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**FORGING ECONOMIC VALUE FROM ACADEMIC
SUCCESS –
CHICAGO WEBDOCENT GOES TO MARKET**

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Abstract (EN)

This paper describes the preliminary process of forming an online learning company based on a successful university/museum partnership. We discuss the effort required to write a business plan to launch a new venture with strong scholarly ties that creates value for elementary schools and museums and returns profit.

In 2005 the *Chicago WebDocent* team has been working in conjunction with The University of Chicago Graduate School of Business New Venture Challenge program to develop a viable business model and "spin-out" our project from the University. This work has forced our team to confront the many issues faced when "going to market" such as business strategy, entrepreneurship, intellectual property, licensing issues and, of course, politics and egos.

Topics addressed in this paper include:

- Translating academic success into the business setting,
- Defining value in the marketplace,
- Learning new metrics of entrepreneurial success,
- Importance of team and leadership,
- Confronting profit motivation in an academic environment,
- Addressing intellectual property issues and licensing,
- Measuring new business ventures,
- Communicating effectively with venture capitalists and other potential investors,
- The experience of the *eFieldTrips* team in preparing a business plan.

Keywords: Scholarly Entrepreneurialism, Valorization, Valuation, Business Plans, Business Metrics, Venture Capital, Chicago WebDocent, eFieldTrips

Introduction

Throughout 2005 the *Chicago WebDocent* team had been working in conjunction with The University of Chicago Graduate School of Business to develop a business model to "spin-out" our online curriculum project from the University and create an independent business. The intent was to form a for-profit company named *eFieldTrips*, with close ties to the University of Chicago. Existing content, developed with grant moneys would be licensed through arrangements made with the technology transfer office while new online learning content would be developed and sold. The new company would leverage its academic partnerships with major museums into working business relationships while maintaining close ties to the Chicago Public Schools as a test-bed for new online learning content.

This paper describes our process of creating a business plan and details important considerations for those contemplating a like move to lift an academic project out from the protective not-profit realm of universities, museums and libraries into the competitive for-profit business world. Specifically this paper traces important factors when writing a business plan as a first step toward completing this challenging task. This paper is a result of our efforts while competing in a business plan contest called the *New Venture Challenge* sponsored by the University of Chicago Graduate School of Business. We hope short study will serve as a guide to others considering the creation of a self-sustaining businesses based on successful academic projects

A Strong Foundation

For five years the *Chicago WebDocent* project has been a digital educational outreach program of The University of Chicago. Serving all 600 Chicago public schools the project collaborates with eight local museums to digitize and display artifacts and employ these resources within standards-based curriculum units. The program is unique and has been recognized by teachers and administrators as a innovative and useful educational tool.

For more information on *Chicago WebDocent* consult the following sources:

Success factors for Museum-Public School-University Partnerships, Lorch, University of Chicago, ICHIM 2003, <http://www.ichim.org/ichim03/PDF/101C.pdf>

Chicago WebDocent: Bringing Museums to the Digital Classroom — On-line Content Management and Presentation System (CMAP), Brazas, Lorch, York, University of Chicago, *Museums and the Web 2004*, <http://www.archimuse.com/mw2004/papers/brazas/brazas.html>

Let's go into business! Where do we begin?

For several years the Chicago WebDocent team had considered the idea of creating an online content creation company based on its success in the academic arena, but the process was daunting and full of uncertainty. We knew that we wanted to expand our content offerings and to distribute our curricular content nationally. We feared that we could not accomplish this within the confines of the University structure and that we needed to consider other options and to take some bold risks. The question that kept resurfacing was, "Where do we start?" In order to address the challenges of forming a business, Chicago WebDocent team entered an annual business plan competition sponsored by the University of Chicago Graduate School of Business Polsky Center for Entrepreneurship.

The ninth annual Edward L. Kaplan New Venture Challenge provided the *Chicago WebDocent* team an excellent testing ground for our ideas. This paper outlines issues our team addressed over the course of six months as we participated in the contest. We hope to capture many of the major lessons we learned. Herein we describe our process of researching and planning an eLearning business venture based on a university outreach program with the hopes of serving as a guide to others considering such a move. We will discuss our preliminary efforts to create an eLearning company with strong ties to the University of Chicago, eight major Chicago museums and the Chicago Public School System. Our aim in this paper is to share those considerations

with our colleagues worldwide so that you might benefit from we experienced and learned in Chicago.

Could our work be valorized (priced) and sold? Would there be a market for products created from our efforts? Was there an economically sound business model that would return profits on investments of capital and effort? Forced to ask unfamiliar, difficult questions we had to focus on new metrics of success from foreign disciplines. This paper hopes to translate some of those metrics for those in academic fields might more easily consider crossing boundaries into the business of business.

In order to "go to market" many issues must be considered and a critical, shrewd and honest eye must be cast upon any intentions to enter into business. We worked hard to address issues of business strategy, intellectual property, and licensing issues. There were also politics, egos, and past promises with which to contend. Clearly ours is an American perspective. We look forward to further contributions from our international colleagues to address differences in what it takes to launch a business in the European Union as well as intricacies associated with various countries around the world.

It must be noted that, to date, no business has been founded; no product brought to market. This past spring (2005) we completed a preliminary business plan, which was well received. Based on our plan and several presentations by the eFieldTrips team, among sixty teams in the running, we advanced to the final round of nine in the *New Venture Challenge*. Though we did not win the competition, we were lauded for our accomplishments and potential as a business.

Today Chicago WebDocent remains a grant-funded project within the University of Chicago. Currently (September 2005) we continue to work toward our goal of a self-sustainable non-profit organization or for-profit business. While the *New Venture Challenge* allowed us to explore the potential of starting a for-profit business, we learned that venture capitalists have been burned in the past by investing in large education/learning start-ups and many have not recouped their investment. It has also become clear that there may be many advantages to making *eFieldTrips* a non-profit entity. This question of for-profit vs. non-profit remains open.

Common Frameworks – Common Questions

In every discipline, in every realm of endeavor, there is a language of success and a language of failure. There are metrics by which to measure degrees of accomplishment. For most of us we choose a field of scholarship, a sector of business or a medium of the arts and we pursue success through training, apprenticeship, experience and by learning from our mistakes. Whether a mammalian biologist, a commodities trader or a cowboy poet, work in each of these fields has a specific set of necessary skills, standards and expectations. Distinct frameworks, practices and benchmarks of achievement surround and support each realm of work. The language of each discipline must be acquired and practiced. Often embedded in the language are practices, hierarchies and distinct ways of approaching issues. Indeed, the challenges of each discipline are expressed in the language used to describe problems and pose questions.

