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THE ENTREPRENEURIAL EXECUTIVE

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LETTER FROM THE EDITORS

We are extremely pleased to present Volume 2, Number 1, of the *EE*. The Academy of Entrepreneurship is an affiliate of the Allied Academies, Inc., a non profit association of scholars whose purpose is to encourage and support the advancement and exchange of knowledge, understanding and teaching throughout the world. The *EE* is a principal vehicle for achieving the objectives of the organization. The editorial mission of this journal is to advance the knowledge, understanding, and teaching of entrepreneurship throughout the world. To that end, the journal publishes high quality manuscripts, which are of practical value to entrepreneurship researchers and practitioners.

The manuscripts contained in this volume have been double blind refereed. The acceptance rate for manuscripts in this issue, 25%, conforms to our editorial policies.

As editors, we intend to foster a supportive, mentoring effort on the part of the referees which will result in encouraging and supporting writers. We welcome different viewpoints because in differences we find learning; in differences we develop understanding; in differences we gain knowledge and in differences we develop the discipline into a more comprehensive, less esoteric, and dynamic metier.

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IT'S NOT JUST THE BIG BOYS WHO PAY THE BIG BUCKS!: ENVIRONMENTAL CIVIL AND CRIMINAL LIABILITY FOR SMALL BUSINESSES UNDER FEDERAL ENVIRONMENTAL LAWS

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ABSTRACT

This article examines the rising importance of environmental regulation to small business. Initially, an overview is presented of the federal environmental regulatory framework. Then, two emerging - and converging - trends are examined. First, the expansion of the concept of individual liability for environmental problems is outlined. Then, the growing trend in environmental regulation toward enforcing existing federal laws on small business owners and executives is looked at. After this exposition, the potential ramifications of the intersection of these two trends for entrepreneurs and small business in general. In conclusion, a discussion of what this means for the environmental management strategies for small businesses and for the nation as a whole is presented.

INTRODUCTION

Meet Bob. Bob is starting his own small business. Bob knows that by doing so, he is putting his capital, his family, and his reputation at risk. However, does Bob know that he might also be placing his personal liberty at risk? Does Bob know that he could be subject to large criminal and civil monetary penalties for his business activities? Further, does Bob know that he could possibly end up doing *real* jail time in "the Big House" for these same actions? Does Bob know that all this could occur due to federal environmental laws of which he may or may not be aware? If Bob does know about these laws, does he believe that his small business must generally conform to the same standards of conduct as Fortune 500 companies? Let's pick Bob up off the floor and give him some oxygen!

Who gets charged with violations of federal environmental laws today? Most commonly think of large chemical companies and corporations that generate large quantities of hazardous wastes as being most susceptible to run afoul of environmental laws and regulations. Most also commonly think of companies committing environmental violations, while in fact the trend has been to charge individual executives and other key personnel as well as the companies they work for with environmental crimes and misdemeanors.

While most entrepreneurs would cite environmental concerns as being a low priority concern, increasingly, the federal government is targeting small businesses for violations of federal environmental laws (Richman, 1992). While many small businesses have been caught off-guard and unprepared for this enforcement, there are generally no small business exemptions from federal environmental laws. Likewise, many of the federal environmental laws of which entrepreneurs may or may not be aware contain very low thresholds to trigger coverage on a small business. Additionally, these laws often carry the concomitant possibility of large fines and potential criminal liability for both the firm collectively and its ownership and management individually.

Today, there are literally millions of "Bobs" out there who are running small businesses (or who are in positions of executive authority in them) who are subject to a profusion of federal environmental laws to which they and their organizations are subject. The corner dry cleaner, the store-front bakery, and the local photo processor may not even cross our minds as likely targets for environmental enforcement. However, today, small businesses such as these may be just as likely (if not more so) to fall under intense environmental scrutiny as larger, more obvious environmental concerns.

The purpose of this article is to examine the rising importance of environmental regulation to small business. We will first present an overview of the federal environmental regulatory framework. Next, we will look at two emerging trends - the expansion of the concept of individual liability for environmental transgressions and the growing trend in environmental regulation toward enforcing existing federal laws on small business owners and executives. We will then examine the potential ramifications of the intersection of these two trends for entrepreneurs and small business in general. Finally, we will suggest both a proactive environmental management strategy for entrepreneurs and a proposal to the federal government to address this growing concern for small businesses.

THE SCOPE OF FEDERAL ENVIRONMENTAL LAWS

It has been almost three decades since the enactment of the Clean Air Act and the creation of the Environmental Protection Agency (EPA). Since that time, a framework of comprehensive environmental laws has been constructed to regulate discharges into the air and water and the disposal of hazardous and toxic wastes. Simultaneously, environmental laws and regulations have been put into place both prohibiting the intentional and unintentional taking of certain species and actions which cannot be taken in commerce because they might adversely affect wildlife. These federal statutes, summarized in Table 1, have often contained provisions for the imposition of administrative, civil, and even criminal liability for violators. As can be seen in Table 2, severe monetary penalties (sometimes assessed on a *daily* basis) and even jail time can be rendered on violators of these environmental laws.

Table 1: Summary of Federal Environmental Laws with Criminal and Civil Liability Provisions

Law	Criminal	Civil
Clean Air Act	X	X
Clean Water Act	X	X
Resource Conservation and Recovery Act	X	X
Comprehensive Environmental Response, Compensation and Liability Act	X	X
Toxic Substances Control Act	X	X
Emergency Planning and Community Right-to-Know Act	X	X
Endangered Species Act	X	X
Marine Mammal Protection Act	X	X
Lacey Act	X	X
Migratory Bird Treaty Act	X	
Magnuson Fishery Management and Conservation Act	X	X

So who exactly is subject to these laws? Generally, organizations (both private and public), along with key officials and even individuals can be held culpable under these statutes. This is because environmental protection laws generally apply to *persons* (Woodka, 1992). For instance, the Clean Air Act (CAA) imposes criminal and civil liability on "any person" who knowingly violates almost any of the statute's prohibitions or requirements. The CAA defines the term "person" broadly to encompass individuals, corporations, partnerships, and associations, as well as state and federal entities (Gordon, 1993, and Miskiewicz and Rudd, 1992). The Endangered Species Act (ESA) is especially broad in its extensive definition of who is covered as a "person" under the act. Section 2 of the 1973 ESA defines a "person" as:

"an individual, corporation, partnership, trust, association, or any other private entity; or any officer, employee, agent, department, or instrumentality of the Federal Government, of any State, municipality, or political subdivision of a State, or of any foreign government; any State, municipality, or political subdivision of a State; or any other entity subject to the jurisdiction of the United States" (16 U.S.C. Section 1532(13)).

Over time, legislative changes, along with administrative and judicial interpretations, have eroded the traditional protections of corporate law when it comes to environmental violations (Birg, 1994). According to Wolf (1993), when it comes to environmental laws, the so-called "corporate veil" no longer shields officers and directors of organizations from personal liability and responsibility for environmental violations. In 1990, amendments to the CAA specifically added "any responsible corporate officer" to the definition of a person potentially culpable under the act (42 U.S.C. Section 7413(c)(3)).

Table 2: Criminal Penalties Specified Under Federal Environmental Laws					
Law	Potential Fines	Potential Jail Time			
Clean Air Act (42 U.S.C. Section 7413)	Misdemeanors: Individuals-\$100K Organizations-\$200K Felonies: Individuals-\$250K Organizations-\$500K	Between 1 and 15 years			
Clean Water Act (33 U.S.C. Sections 309, 1319)	Individuals-\$250K Organizations-\$1000K	Maximum 15 years			
Resource Conservation and Recovery Act (42 U.S.C. Section 6928)	Maximum \$250K	Maximum 15 years			
Comprehensive Environmental Response, Compensation and Liability Act (42 U.S.C. Section 9612)	Maximums: Individuals-\$250K Organizations-\$500K	Maximums: 3 years - reporting/ recordkeeping violations 5 years - repeated violations			
Toxic Substances Control Act (7 U.S.C. Section 2614)	Maximum: \$25K per day of violations	Maximum 1 year			
Emergency Planning and Community Right-to-Know Act (42 U.S.C. Section 11045)	Maximum: \$25K per day of violations for first occurrence, up to \$75K for repeated occurrences	Maximum 2 years			
Endangered Species Act (16 U.S.C. Section 1540)	Maximum \$50K	Maximum 1 year			
Marine Mammal Protection Act (16 U.S.C. Section 1375)	Maximum \$20K	Maximum 1 year			
Lacey Act (16 U.S.C. Section 3373)	Maximums for Individuals: Misdemeanors-\$100K Felonies-\$25K Maximums for Organizations: Double that of Individuals	Misdemeanors: Maximum 1 year Felonies: Maximum 5 years			
Migratory Bird Treaty Act (33 U.S.C. Section 707)	Misdemeanors: Individuals-\$5K Organizations-\$10K Felonies: Individuals-\$250K Organizations-\$500K	Misdemeanors: Maximum 6 months Felonies: Maximum 2 years			
Magnuson Fishery Management and Conservation Act (16 U.S.C. Section 1859)	Maximum \$200K	Maximum 6 months			

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This concept of responsible corporate officers has been extended to both the Resource Conservation and Recovery Act (RCRA) (Stuart, 1995 and Noe, 1993) and to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (Carley, 1994 and Hodgden, 1994) as well.

Not only has the corporate veil been eroded for *current* corporate officers, but for extended parties and for those involved (even tangentially) in the past, present, and future operations that preceded or followed the proscribed environmental activities. Under CERCLA, the concept of those who can be considered "potentially responsible parties" ("PRPs) (for cleanup of hazardous wastes) extends beyond current owners and operators of a site containing hazardous substances. Today, PRP liability extends, at least: (1) to past and future owners and operators of such sites; (2) to persons (broadly defined) who contributed hazardous wastes to such sites; and (3) to lenders (and their officers) who hold (or held) mortgages and notes on such properties (Oswald and Schpani, 1992, and Fejfar, 1994). Potentially, PRP liability can be extended to parent corporations for acts of subsidiaries (Worden, 1994, Wallace, 1993, and McPhail, 1991) and even to "dissolved" corporations (Stremming, 1994, and Snook, 1992). Under CERCLA, liability of PRPs is strict, as well as joint and several. This means that each defendant in connected with the release of a hazardous substance is liable for up to 100 percent of the cleanup costs. CERCLA liability is also retroactive, as well as prospective. Liability may even be imposed today as a result of activities which took place in the past at a time when they were legal (Oswald, 1995).

Today then, the concept of who is potentially covered under federal environmental laws is quite broad. The trend over particularly the past decade has been to greatly expand the scope of potential personal liability. Consider also that many of these federal laws (such as the Clean Air and Clean Water Acts) mandate state regulation of persons and activities covered under these laws. In many cases then, state laws may be even more strict than federal mandates, and if a company's operations span state lines, they are then subject to oftendiffering state standards. Thus, environmental compliance is becoming a much more complex and important matter in the nineties for corporate focus, with environmental compliance being the fastest growing component of business' costs incurred as a response to government regulation (Richman, 1992).

ENVIRONMENTAL LAWS AND SMALL BUSINESS

There is an important nexus occurring in environmental law in the nineties. At a time when environmental compliance is becoming increasingly intricate and the scope of environmental liability is becoming more broad, the direction of federal environmental enforcement is changing. Increasingly, the EPA and other federal agencies charged with enforcing federal environmental laws are targeting smaller businesses for enforcement actions (Grattan, 1993). Now, the focus of environmental regulation is increasingly falling on smaller companies and their officers (McKee, 1992). The question of whether or not this new regulatory focus on small business is appropriate is quite controversial from a number of standpoints. First, some economists believe that the new regulatory focus on small business is

an unwise expenditure of marginal enforcement dollars. Consider that this is the natural progression of a regulatory cycle over time. The easier targets (the larger companies who are more likely to be considerable polluters) have been found out and corrected. Now, to seek out smaller companies and their officers who produce incrementally smaller levels of pollution and environmental harm, such regulatory efforts will take larger and larger marginal expenditures of time, effort, and manpower in enforcement efforts (McKee, 1992). Secondly, the task of becoming educated about and of complying with the myriad of federal environmental laws (not to mention the cost of compiling the often complex records and reports to prove compliance) is especially difficult for small businesses. Indeed, some analysts see the imposition of environmental standards on small businesses and individuals as patently unfair due to the fact that entrepreneurs and small businesses, these expenditures of time and effort are especially disproportionate for small firms to bear and can make them less able to compete with larger firms who can easier bear this regulatory cost.

Yet, it must be remembered that the liability to comply with environmental laws and regulations (due to being rooted in the concept of a "person") is generally the same for small businesses as it is for large corporations. Likewise, officers and executives of small firms bear no different liability under federal environmental statutes. The civil and criminal penalties outlined in Table 2 do not discriminate based on size of the company involved.

Thus, millions of small business owners and executives find themselves in a collective conundrum - call it "Bob's Dilemma." They are subject to environmental laws which carry potential criminal and civil liability - along with stiff monetary penalties and possible jail time - without the necessary time and resources to adequately know if they are in full compliance with often complex statutory and regulatory requirements. Evidence of "Bob's Dilemma" are annual surveys conducted by the 600,000-plus members of the National Federation of Independent Business (NFIB). In 1992, the NFIB survey revealed that regulation stepped ahead of issues such as taxes, personnel, and credit as the chief concern of small business owners (Richman, 1992). John Gray, an economist with the NFIB, explained the results to mean that small business owners were becoming particularly disenchanted with regulations (including those in the environmental area). He stated that small business owners are increasingly taking the attitude that they cannot comprehend - let alone comply with - all the regulations they face, and thus, they are increasingly saying, "Catch me if you can" (quoted in Richman, 1992, p. 94). What to do about "Bob's Dilemma?" This will be the subject of the concluding discussion of this article.

DISCUSSION

Can one be against clean air, clean water, or saving the red-cockaded woodpecker? Recently, a *Harvard Business Review* article by Walley and Whitehead (1994) questioned whether being environmentally responsible was *always* in business' best interests. Walley and Whitehead (1994) themselves compared their being against wholesale environmentalism " to

arguing against motherhood and apple pie'' (p. 46). Indeed, their article ignited a firestorm of opinions and counter-opinions (Clarke, Stavins, Greeno, Bavaria, Cairncross, Esty, Smart, Piet, Wells, Gray, Fischer, and Schot, 1994).

Still, research is beginning to appear on the true cost of environmental regulation on American business - and particularly on small businesses (Jaffe, Peterson, Portney, and Stavins, 1995). Indeed there is a movement questioning the effectiveness of the traditional command and control based approach to environmental problems (as evidenced by the current regulatory scheme), where possible benefits always outweigh identifiable costs (Stavins, 1996). This has lead toward possible regulatory reforms involving market-based approaches to pollution and other environmental concerns (Stavins, 1995). Already, such market-based approaches can be found in the tradeable permits program enacted with the 1990 Amendments to the Clean Air Act (Dennis, 1993), and, on a smaller scale, to pollution control efforts in Los Angeles (Foster and Hahn, 1995).

While this larger debate over environmental regulation may ensue for years to come, the real-time issues for small business owners and managers continue. What should businesses do to cope? For small businesses - unlike their larger counterparts - the answers are not so simple. In fact, the answers depend upon quite a number of variables, including (but by no means limited to): the nature of the business involved; the location of the business; the number of employees; the financial resources of the company, and; the likely environmental implications of their operations. Unfortunately, a company of two people with \$80,000 in sales - let alone a company of two-hundred - each cannot devote the time and resources to assessing their environmental compliance that a company with twenty thousand employees with sales in the billions. Thus, each company's reaction to their particular version of ''Bob's Dilemma'' will be individualized rather than standardized.

In this case, there is no easy, ten-step plan for small businesses to follow regarding environmental concerns. Yet, it is clearly no longer possible for small business owners to avoid environmental liability through organizational entities or through ignorance (Zimmerman, 1992). Clearly, they must assess their own situation, their own capabilities, and their own competitive situation. In the end, entrepreneurs - a lot known for their tolerance of ambiguity and risk - must balance their ability to comply with the environmental laws with the knowledge that they likely, in all honesty, cannot. Clearly however, small business owners and managers must attempt to educate themselves and their employees regarding environmental issues, compliance requirements, and the potential consequences for environmental missteps. Small businesses should seek out help from federal, state and local agencies, as well as trade associations and industry groups for such information.

Additionally, there are several ways that the impact of federal environmental legislation on small businesses can be minimized. First, Congress may wish to revisit the definitional issue of who is subject to environmental laws. Through reexamining the definitions of both what is a "person" and what is an "organization", Congress might carve out either a wholesale or piece-meal "small business exemption" to either all or part of the environmental regulatory framework. Whether this would be politically viable or even environmentally astute could be the subject of a protracted national debate. However, incorporating into environmental legislation language such as that included in Title VII related employment legislation (which, in most cases, exempts employers of less than fifteen employees) could greatly ease the regulatory burden on the smallest of firms. Congress may also wish to reconsider the wider issue of corporate law in regards to the veil of corporate protection - perhaps limiting the liability and culpability of individual some corporate officers and managers.

Finally, agencies charged with enforcing environmental statues - most principally the EPA, but also the Departments of Interior and Commerce, might be charged with playing more of an informational role in environmental compliance. Perhaps through a consultative process, rather than command and control regulation, even the smallest of businesses could be aided in preventing and/or solving actual or potential environmental problems. If the goal of environmental regulation is to indeed <u>reduce</u> pollution and other environmental problems, then the ability to call upon a government agency for help regarding "a barrel of ______" or "a leaking ______" may be the best role for government - regardless of the type or scope of regulation - or even the potential penalties for avoidance or evasion of the law. After all, who could be against clean air or clean water (other than an economist!).

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PROTECTION IN BUYING AN ONGOING BUSINESS SO YOU WANT TO BE YOUR OWN BOSS?

