in accounting, tax, or law.

The results from the Hypothesis one (H1) tests suggest that, on average, the practitioners who participated in this study did not demonstrate a strong understanding of the penalty standards applicable to tax practitioners, in particular, the realistic possibility standard. Most were unable to
provide an appropriate written definition of the standard, and secondly, they reported the probability standard related to the penalty as being higher than required by the standard. The results of H2 would suggest that practitioners, when unfamiliar with a probability standard, are conservative in their estimate of the correct probability for the standard even when controlling for the level of advocacy. These results are surprising in that they contradict prior tax literature which suggested overly aggressive behavior in making tax recommendations is mitigated by knowledge of the standard. However, this conclusion is not without support in the psychology literature of heuristics and biases. The psychology literature has reported similar results when subjects were faced with estimating probabilities of events with which they lacked familiarity. Thus, when asked about the standard, they report a more conservative rather than a more aggressive estimate. The results from this research also suggest that in general, participants reported minimum thresholds for their decisions on ambiguous areas of tax law as being higher then the realistic possibility penalty standard.

Another interpretation of these results is that tax practitioners are making their decisions independent of the penalty standards and that the decisions may not be tied to the penalty standards at all. The prior publicity surrounding the KPMG marketing of overly aggressive tax shelters suggests the KPMG decision to market the tax shelters may have been driven by a cost/benefit analysis rather than adherence to a certainty threshold. These possible explanations suggest future venues for research on this topic.

REFERENCES


GAIN ON SALE ACCOUNTING: THE IMPACT ON SELECTED FINANCIAL RATIOS

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ABSTRACT

In June, 1996, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards (SFAS) No. 125, Accounting for Transfers and Servicing of Financial Assets and Extinguishment of Liabilities. This document develops accounting standards for sales, securitizations, servicing of receivables and other financial assets, and for extinguishment of liabilities. Although the transfer of assets in which the transferor has no continued involvement was never too controversial a topic, in recent years new instruments have appeared in the financial markets that have stretched the concept of involvement. For instance, pledges of collateral, recourse, servicing, and options written or held are all transactions listed in SFAS 125 that require continuous involvement by the transferor. The transfer of these assets raises the question of whether the transfer should be considered a sale of all or part of the assets or a secured borrowing. The effect of the decision to treat the transfer as a sale or a secured borrowing on financial analysis, particularly on selected financial ratios, can be significant.

Although one could take issue with the accounting treatment offered this type of transaction, it is important to recognize the distortions introduced in a direct comparison between a firm that retains its assets/receivables and one that securitizes them. For a firm that holds its receivables for investment, an increase in "sales/originations" will have a positive effect on earnings. The increase, however, is initially less than that for a firm using gain on sale accounting. The profitability of the sales/origination transaction is spread over its average life, which is typically greater than one year. For a firm that uses gain on sale accounting, the profit, from what is essentially a multi-year receivable, is taken immediately.

Overall, it would appear that different accounting methods have created profound differences for firms that do and do not avail themselves of the asset-backed markets. Such differences constitute a challenge for the financial analyst and may create some initial confusion for direct firm comparisons. Industry standards will become less useful until they are separated for the two accounting methods.
THE INTEREST RATE EFFECTS OF CERTIFICATION AWARDS AND UNDERWRITER TYPES IN THE MUNICIPAL BOND MARKET

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ABSTRACT

New school district bond issues in the U.S. have averaged nearly $50 billion for each of the past few years. Since bond issues are a major source of capital for school districts, they have a strong incentive to minimize the interest costs associated with them. One option school districts have is to obtain financial statement certification from independent organizations. This certification provides assurance to buyers of the quality of financial reporting, which, in turn, should reduce risks that affect interest rates. We investigate differences in interest rates between school districts that provide financial statement certification and school districts that do not. In univariate tests of differences we find no statistically significant difference in interest rates for these two groups. However, when controlling for other factors that impact interest rates, we find that school districts that obtain the certification pay, on average, higher interest rates. This implies that certification has economic value only to school districts that have inherently higher costs of capital.
THE TRADING BELL AT THE NASDAQ

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ABSTRACT

Following the methodology used by Meshke (2002), we investigate the information content of the media event of ringing the trading bell at the NASDAQ. Using a sample of 125 firms which had been invited to ring the opening and the closing bell at the NYSE in the year 2007, we fit a standard market model and test for the presence of abnormal returns around the event date. The evidence suggests that ringing the trading bell at the NASDAQ is a non-event in terms of having effect on stock prices and the markets are efficient.
DOES THE ADOPTION OF INTERNATIONAL ACCOUNTING STANDARDS RETRAIN EARNINGS MANAGEMENT? EVIDENCE FROM AN EMERGING MARKET

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ABSTRACT

In this paper we investigate whether firms adopting international accounting standards (formerly, IAS, now known as IFAR) have higher earnings quality in an emerging market (China). The literature proposes that, compared to non-adopting firms, firms adopting IAS are less likely to smooth earnings, less likely to engage in earnings management as a means to avoid reporting a loss, and more likely to recognize loss in a timely manner. However, critics also argue that IAS provides more opportunities for managers to use accruals to manipulate earnings in China, where a rule-based accounting system had been used before the introduction of accounting standards. We compare the characteristics of accounting data for firms adopting IAS with those from non-adopting firms. We find that adopting firms are less likely to smooth earnings in the post-adoption period. We, however, did not find that adopting firms have any lower tolerance for reporting loss or engage in more timely loss recognition. Overall, our results suggest some improvement in the quality of accounting information associated with the adoption of IAS. Our results also suggest that providing managers more opportunities for earnings manipulation under IAS may neutralize its otherwise positive effect on earnings quality. Because of the relatively newer regulatory environment in China, our findings may point to the need for a stricter enforcement mechanism of accounting standards in emerging markets.

Keywords: Emerging Market (China); Earnings Management; Accounting Standards; IAS; IFRS; Local GAAP
MORTGAGE MARKETING PRACTICES AND THE U.S. CREDIT CRISIS

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ABSTRACT

What role did mortgage marketing practices play in the U.S. credit crisis? Was it the result of greedy lenders, deceptive loan originators, creators of mortgage-backed securities, and complacent investors? Or were consumers complicit with lenders in a market bubble fed by easy credit and a laissez-faire government?

Critics claim that many contracts for loans at risk of default were the result of unscrupulous lending practices. Greedy lenders preyed on unsophisticated and vulnerable borrowers. Aggressive lenders steered creditworthy borrowers into profitable but risky subprime loans. Lenders (and borrowers) committed fraud. The U.S. government failed to protect borrowers and encouraged loose lending standards. As a result, loose lending standards destabilized the housing market. Industry apologists argue that market forces led to the mortgage market meltdown. Subprime lending is not the same as predatory lending. A few lenders behaved badly, but borrowers should have been more diligent. The credit crisis was prompted by market forces such as rising home prices and declining incomes. Government encouraged subprime lending as important source of mortgage funds for the poor.

This paper considers marketing practices, as well as market forces, that contributed to the mortgage market crisis. Marketers and market institutions have important roles to play in the proper functioning of the mortgage market, and government has a role to ensure fairness and transparency so that people can make informed decisions and avoid market failures in the future.
THE IMPACT OF OCCUPATIONAL PREFERENCES ON THE INTENT TO PURSUE AN ENTREPRENEURIAL CAREER

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ABSTRACT

The purpose of this study is to discover if occupational preferences have any bearing on whether, or not, individuals decide to pursue entrepreneurial careers. Specifically, this paper seeks to determine if cognitive occupational expectancies (concerning perceived intrinsic and extrinsic occupational rewards) significantly influence plans to undertake entrepreneurship as a primary vocation. Past theory has determined relevant entrepreneurial rewards to be (a) the intrinsic reward of independence, (b) the intrinsic reward of a satisfying way of life, and (c) the extrinsic reward of profit. Preference for each of these rewards is examined by utilizing the Valence Model of the Expectancy Theory. The Valence Model consists of two variables, Instrumentality and Valence. Instrumentality (I) concerns the belief that the attainment of work-related goals will lead to rewards; and, Valence (V) refers to the value of those rewards to the individual. The affinity for each entrepreneurial reward is posited to significantly and positively influence the formation of strong entrepreneurial intentions.

Findings indicate that individuals who perceive entrepreneurship as advantageous based on their attraction for independence and profits form stronger intentions to pursue entrepreneurial careers than others. However, those who are attracted to entrepreneurship solely based on their perceived notions of a satisfying entrepreneurial lifestyle did not form stronger intentions to start a business than others. The results did, however, affirm the moderating effect of the reward of profit, which indicates that individuals who seek challenge and excitement in their occupational endeavors (a satisfying way of life) form robust entrepreneurial intentions only when they perceive that they can earn potentially limitless, financial rewards (profits). Results, limitations, and future implications are discussed.
ENFORCEABILITY OF EXCULPATORY CLAUSES IN GEORGIA

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ABSTRACT

An exculpatory clause in a contract is a provision that relieves a party from responsibility for his own negligence that causes loss to the other contracting party. Such provisions are enforceable in Georgia unless the clause violates the public policy of the state. Public policy is narrowly defined as a violation of the law stated by the legislature or a contract that has an unlawful purpose as its consideration. Therefore, in many cases businesses have been successful in defeating consumer claims by placing an exculpatory clause in the consumer contract.

INTRODUCTION

Ms. Sanford went to BodySlimmer, a weight-loss facility, for treatment for being overweight. BodySlimmer made available to its clients a "Thermo-BodySlimmer" machine that applied deep heat to the user to effect weight loss. Ms Sanford used the machine and suffered burns from it. Before using the machine Ms. Sanford signed a contract that recited: "I hereby release Thermo-BodySlimmer, this facility and its employees from all claims now or in the future from any injury or damages in connection with the use of the Thermo-BodySlimmer". Ms. Sanford sued the facility for negligence that caused her burns. The trial court found the release barred her claim and the appellate court agreed (BodySlimmer v. Sanford, 1990). Can parties contract away their remedies for the future negligent conduct of others that may cause injury? In Georgia the answer is "Yes".

THE GENERAL RULE

As recently as March, 2008, the courts in Georgia have reaffirmed the rule that: "It is the paramount public policy of this state that courts will not lightly interfere with the freedom of parties to contract. A contracting party may waive or renounce that which the law has established in his or her favor, when it does not thereby injure others or affect the public interest. Exculpatory clauses in Georgia are valid and binding, and are not void as against public policy when a business relieves itself from its own negligence" (Coleman v. B.H. Transfer Company, 2008).

In everyday life for example, the application of this rule means that when an individual like Mr. Winton hires a moving company to move his belongings across town and signs a contract that provides that the mover is not liable for loss of any precious item not specifically listed on the bill of lading then Mr. Winton and consumers generally will not be able to recover for the value of expensive art work lost due to the carelessness of the mover unless the item is listed on the bill (Winton v. Adams Transfer & Storage Co., 1989).

Simply stated, contract clauses in which businesses relieve themselves from their own acts of negligence are valid and binding and are not void as against public policy in Georgia.

SOME EXCEPTIONS

First, in order to be enforceable an exculpatory clause in a contract must be "explicit, prominent, clear and unambiguous" (Holmes v. Clear Channel Outdoor, Inc., 2007). Therefore,
where the exculpatory language in question was placed in the twenty-second paragraph of a lengthy contract with no separate heading and in the same typeface as the surrounding language the court found the clause to be unenforceable because it lacked any indicia of prominence (Parkside Center, Ltd v. Chicagoland Vending, Inc., 2001). In contrast, the BodySlimmer language was prefaced by a bold statement: "Important Information" followed by the exculpatory clause being printed in bold type (BodySlimmer).

Second, a business may not avoid liability for acts of gross negligence or willful or wanton conduct through the use of an exculpatory clause. Gross negligence is the want of slight care and is a type of carelessness that is greater than the absence of common prudence. Willful conduct involves an actual intention to do harm or inflict injury. Wanton conduct is conduct that is so reckless or so charged with indifference to the consequences as to be the equivalent in spirit to actual intent (McFann v. Sky Warriors, Inc., 2004).

PUBLIC POLICY

The application of exculpatory clauses often results in harsh results to the consumer. Can such clauses be defeated and declared void as against Georgia public policy? Most often not. The Georgia courts have a very narrow and strict view of public policy: "A contract cannot be said to be contrary to public policy unless the General Assembly has declared it to be so, or unless the consideration of the contract is entered into for the purpose of effecting an illegal or immoral agreement or doing something which is in violation of law" (McFann v. Sky Warriors, 2004).

EXCULPATING BREACH OF CONTRACT DAMAGES

Exculpatory clauses are most often encountered in actions for negligence. However, such clauses can also result in the loss of damages for breach of contract. A contract that provided: "... neither the customer nor MRP will be liable to each other or any other party for any lost profits or any incidental, special, or consequential damages relating to this agreement" was held to bar an action for breach of that contract. The court stated: "In Georgia there is no generally applicable rule of law forbidding one contracting party from waiving all recourse in the event of breach by the other" (Imaging Systems International, Inc. v. Magnetic Resonance Plus, Inc., 1997).

IMPLICATIONS

Exculpatory clauses in contracts are enforceable in Georgia. By contract one party can relieve themselves from liability for their own future negligence. The result of this rule is that savvy businesses can avoid lawsuits and damages for their own negligent acts by conspicuously placing language in the contract that relieves them of liability. Consumers, then, must carefully read boilerplate contracts to assure that they have not inadvertently waived their right to pursue a claim for negligence against the other contracting party.

REFERENCES


THE USE OF TRADE ASSOCIATION SERVICES TO 
DEVELOP A LOW-COST PROMOTION BUDGET

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ABSTRACT

This paper provides a case study of how a fine dining restaurant (Creole Skillet) in the Warehouse District of New Orleans developed a low-cost promotion plan with the assistance of the services of two industry trade associations, especially the New Orleans Metropolitan Convention and Visitors Bureau (NOMCVB) and to a lesser degree the Louisiana Restaurant Association (LRA).

The Creole Skillet will target locals and leisure and convention visitors. The promotion plan of the Creole Skillet makes use of the free or low cost services of the NOBCVB. Print offerings, networking meetings, and the follow-up on convention leads will be used. The major promotion weapon will be the NOBCVB website used as a link to the Creole Skillet website and to promote coupon/discount offers. Mass emailings will be made to NOBCVB members. The total promotion costs are $1,600 including $650 for association dues.

This case illustrates the important role of the trade association in providing free consulting assistance by staff members to the member clients in developing a promotion plan. Also, the important role of technology in promotion in the tourism industry is illustrated.

INTRODUCTION

On April 29, 2005 the most destructive hurricane (Katrina) in the history of the United States hit the City of New Orleans, surrounding parishes, and the Mississippi Gulf Coast. The impact was great on the City of New Orleans and nearby parishes of St. Bernard, Plaquemines, and East St. Tammany, all in the New Orleans Metropolitan Statistical Area (MSA) (Lacho, Bradley, & Cusack, 2006).

During the almost three years since Katrina, the economic recovery of the region has been slow. As of April 2008, 86 percent of both employment and population has returned. Some industries such as chemicals and transportation equipment and oil and gas are at or near pre-Katrina employment levels. The construction industry is a prime driver of the local economy as many years of building are demanded in the next five to seven years. While the economy continues to expand, the pace of growth is expected to continue slowing (Metropolitan Report, April, 2008).

Tourism was a major sector in the New Orleans economy prior to Katrina. Visitors are returning with 7.5 million of them in 2007, up from 2006. Tourism has seen a stronger than expected recovery (Metropolitan Report, April, 2008).

Tourism normally slows down in New Orleans during the hot summer months. July, August, and September are incredibly difficult and challenging months (Webster, 2008, June 2). Several factors are hurting the tourism industry in 2008 New Orleans. One is the national economic slow down. Also there are consumer concerns over the high price of gasoline, expensive airline tickets, and the hurricane season. Many do not want to be in New Orleans during the same time as there is the potential for hurricanes. In addition, family travel during August has declined as elementary and high schools from Georgia to Texas start their academic year at the start of August as to opposed to the last week in August as done in previous years (Webster, 2008, June 2).

In an attempt to drum up business for the local tourism industry (hotels, restaurants, etc.), the New Orleans Metropolitan Convention and Visitors Bureau (NOMCVB) and the New Orleans Tourism and Marketing Corporation (NOTMC) are focusing their summer 2008 efforts on local
tourism. "Staycation" means stay at home and enjoy what the city has to offer. The focus on local tourism is necessary because of the drop in convention business during the July-September period.

PURPOSE

In addition to promoting New Orleans to tourism and convention sales, the NOMCVB provides free or low-cost services which can be used to promote the businesses of NOMCVB members. This paper provides a case study on how a fine dining restaurant (Creole Skillet) can use the services of the NOMCVB and the Louisiana Restaurant Association (LRA) to develop a low-cost promotion budget to cater to locals, and leisure and convention visitors.

RESEARCH METHODOLOGY

Personal interviews were held by the researcher and the owner of the Creole Skillet with staff members of the NOMCVB and the LRA and a restaurant consultant. Brochures, materials, and email announcements of these organizations were reviewed.

THE NEW ORLEANS MSA RESTAURANT SCENE

Restaurants in the New Orleans MSA were hit hard by Katrina. Only 21 percent of all restaurants were open in December 2005 (McNulty, 2005). LRA reported that in February 2006, 56 percent of Jefferson parish retail food establishments, 27 percent of the City of New Orleans, and 37 percent of the total MSA restaurants had been recertified to open (Hurricane Katrina/Rita News, 2006). Problems in the early post hurricane period were a shortage of workers and the lack of customers.

The restaurant business is improving in New Orleans. As of March 2008 there were 1,355 or 72 percent of food service establishments open in the city compared to 1,882 pre-Katrina (Jim Funk, 2008, March 20). In addition to the slow but hot long summer months of 2008, New Orleans-based restaurants face a number of problems. On the national front, the restaurant industry is experiencing higher fuel costs which vendors pass along to the restaurant owners. The National Restaurant Association (NRA) reported in February 2008 that wholesale food costs rose 7.6 percent during the last 12 months (Funk, 2008, March 20).

The restaurant industry in New Orleans (and Louisiana) is impacted by a number of other factors. For one, there is a worker shortage, the unemployment rate is 3.3 percent for the state. The help wanted signs posted on site by restaurants and advertisements in the classified section of the daily newspaper (The Times-Picayune) are testimony to the shortage of workers, especially those with needed reading and writing skills.

A survey of LRA members indicated that 67 percent reported a 19 percent decrease in staff. Rising costs are another factor. A survey by The University of New Orleans (UNO) Hospitality Research Center showed the following cost increases (Economic Outlook and Real Estate Forecast, 2008).

<table>
<thead>
<tr>
<th>Specific Cost Item</th>
<th>Average Percentage Increase</th>
</tr>
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<tbody>
<tr>
<td>Food</td>
<td>18.3</td>
</tr>
<tr>
<td>Alcoholic Beverages</td>
<td>28.3</td>
</tr>
<tr>
<td>Insurance</td>
<td>94.7</td>
</tr>
<tr>
<td>Labor</td>
<td>30.7</td>
</tr>
<tr>
<td>Water</td>
<td>36.6</td>
</tr>
<tr>
<td>Gas</td>
<td>30.4</td>
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<tr>
<td>Electric</td>
<td>30.8</td>
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</table>
Undoubtedly, these are extreme increases especially in the area of insurance. Despite these drastic increases, menu prices have risen an average of 16 percent (Jim Funk, 2008 March 20). The restaurant industry in New Orleans is continuing to outpace the return of the city's population. As more people return, more restaurants should open.

**THE CREOLE SKILLET**

The Creole Skillet is a fine dining restaurant located in the Warehouse District of New Orleans. The restaurant was conceived in April 2007 and opened January 19, 2008. Ms. Anne Kiefer is the owner of the Creole Skillet. She is a 62 year old retired City of New Orleans employee. She has three children and is a grandmother. She lives in Orleans Parish and was flooded by Hurricane Katrina. Ms. Kiefer has a B.A. in General Studies/Urban Education from The University of New Orleans and prior to Katrina she was the director of the New Orleans East Economic Development Foundation. She is a civic activist and has been active in local politics and has no experience in the restaurant or tourism business. She has helped her son-in-law and daughter start a small business in Virginia. She is a part owner and the only investor in the Creole Skillet.

The Creole Skillet has an owner-manager who has a degree in Hotel Restaurant Tourism and over 10 years of restaurant experience. The staff consists of a chef, one bartender, one preparation cook, and a dishwasher. There are six part-time wait staff.

**THE NEW ORLEANS METROPOLITAN CONVENTION & VISITORS BUREAU**

The NOMCVB is the initial destination sales, service and marketing organization for the New Orleans MSA. The agency is devoted full time to selling, servicing, marketing, branding, and promoting New Orleans as a convention, special event and leisure destination.

In 1960, the Greater New Orleans Tourist and Convention Commission was formed to promote New Orleans as a destination for conventioneers and leisure visitors. The initial staff consisted of three employees and fewer than 100 members. In January 1995, the Tourist Commission changed its name to the New Orleans Metropolitan Convention and Visitors Bureau. In 2008 it has a staff of 80 employees and 900 members.

In addition to promoting New Orleans to conventions and to individual and group leisure visitors, the NOMCVB provides assistance (benefits) to members to promote their businesses to visitors. The use of these membership benefits is the basis of this paper.

**THE LOUISIANA RESTAURANT ASSOCIATION**

The LRA is a major business organization in the state representing more than 3,500 members, 1,300 of them in the New Orleans MSA. LRA's programs and membership services include payroll processing, legal services, a group insurance program, a workman's compensation self-insurers' fund, and a job bank. Fishbowl Marketing is an email marketing program which is available to LRA members.

**INDUSTRY PROMOTION EFFORTS**

The NOMCVB is focusing its efforts for the summer of 2008 on local tourism and hopes to convince New Orleanians in the Metropolitan Statistical Area (MSA) to take a "staycation" instead of a vacation. "Staycation" means stay at home and enjoy the attractions that the city has to offer. The NOMCVB is quarterbacking a local television and radio campaign to promote being a tourist in New Orleans MSA for those who live there. Two new museums, the Audubon Insectarium and the Southern Food and Beverage Museum will be a focus of these efforts (Webster, 2008, June 2).
The NOTMC has initiated a $5.2 million national summer advertising program aimed at leisure travelers. It targets drive-in markets such as Houston, Dallas, Jackson, Mississippi, Memphis, Tennessee and Atlanta. Despite the increased price of gasoline it is predicted that drive-in tourists will still come to New Orleans, though perhaps spending less (Webster, 2008, June 2).

NOBCVB PROMOTION BENEFITS TO MEMBERS

Advertising/Promotion

The NOBCVB offers various benefits to members to help them promote their businesses. There is complimentary listing in appropriate NOBCVB publications. The Official Visitors Guide reaches 500,000 persons. This guide is published twice a year and is published in collaboration with the NOTMC. The guide provides detailed information on restaurants, hotels, entertainment, retail shopping and sightseeing.

The Meeting Planners Guide is an annual publication and reaches 5,000 meeting planners. The publication is used by meeting professionals to help in the planning of meetings and special events. The listing is free to NOBCVB members.

A listing in the Travel Planners Guide is free to NOBCVB members. Some 12,000 guides are sent each year to travel professionals to help in the planning of group and series programs. These recipients include tour companies, cruise ships, weddings and family reunions.

A company's brochure may be put in the racks at the two NOMCVB visitors' centers (2020 St. Charles Ave.) and the St. Ann Visitors' Center in the French Quarter. The St. Charles Visitors Center has 2,400 visitors per year. The St. Ann Center had 48,450 visitors in 2007.

Each member gets a free listing on the NOMCVB website and a complimentary hyper-link to the member's web site. The website receives some 200,000 hits per month. There is access to the NOMCVB Members Only section which contains the confidential convention calendar, a listing of clients in town, and the membership directory.

The confidential convention calendar covers the next 18 months and includes company/associations name, meeting title and date, contact information, size of convention and the NOMCVB sales manager handling that meeting/convention.

Networking. Bi-monthly networking events are held. "Business after Hours" is held at a different location each time. There is the opportunity to have a table display at such an event at the cost of $100. Each meeting reaches about 300 people in the hospitality industry.

The NOMCVB member may participate in the Member-to-Member Discount Program. There are special seasonal promotional opportunities such as general, cruise, Sizzling Summer, Be a Tourist in Your Own Hometown, and COOLinary coupons/discounts. These coupons are made available through the member's link to the NOMCVB website.

The NOBCVB offers a marketing Tool Kit which is available to members online. These tools include: (1) templates, logos, videos, and photos that can be used in member promotion, and (2) press releases that can be posted in three locations on the NOMCVB website as well as local media lists for local promotions.

LRA PROMOTION BENEFITS TO MEMBERS

One promotion benefit is the annual Louisiana Foodservice EXPO. The event is held in New Orleans each August. Exhibitors are primarily suppliers and vendors. Networking and educational seminar opportunities are available. The event is free to LRA members. A 10 by 10 exhibit area costs $1,295. Some 13,300 people attend over a three day period.

LRA members are encouraged to set up a display at the cocktail party the night before the EXPO. The LRA reimburses the restaurant $300.
Taste of Town is held in New Orleans in April and is sponsored by the LRA. Invited restaurants are paid $300 by the LRA to set up cooking displays of their restaurants' dishes. Fishbowl Marketing in collaboration with the LRA offers a discount to LRA members. Fishbowl is a permission-based email firm in the restaurant industry. It combines restaurant and email expertise with solutions especially designed for independent restaurant owners. There is a $99 set up fee and a fee of $179 per month for LRA members. Program features include the below: (Fishbowl Marketing, 2008).

- Data entry including sign-up slips and postage-paid return envelopes
- Automated loyalty emails including welcome, birthday and subscriber anniversary
- Unlimited email campaigns
- List hosting and database maintenance
- Multiple formats, including newsletter
- Image upload
- Restaurant-oriented design library
- Restaurant marketing ideas and promotion content
- Personal guest replies
- Online listing-building and deliverability reporting

THE CREOLE SKILLET PROMOTION PLAN

The Creole Skillet will target locals, leisure visitors and convention visitors. The promotion means used to reach each target are listed below.

The Official Visitors Guide is used to target local, leisure and convention visitors. No cost.

The Meeting Planners Guide is used to target convention visitors through meeting planners. No cost.

The Travel Planners Guide targets leisure and convention visitors through travel planners. No cost.

Brochures describing the Creole Skillet will be placed in the St. Ann and St. Charles Ave. locations. This medium targets local, leisure and convention visitors. No distribution cost.

A listing on the NOMCVB website and link to the Creole Skillet website will be procured. Targets are locals, leisure, and convention visitors. No charge by NOBCVB.

The confidential calendar of incoming meetings, convention, etc. will be used to target convention visitors. The appropriate meeting contact will be emailed information about the Creole Skillet. No cost.