New Metrics

As well, each discipline has a community of professional peers who share a similar set of concerns, ask similar questions and judge progress and success by similar measures. In some cases accomplishment is measured by qualitative and subjective values (the beauty of a violin performance). In other cases, accomplishment is measured in distinct, comparable quantitative value (the annual profits of an automobile company). These measurements, distinct metrics associated with each discipline, vary greatly among professional pursuits; the physical sciences, the biological sciences, the humanities, social sciences, sporting, business, politics and entertainment. The accomplishments of the athlete are not measured by the same token as the silversmith and very often these measurements have no place in other disciplines. Like the divide between the "two cultures" of the literary imagination and the technical orientation of scientist identified by C.P. Snow in the late 1950s, there exist gulfs very difficult to gap.

See Appendix 1. A Comparison of Metrics

What is worth?

More often than not, money is the yardstick by which value is measured. Social, personal, educational, even spiritual values are often overlooked because they do not have measures as distinct as the dollar, the euro, the yen. Monetary value is set by the market and its kindred measures of supply and demand. When buyer and seller agree to a price many factors are at work but, at a most basic level, in this exchange prices are set. When many transactions are made between buyers and sellers more standardized prices are set against which other future prices and transactions are measured and a market is born.

Our point here is not to explore a course in Economics *101*, but simply to point out that the process of bringing a product to market requires much analysis of the potential demand. This process of valorization seeks to prove the *potential* worth of a product or service and explore the merits of taking the risks involved in starting a business to sell the product or service on the market. Often this process begins with of researching and writing a business plan designed to measure and describe the potential economic return on investment of funds and effort.

This is a key difference between not-for-profit and for-profit decision making. In the commercial sector, there is greater emphasis placed on understanding the market for a product—who will buy and use this product—than in the not-for-profit sector, where there is greater latitude for creativity and experimentation. Academicians often lack these economic measures and the necessary tools to address the investment community. In what follows we hope to share some of the basic considerations that must be addressed in writing a business plan, with special consideration given to those working in academic fields, especially those producing digital learning content. Our hope is to be of assistance to those who seek to communicate effectively across disciplinary boundaries and attract the attention of venture capitalists and angel investors.

Value, Valor, Venture

What is a business venture and what does it require? Like all ventures (and adventures) you need strength, skill, strategy, bravery and a tough skin. By definition, business ventures risk loss while seeking to produce profits. Ventures require the challenge of most all previously held assumptions. Academics seeking to become entrepreneurs must be ready for the challenge of their ideas, and possibly their ideals, by people outside of their field. They must be ready to learn and change direction; respect the harsh results of being measured by new foreign systems of metrics; cede control to others; and, most of all, listen closely to the knowledgeable advice of business people: the voice of the market. But, always look for and consider a second (or third) opinion. Lastly, know that, generally, it will be the unyielding leadership of one individual that marshals the enormous amount of work required to organize a strong team, write an attractive business plan, capitalize the venture, launch and eventually grow the business.

Universities, Museums and Libraries - Ideas for sale?

The mission of all universities, museums and libraries is to create, present and preserve knowledge. The many goals of these academic institutions and their professionals could roughly be summed up under *education*. It is with ideas and data that professors, researchers, curators, librarians and archivists ply their trade. And, in some ways these ideas are for sale. Tuitions are paid, admission fees are collected, libraries are supported through private and public moneys. Yet, generally, American universities, museums and libraries reside in the non-profit sector of the economy. Though they are increasingly exposed to market forces and competition, their main mission is not to increase profits, seek market advantage, buy up other entities nor increase value for owners and stockholders. Lo, universities, museums and libraries seek to bolster their endowments, boost their operating funds and often fight off obsolescence. They are accountable to different “stockholders” and are threatened by a multitude of current day forces.

Changing labor demands require "*21st Century skills*" be taught. Shortened attention spans and lower preparation levels among incoming students and patrons mean that content needs to be

adjusted to meet the abilities and needs of clientele. Increased access to information via the Internet and the effects of globalization have shifted attention away from place-based educational experiences while opening up worldwide labor and knowledge resources to once isolated cultures and economies. Indeed, the role of universities, museums and libraries in the production and reproduction of knowledge and learning must change to adjust to the digital age.

Digital Content

The advent of digital content has created many new challenges and opportunities for the creation and dissemination of knowledge in instantaneous, far-reaching ways with low distribution costs. Museums, libraries and universities, once the exemplars of place-based knowledge storage and sharing are challenged *and* offered an opportunity to co-evolve symbiotically with the digital networks that now enmesh our globe and connect our people. Thus, the traditional roles of these knowledge-based institutions have begun to shift and progress. In addition, it would seem that there are new opportunities for the dissemination and capitalization of digital (or digitized) content. However, very often, non-profit status, attitudes and *aptitudes* stand in the way of entering the market and creating value. The result is that new business entities cannot reside within these academic institutions but must be "spun-out" so that newly birthed businesses can license extant digital content and processes from their progenitor organizations for sale on the open market.

It should be noted that not-for-profit organizations are not prohibited from *making* a profit. Rather, they are restricted by how they can *use* such profits. If a not-for-profit engages in activities unrelated to its recognized purpose and brings in more revenue than it pays in operating costs, then it must set up a separate corporation for this activity, or risk losing its tax-exempt status. It is easier, too, for a not-for-profit organization to create and operate a for-profit wing, than the other way around.

Who is going to pay for this stuff?

But the very practical, *non-academic* questions are: Who cares for digital content? Who will buy this stuff and how much will they pay? What types of resources will the market sustain? Backing up a step, just *which market* are we talking about? Compared to the social and research concerns put forth by not-for-profits, these questions may seem crassly stated when compared to the high-minded considerations pondered within academic institutions. When, they are the core questions that must be answered when considering whether one should move a successful academic project into a business.

Good Ideas for Sale

Everyone would agree that universities, museums and libraries are good and needed as the basis for a strong democratic society but, by which values are they judged meritorious? And the ideas they produce – are they all good? Are they all easily monetized? Certainly, the answer is: No. But, good and bad ideas, popular and unpopular opinions are needed within the academy to test notions and strengthen competition producing better scholarship. A close look is needed to determine whether the ideas and digital content in question fulfill a social need or meet a market demand. There is a tremendous difference between these distinct acts of satiation.