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ABSTRACT

Being one's own boss is a dream that swirls through the heads of most people in the marketplace. A country-western song expressed it in a more down-to-earth fashion when it said "Take this job and shove it." The American Dream of success suggests that it is preferable to be a boss than an employee. One of the ways to realize this dream is to buy an ongoing business as opposed to starting a new business from the ground up.

The purpose of this paper is to explore two important areas of buying an ongoing business that have caused the marketplace and the courts many problems and much litigation, i.e., the "No-competition clause" and the use of the protection afforded by the "Bulk Sales" provisions of the Uniform Commercial Code.

THE NO-COMPETITION CLAUSE

Typically, "no-competition clause" statutes prohibit any contract or agreement which restrains anyone from exercising a lawful profession, trade, or business of any kind unless there is a strict compliance with that statute (1). The statutes generally hold that any person, (including a corporation,) who sells his business may agree with the buyer that the seller will refrain from carrying on or engaging in a business similar to the business being sold or from soliciting customers of the business being sold within a specified county or counties, or city or cities, or any parts thereof, so long as the buyer carries on a like-business. Such agreements have strict limitations as to the time such an agreement is effective, usually no more than two years (2).

Most states have consistently had a strong policy against no-competition clauses unless they strictly meet the requirements as set down by the statutes and the courts (3). The restrictive clauses must be reasonable and cannot violate that states statutes or public policy (4) and any non-compliance with the statutes is presumed to be a violation of the Sherman Anti-trust laws (5). Frequently, however, non-competition agreements are used in connection with interest thought to require protection, such as the sale of a business (6), a lease (7), a partnership (8), or a contract of employment (9). The reason behind this strict policy concerning non-competition clauses was summarized by the court in the case of National Motor Club of Louisiana, Inc. v. Conque, in which the court stated:

"Their essential basis is the right of individual freedom and of individuals to better themselves in our free-enterprise society, where liberty of the individual is guaranteed.

A strong public policy reasons likewise for holding unfavorable an agreement exacted by an employer of an employee not to compete after the latter leaves his employment, is the disparity in bargaining power, under which an employee, fearful of loosing his means of livelihood, cannot readily refuse to sign an agreement which, if enforceable, amounts to his contracting away his liberty to earn his livelihood in the field of his experience except by continuing in the employment of his employer" (10).

This reasoning has also been applied to the sale of a business (11), partnership dissolutions (12), and corporations (13).

The sale of an ongoing business in which there is an attempt to restrict or to restrain the seller from competing with the buyer has been the source of much litigation As stated above, the statutes allow a seller of his/her business to agree with the buyer that the seller will refrain from carrying on or engaging in the same or similar business that is being sold (14). They also prohibit the seller from soliciting customers of the business being sold (15). This restraint or prohibition must be within a specific area and usually cannot exceed a period of two years from the date of the sale (16). But the courts have gone further in the application of these statutes when it comes to selling one's entire business.

For instance, what if the seller of the business remains with the business as an employee and at a later date decides to go into the same business for himself? Can the buyer enforce the no competition agreement against the seller under these circumstances? The courts have consistently upheld such agreements (17).

Another situation involves the sale of an ongoing business where the seller does not remain as an employee of the buyer, but receives some form of compensation not to compete. The seller then tries to engage in the same or similar business. The courts, again, have upheld the prohibition not to compete as long as the prohibition complies with the geographical and time limitations as set down in the statutes (18).

No-competition statutes also cover the situation where there is an existing partnership which contains a no competition agreement between the partners should the partnership dissolve or should one of the partners leave for whatever reason. In addition to the statutory requirements, the courts make pertinent inquiries into each case to determine whether all partners are equally bound to the agreement, whether the terms are fair to each party in all respects, the amount of control over an individual, if the person is subject to the wishes of the controlling majority, the circumstances under which the contract was executed, and the effect on the individual's right to engage freely in his occupation after the partnership association is terminated. If the court finds, after considering these factors, along with the statutory requirements, that the agreement applies equally to all the partners and is fair, then the agreement will be upheld (20).

An area that has changed drastically in recent years is that of employer-employee agreements. In the past, in order for an employer to enforce a no-competition agreement with one of his employees that employer had to show that he incurred or expended substantial expense in training the employee or in the advertising of his business (21). If the employer failed to do so, then the employee had an absolute right to enter into the employment of

another or start his own similar business (22). This requirement has been statutorily replaced in most states (23). States now permit no-competition agreements between an employer and an employee as long as there has been a strict compliance with the statutory scheme of geographical and time limitations. It has been held that public policy requires that covenantnot-to-compete-agreements must be strictly construed in the employees favor (24). Accordingly, a no-competition agreement that contained no-territorial limitation whatever was found to be null and void (25). Likewise, an agreement which purported to prohibit the employee from competing against the employer "anywhere within the continental United States" was found to be unenforceable as written since it failed to specify the exact geographical limits (26).

Of equal importance in buying an ongoing concern are the provisions as set out in the Uniform Commercial Code, Article 6, commonly known as the "Bulk Sales Act" (27). The purpose of the "Bulk Sales Act" is to prevent the perpetration of fraud on creditors of the vendor and at the same time grant a means of protection to the buyer from unknown and unforeseen creditors (28). The Act is further intended to prevent small, impecunious merchants from selling their only assets, their inventories, overnight and disappearing with the proceeds (29).

Article 6 of the UCC states that a "bulk sale" is any transfer in bulk and not in the ordinary course of the seller's business of a "major" part of the materials, supplies, merchandise or other inventory of the business that is subject to the Act (30). Some states require that the merchandise, supplies, etc. be sold in globo (31) or at least a whole of a stock of merchandise be sold (32) while others only require that one-half of the inventory be transferred (33). UCC article 6-103 exempts certain transfers from the Act and the various states have exempted others by statute or by case law (34). An example of businesses that have been exempted from the Act have been private schools (35), night clubs (36), savings and loan associations (37) and a ready-mix concrete business (38).

Failure to comply with the provisions of the Act renders the transfer void as to the creditors of the seller and the creditors can pursue a cause of action against the purchaser for the debt owed to the extent of the total value of the property sold in "bulk" (39). Compliance with the Act is simple and is highly recommended. Prior to the sale (ten to twelve days) the seller must provide the buyer with a complete list of his creditors, their addresses, and the amount owed to that creditor or to become due, along with a full and detailed inventory showing the quantity and the cost of each article to be included in the sale. The list of creditors must be in a sworn affidavit and based on such a list the buyer must send a certified letter to each creditor notifying them of the time of the transfer of the business and a statement of the amount owed to that creditor and all other details surrounding the sale (40). Some states require that the notice to the creditors be recorded with the clerk of court in the county where the sale is to take place (41) and other states require that it be advertised in the local legal journal (42). As stated, failure to follow this simple process renders the sale void as to the creditors and subjects the buyer to additional and unnecessary expense. Many buyers refuse to go through the "Bulk Sales Act" because it takes a little longer to complete a sale and they are afraid that the seller will transfer his business to another buyer. After the sale, when it is

too late, the buyer wishes that he had let another unsuspecting purchaser take over the business.

No-competition clauses and compliance with the "Bulk Sales Act" are two excellent ways to protect yourself when you are buying out an ongoing concern. If a seller refuses to consider either of these items then a smart buyer should look elsewhere.

ENDNOTES

- 1. LSA R.S. 23:921 et.seq. (1992)
- 2. LSA R.S. 23:921(B)
- 3. Neeb-Kearney and Company, Inc. v Rellstab, 593 So.2d 741, (4th. Cir. 1992); Orkin Company v Foti, 302 So.2d 593 (La. 1974); Matter v Standard Coffee Service Company, Inc., 499 So.2d 1314 (La., 4th. Cir 1986);
- 4. Professional Investigations and Consulting Agency, Inc. d/b/a PICA, Corp. v Kingsland, et. al., d/b/a Owens Enterprises, 591 N.E.2d. 1265, 69 Ohio App. 3d. Cir. 753; Grant v Corotek, Inc., 737 F.2d 410; Business Intelligence Service, Inc. v Cadillac Overall Supply Co., 396 Mich. 379, 240 N.W. 710; and Janice Doty Unlimited, Inc. v Stockier, 684 F.Supp. 73;
- 5. Sherman Anti-trust Act, 15 USC Secs 1-7, (1890)
- 6. Tri-Continental Fin. Corp. v Tropical Marine Enterprises, 164 F. Supp.1 (S.D., Fla. 1958), Hirsh v Miller, 249 La. 498, 187 So.2d 709 (1966);
- 7. Goldberg v Tri-State Theater Corp., 126 F.2d28 (8th. Cir. 1942);
- 8. McCray v Blackburn, 236 So.2d 859, (La. App. 3d. Cir. 1970);
- 9. Aetna Fin. Co. v Adams, 170 So.2d 740, (La. App. 1st. Cir. 1969), cert denied 247 La. 489, 172 So.2d 294 (1965);
- 10. National Motor Club of Louisiana, Inc. v Conque, La. App. 1965. 173 So.2d 238, cert denied 247 La. 875, 175 So.2d 110; "Agreements Not to Compete". 33 La. L. Rev. 94, (1966);
- 11. Hirsh v Miller, Supra, Marshall Brown Insurance Agency, Inc. v Toledano, 292 So.2d 266 (4th. Cir. 1974);
- 12. Winston v Bourgeois, Bennett, Thokey and Hickey, 492 So.2d 936 (4th. Cir. 1983); Hawthorn, Waymouth & Carroll v Johnson, 611 So2d 645 (1st. Cir. 1992);
- 13. Target Rental Towel, Inc. v Byrd, 341 So.2d 600 (2d. Cir. 1977);
- 14. LSA. 23:291 (A);
- 15. Id.;
- 16. Gold and Suckle, Inc v Suckle, et. al., 335 So.2d 713 (La. App. 2d Cir. 1976). Target Rental Towel, Inc v Byrd, Supra;
- 17. Hirsh v Miller, Supra;
- 19. LSA. 23:921;
- 20. Winston v Bourgeois, Bennett, Thokey and Hickey, CPA'S, Supra;
- 21. National Oil Service of Louisiana, Inc. v Brown, 381 So.2d 1269, 9 La. App. 1980);
- 22. Orkin Exterminating Co. v Foti, Supra;

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- 23. LSA. 23:291; Water Processing Technologies, Inc., d/b/a Clean Water Utilities v Ridgeway, 618 So.2d 583 (4th. Cir. 1993);
- 24. Daiquiri's III on Bourbon, Ltd. v Wandfluh, 608 So.2d 222, (La. App. 5th. Cir. 1992), writ denied 610 So.2d 801 (La. App. 2d. Cir.. 1993); Comet v Lawrence, 600 So. 2d 85 (La. App. 2d. Cir. 1992), writ denied 604 So. 2d 1002 (La. App. 1992);
- 25. LSA. R.S. 23:291; Daiquiri's III on Bourbon, Ltd. v Wandfluh, Supra;
- 26. Comet Industries, Inc. v Lawrence, Supra;
- 27. UCC Art. 6;
- 28. Chelsea Sales Corp. v A. Jacobs., App. 1040, 193 So. 402; M.L. Bath Co. v Booth -McLelland Chevrolet Co., App. 1932, 142 So. 353;
- 29. UARCO,Inc. v Peoples Bank and Trust Co. of St. Bernard , D.C. 1976, 414 F.Supp. 1219, Aff. 545 F.Supp. 1297;
- 30. UCC Art-102 (1);
- 31. American Marine Corp. v Jones, D.C., 280 F.Supp. 419, Aff. 414 F.2d 730;
- 32. LSA. 9:261 (A);
- 33. Nicholas Monastra v Konica Business Machines Corp. et. al., 43 Cal. App. 4th. 1996 Cal. App., Cal. U. Com. Code Ses 6102 Subd (3); 6103;
- 34. UCC Art. 6-103;
- 35. Baton Rouge Bank & Trust Co. v Coleman, App. !st. Cir. 1988, 535 So.2d 323;
- 36. LaBorde v W.W.II, Inc., App. 1st. Cir. 1987, 509 So.2d 816;
- 37. Jim Durio Florist , Inc v St. Landry Loan Co., App. 3d. Cir. 1986, 484 So.2d 228;
- 38. Lewis Mach & Welding Services, Inc. v Amite Ready Mix Co., App. 1968, 158 So.2d 869;
- 39. Elliot Bros., Inc. v Rozas, App. 1963, 154 So.2d 591;
- 40. UCC Art. 6-104, 107; La. R.S. 9:2962;
- 41. Cal. U. Com. Code, Secs. 6104, 6105;
- 42. La. R.S. 9:2962.

ELECTRONIC COUP: SMALL BUSINESS OWNER BEWARE; IT COULD HAPPEN TO YOU

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ABSTRACT

Some of the employees of a small retail firm apparently locked the owner out of the company's computer system in order to force him to relinquish control of the business. Only through a combination of good luck and hard work was the owner able to overcome the crisis. The episode demonstrates the importance of computer security to small businesses and offers several lessons for their owners.

INTRODUCTION

This paper is based on a series of events involving a small business where the use of the company's computer system became a major factor. The facts are disguised and simplified, both to protect the identities of the participants and to focus on the very important questions of computer security which the case raises. The paper is intended solely for educational purposes to illustrate what might happen to an inadequately prepared business owner and not as an exact record of the facts of any particular case.

While we have chosen to focus our attention here only on the computer issues, this does not mean that these are the only, nor even the most important issues raised by the case. There are serious ethical issues involved as well. However, the security issues are by themselves so interesting that we will leave discussion of the other matters for another time and place. We also offer recommendations which might help save other small business operators from suffering similar fates.

There is an enormous literature dealing with computer security. Most of it addresses the needs of large organizations (e.g., Russell & Gangemi, 1991; Denning, 1990). The popular press seems beset with the problem (e.g., Adams, 1996). The wide interest in the subject is demonstrated by such successful motion pictures as *War Games* and *Sneakers*, but these deal with larger organizations. Is this a real problem for small business owners? Little is known about the precautions taken by small business owners (Pendegraft, Morris and Savage, 1987). The following case demonstrates that small businesses do need to worry about computer security. We will describe the events of the case and then offer a short discussion of preventive measures small business owners might take to protect themselves from a similar attack.

THE CASE

Outdoor Sports Equipment (OSE) is a small retailer of recreational products. The company is organized as a closely held corporation with the founder and president, whom we shall call Fred Field, owns a controlling interest of the common shares. The general manager, whom we shall call George Grover was responsible for the day to day operations of the retail operation including the computer system. Field, in anticipation of his own retirement, had recently selected Grover as his heir apparent and had arranged for him to acquire a substantial stock holding in the corporation.

The retail operation employed approximately 20 people responsible for quality control, warehousing, telemarketing, custom fabricating, and packing and mailing of orders. The company used a PC-LAN (Local area network) to handle order processing and inventory management as well as routine accounting. The LAN was also used to prepare catalogs and the mailing list. The LAN and all computer technology was under the direct control of the systems manager, whom we shall call Harry Halsted, who reported directly to Grover. Halsted's responsibilities included day to day operation of the system (security, backup, maintenance, etc.) as well as development of software for specific needs.

The company had recently begun manufacturing a new line of products that required different manufacturing facilities. The manufacturing operation, was proving to be more difficult than anticipated, and was consequently reducing the company's profits. Since the company used a profit sharing plan as part of its compensation package, the weak performance of the foreign manufacturing operation began to cause some dissension among the employees of the retail operation.

Grover asked to be appointed President with authority over all operations. When Field refused, Grover met with potential backers to discuss purchasing some of the company's assets, disseminate negative information about the business to the workforce. Not, surprisingly, the relationship between the Field and Grover deteriorated.

The critical events of the crisis are listed in Table 1. The crisis began on a Friday afternoon when employees presented Field with a letter signed by most of them demanding that Grover be appointed President. In addition, Field spoke with a bank officer who reported that Grover had told the bank about the company's problems. He told Field that the company's line of credit was in jeopardy. Field decided to dismiss Grover from his position as general manager. However, since he was leaving on a business trip that evening, he did nothing till his return on Monday.

Monday evening several of the employees met at Grover's house. While there is no formal record of the meeting, he allegedly announced that he intended to buy the business. There is no known record of what else was discussed.

Tuesday morning Field dismissed Grover. Before leaving for the day Halsted, as was his common practice, copied several data files to floppy diskettes. That evening the employees met again at Grover's house.

When Field arrived at the office Wednesday morning he found only two employees. In short order the others called in sick. In addition, Field found that he was unable to use the

computer system. Computer applications which previously did not require a password, now did. Other passwords had apparently been changed. When Field tried to log on using his supervisor account, he found that the password for that account had been changed as well. Field called Halsted demanding the passwords. Halsted allegedly refused saying that he could give them "only to … [his] supervisor." When Field identified himself as the President and repeated the demand, Halsted hung up the phone. A similar demand made of Grover was also met with refusal.

Thus, Field found that he was unable to access any of the data essential for the continued operations of his firm: accounting, personnel, inventory, customer orders, mailing lists, etc. He hired a computer expert who spent several days hacking into the system and was eventually able to recover most of the data and reinstate the operations and applications systems, but not without having to suspend operations for nearly a week.

Shortly thereafter, Field received an offer to buy the business which valued company assets with amazing accuracy. Within days of the rejection of this offer, Grover, in partnership with his financial backers, announced the creation of a new firm competing directly again OSE. The new firm hired most of the former workers of OSE and quickly arranged quarters.

The new firm was able to immediately obtain supplies from many of the same vendors used by OSE. They contacted a number of current and potential customers and supplied them with their new price list. They quickly published a price list, with prices just below those in OSE's new, unpublished catalog. How could they have gotten a mailing list so quickly? Could they have copies of OSE's new price list, customer mailing lists, and vendor lists? Those and other issues were raised in a lawsuit that has been settled.