Networking events will be attended on a bi-monthly basis. There is no cost. Parking costs will vary depending on the location of the event. Attending these events essentially targets local, leisure, and convention visitors through businesses attending the networking event.

A display table will be set up at two future networking events. This targets local, leisure and convention visitors through businesses attending the event. Total cost is $200.

The Creole Skillet will take part in the Member-to-Member Discount Program. The "Be a Tourist in Your Own Hometown" coupons will be distributed through the NOMCVB website. There is no charge. All coupon offers are valid through Labor Day, 2008. The target is the local MSA resident. A sample website view is shown below:

<table>
<thead>
<tr>
<th>Restaurants</th>
<th>Offer Title</th>
<th>Offer Valid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creole Skillet</td>
<td>Complimentary wine or dessert with dinner</td>
<td>July 1 - Sept. 1</td>
</tr>
</tbody>
</table>

In addition to the "Be a Tourist in Your Own Hometown" promotion, the Creole Skillet will take part in the COOLinary New Orleans celebration. The target is the local. The Creole Skillet will
offer specially priced three-course menus during July and August, 2008. A lunch meal is $20 or less. The website is free of charge. A description of the Creole Skillet, address, hours, telephone number, and the menu will be shown.

The entire membership of the NOBCVB is available to the Creole Skillet. Promotional mailings will be emailed to each member. The target is the local, leisure, and convention visitor to be reached via members catering to those markets. There is no cost.

The NOBCVB Marketing Tool Kit which includes templates, logos, videos, photos, and press releases will be used as needed. No cost.

Creole Skillet personnel will attend the Louisiana Foodservice EXPO, August 2-4, 2008 in New Orleans. There is no cost except for parking. The Creole Skillet will set up a table-exhibit at the Foodservice exhibitors' party on August 1, 2008. In this case the LRA pays the Creole Skillet $300 for having an exhibit.

The LRA-related Fishbowl email marketing opportunity will not be used at this time due to the cost.

---

### Overall Costs

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>One year membership in NOBCVB</td>
<td>$500</td>
</tr>
<tr>
<td>One year membership in LRA</td>
<td>$150</td>
</tr>
<tr>
<td>500 brochures</td>
<td>$750</td>
</tr>
<tr>
<td>Bi-monthly networking event table sponsor</td>
<td>$200</td>
</tr>
<tr>
<td>Total Cost</td>
<td>$1600</td>
</tr>
</tbody>
</table>

---

### CONCLUSION

The New Orleans MSA tourism industry is grappling with the upcoming slow summer season and a national economic slow down. Tourism-related businesses are grappling with higher gasoline and food prices, soaring insurance costs, and rising labor costs just as Americans are gripping tighter to their purse strings (White, 2008, June 22).

The NOBCVB and the NOTMC are helping the tourism industry by their promotion efforts to increase leisure and convention visitors to New Orleans. Local residents are encouraged to stay home and be a tourist. The NOBCVB and the LRA provide assistance to members in running their businesses. The NOBCVB provides more specific means to help members promote their businesses and get customers Local residents are encouraged to stay home and be a tourist.

A variety of promotion means are available to NOBCVB members. These include print, networking meetings, and access to decision makers of upcoming meetings or conventions. Mass emailing to NOBCVB members is a major promotion weapon as is the use of the NOBCVB website to reach potential member customers with news of coupon/discount specials such as the COOLinary New Orleans program.

The LRA promotion assistance is more limited than that of the NOBCVB. On the other hand, what was most valuable to the Creole Skillet management was the personal help and assistance in developing a promotion plan. Six meetings were held with staff members of the LRA and NOBCVB.

The promotion plan of the Creole Skillet makes use primarily of the low-cost services of the NOBCVB. Print offerings, networking meetings and the follow up on convention leads will be carried out. The major promotion weapon will be the NOBCVB website used as a link to the Creole Skillet and to promote coupon/discount offers. Also, the membership of the NOBCVB will be emailed special offers and notices. This case illustrates how a trade association can help its members market (promote) their businesses by personal consulting and the use of technology. Technology such as use of a website and email provides a low cost way to reach a mass if not distant market. The world of technology is undoubtedly a future characteristic of tourism marketing.
REFERENCES


THE TAX IMPACT OF SELECTED ASSET DISPOSALS: AN EXECUTIVE'S PRIMER

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ABSTRACT

Capital assets and certain business assets (i.e., section 1231) can greatly affect executive investment strategies as well as the effective employment of resources. Calculation and taxation of the gain or loss on disposal of these assets are central to maximization of overall cash flows and effective tax planning. Understanding the nuts and bolts of these asset dispositions combined with an advantageous timing of the transaction can be the difference between maximizing benefits versus ineffective asset management and lost tax advantages.

Tax laws surrounding these assets, in terms of which assets are included under each section and the related taxation, are not only complicated, but under seemingly constant revision. A detailed analysis of these complex rules is beyond the scope of this article; however, a basic introduction to these concepts is necessary for sound business decisions and effective tax planning. The purpose of this article is to review and summarize basic tax law relative to the composition of capital assets and section 1231 assets and to examine the timing of the disposition of these assets to maximize the favorable tax impact of gains and/or losses. Individuals and business executives are provided with tax planning suggestions and illustrations of selected asset dispositions.
TOWARD A MODEL FOR DELIVERING EFFECTIVE PRODUCTION AND MANUFACTURING ASSISTANCE AND INFORMATION

Marilyn Young, The University of Texas at Tyler
Isaura B. Flores, The University of Texas at Tyler
Don Bradley, The University of Central Arkansas
myoung323@suddenlink.net

ABSTRACT

Efforts to increase entrepreneurial activities have been initiated by many agencies, including colleges and universities. This increased interest has been seen in off-campus initiatives to provide information and assistance to small business. This pilot study of 20 university counselors shows that agencies are providing assistance in business planning and marketing but less information and assistance to the manufacturing sector. Few counselors provided information on manufacturing and technical assistance but did refer small businesses to state and federal agencies, websites, inventor’s associations, and others. Perhaps many university programs should increase collaboration with local and regional programs to provide assistance and information in technical and manufacturing assistance.

INTRODUCTION

Efforts have continuously been made by education and government to encourage entrepreneurial development. This increased interest has been seen in off-campus initiatives to provide information and assistance to small business. Although much progress has been made, a continual effort has been made to improve such services. Much research has been conducted regarding success factors and methods to secure capital, but this study focuses on the need for technical and manufacturing assistance and information.

Organizations which provide technical assistance to small and medium firms include Small Business Development Centers, Small Business Institutes, Service Core of Retired Executives (SCORE), Enterprise Forums, and University-based entrepreneurship centers, special programs offered through the Chambers of Commerce, Business incubators, and others. These programs are concerned with many factors, one of which is technology transfer (Schroeder, 1990; Rice, 2002).

LITERATURE SURVEY

The SBDC program is the Small Business Administration's (SBA) largest resource partner other than financial institutions. The SBDC's mission is to provide management and technical assistance to current and prospective owner and managers of small business. Services in the manufacturing area are: assistance in technology transfer, and research and development. (Wichmann & Boze, 2007).

A resource for high-tech economic development began in 1994 as the Small Business Technology Transfer (STTR) program began funding cooperative research and development (R & D) projects involving a small company and a researcher at a university or other institution. The propose is to create an effective vehicle for moving commercially promising ideas from research institutions to the market. In addition, some state-level programs, which fund cooperative R & D between university researchers and small companies, reported success in stimulating economic development (Baron, 1993).
In addition, small to medium-sized firms have made valuable economic and social contributions through innovation (Jones, 1996). However, they rarely possessed adequate research and development skills and generally need to acquire new technologies from external sources. Further, they suggested that businesses and higher education programs collaborate in their joint efforts. University-funded programs have been a significant source of information to benefit small business. Jones (1996) found that small- and medium-sized firms rarely possess adequate R & D assets and generally needed to acquire new technologies from external sources. Therefore, he recommended collaboration between the firms and higher education (Jones & Tang, 1996).

Witten (1988) concluded that only through new partnerships would economic developers be able to develop new resources, such as access to new technology, a skilled labor pool, and risk capital. For instance, the University of Arizona made a commitment to take a more aggressive role in economic development and identified five areas of importance. Two of these roles were in the areas of transferring technology and providing assistance through outreach programs. Hence, the University established new communication ties between its administrators and the business sector.

The Southwestern Pennsylvania Industrial Research Center's (SPIRC) mission is to improve the competitive performance of small manufacturers in the Pennsylvania area and enhance the region's overall manufacturing climate. The assistance ranges from informal referral to other providers, including operations reviews, product cost analysis, plant layout design, technology needs analyses, and customized on-site training programs (Ahlbrandt, 1991).

Dunning (1992) reported that the Industrial Research Liaison Program (IRLP) at Indiana University provides technical, research, and business assistance to over 800 Indiana companies each year. The IRLP provides several services, including providing assistance both obtaining low-cost applied research through the Partners in Applied Research Program and in obtaining information from over 350 databases through Indiana InfoNet.

Those firms need to create and sustain competitive advantages in order to survive in today's highly competitive business environment. (Kandemir, Calantone & Garcia, 2006). More importantly, the literature shows that new product performance is directly related to the firm's success (Cooper, 1979; Cooper and Kleinschmidt, 1987; Montoya-Weiss and Calantone, 1994; Kandemir, Calantone & Garcia, 2006).

Snyder (1985) conducted a survey to determine the services provided by high-tech business usage of university-affiliated research centers. The study suggested that these centers were not used because small businesses were unaware of their existence or services and were often reluctant to use any new external assistance.

As new products are vital for the success of a new firm, this pilot study focuses on the counseling efforts and needs of small businesses in manufacturing and technology.

**METHODOLOGY**

This research is a descriptive survey to determine the nature of counseling as related to the manufacturing sector. A convenience survey was conducted to determine the need for manufacturing assistance and to describe types of counseling available. The survey instrument was carefully developed with input from counselors. The sample consisted of 20 telephone calls to directors at two types of centers: (1) Small Business Development Centers (SBDC) and (2) Small Business Institute (SBI). Specifically, this research asked the following questions:

1. What types of businesses come to centers for counseling?
2. How often do people seek manufacturing assistance?
3. What types of assistance are provided?
4. What types of information are given to the small businesses?
5. Where do counselors send their clients for manufacturing and technical assistance?
6. What types of assistance are needed?
7. What is the degree of need for certain information (business, technical, prototyping, commercialization, integrating new technologies, and research)?

**INSTITUTIONAL DEMOGRAPHICS**

The counselors were housed in colleges and universities with enrollments from less than 2,000 to over 30,000. The majority were medium-sized institutions with enrollments from 2,000-20,000 as shown in Table 1.

<table>
<thead>
<tr>
<th>Number of Students</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 2,000</td>
<td>2</td>
<td>11%</td>
</tr>
<tr>
<td>2,000-4,999</td>
<td>5</td>
<td>28%</td>
</tr>
<tr>
<td>5,000-9,999</td>
<td>4</td>
<td>22%</td>
</tr>
<tr>
<td>10,000-20,000</td>
<td>4</td>
<td>22%</td>
</tr>
<tr>
<td>20,000-30,000</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>30,000 &amp; over</td>
<td>2</td>
<td>11%</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td>100%</td>
</tr>
</tbody>
</table>

The majority of counselors were from either a junior or community college. In fact 60% of the respondents were counselors at junior or community colleges as shown in Table 2.

<table>
<thead>
<tr>
<th>Institutional</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community/junior college</td>
<td>12</td>
<td>60</td>
</tr>
<tr>
<td>4-year university</td>
<td>8</td>
<td>40</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>100%</td>
</tr>
</tbody>
</table>

All counselors reported they were connected with public institutions.

**SURVEY RESULTS**

**Types of Clients**

Start-up firms, service, and retail organizations seemed to utilize small business counselors more often than other segments. However, seven of the counselors indicated that small businesses also desired advice and information on production and manufacturing assistance. Table 3 indicated the major type of company was a start-up, followed by service, and retailing.
### Table 3
**Types of Clients Needing Assistance**

<table>
<thead>
<tr>
<th>Type of Client</th>
<th>1st No.</th>
<th>2nd No.</th>
<th>3rd No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>0</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Startup company</td>
<td>8</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Retailing</td>
<td>3</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>Service</td>
<td>9</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Wholesaling</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Construction</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

### Types Of Assistance

The major types of needed assistance requested by 70% of the respondents were in the area of raising capital. However, 65% desired assistance regarding a business plan, and 45% indicated a need for marketing research assistance. Virtually none of the respondents mentioned manufacturing and technical assistance (See Table 4 below).

### Table 4
**Types of Needed Assistance Needed**

<table>
<thead>
<tr>
<th>Assistance Needed</th>
<th>Number of Mentions</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raising capital</td>
<td>16</td>
<td>80%</td>
</tr>
<tr>
<td>Business plan</td>
<td>13</td>
<td>65%</td>
</tr>
<tr>
<td>Marketing research</td>
<td>9</td>
<td>45%</td>
</tr>
<tr>
<td>Legal/licensing/patents</td>
<td>7</td>
<td>35%</td>
</tr>
<tr>
<td>Marketing/advertising</td>
<td>4</td>
<td>20%</td>
</tr>
<tr>
<td>Accounting/taxes</td>
<td>3</td>
<td>17%</td>
</tr>
<tr>
<td>Information system</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>Manufacturing/technical</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Other*</td>
<td>7</td>
<td>65%</td>
</tr>
</tbody>
</table>

*Other includes: Comprehensive assessment of company, audit, and personnel issues.
Manufacturing/Technical Information

Only 10% of the respondents had clients who frequently asked for manufacturing and technical assistance. However, 15% of the counselors stated occasionally, and 75% reported they had clients who seldom requested manufacturing assistance (See Table 5).

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Number of Mentions</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seldom</td>
<td>15</td>
<td>75%</td>
</tr>
<tr>
<td>Occasionally</td>
<td>3</td>
<td>15%</td>
</tr>
<tr>
<td>Frequently</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>Often</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>20</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Types Of Manufacturing Assistance Needed

Respondents reported that they desired assistance in the areas of production, inventory control, and patent assistance. Developing a prototype, forecasting, manufacturing process, and location were also mentioned as shown in Table 6.

<table>
<thead>
<tr>
<th>Manufacturing Assistance</th>
<th>Number of Mentions</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production</td>
<td>7</td>
<td>35%</td>
</tr>
<tr>
<td>Inventory Control</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>Patent</td>
<td>9</td>
<td>45%</td>
</tr>
<tr>
<td>Prototype</td>
<td>3</td>
<td>15%</td>
</tr>
<tr>
<td>Idea for new product</td>
<td>4</td>
<td>20%</td>
</tr>
<tr>
<td>Forecasting</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>Incubator</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>Other*</td>
<td>8</td>
<td>40%</td>
</tr>
</tbody>
</table>

Other* includes more efficient managing skills, business expansion, location assistance, coordinating production, management assessment centers and manufacturing processes.
Manufacturing Assistance

A small majority, 55%, stated they have workshops for manufacturing and technical assistance. Also, approximately 25% send to another manufacturer. Also, Table 7 shows that 4 respondents, 20%, indicated they send the small businesses to a state technical agency.

<table>
<thead>
<tr>
<th>Types of Assistance</th>
<th>Number of Mentions</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-house workshops</td>
<td>11</td>
<td>55%</td>
</tr>
<tr>
<td>Send to another manufacturer</td>
<td>5</td>
<td>25%</td>
</tr>
<tr>
<td>State technical assistance</td>
<td>4</td>
<td>20%</td>
</tr>
<tr>
<td>Incubator assistance</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>Technical specialty center</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>SBA technical assistance</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Small Business Innovation Research SBIR</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Federal technical assistance</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Inventor’s organizations</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Other</td>
<td>10</td>
<td>75%</td>
</tr>
</tbody>
</table>

Other includes: Manufacturing assistance center, one-on-one help, American Business Disk, TMAC, and business accelerators.

Types of Information

Many counselors, 45%, referred the small businesses to web sites. Furthermore, 25% send clients to a state agency, while 20% send them to an inventor's association.

<table>
<thead>
<tr>
<th>Types of Information</th>
<th>Number of Mentions</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web sites</td>
<td>9</td>
<td>45%</td>
</tr>
<tr>
<td>SIC Codes</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>Inventor’s associations</td>
<td>4</td>
<td>20%</td>
</tr>
<tr>
<td>State assistance</td>
<td>5</td>
<td>25%</td>
</tr>
<tr>
<td>SBA technical assistance</td>
<td>2</td>
<td>10%</td>
</tr>
</tbody>
</table>
### Table 8

<table>
<thead>
<tr>
<th>Types of Information</th>
<th>Number of Mentions</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other faculty</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>Engineering department</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>Other*</td>
<td>13</td>
<td>65%</td>
</tr>
</tbody>
</table>

*Other includes: publications, information on business plans, E-commerce assistance, BIC (Business information center) to find suppliers and customers, brochures, and research network books.

### CONCLUSION

The findings show service and retail organizations seem to utilize small business counselors more often than other segments. However, some counselors indicated their clients desired advice and information in the manufacturing areas. The major types of needed assistance were: (1) raising capital; (2) business planning; and (3) marketing. A total of 74% of the respondents indicated that seldom did a client come in for counseling relating to manufacturing and technical assistance. However, respondents mentioned some small business owners or potential owners needed help in the production processes. A small majority, 55%, stated they have workshops in manufacturing processes or had received some type of technical assistance. Approximately 25% of the counselors reported that they send clients to another manufacturing center. Also, 20% indicated they send the small businesses to a state technical agency. Many counselors, 45%, refer the small businesses to web sites. Also, 35% sent clients to a state agency, while 20% send them to an inventor's association.

This research illustrates that small businesses seek assistance from agencies mainly in marketing, start-up, business planning, and methods of securing capital. Few counselors provided information on manufacturing and technical assistance but did refer small businesses to other agencies. Many referred them to state, federal, and other assistance areas. Institutions and agencies providing assistance should be familiar and knowledgeable of specific agencies that provide manufacturing assistance.

College and university business centers are providing a valuable role in assisting entrepreneurship development, but the manufacturing assistance area seems to be lacking. Perhaps institutions should provide newer services and information databases to increase awareness and effectiveness of overall programs and services. Such improvements would be (1) closer associations with technical agencies; (2) collaboration with manufacturing; (3) information networks; and (4) joint clearing house that identifies existing state and federal programs. Colleges and universities could benefit from the results of the study regarding effective outreach programs to assist and provide timely information to this manufacturing sector.

Institutions of higher education could assist with new product development, production systems, logistics, and other initiatives. Centers should continue to build partnerships with potential business and established industries, helping them to improve technical expertise in new and improved manufacturing techniques.

More counselors could be aware of the Small Business Innovation Resource (SBIR) Program and others. The SBIR's major purpose is to stimulate technological innovation in the private sector, strengthen the role of small business in meeting federal research or research and development (R/R&D) needs, increase the commercial application of sponsor-supported research results, foster and encourage participation by socially and economically disadvantaged small business concerns and women-owned business concerns in technological innovation. The objective
of Phase I is to establish the technical/scientific merit and feasibility of the proposed R/R&D efforts in the development of projects that have potential for commercialization.

Perhaps assistance providers could collaborate to enhance their overall effectiveness of their programs. Further, they should examine the possibility of offering programs in the manufacturing assistance area. It seems appropriate that institutions of higher education should continue to build bridges and explore methods to assist the small business sector in technology transfer and commercialization.

Higher education is providing a valuable role in assisting entrepreneurship development through centers, programs and several other areas. Community colleges offer important services, mainly in the continuing education, work force training, and consulting, but few provide assistance in engineering, prototyping, patent, and technical assistance. Manufacturing assistance, applied research, prototyping, and commercialization should be seen as an important factor in this quest. One of the weaknesses of the business programs is its inability to hire technical personnel because of scarcity and cost to the center or college of business. If business centers are to enter into this area of consulting, more highly skilled employees will be necessary.

LIMITATIONS AND DIRECTION OF FUTURE RESEARCH

Though the research provides interesting insights into the effectiveness of providers in manufacturing technology, a major limitation does exist. Although the theory proposed in this study may have universal application, the empirical tests rely on data collected from only 20 institutions of higher education. The intent of the research was to provide a pilot study for further research and to develop a hypothesis. While no research has identified that this area is fundamentally different, a larger sample would give more reliable data.

The research suggests that further analysis is warranted, and questions emerge from this study. However, this pilot study shows the need for a more in-depth study. Such future research could be undertaken to determine specific manufacturing sources and data bases used by many universities in several states to provide a model for effective manufacturing assistance and information.

REFERENCES


A RATIONAL EXPECTATIONS APPROACH TO DEPARTMENT RANKING

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ABSTRACT

The ranking of academic departments has been an ongoing effort for decades. Rankings have been attempted for virtually every academic discipline and using a multitude of measurements, including everything from surveys of students to counts of words published. Yet, despite all the efforts, most of the academic studies have focused on only one aspect of faculty members’ responsibilities, that of research. This may be because it is more easily quantifiable than the other responsibilities of a faculty member (teaching and service), or because records of it are more easily available to those who are outside the institutions in question. No matter the reason, an effort to include all aspects of a faculty member’s responsibilities and, in turn, to include schools which are not focused primarily on research, is long overdue.

This paper undertakes such an effort based on the economics-based concept of rational expectations. Rational expectations essentially claims that, taking all available information into account, people’s expectations constitute the best guess of what the future holds. In other words, people’s expectations are, on average, correct. We also assume that departments are always trying to improve their image, and that one way to do so is through their faculty hiring. If this assumption is true, then we would expect that new hires would be from other schools which are perceived to be at least as good as the hiring school. Thus, by reviewing recent hires of faculty who earned their terminal degree within a short time period, we can infer the perceived ranking of each school in the study vis-à-vis other schools. We base our rankings on data collected for academic year 2005-2006 for accounting departments in the United States.
CONTENT COVERAGE IN HIGH SCHOOL ECONOMICS: SURVEY OF STUDENTS' PERCEPTION IN NEW YORK AND CALIFORNIA

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ABSTRACT

This paper is a study that aims to assess U.S. students' overall experience in the study of economics in high school. Within this line of inquiry, questions aimed at finding out how prepared high school graduates are for the study of college-level economics, or equivalently, what economics topics they were taught in high school, become relevant. To answer these questions, a three-part survey was designed and administered to undergraduate students in two universities, one in New York and another in California. This study reports and analyzes the results of this survey, and uses them to design future research on this and related topics.

INTRODUCTION

This study was first motivated by the self-evaluation of professors that teach introductory economics at the college level. Such self-evaluation generated a series of related questions. In particular, questions to the effect of "Are we doing a good job teaching students the principles of economics?" provided the impetus for this study, followed by the question of "How prepared are our students for the study of college Economics, i.e., what economics topics did they learn in high school and how much or at what level of proficiency did they learn these topics?"

What started out as a small-scale inquiry by a small number of college introductory economics professors ended up being linked with a national inquiry of a similar nature that began more than 50 years ago when "The National Council on Economic Education (NCEE, henceforth) saw a gap between what young people needed to know about economics and what they were being taught." (NCEE website) This led the NCEE in 1949 to build a unique Network of state Councils and university-based Centers to serve as resources for economics teachers who are particularly interested in the practical aspects on economics. More than fifty years since the NCEE mission began, a gap continues to exist.

This paper, conceived independently of NCEE's efforts, turned out to be asking the same questions. In an attempt to answer some of these questions, a survey has been conducted of college students who were enrolled in their first college-level economics course.

THE SURVEY

The survey had three distinct parts: (1) a student profile; (2) questions about his/her high school economics course and teacher; and (3) an assessment of the extent to which certain economic topics were covered in their high school economics subject. These topics were taken from the Voluntary Content Standards in Economics developed and published by the National Council on Economic Education in 1997, in cooperation with its nationwide network of affiliated councils and centers (which make up EconomicsAmerica), the Foundation for Teaching Economics, the National Association of Economic Educators, and the American Economic Association's Committee on Economic Education. This coalition has endorsed these standards, which are summarized in Table 1, to guide economics instruction in American schools.
Each question relates to a topic or set of related topics that are included in a particular standard and asks to what extent a topic was covered in the respondent's economics subject in high school and for which the following choice of answers are provided: "this topic was never covered"; "coverage of this topic was too little/not enough"; "coverage of this topic was just right"; and "coverage of this topic was too much".

The survey was administered to undergraduate students from two universities in the U.S.: a small, private university in upstate New York and a large, state university located in southern California. Both surveys were given in Fall 2006. The survey was administered at the beginning of the school term in New York and at the end of the term in California. Given the two sets of sample, attempts will be made to identify if differences in location (New York vs. California), the type of educational institution (small private vs. large state university), the timing of the survey (beginning vs. end of the school term) might affect the survey results.

**THE RESPONDENTS**

Of the 96 surveys that were completed by students in New York, 72 responses were usable and whose answer sheets could be computer-processed. There were 89 surveys completed by students in California, from which 83 are usable and can be computer-processed.

**The Respondents' Profile**

The profiles of respondents from New York and California are very different. Among the 72 respondents from New York whose survey answer sheets were processed by the computer, the majority were male students (60% vs. 39% female students, with 1 respondent who left the question unanswered). The majority are students in the College of Business (57%), and in their sophomore year of study (61%). Among the 83 respondents from California, 92% are women (vs. 8% men), 100% are students from the College of Liberal Arts and 55% are in their senior year of study.

**THE RESULTS**

**High School Economics Experience**

Despite the difference in profiles, respondents from New York and California share similarity in their experience with high school economics. Approximately 80% of them enrolled in their economics subject in high school during their twelfth grade, and around half of the respondents in each group received a grade of A in their economic subjects while another 40-41% received a grade of B.

A crude indicator of respondents' overall experience in their high school economics subject might be reflected in they rated the subject itself and the teacher. The results indicate that, overall, students were pleased with both. The results are similar for both groups of respondents. For the economic subjects, around 12% of respondents from New York rated it as "excellent", 24% as "very good" and 35% as "good". The corresponding figures from respondents from California are 12%, 37% and 36%.

For the economics teachers' ratings, 24% of respondents from New York rated their economics teachers as "excellent", 17% as "very good" and 32% as "good". From respondents from California, 25% rated their economics teachers are "excellent", 27% as "very good", and 35% as "good".

