A DESCRIPTION OF THE PERCEPTIONS OF

HUMAN RESOURCES PROFESSIONALS

REGARDING MBA DEGREES FROM FOR-PROFIT

AND TRADITIONAL UNIVERSITIES IN TERMS OF

ROGERS' DIFFUSION OF INNOVATIONS THEORY

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CHAPTER I

INTRODUCTION

Globalization and the technology revolution are major forces of change in higher education. This environment has lead to the explosion of online degree programs at for-profit universities in the last decade. Working adults have found the flexibility and convenience of online learning and the need to enhance skills or advance careers the impetus behind choosing an online MBA program, which is the field of interest to this researcher. While numerous studies have indicated there is no significant difference between online and onground learning (Ausburn, 2005; Bernard, R.J., Abrami, P.C., Lou, Y., Borokhovski, E., Wade, A., Wozney, L., Wallet, P.A., Fiset, M., & Huang, B., 2004; Kearsley, 2000; MacGregor, 2001; Neumann & Shachar, 2003; Olson & Wisher, 2002; Russell, 2001; Stansfield, McLellahn, & Connolly, 2004), recent studies indicate some bit of skepticism from the ivory tower surrounding an online masters degree (Adams & DeFleur, 2005). Little research, however, has been done to understand *employer* perceptions of online degrees, a crucial factor when a working adult considers the time and tuition involved in pursuing an MBA. In addition, the literature does not reflect the consideration of the validity or credibility of an online degree in the eyes of employers. If the literature is a reflection of current thinking, the question has yet to be asked: How can for-profit universities, who are planning courses and degree programs, make certain students have successful job placement after completion of the online MBA program?

The researcher has particular interest in this question as she teaches in the MBA program for an online for-profit university.

This study addressed employer perceptions of online MBA degree programs at for-profit universities and those at traditional onground universities. It further examined relationships of those perceptions with demographic variables and grounded these relationships in the framework of innovation diffusion theory addressing the for-profit university as the innovation.

Theoretical Framework

Pragmatism provided the philosophical framework for this study. When analyzing the philosophies of adult education, pragmatism can be viewed as a bridge between the conflicting philosophies of classicalism and behaviorism on the more conservative end of the philosophical continuum, and humanism and radicalism on the more liberal end. Pragmatism, with historical underpinnings shaped by Dewey, Snedden and Prosser, views the role of education as one that addresses effectively meeting both student and employer need. The role of education is guiding learning through and for occupations (Dewey, 1916).

Pragmatism takes a practical approach to both research and education. In the research field, studies are conducted using the most efficient methods that yield the most useful results. In education and instruction, a pragmatic approach focuses on outcomes that meet real world needs (Dewey, 1916). Several general questions about pragmatic educational outcomes gave impetus to this study. Considering the time and money spent in obtaining an online MBA degree from a for-profit university, does the degree hold the same value for employers as one earned onground at a traditional university? The

University of Phoenix (2005) makes this value promise to students in their literature. Is there research to support this claim? What is the employability reality for those earning an online MBA from a for-profit university? Will the findings of this study support this claim and thus pragmatically support education for occupational success?

A second similar pillar in the framework of this study was its view of the constructed nature of truth. Epistemology, or the nature of truth and knowledge, can be objective, subjective or constructed. From this researcher's pragmatic, middle of the road perspective, knowledge is constructed and determined by society. As a researcher, one cannot be totally objective and must realize that humanity and experience influence the search for truth and knowledge. However, one's role in the research cannot bias or compromise the data or influence those being researched. Based on the view that knowledge and truth are constructed by society, this study offered a lens about a lens – how human resources professionals construct a view of online for-profit MBA degrees and thus relative to applicants with more traditional degrees.

The primary theoretical foundation for this study was the concept of *innovation diffusion theory.* This theory focuses on the process through which an individual passes from first knowledge of an innovation to forming an attitude toward the innovation, to a decision to adopt or reject, to implementation and use of the new idea, and to confirmation of this decision (Rogers, 1962, 2003). The diffusion of innovation process consists of four main elements: the innovation, the communication through certain channels, time, and the members of a social system. Research concerning the diffusion of innovation process has increased significantly the past several decades due to its versatility (Fisher, Dwyer & Yocam, 1996; Fishman, 2000; Hoerup, 2001; Kerski, 2001;

Luehmann, 2002; Urias-Barker, 2000; Valente. Hoffman, Ritt-Olson, Litchman & Johnson, 2002). A universality or similarity found amongst the various research studies on the diffusion of innovation process is that the adoption process or the rate of diffusion can be charted on an S-shaped curve (Rogers, 1962, 2003).

The diffusion of innovation process can be tracked on a micro level as in the case of an individual who is a targeted member of an audience, or traced at the macro level when considering economic development or technological advances. In either instance, during the course of the twentieth century the diffusion of innovation theory has proven to be versatile, universal, but most important, relevant (Rogers, 1962, 2003).

Innovation diffusion theory is currently defined by the work of Everett Rogers (1962), Frank Bass (1969), and Gregory Moore (1995). Innovation diffusion theory was formalized by Everett Rogers in his 1962 book *Diffusion of Innovations*. Rogers (1962) defined diffusion as the process by which an innovation is communicated through certain channels over time among the members of a social system. Rogers claimed that adopters of any new innovation or idea could be categorized as innovators (2.5%), early adopters (13.5%), early majority (34%), late majority (34%) and laggards (16%), based on a bell curve. He stated that each adopter's willingness and ability to adopt an innovation would depend on their awareness, interest, evaluation, trial, and adoption. Some of the characteristics of each category of adopter described by Rogers (1962) include:

- Innovators - venturesome, educated, multiple info sources, greater propensity to take risk

- Early adopters - social leaders, popular, educated

- Early majority - deliberate, many informal social contacts

- Late majority - skeptical, traditional, lower socio-economic status

- Laggards - neighbors and friends are main info sources, fear of debt

Celsi and Waefinbarger (2002) used a slightly different terminology in supporting the

Rogers innovation diffusion model. They referred to Innovators, Visionaries, Early

Adopters, Mirrorers, and Detractors in specifically discussing faculty adoption of

technology advances.

Rogers differentiated the adoption process for innovations from the diffusion

process, claiming that the diffusion process occurs within society, as a group process;

whereas, the adoption process is undertaken by each individual. He defined the adoption

process as "the mental process through which an individual passes from first hearing

about an innovation to final adoption" (p. 163). Rogers (1962) broke the adoption process

down into five stages representing five basic functions required in making adoption

decisions:

(1) Awareness,

(2) Interest,

(3) Evaluation,

(4) Trial, and

(5) Adoption. (p. 163)

Moore and Benbasat (1991), working in an implementation success context

related to information technology, expanded upon the five factors impacting the adoption

of innovations presented by Rogers, generating eight factors (that impact the adoption of

information technology:

(1)   Voluntariness

(2)   Relative advantage

(3)   Compatibility

(4)   Image

(5)   Ease of use

(6)   Result demonstrability

(7)   Visibility

(8)   Trialability. (p. 28)

According to Rogers (1962), in the awareness stage "the individual is exposed to the innovation but lacks complete information about it" (p.163). At the interest or information stage, "the individual becomes interested in the new idea and seeks additional information about it" (p.163). At the evaluation stage, "the individual mentally applies the innovation to his present and anticipated future situation, and then decides whether or not to try it" (p.163). During the trial stage "the individual makes full use of the innovation" (p.163). At the adoption stage "the individual decides to continue the full use of the innovation" (p.163).

Rogers pointed out, that an innovation may be rejected during any stage of the adoption process. He defined rejection as a decision not to adopt an innovation, which he contrasted with discontinuance, defined as a rejection that occurs after adoption of the innovation (Rogers, 1962).

Rogers (1962) theorized that innovations would spread through society in an S curve, as the early adopters select the technology first, followed by the majority, until a technology or innovation is common. This proposed adoption-S curve is shown in Figure 1.