Table 1: List of Critical Events					
Prior week	Grover conversation with bank officer				
Friday	Employee letter delivered to Field				
	Field receives message from bank				
	6 PM: Field phone conversation with bank				
Saturday	Monday: Field on business trip				
Monday	PM: Employee meeting at Grover's house				
Tuesday	AM: Field/Grover confrontation				
	PM: Second employee meeting				
Wednesday	computer lockout at OSE sick-out				
	Halsted and Grover refuse passwords				
Wednesday	Friday: Consultant cracks the system				
First Month	OSE hires new people				
	Field receives offer to buy OSE				
The next several months	Litigation				

The lawsuit took many months and considerable expense both in money and in time to resolve. Since we are not privy to the settlement, we can comment neither on its details nor

on the decision process. Suffice it to say that OSE is still in business under Field's ownership while the competing firm ceased operations after several months. The focus of this paper, however, is on the lessons which might be learned regarding potential threats to other businesses. Grover and Halsted *could* have taken copies of these data files, and owners of similarly situated businesses need to be concerned about how to protect themselves against similar threats.

DISCUSSION

Unfortunately, while Field's experience may be unique, his general circumstances are not. A 1995 Ernst and Young survey of computer security (Panettieri 1995) estimated that a firm has a 50-50 chance of losing information during the next few years. The survey also noted that disgruntled employees are a major computer security problem. Chabrow (1996) suggests connecting a computer network to the outside opens it to many forms of computer theft or database intrusion.

The principal lesson from this event is that all small businesses need to deal with computer security. The standard approach is: 1) conduct a treat analysis to identify appropriate steps and, 2) plan and implement measures to counteract the threats. The next section offers a simple threat model to guide the analysis and then discusses the general problem of security planning and identifies several measures which would have been useful and appropriate in this situation.

LESSONS

Table 2 summarizes the threat analysis problem. Threats may be characterized by their source and the losses. The loss is the bad thing which happens if the threat materializes. The columns of the table identify the possible losses. In general three bad things can happen:

The system itself may be made unavailable. This happened to Field when he could not log on to his LAN.

Privacy may be compromised. This is not limited to revealing embarrassing information about a third party. In Field's case, proprietary data may have been stolen and revealed to a competing firm.

Data integrity may be compromised. This is what happens in embezzlement: someone steals cash or an item and then changes the accounting to hide the theft. The data in the database in now wrong: its integrity has been destroyed. So far as we know, this did not happen to OSE.

The rows in the table identify the source of the threat. These also are three: human, system, environment. Environmental threats include problems totally outside of the control of the system manager. Power fluctuations and fire are environmental threats. These are hard

to prevent, but managers can take precautions like using a surge protector or installing appropriate fire suppression systems. System problems include faulty hardware and software. The manager has some control here. For example, protecting computers from dirt and water. The final source of hazard is people. In general these can be deliberate or accidental. For example, theft is a deliberate act, accidentally erasing a file because of inattention would be accidental. All of the problems OSE faced were the result of deliberate human threats.

Table 2: Computer Security Model					
Source	Loss of Privacy	Loss of Service	Loss of Data Integrity		
Human	Espionage	Sabotage	Embezzlement		
System		Hardware failure	Disk failure		
Environment		Flood, fire	Power surge		

The second phase is to develop a plan to deal with the hazards identified in the first phase. The plan should consider three responses. First is prevention: What can I do to prevent the hazard. Using passwords helps to prevent unauthorized use. Second is mitigation: If a hazard occurs, what can I do to reduce the damage. Fire extinguishers do not prevent fires, but they can help reduce the damage. Finally, recovery: What can I do now to make it easier to get things going again. Backing up software is the essential recovery activity. The question for small business owners is then: What can I do to guard against such threats? While it is dangerous to generalize from a single case, we believe that there are several lessons which can be learned from this one. Note that most of the suggestions fall under prevention.

Allow no key employees

The owner made a fundamental error in allowing his system manager to have such complete control over his computing system. This leads immediately to more specific recommendations, listed below.

Be your own security manager

For any computing system with many users, it is necessary to have a security officer to control user IDs and data access. In large companies, these responsibilities are shared by several people with titles like Database Administrator, System Manager, System Security Officer. The idea is that collusion will be necessary to permit someone to have unauthorized access.

A typical small business is too small to allow for such responsibility splitting. The only remaining alternative is for the owner to perform the task himself. If Field had assigned passwords rather than letting Halsted do it, then he, not Halsted, would have been the custodian of the passwords. Then his computer problem would have never occurred.

Observe good password discipline

Most modern database systems provide for various levels of security protection like passwords, access limitation, and data encryption. These features all come at a cost: they slow down operations slightly, but the potential benefits are enormous. Use of these features will make it much harder for anyone to copy (i.e., steal) or change your data without your permission. Change your password regularly, and do not use an easily guessed password (e.g., dog's name, birthdate, etc.).

Audit your system

Be aware of how your computers are being used. Who is using your machines and what are they doing? Use your LAN manager to create a log of all activity. This will permit you to monitor exactly what is happening. Be sure that the log is locked up where only you have access to it.

Follow good backup procedures

Again this is an essential part of any disaster recovery plan. If the owner had backup copies of all his data *and* his operating system and applications programs, he would have been able to recover much more quickly. An additional precaution is to keep backup copies at a location away from the business. Out of town is even better. That way a fire will not destroy the computer *and* the backup data.

Develop a disaster recovery plan

What would you do if your business computers failed? What would you do if you had a fire or flood and your disk drives and paper files were destroyed? What would you do if your employees attempted to lock you out of your computer? Time spent worrying about these matters now may save you hundreds of hours later, and may even mean the difference between your business surviving a disaster or failing.

To develop a disaster plan, one considers the types of things that might happen, and then makes plans to deal with them. Typical issues include development of a backup schedule, providing for alternative computer hardware, providing for an alternative site for operations, and the like. This seems like a lot of work, but there are guides available (for example, Toigo 1989) which can help speed up the process.

Contract with an Emergency Response Team

As a recovery measure, many large firms are forming their own "SWAT" teams or contracting with firms like IBM to provide emergency response teams (ERT) to deal with computer disasters (Violino 1996). Small businesses may be able to contract with outside vendors who provide ERT support to, for example, deal with a virus infection which locks up a computer system (Chabrow 1996). Field was fortunate to know someone who could perform this task for him.

One final suggestion

We now depart slightly from our focus on computer issues and suggest that owners be aware of what is going on in their business. Grover had apparently been fomenting dissension for some time without the owner's knowledge aware of the problem. If Field had been aware of the concerns of his employees, this crisis might have been prevented.

CONCLUSION

We have presented the essential facts of a startling series of events. We have several observations. First, poor computer security can threaten the survival of all businesses, even small ones. These threats range from simple loss of data to loss of control of the information system (thus terminating business activity). Second, all businesses, even small ones, can guard against these hazards by means of several common sense administrative steps, careful attention to hardware configurations, and maintenance of a good grasp on potential labor problems.

Finally, it is clear to us the Field was very lucky: he was able to find a computer expert to help him recover his computer system; he had family and friends who helped him through the crisis; and the judge did not buy the argument regarding the Foreign operation raised by Grover. Others might not be so lucky.

We also offered some suggestions for small business operators to protect themselves against similar attack. We realize that our recommendations require additional effort from an

already very busy group, but the bottom line is that only the owner of a small business can protect it from such problems. Our hope is that we may help prevent similar occurrences.

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CULTURE AND COMMERCE: A PROFITABLE CO-EXISTENCE

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ABSTRACT

Individual artists and cultural organizations and businesses have long been an integral and vibrant part of the Charleston, SC region. In its many forms, art plays an invaluable role, providing a way to discover and learn, beautifying the community and helping to encourage economic development by enhancing the quality of life.

This study examines the local economic impact of the arts industry by examining the impact of individual entrepreneurial artists, the impact of arts organizations, and the combined impact of individuals and organizations as a unit, accounting for nearly 1,000 jobs and \$23.7 million of industry output.

INTRODUCTION

The visual and performing arts have long been recognized as playing an important cultural role for a city. While the intangible effects of national recognition plus the tourism draw of the arts cannot be measured, estimates can be made of the direct, indirect and induced effect of the monies spent locally by individual arts and arts organizations. The economic impact on the local economy is based on expenditures made locally and retained locally which, in turn, create additional indirect and induced economic impacts. The purpose of the study, conducted during a twelve month period from June 1994 through June 1995, is to quantifiably measure the economic impact of the arts and includes individual artists, non-profit arts and cultural organizations and arts-based businesses located in Berkeley, Charleston and Dorchester counties.

ARTS AND BUSINESS

Globally the art market is small, even at recent inflated prices with perhaps \$15 billion-\$20 billion of art sold each year. Few people participate in it directly, but the market is one of the last examples of almost unregulated laissez-faire capitalism, at a time when financial markets seem increasingly buried in by laws. Art catches people at that curious intersection of financial calculation and aesthetic passion that seems to reveal the underlying aspects of society. Before about 1978, art was generally perceived as a luxury, but when art began to be

perceived as a financial instrument, there was no limit on how much to spend. It was this uniting of two obsessions, collecting and speculating, that put an even greater upward spin on art than on most other asset prices (Stevenson, 1990).

Traditionally, dealers in contemporary art were a combination of agent and principal. They searched for young artists whom they thought would be the stars of their generation, then sponsored them and promoted their work. They were similar to the venture capitalists and Wall Street houses that underwrite young companies. Some, however, became a middleman and reseller by aggressively locating salable artworks, buying them from their owners, and reselling them to a growing network of collector clients, earning a commission of between 5% and 15% (Linden, 1990).

Increasingly, art is being viewed in the U. S. in terms of its monetary power. A 1983 study of the New York region estimated the total economic jobs and a gain of \$2 billion in personal income were created by the arts. When a major art exhibit is touring, money is spent on hotels, meals, transportation, retail goods, and memorabilia. For example, when the exhibit, "The Vatican Collections: The Papacy and Art," was shown at the Metropolitan Museum of Art (New York), attendees spent \$57 million on hotel accommodations, meals, entertainment, and transportation (Telzer, 1986).

Small cities, particularly, can benefit from the influx of funds. In addition, an economic impact can be felt in the rise in property values in the vicinity of a new art museum. Corporations see the arts as a means to enhance their image and gain name recognition. A question remains as to the responsibility of corporate sponsors to maintain the integrity and excellence of the arts. Business people know that a community that is well-rounded and well-equipped with a cultural infrastructure is a productive community - a community in which it is easier to do business than one not so provided (Edinborough, 1995). Several cities and states, using the percent for arts concept, allot a portion of the construction costs of new government capital projects, usually 1/2%-1%, to works of art (Reiss, 1991).

In future years, increased attention will be focused on the city as the major source of funding and marketing help for the arts as federal and state support continues to dwindle. It is happening already in many cities, as local government, spurred by an aggressive and involved arts community, has been meeting the challenge of hard times with special endowments, tax benefits, arts tourism programs, and other projects that draw the arts into city life as an equal partner. Agencies in Houston, Texas, and Seattle, Washington, illustrate just how effective a role local arts agencies can play in stimulating arts growth and development in a city. The Cultural Arts Council of Houston celebrated its 25th anniversary by accepting an estimated \$1.275 million increase in annual funding, while the Seattle Arts Commission has played a key role in Seattle's cultural life through its wild range of activities (Reiss, 1993).

CHARLESTON AND THE ARTS

The arts have long been an integral and vibrant part of the Charleston region. In its many forms, the arts play an invaluable role in the community, providing us a way to discover,

learn, beautify our community, as well as help encourage economic development. Annual events such as the internationally recognized Spoleto U.S.A. center on the arts and help to draw thousands of visitors to the regional annually.

The arts also contribute to the economy of the region, providing jobs, attracting visitors and generating dollars directly into the economy. However, the true impact of the arts in the Charleston economy has never been measured prior to this study. The Center for Business Research, Charleston Metro Chamber of Commerce, on behalf of the Trident Regional Arts and Cultural Planning Project, was asked to conduct a study of the economic impact of the arts on the Charleston region. The study was funded through a grant from Southern Bell.

The purpose of the study, conducted during a twelve month period from June 1994 through June 1995, was to measure the economic impact of the arts and includes individual artists, non-profit organizations and arts-based businesses located in the Berkeley, Charleston and Dorchester counties, which make up the Charleston Metropolitan Statistical Area (MSA).

The total tangible economic impact was estimated using economic impact multipliers which are part of the IMPLAN (MIG, Inc.) software program that formulates customized input-output models for long economies using:

*	county/state original data files and national structural matrices data
*	the U.S. industry by-product matrix (production of commodities by industry)

Individual and organizational members of the visual and performing arts community were surveyed by the Center for Business Research, Charleston Metro Chamber of Commerce.

Before work could begin on the development of a survey, a database of artists and organization had to be compiled. Until the study was undertaken, no single source existed for a comprehensive listing of members of the arts community in the region. The Center for Business Research, working with the Charleston Area Arts Council, developed a database of artists, non-profit organizations, and arts-based businesses to survey. Major sources used in compiling the database included the Arts Council, South Carolina Arts Council, local arts organizations within the region, Southern Bell *Yellow Pages*, and Metro Chamber of Commerce.

A working database of 518 individual artists, 70 non-profit organizations, and 98 artsbased businesses was developed. Once the database was completed, three different survey instruments were developed for each audience. The surveys, along with a cover letter explaining the purpose of the study and a return mail envelope were mailed to each audience in December 1994. Respondents were originally given two weeks to respond.

The first mailing provided a less than adequate sample of individual artists and nonprofit organizations. As a second step, individual artists were contacted by telephone in order to collect an adequate sample. In total, information was collected from 148 individual artists. A second mailing to non-profit organizations, along with an additional cover memo, was mailed in late January. Again a two-week response period was requested. While the second mailing provided an overall better response, organizations did not supply the necessary

financial information to allow estimation of economic impact. In fact, only four of the 70 organizations provided the requested information. In a final attempt to collect the needed information, copies of arts organizations grant applications were obtained and used as the basis for analysis. The data from the arts-based businesses were qualitative in nature, rather than quantitative, and therefore not incorporated into this study.

The extreme difficulty in collecting information needed for an adequate analysis of the arts industry resulted in a longer surveying process. More important, broad assumptions had to be made in order to estimate the overall economic impact of the arts industry in the region. The results are based on a sample of 171 or 29% of the individual artists, and non-profit organizations identified.

Local expenditures by individual artists and arts organizations fall into twelve major categories: supplies, publications, travel, insurance, rentals, marketing/promotions, productions, business associations, personnel/payroll, local taxes, other non-profits, and miscellaneous services. These local expenditures are detailed in Table 1.

Table 1: Total Expenditures by Individual Artists and Arts Organizations					
Categories		Individual Artists	Arts Organizations	Total	
Supplies	(172)	\$ 670,731	\$ 626,981	\$1,297,712	
Publications	(179)	259,000	-	259,000	
Travel	(440)	-	110,644	110,644	
Insurance	(459)	-	118,020	118,020	
Rentals	(462)	-	1,588,695	1,588,695	
Other	(468)	884,744	-	884,744	
Marketing/Promotions	(469)	331,520	389,053	720,573	
Production	(484)	1,036,000	-	1,036,000	
Other Non-Profits	(502)	-	355,250	355,250	
Business Associations	(503)	-	51,634	51,634	
Personnel/Payroll	(526)	1,502,200	4,755,100	6,257,300	
Taxes	(523)	93,240	-	93,240	
Total		4,777,435	7,995,377	12,772,812	

Utilizing the sample data, the following assumptions were used:

- 1. Median spending by the 23 reporting arts organizations was considered representative of the total population of 70 organizations.
- 2. The median income and expenditures of individual artists surveyed were considered representative of the total population of 518 individual artists.
- 3. Based on the nature of the expenditures, spending for personnel/payroll, rentals, and other non-profits were considered 100% local. For each of the remaining categories, 84.3% of the expenditures were assumed to represent local spending, based on a national survey by the National Assembly of Local Arts Agencies (1994). Only local expenditures are considered as impacting the local economy; therefore, the

remaining 15.7% (100-84.3) is considered "leakage" from the expenditure stream and not contributing to the local economy.

ECONOMIC IMPACT METHODOLOGY

The economic impact of local artists and arts organizations was assessed through the use of a statistical methodology called econometrics, using input-output analysis. Input-output analysis is based on a general theory of production developed by Wassily Leontief in the 1930's which recognizes the economic interdependencies of producing industries in the economy, i.e. the way individual producing industries are knitted together in the overall economy. Each producing industry in an economy, whether national, local or regional, not only produces goods and services but also purchases other goods and services for use in the production process.

An input-output analysis model uses highly simplified assumptions such as:

- * linear production equations
- * single homogeneous output generated from the same inputs for each producing industry.
- * the amount of each product consumed in each industry is dependent only on the level of output for that industry.

Despite its simplicity, the input-output model has been found to predict actual outcomes reasonably well, making it recognized as a firmly grounded theoretical model, useful for many purposes. The economic region modeled for this impact study consists of Berkeley, Dorchester, and Charleston counties. The model consists of the original twelve sectors of expenditures made by individual artists and arts organizations which in turn impact 200 sectors, representing the inter-industry relationships of industries not only producing goods and services, but also consuming goods and services for use in the production process. It is this industry interdependence that generates the "multiplier" effects of increases or decreases in one sector of economic activity impacting other sectors of the economy.

The arts industry at Charleston provides a stimulus to the regional economy in that it places added demands within the impacted area for goods and services consumed. The demand for these goods and services directly associated with the arts industry, such as business/office supplies, printing and publications, rentals, insurance, etc. provide the initial, or direct, stimulus to the economy. This direct effect is modeled as a change in final demand in the input-output model. Final demand changes are then translated into indirect and induced demands for goods that support the arts industry one or more steps removed (e.g. electricity used to heat/cool the rented facilities, increased demand from wholesale supply distributors to local retail outlets, etc).