Table 1: Voluntary Content Standards in Economics

(\% of respondents who indicated adequate coverage of the topic(s) in each standard; the first figure in parenthesis represents responses from New York)
MICROECONOMICS

Standard 1: Productive resources are limited. Therefore, people cannot have all the goods and services they want; as a result, they must choose some things and give up others. (61%, 70%)

Standard 2: Effective decision making requires comparing the additional costs of alternatives with the additional benefits. Most choices involve doing a little more or a little less of something; few choices are all-or-nothing decisions. (67%, 58%)

Standard 3: Different methods can be used to allocate goods and services. People, acting individually or collectively through government, must choose which methods to use to allocate different kinds of goods and services. (40%, 46%)

Standard 4: People respond predictably to positive and negative incentives. (57%, 51%)

Standard 5: Voluntary exchange occurs only when all participating parties expect to gain. This is true for trade among individuals or organizations within a nation, and among individuals or organizations in different nations. (32%, 38%)

Standard 6: When individuals, regions, and nations specialize in what they can produce at the lowest cost and then trade with others, both production and consumption increase. (54%, 56%)

Standard 7: Markets exist when buyers and sellers interact. This interaction determines market prices and thereby allocates scarce goods and services. (60%, 80%)

Standard 8: Prices send signals and provide incentives to buyers and sellers. When supply or demand changes, market prices adjust, affecting incentives. (68%, 67%)

Standard 9: Competition among sellers lowers costs and prices, and encourages producers to produce more of what consumers are willing and able to buy. Competition among buyers increases prices and allocates goods and services to those people who are willing and able to pay the most for them. (75%, 72%)

Standard 10: Institutions evolve in market economies to help individuals and groups accomplish their goals. Banks, labor unions, corporations, legal systems, and not-for-profit organizations are examples of important institutions. A different kind of institution, clearly defined and enforced property rights, is essential to a market economy. (31%, 40%)

MACROECONOMICS

Standard 11: Money makes it easier to trade, borrow, save, invest, and compare the value of goods and services. (56%, 81%)

Standard 12: Interest rates, adjusted for inflation, rise and fall to balance the amount saved with the amount borrowed, thus affecting the allocation of scarce resources between present and future uses. (42%, 54%)

Standard 13: Income for most people is determined by the market value of the productive resources they sell. What workers earn depends, primarily, on the market value of what they produce and how productive they are. (38%, 56%)

Standard 14: Entrepreneurs are people who take the risks of organizing productive resources to make goods and services. Profit is an important incentive that leads entrepreneurs to accept the risks of business failure. (51%, 60%)

Standard 15: Investment in factories, machinery, new technology, and the health, education, and training of people can raise future standards of living. (46%, 47%)

Standard 16: There is an economic role for government to play in a market economy whenever the benefits of a government policy outweigh its costs. Governments often provide for national defense, address environmental concerns, define and protect property rights, and attempt to make markets more competitive. Most government policies also redistribute income. (42%, 51%)

Standard 17: Costs of government policies sometimes exceed benefits. This may occur because of incentives facing voters, government officials, and government employees, because of actions by special interest groups that can impose costs on the general public, or because social goals other than economic efficiency are being pursued. (29%, 44%)

Standard 18: A nation's overall levels of income, employment, and prices are determined by the interaction of spending and production decisions made by all households, firms, government agencies, and others in the economy. (47%, 55%)

Standard 19: Unemployment imposes costs on individuals and nations. Unexpected inflation imposes costs on many people and benefits some others because it arbitrarily redistributes purchasing power. By creating uncertainty about future prices, inflation can reduce the rate of growth of national living standards. (44%, 54%)

Standard 20: Federal government budgetary/fiscal policy and the Federal Reserve System's monetary policy influence the overall levels of employment, output, and prices. (43%, 53%)
Coverage of Standard Topics

The content standards include 10 topics in Microeconomics and 10 topics in Macroeconomics. We use our survey to assess to what extent these 20 topics were covered in the high school economics subject. This is done by combining the percent of respondents indicating that a particular topic was either covered "just right" or "too much". A pattern emerges that suggests a greater coverage of microeconomic topics relative to macroeconomic topics. This is true from responses from both New York and California where, on average, a higher number of respondents indicated that a microeconomic topic was covered "just right or too much" compared to the lower average figure that corresponds to a macroeconomic topic (54% vs. 44% according to New York respondents, and 58% vs. 56% according to California respondents). This might be due to sequencing. Walstad and Rebeck (2001) point out that "the first part of high-school courses in economics covers fundamental concepts" that get extensive treatment. This is often followed by microeconomics topics (especially the coverage of supply and demand), macroeconomics topics and international economics. Because of this ordering, "most teachers lack time to teach (later) concepts" (page 454) so the coverage of later topics becomes less and, as Walstad and Rebeck (2001) found out, students' performance on these topics is lower.

In addition, both groups of respondents indicated that 7 of the 10 microeconomic topics had more than 50% of respondents indicating adequate or too much coverage. Interestingly, both groups identified the same 7 topics, although there were slight differences in how these 7 topics were ranked.

Among the 10 microeconomic topics, the following topics were identified by the highest number of respondents from New York as having received adequate or too much coverage in class (the figure in parentheses represent the percentage of respondents indicating that the topic received adequate or too much coverage in class): Standard 9: Market competition (75%), Standard 8: Price as signaling and allocative mechanism and supply and demand analysis (68%), Standard 2: Rational decision-making and marginal analysis (67%), and Standard 1: Scarcity and opportunity cost (61%). Three of these four topics (all except Standard 2) made it to the top four according to respondents from California, with Standard 7: Markets at the top of the list, with 80% of California respondents indicating that the topic was adequately covered.

The major difference between the two groups of respondents occurs in the extent to which macroeconomics topics were covered. As reported above, on average, 44% of New York respondents indicated that a macroeconomic topic was adequately covered. This was compared to a significantly higher proportion (56%) of California respondents. This average reflected even more differences in perception by the two groups of respondents. Only 2 of the 10 macroeconomic topics were rated by more than 50% of New York respondents as having been covered adequately in their high school economics subject. These two were Standard 11: Functions of money, with 56% of respondents indicating adequate coverage, and Standard 14: Entrepreneurs as risk-takers and are so in pursuit of profits, with 51% of respondents indicating adequate coverage. In contrast, respondents from California indicated adequate coverage of 8 out of 10 macroeconomic topics. The two topics found to have been inadequately covered were Standard 15: Investment and standards of living, with 47% of respondents indicating adequate coverage, and Standard 17: Costs and benefits of government policies, with 44% of respondents indicating adequate coverage.

Having noted the differences between the two groups of respondents above noted, it is interesting to find similarity in the way that the two groups ranked the 10 macroeconomic topics, according to their perception of how adequately each topic was covered. For instance, both groups ranked Standards 11 and 14 to be first and second. Other topics were ranked similarly, with slight
variation, with the exception of two topics: Standard 15 which was ranked fourth by New York respondents and ninth by California respondents, and Standard 13 which was ranked ninth by New York respondents and third by California respondents.

The actual wording of each topic and the corresponding figures for the percent of respondents from New York and California who indicated that the topic received adequate or too much coverage can be found in Table 1.

CONCLUSION

Our study was based on survey responses from two groups of university students that differ in location (New York and California), type of university (small, private vs. large, state), timing of survey (beginning vs. end of the school term) and student composition (mainly male respondents, Business majors at sophomore standing in New York vs. overwhelmingly female respondents, all Liberal Arts majors and mostly senior standing in California). Despite these differences, our study found a great deal of similarity in the responses of these two groups to the survey we conducted. This is true with regards to the two groups' rating of their economics subject and teacher in high school, as well as their perception of how adequately the 20 topics were covered in their economics subject in high school. Our results show a greater convergence in responses by the two groups with regards to coverage of microeconomics topics than macroeconomics topics. Our survey reveals that macroeconomic topics received greater coverage in high school economics subject in California than in New York.

REFERENCES


ASSESSING STUDENT PERFORMANCE IN PRINCIPLES OF MICROECONOMICS

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ABSTRACT

This paper examines student performance on a course embedded assessment exam for principles of microeconomics. The sample consists of 37 students at a midsized regional institution located in the Southwestern region of the United States. The exam design focus on six different areas of core knowledge at a level of easy, moderate, and hard. Test results are mixed with students scoring over 85 percent in the easy or moderate category for four out of the six core knowledge areas but the overall exam average was a subpar 64.3 percent. Student performance was strongest in core knowledge areas relating to scarcity and opportunity cost (84.2 percent average), supply and demand (72.8 percent average), and comparative advantage (75.4 percent average). Student performance was weakest in core knowledge areas relating to elasticity (69.3 percent average), market structure (40.3 percent average), and welfare effects of various market structures (49.1 percent average).
STUDENT EVALUATIONS: RISK VS. RETURN

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ABSTRACT

Teaching is a college professor's most visible output. Student evaluation of teaching performance has long been used as a key measure of instructor effectiveness. At most teaching institutions, data is collected every semester for each professor. The information is used in important ways, including for merit salary increases and promotion and tenure decisions. But are we efficiently using the data from student evaluations?

Evaluation forms typically contain questions about the course and the instructor, and students report their satisfaction by choosing a response on a Likert scale. Many schools also include free-response or open-ended questions as part of the course evaluation process, but the mean numeric response from the Likert-scaled questions is the easiest to report and the most commonly used for evaluation and comparison purposes. Concentrating on the mean, however, provides only a one-dimensional view of the instructor's performance.

There are many other dimensions of teaching excellence to consider. Evaluations are generally thought to be influenced by the level of course rigor, the expected grades of students, and the time of day the class is offered. Average course evaluations may differ between freshman classes, upper-division electives, and graduate courses. Holding these factors constant, however, the mean evaluation score still provides only a partial picture of classroom performance.

In this paper we concentrate on the standard deviation of student evaluations in addition to the mean. This multidimensional approach provides additional insight and allows a richer interpretation of teaching effectiveness, especially for instructors with average evaluations in the middle of the evaluation range.

Using the interpretation of the standard deviation in finance, high variation is a signal of risk. This paper discusses this risk from the point of view of both students and administrators. A matrix is used to explain the possible mean/standard deviation outcome combinations, with implications for faculty development and student satisfaction.
STUDENT PERCEPTIONS OF THE IMPORTANCE OF INSTRUCTOR TRAITS: A CROSS-CULTURAL STUDY

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ABSTRACT

This study attempts to explore students’ perceptions of importance of instructor traits in three countries: The United States, Jordan, and Chile. A survey questionnaire was administered to samples of college students in the three countries during the academic year of 2004-2005. The questionnaire was sent and distributed to 500 college students in each country. Demographic variables, such as gender, age, educational background, GPA, and learning style were included in the questionnaire. In addition, the survey requested information about perceptions of importance of forty-five traits of instructors. The results of ANOVA revealed that there were significant differences in students’ responses in 43 statements (traits). However, many of these differences were in the extent of their agreements. There were only 8 statements in which students significantly disagreed on the importance of these traits. On the other hand, there were thirty-four traits which were considered by students to be important to very important. These traits could be classified into 5 main categories: traits related to instructor 1) personality; 2) communication skills; 3) style of class management and evaluation of student performance; 4) qualification and credential; and 5) teaching style. Among the demographic factors, gender was the most significant factor that influenced student responses; especially for the American and Jordanian students. The results of the paired sample t-test showed that there were significant differences in student perceptions of importance of instructor traits between face-to-face and online teaching modes. Differences among perceptions of the importance of instructor traits could be partially explained by cultural differences among the three countries using Hofstede’s cultural dimensions. Yet, respondents agreed that to be respectful of students, approachable in and out of class, and clear as well as concise explanations of course materials were the most important traits.
AN ANALYSIS OF PERSONAL COMPUTER DEFICIENCIES AMONG COMMUTER STUDENTS

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ABSTRACT

The use of computer technology has become a ubiquitous feature in the education environment. Many students rely on their own personal computers in order to work on class related assignments rather than computers that are supplied by their school. As a result, students may encounter problems if their personal computer is not technologically sufficient to use for class related tasks. This may be particularly true if the school does not provide guidance on the type of computer that a student will need. Based on a random sample of schools and a survey of students, this paper provides a comparison between what kinds of computers schools are expecting students to have and what students are using. Results show that a noteworthy number of schools do not provide students with guidance on the minimum system requirements they need in a computer. Also, the survey of students reveals that some students are using inadequate computers. Schools and instructors should provide clear guidance to students on what computing technology will be required in order to succeed in their coursework.
ASSESSING THE ASSESSMENT OUTCOMES IN THE PRINCIPLES OF MARKETING COURSE

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ABSTRACT

In recent years assessments have become increasingly prominent fixtures in colleges of business seeking to attain or reaffirm their accreditation. Much work has been done to study assessments at the program level, primarily with the ETS exam serving as a dependent variable. These studies have provided statistical models that demonstrate the importance of such predictor variables as ACT/SAT scores, GPA, gender, etc. This study seeks to build on prior research by examining one of the foundations courses (Principles of Marketing) and modeling the factors that predict outcomes assessment scores at the course level, as well as to try to account for student differences resulting from using multiple professors across different course sections taught in multiple formats (online and on-campus). This study found that gender and course professor were significant, and GPA marginally significant, predictors of assessment scores. Most significantly, the study highlights the need for departments and colleges of business to be aware of the potential impact of instructor traits on student outcomes.

INTRODUCTION

Increasingly, academic programs look to assessment as an important vehicle in determining the overall veracity of a program. It is a means by which the deliverer (instructor) of an academic program can determine if the goals and objectives of the program have been achieved by the recipients (students). Institutional effectiveness is concerned with the extent to which intended outcomes are being achieved (Black & Duhon, 2003). There are two (2) fundamental schemas of assessment delivery. The first employs an instrument developed externally and is standardized across a multitude of dimensions, like the Educational Testing Service's (ETS) exam in business. The second approach employs an embedded, internally developed, instrument that explicitly measures the specific outcomes associated with a program or course.

The purpose of this paper is to examine the various factors or drivers that influence a student's performance on an embedded, course specific assessment (local). These factors or drivers are described along two (2) dimensions, environmental or external, and internal student drivers. The assessment was administered to multiple sections of students in the same foundation or principles level course. The delivery of the actual course material was done both in the traditional in class model, as well as the increasingly popular Online delivery method. The results of this study are derived in the College of Business at a public university located in the Southwestern part of the United States. The institution is mid-sized with a total enrollment of approximately 7,500 total students, 1,000 undergraduate business students, 350 graduate business students.

This manuscript is organized as follows: First, a literature review is provided. The second section of the manuscript describes the data and the model. The next section provides empirical results testing the performance of students on the assessment exam while controlling for format of delivery, professor, student grade point average (GPA), international vs. domestic status, standardized test scores (ACT), transfer students, and gender. The final section offers conclusions and implications.
LITERATURE REVIEW

Research abounds on the subject of program assessment. Assessment is a "systematic collection, review, and use of information about educational programs undertaken for the purpose of improving student learning and development" (Palomba & Banta, 1999). Collegiate business programs are increasingly tasked with the need for ongoing assessment of student performance in their programs (Adams, et al, 2000; Bagamery, et al, 2005; Martell & Calderon, 2005; Terry, et al, 2008; Trapnell, 2005). Increasingly, since the mid-1980s, there has been a shift towards student-centered and learning-oriented assessments and accreditation (Lubinescu, et al, 2001). In fact, the AACSB imposes standards for program learning goals upon collegiate business programs aspiring to attain or maintain AACSB accreditation. These programs utilize direct measures in order to demonstrate student achievement of the stipulated goals (Martell, 2007; Pringle & Michel, 2007).

As assessment increases to build momentum, it is important to identify the internal and external audiences who will utilize the results in shaping and refining the assessment process. A comprehensive assessment process provides an institution with information that can be both shared and utilized to satisfy the needs of internal and external constituents. The internal audience (faculty, students, assessment committees, administrators and alumni) benefits by helping to define successful ongoing programs, implementing similar programs, and for improving less successful programs. Externally, the assessment data are used to demonstrate to accreditation organizations, government officials, government boards and other constituents the institution's effectiveness and accountability (Aloi, et al, 2003).

There are two principle types of assessment tests, standardized and local. Of the two, local tests require more faculty effort and other resources for test development, scoring, reporting, and improving. However, the advantage to the local instrument is that it can be tailored to a specific course or program so that the actual scores more accurately reflect the extent to which specific learning objectives are being met (Black & Duhon, 2003), along with impact of local and specific influences or drivers.

An important aspect for any instrument involves validity. Validity exists when the scores on the instrument accurately reflect achievement along the various dimensions the institution is seeking to evaluate. Validity has several dimensions, including content and context. Content validity exists when the test or instrument covers and measures the specific program or course curriculum. Context validity examines the extent to which scores (outcomes) logically correlate with other, external, variables expected to be associated with student achievement. An additional facet to validity is criterion validity, the extent to which scores of the test correlate with other variables one would expect to be associated with test performance (Black & Duhon, 2003).

The Educational Testing Service's (ETS) exam in business has become, to many, the de facto standard of standardized assessment instruments in collegiate business programs. The literature reveals an almost universal agreement as to the principle variables examined as predictors of student performance on the ETS exam. These variables include: grade point average (GPA), standardized test scores (SAT/ACT) and gender. In addition to these variables, Mirchandani, et al, (2001) include transfer GPA and student grades in quantitative courses.

It is possible to extrapolate and utilize the same variables when examining the results on a local instrument. Terry, et al, (2008) developed a model based upon a production view of student learning to examine the determinants of performance on the business major field achievement ETS exam. Their model controlled for grade point average (GPA), standardized test scores (SAT/ACT), junior college transfer students, gender. Their findings were consistent with much of the previous research in this area, that academic ability as measured by grade point average (GPA) and scores on standardized tests (SAT/ACT) are the primary determinants of student performance on the ETS exam.

Black & Duhon's (2003) study of ETS scores conducted during three (3) semesters in 1996-1997 included an examination of an incentive as a driver in student performance. In that
study, students scoring at the national 50th percentile, or better, were given an extra-point bonus, which was used in the calculation of the student's final course grade. The exclusion of this, or some other, form of incentive is not used; some students may not take the test seriously and by extension, the results may be misleading (Allen & Bycio, 1997). Terry (2007) included the impact of course formats, traditional campus courses, online courses and the newer hybrid courses on ETS scores.

**METHODOLOGY**

A 20-item multiple-choice comprehensive examination was given to students in each of three sections of the Principles of Marketing course at a regional university in the Spring 2008 semester. This exam was one component of a two-part final exam administered at the end of the semester, and was incentivized to motivate student preparation. The results for the three sections appear in Table 1.

The instrument was a series of questions that cover the entirety of topics presented in a typical Principles of Marketing course. The entire Marketing faculty agreed upon the corpus of questions in Fall 2007. Each of the questions were mapped to specific learning objectives for the course.

Two professors taught this course during the Spring 2008 semester. Professor 1 is a tenure-track professor with a PhD, and taught sections 1 (on-campus) and 3 (online). Professor 2 is a PTI (part-time instructor) with an MBA and 18 graduate hours of study in Marketing, and taught section 2.

Numerous studies have sought to map the relationship between student input variables and outcome assessments. Generally speaking, these models delineate multiple factors (or internal student drivers) impacting assessment scores, including Native Ability (intelligence, often measured by ACT and/or SAT scores), Student Effort (often measured by the student's cumulative GPA), and Student Traits (a vector of categorical demographic information, including gender, transfer status, and nationality). A fourth set of factors include Environment Variables, which accounts for course format (online, campus, etc.) and the individual professor of record. Figure 1 illustrates the relationships of this model. Four models were calculated in this study based on these relationships, with the broadest model specified as follows. The inclusion of specific variables is based on the work cited above in predicting ETS exam scores, with the exception of the Professor variable. This variable was included in an effort to extend the research and to search for possible hidden influencers.

\[
\text{SCORE}(i) = B(0) + (B1)ACT + (B2)GPA + (B3)TRANSFER + (B4)NATIONALITY +
(B5)GENDER + (B6)FORMAT + (B7)PROFESSOR + \epsilon(i)
\]

The dependent variable in this study was the student's score on the 20-item exam, with each correct response earning five points. Scores could thus range from 0 to 100. Independent variables were compiled from the university Registrar's database after the semester ended, and included a variety of internally-scaled and binary variables. Cumulative GPA is on a scale from 0 to 4.00, and represents only the student's GPA since the time of their matriculation at this university. The ACT score is the student's composite score on the national entrance exam, and ranges from 1 to 36. The remaining independent variables (student nationality, transfer status, gender, course format, and professor) were binary variables coded as either a 0 or 1.

Based on upon the prior research of Terry, et al (2008), Mirchandani, et al, (2001), and Black & Duhon (2003), we hypothesize the following relationships:

H1: ACT will have a significant positive influence on a student's outcome assessment score. Terry, et al, and others are in unison in finding that ACT (or SAT), as a measure of native ability, is a strong predictor of student assessment outcomes.
H2: GPA will have a significant positive influence on a student's outcome assessment score. Similarly, student effort, as measured by cumulative GPA, is a strong predictor. Terry, et al, and numerous others concur that this variable will yield a positive and significant influence on outcomes scores.

H3: Transfer status will not have a significant influence on a student's outcome assessment score. Transfer status has been included in prior research, but has not yet been found to be a significant predictor. We thus do not predict any significant influence in either direction.

H4: Nationality will not have a significant influence on a student's outcome assessment score. Terry, et al, also included student nationality as a dichotomous variable, and found no significant influence. We likewise have no reason to predict any significance from this variable.

H5: Class Format will not have a significant influence on a student's outcome assessment score. While much research has been done comparing online and on-campus outcomes, no trend has emerged favoring one over the other. We thus propose no significant influence from this variable.

H6: Gender will have a significant influence on a student's outcome assessment score. Terry, et al, found that females scored significantly higher on their ETS exam, and we likewise propose a similar significant relationship.

H7: Professor will not have a significant influence on a student's outcome assessment score. This variable has not been included in the prior cited work, but given that many schools employ multiple professors to teach their foundational courses, it is possible that an "instructor effect" may be apparent. In the absence of prior research, we posit there will be no difference, assuming similar effectiveness across instructors.

RESULTS

The initial sample was comprised of 151 students who took the assessment exam; this group was labeled the "full" model. The "partial" model was comprised of 63 students for whom the university had an ACT score on record. Since the university does not require an ACT score for incoming transfer students, and because a large percentage of students are transfers, the "partial" model was based on a much smaller sample.

Tables 1 and 2 contain course section means for the full and partial (ACT) groups. The overall mean score for the full group was 72.58, while the overall mean among those with ACT scores was 72.85. Given that the majority of students reporting an ACT score were four-year students at the university (and the non-ACT students were transfers), it can be concluded there is no difference in mean score between these two student groups.

Four linear regression models were then calculated, as summarized in Table 3. A 2 X 2 matrix of the models includes both "full" and "partial" models, as well as those with and without the effect calculated for the professor.

The first model (Basic Model; top-left) is built on the full data set and contains the basic vector of variables (GPA, Transfer, Nationality, Gender, and Format). In this model both Format and GPA were significant predictors at the p=0.05 level, suggesting that the online format and higher overall student GPAs were positively related to student scores on the assessment exam. Only 25% of the variance is accounted for by the model, though. The data for the three sections suggested, though, that the explanatory power of Format may not be sufficient to capture other nuances of the data. A categorical "dummy" variable was created to account for the professor of these three sections, the results indicating in the second model (Basic Model + Prof; lower-left) that GPA and
Professor are now significant at the $p=0.05$ level. This manipulation resulted in the model accounting for 39% of the variance, a substantial improvement over the first model.

Of the four models created, the Partial + Professor model resulted in the highest $R^2$ (0.458). In this model only the Gender (H6) and Professor (H7) variables were significant at the $p=0.05$ level. GPA (H2) was marginal at $p = 0.06$, and thus conditionally retained. Surprisingly, ACT (H1) was not significantly related, in spite of the findings in prior research. In this instance, it is possible that the Professor effect was more profound and offset any native ability students may have possessed going into the course.

Of particular interest is the effect of Gender. While we affirm the findings of Terry, et al, Gender did not appear as a significant variable in the Full Model (column 1), but did so in the Partial Model (column 2). A Key Influencers analysis of the variables revealed that female students were tightly clustered in the 76-84 score range, and once the Professor variable was added to the equation, Gender emerged as a very strong predictor.

Further analyses were conducted by calculating t-tests in both the Full and Partial models using the dichotomous independent variables with the dependent variable (test score). These results are summarized in Table 4, indicating Format and Professor yielded significant differences in test scores. The models above, though, indicate somewhat different results when variables are not isolated.

### CONCLUSIONS AND FUTURE RESEARCH

The statistical models presented above illustrate the differences in outcomes scores that can accrue in one topical area in multiple format/professor situations. In this particular case, the most significant predictor was the professor, not the format. The implication of these findings is that departments and colleges engaged in the assessment process need to be cognizant of influences from different sources that may not otherwise have been observed or isolated.

In this particular study, differences in outcomes assessment were not so much a factor of course delivery format as they were who was teaching the course. The difference in scores may be attributed to the differences between a full-time doctorally-qualified professor and a part-time adjunct with a master's degree. This is not to say that non-PhD instructors are less effective than those with a PhD; rather, it illustrates the need for departments and colleges of business to carefully dissect the data when analyzing assessment scores.

This research is intentionally narrow in scope, and is thus not necessarily transferable across disciplines or schools as it stands. With only a small matrix of course sections, formats, and professors included in the study, there is room for further exploration by applying this model across disciplines, time, and more faculty. Of greater potential importance is the possibility of tracking these students through the remainder of their academic program, including their outgoing assessment exam in the capstone Strategy course.