The question is which digital content and related processes stand a fighting chance outside the protective walls of the academic institution? Which ideas can be valorized to produce economic value? And, what is good process of testing their mettle and potential for capitalization? Can we translate the value of digital content developed in universities, museums and libraries into profits? Perhaps these are good ideas and high quality content that no one will buy. More succinctly, can a business be built to support the production of further digital content and is there a sustained market of willing buyers?

Below we discuss how the process of writing a business plan is an important first testing ground for those considering forming a business to produce academic digital content. We outline the

major components of an effective plan and meditate on some of the considerations the *eFieldTrips* team encountered.

The Goal and the Motivation

The most successful academicians, librarians, and curators are passionate about their work and inspired to further their pursuits. Under the best of circumstances professionals also feel great loyalty to their institutions and synergy between their work and the long and short term goals of their employer. Yet, when spinning off a new business venture a dramatic shift must be made away from the subject matter once at the center of concern toward the establishment of a business entity. The challenge is to *create a business organization* that will produce a good or service that will meet a specific consumer need. In the business plan the goal is *not* to offer a detailed description of the product, the content, and the goods for sale. Rather the goal in the plan is *to accurately describe a structure for a business that will attract investment because it holds a strong potential for success and return on investment.*

At the outset academicians seeking to become entrepreneurs must examine their passions. They must ask themselves: Why am I doing this? Why have I decided to no longer pursue the academically oriented work at which I have become expert in order to pursue the establishment of a business?

Often the answer that results is formulated in a means-to-an-end statement. In the case of the early transformation of Chicago WebDocent into *eFieldTrips* our reasoning first sounded something like this: "We want to produce 1,200 high-quality online learning units based on museum materials for inner city elementary school students so that they will have access to preeminent digital content and thus opportunities to learn and succeed. A sustainable business entity which produces value will allow give us the flexibility needed to achieve this goal. Therefore we want to create a business." The problem with this statement is that the 1,200 online learning units remain the top priority not the formulation of the business. In order to attract

investment a case must be made *for the business* not the idea behind the business, not the product, nor the outcome of the use of the product.

Rather than responding with a means-to-an-end statement, when asked "Why do you want to form this business venture?" the following questions must be addressed:

What are you selling?

Who is going to buy it?

What specific need are you meeting?

Why is this business a good investment?

Addressing these questions involves a great shift in metrics and motivation. This requires a lot of soul searching, research and a close examination of competencies.

As the *eFieldTrips* team progressed through the process of drafting a business plan, we were asked time and time again, "What is your business?" We often struggled to succinctly state our intentions. We spent hours asking ourselves, "What is our mission statement?" We wrote on countless blackboards, "We sell _____ to _____" and fought to convincingly fill in the blanks with details of our relationship to museums, a customer base and the digital content market. We began to fear that we pursued good ideas and created products that perhaps no one would buy.

Over the course of months we refined our statement and our mission came into focus. We drilled each other to clearly state our "mantra" so that everybody on the team was on the same page. This became increasingly important as became to talk to potential investors and those coaching and advising us through the process. In the final draft of our business plan, our statement was distilled:

Our Company

eFieldTrips is an online learning company dedicated to providing highly interactive, classroom-ready curriculum to educators in grades 3-8. Our company is focused on the \$7.87 billion educational technology market and will generate revenue from school districts and individual users through subscription fees for our products.

Our Mission

eFieldTrips is an online learning company dedicated to providing highly interactive, classroom-ready curriculum based on museum artifacts to educators in grades 3-8.

We provide value to school educators by offering:

- ✓ standards-based online lessons across multiple subject areas and grade levels;
- ✓ easily incorporated, classroom-ready lessons to complement hardware investments;
- ✓ peer- and expert-reviewed content written by teachers, for teachers;
- ✓ management tools to help track student progress and achievement;
- ✓ fun, narrative-based lessons that incorporate high-resolution digitized artifacts and;
- ✓ Macromedia Flash™ games to keep students actively interested.

Our well-designed curriculum product can help teachers support and remediate struggling students and be a part of an effort to drive student achievement to fulfill the requirements of the No Child Left Behind legislation.

Here we address the potential investor with a clear focus is on how business will generate revenues that return value to the investor. This is business-speak not academic language. It addresses the metrics of the business investor. A consistent refining of the business model accompanied with regular editing of the summary statement is a crucial ongoing process for any team working on a business venture. In addition, it is important to regularly return to the statement in writing and in verbal communication. The team will not cohere around the business until all members can pronounce the statement aloud on demand. This may sound elementary but it is fundamentally important to maintain direction and cohere the team.

The Role of the Leader/Founder

Beyond the question of goal, motivation and passion, another very important question to ask is: "Is the leader/founder of the project the right person to start the venture?" Often the answer is: *No* or *Yes, but in a limited way*. In efforts to create a business from a formerly academic pursuit, an honest assessment of the initial founder/leaders ability to strategize and lead the new venture must be asked.

Does the founder have the time to take on this undertaking?

Does he/she possess business sensibilities?

Is he/she willing to part with ideas and ideals which may have no economic value or are fraught with difficulties and inefficiencies?

Can he/she they accept the challenge and at times rejection of their ideas when confronted?

Will he/she respect the opinions of experts from other fields?

Does he/she understand the complex notion of a market?

Is he/she a credible leader?

Is he/she comfortable talking about and asking directly for money?

What is his/her relationship to risk taking?

In the case of the *eFieldTrips* team our leader/founder of the *Chicago WebDocent Project* did not participate closely in the business plan development process and associated contest. The business plan contest team leader and our project leader/founder agreed that the New Venture Challenge would be an excellent opportunity to test new ideas and perhaps throw out old assumptions. For the purposes of the New Venture Challenge a new direction would be charted and then presented to the founder/leader and other advisors for reconciliation and further refinement.

Start-up businesses require business people to lead them. This is why organizations run into the "founders problem" wherein old goals, egos and legacy can stand in the way of progress. Difficult decisions about where to let go of control and assumptions are hard to face. Often the

initial leader/founder is placed on the board of advisors and/or holds a position of Chief Scientific Officer, Chief Learning Officer or Chief Educational Officer. The position of Chief Executive Officer and Chief Operations Officer are often left to those better suited to lead and manage the new business, respectively.