Diffusion Process
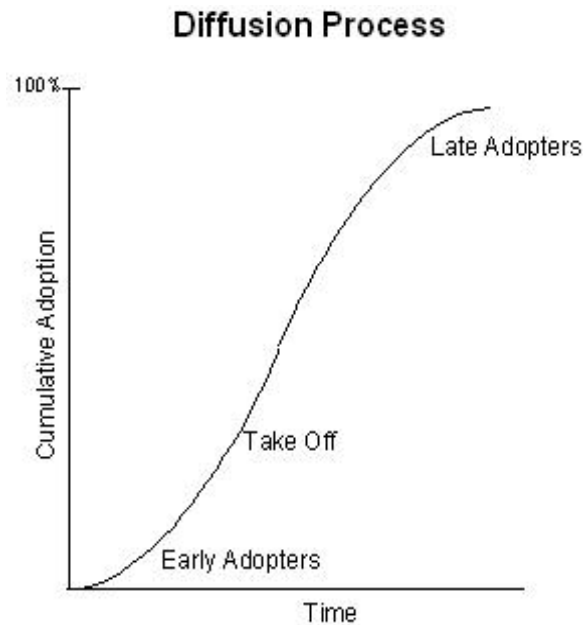
Figure 1. S-Curve of Innovation Diffusion and Adoption from Rogers (1962)

Bass (1969) further expanded Rogers' innovation diffusion theory to create the new product growth model based on the premise that part of the influence affecting adoption depends on imitation. The two influences on innovation adoption in this model are commonly termed *external influence* and *internal influence* (Mahajan, Mueller & Bass, 1990). In the Bass model, coefficients are assigned to the internal and external influences, and a hazard function is included, which represents the probability that an adoption will occur at a given time, given that it has not yet occurred. The Bass diffusion model of innovation adoptions over time due to external and internal influences is shown in Figure 2.
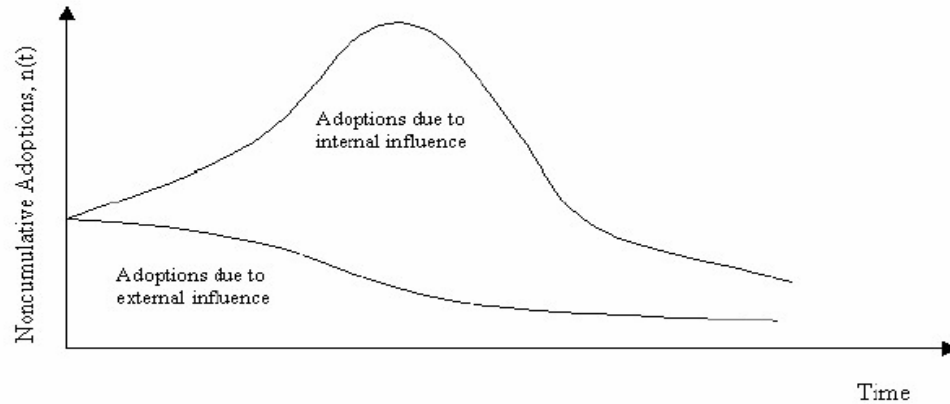
Figure 2. Adoptions due to external and internal influences –from Mahajan, Mueller, and Bass (1990)

Moore (1995) developed a diffusion model for technological innovations that was based on Rogers' theory and model. The same five categories were used as the general DOI model, with the same terms to represent the forward stages of innovation adoption (Sroufe et al., 2000). The major differences from Rogers' traditional DOI model was the assumption of a discontinuous innovation process with time gaps between various stages of adoption and the focus only on organization, with a new technology adoption requirement.

Based on the consideration of the online MBA degree from for-profit universities as an innovation, the researcher posited a working hypothesis that its acceptance – or diffusion – would show a range along the continuum proposed by Rogers, Moore and Bass. It was further hypothesized that the innovation diffusion model would provide a structure and vocabulary for analyzing and discussing the variations found in the study in acceptance of online MBAs from for-profit universities among various groups of HR professionals. Thus, the innovation diffusion theory set out in the models of Rogers,

Moore and Bass served as the conceptual, structural, and analytical framework for the study and for interpreting and discussing its findings.

Statement of the Problem

The explosive growth of online learning has resulted in booming enrollments in online MBA programs at for-profit universities. "At the end of 2006, there were at least 1.5 million students enrolled in online programs, up 24 percent from 2005. The figure is expected to reach 2.1 million students in 2008, an 11.5 percent gain" (Verekey, 2007). Such degree programs offer flexibility, convenience and the promise of employment or career advancement. The for-profit universities cite Thomas Russell's (2002) book, *No Significant Difference,* and imply that employers grant equal value to online degrees and onground degrees (University of Phoenix, 2005). Despite mixed evidence and opinion from both for-profit and traditional universities, the question remains as to whether employers value the job applicant with an online MBA as much as the one with a traditional onground MBA. The literature provides no definitive answer yet to this question. With such rapid growth in online learning, research has been focused on student and faculty perceptions of distance learning (Olsen, 1999). Little research has been done to understand employer perceptions of online degrees, a crucial factor when a working adult considers the time and tuition involved in pursuing an MBA and when a for-profit university considers placement rates.

For many years, published research has centered on the topics of student and faculty perceptions of online learning (Olsen, 1999). There is conspicuous dearth of research related to *employer* perceptions of online degrees, specifically MBA degrees. This quantitative study sought to establish a new line of thinking related to the value of

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an online MBA degree in terms of *employability*. Employers' voices relative to hiring trends have been missing from the knowledge base of for-profit degree research. Working adults pursuing an online MBA degree from a for-profit university should be aware of their future employers' perceptions of online degree programs before they complete their program. These perceptions, which have not yet been addressed in the research literature, can shed light on several pragmatic questions. Will working adults who commit time and money to pursuing an online MBA from a for-profit university have the same employment opportunities as those who pursue a traditional onground MBA from a non-profit university? If employers perceive a difference in the value and quality of an online MBA from a for-profit university compared to one earned in a traditional onground non-profit university setting, what impact does this have on the working adult pursuing an online MBA?

While time and time again studies and meta-analyses have shown there is no significant difference in online versus onground learning, in reality do employers see it that way? (Ausburn, 2005; Bernard, R.J., Abrami, P.C., Lou, Y., Borokhovski, E., Wade, A., Wozney, L., Wallet, P.A., Fiset, M., & Huang, B., 2004; Kearsley, 2000; MacGregor, 2001; Neumann & Shachar, 2003; Olson & Wisher, 2002; Russell, 2001; Stansfield, McLellahn, & Connolly, 2004). From a Constructionist perspective, reality is socially constructed based on people's experiences and perceptions. So what is the reality for a job applicant with an online MBA? The reality is constructed by the HR manager's perception of the value of the online degree as compared to the traditional onground degree. Without empirical assessment of what these perceptions actually are and where employers currently sit on the diffusion of the innovation of online MBAs from for-profit

universities, it is not possible to realistically advise potential students before they undertake these degrees.

Purpose of the Study

The purpose of this study was to describe the perceptions of human resources professionals regarding the value of an online MBA from a for-profit university and to compare this perception to the perceived value of an MBA from a traditional onground university. This purpose was addressed in three parts:

(1)   The study developed a general or aggregate description of perceptions of a group of HR professionals.

(2)   The study described differences in the perceptions of human resources professionals based on independent criteria such as age, industry, location, familiarity with online learning and for-profit universities.

(3)   The study described the perceptions of acceptance of online MBA degrees from for-profit and traditional universities in the framework of innovation diffusion theory.

Research Questions

Prior to the development of specific research questions, an extensive review of current literature was used to identify particular evaluation themes and issues facing higher education, online learning, for-profit universities and online learners. The following questions emerged and guided this study:

(1)   What is the demographic profile of HR professionals who participated in this study?

(2)   What are the perceptions of human resources professionals regarding job applicants with online MBA degrees from for-profit universities?

(3)   What are the perceptions of human resources professionals regarding job applicants with online MBA degrees from for-profit universities compared to applicants with MBA's from traditional universities?

(4)   What relationships exist between the perceptions of human resources professionals and key demographic variables?

(5)   What distribution patterns of perceptions of online and traditional MBAs emerged in the framework of innovation diffusion theory?

Overview of the Study

<u>General Research Approach and Methodology</u>

"Statistical methods are especially useful for looking at relationships and patterns and expressing these patterns with numbers" (Rudestam & Newton, 2001, p. 17). This study was designed as a descriptive study utilizing survey methodology and quantitative data techniques that focused on human resources professionals' perceptions of job candidates with MBAs earned online through for-profit universities.

Descriptive research design is frequently used in education research. Quantitative descriptive research can be described as research that examines a situation as it is and tries to identify the characteristics of an observed phenomenon (Leedy & Ormond, 2001) Descriptive research is an attempt to determine and describe how things are. Gay and Airasian (2000) stated, "The descriptive research method is valuable for investigating a range of educational situations and issues" (p. 275). Descriptive studies are concerned with the assessment of attitudes, perceptions, preferences, demographics, practices and

procedures (Gay & Airasian, 2000). Gall, Gall, and Borg (2002) claimed that "descriptive research studies in higher education, while simple in design and implementation, can generate important insights and knowledge" (p.291). Babbie (2003) shared that the intent of descriptive survey research is to generalize from a sample to the population so that inferences can be made regarding some characteristics, attitudes, perceptions or behaviors of the population. Descriptive research does not change or modify the situation but provides insights into the phenomena. Descriptive research served well for this study.

In addition, the research generated some data that were "subsequently analyzed using appropriate inferential statistics" (Rudestam & Newton, 2001, p.26). Differences between groups of participating HR professionals based on independent demographic and identifier variables such as location or age were analyzed using ANOVAs or t-tests, which are appropriate analyses, to "compare the size of between-group differences with the size of within-group differences due to individual variability" (Rudestam & Newton, 2001, p. 27). The purpose of these inferential tests in this study was to determine the generalizability of findings from the study's sample to the broader population of HR professionals.