<table>
<thead>
<tr>
<th>Section</th>
<th>Avg. Score</th>
<th>Class Size</th>
<th>Format</th>
<th>Professor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>79.06</td>
<td>53</td>
<td>Classroom</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>60.27</td>
<td>55</td>
<td>Classroom</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>81.32</td>
<td>53</td>
<td>Online</td>
<td>1</td>
</tr>
</tbody>
</table>
### Table 2: Exam Scores by Section, Format, and Professor: ACT-Only Sample (68)

<table>
<thead>
<tr>
<th>Section</th>
<th>Avg. Score</th>
<th>Class Size</th>
<th>Format</th>
<th>Professor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>80.96</td>
<td>31</td>
<td>Classroom</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>60.83</td>
<td>24</td>
<td>Classroom</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>80.38</td>
<td>13</td>
<td>Online</td>
<td>1</td>
</tr>
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</table>

### Table 3: Model Comparison

<table>
<thead>
<tr>
<th>Model Comparison</th>
<th>Full Model (all cases)</th>
<th>Partial Model (ACT score available)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Basic Model</strong></td>
<td>n= 161</td>
<td>n= 68</td>
</tr>
<tr>
<td>R² = .206</td>
<td>R² = .274</td>
<td></td>
</tr>
<tr>
<td>Adj R² = .181</td>
<td>Adj R² = .203</td>
<td></td>
</tr>
<tr>
<td><strong>IV</strong></td>
<td><strong>t</strong></td>
<td><strong>prob</strong></td>
</tr>
<tr>
<td>Format</td>
<td>4.724</td>
<td>0.000</td>
</tr>
<tr>
<td>GPA</td>
<td>3.124</td>
<td>0.002</td>
</tr>
<tr>
<td>Nat</td>
<td>1.303</td>
<td>0.194</td>
</tr>
<tr>
<td>Transfer</td>
<td>-0.869</td>
<td>0.386</td>
</tr>
<tr>
<td>Gender</td>
<td>.895</td>
<td>0.372</td>
</tr>
<tr>
<td><strong>Basic Model + Prof Effect</strong></td>
<td><strong>IV</strong></td>
<td><strong>t</strong></td>
</tr>
<tr>
<td>n= 161</td>
<td>R² = .397</td>
<td>Adj R² = .374</td>
</tr>
<tr>
<td><strong>IV</strong></td>
<td><strong>t</strong></td>
<td><strong>prob</strong></td>
</tr>
<tr>
<td>Format</td>
<td>1.116</td>
<td>0.266</td>
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<tr>
<td>GPA</td>
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<tr>
<td>Nat</td>
<td>0.715</td>
<td>0.476</td>
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<td>Transfer</td>
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<tr>
<td>Gender</td>
<td>1.276</td>
<td>0.204</td>
</tr>
<tr>
<td>Prof</td>
<td>6.988</td>
<td>0.000</td>
</tr>
<tr>
<td><strong>Partial Model + ACT + Prof Effect</strong></td>
<td><strong>IV</strong></td>
<td><strong>t</strong></td>
</tr>
<tr>
<td>n= 68</td>
<td>R² = .458</td>
<td>Adj R² = .395</td>
</tr>
<tr>
<td><strong>IV</strong></td>
<td><strong>t</strong></td>
<td><strong>prob</strong></td>
</tr>
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<td>Transfer</td>
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<td>0.781</td>
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<tr>
<td>Gender</td>
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</tr>
<tr>
<td>Prof</td>
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<td>0.000</td>
</tr>
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</table>
Table 4: T-Tests

<table>
<thead>
<tr>
<th>IV</th>
<th>t</th>
<th>prob</th>
<th>Full Model</th>
<th>IV</th>
<th>t</th>
<th>prob</th>
<th>Partial Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Format</td>
<td>-4.747</td>
<td>0.000</td>
<td></td>
<td>Format</td>
<td>-1.674</td>
<td>0.099</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
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<td>0.580</td>
<td></td>
<td>Gender</td>
<td>-0.587</td>
<td>0.559</td>
<td></td>
</tr>
<tr>
<td>Transfer</td>
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<td>0.682</td>
<td></td>
<td>Transfer</td>
<td>0.500</td>
<td>0.619</td>
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</tr>
<tr>
<td>Nat</td>
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<td>0.106</td>
<td></td>
<td>Nat</td>
<td>-1.243</td>
<td>0.218</td>
<td></td>
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<tr>
<td>Prof</td>
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<td></td>
<td>Prof</td>
<td>-6.044</td>
<td>0.000</td>
<td></td>
</tr>
</tbody>
</table>

Figure 1: Model of Assessment Inputs

REFERENCES


ASSESSING FINANCE PROGRAMS USING STUDENT-MANAGED INVESTMENT FUNDS

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ABSTRACT

As the job market for finance graduates has become increasingly competitive, finance programs are searching for ways to make their graduates more marketable. Limited resources and a focus on student assessment have forced departments to alter programs that can provide tangible results. One solution to these challenges is a student-managed investment fund. This paper examines the role of a student fund at a regional school to assess and improve the finance program.

ROLE IN ASSESSING FINANCE CURRICULUM

The role of a student-managed investment fund in the finance curriculum is three-stage. First, it is a tangible teaching tool that students use to apply the theories of portfolio management. Because of the applied nature of a student fund, it serves as the capstone experience for the finance program. In the second stage, the finance faculty can assess the success of the program at meeting the learning objectives and make any necessary changes for program improvement. The final stage is to ask the students, alumni and employers to assess the program's ability to meet each group's needs. The last two stages involve closing the loop on assessment of the program both internally and externally.

As the role of assessment increases, the second and third stages gain in importance and necessity. Experimental courses provide a natural method for assessing programs (Walstad, 2001). Finance programs tend to use exam-based methods for assessing curriculum (Redle and Calderon, 2005). However, this process overlooks a vital part of critical thinking skills: the ability to communicate the analysis. Finance majors respond that they are comfortable with the mathematics of analysis but not the communication of the results (Chatman, 2007).

The main learning outcomes for a finance program within a business program are both theoretical and practical. Students will demonstrate knowledge of finance-specific principles such as the risk-return relationship, term structure of interest rates, efficient capital markets, and agency problems. Furthermore, students will demonstrate the ability to apply finance-specific fundamentals and critically interpret and solve problems related to time value of money, investment analysis and corporate finance. In addition to the traditional financial knowledge learning objectives, finance curriculums usually require proficiency in basic computer application programs. Since the scandals in the finance industry, ethics has moved from an implicit learning objective to an explicit learning objective. Finally, the finance program should prepare students for careers in banking, financial planning and corporate finance. Thus, the finance curriculum is expected to meet four global learning objectives: finance-specific knowledge, written and oral presentation and technology skills, ethical behavior, and community outreach. The objectives can also be divided into critical thinking skills or communication skills.

The student-managed investment fund meets these goals in several ways. The key idea is to design an assessment tool that allows the students to demonstrate their skill gains. The stock or bond analyses that the students typically create while working on the fund is the natural connection. Each student is able to show the mathematics of the calculations but also explain what the analysis means to the reader. Instead of taking an exam and choosing the best answer, students are forced...
to express the meaning behind the numbers in their own words, which creates the link between the 
critical thinking skills and the communication skills.

The process is similar to humanities disciplines that have students create a portfolio of 
projects throughout the curriculum. However, for efficiency, the asset analysis is one major project 
that encompasses all the main topics in security valuation. Finance programs tend to be much larger 
than history or speech programs, and professors don't have the time for repetitive assessment. 
Furthermore, because of the integrated nature of a finance program within a BBA degree, having 
an end of curriculum project allows the student to demonstrate cross-discipline knowledge.

The global objective of finance-specific concepts and techniques is the most easy to 
demonstrate. As students apply the ideas of investment analysis and portfolio management to the 
fund and individual assets, they are developing the key connection between the theory and the 
application. For example, finance students are well-versed in the theory of time value of money. 
Analysis of the fund requires that students calculate the expected future price of each stock in the 
fund or considered for addition to the fund under different macroeconomic conditions. The students 
learn the ambiguity of the actual number calculated because of the number of estimates required in 
the computation. As the students alter the estimates and calculate a range of prices, the students 
apply sensitivity analysis and how to critically interpret earnings and price projections.

Using computer applications such as Microsoft Excel provide students with the needed skills 
for complex computations. But technology is integral to communication. Thus, having students use 
Microsoft Publisher for their stock reports allows them to learn a new application plus it teaches 
them how to communicate the ideas in an attractive format. Furthermore, the students have a 
tangible item for their portfolio for the job market. The students can post their reports on the 
Internet for sharing with alumni and employers, which generates a connection with the finance 
program's community.

Including the finance community helps to close the loop for the finance program. The 
student-managed investment fund asset choices are always of interest to alumni of the program. An 
implicit benefit of the fund that employers notice is how the students handle an asset that is not 
successful. The ability of a student to accept and learn from failure is a desired attribute that the 
fund allows some students to display. In addition to the basic community relations, the 
student-managed investment fund is a tie to alumni for fundraising. Alumni are much more likely 
to give to specific projects, especially when they can see the results.

Perhaps the most overlooked role of the student-managed funds is the emphasis on ethical 
behavior. The funds are real and the students must recognize their fiduciary responsibility with 
managing those funds. By instilling in the students how the earnings will be used, the students are 
less likely to view managing the fund as a game and instead, really consider which assets will help 
the fund achieve its desired risk-return relationship and diversification.

The substantial application tool that the student-managed fund provides allows it to be the 
capstone experience for the finance program. Not only are the majority of key finance concepts 
covered but so are the main computations. All of this is done within the constraints of fiduciary 
responsibility, which further helps students develop their ethical compass.

The fund becomes the key assessment tool for the finance program. Student papers and 
presentations can be used to assess student thought process and student ability to apply the theory 
to actual monies. Overall portfolio performance provides a tangible way to evaluate student 
knowledge versus major indices, major mutual funds and other student-managed investment funds. 
The finance faculty is then able to make recommendations for program and curriculum 
 improvement. The results of the student fund and the assessment process can then be used to market 
not just the finance program but also the finance majors to alumni and the employers.
THE CHICKEN OR THE EGG? RELATING RESEARCH ATTITUDES AND BEHAVIORS OF BUSINESS SCHOOL FACULTY

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ABSTRACT

Research and publishing have become increasingly important in colleges of business nationwide and the importance of publishable research is even greater in schools/colleges which are accredited or seeking accreditation by the Association to Advance Collegiate Schools of Business (AACSB). The premise for this increased importance is that faculty's research efforts and outcomes enhance faculty performance in the classroom and enhances the educational experience of students. But do business faculty agree with this premise, and do their attitudes toward the usefulness of research in their mission of teaching relate to their behaviors in this area?

This research examined the relationship between attitudes toward research, attitudes toward the impact of research on teaching, and research-oriented behaviors among business faculty at AACSB accredited institutions.

An on-line questionnaire was developed to assess faculty attitudes and behaviors relating to research and teaching. An e-mail invitation to participate in the survey was sent to a random sample of 1000 business faculty at AACSB accredited business schools nationwide. One hundred thirty six faculty responded to the survey representing a 14.4% response rate.

The results show that faculty generally support the idea that researching and publishing improve teaching, and that attitudes toward the usefulness of research relate positively to both research efforts and to research success in the form of published journal articles. The study shows that faculty members do believe that researching and publishing make them better teachers. That belief, in turn, is related to a variety of attitudes that essentially embrace research as being mutually supportive with teaching and also as enhancing the educational experience of students. The study also found significant relationships between these positive research/teaching attitudes and faculty members' successful research outcomes.
DO ONLINE STUDENTS MAKE THE GRADE ON THE BUSINESS MAJOR FIELD ETS EXAM?

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ABSTRACT

This paper examines the determinants of performance on the business major field achievement ETS exam with a focus on the impact of students taking multiple business courses in the online environment. The sample consists of 136 students at a midsized regional institution located in the Southwestern region of the United States. The empirical model employed controls for grade point average, standardized test scores (SAT/ACT), junior college transfer students, gender, and student motivation. Consistent with previous research, the results find that academic ability measured by the college entrance exam and student grade point average are the primary determinants of student performance on the ETS exam. The empirical results indicate that counting performance on the ETS in a range of ten to twenty percent as part of the capstone course grade significantly increases performance on the ETS exam. The results indicate that students completing multiple business courses in the online environment scored six percentile points lower on the ETS exam but the coefficient is not statistically significant.
STUDENT PERFORMANCE ON COURSE EMBEDDED ASSESSMENT IN INTRODUCTORY CORPORATE FINANCE

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Huabing Wang, West Texas A&M University
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ABSTRACT

This paper examines course embedded assessment results in introductory corporate finance courses from a public university in the Southwestern region of the United States. Results are derived from 141 students completing a course embedded multiple-choice exam at the conclusion of the spring 2008 semester. All students were required to take the assessment exam as part of the final exam grade. Of the 141 students, 38 (27%) fall in the sufficient range with scores between 70% and 90%. Only two students (1%) fall in the exemplary range with scores above 90%. Students demonstrate overall sufficiency on three of the eight learning outcomes, which are financial markets and efficiency, time value of money, and capital structure of a firm. Students show partial sufficiency on learning outcomes risk, return and diversification, and capital budgeting and the cost of capital. Students fail to show any sufficiency on the three learning outcomes: financial statement analysis, stocks and bonds, and multinational financial management. The amount of time spent on each topic and the placement of the topic in the course influenced the end of term performance. The three objectives with sufficient results are concepts and mathematical techniques that are used throughout the course, which reinforces them. In comparison, the mathematics of diversification and capital budgeting involve multiple steps and while the concepts are used in later units, the techniques are not. Financial statement analysis and stocks and bonds are covered at the start of the course while multinational financial management is the last topic. Classes that were behind on the material and had to rush through the international topics scored substantially lower than the other classes. Furthermore, these classes did not have time to review concepts from the start of the semester. Assessment results also vary by major. Of all the majors with sample size greater than five, the accounting major ranks on top with an average score of 64.7%. Agribusiness and marketing majors follow with average scores of 63.8% and 61.5%, respectively. Finance majors rank fourth with an average score of 60.4%. General business, management, and CIS majors are among the majors with the lowest assessment scores.
STUDENTS IN FREE ENTERPRISE (SIFE) TEAM PERFORMANCE AND THE IMPACT OF BUSINESS ACCREDITATION

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ABSTRACT

This study examines factors influencing the performance of Students in Free Enterprise (SIFE) teams at regional and national competitions. The primary empirical focus of the research is the relationship accreditation by the Association to Advance Collegiate Schools of Business (AACSB) has on SIFE team performance. The data set includes 235 teams placing at regional and national competitions in 2008 competitions. Thirty-four of the sample institutions are AACSB accredited, eleven percent is AACSB members but not accredited, and fifty-five percent are not associated with AACSB. The empirical results from the paired t-test indicate that there is not a statistical difference in competitive performance across the three classifications. The results imply that AACSB accreditation or membership is not a significant determinant of how a SIFE team will perform in competition.

INTRODUCTION

Students in Free Enterprise (SIFE) is a global organization with 1,503 active SIFE teams on college campuses in 47 countries. As of 2008, over 38,000 students are collegiate members of this partnership of higher education and business. SIFE's mission is to provide college and university students the best opportunity to make a difference and to develop leadership, teamwork and communication skills through learning, practicing and teaching the principles of free enterprise. The purpose of this manuscript is to compare performance in SIFE competition across three different accreditation classifications: AACSB accredited, AACSB member but not AACSB accredited, and no association with AACSB. The manuscript is organized as follows: First, a brief background description describing SIFE is provided. The second section of the manuscript puts forth a discussion of competition standards. The next sections offer a brief discussion covering the role of leadership and financial resources for a SIFE team. The final section is a discussion of the empirical results comparing the various accreditation categories.

BACKGROUND

Founded in Texas in 1975, SIFE has grown to 601 teams in the USA with 15,000 members; since 1996, SIFE has grown worldwide to 46 other countries. SIFE gives students an unparalleled opportunity to extend their skills and knowledge beyond the classroom by engaging in service learning projects. Students develop their own leadership, project management, teamwork, and communication skills by implementing projects, which improve the quality of life or standard of living for others. SIFE World Headquarters purposely allows each team the creative freedom to identify the unique needs of their community in order to develop projects that best target those community needs. The economic empowerment of others is the common thread running through all SIFE projects.

SIFE taps into the idealism of youth, encouraging college students to make a difference through this worldwide movement. For some, that altruistic spirit might be enough, but college
students are also competitive, and SIFE competition is the icing on the cake. Every March and April, SIFE USA hosts Regional Competitions, which give SIFE teams the opportunity to present the results of their projects to determine which teams have made the most impact. Winners from each competition league advance to the SIFE USA National Exposition.

At a SIFE competition, each team has a time block of thirty-seven minutes to convince a panel of business executives and entrepreneurs that they have done the best job of creating economic opportunity for others. Each team prepares a four-page written Annual Report, which is distributed to the judges as the team enters the competition room. The judges have seven minutes to read the Annual Report while the team sets up its oral presentation. The team then has twenty-four minutes to present their educational outreach projects and team sustainability strategy using an audio-visual presentation, followed by a five-minute question and answer period.

The Regional and National SIFE Competitions are the focus of this research. What are the characteristics of a winning SIFE team? Judges are admonished to "look past flashy presentations and the latest technology," using only the judging criteria to determine the team's impact. Judges are asked to answer the question, how effectively did the SIFE team measure programs and demonstrate that it created economic opportunity by helping others? Specifically, did the target group accomplish the following: (1) Understand how a market based economic system operates; (2) Acquire the education and skills training needed to succeed in a dynamic, competitive global economy; (3) Learn how to succeed as an entrepreneur and/or improve an existing business; (4) Develop the personal financial management skills necessary to achieve financial independence; (5) Understand that the long-term success and prosperity of a market economy, business and individuals are dependent on ethical business practices; and (6) Determine how successfully the team developed and executed a strategy to ensure the longevity of the team and its educational programs. These six criteria are known to SIFE teams as Market Economics, Success Skills, Entrepreneurship, Financial Literacy, Business Ethics, and Team Sustainability. Each criterion may earn the team a maximum of twenty points, for a possible total score of 120. Teams are ranked according to point totals of all judges in a league.

**COMPETITION STANDARDS**

To understand what differentiates the teams who rank highest in competition from lower ranking teams requires a focus on the projects, the presentation, and the teambuilding necessary to create a cohesive, committed, productive SIFE team. At a minimum, projects must meet several standards. First, all projects must meet one or more of the six foundation criteria. Second, projects must address an identifiable need, which can be solved through free enterprise education or consultation. Third, the impact of a project should be measured, showing how opportunity was created for others and accounting for number of people impacted, hours invested in the project by SIFE, and the number of SIFE students involved. Fourth, the project should fit the individual team's mission statement. Six, projects should be created with long-term project sustainability in mind. At the highest level of competition, projects often are multi-layered with many component parts with multiple target audiences. Top projects expand the term community to include the whole world with one or more international projects, display creativity and originality, evolve through partnerships with businesses or non-profit organizations, or reach wide audiences through electronic or print media.

The minimum standards for presentations to judges include a written compilation of the team's projects and an explanation of school and community demographics, one or more speakers who describe the projects, and a computer-generated visual presentation, which aids in project documentation. At the highest level of competition, the presentation to judges uses great packaging of the complete presentation to convey an extremely professional team image consistent with a successful SIFE brand. This often includes a professionally printed Annual Report using advanced desktop publishing, a professionally printed brochure of team member biographies with pictures
included, a memorized twenty-four minute presentation showing evidence of the journalistic approach present in good news writing, a group of four to six presenters who demonstrate passion for the projects as well as excellent oral communication skills, and a computer presentation employing sophisticated software integrating film, still pictures, graphics, and music to effectively document projects. Top presentations are built around a theme on which projects for the year have been focused. The theme is incorporated in the written Annual Report, the spoken presentation, the look of the visual presentation, and often even the music used in the presentation.

THE IMPORTANCE OF LEADERSHIP

Before the projects, the presentation, and the competition comes the building of a competition-worthy SIFE team. A team must start with one or more faculty advisors called Sam Walton Fellows. Wal-Mart's founder, Sam Walton, is seen as the shining example of a servant leader, a worthy example to faculty advisors. Funds from the Wal-Mart Foundation provide $1,000 fellowships yearly to Sam Walton Fellows. As an international organization, SIFE requires that each team have a Sam Walton Fellow appointed by and supported by the University. SIFE is a team, not a chapter or a club, and the Sam Walton Fellow is the team coach. The Sam Walton Fellow of a winning SIFE team is totally committed to the success of the team, taking active oversight of project selection, planning, and execution; documentation of projects; reporting to SIFE World Headquarters; and creation of the written Annual Report, the script for the oral presentation, and the look of the visual presentation. The Sam Walton Fellow is the glue that holds the team together year after year. Often spending in excess of twenty hours per week, the Sam Walton Fellow is the team coach who builds on the strengths and works to cure weaknesses. The Sam Walton Fellow is the team's ultimate go-to person, authority figure, parent figure, friend, supporter, disciplinarian, and scavenger for resources.

The level of committed involvement of the Sam Walton Fellow may be the greatest intangible predictor of team success. Most Sam Walton Fellows are business faculty members, although some are administrators, staff, or faculty from non-business areas. Some faculty members receive release time, a graduate assistant assigned to SIFE, the appointment of co-fellows, or other considerations. For faculty, SIFE is a service activity creating such a level of time engagement that fulltime commitment to both teaching and research added to the time required to take a SIFE team to a highly competitive level becomes a difficult balancing act, particularly in an AACSB environment where Sam Walton Fellows must also keep themselves academically or professionally qualified.

THE ROLE OF FINANCIAL RESOURCES

Financial support from the university varies greatly among SIFE teams. At a minimum, the university typically furnishes a place for team meetings and project meetings and access to campus facilities for conducting campus-based projects. On the lower end of the scale, the SIFE team and individual members fund all project costs and student travel without university contribution and the only technology or supplies furnished may be those ordinarily available to faculty and students for general use. At the higher end of the financial resource spectrum, SIFE teams have access to internal support for dedicated travel, equipment, and project development.

In addition to financial support from the host university, SIFE teams fund themselves through profits earned from SIFE-run businesses; grants obtained by the team; contributions or gifts from businesses, alumni, or Business Advisory Board members; in-kind contributions from project partners; and winnings from SIFE competitions. All competing teams at a Regional Competition are reimbursed for the cost of three hotel rooms, and a team named Regional Champion wins $1,500. The top 60 teams at SIFE USA National Exposition take home winnings varying from $750 to $5,000. Individual Topic Competitions for projects in each of the six judging criteria provide
$1,000 prizes for a Top 20 national placement with the top three winners in each topic area earning an additional $1,000 to $3,000. Over 200 corporations, foundations, and individuals provide at least $25,000 in funding to SIFE USA, with nearly 20% of them providing $100,000 or more.

EVALUATING THE IMPACT OF AACSB ACCREDITATION

Accreditation by the Association to Advance Collegiate Schools of Business (AACSB) is normally considered the highest level of business school accreditation. Ivy League or branded colleges may not need the AACSB quality stamp but the vast majority of business schools seek external validation through accreditation. An implicit expectation of AACSB accreditation is that faculty members will retain human capital via professional activities, which are often a function of actively pursuing research activities. Assuming a successful SIFE team needs one or more dedicated faculty advisors with limited time to pursue an active research agenda, one possible theory is that AACSB accreditation is a detriment to running a competitive SIFE team. Alternatively, most AACSB accredited programs commit to quality programs with an ethical and global perspective. In addition, AACSB standards require a resource commitment to strategic management, professional development, and continuous improvement. The mission and resources associated with AACSB accreditation would appear to be consistent with a competitive SIFE team. It should be noted that some SIFE teams are housed outside the College of Business but most teams have a strong College of Business presence.

The empirical analysis of this study employs a simple paired t-test to compare performance placing at regional and national competitions for the top 235 SIFE teams by the three classifications of being AACSB accredited, AACSB member but not accredited, and no association with AACSB. The results are based on the 2008 season for the four-year division. The 2008 national champion is the University of Arizona. La Sierra University finished second nationally followed by Graceland University and Texas State University. Thirty-four of the sample institutions are AACSB accredited, eleven percent is AACSB members but not accredited, and fifty-five percent are not associated with AACSB. The empirical results from the paired t-test indicate that there is not a statistical difference in competitive performance across the three classifications. Competitive rank performance is highest for programs that are not associated with AACSB and lowest for AACSB member schools that are not accredited but the empirical results are not statistically different.

The results of this study are limited by the observation that the empirical analysis is based on a simple paired t-test. Future research focusing on the determinants of SIFE performance in competition should employ a more robust model that includes multiple control variables such as university size, public versus private institution, and number of years the SIFE team has been active.
THE POSITIVE AND NEGATIVE OF INCREASING RESOURCES FOR STUDENT ORGANIZATIONS

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ABSTRACT

This paper examines the impact of increasing financial resources for a student organization based on a Students in Free Enterprise (SIFE) team at a regional university. Financial support from the university varies greatly among teams. On the lower end of the scale, the SIFE team and individual members may be expected to fund all project costs and student travel without university contribution; the only technology or supplies furnished may be those which are ordinarily available to faculty and students for general use; and a minimal level of faculty travel funds may be provided. However, other universities may provide significant funds for SIFE team projects, travel, and technology. In addition to financial support from the host university, SIFE teams fund themselves through profits earned from SIFE-run businesses; grants obtained by the team; contributions or gifts from businesses, alumni, or Business Advisory Board members; in-kind contributions from project partners; and winnings from SIFE competitions.

What are the positive as well as the negative changes experienced by a SIFE team when the host university significantly increases the team's annual financial resources? Assuming that university resources have previously been the largest funding component for a team, increasing the funding can lead to several changes. First, a team with increasing resources tends to gain access to better technology and equipment. When a team has one or more dedicated computers loaded with the most powerful media production and presentation software and the best desktop publishing software, it has enhanced ability to produce a top-notch Annual Report and audio-visual presentations. Multiple video cameras and still cameras can give the team the ability to thoroughly document all projects even when multiple projects occur within a short time frame. A high quality projector can enhance any computer presentation. Although having new technology provided keeps a team from constantly scrambling to obtain it, the reality is that few teams go without the technology needed to do an adequate job. SIFE team members are tech-savvy students who personally own much of the technology needed; so the presentation may be created on a student's computer and the Annual Report may be written on the Sam Walton Fellow's computer, but the jobs get done. Even if the team does not own it, borrowing a projector for projects or competition is usually not difficult on a college campus.

Second, more resources implies more funds available for travel. With little funding from other sources, SIFE team members are typically expected to pay their own travel expenses to competitions or for out-of-town projects. Therefore, a lack of personal funds restricts SIFE travel for some team members. If a university is willing to fund travel, it significantly increases the number of students who are able to travel with SIFE and reduces the burden on team members who were funding their own travel. The downside is that fully paid travel encourages free riders, and teams must then set up a new system to discourage the free rider mentality.

Third, increasing resources allows a team the luxury of focusing on projects that have a higher level of cost attached. Many projects, especially international projects, come with such a high price tag attached that teams never realistically consider doing those projects. Projects that require significant food, transportation, room rental costs, or sponsored competitions requiring prize money are examples of projects that can be considered for teams with access to increased funding. On the other hand, when students know they have money to spend they often overlook good projects with little cost. If a team can, without cost, reserve a university facility for a few hours and
do a workshop for an invited audience of university students or community members, the cost is very small. Assuming the Sam Walton Fellows' academic department does not charge the team for copies or technology usage, there may be no cost to the team to present a workshop complete with audio-visual presentation and handouts. SIFE team members can be quite creative in obtaining the resources they need to complete projects without cost. Availability of funds may inhibit the cost-cutting mentality that actually serves people well in the business world.

Fourth, additional financial resources often increase visibility on the university campus and in the community. As financial resources increase and the scope of projects expands, SIFE maintains a higher profile on campus and in the community. The ability to more aggressively pursue high profile projects with fewer funding worries not only attracts attention from potential partnering organizations and the media, but it makes recruiting new team members easier. Students are eager to join an organization held in high esteem on campus, especially one with funded travel opportunities. Of course, increased funding seldom comes without strings. Any university entity contributing funds to SIFE has expectations about the results those contributions will produce. At the most benign the expectation may simply be that more students will have an opportunity to participate, but since SIFE also involves competition, increased funding may produce increased expectations of results.