Measuring Value – Weighing Risk

The process of writing a business plan will force involved parties to confront the viability of the proposed business venture. Prospective investors use business plans to measure the *value of the business* and its potential to return investment. In fact, the very ability to produce a sound business plan demonstrates some of the preliminary signs of potential success. Note how many qualifying clauses are in that last sentence. That is to say, the plan will not attract investment on its own. Much more work will be needed to "shop" the plan to investors, defend its reasoning and present the strengths of the team will be needed before investments are made. (Not-for-profits, too, might benefit for a similar analysis of its own operations and prepare a business plan—even if it does not intend to enter the corporate sector—to locate inefficiencies or to clarify goals and assumptions.)

The goal of the business plan is to persuade investors that this is a sound investment and does so by clearly explaining the business, (the team, its products, the market) and to demonstrate its viability. The product and output of the business is just one of many factors that must be considered in making investment decisions. Generally the plan aims to demonstrate a clear path toward profitability with a predicted timeline of distinct and measurable milestones of accomplishments.

There is a common misconception that investors, venture capitalists and speculators are risk takers, the high-stakes gamblers in the world of entrepreneurship and business. Nothing could be further from the truth. Successful investors take great care in their investments, understand and weigh risks and perform a great deal of due diligence work to ensure that their investments will

yield profitable returns. A good business plan should instill feelings of confidence, trust and security in the investor.

Evaluation of the Venture

Listed below are some of the issues that must successfully be addressed in the plan in order to attract potential investors. An in-depth discussion of these subjects is far beyond the scope of this paper but we will briefly touch on these subjects. Much more information on these subjects can be found in studies of start-up businesses, entrepreneurship, venture capital investment and business strategy. These are the measures by which ventures are generally judged.

The Prospect – New ventures must spark inspiration. The idea should contain an "ah-ha" moment that makes people want to know more and become associated and involved. The timing must also be right so that it captures an element of the "cool" without appearing to be a fad that will quickly fade.

What is the idea for the business? What content, goods or services are to be sold? How will the content be generated? Is content the main product offering, or are there other associated goods and services that could also generate revenue like training or pencil-and-paper workbooks for students studying digital content? Has this idea been tested before? What assets are currently held that bring value to the table? What makes this opportunity unique and attractive? Why has not anybody pursued this opportunity before?

The Industry and Economic Sector – Each sector of the economy has its own ebbs and flows. Like the various subjects of academia, each has a history and a way of conducting business. Similarly, standard practices vary across sectors all of which add up to a business culture. Individual investors and venture capitalist firms are usually versed in only a few industries because they, like those their money will support, must be experts in the field, abreast of the latest developments.

What type of business is in question? Which sector of the economy does this industry fall under? Is this sector heavily regulated by the government? Who are the major players in this industry and sector? How fragmented is this sector? Is this industry "hot?" Is it generally considered to be on an upswing or downturn? Is this industry and sector closely tied to other industries and sectors? Might there be crossover from the sector the business is imagined to fit into presently into other new potential applications in different sectors?

The Market – Perhaps one of the most important aspects of any venture, the market must be well understood. Who are the major players--the key producers and consumers of digital content? How is the larger market sector broken into smaller targeted market sectors? For consumers, who makes purchasing decisions and what is the purchasing cycle? How much money flows through this market annually? Is the market growing or shrinking? How are prices set on the market? Where does the market exist? Are there major tradeshows associated with the market? Will the venture be accepted by the market and how will the new business make its self known to potential buyers? Who will most likely be the major competition for the new business? There will *always* be competition so to say to potential investors, "We will have no competition," is a sure way to be laughed out the door.

Uncertainty and Risk – All ventures, by definition, involve risk due to uncertainties. Successful entrepreneurs understand the uncertainties of their venture and do all they can to minimize these unknowns. Potential investors want to be assured that the landscape of uncertainties has been fully explored and considered. In an effort to understand the risk involved in any investment investors will challenge the venture (and the entrepreneur) by posing questions about uncertainly. If the uncertainties are too many and the risks are too high, they will not take interest in the deal. They may require more research and strategy work be done or simply walk away. Uncertainties abound in *all* aspects of any venture. The questions to be asked are far too numerous to list here and are often specific to the particular venture in question. A good approach to take toward uncertainly is one of severe skepticism. Ask "Who? What? Where? How? When? How Much?" at every turn. Be prepared to field persistent questioning like that which might be posed by an endlessly inquisitive four year-old. Why do you want to go into business? Who are you and why are you the person in which to invest? Who needs this product?

Team and Leadership – Perhaps above all of the considerations that both entrepreneurs and investors must consider when entering a venture is the question of team. As much as investors place their bets on new entrepreneurial ideas and products, they speculate on the effectiveness of those who will implement the business strategy. Investors and venture capitalists must feel entirely confident in the persons to whom they will entrust capital. Their level of confidence will be based on measurements of skill, experience, ability, leadership and vision as much as very personal feelings of trust, confidence and an ability to communicate. The very first step in establishing these crucial relationships is to ensure that the resumes attached to the business plan clearly spell out the strengths and proven experience of each team member and how they contribute directly to the venture. Finally, the investor will want to feel confident that this team is the right one to successfully execute the business.

Equally as important is the issue of leadership. In order for the team to function effectively and accomplish goals, strong leadership and decision-making must be in place. Good leaders set expectations and effectively channel the efforts of their team. They also must be prepared to make difficult strategy decisions and take responsibilities for their actions. They must know their team and its abilities well. They must be willing to make additions to the team where skills and experience is lacking and they must be ready to eliminate or redirect team members when their performance is not contributing directly to the goals and bottom line of the venture. Cautious investors will spend a great deal of time and effort testing the strengths of the entrepreneurial team and its leader. An effective way to proceed with any business, then, is to establish an advisory board of experienced leaders to help support the startup and to guide the company leadership to hire the right individuals and seek out strategic opportunities.

Who are the individuals that will be formulating and implementing the strategy? What are their qualifications and can they do the work? Do they have the passion required? Are they smart and seasoned enough to pull this off with speed and efficiency? Do they have the strong stomach required for the challenges of the business world? Will the team work effectively together under pressure? Do the team members seem to be at a point in their careers where participating in the

venture makes sense? Do they have the passion required and will they be willing to work the very long, arduous hours required to launch and grow a business?

Lastly, a note on choosing the right investors. As much as investors who hold the purse strings of capital seek to conduct diligent research and make sound investment decisions, so too do entrepreneurs need to conduct their own research to seeking the right investor. More than money need be sought from the investor. Market experience, industry experience and continued sound advice should all accompany investment dollars.