Population and Sample

The population for this study included all human resources professionals who were members of an online Human Resources group, HR.com, during 2006. HR.com had a membership of 135,000 HR professionals when the study was conducted (HR.com, 2006). The survey was administered online. HR.com sent a link to the survey to a representative sample of their choice of 1,000 members across the U.S. The obtained self-selected sample consisted of 210 HR.com members who chose to complete and submit

the survey. The sample size was relatively small but because of the method HR.com used to administer the survey, the researcher could not obtain more respondents.

Research Survey

Human resources professionals were questioned using a research survey developed by the researcher regarding their perceptions, understanding and support of (a) job applicants with online MBA degrees earned at a for-profit university, and (b) credibility of for-profit universities as compared to traditional onground universities. The research survey was an online questionnaire containing 30 questions that addressed the research questions for this study. The survey questionnaire was available from any computer with web access. This self-administered questionnaire was designed and developed based upon the review of literature and the research questions of the study. The survey method of data collection is a common type of descriptive methodology in educational research, and the self-administered questionnaire has become ubiquitous in modern living (Cooper & Schindler, 2003). A Web-based survey was selected for the study due to the low cost and the ability to have greater data collection in a shorter amount of time. The Web-based survey also allowed real-time viewing of incoming data. Because of the instantaneous nature of a Web-based information, the Internet delivery of the survey provided the ability to collect and process data from the research quickly, efficiently, and with reduced cost.

Procedures

Participation in the survey was strictly voluntary with informed consent and required approximately 30 minutes. Email addresses of participants were not collected or tracked by the researcher, and the participants remained anonymous. HR.com selected the

sample from their membership and sent the link to the survey; email addresses remained with HR.com. Respondents were not asked their name or email address in the survey. Completed questionnaires were retained online through SurveyMonkey.com. The researcher collected the data from the online questionnaires, coded the data and entered it into SPSS for statistical analysis using descriptive and inferential tools.

Limitations, Delimitations and Assumptions of the Study

The following limitations were accepted for this study:

1.   The study was limited to only those Human Resources professionals that were members of HR. com at the time the sample was selected. This membership constitutes the study's population and bounds the study's generalizations. Only to the extent that the HR.com population represents the broader national population would generalization beyond HR.com members be appropriate, and this is undeterminable at this time.

2.   The responses to the survey questions were anonymous, and therefore did not provide the opportunity to ask follow up questions, seek clarification on any voluntary comments or attempt to increase return rate through follow-up personal contact. This may have limited both data density and return rate.

3.   The study's data were limited to Human Resources professionals who volunteered to participate in the study. The self-selection process may have biased this sample and could limit the generalizability of findings.

4.	This study is quantitative in design and implementation. Interviews or other methodologies germane to qualitative studies were not included, with the exception of the comments section at the end of the survey questionnaire.

The study was based on the following assumptions:

1.	The respondents to the survey were assumed to be a representative and generalizable sampling from the targeted population as a whole. HR.com selected the sample and claimed representative coverage. However, this could not be verified by the researcher.

2.	The survey questions were based on a review of literature, which was assumed to be accurate.

3.	The respondents were assumed to be truthful and sincere in their answers, and have given responses representing their true perceptions and feelings.

Definitions of Key Terms

The following definitions were applied in this study:

1.	For-profit universities: Those that rely solely on tuition income for funding, such as the University of Phoenix, Kaplan University and DeVry University.

2.	Hiring Practices: Recurrent strategies or methods of selecting applicants for employment.

3.   Innovation diffusion theory: Formalized by Everett Rogers in a 1962

book called *Diffusion of Innovations* and updated by the work of

Gordon Moore. Rogers classified diffusion in his innovation adoption

framework into five onwards stages: innovators, early adopters, the

early majority, the late majority, and laggards, with 2.5%, 13.5%, 34%,

34%, and 16% of the population respectively (Rogers, 1962). Bass

added the concept of internal and external influences on adoption

processes (Bass, 1969). Moore (1995) added the concepts of gaps along

the diffusion curve.

4.   Job applicants: People who apply for employment

5.   Online MBA Degree: An MBA degree earned by taking 100% of the

courses via the Internet.

6.   Perceptions: Self-reported views of employers toward job candidates,

employees, their educational background or the online coursework, as

measured by the researcher's survey, an online questionnaire

7.   Traditional universities: Those that are funded through appropriations

from state sources, private donations and tuition. Examples of

traditional universities include Oklahoma State University, Penn State

University and Harvard.

Significance of the Study

This study has merit and significance in a number of ways. Never before has

higher education been so impacted by technological revolution. As for-profit universities

strengthen their academic programs and rethink and reshape their academic structure, they must do so with placement needs of the working adult in mind. They must design accredited and recognized programs that advance job placement and employment opportunities for their graduates. As nonprofit universities move into online learning and become more competitive, job placement rates could be a major differentiator. Research has shown that both students and universities see many advantages to online learning. Little research, however, had been done at the time of this study to discover employers' views of online degrees from for-profit universities. The study provided guidance for working adults making enrollment decisions. It is also conceivable that companies not involved in this study will use this information to establish their position on job applicants with online MBA degrees from for-profit universities in relation to other companies. Finally, the study offered a diffusion snapshot of the current levels of acceptance of the new online MBA degree from for-profit universities as an educational innovation.

CHAPTER II

REVIEW OF LITERATURE 12

Theoretical Perspectives and the Literature Review

In 1999, Olsen stated that much research has been generated with respect to student and faculty perceptions of online degrees, but there was no research related to employer perception of online degrees In 2004, Babson Survey Research Group found that the *ivory tower* did not perceive online degrees to be equivalent to a traditional degree, a finding repeated in 2005 by Adams and DeFleur. The current literature is still devoid, however, of employer perceptions of online degrees from for-profit universities. The present research study sought to illuminate human resources professionals' perceptions related to a job applicant's employment opportunities when holding an online MBA degree from a for- profit university as compared to the applicant who holds an MBA from an onground traditional university.

Post-positivism is research theoretical perspective aligned with this researcher's own pragmatic philosophy. While positivists believe that there in one Truth, post-positivists recognize the role of humanity and experience in research and believe that while there may be one Truth we uncover at the end of life, living involves multiple truths that are shaped by the human experience. With respect to post-positivist views on research, Lincoln and Guba (1985) used a white swan as an example. The positivists would seek to prove that all swans were white.

The post-positivists would seek to prove the existence of the black swan in an attempt to prove alternatives wrong. In educational research, Russell (2001) has long been credited with revealing the "no significance difference phenomenon" which illustrates through extensive literature review that there is no difference in student outcomes where the independent variable is the method of course delivery. Similarly, many other research studies and meta-analyses have demonstrated "no significant difference" in learning outcomes between online and traditional course delivery (Ausburn, 2005; Bernard, Abrami, Lou, Borokhovski, Wade, et. al., 2004; Kearsley, 2000; MacGregor, 2001; Neumann & Shachar, 2003; Olson & Wisher, 2002; Russell, 2001; Stansfield, McLellahn, & Connolly, 2004). Clark (1983) codified this phenomenon in his theory that delivery medium has no general effect on learning. This research study, rather than attempting to demonstrate there is no significant difference in HR managers' perceptions of job applicants with online MBA degrees earned at for-profit universities and those with MBAs from onground traditional universities, instead exposed the multiple truths related to a sample of human resources professionals' perceptions of job applicants with online MBA degrees from for-profit universities.

Crotty (1998) postulated that theoretical perspective drives research methodology. Post-positivism therefore, framed this researcher's approach to quantitative methodology. Quantitative methodology is appropriate for post-positivist research for many reasons. Quantitative methods take on an objective role when compared with qualitative methods. Quantitative methodology is measurable, controllable, based on proposed hypotheses and can be used to infer from a sample to a larger population (Winter, 2000). Quantitative methodology is also deductive and more recognized in the business world. This was

particularly appropriate for this researcher when considering that the findings of this study could impact student retention rates, course curriculum and the overall marketing/messaging of the online for-profit MBA programs.

The relationship between the researcher and those researched in the proposed study was one of both objectivism and constructivism. The researcher sought through quantitative methodology to objectively describe the human resources professional's perceived truths related to a job applicants' employability with an online MBA earned from a for-profit university compared to those with an MBA earned from a traditional onground university. The researcher recognized that the experiences of the human resources professional influence their perceptions related to online MBA degrees earned from for-profit universities.

Several areas of theory and research provided a framework and underpinning for the study. These included aspects of diffusion of innovation, perception measurement, academic bias and the growth of online for-profit universities.

Diffusion of Innovation Theory

The Diffusion of Innovation (DOI) theory is a theory of communication which has been studied extensively in the literature from the viewpoint of various disciplines and with respect to different types of products, services and ideas. Rogers (1962, 2003) Moore (1995) and Bass (1969) are three of the mainstream theorists in the DOI school of thought, with the Rogers receiving most attention.