Several steps are involved in determining changes in final demand due to spending associated with the arts industry. First, expenditures must be identified and quantified. This was accomplished through the survey analysis prepared by The Center for Business Research,

Charleston Metro Chamber of Commerce. Next, the expenditure totals must be distributed to the appropriate economic sectors, as defined by Standard Industrial Classification (SIC) codes. Two separate final demand vectors are calculated, then aggregated to drive the I-O model. One vector represents spending by individual artists and the other was calculated to represent spending by the arts organizations. These two vectors were combined to form a third view, that of the effects of the combined spending of both individuals and arts organizations, to represent the total arts industry.

For statistical integrity, certain adjustments were made to the original data. For example, a regional coefficient representing the part-time and full-time jobs per million dollars of Total Industry Output for the Charleston MSA was applied to determine payroll values. The coefficient for the Charleston MSA is 132.0481. The regional coefficient is a standardized number that captures the enormous variances between the number and levels of compensation of the jobs created by the direct versus the indirect and induced effects. Accordingly, personal consumption expenditures associated with the jobs and their payrolls have been adjusted to reflect disposable income, i.e. income available for consumption.

	Individual Artists	Arts Organizations	Total
(455)	\$297,805	\$ 278,380	\$ 576,185
(179)	259,000	-	259,000
(440)	-	110,644	110,644
(459)	-	118,020	118,020
(462)	-	1,588,695	1,588,695
(468)	884,744	-	884,744
(469)	331,520	389,053	720,573
(484)	1,036,000	-	1,036,000
(502)	-	355,250	355,250
(503)	-	51,634	51,634
(526)	995,000	3,135,000	4,130,000
(522)	03 240		02 240
	 (455) (179) (440) (459) (462) (468) (469) (484) (502) (503) (526) (522) 	Individual Artists (455) \$297,805 (179) 259,000 (440) - (459) - (462) - (468) 884,744 (469) 331,520 (484) 1,036,000 (502) - (503) - (526) 995,000 (522) - (526) 925,000	Individual ArtistsArts Organizations (455) \$297,805\$278,380 (179) 259,000- (440) -110,644 (459) -118,020 (462) -1,588,695 (468) 884,744- (469) 331,520389,053 (484) 1,036,000- (502) -355,250 (503) -51,634 (526) 995,0003,135,000

In addition, local expenditures for goods not manufactured locally contribute only 44.4% (the retail margin) toward indirect and induced impacts. The remaining 55.6% is considered "leakage" from the local economy which goes back to the producing industry outside of the region The results of these adjustments are reflected in Table 2.

Finally, since the model database is in 1991 transaction dollars (the most recent multiplier set available at the time of the study), 1994-1995 expenditure data and their corresponding output should be adjusted for inflation, which measured a 4.4% increase between 1992 and 1994 (Federal Reserve Bank of St. Louis, 1995, p. 6).

ECONOMIC IMPACT FINDINGS

Table 3 shows the total economic impact of the arts industry on the Charleston Metropolitan Statistical Area. The initial direct expenditures of both individual artists and arts organizations of \$9,923,985 produced a total economic impact of approximately \$24 million in total industry output. Furthermore, it created an increase in employee compensation income of over \$15 million and 999 jobs.

Table	3: Total Econom	ic Impact of the A	Arts in the Charleston MSA 19	994-96
		1994-5 (Dollars i	in Millions)	
		Initial Impact	Total Economic Impact	Multiplier
Organizations:	Output	\$ 5.923	\$14.872	2.51
	Income	\$ 4.948	\$ 9.958	2.01
	Employment	470	668	1.42
Individual Artists:	Output	\$ 3.858	\$ 8.864	2.30
	Income	\$ 2.433	\$ 5.248	2.16
	Employment	221	331	1.49
Combined:	Output	\$ 9.781	\$ 23.740	2.43
	Income	\$ 7.381	\$ 15.209	2.06
	Employment	691	999	1.44

As Table 6 displays, the direct effects, i.e. direct change in output per dollar change in final demand, are \$9,781,300 in total industry output, \$7,381,200 in the sum of indirect changes to employee compensation income and property income, and 691 in jobs created. The indirect effects are \$1,217,000 and \$700,400 and 25, respectively, while the induced effects are \$12,741,700, \$7,127,000 and 283, respectively. Details of the effects of the sub-categories of individual artists and organizations separately can be found in Tables 4 and 5.

Table 4: Economic Impact of Expenditures of Individual Artists (\$MM)						
	Direct Effects	Indirect Effects	Induced Effects	Total Effects		
Total Industry Output	3.858	.791	4.216	8.865		
Empoyee Compensation Income	1.983	.207	1.360	3.550		
Property Income	.451	.250	.998	1.699		
Total PoW Income	2.434	.457	2.358	5.249		
Total Value Added	2.533	.478	2.742	5.753		
Employment (No. of Jobs)	221	16	94	331		

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Change in Population	411	29	174	614	

Total Industry Output: Indirect change in total industry output as a result of the user's impact. Employee Compensation Income: Indirect change to employee compensation as a result of the user's impact. Property Income: Indirect change to proprietor's and other property income as a result of the user's impact. Total PoW Income: Sum of indirect changes to Employee Compensation Income and Property Income. Total Value Added: Indirect change to Value Added (employee compensation, proprietor's income, and other type income and indirect business taxes) as a result of the user's impact. Employment: Indirect change in number of jobs as a result of the user's impact.

Change in Population: Indirect population change associated with indirect employment impact.

Table 5: Economic Impact of Expenditures of Arts Organizations (\$MM)							
	Direct Effects	Indirect Effects	Induced Effects	Total Effects			
Total Industry Output	5.924	.427	8.522	14.874			
Empoyee Compensation Income	3.712	.129	2.750	6.591			
Property Income	1.236	.114	2.017	3.367			
Total PoW Income	4.948	.244	4.766	9.958			
Total Value Added	5.213	.263	5.544	11.017			
Employment (No. of Jobs)	470	9	189	668			
Change in Population	873	17	352	1242			

Total Industry Output: Indirect change in total industry output as a result of the user's impact. Employee Compensation Income: Indirect change to employee compensation as a result of the user's impact. Property Income: Indirect change to proprietor's and other property income as a result of the user's impact. Total PoW Income: Sum of indirect changes to Employee Compensation Income and Property Income. Total Value Added: Indirect change to Value Added (employee compensation, proprietor's income, and other type income and indirect business taxes) as a result of the user's impact.

Employment: Indirect change in number of jobs as a result of the user's impact.

Change in Population: Indirect population change associated with indirect employment impact.

fable 6: Economic Impact of Expenditures by Individual Artists and Arts Organizations (\$MM)							
	Direct Effects	Indirect Effects	Induced Effects	Total Effects			
Total Industry Output	9.781	1.217	12.742	23.740			
Empoyee Compensation Income	5.694	.337	4.112	10.143			
Property Income	1.681	.364	3.015	4.060			
Total PoW Income	7.381	.700	7.127	15.208			

Total Value Added	7.746	.741	8.289	16.776	
Employment (No. of Jobs)	691	25	283	999	
Change in Population	1284	46	526	1856	

Total Industry Output: Indirect change in total industry output as a result of the user's impact. Employee Compensation Income: Indirect change to employee compensation as a result of the user's impact. Property Income: Indirect change to proprietor's and other property income as a result of the user's impact. Total PoW Income: Sum of indirect changes to Employee Compensation Income and Property Income. Total Value Added: Indirect change to Value Added (employee compensation, proprietor's income, and other type income and indirect business taxes) as a result of the user's impact.

Employment: Indirect change in number of jobs as a result of the user's impact.

Change in Population: Indirect population change associated with indirect employment impact.

CONCLUSION

Individual entrepreneurial artists and arts organizations in the Charleston Metropolitan Statistical Area spend \$12,773,000 annually in the local economy. These expenditures in turn have a multiplier effect that results in a total economic impact of \$23.7 million on industry output and \$15.2 million on income in the form of employee compensation. The employment impact is an increase of nearly 1,000 jobs, with a population impact of 1,856 persons. Not only do local individual artists and arts organizations impact the local economy through their direct expenditures, they also make sales to those residing outside of the area which bring in an estimated additional \$93,300 annually in sales tax revenue.

The enhancement of the South's natural and cultural assets, including the preservation of historic, cultural, and artistic resources, should be a top economic development priority. Arts and culture, including plays, paintings, pottery, and attractive landscapes, create significant economic benefits not limited to the direct provision of jobs. Arts activities can stimulate other sectors of the economy and help build a community's capacity for future economic development, even though direct spending by arts organizations is substantial in itself. In addition to full-time positions, arts organizations typically provide many part-time and seasonal employment opportunities. Tourism can also be enhanced through linkages with local artistic and cultural resources (Hoke, 1991).

In exposing and analyzing the peculiar problems posed by production and consumption of the arts, there are numerous nontrivial theoretical and empirical problems yet to be explored in this area that are susceptible to the powerful tools of positive and normative economic analysis (Throsby, 1994). Interest is likely to continue to arise particularly from existing fields of economic inquiry where applications to the arts and culture occur as a special case. An essential element in future work will be the provision of better data. While theoretical and empirical developments within the conventional paradigms of economics will doubtless continue, the arts and culture also challenge tradition-bound researchers to focus their eyes on a wider horizon.

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COMPARISONS OF SMALL BUSINESS OWNERS AND THEIR MANAGERS: PERSONALITY CONSTRUCTS AND COMPUTER USAGE

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ABSTRACT

To determine if a relationship existed between the personality construct work locus of control (WLOC), known to be a dominant predictor of behavior, and self-monitoring, a relatively new personality attribute, we conducted a telephone survey of 79 owners and managers of 44 companies. No relationships were found between these two personality attributes for owners and managers. Computer scores were assigned to each owner and manager based upon responses to survey questions, evaluating the extent to which each was using computer technology. The study investigated their computer scores and work locus of control (WLOC) to determine if a relationship existed for this pair-wise sample of owners and managers. In addition, selfmonitoring was examined with computer scores to determine if a relationship existed between these two variables for the pairs of owners and managers. When owners' scores on work locus of control (WLOC) and their attained computer scores were examined, a significant negative correlation was found. This finding correlates with previous research indicating that individuals found to be internals are more likely to introduce and utilize computer technology in their business than their external counterparts.

INTRODUCTION

If business owners and managers are to survive and remain competitive in the current knowledge era, they must be proficient in using simple common computer tools. On-going research conducted with small business owners continues to find them deficient in computer knowledge and skills. This finding correlates with earlier research (IBM..., 1992).

Even though computers have become easier to use with the introduction of graphical interfaces, the proliferation of on-line services, and much new user-friendly computer software, it is questionable that these new developments have had any effect on small business owners and their managers in expanding their use of computer technology for business operations. Has this profound change created a willingness of owners and managers to be more competitive and meet the demands placed on their business by cutting edge technological breakthroughs? Research supports prolific growth in computer software, computer resources, Web sites, and Internet use for business among mid-size to large companies. However, little research is available studying small businesses. Use of the information highway is expanding
and changing daily, leaving owners and managers who are not technologically proficient unable to grasp fully the need and value of sophisticated computer processes and on-line Internet services for their businesses. Is personality also an influential factor affecting business owners' and their managers' decision-making concerning the need to implement change or to continue in a status quo environment? What is the role of behavior flexibility or inflexibility? The study sought answers to the following questions:

- 1. Are owners and managers of small companies, who can readily adjust their behavior to changes taking place in the environment and see the environment responding to their behavior, using and integrating sophisticated computer technology in the workplace?
- 2. Is there an association between owners and managers in their perception of jobs and rewards (workrelated aspects), and their ability to alter their behavior in different circumstances with different people?

Since small business owners and their managers are highly involved in the direct operation of daily business and have set objectives related to expected outcomes, the paper examines whether an individual or outside forces govern rewards, and whether an individual can readily change his/her behavior based on the need created by a given situation. In addition, demographic variables are analyzed to determine differences among the population.

BACKGROUND

While the Locus of Control concept has been researched extensively, these studies most often used Rotter's, 1966, Internal-External general locus of control scale to survey various sample populations. Trexler (1978) substantiated the necessity to conduct research beyond general settings and to concentrate on industrial factions, particularly employee opinions and behavior with regard to Locus of Control. Spector's, 1988, Work Locus of Control (WLOC) scale correlates with Rotter's scale, but may predict work behavior, reinforcements, and outcomes more accurately. Locus of Control (LOC) is a personality construct used to understand, explain, and predict behavior in organizational settings (Rotter, 1966). People who perceive themselves as controlling their own lives and possessing control over what happens to them are termed internals; while individuals who believe outside forces, such as fate or luck, control their lives are deemed externals (Rotter, 1966). Phares (1968, 1976) concludes that internals decipher information better and use this knowledge more effectively in problemsolving situations than their external counterparts. In citing behavioral differences, he notes that internals are more inquisitive, thus more likely to keep abreast of new technological breakthroughs, as well as implementing changes along these lines in business operations. Findings indicate that entrepreneurs are most likely to be internal, exhibiting independence, taking initiative, and pursuing creativity in performing computer applications (Spector, 1982).

Accomplishing organizational objectives and successfully developing strategies requires arduous work on the part of entrepreneurs and their managers. With this in mind, one would predict that internals would work harder and perform better than their external counterparts

(Spector, 1982), and, therefore, attribute the successful attainment of outcomes, rewards, and reinforcements to their own behavior and actions. Thus expected outcomes should correlate with peoples' ability to change their behavior enabling them to operate their businesses more effectively and efficiently through the use of new computer technology. Spector (1982) associated difficulty of task, initiative, and independence with high-performing individuals, who were deemed to be internals. Spector (1982) reveals in his research that internals would most likely possess the needed skill levels to run their business using new computer technology. Findings indicate that internals possessing these high skill levels would see rewards and goal attainment forthcoming based on their actions.

Phares (1965), Strickland (1972), Rychman, Martens, Rodda, & Sherman (1972), O'brien (1983), and Spector (1988) conducted research finding locus of control relating to many organizational variables. Brockaus (1975), Durand and Shea (1974), and Shapero (1975) found a relationship between entrepreneurial behavior and locus of control indicating that internals possess more innovative dimensions than externals. Based on their findings, predictions are that individuals, both small business owners and their managers, who are termed internal are more likely to be researching business applications and new opportunities provided by the web, integrating and using e-mail in their day-to-day operations, investigating and developing web sites, and redesigning or developing new software using productivity development software tools more so than their external counterparts.

In order to undergo these vast changes and function in a sophisticated automated work environment, owners and their managers may need to be high self-monitors capable of changing their behavior to accommodate different individuals under different circumstances. Thus the automated workplace requires behavioral change and adaptability for companies to survive and succeed. According to Lau and Woodman (1995), internals are catalysts who relate change to success. If, however, implementing change would impact on the organization negatively, contributing to the firm's vulnerability, these individuals as internals and catalysts would be powerful enough to resist it. This may not be clearly understood as little research has been conducted with Locus of Control and implementing change in organizational settings. But, if internals evidence entrepreneurial-type behavior and illustrate the willingness to change, these differences and the Locus of Control variable should be linked.

Hypothesis 1:	Self-monitoring is correlated with computer scores for owners and their managers, as a group.
Hypothesis 2:	Locus of control is correlated with computer scores for owners and their managers, as a group.
Hypothesis 3:	Locus of control is correlated with self-monitoring for owners and their managers, as a group.
Hypothesis 4:	Self-monitoring is correlated with computer scores for owners alone.
Hypothesis 5:	Self-monitoring is correlated with computer scores for managers alone.
Hypothesis 6:	Locus of control is related to computer scores for owners alone.
Hypothesis 7:	Locus of control is related to computer scores for managers alone.

RESEARCH METHODS

A random sample of small businesses who hold membership in various Chambers of Commerce located in Southern Connecticut, employing 50 or fewer employees, were the sample population. Seventy-nine individuals from forty-four small businesses participated in the telephone questionnaire/survey. The sample population consisted two groups: The first group comprised owners, while the second group of participants consisted of managers employed by the small business owners. In addition to testing the hypotheses, demographic data was collected. Categories included age, ethnic background, academic achievement, gender, income, job experience, tenure in position, type of company, and number of employees. Data was collected for the two sample groups.

Computer scores for owners and managers on a scale of 0-5 were obtained. Questions centered on business computer usage, hardware, and software. More sophisticated questions pertained to the sample population's use and implementation of visual development productivity tools and their progression with Web sites and Internet use in the business operation.

The Work Locus of Control Scale (WLOC), a l6-item rating of work-related items, with a Likert-type scale, developed by Spector (1984) was used to obtain scores and assess locus of control for owners and managers. Response choices are agree-disagree with items divided in half between internal and external. The revised Self-Monitoring Scale, based on Lennox and Wolfe's instrument, a 13-item measure with a Likert-type scale, certainly always true to certainly always false, ascertained scores for owners and managers relative to their ability to adjust or change behavior patterns according to situational factors.

RESULTS

Table 1 presents numeric demographic data about the two groups, owners and managers, who participated in the study. Some people failed to respond to all questions, even though 79 took part in the research.

Table 1: Characteristics							
		Owner	S			Managers	
	Ν	Mean	Std.Dev	Ν	Mean	Std. Dev.	
Age	35	46.76	11.63	41	41.07	16.71	
Education	38	15.53	2.35	41	14.22	2.02	
Tenure	38	13.05	9.17	41	7.71	7.26	
Employees	38	18.97	11.03	41	17.37	16.77	

When examining differences with demographic characteristics, no significant differences between the sample groups were found (Table 1). The one apparent difference was that owners were in the companies longer than their managers. While most owners founded the company, a few owners worked their way up through the ranks of the company until they

made a decision to purchase it. The sample population was predominantly white, with only one black business owner participating.

There were significant gender differences. Males comprised 78.95% of the owners, leaving fewer than one-quarter females as owners. This is an interesting statistic since recent research indicates more women than ever are buying businesses. Female managers comprised 60.98% of the participants. This indicates that women are willing to work as managers in small businesses even though there is a major salary discrepancy. Of the owners, 47.37% fell into the \$75,000 or more salary category. The majority of managers' salaries were between \$20,000 and \$50,000; 60.98% of this group were women. This confirms that a glass ceiling continues to exist for women. While their skills are recognized in management level positions, salary levels do not compensate for the responsibility and authority mandated by these positions. Service companies comprised 75.61%, with the remainder in manufacturing.