Strategy – A clear, sound, and reasonable strategy must be described in the business plan. It must be consistent with the prospect and opportunity of the business, address uncertainties, and champion the team and the strengths of the leadership. The strategy must also describe a clear path into the market and describe a tight and targeted sales and marketing strategy aimed at a specific set of customers and decision makers. In most industries, venture capitalists look to see profitability by year three. Lastly, the strategy should describe how the content, goods and/or services provided by the company will be produced and distributed.

Financial Statements – All business plans contain projected financial statements which outline how money will move through the company. These tables project income, cost of good sold, gross profits, market adoption analysis, cash flows, depreciation, taxes, interest, etc. These numbers and are what people spend years in business school to study and a lifetime to understand and manipulate. They are very powerful tools of analysis. Expressed in a standard format, they allow investors to evaluate the venture at a glance while also allowing for closer scrutiny. Volumes have been written on these subjects and we, the authors, are far from qualified to cover these topics. However, these tables are *crucial* to the plan and must be carefully crafted by an experienced analyst. Like ideas about the company and its operations, these financial projections should be challenged. Repeated review and second opinions sought during their development.

The Investment and The Deal – The goal of any business plan is three-fold. First it is to solicit capital investment. Second, it is describe the proposed venture. Third, it is to serve as a very general roadmap for the launch and strategy for the business. As a solicitation it must

specifically ask for money. Often this number is stated *in the first sentence of the plan*. The rest of the plan essentially describes how the money will be spent and how these funds will be used to grow the business, generate sales and return profit to investors over time.

Beyond the specific funding needed, it should be clear that the deal is structured to provide appropriate incentives to all the interested parties so that key individuals will make the venture successful and provide proper governance.

The Exit – Venture capitalists want a return on their investment. Some investors, called Angel Funders, hope to make money while also serving societal needs but want to *at least* break even in doing so. It is important to consider that for investors, businesses are a means-to-an-end for profit. They are a machine or a medium for money. As such, entrepreneurs must explain how investments will be returned and profits generated. "How and when will I get my money out?" "When will the business go cash flow positive and produce profits for investors?" Once the company has grown into a viable and valuable entity to whom might we sell it? This perhaps is one of the most foreign concepts to academicians: Many successful entrepreneurs develop companies not so that they can engage their areas of interests in particular subjects but rather to create value and extract value by selling the entire entity. Their primary passion may be for that process, not for the content of the business. This type of thinking must be considered and partially adopted by those seeking to grow a new venture and communicate with potential investors.

A Small Case Study: Chicago WebDocent Becomes eFieldTrips

Thus far we have discussed what those working in universities, museums and libraries should consider when thinking about spinning an independent business out of their organization. We have explored how the metrics and language used by entrepreneurs and investors vary greatly from those used in scholarly pursuits. Of particular interest are notions of value across disciplines and how scholarly pursuits and the content produced therein might be measured by market demand. We have also meditated on the motivations of scholars to make the leap into

entrepreneurship and the important role of the leader/founder. Lastly we have outlined the ways in which business plans are evaluated, which reflect the concerns of the venture capitalist and investor.

With these general themes in mind we will turn to some of the specific experiences *eFieldTrips* faced when writing a business plan. Here we hope to give some color to the ideas thus far explored in this paper, paying special attention to digital content creation.

The eFieldTrips Story

After a successful five-year partnership among the University of Chicago, the Chicago Public Schools and eight major Chicago museums, the *Chicago WebDocent* pilot project was coming to close. We had engaged teachers, students and museum professionals to produce high-quality, online content and interactive learning curricula. Our work had attracted national and international attention. However, funding for the project was starting to dwindle and it was clear that different sources of financial support were needed. In addition, though the online units were lauded, the production cycle was slow and needed to become more efficient to meet the demands of the educational marketplace. In December of 2004 members of the *Chicago WebDocent* team lead by Benjamin Lorch entered the University of Chicago Graduate School of Business New Venture Challenge as a means to test the market-readiness of *Chicago WebDocent* and to develop a business plan that would hopefully attract the attention of investors.

Value Loops

The Chicago WebDocent project had succeeded in the past by forming productive working relationships. Situated at the University of Chicago, our position at one of the foremost academic institutions in the world lent credibility to our initiative and allowed us to serve as an intermediary between institutions that did not have a history of working together effectively. All of the partners seemed to benefit and find value in the project. Individual schools received free online content and training for teachers in an effort to bring digital learning to their classrooms. The museums, which seek to serve the students of Chicago, were happy to be involved with the

project as civic storehouses of incredible resources and knowledge. The Chicago Public Schools Department of eLearning supported the program and was happy to be associated with a project that leveraged the power of so many esteemed institutions in order to serve the students of Chicago. Yet, the model and the partnerships were not sustainable and arrangements had to be made. A business entity seemed to be the best option to fund a project intended to create a complete online social studies and science curricula for third through eighth graders.

Through the months of research, strategizing, productively arguing and writing the plan we tried to create a strategy which would bring value to our three major constituents: the schools, the museums, and the school systems. New constituencies began to emerge as well: parents, city boards of tourism, major traveling museum exhibitions were all considered as potential clients and sources of revenue. Our challenge was to transform working partnerships based on trust into business relationships backed by contracts. We knew, however, that some value transfer would not be in the form of money. For example, in exchange for use of images of museum objects, eFieldTrips could return value to the museums by digitizing objects and documents at archival standards. In addition, there was the consideration of a loyalty campaigns that would attract young visitors and their families to the museums. Since by definition, our role was to be situated among non-profit institutions, we called these relationships "value loops."

We summed these value loops up with the following description:

Providing Content for the Schools

Creating Value for the Museums

Making Money for the Investor

As we described these value loops and presented our fancy diagram to our coaches in the contest and later to venture capitalists, their eyes would often glaze over.