Rogers introduced his famous innovation diffusion theory in his 1962 book, *Diffusion of Innovations*. Since then, due to its popularity for analyzing technological innovation adoption, five editions of the book (1962, 1971, 1983. 1995, 2003) have been

printed. Rogers classified diffusion in his innovation adoption framework into five

onwards stages: innovators, early adopters, the early majority, the late majority, and

laggards, with 2.5%, 13.5%, 34%, 34%, and 16% of the population represented in each

group respectively. The adoption of an innovation, according to Rogers, is mainly

affected by four elements: the innovation itself, communication channels, time, and the

social system. Differences between stages were presented under headings, such as

socioeconomic status, personality values, and communication behavior. Rogers' theory

can be applied to both individuals and organizations (Cheng & Kao, 2004). His bell curve

of innovation diffusion is shown in Figure 3.

| Innovators | Early Adopter | Early Majority | Late Majority | Laggards |

Figure 3. Innovation Diffusion Curve adapted from Rogers (1962)

Rogers (1962) also proposed that adoption innovation occurred in an S-shaped

curve. It started with Early Adopters, hit a take-off point, and then spread sharply upward

in adoption rate through the Early and Late Majority, to finally be accepted by the Late

Adopters. Rogers' S-shaped innovation diffusion/adoption curve is shown in Figure 4.

Diffusion Process
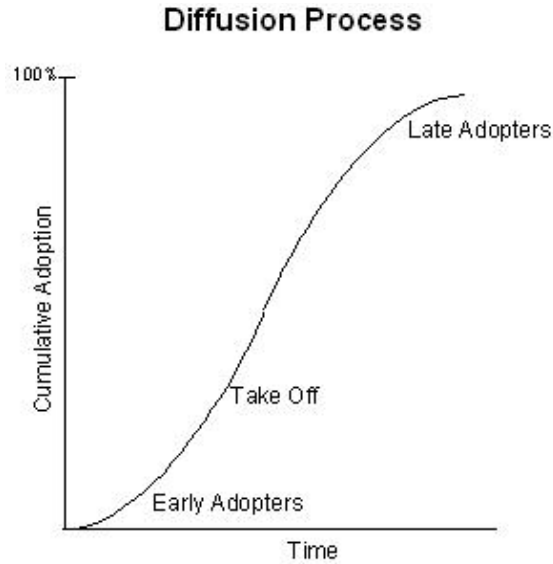
Figure 4. S-Curve of Innovation Diffusion and Adoption adapted from Rogers (1962).

Moore (1995) developed a diffusion model for technological innovations that was based on Rogers' theory and model. The same five categories were used as the general DOI model, with the same terms to represent the forward stages of innovation adoption (Sroufe et al., 2000). The major differences from Rogers' traditional DOI model was the assumption of a discontinuous innovation process with time gaps between various stages of adoption and the focus only on organization, with a new technology adoption requirement.

By utilizing mathematical methods, Bass (1969) added to the Rogers model and developed an innovation diffusion model in which the traditional five adoption categories were proposed, from the earliest adoption onward: innovators, early adopters, the early majority, the late majority, and laggards. What was new in the Bass model was that the movement of the adoption stages was posited to be affected by two types of

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communications, i.e., mass media (or internal influence) and word of mouth (or external influence) (Mahajan, Muller, & Srivastava, 1990; Martinez & Polo, 1996).

For this study, diffusion of innovation theory was used as the theoretical framework in which to identify and describe perceptions of acceptance of MBA degrees from online for-profit and onground traditional universities. It was proposed based on diffusion theory, that acceptance of online MBA degrees from for-profit universities could be viewed as an innovation and would therefore demonstrate a range of levels of acceptance or adoption. It was also proposed that the concepts and language of innovation diffusion theory could be used to discuss the perceptions of MBAs from online and traditional universities held by HR professionals.

Rogers (2003) cites technology transfer as a natural area for study of the diffusion of innovation throughout his text (Dubkin-Lee, 2006). The earliest study of technology and education was Fisher (1996) that used Rogers' model to describe successful adoption of computer use in the classroom. Fishman (2000) used Rogers' model to identify which teachers needed more extensive ongoing professional development in order to be more successful with their students. Urias-Barker (2000) used Rogers' model to identify socioeconomic variables of education and position as an influence on the uses of the Internet in Texas schools.

Kerski (2001) used Rogers' categories to design a questionnaire that studied how secondary teachers used geographic information systems technology in their classroom. Hoerup (2001) categorized the findings from an ethnographic case study of six teachers adopting computer innovation using Rogers' model. Valente (2002) used Rogers' model to structure a smoking-prevention program with teachers. Still further, Luehmann (2002)

used Rogers' model to study five middle school science teachers implementing a technology-based learning environment (Dubkin-Lee, 2006).

Measurement and Human Perception

Definition and Nature of Perception

Perception can be defined as "the active process of selecting, organizing, and interpreting the information brought to the brain by the senses" (Levine & Shefner, 2006, p. 24).   Simply put, the brain organizes information and translates it into something meaningful. "How we perceive the world is a function of our past experiences and cultural makeup" (Levine & Shefner, 2006, p. 24).

The process of perception links people to their environment and is critical to an accurate understanding of the world about us. "Accurate analysis obviously requires accurate perception. Yet research into human perception demonstrates that the process is beset by many pitfalls" (Heuer, 1999, ¶. 1). What people in general perceive, and how readily they perceive it, are strongly influenced by their past experience, education, cultural values, and role requirements.

Heuer (1999) pointed out both the active nature of human perception, and its constructed nature. According to Heuer (1999):

> People tend to think of perception as a passive process. We see, hear, smell, taste or feel stimuli that impinge upon our senses. We think that if we are at all objective, we record what is actually there. Yet perception is demonstrably an active rather than a passive process; it constructs rather than records 'reality.' Perception implies understanding as well as awareness. It is a process of inference

in which people construct their own version of reality on the basis of information

provided through the five senses. (¶.2)

Issues in Measuring Perception

The measurement of human perceptions is typically more difficult than other

tangible variables measured in the physical sciences. A prime example of this difficulty is

the measurement of the construct of *attitude*, which exists in the minds of the individuals

and therefore is not directly observable. "In measuring attitudes, one must be sensitive to

the scale-level assumptions and the restrictions these assumptions impose on data

analysis" (Kinnear & Taylor, 1991, p. 242). Typically attitudes are measured at the

nominal or ordinal level, yet there is often the temptation to assume that attitude

measurements have the more powerful properties of an interval scale. Kinnear (1991)

posited that "the researcher must always be sensitive to the characteristics of the

construct being measured and the properties of the number systems related to the

construct" (p. 244).

Perception has many diverse sources, including past experience, professional

training, and cultural and organizational norms. All these influences predispose people to

pay particular attention to certain kinds of information and to organize and interpret this

information in certain ways. Perception is also influenced by the context in which it

occurs. Different circumstances evoke different perceptions. Research has indicated that

an early judgment adversely affects the formation of future perceptions. This

phenomenon was described by Heuer (1999):

Once an observer thinks he or she knows what is happening, this perception tends

to resist change. New data received incrementally can be fit easily into the

previous image. This perceptual bias is reinforced by organizational pressures favoring consistent interpretation; once the respondent is committed in writing, both the analyst and the organization have a vested interest in maintaining the original assessment. (¶. 30)

Several common issues have been identified in measuring human perceptions. Bennett, Rollnick, Green, and White (2001, p. 834) noted seven areas of difficulty in attitude/perception measurement:

(a) lack of precision over key definitions of terms;

(b) poor design of instruments and individual response items within instruments;

(c) failure to address matters of reliability and validity appropriately;

(d) inappropriate analysis and interpretation of data;

(e) lack of standardization of instruments;

(f) failure to draw on ideas from psychological theory; and

(g) failure to formulate the research with reference to theory of data collection.

Some of the contentions of Bennett et al. (2001) were supported by the literature review. MacKay's (2004) systematic review of interprofessional education revealed that there was a lack of good quality study designs for evaluating attitudes related to outcomes of interprofessional education. MacKay (2004) identified an overall absence of an effort to obtain reliability and validity of the measurement instrument. This demonstrates that the contextual nature of the tools may have applicability to the specific set of subjects, but not to others in the same industry or profession. "The result of such research is likely to create confusion as to which contexts and educational processes are effective" (Mackay, 2004, p. 295).

Additionally, Mackay found that some researchers used theory to identify content in their tools while others used a grounded theory approach. "Once content had been identified questionnaires were constructed and variables were often subject to factor analysis to reduce the number of items in the questionnaire and look for underlying factors" (Mackay, 2004, p.291). Principle component analysis, designed to reduce the dimensionality of the data set and identify new meaningful underlying variables, was the most common technique used in the various studies. Reliability tests were most often internal consistency measures using Cronbach's alpha, which "indicates the extent to which a set of test items can be treated as measuring a single latent variable" (SPSS FAQ, 2006, p. 1).