Finally, increased financial resources often result in a change in attitude by SIFE team members. When a university confers a stamp of approval on a student organization by significantly increasing its funding, it makes team members feel valued and lends credibility to the organization's objectives. This enhances recruiting of new team members, new Business Advisory Board members, and partners in projects. On the other hand, team members may develop an unjustified sense of entitlement because they belong to a favored organization. Faculty members and other students view that arrogance and sense of entitlement in a negative light.
TACKLING BUSINESS WRITING IN THE DIGITAL AGE

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ABSTRACT

Will a discipline-specific writing test alert students to common conventional writing errors and motivate improvement? Two professors administered such a test comprised of 7 categories of writing errors to 96 students. There was a statistically significant difference in test scores for graduate students compared to undergraduate students. However, there was no significant difference in test scores related to when the test was administered in either the semester or a program of study. In subsequent writing assignments by 69 of the same students, 57% of undergraduates and 65% of graduate students continued to demonstrate trouble in most or all of the writing error categories. Conclusions include acknowledgment that writing is difficult and is a skill that must be both learned and practiced. The teaching of writing skills is also difficult and the problem is not easily remedied by raising awareness of writing errors at the individual instructor, assignment or course level. Recommendations and follow-up actions by these authors are provided. Key words: education leadership, business writing, writing competency.
SELECTING IMPORTANT CRITERIA FOR TELEMEDICINE IMPLEMENTATION

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ABSTRACT

The objective of this paper is to create a baseline result from the pre-telemedicine data and identify important criteria (or factors) that should be employed in measuring telemedicine effectiveness in Alaska after the implementation of telemedicine project. Alaska is an expansive and complex geographic area with many rural communities of villages and few small towns in remote locations. These geographic conditions along with limited healthcare facilities make health care management a challenging task in the state. Therefore, it is important to look for an effective alternative, such as telemedicine, for health care delivery in remote rural regions. In this paper, we focus on data gathered before telemedicine implementation to select factors that are associated with patients' satisfaction. Four rural regions are selected for the implementation of telemedicine. Statistical technique "Regression Analysis" is primarily utilized for factor selection processes. All regression models are estimated separately for each region, and a separate model is also estimated for all regions combined. Our analysis reveals that the most important criterion in terms of magnitude and statistical significance is "the perceived level of prescribed treatment" across all regions. The "amount of time that health care provider spent with the patient" is also emerged as an important characteristic for patients' satisfaction. Another important factor the "ability to communicate" is also found to be associated with patients' satisfaction. Analyses reveal that regardless of the geographic region these three factors are statistically significantly associated with patients' satisfaction.
AN EVOLUTIONARY METHOD FOR THE MINIMUM TOLL BOOTH PROBLEM: THE METHODOLOGY

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ABSTRACT

This paper considers the minimum toll booth problem (MINTB) for determining a tolling strategy in a transportation network that requires the least number of toll locations, and simultaneously causes the most efficient use of the network. The paper develops a methodology for using the genetic algorithm to solve MINTB and presents the algorithm GAMINTB. The proposed method is tested and validated through a computational study with six example networks. Additional numerical test discovers some interesting properties for the proposed method, and provides guidelines for further application of the GAMINTB.

INTRODUCTION

Today, traffic congestion is a pressing issue for society and a major concern for urban planners. The 2007 Urban Mobility Report states that congestion in the U.S. caused 4.2 billion hours of travel delay and 2.9 billion gallons of wasted fuel for a total cost of $78 billion in 2005. Although congestion pricing has been proposed by transportation economists as a means of reducing congestion for over 80 years, it is only recently that this idea has been implemented in practice. Examples include the "Electronic Road Pricing" (formerly "Area Licensing Scheme") program in Singapore implemented in 1975, a toll ring in Bergen, Norway implemented in 1986, and subsequently two toll rings in Oslo and Trondheim, respectively. More recently, London introduced a $5 (now raised to $8) daily fee on cars entering the city center in February 2003. In the United States, the Federal Highway Administration (DeCorla-Souza, 2003) has been funding toll pricing projects in cities such as San Diego, Houston, and Seattle under the Congestion Pricing Pilot Program established by Congress since 1991.

This paper focuses on determining tolls with the primary objective of inducing travelers, who are encouraged only by their own travel costs, to choose routes that would collectively benefit all travelers and use the transportation system resources more efficiently. The secondary objective is to find tolls that require the least number of collection facilities or toll booths. The problem was first introduced in Hearn and Ramana (1998) and was referred to as the minimum toll booth problem (or MINTB). When compared to the marginal social cost pricing (MSCP) advocated by transportation economists, the MINTB solution often requires substantially fewer number of toll booths. For example, the well documented Sioux Falls network with 24 nodes and 76 arcs requires to toll on all 76 arcs under MSCP, but only 32 under the MINTB solution. Considering that operating a manned toll booth costs $180,000 per year, MINTB solutions would save approximately eight million dollars per year for Sioux Falls.

MINTB is a very difficult mixed integer linear programming problem, and it is documented in the literature that general purpose solvers such as CPLEX cannot solve MINTB for even moderate size networks. The computational challenge for MINTB has remained relatively unexplored in the transportation and management science literature.

Up to date, most existing work (see e.g., Bai (2004)) on MINTB uses the local search method to obtain "good" solutions with no guarantee on global optimality. Genetic algorithms (GA) are well
known for their ability to sort through a variety of local optimal solutions until they converge to a global optimal solution. Therefore, the purpose of this paper is to develop a general methodology for applying the genetic algorithm to MINTB.

**PROBLEM FORMULATION**

This section formulates the minimum toll booth problem using network notation. The transportation network is represented by sets of arcs and nodes corresponding to roads and intersections, respectively. An origin-destination (O-D) pair (also known as a commodity) is a pair of nodes on which a user (traveler) in the system must begin and end. Mathematically, let $G=(N,A)$ denote a network with the set of nodes $N$ and set of arcs $A$. The set of origin destination pairs is denoted as $K$. The demand for an O-D pair $k$ is simply the number of travelers going from the origin to the destination.

Let $X_k$ represent the flow vector for commodity $k$. The vector $X_k$ is feasible if it satisfies $UX_k = b_k$ where $U$ is the node-arc incidence matrix for $G=(N,A)$ and $b_k$ is the demand vector.

The sum of flow vectors $X_k$ over all O-D pairs that pass over a given arc $a$ is denoted $v_a = \sum X_{k,a}$. It follows, then, that an aggregate flow vector $v$ is feasible only if $v = \sum_k X_k$, $UX_k = b_k$, and $X_k \geq 0$, $\forall k \in K$.

Finally, the cost of each path can be measured by the amount of time it takes to travel from the origin to the destination for each user. Let $s(v)$ be the travel cost vector for a given flow $v$ and $\tau$ be the toll vector in the network. Then, the MINTB problem can be formulated as the mixed integer linear program as follows:

$$
\begin{align*}
\min \sum_{a \in A} y_a \\
p.s.t. & \sum_{k} X_{k,a} = b_k \\
& (\Phi v + \beta \tau^T) \geq \sum_{k} X_{k} \\
& 0 \leq \beta \tau^T \leq MyaA \\
& \tau \leq 0, \forall \tau \in 
\end{align*}
$$

In the MINTB formulation, is a pre-determined parameter called "system optimal flow," which is usually calculated by solving a nonlinear program. In addition, $\tau$ is a binary variable indicating if there is a toll booth on arc $a$ while $\tau_a$ being the real toll level on arc $a$. The first two conditions in MINTB ensure that the toll vector $\tau$ will induce the most efficient use of the transportation network; the third condition uses an arbitrarily large constant $M$ to state that $=1$ when $\tau_a>0$ and $=0$ when $\tau_a=0$.

**THE METHODOLOGY**

We propose a genetic algorithm for MINTB (GAMINTB), and the algorithm works as follows. GAMINTB first randomly generates binary vectors, each of which represents whether or not a toll booth is used on any arc for a given network. After using a linear program solver to determine feasibility and calculate optimal toll levels, GAMINTB divides all randomly generated toll vectors into two groups: feasible and infeasible groups; and then ranks them according to their feasibility and corresponding total number of toll booths. Based on this ranking, the algorithm randomly selects toll vectors to become "parents" where higher ranked toll vectors have higher probability of being selected. The parent toll vectors then reproduce the new generation of toll
vectors following an alteration process consisting of "crossover" and "mutation." The new population is again evaluated and ranked, and the process continues until the algorithm reaches the specified number of generations. Finally, the solution with the minimal number of toll booths is returned as the final optimal solution.

Important considerations in designing GAMINTB include: using a linear programming solver to check the feasibility of a binary toll vector and calculate the actual toll amount; the choice of uniform or weighted probability for randomly selecting parent toll vectors; and the adoption of the immigration concept to diversify all generations so that the algorithm reaches the global optimal solution.

COMPUTATIONAL RESULTS

The purpose of our computational study is to validate GAMINTB through small example networks, as well as to investigate how parameter settings affect the performance of GAMINTB. In this section we present the results of GAMINTB tested for performance and implementational comparisons over six small example networks. The GAMINTB was programmed using Fortran, and the tests were run on a computer platform with a 2.6 GHz Pentium 4 processor and 512 Mb of RAM.

The quality of the GAMINTB is defined as the percentage of the final population that is the optimal solution. It can be used as a measure of both the convergence rate of the GAMINTB and the diversity created within the GAMINTB. The algorithm performed well if the quality fell between 40% and 60%. A solution quality in this range indicates that a clear winner was discovered, yet a fare amount of diversity was introduced throughout the algorithm. Note that 100% is not considered to be the best quality because it could indicate that the algorithm only terminates at a local optimum.

We first conduct the "implementational comparison test" to compare the quality of various levels of immigration and mutation, and quality differences between implementing uniform and weighted selection. Table 1 suggests that immigration allowed for more variety among optimal solutions into the final population to minimize any fears that the algorithm may prematurely converge to some local optimal solution. On the other hand, mutation was not nearly as effective. It did slow the convergence rate, but only after the mutation rate was raised to an absurdly high level. In most cases, the effect of mutation on the genetic algorithm is minimal, thus it is not essential to the success of our genetic algorithm.

<table>
<thead>
<tr>
<th>Network</th>
<th>Mutation Rate</th>
<th>Immigration Rate</th>
<th>Rate of Both</th>
<th>Neither</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>20%</td>
<td>30%</td>
<td>40%</td>
<td>20%</td>
</tr>
<tr>
<td>1</td>
<td>82%</td>
<td>70%</td>
<td>62%</td>
<td>61%</td>
</tr>
<tr>
<td>2</td>
<td>79%</td>
<td>74%</td>
<td>73%</td>
<td>75%</td>
</tr>
<tr>
<td>3</td>
<td>82%</td>
<td>74%</td>
<td>64%</td>
<td>66%</td>
</tr>
<tr>
<td>4</td>
<td>80%</td>
<td>65%</td>
<td>64%</td>
<td>61%</td>
</tr>
<tr>
<td>5</td>
<td>82%</td>
<td>76%</td>
<td>67%</td>
<td>70%</td>
</tr>
<tr>
<td>6</td>
<td>82%</td>
<td>69%</td>
<td>63%</td>
<td>64%</td>
</tr>
</tbody>
</table>
Comparing the uniform and weighted probability methods, Table 2 indicates that the weighted probability converges at a much higher rate. However, the convergence rate is not high enough to generate much alarm for premature termination. On the other hand, some of the uniform cases experienced rather low convergence rates and were dangerously close to not converging at all. Thus, it can be concluded that GAMINTB is much more effective when using a weighted selection probability.

<table>
<thead>
<tr>
<th>Network</th>
<th>Uniform</th>
<th>Weighted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7%</td>
<td>30%</td>
</tr>
<tr>
<td>2</td>
<td>3%</td>
<td>50%</td>
</tr>
<tr>
<td>3</td>
<td>11%</td>
<td>43%</td>
</tr>
<tr>
<td>4</td>
<td>1%</td>
<td>37%</td>
</tr>
<tr>
<td>5</td>
<td>7%</td>
<td>38%</td>
</tr>
<tr>
<td>6</td>
<td>5%</td>
<td>41%</td>
</tr>
</tbody>
</table>

Table 2: Comparing Uniform and Weighted Probability

Our second computational test is the "Performance Test." The goal is to demonstrate the effect of population size and generation number on run-time and quality. Tables 3 and 4 suggest that increasing the number of generations increases the total CPU time less rapidly and still produces similar quality results when compared to increasing the population size. Thus, it may be better to increase the number of generations before increasing the population size.

<table>
<thead>
<tr>
<th>Network</th>
<th>Population Size</th>
<th>Number of Generations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>500 1000 1500 2000</td>
<td>500 1000 1500 2000</td>
</tr>
<tr>
<td>1</td>
<td>1.25 4.16 8.83 15.04</td>
<td>0.56 1.16 1.68 2.26</td>
</tr>
<tr>
<td>2</td>
<td>1.34 4.37 8.97 15.33</td>
<td>0.64 1.29 1.92 2.55</td>
</tr>
<tr>
<td>3</td>
<td>1.38 4.41 8.9 15.05</td>
<td>0.72 1.43 2.15 2.84</td>
</tr>
<tr>
<td>4</td>
<td>1.04 3.82 8.06 14.06</td>
<td>0.35 0.7 1.05 1.38</td>
</tr>
<tr>
<td>5</td>
<td>1.47 4.71 9.59 16.27</td>
<td>0.74 1.47 2.21 2.92</td>
</tr>
<tr>
<td>6</td>
<td>1.45 4.67 9.4 16.06</td>
<td>0.71 1.42 2.14 2.84</td>
</tr>
</tbody>
</table>

* All CPU times are in seconds.

Table 3: CPU time Comparison (Population Size vs. Generation Size)*
<table>
<thead>
<tr>
<th>Network</th>
<th>Population Size</th>
<th>Number of Generations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>500 1000 1500 2000</td>
<td>500 1000 1500 2000</td>
</tr>
<tr>
<td>1</td>
<td>38% 43% 38% 39%</td>
<td>24% 38% 38% 37%</td>
</tr>
<tr>
<td>2</td>
<td>41% 43% 41% 43%</td>
<td>35% 34% 35% 50%</td>
</tr>
<tr>
<td>3</td>
<td>38% 46% 44% 41%</td>
<td>18% 30% 46% 43%</td>
</tr>
<tr>
<td>4</td>
<td>34% 41% 38% 39%</td>
<td>35% 35% 40% 37%</td>
</tr>
<tr>
<td>5</td>
<td>21% 24% 15% 18%</td>
<td>14% 10% 19% 15%</td>
</tr>
<tr>
<td>6</td>
<td>36% 38% 36% 32%</td>
<td>39% 28% 36% 39%</td>
</tr>
</tbody>
</table>

CONCLUSIONS

The purpose of this paper is twofold. One is to apply the genetic algorithm to the MINTB problem and develop a general framework for the methodology. The other is to validate the so developed method through small numerical examples. In response, the paper presents a customized genetic algorithm, GAMINTB, as a heuristic method for solving the minimum toll booth problem; and the algorithm is shown to be effective at solving MINTB for six small networks, all matching the optimal solutions generated by an NLP solver LINGO 7. Furthermore, computational tests suggest the following guideline for using GAMINTB. First, when searching for a better solution, the number of generations should be increased before increasing the population size, due to a lower CPU time and a higher projected convergence rate. Second, the use of immigration is much more effective in promoting diversity than the traditional mutation process. Third, the use of weighed probability in the selection process is better than the uniform probability for solving MINTB. However, whether or not the uniform probability would still be ineffective for larger networks needs further investigation. Finally, other streams of future research include testing and applying GAMINTB for larger networks, and considering the penalty approach for a variation of the GAMINTB.

REFERENCES


THE ROLE OF TECHNOPHOBIA IN COMPUTER LITERACY: HOW TO MEASURE AND COUNTERACT TECHNOPHOBIA IN ORDER TO INCREASE COMPUTER AND INFORMATION LITERACY

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ABSTRACT

Surveys have shown that today’s students are comfortable using various types of technology to communicate. They use text messaging to “talk” to friends, blogs to discuss special interest subjects, and social networking sites like Facebook and Myspace to interact with each other. Students are also adept at using file sharing devices and downloading and sharing music, video, and audio files. However, these students might not be as technologically savvy in all respects as one might think. These same students who can send text messages within a matter of seconds often experience difficulty in using professional or educational technology tools like university web portals, Blackboard, and Microsoft Office applications.

Students’ lack of comprehension and computer literacy when using technology for professional or academic use has often been called “technophobia.” Studies show that one of the resulting effects of this technophobia on students is a decrease in what librarians call “information literacy.” Information literacy is the set of skills students need to “access, evaluate, organize, and present information from all the real-world sources existing in today’s information society.” (Breivik, Patricia S., Student Learning in the Information Age, Phoenix: Onys Press, 1998, p 25)

Surveys have shown that high use, by students, of computers and technology does not translate into computer or information literacy. (British Library Report, Information Behaviour of the Researcher of the Future, Jan 11, 2008.)

The authors suggest that computer literacy is one of the primary components of information literacy, and that increasing students’ computer literacy may lead to a decrease in technophobia for students. The authors have also noticed that, in classroom settings, at-risk students experience more technophobia than their better-prepared student peers.

This paper attempts to find specific indicators (such as socio-economic status, family background, etc.) that can be used to determine which students might experience higher levels of technophobia and computer literacy issues. The authors will offer some methods to decrease students’ technophobia and increase their computer literacy and ability to evaluate information.
THE REVOLUTION OF SIX-SIGMA: AN ANALYSIS OF ITS THEORY AND APPLICATION

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ABSTRACT

Six-sigma is a discipline that has revolutionized many corporations. It has literally transformed them from a state of loss to one of profitability. It can be used to improve any process, and is particularly useful for improving any production system, whether one used for tangible products or services. Although the Japanese are ordinarily credited with having originated and advanced the quality movement, the roots of the quality movement, and consequently the roots of the six-sigma discipline actually originated in the United States. If the history of six-sigma is not well understood, neither is the rather subtle theory behind it. In this paper we develop the historical roots of the quality revolution, show how it developed into six-sigma, develop the theory behind six-sigma, and analyze the uses of some six-sigma tools used in an effective, coherent six-sigma program.
ONLINE ACADEMIC DATABASES + BIBLIOGRAPHIC MANAGEMENT SOFTWARE: A RECIPE FOR SUCCESS IN UNDERGRADUATE RESEARCH?

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ABSTRACT

This paper examines the feasibility of using the latest bibliographic management software with online academic databases for promoting undergraduate student research and publication. The assumption is that the use of such high technology tools would improve the mechanics of research and bibliographic reference management, which would increase the research output on the undergraduate level. This paper reviews information service providers, academic online databases, academic online databases in business and economics, the three major bibliographic management software packages, and presents the author’s recommendations.
A MODEL ANALYZING ATTITUDES TOWARD MUSIC PIRACY

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ABSTRACT

Music piracy is currently having a detrimental effect on the music recording industry, lowering revenue and profits and potentially changing the structure of the industry. The little research that has been conducted on music piracy has noted its similarities to software piracy. This paper tests whether the Theory of Reasoned Action, which previously has been found to describe software piracy, adequately describes music piracy. The Theory of Reasoned Action hypothesizes that a behavior can be predicted by a person's attitude toward the behavior and their perceptions of what other people think (social norms).

The model is tested by using responses to a survey given to university students. As expected, attitude is associated with music piracy behavior. Unlike some research on software piracy, social norms are also associated with music piracy behavior, but only when social norms are limited to perceptions about peers. Perceptions of authority figure attitudes toward music piracy are not associated with music piracy behavior. Attitude and social norms are also correlated with each other. The paper describes how these findings may apply in practice and research.
OUTSHOPPING BEHAVIOR WITHIN THE UPPER PENINSULA OF MICHIGAN: AN EXPLORATORY ANALYSIS

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ABSTRACT

An original, empirical study was designed and implemented, in an attempt to better understand outshopping behavior within a largely rural area (i.e., the Upper Peninsula of Michigan) which contains a large number of small cities and communities. Outshopping behavior, in the context of this study, is roughly defined as shopping behavior, among individuals and households, which involves retailers / marketers located outside of a given area (i.e., in this case, outside of the geographic boundaries of the Upper Peninsula of Michigan). Outshopping behavior can take a variety of forms, such as physical travel / shopping behavior in another city or state (i.e., a shopping trip to New York City), video-based shopping (i.e., the Home Shopping Network, infomercials), direct marketing (i.e., buying from catalogues), or electronic forms of shopping (i.e., such as using the internet). The research results provided a number of key insights into the range and scope of outshopping behavior (using a specific geographic area as an example case), and provides the basis for an initial understanding of the influence that shopping behavior has on quality of life. The research also has yielded a number of interesting and useful research questions related to the interrelationship between outshopping behavior and quality of life, given the influence that technology has had on the various forms of outshopping behavior.

INTRODUCTION

The following report delineates the results of a study designed to better understand the level and nature of outshopping behavior within the Upper Peninsula of Michigan. Outshopping behavior, in the context of this study, is roughly defined as shopping behavior, among individuals and households, which involves retailers / marketers outside of the Upper Peninsula; outshopping can, for example, take the form of physical travel / shopping behavior in another city / state (i.e., Home Shopping Network, Infomercials), direct marketing (i.e., catalogue marketers such as Lands’ End, L.L. Bean), or electronic forms of retailing such as the internet. Conventional wisdom, related to outshopping in the U.P. has long held that a significant amount of household income is spent outside of the 15 counties that make up the Upper Peninsula; however, it is the purpose of this research to provide a more definitive reading on the form, magnitude and behavioral dynamics associated with outshopping behavior in the U.P.

Two broad research questions were addressed in this research effort, namely:

1. What is the overall level of outshopping behavior among households in the Upper Peninsula?
2. What forms of outshopping behavior are more / less predominant among households in the Upper Peninsula?

Additionally, a larger number of related questions and issues surrounding these two broad research questions were addressed in the research effort, including the following:
1. Level of outshopping behavior within the household
2. Range/form of outshopping behaviors
3. Changes in outshopping behavior over time (i.e., seasonal)
4. Impact of technology on outshopping behavior
5. Behavioral impact of outshopping behavior (i.e., key benefits)
6. Role of stage of Family Life Cycle (FLC) on outshopping behavior
7. Role of product/category interest on outshopping behavior
8. Role of perceived inshopping sources on outshopping behavior
9. Measures of relevant financial issues related to outshopping

SUMMARY OF SURVEY METHODOLOGY, SURVEY INSTRUMENT AND DEVELOPMENT

A standardized survey instrument was developed, based upon the broad research questions, and related sub questions outlined in the research plan. The researcher worked collaboratively with others in developing and refining the survey instrument. Following initial development, the survey was then pretested using mock subjects; comments obtained from these pretest efforts were then used in refining each survey prior to full-scale data collection. A copy of the survey instrument can be made available upon request.

Subject Identification / Sampling

Computerized versions of telephone directories were used in order to identify the pool of current households (with a telephone) currently residing within all of the counties of the Upper Peninsula of Michigan. From this database, a group of 3000 names/households were randomly selected to receive survey instruments. Regarding the issue of "unit of analysis" respondents were asked (via instructions found on the front end of the survey instrument) to respond on behalf of their entire household, collectively representing the views and attitudes of all relevant household members.

Survey Administration / Data Collection

A series of mailings were targeted to the 3000 randomly selected households, including a survey pre-announcement post card, which was followed several days later by the survey instrument (i.e., including cover letter, and self-addressed and stamped return envelope, all containing the university logo/letterhead). Several days after this, a series of two survey reminder postcards were sent to each household, all in an attempt to enhance the overall return rate. These techniques are intended to increase the overall response rate, and are similar to those suggested by Dillman, (1978, 1984) via his Total Design Method (TDM). Based upon these mailings, a summary of the overall response rate is as follows:

3000 Household Surveys Mailed
207 Household Surveys returned labeled "postal undeliverable"
2793 Household Surveys were received by subjects
666 Completed Household Surveys were returned by subjects
23.85 % Response Rate (overall)

This overall response rate of 23.85% is considered quite acceptable, based upon past experience and similar survey efforts found in the literature.
Data Analysis

Once received, surveys were coded, and the data were analyzed using SPSSX. Reporting style was driven by each specific survey question, and the need to have additional information beyond simple frequency and mean statistics.

Key Findings

Overall respondents were engaged in a range of shopping behaviors, as indicated by the results below (note: only a small fraction of the survey results are being reported here; a complete set of the results can be obtained from the author upon request):

1. What is your household's overall level of shopping from within your home (i.e., shopping by using catalogs, cable TV, the Internet, etc.), versus shopping outside your home (i.e., physically going to a retail store)?

   The answer scale ranged from 1 to 7 with a one indicating that all of the respondents shopping was done from within the home and a seven indicating all of their shopping is done from outside the home. A zero was given to any surveys with no response. These are the results:

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (all shopping within home)</td>
<td>24</td>
<td>3.6%</td>
</tr>
<tr>
<td>2</td>
<td>20</td>
<td>3.0</td>
</tr>
<tr>
<td>3</td>
<td>18</td>
<td>2.7</td>
</tr>
<tr>
<td>4</td>
<td>41</td>
<td>6.2</td>
</tr>
<tr>
<td>5</td>
<td>104</td>
<td>15.6</td>
</tr>
<tr>
<td>6</td>
<td>230</td>
<td>34.5</td>
</tr>
<tr>
<td>7 (all shopping outside of home)</td>
<td>222</td>
<td>33.3</td>
</tr>
<tr>
<td>No Response</td>
<td>7</td>
<td>1.1</td>
</tr>
</tbody>
</table>

2. Please indicate the level of shopping, based upon your household, for products made available through each of the following:

   (The respondents were asked to use the scale of Low, Medium, High and None. Again the score of zero was given to any surveys without response and was treated as a response of "None".)
3. How often does your household shop in another community outside the U.P. (includes downstate Michigan)?

The scale of one to seven was used with one being the equivalent of quite frequently (once a month or more) and seven being the equivalent of not very frequently (1-2 times per year).

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (once/month or more)</td>
<td>70</td>
<td>10.5 %</td>
</tr>
<tr>
<td>2</td>
<td>45</td>
<td>6.8</td>
</tr>
<tr>
<td>3</td>
<td>49</td>
<td>7.4</td>
</tr>
<tr>
<td>4</td>
<td>73</td>
<td>11.0</td>
</tr>
<tr>
<td>5</td>
<td>70</td>
<td>10.5</td>
</tr>
<tr>
<td>6</td>
<td>94</td>
<td>14.1</td>
</tr>
<tr>
<td>7 (1-2 times/year)</td>
<td>242</td>
<td>36.3</td>
</tr>
<tr>
<td>No Responses</td>
<td>23</td>
<td>3.5</td>
</tr>
</tbody>
</table>

**DISCUSSION**

While only a small fraction of the survey results can be reported here, it is clear that consumer in the Upper Peninsula of Michigan do engage in a range of outshopping behaviors, including doing all shopping from within the home, as well as physically travelling to communities outside of the respondent's home community. Retailers in small rural areas would seem to face an array of challenges in the future, given the trend towards outshopping behaviors in places such as
the Upper Peninsula of Michigan. A complete set of the results can be obtained from the author upon request

REFERENCES


A PRELIMINARY STUDY OF THE RELATIONSHIPS AMONG CONSUMER SATISFACTION, LOYALTY, AND MARKET SHARE IN MEDICAL CLINIC CONSUMERS

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ABSTRACT

This study investigates the relationships among customer satisfaction, customer loyalty, and market share in a sample of students pertaining to their usage of medical clinics. The authors show that the expected positive relationships of satisfaction with market share and of satisfaction with loyalty are not supported in this sample. However, as expected, customer loyalty is shown to be positively associated with market share.