The Spearman's Rank Correlation Coefficient was used to do pair-wise comparisons of owners and managers on the locus of control construct and on the self-monitoring personality attribute. When no relationships were found, the researchers tested the independent groups for relationships.

TESTS OF HYPOTHESES

The first hypothesis stated that the personality construct, self-monitoring, would be related to computer scores for the pair-wise sample, owners and managers. The variable selfmonitoring was not significantly related to computer scores for this sample population.

The second hypothesis proposed that work locus of control (WLOC) would be correlated with computer scores for the pair-wise sample, owners and managers. No significant correlation for the work locus of control (WLOC) variable and computer scores for these pairwise groups was found.

The third hypothesis stated that the two variables, work locus of control (WLOC) and self-monitoring, would be related for owners and their managers. These variables were not significantly related for the pair-wise population.

The fourth hypothesis stated that self-monitoring and computer scores would be related for owners. Scores ascertained on the self-monitoring scale for owners were not significantly related to their computer scores.

The fifth hypothesis stated that self-monitoring and computer scores would be related for managers. Scores obtained on the revised self-monitoring scale were not correlated with computer scores for managers.

The sixth hypothesis proposed that the variable locus of control would be related to computer scores for owners. Owners scores on the work locus of control scale (WLOC) were negatively correlated with their computer scores (coefficient = -0.4085, p = 0.015). These results illustrate that owners' computer scores might be affected by the owner's personality. The lower scores on the (WLOC) scale denote internality. Owners are in control of work-related aspects. This is related to the high scores achieved in computer rankings, indicating that owners termed internals are more likely to integrate new computer technology in their business operations.

The seventh hypothesis proposed that the variable work locus of control (WLOC) would be related to computer scores for managers. Managers scores on the (WLOC) scale indicating internality or externality had no relation to their computer scores.

Table 2: Correlation Matrix of Variables and Computer Scores				
Variable	Spearman's Rank Correlation Coef.	Ν	P-value	
Owner's Locus of Control vs Computer Score	-0.4085	35	0.015*	
Owner's Self-Monitoring vs Computer Score	0.2663	38	0.106	
Manager's Locus of Control vs Computer Score	-0.037	39	0.823	
Manger's Self-Monitoring vs Computer Score	0.0817	40	0.616	

CONCLUSIONS

Statistical analysis associating the (WLOC) scale with computer scores is not common. The only significant correlation found was between WLOC and computer scores for owners. Owners who are termed internals are individuals who would investigate new ways to automate their business and implement advanced technology into their everyday operation. Findings corroborate prior research indicating that owners who scored lower on the (WLOC) scale, described as internals, are individuals prone to be high-tech oriented. This substantiates earlier literature findings confirming that internals are expected to perform more efficiently than externals in automated tasks requiring complex information processing (Phares, 1976; Spector, 1982).

Owners termed internal would most likely research and utilize Web sites and Internet technology and investigate the cost-effectiveness and value-added to their business by integrating new updated software as a replacement of old, obsolete, band-aid driven software.

Neither positive nor negative relationships were found for managers on personality constructs (WLOC) and self-monitoring with computer scores. A manager's decision-making power is often limited and delegated by the owner who allocates funds and places time constraints on research activities conducted by the manager, particularly, with regard to investigating new hardware and software.

Self-monitoring and computer scores for owners did not show any significant correlation. The average owner was 47 years old. Computer courses were not commonly available to these owners either in high schools or at the universities. Therefore, this may explain the reluctance for some owners to use computer technology.

There was no significant correlation between self-monitoring and computer score and locus of control and computer score for owners and their managers. Locus of control and self-monitoring for owners and mangers also showed no correlation.

Only 20 individuals of the 79 participants reported using some degree of new computer technology, for example, connecting to on-line services for e-mail and browsing the Net. Only

eight companies out of 44 are actively involved in using Internet resources for marketing and advertising activities via a web site and home page. These eight companies were very responsive to the need to integrate computer technology and are using productivity tools, such as Visual Basic, to redesign old software or create new software. Only three individuals in the study possessed programming skills.

The current trend among small companies is to use industry based software, rather than hire programmers or consultants to customize software for them. Some small companies are making progress toward implementing new computer hardware and software such as net worked PC's under NT or Windows 95, but there are other companies who are confined to using only dumb terminals or limited to using word processing or spreadsheets. Although at least half of the companies surveyed reported a need to investigate on-line services and Internet resources, most are not actively engaged in this research due to misunderstandings of the cost involved with getting on-line.

Small business owners and their managers need to stay abreast of new computer technology and learn how these techniques can be integrated into their day-to-day operation simply and cost effectively. Many individuals in this sample population could not understand the phenomenal changes occurring in the computer industry and the impact these changes are having on how business is conducted today.

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DOES A TRADITIONAL BUSINESS EDUCATION PREPARE STUDENTS FOR A CAREER IN SMALL BUSINESS: A STUDY OF PERCEIVED DIFFERENCES

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ABSTRACT

The role of a College of Business is to prepare its students for an increasingly dynamic and diverse workplace by requiring courses in many disciplines, thus giving the graduate a wellrounded business education. Attaining this goal is of great importance to all concerned. Of particular concern is whether Colleges of Business are preparing students who will work for small employers (fewer than 100 employees) equally as well as those who will work for large employers (more than 100 employees). Is the traditional orientation toward corporate business education adequate for the many students who will either work for small employers or own their own businesses? The purpose of this study was to examine the perceived relative importance of several conceptual skills by those graduates working for small and large employers. In addition, the perceived helpfulness of several business core courses in the careers of graduates was compared in the two groups.

ENTREPRENEURIAL EDUCATION PROGRAMS

Entrepreneurship programs are appearing at many of the leading business schools in the nation. Nearly 400 business schools offer courses in entrepreneurship, with approximately seventy (70) schools offering concentrations in the area (Lord & Westfall, 1996). The top entrepreneurial education programs were listed in *Success* (Callan & Warshaw, 1994) and include schools such as Harvard, Northwestern and Cornell.

The National Entrepreneurship Education Consortium has identified five distinct stages of development in the entrepreneurship learning process. The stages are business basics, competency awareness, creative applications, start-up assistance, and growth issues. Each of these may be taught in separate courses or integrated into separate courses (Keying In, 1994). Many of the issues of importance in entrepreneurship education can be found in a traditional business core that emphasizes corporate education. However, several key components are missing. Laurence J. Pino, president of Open University whose major mission is entrepreneurial education, feels that entrepreneurism can be learned but not by what is taught in traditional business schools. He contends that a corporate business education stresses the conservation of a firm in the marketplace, while marketing and the creation of markets should be at the core of entrepreneurial education. The Open University also stresses life-long learning techniques essential to the entrepreneurial environment (Pietruchaa, 1996). But, in a business school where an entrepreneurial concentration is not available, to what extent are students prepared to work in a small business environment? This study examines this important issue.

RESEARCH METHODOLOGY

A survey was mailed to 1,472 May 1992 - December 1994 graduates from the College of Business of a southwestern regional university. The response rate was 21 percent (312 usable responses). A scale was used to measure the importance of certain conceptual skills to the career of the graduate. The basis of this scale was recommendations from the major accrediting body of Colleges of Business, the American Assembly of Collegiate Schools of Business (AACSB). In addition, graduates were asked to rate the usefulness of the business core subject areas in which courses are required at the university. Both used seven-point semantic differential scales anchored by "extremely" and "not at all."

Figure 1: Factor Analysis Results		
	Factor Loadings	Means
Problem-Solving and Communication		
Ability to Think Critically	.82276	6.320
Analyze Information to Solve Problems	.81647	6.3072
Develop Innovative Strategies to Solve Business Problems	.46502	5.7549
Effective Written Communication Skills	.45930	6.2190
Professional Oral Communication Skills	.45108	5.6373
Diversity and Flexibility		
Ability to work with people of different ethnic/racial backgrounds	.78524	5.2508
Ability to work with people of different genders	.78400	3.2772
Emphasis on Teamwork	.58651	5.7822
Preparation for Business Operations on an International Level	.41498	6.0495
Technology		
Preparation for Rapidly Changing Technological Environment	.85121	5.3889
Understanding of Computer Technology in Workplace	.83503	6.0621
Legal/political Issues		
Awareness of Legal and Regulatory Factors Facing Organization	.82856	5.1895
Awareness of Political Constraints under which Business Operates	.78881	5.4150
Ethics		
Identification of Ethical Issues in Business	.80707	5.7228
Ethical Decision-making Skills	.79223	5.2607

A factor analysis, with Varimax rotation, was conducted to examine the underlying dimensions of the scale designed to measure conceptual skills. The original scale used 16 items to more completely measure the importance of seven conceptual skills. Factors were retained with an eignenvalue of 1.0 or greater, and a .40 cutoff was employed for the factor loadings. Fifteen of the scale items loaded clearly on five factors. The original items, their means, and the factor on which they loaded are shown in Figure 1. These five factors accounted for 58.1 percent of the variance.

The factors were then used as dependent variables in a multivariate analysis of variance (MANOVA). The size of the respondent's employer served as the independent variable. The five factors and the group means are shown in Figure 2. A MANOVA was appropriate, rather than separate ANOVAs, in order to preserve the alpha level (Hair, Anderson, and Tatham 1987). The homogeneity of variance assumption was upheld in this analysis. The Box's M value was 25.45387, which shows equality of variance in the two groups at the .05 level of significance. Therefore, no adjustments were needed in the MANOVA.

Figure 2: Group Means for the Factors			
	Employees of Small Firms Employees of Large Firms		
	(< 100)	(> 100)	
Problem-Solving and Communication	6.00448	6.05325	
Diversity and Flexibility*	4.78545	5.31169	
Technology*	5.47761	5.91234	
Legal/Political Issues*	5.13433	5.45130	
Ethics	5.47761	5.49351	
* Significant at the .05 level			

The MANOVA resulted in an F-value of 4.93726 and a p-value of .000 (d.f.=5). This indicates that the means of the two groups do differ across the five factors. Univariate F-tests were conducted to assess whether the group means differed on each of the individual factors. The factors on which a significant difference exists between the two groups are denoted by an asterisk.

The second major purpose of this study was to examine the difference in perceived usefulness of business core courses in the two groups. Once again, a 7-point semantic differential was used with the anchors being "extremely useful" and "not at all useful." The eleven courses which all business majors must take served as the dependent variables, while size of the graduate's employer served as the independent variable. Figure 3 lists the core courses and the group means.

The MANOVA resulted in an F-value of 2.3994 and a p-value of .007 (d.f.= 11). This indicates that the means of the two groups do differ across the eleven courses. The Box's M value was 89.83224, which shows equality of variance in the two groups at the .05 level of significance. Therefore, no adjustments were needed in the MANOVA. Univariate F-tests were conducted to assess whether the group means differed on each of the individual courses.

The course areas in which a significant difference exists between the two groups are denoted with an asterisk.

Figure 3: Group Means for the Core Courses		
	Employees of Small Firms	Employees of Large Firms
	(< 100)	(> 100)
Principles of Accounting*	5.44275	4.93960
Business Communication	6.14504	6.00000
Principles of Economics	4.30534	4.19463
Business Environment	4.70992	4.97987
Business Law	4.53435	4.62416
Business Organizations	4.88550	4.89933
Principles of Marketing*	5.29771	4.90604
Applied Statistics	3.82443	3.91946
Principles of Finance*	5.00763	4.60403
Production/Operations Management	4.45038	4.48322
Business Policy	5.55725	5.71812
*Significant at the .05 level		

CONCLUSIONS

The alumni working for large employers felt that learning diversity and flexibility, technology, and legal/political issues was significantly more important than did alumni working for small employers. However, those working for small employers felt that the accounting, marketing, and finance courses were significantly more helpful. The results indicate that a traditional business core that emphasizes corporate education is not completely adequate for students interested in employment in a small firm (fewer than 100 employees) or in creating their own ventures. In today's continuing era of corporate downsizing and dynamism in the workplace, it is imperative that Colleges of Business produce graduates who are able to provide value to employers. Thus, Colleges of Business must determine if graduates (supply) meet the needs of average employers (demand). Since the average size of business firm based on the number of employees is declining, colleges of business curriculum should be evolving to emphasize small and entrepreneurial environments rather than the corporate environment.

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STRATEGIC DECISION-MAKING PROCESSES IN OPPORTUNISTIC SITUATIONS: ARE ENTREPRENEURS MORE COMPREHENSIVE THAN MANAGERS?

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ABSTRACT

This paper presents a theory which suggests that entrepreneurs are more comprehensive in decision-making processes than managers in opportunistic situations. The model proposed illustrates that the levels of risk and rewards moderate the relationship between the opportunity and the degree of comprehensiveness in the decision-making process. More rewards for success and more risk of failure will motivate an individual to be more comprehensive when making decisions than an individual with fewer rewards and less risk. And in general, entrepreneurs experience greater rewards and more risk than managers, and therefore, are more comprehensive when making decisions in opportunistic situations.

INTRODUCTION

Decision-making in any business is an extremely important event. Every decision an entrepreneur or manager makes effects the business in some manner. While the decision to start or not to start a business has been given adequate attention, the decision-making processes of the entrepreneur during the operation of the business has been largely ignored. However, the strategic management literature offers a good basis from which studies in entrepreneurship could extend in the area of decision-making (Mintzberg, 1978; Bourgeois, 1985; Fredrickson 1984, 1985). This is not a concise or easily defined area of research, though. As Fredrickson (1985) illustrates, strategic decision-making is a topic that has fluid boundaries and isolating one particular decision is very difficult.

When most decisions are made, the individual has either been presented with an opportunity or a problem. The focus of this paper will only be on opportunistic situations. And the central thesis suggests that entrepreneurs will be more comprehensive in the decision-making process than managers. Comprehensiveness is defined as gathering as much information as possible before making the decision. This can include seeking advice from other members of the organization, seeking advice from outsiders such as consultants, lawyers, or accountants, and conducting a formal analysis of the situation external and internal to the business. Comprehensiveness also includes the time and money spent to acquire such information. The definition of an entrepreneur used in this article is someone who simply

owns the business. And a manager is defined as someone who manages in, but does not own, the business. The propositions of this paper will be discussed further in the following sections: opportunistic situations, decision-making process research, propositions, and conclusions.

OPPORTUNISTIC SITUATIONS

Opportunity is a word that has been closely linked to entrepreneurship. For example, Gartner (1990) conducted a Delphi study to explore the meanings attached to the word entrepreneurship, and opportunity seeking appeared in several different forms (e.g. seeing situations in terms of unmet needs, identifying a market, providing a new product or service). And as Drucker (1985) states, purposeful, systematic innovation must begin with the analysis of the sources of new opportunities. Although there are many opportunities that surround us, it takes someone who is able to envision them and is willing to take advantage of them before they have meaning. This is where entrepreneurial competence becomes important. For example, Herron (1990) asserts that the entrepreneurial skill of conceiving an opportunity and then allocating resources to that opportunity contributes significantly to venture performance.

Managers have opportunities as well. They are often presented with an opportunity to manage a new product line, a department, or perhaps a new division of an existing business. One of the key differences is that entrepreneurs most often seek out opportunities while managers are most often presented with them. How entrepreneurs and managers view and treat these opportunities is discussed in the remainder of the article.

DECISION-MAKING PROCESS RESEARCH

Fredrickson (1985) states that most decision-making process models are very similar beginning with stimuli motivation (Barnard, 1938; March & Simon, 1958; Simon, 1965). Mintzberg, Raisin-ghani, and Theoret (1976) suggest that there are three phases of decision-making: (1) identification, (2) development, and (3) selection. So, in the identification phase the entrepreneur or manager has either identified or been presented with an opportunity. The development phase is most crucial, because it is in this phase that information is developed and analyzed and the individual can choose to be comprehensive or very simplistic in the information gathering. The selection phase is the final choice or decision the individual makes after all of the information has been gathered and analyzed.

Entrepreneurs, by nature, are opportunity seekers. Most businesses begin when an entrepreneur sees an opportunity that no other person has yet identified. According to Mintzberg et al. (1976), managers most frequently analyze problems in a comprehensive and rational nature, but treat opportunities very simplistically. Fredrickson (1985) explains this difference by the effects each has on the organization. Problems will have negative effects. And to avoid these negative effects, managers will conduct a careful analysis to gather as much information as possible to ensure they are comprehensive in solving the problem. On the other hand, opportunities do not need solving, and managers will exploit them by simply responding to the stimuli presented to them (Fredrickson, 1985). Another explanation can be

inferred from a study conducted by Jackson and Dutton (1988). They investigated how mangers discern problems and opportunities and found that managers pay greater attention to problems than opportunities, because organizations reward them greater for successfully handling a problem than for successfully exploiting an opportunity.

PROPOSITIONS

Again, the central thesis of this article is to compare entrepreneurs and managers on the basis of how comprehensive they are when making strategic decisions. Since the definition of an entrepreneur states that the individual must own the business, he/she must sustain the entire existence of the business. The manager, however, must only maintain a division or department of the business.

When analyzing any opportunity, the risk of failure and the rewards for success must be anlayzed. Risk is an important variable to assess when evaluating a new opportunity, because it is directly linked to failure. Mintzberg (1978) suggests that the level of risk present and how the strategic decision-maker handles the risk is very important, because the outcomes can greatly effect firm survival. So, it would be logical to assume that risk has an impact on how comprehensive a person is when analyzing an opportunity. Therefore, the level of risk moderates the relationship between the opportunity and the degree of comprehensiveness in the decision-making process (see Figure 1).

P 1 a: A high level of risk associated with the failure of an opportunity will motivate an individual to be more comprehensive in the decision-making process.