The seven areas of contention in the Bennett *et al.* (2001) study in attitude measurement include the failure to appropriately address matters of validity. This contention was supported by Mackay (2004) who analyzed *The Interdisciplinary Education Perception Scale* (IEPS), an 18 item questionnaire using Likert type response purporting to measure the professional perceptions of students exposed to interdisciplinary settings. The scale claims content validity from five faculty members who used their clinical expertise in surveying the factors that appear to be most relevant. The researchers who created the IEPS claimed that the five faculty members can represent nursing and health professions, but according to Mackay (2004), they can only represent their own profession and this weakens their claim to content validity.

Foreman and Nyatanga (2001) discussed the process of developing a research questionnaire to measure attitudes of shared learning. They constructed their

questionnaire after a "diligent literature search" and found no pre-validated research instruments relating to attitudes of shared learning.

Clearly, the literature points to a lack of a common instrument to measure perceptions. "How we perceive the world is a function of our past experiences and cultural makeup" (Levine & Shefner, 2006, p. 12). These individual perceptions make instrument content and construct validity extremely important to the researcher. Caution must be used when inferring results to a larger population. This is not surprising, as perception is a highly individual act, which creates challenges and limitations of measuring attitude and perception.

An attitude is a construct that exists in the mind of an individual. Attitude scaling refers to operational definitions for the measurement of this construct (Levine & Shefner, 2006). Measuring attitude is a difficult task because it is a construct in the mind of the individual and much is assumed by the researcher. Several difficulties arise when attempting to define and measure constructs.

Reininger, Evans, Griffin, Valois, Vincent, Parra-Medina, Taylor & Aullig (2003) found that limitations in studies measuring perceptions as constructs are inherent when information is self-reported. They concluded that "while multiple procedures were used to ensure confidentiality, it is possible that bias of providing socially acceptable answers is present" (Reininger et al, 2003, p. 474). Moreover, Reininger, et. al (2003) identified the "need for further exploration of item wording and response options on factor analysis results and the need for further development of survey items labeled as content clusters" (p. 474) as further limitations. Another limitation of this study was related to the examination of construct validity. The authors explained that "the survey results were not

compared to measures of actual behavior" (Reininger, et. al, 2003, p. 474). In addition, "the instrument was not validated against other established instruments to examine divergent and convergent validity" (p. 474). Future studies would also want to examine the constructs of reliability with a test-retest analysis. Reininger et al. (2003) recommended that caution be taken when using an instrument until further studies can provide validity and reliability evidence.

Another major assumption related to attitude measurement involves the survey tool. Mackay (2004) cautioned that "questionnaires cannot accurately reflect the attitude of one profession towards another" (p. 293). No valid and reliable questionnaires were found in the published literature that Mackay (2004) surveyed that could be used to rate the attitudes of one profession to another. To demonstrate construct and content validity the questionnaire content, postulated Mackay, must be rooted in theory and use factor analysis to refine the content.

Related to the limitations in the Mackay (2004) study, Griffin, Reininger, Evans, Valois, Vincent, Parra-Medina, Taylor & Aullig (2005) noted that in an effort to capture each dimension of community capacity, only two to three questions were used. Subscales measuring organizational capacity only used one question. Additional items for each dimension would have allowed more data to be collected. A test-retest analysis was not conducted to determine if the scales remained stable over time. Griffin, et. al (2005) also indicated that further examination of construct validity was required.

Mackay (2004) also revealed a debate in the literature as to whether it is valid to supply constructs to others. The argument is that "constructs are personal and are the understanding behind the verbal label attached to them" (Mackay, 2004, p. 292).

Therefore supplied constructs may be unintelligible to the person who did not originally construe them. According to Kelly (as cited in Mackay, 2004) in his six assumptions underlying his original *Role Construct Repertory Test*, "verbal labels that attach to constructs should be communicable to others" (p. 294). Therefore, according to Kelly (as cited in Mackay, 2004) if constructs are elicited from a comparable group the verbal labels and language of the group are likely to be representative of that group and the most commonly used constructs for that group should be meaningful to other individuals within in it" (p. 296). Clearly, Kelly and Mackay disagreed on the nature of constructs.

Another issue is the creation of constructs in attitude measurement. Both Fransella and Banister (1977) and Beail (as cited in Mackay, 2004) described the potentially non-useful construct permutations that can be elicited. Some are found to have too wide an application, while others are found to be too narrow or vague in the statement. Beail (as cited in Mackay, 2004) suggested that "context within which the constructs are elicited need to be specific, otherwise it may lead to ambiguity of response" (p. 296).

Edelmann (1996) postulated that attitude has three different aspects: a belief or cognitive component, an evaluative component, and a behavioral component. Edelmann suggested that questionnaires are valuable in assessing attitude. However, they only assess the evaluative component.

Measuring perceptions is challenging at best. It must be assumed that the measure of perception changes over time and findings are limited to the validity of the construct and content used. Researchers must draw on ideas from psychological theory and formulate the research with reference to the theory of data collection tools.

The measurement of attitudes is central to many research situations. Kinnear and Taylor (1991) defined attitude as an individual's enduring perceptual, knowledge-based, evaluative and action-oriented processes with respect to an object or phenomenon.

Attitude measurement procedures rely on data from respondents. The measuring techniques can be grouped into those based on communicating with respondents and those based on observing respondents. Kinnear and Taylor (1991) identified several techniques including self-reports, where respondents are directly asked to report beliefs or feelings by responding to a questionnaire; unstructured stimuli response, where respondents are shown a picture or item and asked to respond; and performance of objective tasks, where respondents are asked to memorize and/or report factual information about an object. They claimed that "observable techniques include overt behavior, where an individual's behavior patterns are evaluated and physiological reactions, where respondents are exposed to objects and their reactions are measured" (Kinnear & Taylor, 1991, p. 244).

Likert Scaling in Measuring Perception

The research literature has tended to focus largely on self-reporting in perception or attitude measurement, specifically on use of the Likert-type scale. Kinnear and Taylor (1991) postulated that "of the general methods for measuring attitudes, the self-reporting technique is by far the most widely used" (p. 23). The Likert-type scale procedure was selected for the present study because it is widely used in measuring attitudes and because it is an easy to use self-reporting technique.

The Likert-type scale has several advantages over other indirect scaling techniques. It is reasonably easy to construct and administer, and the simplicity of

instructions and the judgment tasks allow its use on mail and email surveys. It can also be used to measure attitudes in situations where the respondents may not accurately report beliefs and feelings using direct scaling approaches. "The main argument against the Likert scale is that it produces only an ordinal scale" (Kinnear & Taylor, 1991, p. 257). This limits both the power and the data analysis possibilities of the obtained perception/attitude data.

Existing studies have offered examples of the creation and use of Likert scales. In the Reininger, et. al (2003) study of youth attitudes, a literature review was undertaken to identify the various instruments that could be used. A pilot test was conducted to clarify the meaning of the survey questions. All survey items measuring youth assets and attitudes included in the analysis used Likert-type response options. Examples of responses included "strongly agree" to "strongly disagree" (Reininger, et. al, 2003, p. 465). The data were analyzed descriptively such that mean scores, standard deviations, frequencies and ranges were calculated.

Perez, Luquis and Allison (2004) developed *The Teachers' Attitude and Comfort Scale (TAGS)* to assess teachers' attitudes and comfort level about teaching sexuality education to adolescents. "TAGS was developed through an extensive literature search, focus group discussions and validity testing" (Perez, Luquis & Allison, 2004, p. 26). Based on their literature review, Perez, Luquis and Allison found no single instrument to measure specific constructs, so 10 domain areas were identified as in need of further exploration. To determine content validity and reduce the number of items in the scale, an initial pool of 100 items was presented to a panel of experts. In addition, three focus groups were conducted to further refine the items. Finally, a pilot test was conducted. The

final Likert scale included 23 items on five factors. Data were analyzed using descriptive statistics, a panel of experts and focus groups for face validity, a factor analysis and Person product moment correlation coefficients for construct validity, and Cronbach alpha analysis and test-retest for reliabilities.

An extensive literature review was also used by Griffin et. al. (2005) in a study to survey key leaders' perceptions of community capacity and organizational capacity for teen pregnancy prevention. A five point Likert-type response scale (strongly agree – strongly disagree) was used to measure key leaders' perceptions. The survey was pretested with two different groups for completeness, reading level, response format, clarity, flow and cultural appropriateness. Univariate analysis, including the calculation of frequencies, means, median, modes and standard deviations was conducted to provide descriptive data on the respondent population. Factor analysis was used to reduce the data into scales.