INTRODUCTION

An accurate description of the basic consumer model, along with the relative influence of that model on firm performance, has interested marketing theorists for decades. The basic premises in marketing are straightforward: (a) better value for the buyer should lead to consumption and satisfaction, (b) a satisfied buyer will eventually and for various reasons become a repeat purchaser and/or loyal buyer, (c) this buyer loyalty and satisfaction should result in improved marketing performance for a variety of reasons, and (d) the improved marketing performance should lead to better overall firm performance (Leverin & Liljander 2006, Story & Hess 2006, Cooil et al 2007). However, these general premises do not hold for every industry or under every condition (Mitchell & Kiral 1998, Reichheld & Sasser 1990, Knox & Denison 2000). Therefore, the specific conditions for which the marketing premises hold are still under investigation. The purpose of this study is to partially investigate the premises mentioned above. In particular, the interrelationships among consumer satisfaction, consumer loyalty, and market share are studied in medical clinic users.

THEORETICAL BACKGROUND

Customer satisfaction and retention are generally considered among the most important long term objectives of firms (Cooil et al 2007). The marketing concept suggests that a satisfied buyer will likely return to purchase again, or at least, consider purchasing again (Keith 1960, Leavitt 1960). According to Reichheld and Sasser (1990) repeat customers cost less to serve than new buyers, benefiting a firm's cost structure. Additionally, maximizing customer retention rates and minimizing customer defections are primary strategic objectives for most firms, as evidenced by the recent emphasis on customer relationship management (Ching et al 2004, Verhoef 2003). Thus, previously satisfied buyers may help firms both reduce marketing costs and develop more stable levels of sales when a large number of satisfied buyers are retained to purchase again in the future.

The investigation of brand loyalty has had a long and rich tradition in the field of marketing. The modern conceptualization is that from Dick and Basu (1994) who argue that brand loyalty should not be regarded as mere repurchase behavior, but rather as a combination of purchase behavior and attitudes. It is accepted that maintaining and increasing loyalty is a primary responsibility for any marketing manager. Customer retention programs may lead to positive increases in buyer loyalty, but with no guarantees (Story & Hess 2006). Plus, today's loyal buyers might not be so loyal in the future since loyalty is transient (Oliver 1980). Regardless, across the
industries, it is a firm's ability to manage both the penetration levels and the repeat purchases of its buying market which dictates the extent of customer base retention now and in the future (McDowell & Dick 2001, Lehmann & Winner 1997).

A good indicator of buyers' commitment towards specific retail brands should be the loyalty of customers (Cooil et al 2007, Tellervision 2006). Since the formalization of the marketing concept, the idea that satisfied buyers will (hopefully) return for future purchases and eventually become loyal buyers has been the basis for marketing thought. Loyalty and satisfaction can make customers more forgiving at some disappointing situations associated with a certain brand name or with a store (Shankar et al 2003). In fact, this relationship between satisfaction and loyalty has been shown to be the case throughout much of the literature. However, despite the expectations of both common sense and research mentioned above, there is a growing school of thought which suggests that satisfaction is not a reliable predictor of buyer loyalty (Story & Hess 2006, Reichheld 2003). In this perspective, it is possible to be a satisfied buyer but not a loyal buyer. Thus, the primary point of emphasis is this: loyal customers are always satisfied but satisfied customers are not always loyal. The current study simply aims to determine if a relationship is evident between loyalty and satisfaction. Hence, the following proposition:

P1: There is a positive relationship between customer satisfaction and buyer loyalty in Medical Clinic consumers.

It should be logical that both satisfaction and loyalty are theoretically related to market share in a positive manner. Increases in satisfaction hopefully lead to repeat purchases and positive word-of-mouth between buyers and, in doing so, to higher shares in the long-run. Increases in loyalty should also lead to positive word-of-mouth and increases in purchase volume, leading to share improvements (Leverin & Liljander 2006, Fader & Schmittlein 1993). But, the advantages garnered from increases in loyalty are especially relevant since, as markets become more mature, increases in share become more expensive and improvements in the loyalty base is one viable means of increasing or simply maintaining share (Ghounaris & Stathakopoulos 2004). Hence, the following propositions:

P2: Customers loyalty is positively related to market share in Medical Clinic consumers.

P3: Customer satisfaction is positively related to market share in Medical Clinic consumers.

DATA COLLECTION

The data for the current study was gathered from a buyer group in a large university town in the southeastern USA. The sampling frame is comprised of undergraduate business students, a group of consumers who are frequent users of medical clinics. The data are from self-administered questionnaires. Non-users are excluded from the study. Three classes are randomly selected for inclusion in the study from the offerings in the business school at the university, resulting in sixty-nine usable respondents.

There are twelve medical clinics in the general area that are included on the questionnaire. These clinics are identified by speaking with the market group and looking through the yellow pages to include only those within the city limits. An 'others' category was included to catch those retailers not specifically listed on the questionnaire. Six of these clinics are eliminated after data collection due to either a small number of users in the respondent group or a small market share. It seems that the student market is focused on only a few clinics in the vicinity of the university. This resulted in six medical clinics that are included in the analysis. In order of market share from lowest to
highest, the clinics are: clinic#1, clinic#4, clinic#6, clinic#8, clinic#2, and clinic#7. All six of the clinics have market shares above three percent.

**MEASUREMENT**

The study includes one indicator of market share, two indicators of buyer loyalty, and one indicator of consumer satisfaction. The measures are identical for each of the retail types and are summated/aggregate percentages for loyalty and market share and sample averages for satisfaction. Details of the indicators are shown in Table 1 for each of the relevant constructs. The variables are described below.

<table>
<thead>
<tr>
<th>Clinic #</th>
<th>MSHA</th>
<th>L%TOT</th>
<th>L%MST</th>
<th>SATF</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC4</td>
<td>3.6</td>
<td>46.8</td>
<td>3.0</td>
<td>24.7</td>
</tr>
<tr>
<td>MC1</td>
<td>3.6</td>
<td>58.3</td>
<td>4.5</td>
<td>22.6</td>
</tr>
<tr>
<td>MC6</td>
<td>4.4</td>
<td>47.0</td>
<td>3.0</td>
<td>24.0</td>
</tr>
<tr>
<td>MC8</td>
<td>16.6</td>
<td>54.4</td>
<td>17.9</td>
<td>21.9</td>
</tr>
<tr>
<td>MC2</td>
<td>17.4</td>
<td>56.4</td>
<td>22.4</td>
<td>24.1</td>
</tr>
<tr>
<td>MC7</td>
<td>42.2</td>
<td>66.0</td>
<td>46.3</td>
<td>19.2</td>
</tr>
</tbody>
</table>

Market-Share (MSHA) is defined as the visits (uses) to a medical clinic divided by the total visits (uses) for all medical clinics. The respondents are asked how many 'times' they visit each clinic per month. These 'times' are summed for each clinic. Thus, MSHA(A) = (times for clinic A)/(summation of times for clinic A, B, C… N).

Loyalty-%of-total-use (L%TOT) is defined as the percentage of total times (uses) the respondent uses each medical clinic, if they are users of that clinic. Then an aggregate sample percentage is calculated. Thus, for respondent X who uses clinics A and B: L%TOT(X,A) = timesA/(timesA + timesB + …+ timesN) and L%TOT(X,B) = timesB/(timesA + timesB + …+ timesN) and L%TOT(X,C) =0 and continuing for the remaining clinics.

Loyalty-Most-used-% (L%MST) is defined as the percentage that each medical clinic is used as primary outlet in the category. Respondents indicate the number of 'times' they use each clinic. The clinic is defined as the most used for a respondent when the largest number of visits is indicated. Thus, for respondent X, if timesA > timesB, timesC…, timesN, then clinicA is assigned to respondent X as most used medical clinic. These assignations are summed for each medical clinic and is then divided by the total respondents to get a percentage.

The study also includes one indicator of consumer satisfaction (SATF), which is comprised of four measurement items. Each of the four questions is measured using consumer ratings on a scale from very satisfied [7] to very dissatisfied [1]. The four satisfaction items are factor analyzed using principal axis analysis for each type of retailer. The four items exhibited a single dimension. The overall indicator of SATF is constructed by summing the four items into an overall score. Across the sample SATF has a possible range from four to twenty-eight. For medical clinics, SATF has a mean of 21.43, a standard deviation of 5.4, and a coefficient alpha of 0.949.
ANALYSIS/RESULTS

In order to test the model, it is necessary to use a nonparametric test. The number of observations (the clinics: six) is insufficient to allow the necessary observations per variable, usually a minimum of eight to ten per variable, for parametric tests such as regression or correlation. Thus, the Spearman (1904) rank correlation coefficient is selected to analyze the association between the variables in the model.

The test statistic, rho, is calculated using the following equation derived by Spearman (1904): \( r = \frac{1 - \sum d^2}{n(n-1)} \), where 'n' is six and 'd' is the absolute difference between the rankings. The test statistic (rho) ranges between +1 (perfect positive association) and -1 (perfect negative association). Two-tailed tests are performed, giving the general hypotheses for the paired variables - Ho: independently ranked pairs or Ha: related ranked pairs. Due to the limited power of the test statistic, the following cut-off points are established for the 'p'-values: (i) strong relationship - 'p'\(<=.05\), moderate relationship - '.10'>='p'>.05, and no relationship - 'p'>.10. The test statistics, and 'p'-values are shown in Table 2.

<table>
<thead>
<tr>
<th>Variable</th>
<th>MSHA</th>
<th>L%TOT</th>
<th>L%MST</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSHA</td>
<td>rho= n/a</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>p=</td>
<td></td>
<td></td>
</tr>
<tr>
<td>L%TOT</td>
<td>rho= +.557</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td></td>
<td>p= n.s.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>L%MST</td>
<td>rho= +.871</td>
<td>+.814</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td>p= &lt;.05</td>
<td>n.s.</td>
<td></td>
</tr>
<tr>
<td>SATF</td>
<td>rho= -.500</td>
<td>-.071</td>
<td>-.585</td>
</tr>
<tr>
<td></td>
<td>p= n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
</tbody>
</table>

First to test P1, that consumer satisfaction is related to buyer loyalty, we must look to Tables 2 for the relevant statistics. As shown in the tables, none of the two satisfaction-loyalty test statistics are significant (\( r'=-.071, 'p'=n.s. \); \( r'=-.585, 'p'=n.s. \)). Thus, support is not provided for P1: satisfaction does not have an impact on loyalty in this sample.

Next we move to test P2, that buyer loyalty is related to market share. As shown in the table, of the two test statistics, one statistic is significant and positive in direction (\( r'=+.871, 'p'<.05 \)) while the second statistic is not significant (\( r'=+.557, 'p'=n.s. \)). Thus, partial support is provided for P2: loyalty may have a positive relationship to market share in this sample.

The final tests regard P3, that consumer satisfaction is related to market share. As shown in the table, the one test statistic is not significant (\( r'=-.500 \)). Thus, support is not provided for P3: satisfaction appears unrelated to market share in this sample.

DISCUSSION/LIMITATIONS

The results indicate that the propositions are not as broad-ranging as might be expected, since two of the three proposed relationships are not supported. The findings suggest that there may
be a positive relationship in medical clinics between loyalty and market share. This is congruent
with many other studies across industries (Reinartz & Kumar 2002).

No relationship is found between satisfaction and loyalty. It should be noted that satisfaction
is only one aspect of the jumble which contributes to ultimate loyalty of buyers (Oliver 1999).
Situational or socio-cultural influences might lead a satisfied buyer to purchase other brands on a
regular basis. In university settings, for example, emphasis is placed on reference groups as well
as social status. It may be possible that a buyer is pressured by friends to use a specific clinic
because everyone else in the group shows patronage there. Or, it may be that one retailer has a
much better reputation leading the buyer to switch even though there is satisfaction with a lower
status clinic. Or some clinics may be closer to campus and be easier to reach. This may lead some
customers to visit these clinics even when satisfaction is not at high levels.

Finally, no relationship is found between satisfaction and market share. This is contradictory
to other studies investigating this relationship (Pleshko and Cronin 1997). However, it may be that
little repeat purchase occurs in this service in young, healthy adult students. So, if a customer is
satisfied, then he/she may not need to return to the clinic. Or, possibly more importantly to
marketing theory, it may be that loyalty acts as a mediator between satisfaction and market share,
indicating that satisfaction's effects on share occur through loyalty. This would need to be
investigated in the future.

The readers must wonder if the current findings are indicative of general tendencies or
simply a characteristic of this limited student-based study. The investigation needs to be repeated
using additional retailer types as well as larger more appropriate samples. Another limitation would
be the statistical test, which does not offer the same "power" as other parametric tests do. Therefore,
the ability of the Spearman test to actually reject a false null hypothesis is smaller than might be
possible with other tests.

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A PRELIMINARY STUDY OF THE RELATIONSHIPS AMONG CONSUMER SATISFACTION, LOYALTY, AND MARKET SHARE IN CONVENIENCE STORE CONSUMERS

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ABSTRACT

This study investigates the relationships among customer satisfaction, customer loyalty, and market share in a sample of students pertaining to their usage of convenience store outlets. The authors show that the expected positive relationships of satisfaction with market share and of satisfaction with loyalty are not supported in this sample. However, as expected, customer loyalty is shown to exhibit a strong and positive associated with market share.

INTRODUCTION

An accurate description of the basic consumer model, along with the relative influence of that model on firm performance, has interested marketing theorists for decades. Two of the basic premises in marketing are (i) a satisfied buyer will eventually and for various reasons become a repeat purchaser and/or loyal buyer and (ii) this buyer loyalty and satisfaction should result in improved marketing performance for a variety of reasons (Leverin & Liljander 2006, Story & Hess 2006, Cooil et al 2007). However, these general premises do not hold for every industry or under every condition (Mitchell & Kiral 1998, Reichheld & Sasser 1990, Knox & Denison 2000). Therefore, the specific conditions for which the marketing premises hold are still under investigation. The purpose of this study is to investigate the interrelationships among consumer satisfaction, consumer loyalty, and market share in convenience store consumers.

THEORETICAL BACKGROUND

Customer satisfaction and retention are generally considered among the most important long term objectives of firms (Cooil et al 2007). The marketing concept suggests that a satisfied buyer will likely return to purchase again, or at least, consider purchasing again (Keith 1960, Leavitt 1960). According to Reichheld and Sasser (1990) repeat customers cost less to serve than new buyers, benefiting a firm's cost structure. Additionally, maximizing customer retention rates and minimizing customer defections are primary strategic objectives for most firms, as evidenced by the recent emphasis on customer relationship management (Ching et al 2004, Verhoef 2003). Thus, previously satisfied buyers may help firms both reduce marketing costs and develop more stable levels of sales when a large number of satisfied buyers are retained to purchase again in the future.

The investigation of brand loyalty has had a long and rich tradition in the field of marketing. The modern conceptualization is that from Dick and Basu (1994) who argue that brand loyalty should not be regarded as mere repurchase behavior, but rather as a combination of purchase behavior and attitudes. It is accepted that maintaining and increasing loyalty is a primary responsibility for any marketing manager. Customer retention programs may lead to positive increases in buyer loyalty, but with no guarantees (Story & Hess 2006). Plus, today's loyal buyers might not be so loyal in the future since loyalty is transient (Oliver 1980). Regardless, across the industries, it is a firm's ability to manage both the penetration levels and the repeat purchases of its customers that will determine success.
buying market which dictates the extent of customer base retention now and in the future (McDowell & Dick 2001, Lehmann & Winner 1997). A good indicator of buyers' commitment towards specific retail brands should be the loyalty of customers (Cooil et al 2007, Tellervision 2006). Since the formalization of the marketing concept, the idea that satisfied buyers will (hopefully) return for future purchases and eventually become loyal buyers has been the basis for marketing thought. Loyalty and satisfaction can make customers more forgiving at some disappointing situations associated with a certain brand name or with a store (Shankar et al 2003). In fact, this relationship between satisfaction and loyalty has been shown to be the case throughout much of the literature. However, despite the expectations of both common sense and research mentioned above, there is a growing school of thought which suggests that satisfaction is not a reliable predictor of buyer loyalty (Story & Hess 2006, Reichheld 2003). In this perspective, it is possible to be a satisfied buyer but not a loyal buyer. Thus, the primary point of emphasis is this: loyal customers are always satisfied but satisfied customers are not always loyal. The current study simply aims to determine if a relationship is evident between loyalty and satisfaction. Hence, the following proposition:

P1: There is a positive relationship between customer satisfaction and buyer loyalty in Fast-Food consumers.

It should be logical that both satisfaction and loyalty are theoretically related to market share in a positive manner. Increases in satisfaction hopefully lead to repeat purchases and positive word-of-mouth between buyers and, in doing so, to higher shares in the long-run. Increases in loyalty should also lead to positive word-of-mouth and increases in purchase volume, leading to share improvements (Leverin & Liljander 2006, Fader & Schmittlein 1993). But, the advantages garnered from increases in loyalty are especially relevant since, as markets become more mature, increases in share become more expensive and improvements in the loyalty base is one viable means of increasing or simply maintaining share (Ghounaris & Stathakopoulos 2004). Hence, the following propositions:

P2: Customers loyalty is positively related to market share in Fast-Food consumers.

P3: Customer satisfaction is positively related to market share in Fast-Food consumers.

DATA COLLECTION

The data for the current study was gathered from a buyer group in a large university town in the southeastern USA. The sampling frame is comprised of undergraduate business students, a group of consumers who are frequent users of medical clinics. The data are from self-administered questionnaires. Non-users are excluded from the study. Three classes are randomly selected for inclusion in the study from the offerings in the business school at the university, resulting in eighty-nine usable respondents.

There are twelve original convenience store brands in the vicinity of the market that are included on the questionnaire (i.e. 7-11). These outlets are identified by speaking with the market group and looking through the yellow pages to include only those within the city limits. An 'others' category was included to catch those retailers not specifically listed on the questionnaire. Only four of these stores are eliminated after data collection due to small numbers of users or small market shares. This resulted in eight convenience stores for inclusion in the analyses: store#8, store#10, store#4, store#6, store#3, store#5, store#2, and store#9, all with market shares above five percent.
MEASUREMENT

The study includes one indicator of market share, two indicators of buyer loyalty, and one indicator of consumer satisfaction. The measures are summated aggregate percentages for loyalty and market share and sample averages for satisfaction. Details of the indicators are shown in Table 1 for each of the relevant constructs. The variables are described below.

<table>
<thead>
<tr>
<th>Table 1 General Statistics: Convenience Stores</th>
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<tbody>
<tr>
<td>CStore #</td>
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<tr>
<td>CS8</td>
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<td>CS5</td>
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<td>CS2</td>
</tr>
<tr>
<td>CS9</td>
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</tbody>
</table>

Market-Share (MSHA) is defined as the visits (uses) to a convenience store divided by the total visits (uses) for all outlets. The respondents are asked how many 'times' they visit each outlet per month. These 'times' are summed for each outlet. Thus, MSHA(A) = (times for outlet A) / (summation of times for outlet A, B, C... N).

Loyalty-%-of-total-use (L%TOT) is defined as the percentage of total times (uses) the respondent uses each convenience store, if they are users of that outlet. Then an aggregate sample percentage is calculated. Thus, for respondent X who uses outlets A and B: L%TOT(X,A) = timesA/(timesA + timesB + ... + timesN) and L%TOT(X,B) = timesB/(timesA + timesB + ... + timesN) and L%TOT(X,C) = 0 and continuing for the remaining convenience stores.

Loyalty-Most-used-% (L%MST) is defined as the percentage that each convenience store retailer is used as primary outlet in the category. Respondents indicate the number of 'times' they use each outlet. The outlet is defined as the most used for a respondent when the largest number of visits is indicated. Thus, for respondent X, if timesA > timesB, timesC..., timesN, then outletA is assigned to respondent X as most used fast-food outlet. These assignations are summed for each convenience store and are then divided by the total respondents to get a percentage.

The study also includes one indicator of consumer satisfaction (SATF), which is comprised of four measurement items. Each of the four questions is measured using consumer ratings on a scale from very satisfied [7] to very dissatisfied [1]. The four satisfaction items are factor analyzed using principal axis analysis for each type of retailer. The four items exhibited a single dimension. The overall indicator of SATF is constructed by summing the four items into an overall score. Across the sample SATF has a possible range from four to twenty-eight. For convenience stores, SATF has a mean of 19.18, a standard deviation of 4.5, and a coefficient alpha of 0.834.
ANALYSIS/RESULTS

In order to test the model, it is necessary to use a nonparametric test. The number of observations (the convenience stores: eight) is insufficient to allow the necessary observations per variable, usually a minimum of eight to ten per variable, for parametric tests such as regression or correlation. Thus, the Spearman (1904) rank correlation coefficient is selected to analyze the association between the variables in the model.

The test statistic, rho, is calculated using the following equation derived by Spearman (1904): \[ r = 1 - \frac{6 \sum d^2}{n(n^2-1)} \], where 'n' is eight and 'd' is the absolute difference between the rankings. The test statistic (rho) ranges between +1 (perfect positive association) and -1 (perfect negative association). Two-tailed tests are performed, giving the general hypotheses for the paired variables - Ho: independently ranked pairs or Hα: related ranked pairs. Due to the limited power of the test statistic, the following cut-off points are established for the 'p'-values: (i) strong relationship - 'p'\(</.05\), moderate relationship - \(.10'/>='p'>.05\), and no relationship - 'p'>.10. The test statistics, and 'p'-values are shown in Table 2.

<table>
<thead>
<tr>
<th>Table 2</th>
<th>Spearman Rho Test Statistics: Convenience Stores</th>
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<tr>
<td></td>
<td>MSHA</td>
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<tr>
<td>MSHA</td>
<td>rho=</td>
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<td>SATF</td>
<td>rho=</td>
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<td>p=</td>
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First to test P1, that consumer satisfaction is related to buyer loyalty, we must look to Tables 2 for the relevant statistics. As shown in the tables, none of the two satisfaction-loyalty test statistics are significant ('r'=-.023, 'p'=n.s.; 'r'=-.035, 'p'=n.s.). Thus, support is not provided for P1: satisfaction does not have an impact on loyalty in this sample.

Next we move to test P2, that buyer loyalty is related to market share. As shown in the table, of the two test statistics, neither statistic is significant ('r'=-.024, 'p'=n.s.; 'r'=.542, 'p'=n.s.). Thus, no support is provided for P2: loyalty does not exhibit a relationship to market share in this sample.

The final test regards P3, that consumer satisfaction is related to market share. As shown in the table, the one test statistic is not significant ('r'=-.619, 'p'=n.s.). Thus, support is not provided for P3: satisfaction appears unrelated to market share in this sample.

DISCUSSION/LIMITATIONS

The results indicate that the propositions are not as broad-ranging as might be expected, since all three proposed relationships are not supported. The findings suggest that there is no relationship in convenience stores between loyalty and market share. This is incongruent with many other studies across industries (Reinartz & Kumar 2002). It may be that there is really not much
variation in loyalty across the stores due to the nature of the business. Thus, even though shares differ, the stores may have approximately similar levels of loyalty. In other words, there is no 'double jeopardy' effect (c.f. McDowell and Dick 2001).

No relationship is found between satisfaction and loyalty. It should be noted that satisfaction is only one aspect of the jumble which contributes to ultimate loyalty of buyers (Oliver 1999). Situational or socio-cultural influences might lead a satisfied buyer to purchase other brands on a regular basis. In university settings, for example, emphasis is placed on reference groups as well as social status. It may be possible that a buyer is pressured by friends to use a specific store because everyone else in the group shows patronage there. Or, it may be that one retailer has a much better reputation leading the buyer to switch even though there is satisfaction with a lower status outlet. Or some stores may be closer to campus and be easier to reach. This may lead some customers to visit these outlets even when satisfaction is not at high levels.

Finally, no relationship is found between satisfaction and market share. This is contradictory to other studies investigating this relationship (Pleshko and Cronin 1997). However, it may be that achieving a minimal or equal level of satisfaction is required to stay in business in the convenience business. Thus, all the competitors in the market have survived partly because they have achieved acceptable satisfaction levels in their buying markets. The remainder may have exited the market already. Or, possibly more importantly to marketing theory, it may be that loyalty acts as a mediator between satisfaction and market share, indicating that satisfaction's effects on share occur through loyalty. This would need to be investigated in the future.

The readers must wonder if the current findings are indicative of general tendencies or simply a characteristic of this limited student-based study. The investigation needs to be repeated using additional retailer types as well as larger more appropriate samples. Another limitation would be the statistical test, which does not offer the same "power" as other parametric tests do. Therefore, the ability of the Spearman test to actually reject a false null hypothesis is smaller than might be possible with other tests.

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THE DETERMINANTS OF MOVIE RENTAL REVENUE EARNINGS

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ABSTRACT

This paper examines the determinants of movie rental revenue in the United States. The sample consists of 214 films released during 2006. Regression results indicate the primary determinants of video movie revenue are domestic box office, time to video, academy award nominations, sequels, children’s movies, and domestic release exposure. Specific results include the observation that domestic box office revenue serves as a complement to movie rental revenue and time to video is inversely related to video revenue as motion picture companies take advantage of marketing economies of scale. Branding associated with an academy award nomination is worth over a million dollars in rental revenue and sequels are worth six million less than alternative releases. Children’s movies are worth ten million dollars less in rental revenue than other releases, as parents appear to buy over renting children’s movies. Critical acclaim, foreign box office performance, and budget are determinants that have a positive but statistically insignificant impact on movie rental revenue.
ORGANIZATIONAL CULTURE AND THE FOODSERVICE INDUSTRY

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George Alexakis, Florida Gulf Coast University
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ABSTRACT

The foodservice sector of the hospitality and tourism industry is unique in its structure and prevailing organizational cultures. The manuscript examines the contemporary literature on organizational culture and its effect on the organization. The specific focus is on how the concepts and practices related to organizational culture influence the food and beverage organizations. The article discloses that the extend to which foodservice leaders are mindful of effective organizational culture principles will dictate the level of future organizational success. The authors call for empirical research to measure the effect of leading-edge organizational culture principles on individual foodservice establishments.
AN ECONOMIC ANALYSIS FOR TURKEY'S ACCESSION TO THE EUROPEAN UNION

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ABSTRACT

The primary driving force for European Union (EU) integration comes from the concept of single market efficiency that can be achieved by the union member nations. Since this is the intention of EU integration, we have evaluated Turkey on the basis of their economic profile for integration likelihood into the union and investigated a prognosis for future prospect by analyzing the similarity of their economy with that of eleven other longstanding European Union (EU) member countries. Therefore, this paper examines Turkey's current and future economic standing and provides some prospects into the future prognosis for union membership eligibility on the basis of economic profile.