P 1 b: A low level of risk associated with the failure of an opportunity will lead an individual to be less comprehensive in the decision-making process.

Rewards are also essential to consider, because they are directly linked to success. If the opportunity leads to success, the rewards from that success are important to realize. So, it would be logical to assume that rewards have an impact on how comprehensive a person is when analyzing an opportunity. Therefore, the level of rewards moderates the relationship between the opportunity and the degree of comprehensiveness in the decision-making process (see Figure 1).

P 2 a: A high level of reward associated with the success of an opportunity will motivate an individual to be more comprehensive in the decision-making process.

P 2 b: A low level of reward associated with the success of an opportunity will lead an individual to be less comprehensive in the decision-making process.



FIGURE 1

The question then becomes, how do risk and rewards effect both managers and entrepreneurs? If an individual is entirely responsible for the survival of a business, the risk is greater than for an individual who is only responsible for a project, department, or even division of a business. The level of risk would then be greater for the entrepreneur than the manager in almost all circumstances. The entrepreneur risks losing everything, while the manager's job is often secured by other parts of the business. And even if the manager loses his/her job, he/she can cut those losses more readily than an entrepreneur who loses his/her entire business.

Rewards will differ as well. As Jackson and Dutton (1988) found, managers were not rewarded for successfully handling opportunities as much as for solving problems. Entrepreneurs are rewarded greatly for success. Success itself is rewarding, not to mention the financial freedom and independence that is associated with a successful venture.

Therefore, since the risk level and reward level both moderate the relationship between the opportunity and degree of comprehensiveness in the decision-making process, the third proposition can be generated.

P 3: Entrepreneurs will exhibit a higher degree of comprehensiveness in the decision-making process than managers.

CONCLUSIONS

This paper presented a theory which suggests that entrepreneurs are more comprehensive when making strategic decisions than managers. Other viewpoints may contradict this theory such as the assertion that successful executives, and perhaps entrepreneurs make decisions on the basis of intuition (Wrapp, 1967; Summer, 1969), and that some envision the future which guides their organization toward its goals (Srivastva, 1983). However, empirical studies are needed in order to test these theoretical viewpoints. Fredrickson's (1985) study could be used as a model. In this study he empirically analyzed two groups of individuals, MBA students and executives, by using a questionnaire to measure the degree of comprehensiveness in their decision-making processes. A similar study could be conducted comparing entrepreneurs and managers using a modified version of the quesionnaire.

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THE STUDENTS IN FREE ENTERPRISE EXPERIENCE IN SPREADING THE MESSAGE OF FREE ENTERPRISE AND ENTREPRENEURSHIP IN ELEVEN CENTRAL ASIAN COLLEGES AND UNIVERSITIES

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ABSTRACT

Students in Free Enterprise (SIFE) is a partnership between higher education and business whose primary objective is to promote an improved understanding of economic issues among college and university students through experiential, entrepreneurial activities. The educational impact of SIFE extends beyond its participating students, however, because SIFE also encourages these students to share this knowledge with their various publics. Students in local SIFE chapters essentially assume the role of an economic educator as they seek innovative methods to convey their economic knowledge to others in their communities.

On March 18-19,1996, in Bishkek, Kyrgyzstan, eleven new "rookie" SIFE teams from eleven Central Asian colleges and universities competed at the first ever SIFE Regional Competition held outside the continental United States of America. Here were groups of college and university students from countries in the former Soviet Union barely five years removed from communist-style socialism assuming leadership positions in trying to spread the gospel of free enterprise and entrepreneurship to their publics. The two Regional Champions from Central Asia distinguished themselves at the SIFE International Exposition held in Kansas City Missouri on May 19-21 in live presentations before a judging panel of leading American business executives.

The approach taken by the Central Asian students was entrepreneurial in focus. The wide variety of entrepreneurial projects undertaken by the students serves as a vivid and inspirational reminder of SIFE's growing scope and diversity, not only in America but also globally. This approach can serve as an international model that can be followed to educate the public about other important economic issues while simultaneously reinforcing this knowledge among the 'student-teachers' and allowing the students to use their unique talents to develop innovative methods to convey this knowledge to others.

OVERVIEW

Approximately 500 United States colleges and universities started the SIFE program in 1995-96. Outside the U.S., in addition to the eleven Central Asia schools, there are

competing colleges and universities from Canada and Poland. In a SIFE Regional Competition, students are given a forum in which to present the results of their free enterprise and entrepreneurial projects which they have completed over the course of the school year. Competitions are judged by a panel of leading corporate business leaders and entrepreneurs. A typical league consists of 6-8 teams with each college SIFE team given a 30 minute block of time in which to make its presentation. The judges select two winners who advance to Kansas City in May for the right to compete for the SIFE International Championship.

INTRODUCTION

On March 18-19, 1996, students from eleven Central Asian countries competed in Bishkek, Kyrgyzstan, in the first ever SIFE Regional Competition held outside the continental United States. The thought of a free enterprise competition in countries that comprised the former Soviet Union was not only an exhilarating experience, but proved to be an emotional experience for the United States executives who judged the two Central Asian Regional Championship teams who advanced to the SIFE International Exposition in Kansas City in May. The list of the countries and teams that competed in this first ever Central Asian competition included:

Kazakstan
1. Kazakh National State University ***
2. Turan University
3. Kazakh State Academy of Management
Kyrgystan
4. Kyrgyz-American School ***
5. Slavonic University
6. State National University
7. Center for International Education
Tajikistan
8. Technological University of Tajikistan
9. Khujand University
10. Khujand State University
11. Tadjik American Institute of Economies and Business
*** Control Agion Degional Champions
Central Asian Regional Champions

This paper will first examine the key project(s) of the Central Asian Regional Champion teams from the Kyrgys-American School (KAS) and the Kazakh State National University (KSNU). The paper will then examine the key project(s) of some of the remaining nine schools.

KYRGYZ AMERICAN SCHOOL

Project One involved seven SIFE students with the goal of promoting information systems within private businesses, academic institutions, and non-government organ-izations. The students (a) provided MIS training for numerous private and small businesses, resulting in the creation of the SIFE Computer Club which now includes some 50 local business executives and entrepreneurs. The SIFE Computer Club provided technical support, consultation and training on various information technologies, (b) compiled the Information Data Bank - which provided basic information on organization and management of a private enterprise and included basic information for Internet users; c) developed management technologies in MIS and held seminars on the use of information systems; (d) established a "1-800-Help" technical support line; and (5) maintained Internet information services for academic settings. As a result of the students' efforts, their college was one of the first in Kyrgyzstan to obtain full access to the Internet. In conjunction with IREX, the LAN and the Internet gateway were installed for the KAS students and faculty.

Project Two introduced the "Career Center" to help young people understand basic economic education and free enterprise principles and to prompt young people to take charge of their own life and future with the long term goal of educating a new generation of business leaders. A series of workshops and seminars covering such topics as resume writing, job interviews, internship opportunities, and work behavior, were held in cooperation with seven companies in Bishkek. The students provided statistics about existing and growth careers in Kyrgyzstan and developed a database for storing information about the local job market. Of the 70 high school and college students who attended the seminars and workshops, 25 were hired as interns with the seven sponsoring companies.

Project Three started in October 1995, with the declaration of October 1995-October 1996 as "The Year of Education and Women in the Kyrgyz Republic." The overall objective was to involve the women of Kyrgyzstan to actively partake in the ongoing economic reforms and free enterprise processes. SIFE students developed a series of three "Women in Business" lectures/seminars on the main characteristics of management and leadership positions for women in businesses in their country. The SIFE students have established a data base to provide information about current women organizations and women programs functioning in Bishkek. The SIFE students are also conducting (for a local government think tank) labor market research and comparative analysis on the most popular professions and specialties among the women in the region and providing basic supply and demand statistics for women of Kyrgyzstan.

AL PHARABI KAZAKH STATE NATIONAL UNIVERSITY

Fifty SIFE students at this 14,000 student university engaged in a diversity of free enterprise and entrepreneurial projects. A unique project was the creation of a business which derived its revenues primarily from university computer consulting services for students and business. A sophisticated system was implemented on how team members were to be compensated for services rendered which included bonuses for team members who brought in additional business. In just six months, the students grossed over \$2,100 (U.S) in revenues with \$1,770 in expenses resulting in a profit of \$330-for the groups efforts. Another highlight project was monthly seminars conducted in 12 high schools in which the SIFE students presented lectures on basic free enterprise and basic economics principles. Starting in October 1995, through February 1996, the SIFE students were able to document through pre and post test results a 92% increase in the level of understanding of basic economic principles.

TURAN UNIVERSITY

SIFE students started their first ever student newspaper, STUD&I. The initial eapital was provided from student government funding. The frst issue sold for 10 tenge each for the 263 copies sold. The students hope to eventually turn a profit primarily from selling advertising space much as a traditional U.S. college newspaper. Initially, no salaries are being paid to student volunteer reporters. Twenty of the students are also involved with 8 local tour groups and 7 advertising agencies in the setting up of mountaineering (trekking) tours for which the participating SIFE students are compensated. The students are also involved in the training of guides, interpreters, cooks, porters, and language and cooking classes. The tour arrangement was successful and the students earned \$3,500 this past summer. The students were also paid substantial bonuses based on performance.

KAZAKH STATE ACADEMY OF MANAGEMENT

The SIFE students engaged in two entrepreneurial projects. The students arranged for a St. Valentine's Day Concert which attracted 283 patrons who paid 20 tenge each. Profits from the concert were split 50-50 with the contracted band. The students had previously engaged in a New Year's fund raiser by selling artful hand made presents. The students sold over 300 presents and with the profits generated produced presents for children at School #4 - a school whose enrollment consisted of blind children.

SLAVONIC UNIVERSITY

Like their peers at Turan University, nineteen SIFE students started a school newspaper - the "Business Student" which they hope eventually will make a profit. The contents include news articles, tests, crossword puzzles, and cartoons on economic themes. The students also started a T-shirt manufacturing company -believed to be the first of its kind run on a college campus in Kyrgyzstan. The student started with a basic T-shirt emblazoned with the school's official emblem. Bottom line profit from the sales of the initial shirt was 3,015 soms. The students hope to produce a full line of university shirts and sweatshirts given demand for the first T-shirt.

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KHRGHYZ STATE NATIONAL UNIVERSITY

The SIFE students at this university also started a daily campus newspaper for a nominal charge. With an enrollment of 8,000 students, the SIFE students feel that there is potential for fmancial success in their publishing venture. The students have also learned some economic realities including: (a) they have to utilize the university's current publishing contract which is highly bureaucratic; (b) the students do not have full editorial control; c) the realization that a profit was not going to be realized overnight; and (d) a weekly paper might make more sense than a daily paper. From an initial circulation of 200 copies, the students have increased the circulation to 800 copies and the daily charge of 1.5 som is resulting in a 1 som profit per paper. There are no wages paid as of the date of competition and if the paper is to maintain quality, it is felt that student employees will need to be paid for services rendered.

CENTER FOR INTERNATIONAL EDUCATION

Eight SIFE students conducted a food marketing research study and an auto service feasibility study for a management consulting firm seeking local investors in Central Asia. (a) The centralized Kyrgyz state meat enterprises currently do not produce sausages or frankfurters. The students determined that for an initial investment of \$200,000 (U.S.), a firm could reap a bottom line profit of \$130,000 (U.S) after the payment of estimated taxes of \$84,000 (U.S.). Using data from the Boards of Public Nutrition and Trade Management, the SIFE students determined that the main local market for sausages and frankfurters consisted of 436 retail and public food enterprises including shops in Bishkek, Tokmok, and other populous towns, in fast food shops, airports, bus stations, and shopping areas. The students estimated that each of these food enterprises would be able to sell up to 600 kilograms of combined product per day. (b) Auto service/repair stations in Bishkek suffer from gross inefficiency, lack of spare parts and inventory, and poor technical knowledge on behalf of management and service personnel when it comes to servicing and sales of foreign automobiles. Foreign automobiles comprise approximately 30% of the local market. The students determined that for an initial investment of approximately \$370,000 (U.S.), a FIAT dealership could be established with an initial inventory of 40 new FIAT vehicles, equipment for the repair station, and spare parts. The students estimated that first year profits would be approximately \$60,000 (U.S.), after paying taxes of \$40,000 (U.S.). The SIFE students concluded that as free enterprise continues to grow in the region, demand for foreign automobiles will continue to grow.

TECHNICAL UNIVERSITY OF TAJIKISTAN

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One of the creative projects of the SIFE students at this university was an "economies quiz-bowl" in which 800 university students participated. Students were given a series of questions about basic economic principles, as well as questions about the economy of Tajikistan. Eventually, the top 15 students competed in the final round of competition with prizes awarded by the major of Khujand to the eventual 1st, 2nd, and 3rd place winners.

UPDATE

The number of Central Asian teams competing in the April 1997, Regional Competition in Bishkek is expected to increase from 11 to as many as 30 competing teams. SIFE is becoming a positive force and the participating SIFE students are serving as articulate proponents for the promotion of free enterprise and economic education on campuses throughout Central Asia.

THE FIREFIGHTER, THE MATHEMATICIAN, AND THE EXPERIMENTER: A METAPHOR FOR IMPROVING DECISION-MAKING IN THE FAMILY BUSINESS

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ABSTRACT

This paper suggests that managers can be classified into three decision-making styles, firefighter decision-makers, mathematician decision makers, and experimenter decision-makers. It describes each and argues that firefighter-style (classic founder style) and mathematician-style (classic successor style) decision-making can be reconciled in the family business by the development of experimenter-style decision making.

INTRODUCTION

A mathematician friend, poking fun at mathematicians, once told this story:

A firefighter who discovers a fire in a wastebasket will get some water and put out the fire.

A physicist who discovers a fire in a wastebasket will sit down and calculate the exact number of grams of water that it will take to bring the temperature of that mass down below its flash point, get exactly that amount of water and throw it on the fire. If the fire does not go out, she will redo her calculations, get more water and throw it on the fire, and continue this process until the fire is out.

A mathematician who discovers a fire in a wastebasket will sit down and calculate the exact number of grams of water that it will take to bring the temperature of that mass down below its flash point and, having completed his calculations, he considers the problem solved.

As I reflected on his joke, it occurred to me that the three characters in my friend's story -- the firefighter, the mathematician, and the physicist -- were analogous to three styles of management decision-making: I'll call them "firefighter decision-making," "mathematician decision-making," and "experimenter decision-making." Understanding the differences between these three decision-making styles helps to explain why many founders and successors

in family businesses disagree over decision-making style and how such disagreements can be resolved.

THE FIREFIGHTER DECISION-MAKER

The experienced firefighter, like the one in our story, does not need any calculations to determine how much water to bring to a fire. He has put out fires like this one many times before. Besides that, he always throws a "little extra" water on the fire, just to be sure. Likewise, the firefighter decision-maker, the classic founder generation decision-maker, doesn't make decisions based on calculations. He uses his judgement and experience. In addition, he always throws a little extra in resources at the problem to make sure that he has the problem licked.

The firefighter decision-maker dominated management practice in the pre- and post-World War II eras. Experience was seen as the major determinant of success as a manager. After World War II, the United States was the only major industrialized nation whose industrial capacity escaped unscathed from the war. Pent-up demand from ten years of worldwide depression and four years of world war created stability and ever increasing demand. The American public as well as the other nations of the world would buy almost anything that American manufacturers could make. Keeping the wheels of industry churning out ever larger quantities of goods, each year like the year before, became the priority. The firefighter decision-maker's wealth of experience was well suited to this challenge.

As the rest of the industrialized world recovered from the war, however, the rate of technological and competitive change began to increase rapidly in the 1960s and 70s. In this environment, the firefighter decision-maker approach became less workable. First, the experience-based, gut-feel answers of the firefighter decision-maker were often wrong because his underlying assumptions about the environment were no longer valid. Second, resources became more and more constrained and efficiency became more and more important for competitive survival. As a result, those managers who did not need to "throw a little extra" in resources at every problem were much more efficient and successful. The use of mathematical models and calculations seemed to hold the promise of salvation from a rapidly changing and unsure world.

EXAMPLE -- MONTGOMERY WARD VERSUS SEARS

After every major war prior to World War II there had been a major recession or a depression. At the end of the World War II, Sewell Avery was Chairman of Montgomery Ward, one of the largest retailing concerns in the U.S. and a major competitor to Sears. Based on his judgement that there would be a recession following World War II as after all previous wars, Sewell Avery decided to hoard cash.

At the same time, Robert E. Wood of Sears decided that the pent-up demand from the Depression and the War would carry the U.S. beyond any threat of major recession. In addition, his predictions about the development of suburban shopping centers as the retail Mecca's of the future led Sears to undertake the largest investment in bricks and mortar ever

undertaken by a single company in the history of the U.S. up to that time, flying in the face of history and experience.

At the end of the World War II, Sears and Montgomery Ward had been close to the same size. By 1950, Sears was more than twice as large as Montgomery Ward, and had ascended to become the world's largest retailer, a position which they held for over thirty years. Sewell Avery's conservative stance, although based on his experience and consistent with history, was dead wrong. His strategy was later to be called "Sewell's folly," and was attributed with the near-destruction of Montgomery Ward as a retailing giant.¹

THE MATHEMATICIAN DECISION-MAKER

In response to the increasing turbulence of the 1960s and 70s, successful business founders began to send their children and successors off to get MBAs. They began to pay premium salaries to hire quantitatively trained mathematician decision-makers with MBAs and tool kits of quantitative-analysis techniques. Companies also began promoting these mathematician decision-makers to levels of management that "newcomers" could never have reached in the 1940s and 50s. These mathematician decision-makers brought with them quantitative tools that their superiors and firefighter decision-making colleagues frequently did not understand. They seldom had significant industry experience, however.