Hyung-sook, Juhu, and Dong-Hwa (2003) developed a teacher rating instrument to measure early childhood teachers' attitudes toward science teaching. These researchers reported that "the first step in developing the scale involved conducting a validation procedure using Thompson and Shrigley's (1986) *Revised Attitudes Scale*" (Hyung-sook, Juhu, & Dong-Hwa, 2003, p. 35). The scale was designed specifically for pre-service elementary teachers. The scale consisted of four subconstructs and 22 items. A Likert scale was used for responding. The Hyung-sook, Juhu, and Dong-Hwa (2003) study modified the wording of the Thompson and Shrigley's (1986) *Revised Attitudes Scale* to fit the early childhood setting. A pilot study was conducted as a content validation procedure. Reliability was determined using Cronbach Alpha for internal consistency.

Attitudes and Behaviors

Attitudes are important in decision making because of the assumed relationship between attitude and behavior. Models that conceptualize the construct of attitude typically represent an attitude as a series of sequential components which lead to behavior (Hunter, 2003). Research indicates that the link between attitudes and behavior is not simplistic, and the researcher should be cautious in assuming that such a relationship exists in a decision situation. Mackay (2004) asserted the following:

> The prediction of future behavior for an aggregate of the researcher's sample population does appear to be higher than the prediction of behavior for an individual subject. Since most quantitative research finding are concerned with aggregate behavior, rather than individual behavior, the attitude behavior link does have some empirical support for many decision situations" (p. 297).

However, attitudes are only one influence on behavior, and in a particular decision situation other factors could be more influential than attitudes. An obvious example relevant to the present study would be a human resources manager who has a highly favorable attitude toward job candidates with an MBA earned online from a for-profit university but, because of organizational economic constraints, can only afford to hire a candidate with an undergraduate degree.

Generalization of Perception and Attitude Measurements

Needham, Aberhalden, Dassen, Haug, & Fischer (2004) suggested that results of perception measurement or attitudes should be generalized with caution beyond the perceptions of the respondent population. Before measuring perceptions of individuals in other countries and cultures, it is particularly recommended that a replication of the

original study should be undertaken. Transcultural differences may accrue because of complex wording in the survey questionnaire.

Academic Bias in Acceptability of Online Degrees

Recently, there has been significant interest in the acceptability of online degrees by the traditional academic world. Adams and DeFleur (2005) cited evidence that "at least some academic administrators do not view online coursework favorably" (p. 71). Several recent studies have shown that "although distance education and teaching with technology have become more prevalent in higher education delivery practice, many faculty review committees may not take online work seriously (Adams & DeFleur, 2005; Seminoff & Wepner, 1997). Further, it has been found that even with the clear evidence of dynamic growth of technology in higher education delivery, only 13% of academic institutions have reported a formal institutional program to recognize and reward the use of information technology as part of the faculty review process (Adams & DeFleur, 2005; Green, 1999).

Adams (2003) asked 109 university and college administrators to evaluate the performance criteria for awarding promotion and tenure. The criteria included teaching evaluations, publication, and managing online courses. The results of the Adams study indicated that managing online courses was not viewed as an important aspect of faculty job performance (Adams, 2003; Adams & DeFleur, 2005). Adams and DeFleur concluded that "this perceived lack of importance also presents problems for graduate school applicants whose college credits earned online are not regarded by admissions officers to be as acceptable as traditional coursework" (Adams & DeFleur, 2005, p. 4).

Adams and DeFleur's (2004) survey of graduate deans, associate deans and program directors at 160 institutions of higher education in the U.S. revealed that "even when all other applicant qualifications are equal, those who had earned their bachelor's degree online or even partially online, are not as likely to be recommended for admission to graduate programs" (Adams & DeFleur, 2005, p. 7).

Growth of Online For-Profit Programs

The willingness of students to embrace online for-profit universities is on the rise. At the end of 2006, "there were at least 1.5 million students enrolled in online programs, up 24 percent from 2005. The figure is expected to reach 2.1 million students in 2008, an 11.5 percent gain" (Verekey, 2007). For-profit campuses graduated over 150,000 students in 2003, or about 37% of all graduates in the for-profit sector that year (Kinser, 2007).

> The top producers are Corinthian Colleges, followed by Career Education Corporation and the Apollo Group. Looking at institutions, the University of Phoenix is responsible for nearly all of the Apollo Group's 20,000 graduates, while ITT Technical Institute, DeVry University, and Corinthian's Bryman College graduate around 10,000 students each. Most for-profits, of course, are institutions with smaller enrollments, graduating fewer than 600 students a year. (Kinser, 2007)

A college master's degree is worth $1.3 million more in lifetime earnings than a high school diploma, according to a recent report from the Commerce Department's Census Bureau (2006). The report titled *The Big Payoff: Educational Attainment and Synthetic Estimates of Work-Life Earnings* revealed that over an adult's working life,

high school graduates can expect, on average, to earn $1.2 million; those with a bachelor's degree, $2.1 million; and people with a master's degree, $2.5 million. At most ages, more education equates with higher earnings, and the payoff is most notable at the highest educational levels (Commerce Department Census Bureau, 2006).

The latest trends continue to show that an MBA is the most valuable and valued degree you can get. According to the most recent Graduate Management Admission Council (GMAC) survey, 2004 was a record year for MBA grads – both in terms of job placement and starting salaries. GMAC reports an average salary offer of $84,318 upon graduation. According to the GMAC survey, MBA degree holders saw an average postgraduation salary increase of 29 percent in 2004 (Schneider, 2005)

The average tuition cost for a two-year MBA degree at a traditional business school rose to more than $60,000 in 2004 (Schneider, 2005). While for-profit players such as the Apollo Group (University of Phoenix) continue to expand, the cost of attending for-profit colleges continues to exceed the national average (GetEducated.com, 2007). A survey of 130 distance learning master's revealed online learners should be prepared to pay as little as $5,598 or as much as $115,700 for a regionally-accredited distance MBA degree (GetEducated.com, 2007).

Chadron State (Nebraska) had the lowest cost at $5,598 for an online MBA degree for state residents. Out-of-state students pay significantly more ($10,080) for the same degree. Duke University (North Carolina) topped the price chart at $115,700 nationwide (GetEducated.com, 2007). The University of Phoenix charges an average of $27,048 for their online MBA compared to California State University ($10,500), Baker College ($14,250), Bellevue University ($11,700), the University of Wisconsin

Whitewater ($19,800) and the University of Nebraska Lincoln ($14,212) (GetEducated.com, 2007).

Apollo Group Inc.'s University of Phoenix online unit, founded in 1989, was among the first accredited for-profit universities to provide college degree programs over the Internet. As one of the largest online providers in the space, the university offers dozens of online degree programs in areas such as business, technology, health care and education (Verekey, 2007).

With 130 options to choose from for an accredited online MBA consumers have never enjoyed greater opportunities to get educated at a reasonable price. The first lesson should be learning how to shop intelligently for an online degree. Consumers can choose to pay as little as $5,598 for a solid name-brand MBA or as much as $115,000. Students will want to carefully scrutinize what they are paying for before opening wide their wallets (GetEducated.com, 2007).

The number of online doctoral degree programs at for-profit universities has increased in the past few years. More recently, some for-profit universities have added doctoral degree programs. The University of Phoenix and Capella University both offer doctoral programs in business and management. Traditional onground universities also offer doctoral degrees online. For example, Boston University offers Doctorates in Music Education and Physical Therapy (ClassesUSA.com, 2006), and University of Florida offers a Doctor of Pharmacy degree program (University of Florida, 2006). This raises the question of whether these online doctoral degrees are accepted for employment at traditional universities. The findings of recent study by Adams and DeFleur (2005) suggested that such doctoral degrees "are not accepted as equivalent of those earned in

the traditional manner for those seeking academic employment" (p. 7). Adams and DeFleur (2005) concluded that their findings also "appear to cast a negative light on online education and that at the present time, doctoral students may need to consider carefully before investing time and effort to earn an advanced degree – whether fully or partially – online" (p. 8).

Conclusion

Based on the review of literature, it appeared to this researcher that bias against online degrees, and even online course work in more traditional degrees is present in the academic sector. Adams and DeFleur (2005) online learning appears to be perceived by academics as inferior to learning in traditional instructional settings, and this perception persists despite a large body of reported evidence of *no significant difference* in learning outcomes based on delivery method (Ausburn, 2005; Bernard, R.J., Abrami, P.C., Lou, Y., Borokhovski, E., Wade, A., Wozney, L., Wallet, P.A., Fiset, M., & Huang, B., 2004; Kearsley, 2000; MacGregor, 2001; Neumann & Shachar, 2003; Olson & Wisher, 2002; Russell, 2001; Stansfield, McLellahn, & Connolly, 2004). While this perception bias is well documented in the academic sector, no evidence has yet been amassed in the literature regarding other areas of employment. Thus, it is not known if diffusion of the innovation of online instruction is currently similar in other employment sectors to the limited diffusion pattern demonstrated in the academic field. The present study was designed to contribute to knowledge of diffusion and acceptance of online degree programs in employment areas outside the confines of academia.