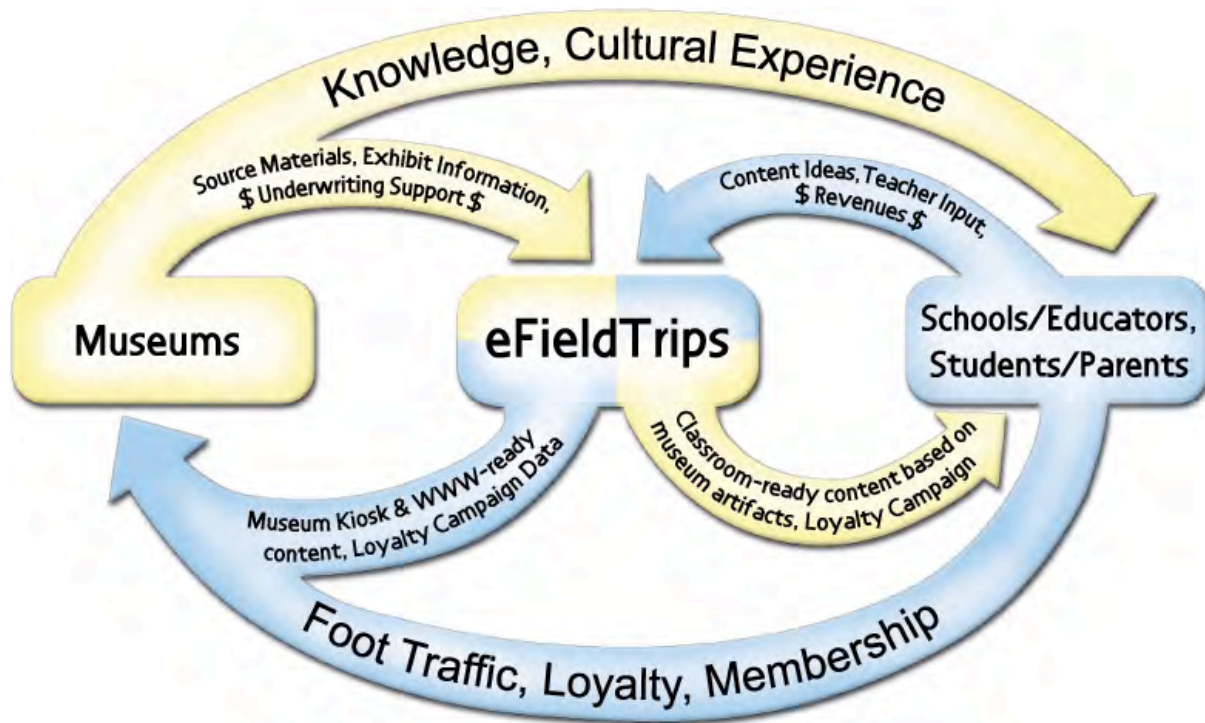


Figure 1. *eFieldTrips* Value Loops

Our plan had too many moving parts; too much uncertainty, we were told. Doing business with the museums seemed risky and unnecessary. The prestige the museums carried in the non-profit world of academics and scholarship would not necessarily translate into sales and profits. And, if it did there may be far too many considerations to make it work. The partnerships we had with the museums and our strong reputation mattered little to potential investors. The creation of a strong brand which conjured the prestige of major museums could not provide the same respectability on the open market that we had enjoyed while working in scholastic circles. The museums' role it seemed might have to be reduced. This was true also of our close connections to public school teachers, which had been central in slowing down the content creation cycle.

The history of the project, while a nice story about our credibility, mattered little to investors. The future was what they were concerned about.

The Team

Fortunately, for the *eFieldTrips* team our initial group was strong. Benjamin Lorch had five years of experience managing the Chicago Public Schools | University of Chicago Internet Project and also had previous museum and strategic communication skills gained while working for the Smithsonian Institution. Julia Brazas, Director of Chicago WebDocent, had developed the program over the course of several years and was a recognized museum educator. Sean York was an accomplished designer of online interactive learning units and also had experience working for start-up companies. The foundation was in place.

Bob Rosenberg, a coach for the New Venture Challenge, suggested that Matt Howard, director of the Chicago Media Initiatives Group, be added to the team. Matt brought experience in new media and online learning, having worked for several Universities and educational startups. He was also interested in entering business school and thus had an interest in entrepreneurship. His energy and creativity were a boost.

In order to participate in the contest at least one member of the team had to be a full-time student at the Graduate School of Business. After attending preliminary meetings Lorch attended a meet-and-greet session intended to match individuals with teams. He also posted a description of the project to the New Venture Challenge web site. Two qualified individuals inquired and brought with them the needed skills to round out the group. Ryan Malone was an expert in marketing and said that all of the other projects proposed bored him. His wife was a public school teacher. Achyuth Hassan had real-world experience in operations. Both Achyuth and Ryan also brought to the group the financial and accounting skills the group lacked.

Throughout the contest the team was lauded as strong and able to execute the business plan if it were capitalized. In addition, we recognized that a seasoned Chief Executive Officer would be needed and built this into our plan. If the business if it were to launch, Lorch who lead the business plan effort would most likely take the position of Chief Operations Officer, managing the day-to-day operations.

Many members had strong connections in the education market and within venture capital circles. From these individuals a provisional board to directors was assembled.

Presentation of Current Assets

As we have discussed value is central to making the case for a new business. The eFieldTrips team already held several valuable assets that were hard to document. This often meant translating from academic and scholarly language into the language of business and commerce.

A Memorandum of Understanding

As stated earlier, we had to demonstrate an ability to parlay our institutional partnerships into business relationships. The team decided to concentrate on our relationship with the Field Museum of Natural History since we had the most formalized and productive connection with them. Months earlier Chicago WebDocent and the Field Museum had signed a Memorandum of Understanding in regard to the use of digital imagery supplied by the museum. This letter was added an appendix to the plan.

Letters of Support

While developing the business plan Benjamin Lorch and Professor Don York, founder of Chicago WebDocent, met with the President, the Chief Financial Officer as well as the Director of Teacher and Student Programs of the Field Museum to discuss our intentions of forming a business. We sought their input, criticism and support since, for the business to succeed, the role of the museum would be crucial. Our goal was to secure a letter of support, to which they agreed. Following the meeting a letter of support was drafted by Lorch and signed by Director of Educational Programs and Outreach. This letter was also added as an appendix to the business plan.

One aspect of the plan involved developing a loyalty campaign for the partner museums that would draw students, teachers and parents to the museums for visits outside the classroom where they would first encounter digitized artifacts. Such a loyalty campaign seemed like an attractive feature of the plan but the team had neither time nor the expertise to develop this part of the business model. Recently, word-of-mouth marketing had been receiving a lot of press and such a strategy seemed to fit very closely with the eFieldTrips business strategy since it relied heavily on leveraging the Internet as a communications tool to spread positive marketing messages. Lorch knew Dave Balter, the president of BzzAgent, the hottest of the burgeoning buzz marketing companies. BzzAgent had recently been featured on the cover of *The New York Times Magazine*. Again, Lorch drafted a letter of support and interest, Dave signed it and it was added as an appendix to the plan.