Calculations replaced judgement. Financial considerations, since they are much more easily quantifiable, replaced marketing, operational, ethical, and company image considerations. Mathematician decision-makers often made decisions based on the variables that were the most easily measurable rather than those which were the most important. Because the calculations of the mathematician decision-makers frequently intimidated the firefighter decision-makers, firefighter decision-makers hesitated to dispute the recommendations of mathematician decision-makers even when their "gut feel" told them that the answers didn't make sense.

EXAMPLE -- THE FORD PINTO

The Ford Pinto contained a design flaw that caused the gas tank to explode when another car hit a Pinto in the rear. At the class action suit against Ford, attorneys presented into evidence memos which proved that Ford management was aware of the problem. The memos showed that calculations had been done on how much it would cost to repair the design flaw versus how much it would cost to settle lawsuits of those injured in Pinto fires. The calculations had indicated that it was cheaper to pay the lawsuits of those burned in Pinto accidents than it was to repair the flaw. Based on those calculations, management had decided NOT to repair the cars.

Unfortunately, the calculations overlooked some of the more difficult-to-quantify variables. The calculations ignored issues such as Ford's credibility and image, the impact that such a disclosure might have on future sales of Ford products and on company morale, how many millions of dollars of advertising would be needed to offset the bad publicity of the Pinto revelations, etc. Had analysts asked even a handful of customers and/or outsiders their impressions of this decision ahead of time, the imperfection of the calculations would have become clear. The Ford Pinto debacle is a classic example of the folly of relying on untested calculations.²

THE EXPERIMENTER DECISION-MAKER

During the 1980s and early 90s, W. Edwards Deming and others have sought to infuse America with the appreciation for quality that has marked the Japanese resurgence in world markets. The Total Quality Management (TQM) movement has been one of the offshoots of this effort. Quality experts, although they may disagree on many things, seem to find agreement that the mathematician decision-maker who relies strictly on calculations for decision making must give way to a new style of decision-maker.

Tom Peters³, in books and magazines, has been imploring managers to abandon mathematician-style decision-making. Is he, then, suggesting that we return to firefighter-style decision-making? EMPHATICALLY, NO! Peters is recommending that we move forward to a new style of decision-making -- experimenter-style decision-making.

Experimenter decision-makers may have available to them the same mathematical tools and quantitative skills as mathematician decision-makers. Experimenter decision-makers, however, do not make major decisions (or minor ones, for that matter) by the blind application of mathematical tools. They insist on performing some type of "reality-check" on the calculations. These "reality-check" experiments insure that decision-makers have used all the important variables, not just those that are easy to quantify. Small tries and experiments also insure that decision-makers have properly interpreted the output of their calculations.

Experimenter decision-makers test every decision possible on a small scale before implementing the decision on a large scale. Some managers protest that they can not test all decisions before implementation. Although this is true, many decisions can be broken down into their component parts and each part tested. For the experimenter decision-maker, the ability to devise tests and experiments is a skill that is as important as the mathematical skills necessary for the calculations.

EXAMPLE -- 3-M CORPORATION

3-M does many things right, and the results can be seen in the perennial success of this diversified company. One of the things at which 3-M has been extraordinarily successful is creating an environment in which its people are inordinately innovative, creating new products and divisions almost daily. One of the processes 3-M uses to help create this innovation-supportive environment this called "bootlegging."

Every employee is expected to spend 15% of his/her time and company resources working on his/her own pet projects. Many of these small trials reach dead ends long before they are ever committed to paper and company scrutiny. Some, however, result in fabulously successful new products like the Post-It Note, as well as successful process, new customer services, and other innovations.

This encouragement and institutionalization of the "bootlegging" process is an effective way to keep all employees on the scent of innovation. It is this experimenter mentality that helps 3-M to be successful in businesses and product lines that range from being as stable as sandpaper to as rapidly changing as laser disks.⁴

CREATING EXPERIMENTER DECISION-MAKERS

How can a company use experimenter-style decision-making to resolve the conflict between firefighter-style decision-makers and mathematician-style decision-makers? The first hurdle is to recognize that the differences between a firefighter decision-maker, a mathematician decision-maker, and an experimenter decision-maker are largely attitudinal.

Most organizations, including most family businesses, have a combination of firefighter decision-makers and mathematician decision-makers, with the founder generation managers traditionally belonging to the former group and the successor generation managers belonging to the latter. These two groups are always in conflict, each challenging the other's ability to make wise decisions in the environment of the 1990s. Firefighter decision-makers and mathematician decision-makers have no real ground for compromise, since they have totally different views of the world. Firefighter decision-makers and mathematician decision-makers, however, can find agreement by both becoming experimenter decision-makers.

CONVERTING FIREFIGHTER DECISION-MAKERS INTO EXPERIMENTER DECISION-MAKERS

The firefighter decision-maker has faith in his view of the world based on his experience. The experimenter decision-maker, on the other hand, acknowledges that the environment is always changing. She recognizes that testing and experimenting is the only way to insure that a particular solution is appropriate to existing conditions. For a firefighter decision-maker to become a experimenter decision-maker, he merely needs to accept the reality of a rapidly changing environment. He will then see the benefit of testing ideas on a small scale before implementation on a large scale.

In actuality, most firefighter decision-makers recognize that the environment is changing. They cling to experience-based decision making, however, as an alternative to "blind number-crunching." They frequently do not have the quantitative skills of mathematician decision-makers. Their "gut feel" tells them that the quantitative solutions proposed by their mathematician decision-maker colleagues and successors ignore important considerations. However, what justification do they have for questioning "the numbers"?

These decision-makers should find it easy to embrace the experimenting approach of the experimenter decision-maker because it gives them an alternative to strictly quantitative decision making. They now have grounds to challenge the questionable numbers from their mathematician decision-maker successors without appearing to unreasonably dismiss the successors' calculations. They can suggest some form of testing to see if the quantitative analysis has considered all of the important variables.

CONVERTING MATHEMATICIAN DECISION-MAKERS INTO EXPERIMENTER DECISION-MAKERS

The mathematician decision-maker has faith in the output of his calculations. The experimenter decision-maker, on the other hand, sees all calculations as suspect, as assumptions to be challenged or models of reality to be tested. The mathematician decision-maker sees the solution to the computation as the solution to the problem. The experimenter decision-maker sees the results of a calculation as the input to an experiment or test. For a mathematician decision-maker to become a experimenter decision-maker, he merely needs to accept the fact that assumptions underlie all calculations. Small trials test the validity of these assumptions.

In actuality, most mathematician decision-makers recognize the limitations of the mathematical models which they apply to problem solving. They insist on number-crunching, however, as an alternative to "seat-of-the-pants" decision making of their founder/parents. They frequently do not have the years of experience of the firefighter decision-makers. They believe that quantification of the problem leads to better decisions.

Because of their scientific orientation, however, these decision-makers should find it relatively easy to accept the need for the experimenting approach of the experimenter decisionmaker in order to test the appropriateness of the assumptions underlying their calculations.

RECOMMENDATIONS

As Tom Peters points out in *Thriving on Chaos*, and more recently in *Liberation Management* and *The Tom Peters Seminar*, innovation in large and small things will mark the excellent (and successful) companies of the late 1990s and beyond. Senior management must not only recommend but require small trials and tests. Each time a staff member or line department submits a recommendation or suggestion, the first question asked by supervisors must be, "What kind of tests or small trials did you perform?" Reports should require that documentation accompany them indicating the types of tests which have been or will be done.

Senior managers must make it clear to all levels of the organization that they expect all managers to be experimenter decision-makers. This means that all must recognize that testing assumptions is the only way to be sure that recommended solutions are appropriate to conditions. It also means that the output of each calculation is seen not as an answer to the problem, or even as a recommendation for action, but rather as a model of reality for testing. Management must allocate two major commodities -- time and money -- differently if they wish to encourage experimenter-style decision-making.

ALLOCATING TIME DIFFERENTLY

Good decisions based on experimentation take more time than fast "gut-feel" decisions or "quick and dirty" calculations. However, a company can pay the price for a quick decision for years. When subordinates return too quickly after being given an assignment, the response of the senior manager must be, "What kind of tests of these recommendations did you do?" On the other hand, subordinates should not be encouraged to practice "analysis paralysis." A quick try or test is frequently as telling as an expensive and time-consuming statistically significant random sampling.

Founders must also resist the temptation to make quick decisions themselves. Top decision-makers must test their own ideas before implementation. Without this, line management will see that founders are not committed to experimenter-style management.

ALLOCATING MONEY DIFFERENTLY

Budgets must include funds for trials and tests. Each department should continually perform tests and trials of new services, new methods, new ways of interfacing with customers, new ways of interfacing with other departments, etc. This requires funds assigned for this purpose. A budget line item for tests and trials may convince department level personnel that senior managers are serious about the need for testing.

Senior managers must recognize that a certain amount of money will be "wasted" on failed experiments. Each failed experiment, however, has two important benefits which justify its cost. First, a failure in a small experiment prevents the loss of large amounts of money implementing an unworkable program. More importantly, however, each failure, if congratulated and celebrated as a victory, becomes an investment in encouraging additional new experiments. We must celebrate failed "good tries" as jubilantly as we do successes if we hope to create an environment in which our people feel compelled to innovate.

Success in innovation is a "numbers game," not unlike sales. Every seasoned salesperson learns that the salesperson who makes twice as many sales calls makes significantly more sales. Therefore, door-to-door salespeople learn the trick of expecting a sale every twenty calls or so (whatever is normal for their type of product). Then each rejection or slammed door is celebrated as a victory. "One more 'no' down -- I'm one call closer to a 'yes'!"

Innovation should be treated similarly. Each "good try" that fails puts you one try closer to a success that pays off. Peters has said that this means we need to accelerate our failure rate! The more times we try, the more times we will fail, but the more times we will succeed, too. And this continual experimentation and striving for excellence will bring hundreds of useful and competitively advantageous innovations to our company.

Innovation is risky, yet innovation is necessary for survival in the 1990s. The surest way to decrease the costs of innovation is by using the small tests and trials characteristic of experimenter-style decision-making. Using tests and trials, management can identify successes early and fine tune them before major implementation. Management can also identify failures and scrap them before major losses accrue.

Experimenter decision-making offers the family business with a mix of firefighter-style and mathematician-style decision-makers a middle ground that will allow for cooperation between these two groups as never before. When both are dedicated to finding a test or trial

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for every planned program, the arguments about "My experience tells me what will work" versus "I've done all the calculations and they say to do this" dissolve into a joint effort to find the most appropriate way to test the instinct and the calculations to find out which is the better decision. This constant testing, trying, experimenting, and innovating will bring your business rewards that may help it to survive the transition to the new generation of management and ownership as it vastly improves the decision-making skills of your successor generation managers.

ENDNOTES

- 1. The story of Sears' growth under Robert E. Wood during the post war period and its competition with Sewell Avery's Montgomery Ward can be found in *Shaping an American Institution: Robert E. Wood and Sears Roebuck*, by James C. Worthy (Urbana, IL: University of Illinois Press, 1984), and in *The First Hundred Years are the Toughest: What We Can Learn From the Century of Competition Between Sears and Wards*, by Cecil C. Hoge (Berkeley, CA: Ten Speed Press, 1988).
- 2. See Cullen, F. T., Maakestad, W. J. and Cavender, G., (1987), *Corporate Crime Under Attack: The Ford Pinto Case And Beyond*, Cincinnati: Anderson Publishing Co. In this book, the Ford Pinto case is used as a classic example of corporate crime resulting from the greed of managers. This paper uses the Ford Pinto case as an example of mismanagement brought about as a result of using the wrong information and the wrong decision-making model for making an important management decision.
- 3. Tom Peters co-authored *In Search of Excellence* (1982, Harper & Row) with Robert Waterman, co-authored *A Passion for Excellence* (1984, Harper & Row) with Nancy Allen, and authored *Thriving on Chaos* (1987, Harper & Row), *Liberation Management* (1992, Knopf), and *The Tom Peters Seminar* (1994, Vintage Books). He has been a frequent contributor to magazines and journals reporting on the state of business, and is President of the management consulting and publishing firm the Tom Peters Group.
- 4. **3-M is a favorite example of innovation used by Tom Peters in his books and by many other management authors.**

EDUCATING THE PRACTICING ENTREPRENEUR: INITIAL ASSESSMENT OF AN INTENSIVE INNOVATIVE PROGRAM

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ABSTRACT

Purdue University Calumet recently developed an entrepreneurship program for the "practicing entrepreneur". The design of this 21-month intensive program, which is based on suggestions received from entrepreneurs, has several unique features. There are only two prerequisites for participation: all applicants must be full-time practicing entrepreneurs and must have been business owners for at least one full year. The profile of the current participants, totaling 54 in three different ongoing groups, is very diverse and interesting. Overall, the initial indicators of the impact of the program on the participants appear to be very promising.

INTRODUCTION

Entrepreneurial education is usually considered to have two distinct markets. One is comprised of traditional students enrolled in courses "for-credit". Small business/entrepreneurship courses are part of business education programs. Students taking these courses might consider entrepreneurship and small business management as a possible field of study within the business degree program. Students usually take these courses concurrently with or after having taken courses in accounting, finance, marketing and management. An increasing number of universities are now offering an undergraduate major/specialization in entrepreneurship as well as a graduate degree.

The second market for entrepreneurship education is considered by Solomon and Fernald (1991) to consist of "those individuals not in traditional educational settings who seek lifelong learning in which entrepreneurship or small business management is a part." This market could include the "practicing entrepreneur"-- one who knows and feels the need to improve his/her managerial competence so as to enhance survival and growth possibilities and to develop competitive advantages.

According to the National Federation of Independent Businesses, forty percent of today's entrepreneurs have no formal education beyond high school. In fact, eight percent are high school dropouts. A survey conducted of 40,000 Ohio business owners produced similar results (Ashmore, 1989).

During the past few years, informal surveys and formal discussion sessions were conducted with several practicing entrepreneurs at Purdue University Calumet. It seems that,

particularly among business owners with annual sales of \$3 million or less, there is a growing realization for training programs that focus on their day-to-day business needs.

The surveyed entrepreneurs indicated that they would consider participating in and/or would be interested in entrepreneurship education programs that had the following characteristics:

a.	Non-academic, business-like environment
b.	Not more than 20 participants per group
с.	No competing companies in any one group
d.	No minimum educational requirement for acceptance
e.	All participants in any group be ONLY entrepreneurs and not a mixture of entrepreneurs and non-entrepreneurs
f.	Majority of discussion leaders be people with actual entrepreneurial
	backgrounds; minimal number of academicians involved
g.	No homework - No tests - No textbooks
h.	Sessions be conducted after normal business hours.
i.	Provide opportunity to have a long-term association with the institution AFTER the basic
	program was over.

The "Certificate in Business Administration", an eleven weekend program offered by the University of Illinois at Chicago (UIC), seems to have the closest resemblance to what the entrepreneurs have indicated above. This UIC program is open to small business owner as well as managers of small businesses and fee is over \$5,000 per participant.

PURDUE'S ENTREPRENEURSHIP PROGRAM

In 1995, Purdue University Calumet initiated an intensive 21-month practical training program designed specifically for the experienced practicing entrepreneur. Most of the suggestions offered by entrepreneurs have been incorporated already, with no more than 20 non-competing participants being included in each group. This program consists of the following three segments:

Segment I:	CONFERENCE ROOM SESSIONS. The group meets for 4 hours once every week for 6 months. The focus is on providing a "down & dirty" overview of business, with a strong emphasis on the "how to" aspects of managing businesses effectively.
Segment II:	CONSULTING FOR OTHER SMALL BUSINESSES. This segment is spread over 3 months. Participants, in groups of 3-4, are required to provide consulting assistance to other small businesses. Participants meet formally once every two weeks for internal brainstorming sessions, interspersed with informal meetings with the "clients". The focus of learning is to utilize the newly acquired knowledge from the first segment and draw extensively from their individual and collective entrepreneurial expertise and experiences to identify the strengths.

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weaknesses, opportunities and threats of the client companies leading to a set of recommendations for the client.

Segment III: ROUNDTABLE MENTORING. The entire group is divided into smaller groups of 7-9 participants. Each group meets once a month for 12 months. These meetings are conducted by rotation at each participant's place of business, The main topic of discussion for each meeting revolves around the host's business. The role of the members is to serve as the informal "board of advisors" for the host entrepreneur, and to "zero-in" on the host's issues. The whole evening is spent in attempting to provide an objective analysis with recommendations for improvements.

RECRUITMENT

Each potential entrepreneur interested in joining the program is required to meet with members of the Entrepreneurship Program's Executive Committee. Criteria established by the Committee for assessing applicants include: motivation level; commitment level; probability of business surviving 21 months; and probability of applicant remaining in the program. The participants pay a tuition of only \$1300 for the entire 21-month program; the deficit is subsidized by a large number of sponsors and Purdue University Calumet.

PROFILE OF PARTICIPANTS

The only two requirements for joining the program are that the participants be fulltime practicing entrepreneurs with at least one full year of experience as business owners. The overall profile of the current 54 participants, based on the ongoing three batches, (labeled as E1, E2, and E3) has at least ten different dimensions explained in these terms:

a.	Education:	Some who did not complete high school to some with graduate degrees
b.	Age:	From 23 to 68 years
c.	Sex:	4 to 1 ratio of males to females
d.	Status:	From single parents to grandparents
e.	Business Experience:	From 1 year to 42 years
f.	Annual Sales:	Ranging from \$20,000 to \$2,500,000 gross sales/year
g.	Success:	Highly successful (\$200,000 net profits/year) to struggling businesses (net losses per year)
h.	Ego:	Humble to not-so-humble
i.	Business Type:	Service, retail, professional, wholesale, distribution, and manufacturing companies
j.	Competition:	Each group consists of non-competing companies

ANALYSIS

The first batch of entrepreneurs (E1) in this program are now into the seventeenth month and are scheduled to complete the program by January 1997. Two subsequent batches (E2, E3) are also underway, but are in different segments of the program. All three ongoing programs have generated a series of fairly pleasant and unexpected surprises for Purdue University Calumet.