CHAPTER III

METHODOLOGY

Research Approach and Design

"Statistical methods are especially useful for looking at relationships and patterns and expressing these patterns with numbers" (Rudestam & Newton, 2001, p. 21). This study was designed as both a descriptive and inferential study utilizing quantitative methods that focused on human resources professionals' perceptions of job candidates with MBA degrees earned online through for-profit universities. A statistical *snapshot* approach was chosen because human resources professionals' perceptions may change with time and experiences and this would allow for follow-up research studies. This research model that examined existing differences and relationships among existing groups is generally identified as descriptive research (Fraenkel & Wallen, 2006). Descriptive research design is commonly used in education research methods. Quantitative descriptive research can be described as research that examines a situation as it is and tries to identify the characteristics of an observed phenomenon (Leedy & Ormond, 2001).

Descriptive research determines and describes how things are in a given situation at a point in time. Gay and Airasian (2000) stated, "the descriptive research method is valuable for investigating a range of educational situations and issues" (p. 275). Descriptive studies are typically concerned with the assessment of attitudes, perceptions,

preferences, demographics, practices and procedures (Gay & Airasian, 2000). Gall, Gall, and Borg (2002) stated that "descriptive research studies in higher education, while simple in design and implementation, can generate important insights and knowledge" (p.291). Babbie (2003) claimed that descriptive survey research can be used to generalize from a sample to the population so that inferences can be made regarding some characteristics, attitudes, perceptions or behaviors of the population. Descriptive research does not change or modify the situation, but rather provides insights into the phenomena. Descriptive research served well for this research study.

In addition to data that described the study's sample, this research also provided some data that were analyzed using appropriate inferential statistics in order to generalize the findings to the larger population of HR professionals (Rudestam & Newton, 2001). This allowed the generalization of the descriptive findings of the study's sample to the broader population it represented.

This study used survey methodology to collect data. According to Fraenkel and Wallen (2006), survey research "obtains data to determine specific characteristics of a group" (p. 12). Human resources professionals were questioned using an online research survey developed by the researcher regarding their perceptions, understanding and support of (a) job applicants with online MBA degrees earned at a for-profit university, and (b) credibility of for-profit universities as compared to traditional onground universities.

Population and Sample

According to Fraenkle and Wallen (2006), a sample in a research study is "the group on which information is obtained," while the population is "the larger group to which one hopes to apply the results" (p. 92). The population for this study included all human resources professionals who were members of an online Human Resources group, HR.com, during 2006. HR.com provided the following description of its membership and purpose:

> Founded in August, 1999, HR.com is in business to help build great companies by connecting them with the knowledge and resources they need to effectively manage the people side of business. As the global authority, HR.com delivers HR best practices to help organizations build great companies through community, collaboration, research, shared best practices, events and measurements. (HR.com, 2006)

HR.com is an individual membership organization, and its members include HR professionals with the following titles:

- President, CEO, Chairman, Partner, Principal
- Chief HR Officer
- Vice President of HR, Personnel
- Assistant/Associate Vice President of HR
- Director of HR, Personnel
- Assistant/Associate Director of HR
- Manager of HR, Personnel
- HR Generalist
- Supervisor
- Specialist
- Consultant

- Administrator
- Representative
- Legal Counsel   (HR.com, 2006)

These titles are based on what the member has reported as their title when they apply for membership to HR.com.

According to the organization:

> HR.com offers the most extensive opt-in email database of senior-level HR professionals and decision makers. Whether you want to reach the staffing professionals in California or the VPs of HR in the financial industry, HR.com can precisely target and engage your audience. (HR.com, 2006)

HR.com had a membership of 135,000 HR professionals when the study was conducted (HR.com, 2006), thus establishing a population of N = 135,000 nationwide. The sample for the study was selected by the HR.com organization, according to its policy for participating in research projects. HR.com selected for the researcher what they reported to be a representative sample of their choice of 1,000 members across the U.S., which became the potential sample for the study. The obtained sample consisted of 210 HR.com members from this potential sample who chose to complete and submit the survey.

Research Survey

Human resources professionals were questioned using a research survey developed by the researcher regarding their perceptions, understanding and support of (a)

job applicants with online MBA degrees earned at a for-profit university, and (b) credibility of for-profit universities as compared to traditional onground universities. The survey was an online self-administered questionnaire containing 30 questions that addressed the research questions for this study. The survey questionnaire was available from any computer with web access.

The questionnaire was designed and developed based upon the review of literature and the research questions of the study. A survey created by Maureen Wynkoop, Master of Library Studies (MLS) graduate, as a project for the MLS degree at Southern Connecticut State University, was used as the starting point for creation of the researcher's survey. The Wynkoop survey was changed to include HR specific Likert-like scaled questions. Wynkoop granted permission to use the survey as a basis for instrument design for this study (M. Wynkoop, personal communication, February 23, 2006).

Survey questions included both demographics and Likert-like scaled response questions. The Likert-like scale was used to measure human resources professionals' perceptions of online MBA degrees from for-profit universities compared to onground traditional universities. The content validity of the survey questionnaire was addressed through pilot testing. After initial development, the research survey was reviewed by a panel of experts. The panel was selected based on their involvement in the design, implementation, teaching and evaluation of courses in an online environment as well as

being members of a graduate college who oversee graduate research studies (graduate research faculty at Oklahoma State University).

A further content validity check was conducted by having a representative human resources professional panel review the questionnaire. This validation panel was composed of five human resources professionals from the Tulsa area who were not included in the research sample for the study. This content validation process used procedures for pilot and pre-testing to improve the internal validity of a questionnaire recommended by the University of Surrey in the United Kingdom. The procedure used for this study recommended by the University of Surrey in the United Kingdom included: (a) administer the research questionnaire to the pilot or pretest sample in exactly the same procedures that will be utilized for the study; (b) ask the subject for feedback regarding the questionnaire and questions; (c) assess whether questions are provided with an adequate range of responses; (d) reword or rescale any questions that were not answered as expected; (e) shorten or revise the questionnaire, based on feedback from the pilot or pretest sample (University of Surrey, United Kingdom, 2004).

Following these recommendations, a pretest to a representative subset of the population was conducted with members of the Tulsa Society of Human Resources Managers (SHRM) and the survey questions were edited based on the obtained feedback. Thus it was believed by the researcher that the data obtained in the study were obtained from a research survey with content validity that allowed both accurate description of the study's sample and reasonable generalizability to the population.

Procedures

In July 2006, OSU Institutional Review Board approval was granted, and a pilot

study was conducted with human resources professionals in the Tulsa Society of Human

Resources Managers (SHRM) chapters to validate the survey questionnaire. After survey

validation, the full scale study was conducted in August and September 2006. The

researcher analyzed the data in March 2007 and completed findings in May 2007.

An email of introduction was sent by HR.com to their members across the country

who chose to participate in the study, excluding Tulsa. Directions for completing the

survey were provided in the introductory email, along with a link to the website for the

online survey. The survey was distributed and managed for the researcher by Survey

Monkey. All data were collected and analyzed by the researcher. The choice of a self-

administered online survey format is well-supported in research literature.

The self-administered questionnaire has become ubiquitous in modern living

(Cooper & Schindler, 2003). Web-based survey administration was selected for the study

due to the low cost and the ability to have greater data collection in a shorter amount of

time. The web-based survey also allowed real-time viewing of incoming data, due to the

instantaneous nature of web-based information. The Internet delivery of the survey

provided the ability to collect and process data from the research quickly, efficiently, and

with reduced cost. The web-based survey has begun to supplement, if not replace,

telephone and mail interviews as the selected mode for some survey research (Satmetrix,

2001). Research does support the use of web-based surveys as an accurate method for

collecting data, especially if the sample to be surveyed is chosen from a known and identifiable research population (Satmetrix, 2001) as was the case in this study. Komsky (1991) claimed that evidence supported the proposition that online surveys may be as effective as traditional forms of survey research.

Once the introduction email was distributed to the survey sample, data collection was completed within 30 calendar days. Participation in the survey was strictly voluntary and required approximately 30 minutes. Completion of the survey by email address was not tracked, and the participants remained anonymous. Respondents were not asked their name or email address on the survey. Email addresses were not collected by the researcher. HR.com selected the sample and sent the link to the survey and email addresses remained with HR.com.

Once a predetermined minimum quantity (n = 200) of responses were received, the researcher exported the data into the SPSS version 12.0 statistical application to analyze responses and examine independent and dependent variables. The quantity (n = 200) was selected because it represented at least 20% of the sample size of 1000, which was indicated by HR.com as the largest sample they would contact for the researcher. The obtained self-selected sample consisted of 210 HR.com members who chose to complete and submit the survey. The sample size was relatively small but because of the method HR.com use to administer the survey, the researcher could not get more respondents.

Data Analysis

The surveys were analyzed both in terms of collective total responses to each item and by totals for each of the sections of the survey. Both descriptive and inferential statistics were used to describe the study's sample and to draw inferences about the wider population it represented.