Video

Under the direction of Matt Howard and Sean York the *eFieldTrips* team produced a promotional sales video, which was also presented to the judges of the *New Venture Challenge*. The video forced us to refine our messages. Short on-camera interviews allowed us to demonstrate the enthusiasm teachers, principals and senior administrators at the Chicago Public Schools felt for the *Chicago WebDocent* project and its online content. Shots of students using the online content gave proof that the content was classroom ready. Live captures of *Chicago WebDocent* content in use showed what students and teachers could expect to experience online. Upbeat music and smart editing created excitement in the four-minute piece. The video helped us sell our ideas but it also demonstrated that we could produce professional and affective marketing tools at a very low cost. We wanted people to know that we serious and ready to rollout into the marketplace.

Showcase Interactive Learning Units – The Mummy

One of the most popular activities Chicago WebDocent has produced is an online interactive mummification of an ancient Egyptian body. Students love it, teachers are impressed by it, no

one seems able to forget about it after seeing it – especially the portion of the interactive lesson wherein students are asked to remove the brain of the dead with a hook guided though the nostrils. (OK, perhaps now *you* will not forget it either!) We showcased the mummy in the video and we present it to nearly every audience we encounter. It sets us apart and leaves an indelible memory of an engaging and educational online tool.

The Content

At the core of the eFieldTrips offering is the online content co-developed by Chicago public school teachers and reviewed by content area experts at the University. In the business plan we could only describe the units and list them by name. We did not dedicate much text in the plan to descriptions of the content but we did list the names of the units, the grade levels at which they are aimed, and the educational standards they addressed. We also included a short paragraph on the pedagogy and educational approach of the online offering. Our intention was to ensure potential investors of the credibility of the educational offering while maintaining a focus on the structure of the business and its potential to succeed.

We included an image of the proprietary *Chicago WebDocent* interface in the business plan. The interface encourages student engagement and helps teachers use the resources in a variety of classroom settings. We took time to determine which lessons were best shown to potential investors and became versed in making effective demonstrations of the content. When we presented the interface in a live demonstration, we pointed out the features available to students, teachers and school administrators. We speculated that if we could demonstrate the effectiveness of the online units to potential investors, we would also succeed in selling the idea of the business.

Naming and Branding the Venture

One of the first tasks our team took on was to name the venture in way that would attract attention, demonstrate the sector we wished to enter (education) and the industry in which we hoped to become a player (online classroom content production and delivery). We knew that *Chicago WebDocent*, the initial name of the project, was too academic. “Docent” was not a commonly used word and, while associated with museums, did not exactly trip of the tongue. After much deliberation we settled on *eFieldTrips*. Our intension was to express a cybernetic connection between museums and classrooms. Settling on this name was also influenced by a doodle Sean York, our Creative Director and web designer came up with in discussions. A yellow school bus emerging from a computer screen was attractive and seemed to send the right message.

In practice, we found that *eFieldTrips* mislead potential investors and other advisors. Upon first impression, people quickly assumed that we intended to provide online fieldtrip experiences. In addition, many consider fieldtrips extraneous to the core educational experiences schools aim to provide. We wanted our business to be positioned as a central provider of online content to be used regularly in classrooms, libraries and teaching laboratories.

Names and brands are *very* important. They must instantly send the messages you intend to deliver. Any effort required to explain the name, correct misperceptions or realign expectations among potential investors is time waited. In addition, such explanations may give the unwanted impression of uncertainty. Entrepreneurs would be well advised to consult with marketing and branding experts when naming their venture

Analogs to a Digital Business

Presenting an analog for your new venture will help potential investors and customers understand your new venture. Analogs help people frame the business in common terms and experiences

known to them. In addition, analogs allows entrepreneurs to associate their venture with commonly known, successful businesses.

For example, one of the best analogs presented among the teams with which we participated in the business school content was a for a venture called *Garage Pros*. Garage Pros intended to address a particularly American “problem.” Many new homes are built with large garages but are not furnished with shelving or organized workspaces. Garage Pros intended to provide design consultation and construction services for a high-income clientele that wished to provide a cozier environment for their clients’ SUVs and golf clubs. “We are the California Closets for your garage,” they claimed. Investors instantly nodded their heads in recognition recalling the success of *California Closets*, a company that sells customizable closet organization systems. California Closets had also recently been acquired by Home Depot, a very large, very successful home and building supply retailer in the United States.

An accurate and attractive analog can do a lot of the work of explaining your venture to people. However, analogs can have pitfalls as well. You would never want to analogize with a failed business model. Investors and venture capitalists seem to take great enjoyment in poking holes in business analogies. Entrepreneurs must also avoid the pitfalls of reifying their analogy, thereby becoming trapped in a pre-established model. This will limit their creativity when creating business models and strategy.

Endless Considerations

The complexities of establishing and running a business are nearly endless: Incorporation, Office Space, Operating Costs, Staffing, Insurance, Benefits, Fixed and Variable Costs, Payroll, Copyright and Patent Protection, Sales and Marketing, Expenses including Travel, Production and Distribution Costs, Sales Cycles. And the list goes on and on. The entrepreneur must be willing, able and prepared to address these concerns, and more. Without careful attention paid, any of these issues can jeopardize the viability of the business. Be prepared to address these issues upon the inquiry of venture capitalists and investors.

Understanding and Targeting the Right Market

As mentioned earlier, understanding your particular market is *crucial*. Markets in every sectors are complex and require years of study and experience to understand and successfully participate and forecast.

The *eFieldTrips* was forced to carefully consider the proper market for the content we planned to produce. We knew we would fall broadly into the education sector but we had to first ask ourselves, “Who is our true consumer and who is our true customer?” It would quickly become apparent that these were two different constituencies. We quickly realized we had a classic third-party payer problem on our hands. Student and teachers would consume (use) the product but they would not be paying for it. Rather schools, school districts and perhaps educational government agencies would purchase the content for the use of their constituencies. The effectiveness of the product would be measured through student test scores and teacher and student testimonials.

Also, the purchase of curricula, we learned through our research and from conversations with school decision makers, is a long and political process with one primary selling season, winter. In spring, school boards, superintendents and principals make their spending decisions. We were challenged to figure out how we could possibly reach the number of schools needed just to make ourselves known. Making the sale was a further challenge. And, servicing the individual schools using the content with training and support would prove an even further challenge.

In some projections the cost of just making the sale outweighed any profits gained. Selling to major school systems seemed like the best option since they had large budgets. But, some school systems, for instance Chicago, have no centralized curriculum and therefore no central purchasing body that could make a centralized decision. Smaller districts tend to have a committee or one person that makes the spending decisions but we could not expect to reach the number of districts needed to “make our numbers.” It was a classic Catch-22. We went with the large district model in the business plan but it was not without flaws.