Most recent effort by Turkey to enter the union has been denied on the ground of poor achievement on various aspects directive by the union. Geographically and politically Turkey is uniquely situated for an economic integration analysis. Its intention to join the union has faced many impediments and confronted numerous challenges. Statistical analyses of Mahalanobis squared distance $D^2$, canonical correlation, and canonical discriminant analysis reveals that Turkey currently does not have similar economic standing and the prognosis for them to have a similar economic profile in near future is very unlikely to be a contender for the union membership. On the other hand, Greece is also drifting apart from those longstanding EU member countries and therefore can be classified into a separate group. This provides an opportunity for an argument in favor of Turkey for its accession to the union.
ATTRACTING FOREIGN DIRECT INVESTMENTS: CHALLENGES AND OPPORTUNITIES FOR SMALLER HOST ECONOMIES

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ABSTRACT

This paper reviews the post-1997 literature on foreign direct investments (FDIs, henceforth) in general and on host country government policies toward FDIs, in particular, with emphasis on the literature on FDI incentives. It then discusses the challenges faced by smaller host economies and their governments in their efforts to attract FDIs in an environment where many other governments are adopting similar strategies to compete for FDIs. The opportunities available to them are also discussed.

INTRODUCTION

The Asian financial crisis of 1997 reminded many in the international community that foreign capital inflows come in different forms and that some of these forms are more desirable than or preferred over other forms. From the perspective of a recipient or host country, these different forms of foreign capital inflows have different impact on its economic development.

The lesson is clear and the verdict is out: comparatively speaking, foreign direct investments (FDIs, henceforth) are the preferred form of foreign capital inflows. Nunnenkamp (2001) noted that FDIs are superior to other types of capital inflows because of their longer-term orientation and hence their stability, their higher likelihood of being used productively, their risk-sharing properties, and their greater likelihood of increasing the level of aggregate investment and economic development in the host country. In addition, he noted that "FDI is more than just capital as it offers access to internationally available technology and management know how", which can potentially spill over to domestic firms and result in higher productivity (quote taken from Nunnenkamp (2001), page 3).

Consequently, countries seek out this preferred form of foreign capital, FDI, thus competing fiercely against each other. This competition is further intensified by the continued globalization of markets which makes foreign capital in general and FDIs in particular even more mobile. Such mobility gives foreign direct investors, mostly multinational corporations (MNCs, henceforth), bargaining power over prospective host country governments as they choose their investment location.

At the same time, globalization has limited host country governments' use of trade and exchange rate policies (Blomstrom and Kokko (2008)). They needed to make greater use of those policy measures that they can control in order to attract FDIs. All of these combine to explain the proliferation of FDI incentives, and the greater competition among host country governments have made these incentives increasingly generous over time.

It is in this environment that many countries and their governments have to operate and find a balance between the challenges they face and the opportunities that are available to them in their pursuit of FDIs.

The paper is organized as follows. The next section will present a selective review of literature on FDIs and host country policies, with particular focus on FDI incentives and on studies published after the 1997 Asian crisis. This will be followed by a discussion of the challenges and
opportunities for small host countries and their governments. Summary and concluding comments will be made in the final section of the paper.

**REVIEW OF FDI AND RELATED LITERATURE**

The review of the literature presented in this section is selective, rather than comprehensive, as it focuses on studies undertaken after the 1997 Asian crisis and on two specific issues: Do FDIs benefit host countries, if how, in what way? What factors are most effective in attracting FDIs into a host country?

Several studies answer this question in the affirmative (Blomstrom and Kokko (2008), Miyamoto (2003), and Palmade and Anayiotas (2004). Two channels by which FDIs lead to higher host country productivity have been clearly identified in the literature: the competition channel and the knowledge and technology spillover channel. As Blomstrom and Kokko (2001) point out, the increased competition brought on by FDIs have made domestic firms more productive.

The theoretical basis for the second channel is clear but the evidence on the presence of knowledge and technology spillovers is mixed.

Having established that FDIs contribute positively to host country's economy and hence their desirability, we then ask the question of what factors are most effective in attracting FDIs? What are the major determinants of FDIs? A more pointed question is whether FDI incentives are effective in attracting FDIs.

Many studies (Morisset and Pirnia (2001), Nunnenkamp (2001), Miyamoto (2003)) point to economic fundamentals and political stability as the primary determinants of FDIs and to FDI incentives as not being effective and to matter only at the margin. The most effective way to express this is to say that FDI incentives, especially "tax exemption is like a dessert; it is good to have, but it does not help very much if the meal is not there" (Morisset and Pirnia (2001), page 76).

Morisset and Pirnia (2001) clarify the above conclusion by saying that "it is not true that tax policy and incentives fail to attract investors; they do affect the decisions of some investors some of the time" (page 81).

It is also important to remember that FDI decisions are a two-stage decision. FDI incentives are not significant at stage 1 but can affect final locational choice at stage 2 (Forsyth (1972 cited in Morisset and Pirnia (2001), Nunnenkamp (2001)).

There are also suggestions in the literature of a shift occurring in favor of FDI incentives playing a more important role in influencing FDI location decisions (Blomstrom and Kokko (2008), Palmade and Anayiotas (2004)).

Although the literature does not give a definitive answer in regards to the effectiveness of FDI incentives in attracting FDIs into host countries, it is useful in prescriptive findings on how to increase the effectiveness of FDIs (see Morisset and Pirnia (2001)).

**CHALLENGES AND OPPORTUNITIES FOR SMALLER HOST ECONOMIES**

This section draws from the literature review in the preceding section to identify the challenges and opportunities for smaller host economies and their governments as they aim to attract FDIs as a means to achieve short-term and long-term economic goals. The literature points to very few success stories of small economies: Ireland (Morisset and Pirnia (2001), Blomstrom and Kokko (2008)), Sweden (Blomstrom and Kokko (2008)), Singapore (Morisset and Pirnia (2001), Miyamoto (2003)), Costa Rica (Miyamoto (2003)).

**Challenges**

Host country governments in general, and those of smaller economies, in particular, face many challenges. A number of them have already been mentioned in earlier sections. Faced with
tough competition from other host countries, a government would like to offer the most generous FDI incentives but is limited by fiscal and political constraints. Fiscal constraints are greater for smaller economies as government resources are limited with many competing demands, tax system less developed or sophisticated, economic structure not as diversified, political factors are more important in affecting aggregate investment in developing countries than in advanced economies (Pindyck and Solimano (1993)).

Public support for FDI incentives improves with the ability to provide evidence that such FDI incentives are effective in attracting FDIs, on the assumption that FDIs assist in achieving the host country's economic goals. The challenge becomes how well and accurately the benefits and costs associated with FDI incentives can be calculated. The more difficult issue to address is one put forth by Morisset and Pirnia (2001): "whether the new foreign investment would have come to the country if no or lower incentives were offered" (page 93).

One of the biggest challenges faced by host country governments is how to show, not assume, that FDIs contribute positively to the host country's economic development. The literature provides a more definitive answer that FDIs contribute positively to the host country's economy than in explaining how this positive impact comes about. The difficulty comes from showing evidence of the benefit to domestic firms and the host country's economy in the form of knowledge and technology that spill over from FDIs and in turn increase productivity. It is much easier to show, through a multiplier model, for example, that FDIs enhance the host country's employment, tax revenues, exports and technological and knowledge levels.

Another challenge for host countries is to make it further in the two-stage location FDI decision process as noted by Nunnenkamp (2001) and Morisset and Pirnia (2001): they identify the region or a short list of potential host countries (stage 1), then choose one or a few from this list (stage 2). Obviously, to get to stage 2, host countries must make it to stage 1. This suggests that there are benefits from host countries within a region to work together to make the region sufficiently attractive to FDIs, thus making it to stage 1, after which host country governments compete fiercely by offering FDI incentives to be the successful FDI site.

Opportunities

This is not to say that attempts to address these challenges are not without rewards. On the contrary, the ability of host country governments to effectively respond to the above challenges increases their success in pursuing opportunities that are present and available to them. Post-2003 trends in FDIs bring good news to many developing countries, including smaller economies.

FDIs, which declined after 1999, have been on the rise since 2003 (Kearney (2007)). This means that, although many host countries compete to attract FDIs, there is more of them to attract. Another good news for developing countries that are prospective hosts to FDIs, many of which are smaller economies, is an evidence of a shift in FDI inflows in favor of developing countries (Nunnenkamp (2001)). This gets even better by noting the increase in FDI inflows to developing countries originating from other developing countries, sometimes described as "South-South FDI" (As Palmade and Anayiotas (2004)).

Several authors (Nunnenkamp (2001), Miyamoto (2003), Blomstrom and Kokko (2008)) note that globalization has diminished the importance of the size of the domestic market in MNC's locational choice for FDIs. Consequently, the motivation for FDIs have shifted from "market-seeking" to "efficiency-seeking", "motivated by creating new sources of competitiveness for firms and strengthening existing ones" (Nunnenkamp (2001)). Again, this is favorable development for smaller economies, especially those that are highly integrated with the global economy, as they now have as good a chance of being selected as FDI destination as larger economies.

Palmade and Anayiotas (2004) see an opportunity for host countries to attract FDIs into the service sector. They identify the following factors as being attractive to these types of FDIs:
stable and smart regulatory environment for quasi-natural monopolies functioning land markets for retail, hotels and construction "protection" from unfair competition from tax-evading, low-productivity informal players

In a survey of MNC executives in several countries and across different economic sectors, Kearney (2007) found that Asian and European investors prefer to invest within the region. This presents opportunities for attracting FDIs for developing countries within Asia.

According to Nunnenkamp (2001), small developing economies should open up early to FDI inflows and increase its integration into world trade in order to enhance FDI's positive contribution to economic growth.

SUMMARY AND CONCLUSION

It is an opportune time for many host countries, including smaller economies, to attract FDIs and make them instrumental in their pursuit for economic development and an increase in the welfare of their citizens. As noted in the beginning of the paper, one policy instrument continues to be in their government's control, FDI incentives. Despite strong skepticism in its effectiveness in the past, there is a rich literature from which to draw lessons on how to make FDI incentives more effective. These lessons are outlined here in brief and are a starting point in creating a guideline for the design of FDI policies in host countries:

- FDI incentives must be based on rules, not discretion, thus making it more broad and general (available to all economic sectors), not specific and selective (Blomstrom and Kokko (2008), Palmade and Anayiotas (2004), Nunnenkamp (2001), Morisset and Pirnia (2001)).
- FDI incentives must be complemented by favorable overall policy framework that focus on economic and political stability, provide physical, human and institutional infrastructure and reduce the cost of doing business in the host country (Blomstrom and Kokko (2008), Morisset and Pirnia (2001)).
- FDI incentives must be complemented by measures to create and enhance local competence, especially in ways that will allow the domestic labor force to absorb the knowledge and technology brought by FDIs (Blomstrom and Kokko (2008), Miyamoto (2003)).
- FDI incentives must aim to create a virtuous cycle brought about the complementary relation between human resource development and high value-added FDIs. To this end, Miyamoto (2003) suggest that "governments that emphasize flexible demand-driven human resource development strategies, target MNCs in high value-added areas, and coordinate education and training policies are more likely to lead the country into a virtuous circle" (page 42).

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PROJECT MANAGEMENT SOFTWARE SELECTION USING ANALYTICAL HIERARCHY PROCESS

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ABSTRACT

A very large class of problems in management and administration are known as multi-attribute decision problems. Such problems involve decisions that must take into account large numbers of variables and objectives that cannot always be directly quantified. These problems are rendered even more unwieldy to handle by the fact that the variables and objectives are often in conflict. One very popular approach to handling this class of problem is called Analytical Hierarchy Process (AHP). AHP affords a technique for structuring this class of problems so that it can be given a quasi-quantitative structure. This permits handling any number of variables and objectives, quantitative and non-quantitative, compatible and conflicting. One practical problem of the multi-attribute type is the selection of project management software. In this paper there is developed an approach to the use of AHP in the selection of project management software.
THE NEW LAW OF CONSERVATION OF FLOW
EXPLAINS THE PIONEER 10 AND 11 ANOMALY

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ABSTRACT

This is a theoretical paper showing that Pioneer 10 and 11 anomaly can be explained by the new Law of Conservation, the Law of Conservation of Flow. As we mentioned on our previous work, the new Law of Conservation of Flow (the rate of mass change) is applicable to all physical, chemical, biological, and economic systems (Aleinikov & McFarland, 2008). This time it is applied to the physical reality to explain one of the most famous physical anomalies in a simple and elegant manner requiring no "black magic" and no "new physics."

INTRODUCTION

Paul Marmet in his paper "Anomalous Acceleration of Pioneer 10 and 11: Dust density in the Kuiper Belt" mentioned numerous attempts to explain the Pioneer anomaly. He himself, included in his calculations the following ones:

1. The pressure of the solar radiation on the space craft
2. The solar wind.
3. The solar corona perturbation.
4. Electromagnetic forces
5. The influences of the Kuiper belt (dust or gravitational)
6. Stability (or rather instability) of the references of atomic clocks.

Some other authors put forward:
1. The drag of the interplanetary medium that includes interplanetary dust, cosmic rays and hot plasma
2. Gas leaks, including helium from the spacecrafts' radioisotope thermoelectric generators

Finally, there is an idea of creating new physics dealing with
1. Invisible dark matter
2. New forces created by other dimensions that we don't understand
3. Different (than we think) work of gravity (see for example, Britt, 2004).

It is interesting that the second hypothesis supports Bartini's idea of the six-dimensional structure of our world (Bartini, 1965) - certainly not understood yet. However, it will be too bulky to talk about it now.

Despite a number of hypothesis, Tariq Malik in 2007 stated that the NASA's Great Gravity Mystery still remains unsolved (Malik, 2007). Moreover, new spacecraft and probes (Voyager, Galileo, Rosetta, Cassini, NEAR) added new data to the abnormal acceleration, and now no one is discarding it as instrumental error any more.

Still, because none of the offered hypotheses gives a final answer and none has explained the anomaly properly yet, our task is to find a reasonable and calculable cause for the acceleration.
(positive and negative) and to offer some credible ways of its scientific testing. Since the anomalous acceleration effect (called anomaly) was detected during the flight through the solar system, we will not take into account the termination shock, heliopause, bow shock and any influence of the galactic cosmic rays. We will conceptually stay within the solar system phenomena.

**HYPOTHESIS**

Traditional understanding of flow is that of liquid/gas going through shores/banks or through the pipelines (i.e., fluid substances through solid matter). In such cases the borders of flow are stable and unchangeable (at least relatively), while liquid/gas constitute the moving part, the changing part of the flow. In an opposite situation, an object going through liquid/gas (never mind how low the density is) will have this liquid/gas flowing at it - like a boat moving in the lake or river, like an airplane moving through the air. In the air environment (Earth), all automobile and air industries are fighting against it to improve the efficiency of vehicles moving through the flow.

In the outer space environment, the density of this gas becomes so low that it is called vacuum. This name is misleading. The outer space vacuum is never a perfect vacuum. The latter is only a theoretical concept. In reality, there are always some gas molecules in this vacuum, and that is why this vacuum is called partial versus perfect.

It is still a gas - a Hyper Low Density Gas (HLDG) - but a gas. This gas behavior may be different from the low density gas (Hoffman, Wong & Krauss, 1991) and from the traditionally understood gas.

In the situation where anomaly is detected, high speed spacecraft like Pioneer 10 and 11 (solid objects) are moving through this "gas" (even if we assume it is stable in reality it is not - it is still a lot of molecules to overcome). With the high speed of the spacecraft in the HLDG, the flow of the molecules becomes a straight bombardment against the ship, and this creates the extra force for deceleration.

It's a well known fact that artificial satellites launched to a certain orbit around the Earth have to boost their engines every several days to maintain the necessary speed that constantly decreases due to the collision with the molecules of the atmosphere gases (hydrogen, oxygen, carbon dioxide, etc.). The amount of gas molecules in the outer space near the planet Earth is observable: it creates resistance and must be taken into account in the movement and operations of these satellites. In the outer space far away from the Earth, the number of gas molecules per volume (density) is much smaller, the gas becomes predominantly hydrogen, but still this number never goes to zero. For instance, the outer space vacuum density is $1 \times 10^{-6}$ to $< 3 \times 10^{-17}$. It means that

- interplanetary space contains 10 molecules per cm$^3$
- interstellar space contains 1 molecule per cm$^3$
- intergalactic space contains 10-6 molecules per cm$^3$.

Pioneer 10 and 11 had to move in the interplanetary outer space and only after they leave the solar system they get into the interstellar outer space.

Therefore, our hypothesis states that it is the interplanetary outer space vacuum, or rather the Hyper Low Density Gas, that decelerates the space ships moving in this flow. The Law of Conservation of Flow takes this seemingly miniscule flow into account and demonstrates that this flow will resist the movement of Pioneer 10 and 11. The constant bombardment of the surface of the spacecraft will result in the negative acceleration, considered to be an anomaly.

When calculations are done and they prove explaining the "anomaly," the new Law of Conservation of Flow may save the classical physics from the "necessity of the new physics" (Occam's razor). The classical physics is far from being exhausted, and 10 new laws of conservation are the proof (Aleinkov 2007, 2008).
STEPS TO PROVE OR DISPROVE THE HYPOTHESIS

Steps to check the hypothesis:

1. To find the precise area of the surface of Pioneer 10 and 11 experiencing the pressure of the flow (with the Diameter of the antenna equal to 2.9m the area of the spacecraft exposed to the flow equals \( R^2 = 3.14 \times 145\text{cm} \times 145\text{cm} = 66,000\text{cm}^2 \). The area of the protruding parts like radioisotope thermoelectric generator and asteroid-meteoroid detector sensor, etc. must be added (we do not have access to the precise measurements).

2. To find the number of cm in the covered distance: take for example 12 billion kilometers (12,000,000,000 km) and convert kilometers into meters (x1000) and then into cm (x100). The result is 12,000,000,000 x 100,000 = 12 x 1014 cm of distance.

3. To find the number of hydrogen molecule hits, multiply the covered distance by area of the spacecraft surface and by the number of hydrogen molecules in a cm3 (x 10, as it was the interplanetary outer space).

4. To find the impact (the kinetic energy acting against the spacecraft), multiply the number of molecule hits by the weight of each molecule and by the speed of the spacecraft (about 20 km/s, or about 2,000,000 cm/s). The speed of the spacecraft was initially over 11.2 km/s - the 2nd space speed necessary to leave the planet Earth gravity field. Then the speed of the Pioneers was increased due to the maneuvering in the vicinity of outer planets and grew to the level of over 16 km/s that is absolutely necessary to leave the Solar system.

5. To find the impact of the cumulative energy of flow against the mass of the spacecraft, divide the result by the weight of the spacecraft - 260kg.

6. To take into account the opposite action of the solar wind (acting in the opposite direction). In our understanding if solar wind and solar radiation are pressing on the back of the spacecraft that should increase the speed while the pressure of the flow molecules works against the aircraft and should decrease its speed. The difference between the former and latter will create the resulting deceleration that is countable and measurable.

7. To compare the calculated result with the actual (recorded) acceleration of the Pioneers.

Just to visualize the impact, consider that every second a spacecraft is exposed to the bombardment of approximately 6 x 1011 molecules of hydrogen and helium, and this goes on for many years.

PREDICTIONS AND TESTS

To avoid the Higgs' mistake (his ground-breaking work on Higgs bosons was at first rejected for publication as it lacked the predictions), we will include possible scientific predictions "flowing" from our hypothesis and some ways to check them:

A. Larger spacecrafts should experience larger decelerations due to a larger area of exposure. This prediction is easy to check in a space experiments: by sending two spacecraft of different size, but same weight in the same direction at the same time and measuring the difference in their acceleration (The Law of Conservation of Flow).

B. On the other hand, it can be also checked on Earth. When the cumulative force acting on the spacecraft is calculated, the precise model of the spacecraft with the same dimensions and the same mass can be suspended in the lab environment (like aerodynamic tube) and an equal in mass amount of hydrogen (or any calculable and comparable gas) can be accelerated to the cosmic speed and applied to this model. The resulting acceleration of the model will be equal to the observable in the Pioneer case deceleration.

C. If the Pioneer or Voyager type spacecraft could be followed beyond the Solar system, then a predicted phenomenon is the decrease of negative acceleration due to a lower density of the interstellar and intergalactic outer space as compared to the interplanetary outer space.
density. This prediction is easy to check by sending spaceships with more powerful radio equipment for the scientists to follow their movement longer (beyond the Solar system).

CONCLUSION

The newest Law of Conservation, the 10th Law, is the Law of Conservation of Flow (the rate of mass change). When this Law is applied to the physical system of the Pioneer anomaly, it can explain the phenomenon of their deceleration, or negative acceleration. This deceleration can be explained by the summative kinetic energy of the gas molecules acting as a flow of the Hyper Low Density Gas in the direction against the moving spacecraft. Our hypothesis needs precise calculations and may require help of the teams dealing with the Pioneer anomalies.

REFERENCES


THE LAW OF CONSERVATION OF VOLUPOWER APPLIED AS A NATION-STATE GLOBAL POWER DESCRIPTOR

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ABSTRACT

This presentation describes the application of the Law of Conservation of Volupower as a Nation-State Global Power Descriptor (NSGPD). Our previous work defined the Law of Conservation of Volupower and showed that the law is applicable to physical systems as well as complex economic and military systems (Aleinikov & Smarsh, 2007). Our next work expanded the concept of Volupower as a universal basis of comparing different nation-states and delineated the four-step process to analyze a nation-state system (Aleinikov & Smarsh, 2008). This particular research furthers the nation-state analysis work and is focused on using Volupower as a Nation-State Global Power Descriptor for the particular countries. Volupower expands the Bartini/Kuznetsov LT system of interpretation of laws of physics (Bartini, 1963, 1965, 2005; Kuznetsov, 2000) and builds up on the two laws introduced by Aleinikov (Aleinikov, 2006 - 2008). The Law of Conservation of Volupower states that under ideal/unchanging conditions Volupower (volume spread of power) remains constant. The formula for Volupower is \( Vlp = P \cdot S^3 = \text{const} \) (where \( Vlp \) is Volupower, \( P \) is Power, \( S \) is Distance). The unit of Volupower, called Smar (in honor of David Smarsh - one of the discoverers of the Law), is used to measure and compare the Volupower of nation-states.

INTRODUCTION

Today's technology presents significant challenges to leaders in data collection, analysis, assessment, and decision making. We are faced today with tremendous variations and nuances, a sea of opinions and the ocean of numbers, models and results. In this world of highly subjective politico-economical analysis, decision makers need a scientific, systems-based approach that takes into account all aspect of the issue at hand, and provides valuable results. Leaders would like to have a generalized view - one image, one picture that would demonstrate a truly scientifically based view for the most complex situation. Science as a whole is supposed to provide this global view as well as the specifics, but specifics are easy to obtain, while generalizations are still difficult to find. The concept of Volupower will allow political leaders and decision makers to assess and compare nation-states.

ESSENCE

The term offered for the phenomenon of volume spread of power -Volupower - is quite transparent. The range for measurement for Volupower is \( L^8 T^{-5} \) (where \( L \) is length and \( T \) is time) that further expands the Bartini/Kuznetsov system. The Law of Conservation of Volupower states that under ideal/unchanging conditions Volupower (volume spread of power) remains constant. The formula for Volupower is \( Vlp = P \cdot S^3 = \text{const} \) (where \( Vlp \) is Volupower, \( P \) is Power, \( S \) is Distance). The relationships with the other concepts are the following: \( Vlp = \text{Exp} \cdot S = \text{Ext} \cdot S^2 = E \cdot S^{3/t} = \text{const} \) (where \( Vlp \) is Volupower, \( \text{Exp} \) is Expancia,
Ext is Extencia, P is Power, E is Energy, S is Distance, t is Time). A new unit for measuring Volupower is called Smar. Mathematically, 1Smar = 1watt * 1m³. For additional information, see Aleinikov & Smarsh 2007.

Previous work outlined how to apply the concept of Volupower to a socio-political system to convert all numerous factors into one measurement - a process to quantify numerous characteristics. The first step is to define the elements that make up the system itself while holding the environment constant. The second step is to measure or quantify the elements. The third step is to convert the measurements of the elements into a common unit. In terms of Volupower, the unit is a Smar. The other measurement units could be first converted into power, then to Smar. Once all elements have been measured and converted, then the fourth step will include adding the parts of the system. The outcome describes the overall potential of the system power. Finally, as step five, the result must be multiplied by a coefficient of the political power.

After repeating this process for the second or subsequent nation-states, certain conclusions can be drawn from comparing the potential of these systems' power and certainly if it is done in time, year after year, the growth of Volupower will be seen more vividly than the growth of any economical, technical or political power.

We think that the overall sum of the parts of the compared nation-state systems can be used for calculating the strength/weakness of the states, thus first scientifically describing and then scientifically predicting the global trends of power changes. For example, the calculation can show when the Volupower of a nation-state like China will exceed that of the United States. This can be an objective or visible way of simplifying often disconnected, unsystematic and over excessive data.

CONCLUSION

This presentation form (abstract and proceedings) are too small to present the data of comparison, but the results are promising: when the Law of Conservation of Volupower is applied to the countries as nation-states, it gives a simple vision to complex (and often overcomplicated) comparisons. Our approach allows researchers (and leaders of all ranks) to generalize and visualize the volume of power of our own system as opposed to the volume of power of other nation-states.
JOB LEVEL INFLUENCE ON THE ATTAINMENT OF HUMAN CAPITAL

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ABSTRACT

A significant factor in enhancing individuals' career success can be attributed to human capital. A nation's wealth is the quality of its labor force and that the performance disparities are primarily due to differences in their human capital. Overall, individuals at higher job level enjoy greater rate of return on their human capital. Thus, earnings variations at different job levels are partly due to the differences in investments in human capital. However, the differential effect of human capital is not proportionate at different job levels. Therefore, the job level differentials may be explained by the differences in performance efficiency.