The first surprise came about 9 months after the start of the first batch, in December 1995, when the entire group of eighteen entrepreneurs decided to become sponsors of the program and officially made an announcement to this effect in a well attended University gathering. In October 1996 one member of the second batch, which started in January 1996, brought a check and announced that he had decided to make annual contributions to the program as a sponsor. These two incidents and several smaller, but different surprises, speak volumes about what the participants may be getting out of this program.

Additionally, word of mouth publicity from the participants has generated extensive coverage in the local media regarding the impact this program has had on them.

It appears from research, readings, discussions and dialogues with several entrepreneurs, experts, individuals and institutions involved in entrepreneurship education in different parts of the world, that a program as intensive and innovative as ours, is probably not being offered elsewhere. Among the more distinctive and creative features of the E-program appear to be the following:

- (a) the second segment which requires participating entrepreneurs to work in small groups for four months as consultants to another live company which is in need of some management advice, and
- (b) the third segment where the participants meet in groups by rotation once a month in their own business premises and where the host entrepreneur for the month receives advice on his/her own business from all the others who are required to act as the host's "advisory board."

Soft evaluative studies have already been initiated to assess and refine different components of the program and to capture findings which could add to the body of knowledge. We propose to closely monitor the impact of the program on the participants of each group, and report our overall findings at a later point in time, maybe after at least two or more of the initial batches have completed their program.
ENHANCING SMALL BUSINESS COUNSELING SERVICES: MELDING SCORE/ACE WITH SBI¹

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ABSTRACT

While numerous citations in the literature have lauded the benefits that could be derived from the establishment of cooperative relationships between SCORE/ACE and SBI, actual cooperation has at best been sporadic. This paper overviews the benefits that SBI team members, entrepreneurs and small business clients, as well as the SBA derive from the SBI program; examines some of the reasons that SCORE/ACE-SBI cooperation has not materialized; provides a model approach or framework to overcome the previously identified reasons/roadblocks to SCORE/ACE-SBI cooperation; and discusses the reasons that such a cooperative effort should be encouraged. It is the view of the authors of this paper that if SCORE/ACE-SBI cooperation can be attained, SBI and SCORE/ACE programs truly will reach their full promise and potential in both servicing entrepreneurs and small businesses as well as creating the ultimate practical student experience.

INTRODUCTION

The years following World War II brought on tremendous opportunity for individuals interested in establishing their own small businesses. The material sacrifices throughout the war years created a pent-up demand for a variety of goods and services of which those with the entrepreneurial spirit could now take advantage. However, as the number of small businesses being established mushroomed, so did the need for assistance. In 1953, Congress created the Small Business Administration (SBA) with a charge to "aid, counsel, assist and protect the interests of small business concerns..." (Soll, 1973). For the next decade, most of the assistance given to small businesses was provided through the efforts of full-time SBA personnel.

By early 1963 the SBA had discovered that a significant proportion of the small businesses they were attempting to help were in need of something more than the financial assistance that they primarily were offering. Many of these small firms were in desperate need of management assistance and training, something for lack of manpower and/or specialized expertise that the SBA was unable to provide. In an attempt to accommodate an ever increasing need for management assistance and as a supplement to its own efforts, in early 1963 the SBA began, on an experimental basis, soliciting the help of retired business

executives. The response to this initial experiment was so enthusiastic and the potential value of these volunteer services so significant that in October of 1964 the SBA took steps to formalize this service and, under its auspices, the Service Corps of Retired Executives or SCORE was born. By 1966 more than 12,000 clients had received management assistance from SCORE volunteers and the success of the program was broadly acknowledged (*SCORE: A Brief History*, 1989, p. 2).

Yet, the demand for assistance continued to far outstrip what could be provided for by both SBA representatives and SCORE volunteers. In some instances expertise was needed which both SCORE members and SBA personnel lacked. Through discussions with active business executives, it was quickly discovered that many not-yet-retireds were willing to volunteer services in counseling and training to supplement those provided by the retired SCORE contingent. In 1969 these actively-employed volunteers were established as the Active Corps of Executives or ACE (*SCORE: A Brief History*, 1989, p. 4).² All SCORE and ACE counseling is accomplished on a non-compensated, time available basis.

While the addition of SCORE and ACE counseling significantly bolstered SBA's charge to "aid, counsel, assist and protect the interests of small business concerns...," many requests from small businesses were still going unanswered. In 1972, in order to more effectively meet the ever growing need for small business counseling, another small business assistance program, this one called the Small Business Institute or SBI Program, was established by the SBA. The SBI program utilizes the resources available at colleges and universities to furnish management assistance to small business. Advanced level business students, under the guidance of faculty members, are assembled into teams to provide free counseling to small businesses on a variety of business problems. For each small business served, a case report is provided to regional SBI directors and, to cover the direct costs incurred by the university in providing student consultation to individual small business clients, a modest stipend is provided to the university.

In the first seven years of its existence, SBI was able to counsel more than 45,000 small businesses and more than 100,000 students from approximately 470 colleges and universities gained practical business experience through the program. The number of clients being served by SBI teams today, of course, is much larger than it was in 1979. In 1979, there were 354 SCORE and/or ACE chapters in existence in the United States with a combined membership of over 12,000 (*Better Service...*, 1979, pp. 4 and 7-8). By 1984, SCORE/ACE chapters numbered almost 400, with chapters located in all 50 states, Puerto Rico, the Virgin Islands and the Trust Territories; over 150,000 clients were counseled; and more than 2,500 pre-business workshops were presented to more than 100,000 attendees (Olewine, 1985). SCORE/ACE membership also continues to increase.

While both SBA pamphlets (*Better Service...*, 1979) and published journal articles (Albertson, 1979; Gaston, 1979) have lauded the benefits that could be derived from the establishment of cooperative relationships between SCORE/ACE and SBI, actual cooperation has at best been sporadic. The purpose of this paper is to: (1) overview the benefits that SBI team members, small business clients, and the SBA derive from the SBI program, (2) examine some of the reasons that SCORE/ACE-SBI cooperation has not materialized, (3) provide a

model approach or framework to overcome the previously identified reasons/roadblocks to SCORE/ACE-SBI cooperation; and (4) discuss the reasons that such a cooperative effort should be encouraged. It is the view of the authors of this paper that if SCORE/ACE-SBI cooperation can be attained, SBI and SCORE/ACE programs truly will reach their full promise and potential in both servicing entrepreneurs and small businesses as well as creating the ultimate practical student experience.

BENEFITS OF AN SBI PROGRAM

The SBI program has a three-fold purpose. It permits: (1) upper division business students to experience the application of current business theories to the problems being faced by real-world functioning small businesses, (2) small business start-ups and functioning small firms (with fewer than 50 employees) to obtain research and consulting assistance from a team of soon-to-be college of business graduates who carry out an assigned small business project under the guidance and supervision of a business faculty member, and (3) the SBA to maximize the research and consulting services that it can provide to small businesses.

From the students' perspective, the benefits gained stem from the necessity to draw upon knowledge/skills obtained from three or four years of academic study and then to apply that knowledge/skill in a very real setting where the prosperity of both the businesses' owner and its employees are at risk. Through this face-to-face relationship with business owners and employees, students' work takes on both a sense of realism and importance that is simply not possible to attain in a classroom setting. Members of SBI teams must rely on earlier acquired skills to assess the nature of the problem(s) with which their assigned small business is faced; gather, compile, and analyze factual data related to that problem(s); prepare a written and an oral report on that problem(s) and recommend solutions; and then communicate the results of the study to all involved parties (SBI faculty advisor, management of the assigned small business, and SBI Regional Director). All of this must be done while maintaining a sensitivity to the fact that people's careers and livelihoods are at issue. Throughout one's education, most subject matter is studied in a very segmented fashion with little attention given to how the various components meld together to address comprehensive concerns. The SBI program provides students a capstone experience for assimilating academic knowledge and communicating that knowledge in situations where the accuracy of data and thoroughness of analysis are critical. However, the ultimate benefit of the SBI experience for the student may relate to securing employment after graduation. Since 68 percent of the 25 million new non-farm jobs expected to be created in the United States over the period 1992-2005 will be in industries classified as "small-business- dominated"³ (Projections Show..., 1994), university graduates entering the workforce can utilize their experience as members of SBI teams to document for prospective employers, not only a readiness, but also an ability to positively contribute to their business operation.

From entrepreneurs' and small business persons' perspectives, benefits gained stem from the opportunity to secure research and consultation services from student business teams, who have the interest, time, and energy to thoroughly investigate issues which are of concern

to the business, but which ordinarily would not get addressed (or at the very least would be addressed secondarily) because of the necessity of managing pressing day-to-day problems. Owners of small businesses often become so absorbed in meeting the daily demands of work that they have little time to reflect on, evaluate, or plan long-range for business activities. Student teams, under the direction of SBI faculty and at little or no cost to the small business, can provide assistance in these areas.

From the SBA's perspective, utilization of SBI teams means that each year assistance can be given to many more thousands of entrepreneurs and small businesses than would be possible through just the combined efforts of its own personnel and that of SCORE/ACE volunteers. According to a 1994 SBI economic impact study, for a relatively modest dollar amount (approximately \$3 million nationwide), more than 6,000 small businesses receive assistance annually. An additional benefit derived from SBI's efforts relates to the positive public relations generated for SBA. Because of the good experiences that the vast majority of small business have with SBI teams and the outcomes of their efforts, those businesses are more likely to avail themselves of other SBA services. Hence, the rapport and the relationship between small business and the government is strengthened.

Presently, while continued funding of SBI programs through the SBA appears gloomy at best, most SBI programs are expected to remain viable because of the above-cited advantages to all parties involved. Funding for such programs already has taken a variety of paths at different universities. Some institutions, recognizing the significance of SBI to the educational experiences of their students, have incorporated funding for such programs into their regular budgets. Other SBI Directors are seeking funding from such external grant sources as the Kaufman Foundation or the Coleman Foundation. Still others are seeking and securing funding from local, private sources interested in supporting entrepreneurial/small business management issues. Lastly, some SBI programs have instituted a "fee for service" program to offset the cost associated with the counseling services they provide. Whatever form the funding takes, it appears the SBI concept will continue and, perhaps, grow at most schools that have participated in the past. Furthermore, it is becoming increasingly clear that SCORE will have an even more significant role to play in students' entrepreneurial education.

REASONS FOR LACK OF SCORE/ACE-SBI COOPERATION

Both SCORE/ACE and SBI programs supply personnel to assist small business firms. The primary resource of SCORE/ACE members is their wealth of experience and their ability to provide in-depth individual counseling, whereas the principal asset of SBI teams is their recent academic education and training, including the direction provided them by SBI faculty, and the fact that they can provide assistance where a team effort and multiple specialties (i.e., accounting, finance, human resources, production, marketing) are needed.

While the philosophy of the Small Business Administration in regard to management assistance to small businesses supports cooperation between SCORE/ACE volunteers and SBI teams (*Better Service...*, 1979, pp. 29-30), cooperation, in many instances, appears to be more of the exception than the rule. For example, in a study conducted by Elbert, Anderson, and

Floyd (1983), of the 183 SCORE/ACE counselors that returned questionnaires, 63 percent indicated that they were unfamiliar with the SBI program and 95 percent indicated that none of the cases they had ever counseled had included SBI student teams. While the responses of the eleven SBI faculty directors that participated in the study were more supportive of cooperation, only seven (64 percent) indicated that they had worked with SCORE/ACE counselors on some SBI projects (Elbert, Anderson, & Floyd, 1983, p. 40).

Part of the reason for lack of a more cooperative working relationship between SCORE/ACE and SBI may related to significantly differing attitudes/perceptions of members of the two groups regarding joint counseling ventures (Elbert, Anderson, & Floyd, 1983). For example, when asked who should serve as leaders in joint counseling projects, SCORE/ACE study participants felt that they should serve as the project leaders, whereas SBI faculty expressed a preference for students to fill this role (Elbert, Anderson, & Floyd, 1983, p. 42). Undoubtedly, the retired executive knows he or she is capable of successfully bringing a project to fruition. The SBI faculty member, on the other hand, knows that much learning will be lost if student teams are permitted to count on the SCORE/ACE volunteer's leadership and opt out of taking responsibility for themselves. In addition, regarding who should coordinate joint SCORE/ACE-SBI projects, SCORE/ACE participants preferred that decisions be made by the SBA, while SBI faculty felt they should be coordinating such projects themselves (Elbert, Anderson, & Floyd, 1983, p. 42). Further, differences in beliefs and feelings between SCORE/ACE members and SBI faculty were also apparent in each group's assessment of the ability of students to counsel effectively. SBI faculty expressed markedly greater confidence in the ability of students than did SCORE/ACE members (Elbert, Anderson, & Floyd, 1983, pp. 42-43).

A MODEL APPROACH TO SECURE SCORE/ACE-SBI COOPERATION

With such reported dissimilarity in attitudes between SBI faculty and SCORE/ACE members, is there any hope that cooperation between the two can be attained? The short-term answer to this question may lie in the responses SCORE/ACE participants gave when asked to suggest ways in which they could be effectively used in SBI projects. Three suggestions were made: (1) a SCORE/ACE volunteer could coordinate the project assigned to an SBI team and steer the SBI team's activities, (2) one or more SCORE/ACE volunteers could serve as counselors to an SBI team as they are carrying out their assigned project, and (3) one or more SCORE/ACE volunteers could serve as second opinion/resource persons after the team has reached its tentative conclusions but before those recommendations are presented to the small business client.

The "coordinator of SBI projects" role would not at this time appear very acceptable to SBI faculty, but both the "active counselor to SBI teams" and the "after-the-fact, second opinion resource person" roles would appear acceptable to both groups (Elbert, Anderson, & Floyd, 1983). Both of these later roles call for SCORE/ACE members to serve in staff or advisory roles to SBI teams.

Figure 1 below, a quasi-matrix framework, depicts SCORE/ACE volunteers serving in supporting roles to SBI teams (staff authority) and the SBI faculty member/director as the overseers of projects (line authority). With this arrangement, the SBI faculty member would be responsible for making project assignments, resolving conflict (if it should occur) between student teams and clients, checking client reports for clarity and errors, and evaluating student team performance--organizational and logistical issues. However, when specialized expertise/advice is needed by an SBI team, the SCORE/ACE member with that specialization could be contacted for help--substantive and content issues. As suggested above, the advice could be solicited as the project is being carried out or after the project is completed, but before it is presented to the client.

In the longer-run, however, as the skepticism of each group about the other is overcome and the working relationships and rapport between local SCORE/ACE volunteers and SBI faculty directors is cemented, a true matrix structure could be implemented. Under this arrangement, SCORE/ACE volunteers would be in consultation with SBI faculty directors on projects that have segments related to their specialized areas of expertise. Further, because of the close working relationship with the SBI director, that SCORE/ACE expert would be aware of, and agree with the importance of permitting project teams to come up with their own recommendation, of course hopefully effectively utilizing the specialized information that the SCORE/ACE volunteer has shared with the group. In these cases, the advice given by the SCORE/ACE expert would provide at least some direction for the project team (functional authority) while the team is concentrating on that specific aspect of the project. Further, the critical analysis of the SBI team's report by the SCORE/ACE counselor(s) would provide the basis for necessary revision and enhancement of the recommendations in the final draft. In all other segments of the project, the project team would report to the SBI faculty director (line authority), who remains responsible for the overall project assignment. Over time, it is hoped that the cooperation between SCORE/ACE and SBI faculty would be such that the two would consult on many, if not all of the project that they are undertaking--the goal, of course, would be to pool resources in such a way as to provide the greatest assistance possible to needy small businesses.

RATIONALE FOR ESTABLISHING COOPERATIVE RELATIONSHIPS BETWEEN SCORE/ACE AND SBI

SCORE/ACE volunteers benefit from working with SBI student teams because team members are usually familiar with the latest in technology, eager to apply classroom theory to the practical world of business, and have the time and dedication to secure needed data for the client-project in question. And while SCORE/ACE counselors want to provide the greatest help possible, the time and resources that they can dedicate to any project are always limited. Cooperation from student teams can significantly reduce the time that the SCORE/ACE volunteer must spend collecting and assembling needed information--students have easy access to both the library and computers.

SBI faculty directors also can profit from more cooperative relations with SCORE/ACE counselors. Some may be unaware that most SBI faculty directors' jobs usually require significant time and energy commitment for tasks, such as research and service, that are totally unrelated to servicing the needs of small businesses. The coaching and counseling provided to student project teams by SCORE/ACE volunteers can significantly reduce the time and burden of responsibility that the SBI director must otherwise shoulder alone.

Business clients, while able to secure vital assistance from either SBI teams or SCORE/ACE counselors, can benefit even more if cooperative relations between the two have been established. With SCORE/ACE and SBI teaming-up together, small business clients receive both the benefit of mature experience and the fresh enthusiasm of youth who are current on both new theories and practices.

Finally, since student learning is the primary consideration of this or any educational program, how the students benefit from any learning experience has to be of paramount importance. Some of the benefits that students will derive when SCORE/ACE-SBI cooperation is obtained, include multiple sources of experience, coaching, assistance, and mentorship. While the SBI faculty member is providing the basic direction for the group, the SCORE/ACE volunteer can be counseling students in his/her special area(s) of expertise and, at the end of the project, can serve as a sounding board regarding overall project recommendations. If cooperation between SCORE/ACE and SBI can be attained, it will truly make involvement with SBI project teams the ultimate small business student experience.

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ENDNOTES

- **1** Partial funding for this project provided by the Office of the Dean of the Graduate School and the College of Business, Illinois State University.
- 2 In May of 1982, ACE was merged into SCORE, but the ACE and SCORE rosters were still kept separate. Furthermore, as of 1995, the "ACE" designation was eliminated and all volunteer counselors, active or retired, are now officially designated as SCORE members.
- 3 A small-business-dominated industry is one with at least 60 percent of employment in firms with fewer than 500 employees.