We also explored other possible customer bases. Perhaps parents would be willing to pay to connect to classroom content being employed in their child's classroom? But, selling to parents would be a very different challenge than selling to schools and/or school districts. There would be very different competition and it seemed that this arrangement would only complicate our relationship to the schools, teachers and administrators.

Further, we explored selling content and services to our partner museums. Perhaps they could underwrite the digital content development process. In return eFieldTrips would provide raw digitized content for their archives and ready to view web site content they could publish. In addition, this content could be repackaged for use in electronic kiosks presented in situ with physical exhibits.

Once the digital learning materials were complete *eFieldTrips* could then sell the content on the educational market to schools with a portion of the profits returned to the contributing museums under a licensing agreement. The online content designed for classroom use would carry a strong museum brand and encourage students, teachers and families to visit their local museums driving up foot traffic. In addition, the classroom work of students visiting the museums would be recognized at the museum thereby increasing young patron loyalty.

When we explored this idea with museum professionals they generally reacted by telling us that they had many educational outreach pages specifically designed for students and school teachers. Many of the resources, they told us, enhanced fieldtrip experiences by offering pre- and post-visit activities. Though many of the activities did take advantage of the interactive nature of the web and FLASH, this was clearly a case wherein the museum staffs felt we were stepping on their toes. It was also a case where our project name clearly distracted the curators and museum educators from our main mission, which was to bring museum content to the classroom, not vice versa. Lastly, we learned that museums operate on very tight budgets and have slow decision making cycles. It would appear they would not be a good source of revenue.

In each market we had to determine a reasonable price point and demonstrate each constituency's willingness to pay. Our product offering, price point and annual subscription model were based on an online survey of over 250 educators as well as competitor research.

Intellectual Property Issues

Once established as an independent business, the *eFieldTrips* team hoped to license existing content developed by the *Chicago WebDocent* project from the University, which owns all intellectual property created by the faculty and staff. The University of Chicago Office Technology and Intellectual Property (UCTech), under the direction of Alan Thomas, assesses the potential of new technologies and protects the rights of the inventors and the University. In our case, UCTech agreed to establish licensing agreements to help guide our content to market. In 2004 the *Chicago WebDocent* project filed an Invention Disclosure document with UCTech and thus officially registered our intellectual property with the University. We were informed that there was little use in patenting our work because software patents are very difficult to enforce but that we would want to copyright the content. UCTech would now help us navigate the complex waters of licensing agreements.

However, the question of just who owned the existing content quickly became a sticky issue. Early contracts with the Chicago Public Schools stated that any and all content produced by the Chicago WebDocent activities were the property of the school system. In later contracts with the public schools this ownership clause was struck from such that the University controlled the intellectual property. The result was that the volume of classroom-ready content developed by the Chicago WebDocent program and available under license from the University was quite limited. Negotiations with the school system would be needed to wrest control of the earlier developed content from the Chicago public schools. These talks are pending and a licensing agreement is likely to result.

In addition, use of the digitized images of museum artifacts were under special arrangement with the museums. We were not to sell any of the associated content and use was restricted to

Chicago public schools during the pilot period. This issue remains unresolved but we are hopeful that, again, we can arrive at a licensing agreement.

Presentations to Potential Investors

Just as the ideas and arguments made in the business plan must be highly refined and tested, so too does the presentation to investors. Unlike teaching where the goal of the oratory is education, the presentation of the business plan is a sales pitch. It must be exciting, clear and inspirational. Like any mode of public speaking, practice will be needed and body language is very important. The person best suited for this work may not be the person who knows everything about the business. Those with the deepest knowledge may be best advised to contribute to subsequent questions about the initial pitch.

Several versions of the presentation of varying length should be prepared including at very short “elevator pitch” which describes what are you selling, the customer base, the need met by the product and why the business venture is a good investment. During full blown presentations “the ask,” or the solicitation for funds must be clear and justified. Intensive questioning, critical feedback are to be expected and must be taken as gifts which should be later incorporated into the business strategy. Remember you are asking for their money so never lie, obfuscate, or omit facts about the business. This will only harm your chances of success.

Business Schools as Incubators and testing Grounds

Through this process we learned that business schools can serve nicely as a means toward developing a successful business plan. Business schools’ close proximity within academic institutions can provide a good way to explore the launch of a non-profit or for-profit business based on past scholarly success. In particular the *New Venture Challenge* gave the *eFieldTrips* team the time, space, guidance and motivation to push forth and begin seriously exploring a

business venture. We were able to refine our ideas in preparation for the marketplace. We were also required to consider critical measures of success upon which future success will rest.

Appreciation

Ellen A. Rudnick

Clinical Professor of Entrepreneurship

Executive Director

Polsky Center for Entrepreneurship

The University of Chicago Graduate School of Business

Robert A. Rosenberg

Assistant Vice President of Partnerships & Technology

Office of the Vice President for Research & Argonne National Laboratory

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Appendices

A Comparison of Metrics Across Disciplines

Metric	Academic – Museum – Library	Non-Profit Organizations	For Profit Business
Setting	Womb/Incubator	Open Air	Open Air
Personnel	Professors, Curators, Educators, Librarians, Grant	Social Service, Educators,	Venture Capitalists,
Source of Funds	Grants, Gifts and Endowments	Fundraising, Clients, Grants, Endowments	Customers, Investors
Professional Connections	Collaborations	Partnerships	Contracts and Business Relationships
Time Frame	Past/History	Present Day	Future
Role	Educator	Organizer	Speculator/Salesperson
Environment	Protected/Stable	Political/Insecure	Volatile/Risky
What is valued	Ideas	Ideals	Deals
Time	Open-ended, Extendable	Seasonal	Limited
What is merited in individuals	Credentials, Depth and originality of ideas	Connections, Political Power	Economic Advantage, Profits
Ideal Process	Methodical process leading to findings	Effective decision making leading to action and desired results	Swift decisions leading to profitable products and/or services
Work Mode	Autonomy	Teamwork	Teamwork
Values	Generally Shared, Discussed	Shared, Understood	Diverse, Not Discussed
Product/Outcome	Education, Research, Preservation	Social Progress	Personal/Corporate Profit
	The Best Question	The Best Result	The Best Answer (better than 50% right) or The Best Return
Leadership	Research Team	Charismatic Leader	Executor
Organization	Generally flat with main leader	Hierarchical or Flat	Hierarchical
Goal	Education/Knowledge	Action/Change/Progress	Profit