This paper examines the performance efficiency due to job level differences that goes beyond basic human capital. Using logistic regression we have found that job level has significant predictive power on the performance efficiency of success outcome after controlling for factors such as, gender, age, and education level. Results from logistic regression analysis also indicate that executive job level exert significant impact in increasing the likelihood of success. Further, analyses reveal that the likelihood of an executive to perform more efficiently is twice as much as other job categories. Findings from this study have important implications not only on the human capital investment, but also for business organizations operations process.
MIA MOTORS: THE ARRIVAL OF AN INTERNATIONAL FIRM INTO THE AMERICAN ECONOMY

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CASE DESCRIPTION

The primary subject matter of this case concerns the entry of an international firm and the development of a pioneering management challenge to exist and prosper in an automobile industry with hopes of corporate growth in a market dominated by large multinational firms which also have made advances to it as a prime target for takeover and purchase. The issue of valuation of the firm's and its public shares is the central focus for the case evaluator and student. How should the automobile industry and the American stock market value a firm whose major competitors are virtual giants in the U.S. auto world and specifically, the big three: Ford, GM and Chrysler? The case has a difficulty level of five, appropriate for first year graduate level. The case has both current and historical applicability for MBA students concentrating in corporate finance, international financial management, or multinational corporate entrepreneurial relations and serves as a pedagogically sound tool for applied market strategy by Korean firms and the valuation of the shares for multinational auto developer and manufacturing firm. The case is designed to be taught in three class hours and is expected to require 6-8 hours of outside preparation by students.

CASE SYNOPSIS

This case affords students an opportunity -- from both a strategic and financial point of view -- to evaluate MIA Motors decision to enter the U.S. auto industry and go public while simultaneously assisting the fledgling firm decide from an international perspective the best alternative approach of market survival. The appraisal hinges on the analysis of two kinds of restructuring: 1) the internal restructuring of MIA to adapt to the other major players in the industry (Ford, General Motors and Chrysler and others) and the forces that motivate the firm and 2) the restructuring of a single firm’s residual-ownership interest or equity restructuring of a new firm in a potentially saturated industry whose primary product simply known as the AA Foreign Car® which is widely known and accepted now. Of primary concern throughout is why firms attempt to become major players in international markets and go public(domestically and internationally) and how the offering price can be estimated and evaluated, especially when the forces of international markets are involved. Further, a peripheral issue is the impact of capital restructuring -- the design of the firm’s debt and equity claims with an emphasis on changes in and additions to its international clientele and investors, the allocation and determination of its asset value, and the real potential for failure in new markets, especially international ones, by firms with limited operating history. All data elements and statements were derived from public Internet data and public financial data, and MIA MOTORS represents a fictitious firm although its financials may resemble others in the international automobile industry. No private or insider information was provided or extracted from company files or other such cases.
INTRODUCTION

In August 1990, the Board of Directors of MIA Motors Incorporated faced the decision threshold concerning several issues facing the firm including: (1) how does this firm survive in an international automobile industry market when it is but a small dot on the industry horizon. (2) which international market would best fit the mission of the firm; and more specifically (3) a reasonable price to set for the firm's first public share offering. The most immediate task facing the Board is that it has to arrive at a reasonable and fair level of funding to execute the international move. What funding sources are available and what is a realistic estimate by issue day in order to satisfy the underwriting team of J. P. Morgan Chase, Inc. and Wachovia Securities, Inc., who would be handling the issue. According to Wall Street estimates and CNN News.com, the underwriters have agreed to fully underwrite 600,000 shares of MIA's common stock which, if successful, would not enter the record books but would be considered a rather large IPO in this market for this period by a virtual unknown. The underwriters were also granted the option to purchase up to 50,000 additional shares from the company to cover any over-allotments. There were numerous risk factors to consider with respect to the IPO, including the company's limited operating history and its rapid emergence into this U.S. auto market, which traditionally has led to share price volatility, and a hearty best offer underwriting. Following an extensive investigation, management had discovered that most entrepreneurial firms had stumbled after an initial period of rapid growth but felt that MIA's development had been relatively successful thus far. But its potential investors would be the ultimate deciders of the fate of the firm.
CASH ADVANCE LOANS

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CASE DESCRIPTION

The primary subject matter of this case is payday loans, which are cash advances on a customer’s next paycheck. Payday loans are a large segment of the subprime lending industry. Students examine the industry model, characteristics of payday loans and the people who use them, along with alternatives to payday loans while they calculate the benefits and costs of the various options. Secondary issues include the effect of a bad credit score on a person’s ability to obtain credit and employment and along with reasons why people don’t use banks. Finally, students discuss the ethical nature of bank fees and payday loan charges. The case has a difficulty level of three and is designed to be taught in one class period. The case should require one to two hours of outside preparation by students.
WHO SHOULD BUY A HYBRID CAR

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CASE DESCRIPTION

The primary subject matter of this case is the decision of whether or not to purchase a hybrid car. With gasoline prices at record highs, many consumers are considering buying hybrid cars. Students examine the car purchase decision along with depreciation rates and the long-term value of hybrid cars, while they calculate the benefits and costs of the various hybrid vehicles and their comparable sister cars. Secondary issues include an examination of the trade-in value for non-hybrid cars and the horsepower and greenhouse gas emission differences between hybrid and their sister cars. Furthermore, students will examine whether or not the federal tax credit for hybrids should be reinstated. The case has a difficulty level of two and is designed to be taught in one class period. The case should require one to two hours of outside preparation by students.
A DAY AT THE SPA

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CASE ABSTRACT

Students are faced with a factual setting that presents practical business and ethical issues. After learning from his doctor that he was a prime candidate for a heart attack, the victim in this case considered a regimen of diet and exercise. The exercise aspect of the plan involved possible membership at a local gym, of which his wife was already a member. Following a discussion with his wife, it was decided that the victim would drive his wife to the gym and return to pick her up when her exercise session was completed. When the victim returned to the gym to pick up his wife, he waited for her in the gym lobby. While waiting for his wife, the victim suffered a cardiac arrest. Although medical assistance was immediately administered by a gym employee, and later by emergency medical technicians and trauma center personnel, the victim did not survive.

Following the victim’s death, it was learned that he had suffered a sudden cardiac arrest. Individuals who suffer a sudden cardiac arrest generally survive if heart rhythm is restored using a defibrillator. The gym did not have a defibrillator on the premises. Was the gym negligent in failing to have a defibrillator on the premises? If the gym had had a defibrillator on the premises would the victim have survived? Since the victim was a prime candidate for a heart attack did the victim contribute to his own death?

In answering these questions, the case is divided into three major parts. The first part of the case requires students to utilize their understanding of several statistical issues. They are required to: use linear regression to predict age at death given a specific cholesterol level; determine the expected cost of owning a defibrillator; calculate the age at which the average person will experience their first cardiac incident; and estimate the number of lives that are saved if a defibrillator is available for use.

The second part requires students to analyze a possible negligence claim against the gym with respect to its failure to have a defibrillator on the premises. Students are required to address the following negligence concepts: duty; breach of duty; negligence per se; actual (cause in fact) causation; damages; and defenses to negligence (i.e., contributory vs. comparative negligence).

The last part of the case enables the students to propose strategies regarding settlement and ethical issues raised by the gym’s refusal to assume responsibility for its actions. The case has a difficulty of level three, appropriate for junior level courses. The case is designed to be taught in three class hours, including a class presentation by student teams. The case is expected to require a minimum of three hours of outside preparation by student teams that present a report.
HUMAN RESOURCES PLANNING CASE: STAFFING AND SCHEDULING

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ABSTRACT

New business school graduates often comment that staffing and scheduling of workers are some of the most difficult management skills to develop. As students, they also seem to struggle with these concepts when required to move beyond matching staffing and scheduling terms with definitions and addressing these topics with multiple choice questions. A typical example is a strategic management project that requires forecasting staffing needs and estimating labor costs related to the project implementation. For these reasons, the following case has been developed to provide a framework for some practical experience. A retail pharmacy of a large national drug store chain provides the setting. Essential informational elements are provided to set the stage. Case questions require the calculation of production, full time equivalents of three levels of staff (pharmacists, pharmacy technicians and cashiers), labor costs and methods for monitoring performance in preparation for business growth due to such things as technology advances or national health insurance policy changes. Teaching notes are provided, which include answers to the case questions and variations on the case to provide flexibility for the instructor. Key words include staffing, scheduling, full time equivalent, retail pharmacy, drug store chain and ratio analysis.

INTRODUCTION

The context of this case is a retail pharmacy in a large national drug store chain. Since there seems to be a drug store on every street corner, and sometimes more than one on a street corner, the American competition model seems to be thriving in the drug store industry. Consequently, there is a high demand and a short supply of pharmacists as well as pharmacy technicians, two subjects in this case. Pal (2002) and an MSNBC report in 2005 underscore a nationwide shortage of pharmacists that will continue until at least the year 2020, which has prompted fierce competition. Dresselle (2005) emphasizes the importance for employers to address the national problem of high turnover among pharmacy technicians. These circumstances call for careful use of the pool of available personnel through the human resource functions of staffing, scheduling and budgeting. This case represents the staffing challenges presented by the tight labor markets in one healthcare profession.

BACKGROUND

This case is written as an introduction to learning about the staffing component of human resources (HR) management. Determination of staffing requirements (the number of people needed to operate a component of a business) is a basic first step in HR planning since the planning framework strives to match estimated labor demand (the number of people needed for each required skill level) with estimated labor supply (the size and availability of the talent pool in the labor market). Longest, Rakich and Darr (2004, pg 535) define staff planning as "an action plan that ensures the appropriate number of employees with requisite skills are available".
Comparing the labor supply to the labor demand indicates potential shortages and surpluses of employees. Gaps are addressed with action plans (e.g., recruit, train, transfer from other departments). Staffing requirements are derived from both qualitative analysis (such as expert opinion or experience in the particular field) and quantitative analysis (such as time and motion studies, production formulae and ratio analysis). Students use essential staffing elements to make basic calculations in this case. Accordingly, students are guided to generate information for quantitative analysis and begin learning a strategic workforce planning model (Cascio, 2006). Based on Heneman and Judge (2006, pg 98), this case fills a gap in that it teaches basic calculations based on historical data prior to teaching strategic HR planning.

The staffing calculations in this case include use of the term full time equivalent (FTE). Heneman and Judge (2006, pg 97) define this term as "work content in hours that can be accomplished by one full time employee with a full time employee defined as 40 hours per week or 2080 hours per year". Therefore, one person working 20 hours would be .5 FTE and one working 30 hours per week would be .75 FTE. However, these authors show no distinction between paid hours and hours actually worked. This case creates a concept of an adjusted FTE defined as hours one full time worker is present and producing work.

According to Longest, Rakich and Darr (2004, pg 433), customer demand for a product or service is controlled through scheduling. When full time staff cannot meet the demand, part-time staff is used as one "production-smoothing technique" to spread the workload. This case will make use of part-time staff.

**LEARNING OUTCOMES**

The student will be able to:

1. Articulate the informational components required to determine staffing needs by skill level and discuss the density of the detail required to grasp the task of staffing and scheduling.
2. Perform calculations to determine the number of required staff by skill level to produce the designed workload.
3. Create a labor budget for the pharmacy component of a retail drug store.
4. Determine four measures to track production and cost performance over time.

**CASE DESCRIPTION**

You are a drug store manager and your regional vice president has requested a staffing plan and labor budget for the pharmacy component of your store for the next fiscal year. The vice president has also requested a plan on how to monitor performance and cost across time to measure progress as a basis for planning business growth.

You will need a calculator or use a spreadsheet for calculations included in the case questions.

**ESSENTIAL INFORMATION ELEMENTS**

**Hours of Operation**

Hours of Operation: 9AM - 9 PM every day of the week; closed on Christmas Day but open all other holidays.
Prescription Volume

Prescriptions Filled: average 300/day (accounts for seasonal fluctuations and differences among days of the week.

Hourly Staff Wages

Hourly Wages of Staff: pharmacists $55/hour; cashiers $8.50/hour; pharmacy technicians (technicians) $11/hour.

Annual Paid Benefits

Full Time Staff Paid Benefits: 6 holidays, 6 sick days and 1 personal day per year for all workers; 4 weeks vacation for pharmacists, 2 weeks vacation for cashiers and 2 weeks vacation for technicians. Assumption: no paid benefits for part time staff.

Full Time Staff Benefit Cost: 20% of annual wage.

Annual Paid Hours

Hours Paid for Each Full Time Worker: 2080 (8 hours/day x 5 days/wk x 52 weeks)

Work Hours

Full time pharmacists work a 12 hour shift 3 days per week from 9:00 AM - 9:00 PM and are paid for 40 hours. Part time/relief pharmacists work the same 12 hour shift.

Full time cashiers and technicians work 8 hour shifts 5 days per week from 9:00 AM - 5:00 PM. Part time/relief cashiers and technicians work 4 hour shifts from 5:00 - 9:00 PM.

Lunch and Dinner Periods

Lunch occurs 12:00 - 12:30 PM and dinner occurs 5:00 - 5:30 PM at which time the pharmacy is temporarily closed since it cannot operate by law without a pharmacist on duty. Lunch and dinner periods for full time or relief pharmacists as well as lunch period for full time and relief cashiers and technicians are considered paid time hours due to the erratic ebbs and flows of the work load causing skipped meal breaks. Part time cashiers and technicians who work evening hours do not have a dinner period.

Work Breaks

Morning and afternoon breaks for full time staff are not scheduled but taken in staggered shifts as work load allows. No breaks are scheduled for part time cashiers and technicians, who work the afternoon shift 5:00 - 9:00 PM. Therefore, break time is ignored in the productivity hours discussed below.

Minimum Productivity Hours

Minimum Hours of Productivity by Staff Type: (this case assumes vacation days, holidays, sick time, lunch/dinner periods and personal leave day are taken by each staff member):

Full Time Pharmacists: 1678 hours derived from 2080 hours - 160 vacation hours - 48 holiday hours - 48 sick time hours - 8 personal leave hours - 138 lunch and dinner periods (1 hour per day x 3 days/wk x 46 weeks each full time pharmacist is present and producing work).
Full Time Cashiers: 1776 hours derived from 2080 hours - 80 vacation hours - 48 holiday hours - 48 hours sick time - 8 personal leave hours - 120 lunch period hours (.5 hours per day x 5 days/wk x 48 weeks each full time cashier is present and producing work).

Full Time Technicians: 1776 derived from 2080 hours - 80 vacation hours - 48 holiday hours - 48 hours sick time - 8 hours personal leave - 120 lunch period hours (.5 hours per day x 5 days/wk x 48 weeks each full time cashier is present and producing work).

Job Duties

Pharmacist: Interpretation of physician orders; interacting with physicians by phone, fax and email; checking the incompatibility of ordered medications with other drugs or foods consumed by the patient; approving all prescriptions prepared by the technician; documenting all approvals; addressing any questions; and providing instructional assistance to customers.

Technician: Actual placement of prescribed medication into the packaging (which incorporates stocking and operating a computer driven robot that counts and places medications in containers); attachment of labels to packaging; and verification of insurance coverage for the prescribed item.

Cashiers: Verify customer identity and match it to the prescription being dispensed; collect out-of-pocket costs not covered by insurance; operate the cash register; cover the drive-thru window; direct customer questions about medications to the pharmacist; and secure customer signatures to document that prescriptions and instruction have been received.

CASE QUESTIONS

1. Estimate the total number of hours of operations per year.
2. Estimate the number of prescriptions filled during the operational year.
3. Estimate the number of pharmacists required to do the work.
4. Estimate the number of technicians required to do the work.
5. Estimate the number of cashiers required to do the work.
6. Estimate the labor cost to operate the pharmacy as follows:
   a. Pharmacists:
   b. Technicians:
   c. Cashiers:
   d. Total labor costs including wage and benefit costs:
7. Calculate total labor cost per operational hour (labor dollars per operational hour ratio expressed as $: 1 operational hour).
8. Calculate total labor cost per prescription (Rx) dispensed (labor dollars per Rx ratio expressed as $: 1 Rx).
9. Calculate the number of prescriptions (Rx) dispensed per technician hour worked (Rx per technician hour expressed as Rx: 1 technician labor hour). Note that the focus is on worked hours rather than hours paid, since the technician is not producing work when away on vacation or absent due to illness.
10. Calculate the number of prescriptions dispensed per operational hour (Rx per operational hour ratio expressed as Rx: 1 operational hour)

RESOURCES


PEANUT VALLEY CAFÉ: WHAT TO DO NEXT?

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CASE DESCRIPTION

The primary subject matter of this case involves the management of a quick service restaurant (QSR). The case would be appropriate for upper division undergraduate courses in management or hospitality management.

CASE SYNOPSIS

This case focuses on the operational and strategic management issues faced by a family owned quick service restaurant (QSR). The case explores the operational issues with a multi-unit restaurant. What are the operational decisions necessary to effectively manage QSR facilities? What are the strategic issues facing a QSR owner?

[NOTE: This case is a fictionalized version of a real-life situation. Names and other potentially identifying information have been changed to protect identities. The applicable fact situation is true to the real case.]

Peanut Valley Café is a family owned, ethnic food quick service restaurant (QSR). The company has two locations in the southwestern part of the United States. The two facilities are 20 miles apart with one facility located in Plainsville and the other in Pleasant Valley. Both facilities are equidistant, about 8 miles, from a major military base which is in the process of expanding operations. The population of Plainsville is nearly 33,000 and the population of Pleasant Valley is approximately 11,000. Plainsville is the county seat for Mountain County. The city has a small, regional shopping mall, a civic center, a hospital, and Mountain Community College. Pleasant Valley is the county seat for Lovely County. The town has an ethanol processing plant, milk processing facility, several peanut processing facilities, and Regional State University (RSU). RSU is a small regional university providing undergraduate and graduate programs for approximately 4,000 students. Both cities are about 100 miles from a metropolitan area with a population greater than 50,000 and more than 120 miles from a population centers greater than 150,000.

Peanut Valley Café originally started as a franchise operation in 1967 serving Mexican-American fast food. Sam Snow joined the company in 1969 as a management trainee after graduating from a prestigious land-grant college with a degree in Hotel Restaurant Management (HRM). By 1970, Peanut Valley Café had grown to five franchise locations. In 1971, the owner of Peanut Valley Café offered Sam the opportunity to buy the Plainsville franchise. This facility was located in front of a new shopping center, across the street from the Plainsville Park and within a block of the Plainsville High School. In 1971, this was an ideal location since the highway had been expanded to three lanes to handle the traffic to the hospital and the military base located west of town. In 1975, Sam received permission to open a Peanut Valley Café in Pleasant Valley across the street from a RSU dormitory and the RSU administrative building. Additionally, this location was along the main highway to Desert Sun, a city of 55,000 located about 90 miles southwest of Pleasant Valley.
In 1979, Peanut Valley Café's operations were facing financial difficulties. Originally, the franchises' locations in small towns resulted in little competition with national franchise operations. With increased competition from national chains, three of the company's five operations had reported their third consecutive annual loss. Only Sam's operations in Plainsville and Pleasant Valley posted profits during this time. When Peanut Valley Café's ownership decided to close the business, Sam offered to buy the company's name and continue operating his two facilities. On January 1, 1980, Peanut Valley Café was officially sold to Sam Snow's new corporation - High Plains Restaurant Management, Inc., dba Peanut Valley Café. Over the years Sam has experienced the typical business cycles of all small businesses and experimented with his share of new projects. For example, from 1998 to late 2004 Sam operated a food court version of his café in the local mall with a limited menu. Also, during this time period, his corporation owned an Orange Julius franchise in the local mall. Moreover, in 1996 Sam was offered the opportunity to buy the gas station adjacent to the Pleasant Valley facility. This venture accounts for approximately 10% of the total revenue at the Pleasant Valley facility.

In July 2006, Sam met with Dr. Abraham, Associate Professor of Management, RSU. Dr. Abraham was designing the curriculum to support a new Hospitality Management degree at RSU and needed the input of industry leaders such as Sam Snow. Their initial conversation covered a variety of topics including the local economy, community growth, entrepreneurship, and the need for a hospitality degree in the area. During this conversation, Sam stated that he wished he had the time to implement the systems that would really help his business. "My managers are not a part of this operation. Sure, they try, but there is no follow through on items. I feel like we are not on the same page." Sam asked Dr. Abraham if he could help in facilitating a discussion between Sam and his managers. Dr. Abraham agreed to assist Sam, but wanted to observe the operation before conducting the meeting. Over the next several weeks, Dr. Abraham visited each facility, met with the employees, and received a tour of the operation. By November, it was agreed that Dr. Abraham would attend the employee meetings being conducted by Sam.

The employee meeting for the Pleasant Valley facility was scheduled for late November 2006. Following his normal procedure for these meetings, Sam decided to close the facility at 8:30PM versus 10PM. About ten minutes into the meeting a bus from Mountain Plains University arrived with the women's basketball team and coaches. The team had played the RSU women's team earlier in the evening. When the coach came to the door, a member of Sam's management team answered the door and told the coach they were closed. Without prompting, the Peanut Valley Café employees asked Sam to open the restaurant for the team. Sam agreed and the team was invited into the facility. While the restaurant employees were busy preparing the food for the team, Sam overheard one of his Assistant Manager's remark "We can't afford to let that much revenue be turned away. I can't believe this meeting is more important than servicing the community!" After the team completed their meal, Sam resumed the employee meeting. During a conversation about hours, one of the morning managers, Jose, started complaining about the lack of support from the other managers, especially Daniel. This continued for several minutes with both managers and their respective subordinates trading barbs about the operational procedures. Finally Sam stopped the meeting and looking at Jose stated "We'll continue this conversation in private after the meeting." The meeting ended with Sam and Jose going to the manager's office. As Dr. Abraham was collecting his materials, several employees stopped to talk. One employee commented "This has been brewing for some time. Jose and Daniel have not gotten along since Daniel was promoted to manager. Jose is a great cook, but he is not a strong manager." Another employee added, "You know this all began when Daniel started going to RSU for his management degree and doesn't have to work the early morning shifts." The next day Sam called Dr. Abraham to apologize for the incident with Jose. "He probably has the best overall culinary skills of all my managers. But he is very narrow-minded about what needs to be done. He is not a good manager and tries to tell the others how things should be done. I had planned to talk to him about his overall performance for several weeks but never got the time to drive to Pleasant Valley for the talk". About a week later,
Sam and Dr. Abraham were coordinating a time for Sam to be a guest speaker in a hospitality management class when Sam stated "Well, Jose quit. Called me at 6:25AM last Tuesday and quit. That hurt since we open at 6:30AM. I had a young employee waiting outside the door for about 45 minutes until I got there to open. The young man was upset that he had to wait and tersely told me about 20 people stopped by and wanted to know why the restaurant was closed. When I explained what happened, he added 'I should have known. Jose and Daniel had words yesterday'."

During the spring 2007, Sam and Dr. Abraham met to discuss managerial operations. They discussed the employee training programs. They reviewed the various videotapes Sam had collected over the years concerning customer service, sales, and safety. Sam stated that the Plainsville facility has an extra room above the restaurant that can be used for small groups or individuals to view the tapes. "Unfortunately, I do not have the same luxury in Pleasant Valley. It's a space issue. So I will periodically show a tape at Pleasant Valley as part of the employee meeting." When asked who is responsible for the training, Sam stated it was the General Manager's and Assistant Manager's responsibility. "But they don't have time to do the training. We get done what we can. I know some of my people are not very good at teaching others, but when you live on the margins, you do what you have to." Additionally, Sam and Dr. Abraham discussed the menu. Dr. Abraham raised the issue, "Sam, there appears to be a lot of items on the menu from traditional Mexican cuisine of tacos and burritos to American cuisine of hamburgers and fried chicken. Doesn't this cause inventory and production issues?" Sam responded "Not really. I use the same ground beef for the hamburgers that I use in the tacos and burritos. There is a longer prep time for the hamburger, but it's not a big seller and whoever wants a burger is willing to wait." As they talked about the size of the menu, Sam stated that he was proud of the fish taco. "I was in Hawaii for a conference and saw a restaurant similar to mine offering a fish taco. It's been great, though not a big seller. I think we sold 10 fish tacos last week between the 2 facilities. I use fresh fish and created my own seasonings. Since we are using fresh fish, I've created a separate prep area to eliminate any cross contamination."

During a meeting in April 2007, Sam lamented that he was 62. He had been in this business for is entire life. "I started with this venture on a lark. No clear plan. This was just a stopover until I found what I really wanted back in the northeast. Here I am 40 years later. I've done well. Had several years when I did not take a salary. Man, that was the closest to bankruptcy I've ever been. I enjoy this business, but for how long? I know I need help. I'm sorry my son lost his job with a major corporation. But he got a good buy out and has decided to come live with us for the next six months to help me get some of the systems I've always wanted to do in place."

In May 2007, Dr. Abraham was ready to facilitate the meeting between Sam and his managers. Sam arranged to have the meeting in a location away from the restaurants. After introductions, Dr. Abraham started the meeting. "The purpose of today's meeting is to discuss Peanut Valley Café - where you are, where you want to go, and your role in the journey. To start we will begin with "Through the Looking Glass". Our initial goal is to identify as many items as possible. So please hold your comments until later. We will list the ideas on the flip chart and post these on the wall for ease of reference. Let's begin. Where do you see Peanut Valley Café five years from now?" The group was then asked to "Look out the window. What do you see?" Finally, the group was asked "What are the roles the people in the room should have?"

The following represents some of the ideas developed at the May meeting.

Through the Looking Glass - Peanut Valley Café 2012

- Participate in city events
- More automation
- Better advertising
- Tours by elementary schools
- Training programs
- More family friendly
Higher presence in community
Keeping up with IT
More managers
Bigger Pleasant Valley store
Double sales - customer count
Work with Military base
General Manager
Faster service
Menu redesign/simplify
Advertise birthday parties
Online orders
Expand

Out the Window - What do we see?

RSU
Businesses
Banks
Fire department
Hospital
Schools: Public and Private
Travelers
Military Base
School Athletic teams
Competitors (Partial List)
  McDonald's
  Dairy Queen
  Burger King
  Taco Bell
  Wendy's
  Juan's Authentic Mexican Restaurant
  Covered Wagon Diner
  Price of Gas Increasing

Managerial Roles

Sam

  Face of the Business
  Provide vision leadership
  Be supportive
  Marketing
  Vendor support
  Update stores
  Moral support

Son

  Implement programs/IT
  Short term - implementation
  Training development
General management role
Marketing

Your
Face of the store - true managers
Hiring employees
Smotherer running crews
Better customer service
Follow through - see beyond the shift
Administrative Organizer - Rose
AN ANALYSIS OF THE IMPLEMENTATION OF GASB 43: A STUDY OF COUNTY GOVERNMENTS

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ABSTRACT

GASB statement 34 required governments to implement a completely new reporting model. Because of the radical change in model, the GASB allowed governments several years to phase in the standard. By the end of 2004, most governmental entities should have implemented the standard.

This paper reports on the quality of the implementation of GASB 34 as determined by governmental auditors. The audit reports on the 2006 financial statements of 125 county governments in Mississippi and Tennessee were reviewed. This study found widespread problems with the implementation of the standard. Over 70% of the counties in each state received negative opinions.
EXAMINATION OF USER ATTITUDES TOWARD COMPUTER SECURITY

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ABSTRACT

A simple model of IT user response to system security is offered. Interviews were conducted to elicit user attitudes toward security in a variety of situations. Results indicate that users’ attitudes toward security are multifaceted and some aspects of security seem to be more intrusive than others. Results, while not completely as anticipated are nonetheless consistent with the general form of the model.