Descriptive statistics used included frequencies and percentages, means, standard deviations, cross-tabulations and chi-square. Chi-square was used to determine if observed distribution of frequencies was different from what was expected to be from chance (Shavelson, 1996). Cross-tabs allow a researcher to compute the number of times that a value occurs when categorized by one or more dimensions such as gender and age. If a researcher wanted to determine if what he or she observes in the distribution of frequencies is what he or she would expect to occur by chance, the researcher would need to move beyond cross-tabs and undertake chi-square calculations (Shavelson, 1996).

Inferential statistics were also used to generalize findings in the sample to the population of HR professionals. Differences between groups of subjects based on independent demographic variables were analyzed inferentially using "ANOVA or a t-test to compare the size of between-group differences with the size of within-group differences due to individual variability" (Rudestam & Newton, 2001, p.38). Correlation co-efficients were also calculated for some variables as direct measures of relationship.

CHAPTER IV

FINDINGS

Introduction

The purpose of this chapter is to present the results of the study and address the

research questions. Several descriptive and inferential statistical techniques were used to

analyze and report the study findings.

Based on the previous studies of Higgins (1993), West (1995), and Timura

(1995), and the adoption curve of innovation diffusion theory, the researcher expected to

find differing views among the sample of HR professionals, representing a range of

adoption or acceptance rates of the innovation of online education. The researcher

expected that some human resources professionals would view onground and online

degrees as equivalent, while others would feel that degrees earned online were inferior.

The results show that some human resource professionals will hire, promote and increase

the salaries of employees regardless of whether the degree was earned through traditional

or non-traditional means. Others may support employee participation in online MBA

programs, but do not value employees with online MBAs as highly as those that hold

MBAs from traditional universities.

Research Question #1: Demographic Profile of Respondents

Tables 1-3 present the demographic profile of the sample. This profile is

organized in three groups of variables for clarity: personal characteristics (Table 1),

educational characteristics (Table 2), and workplace characteristics (Table 3). Table 1

presents the personal characteristics of the study's respondents. The majority (70%) of

respondents were female, and had input into the hiring of personnel (77%). Their median

age was approximately 41, with an age range from less than 30 to over 60. A wide range

of job titles were represented among the six categories provided for response to Question

3: "Your position is.…" However, 52% selected "Other"; all those who selected this

option wrote in their job titles or descriptions. Therefore, the researcher assigned most of

these persons to one of the original categories or to one of six new categories, derived

from the data. The researcher reviewed the titles of these persons and placed them in the

original category that was the most similar in job title. Table 1 shows the distribution of

positions after the reassignments and the categorizations derived from the responses.

In addition to the data shown in Table 1, the respondent's location was also

obtained. Persons from 40 states participated, including from 8 states in the West (n= 38,

18.1%), 13 states in the Central U.S. (n= 71, 33.8%), and 19 states in the East (n=97,

46.2%). Four additional respondents (1.9%) declined to answer this question. These data

indicate the national scope of this study.

Table 1
Personal Characteristics of Respondents (n=210)

Question	Response	n	%

Q7 What is your gender?

	Male	61	29.0
	Female	143	68.1
	No Response	6	2.9
	Total	210	100.0

Q8 My age is:

	under 30	27	12.9
	31- 40	70	33.3
	41-50	53	25.2
	51-60	52	24.8
	over 60	3	1.4
	No Response	5	2.4
	Total	210	100.0

Q1 Do you have input into hiring of personnel?

	No	49	23.3
	Yes	161	76.7
	No Response	0	0
	Total	210	100.0

Q2 Within the next six months, how likely are you to hire an employee with an MBA?

	Very Unlikely	50	23.7
	Unlikely/No opinion	64	30.5
	Likely	60	28.6
	Very Likely	34	16.2
	No Response	2	1.0
	Total	210	100.0

Q3 Your position is:
(Categories from original questionnaire)

	HR Director	20	9.5
	HR Manager	50	23.8
	Hiring Manager	8	3.8
	Benefits Manager	4	1.9
	HR Coordinator	19	9.0
	Support Staff	31	14.8
	Other (please specify)	5	2.4

(Categories assigned from supplied responses)

	Generalist	18	8.6
	Analyst	8	3.8

Learning/Train'g Mgr	28	13.3
Recruiter	5	2.4
President, VP	3	1.4
Consultant	9	4.3
No Response	2	1.0
Total	210	100.0

Table 2 shows educational characteristics of the respondents (degree, where degree was obtained, level of technology skills, and awareness of for-profit universities). Although there was a wide range of educational levels, respondents tended to have a college degree, with 85% of respondents reporting having a bachelors or masters degree. Of those with a college degree, 161 out of 193 (83.4%) had received it from a traditional university. The researcher later noted that the question was worded such that persons with more than one degree, perhaps a BA from a traditional school and also an MBA from a for-profit, could have responded to either choice.

The great majority (76.8%) of respondents indicated that they were "Fairly skilled" in computer use (Question 11). Only four persons (2%) selected the "Novice" level, and none chose "None" or no computer experience. Also, on Question 13, only four persons indicated a lack of awareness of for-profit universities. Therefore, this variable was not a factor in the participants' responses about the universities and did not separate participants into groups with different knowledge characteristics.

Finally, a variable was created to measure the authority the respondent had in the hiring of MBAs. This was developed by the researcher after the survey was taken.

Values from *Very low* to *Very high* were assigned primarily on the basis of the

individual's job title, with major consideration for the size of the organization in which

he/she worked, and some consideration for the industry. An HR Director, for example,

was assigned with very high authority to hire an MBA whereas, support staff or

coordinator would have very low authority. The researcher made this assignment

primarily based on her experience in the corporate world and research in the field of HR

when developing this study.

Table 2
Educational Characteristics of Respondents (n = 210)

Question	Response	*n*	*%*
Q9 The highest degree you have obtained is:			
	High school	8	3.8
	Associates degree	6	2.9
	Bachelors degree	76	36.2
	Masters degree	99	47.1
	Doctorate	17	8.1
	No Response	4	1.9
	Total	210	100.0
Q10 Did you earn a degree from a:			
	Traditional univ. (like Okla. State Univ. or Penn. State)	161	76.7
	For-profit univ. (like Univ. of Phoenix or DeVry)	32	15.2
	Not applicable	12	5.7
	No Response	5	2.4
	Total	210	100.0
Q11 What is your level of self-assessed technology skills?			
	None (no experience with computers)	0	0.0
	Novice (know how to do basic functs.)	4	1.9
	Fairly skilled (know how to do most)	156	74.3

Power user (can do advanced software)	43	20.5
No Response	7	3.3
Total	210	100.0

Q13 Are you aware of for-profit universities (like University of
Phoenix, Kaplan) providing online MBA degrees?

No	4	1.9
Yes	199	94.8
No Response	7	3.3
Total	210	100.0

Created Variable: Authority derived from position and organizational
size

Very low	43	20.5
Low	48	22.9
Medium	54	25.7
High	27	12.9
Very high	36	17.1
No Response	2	1.0
Total	210	100.0

Characteristics of respondents' workplaces are reported in Table 3. Respondents tended to come from large organizations, with 56% reporting that their company employed over 2,500 people. Only about 14% worked at places with fewer than 100 employees.

A wide variety of industries were represented in the sample. As shown in Table 3, the most common choices among those provided were banking/ finance/ insurance (17.3%), followed by manufacturing and healthcare, each with 12.5% of responses, and government or military with 10.6%. No other category was reported by more than 10% of respondents, although 16.8% responded "Other" and wrote in their industry. The latter

included a broad range of fields, including construction, gaming industry, real estate,

telecommunications, and transportation. Table 3 also includes responses to some

questions on their organization's position toward for-profit and online degrees. Close to

half (46.2%) of the respondents' surveyed indicated that their organization checks

accreditation of for-profit universities and more than half (61.4%) provide tuition

reimbursement for online degree programs.

Table 3
Characteristics of Respondents' Workplaces (n = 210)

Question	Response	n	%
Q4 Approximately how many people are employed by your company?			
	less than 25	11	5.2
	between 25 and 99	17	8.1
	between 100 and 999	42	20.0
	between 1,000 and 2,500	22	10.5
	more than 2,500	115	54.8
	No reponse	3	1.4
	Total	210	100.0
Q5 Which best describes the industry in which your company operates:			
	manufacturing	26	12.4
	retail and wholesale sales	13	6.2
	healthcare	26	12.4
	banking, finance, insurance	36	17.1
	utilities and energy	8	3.8
	services	19	9.0
	education or nonprofit	19	9.0
	government or military	22	10.5
	media or communications	4	1.9
	Other (please specify)	35	16.7
	No Response	2	1.0
	Total	210	100.0

Q15 Does your organization check accreditation of univ. when considering an applicant from a for-profit university?

No	56	27.6
Yes	97	46.2
Unsure	50	23.8
No Response	7	3.3
Total	210	100.0

Q12 Does your company provide tuition reimbursement for online degree programs?

No	56	26.7
Yes	129	61.4
Unsure	19	9.0
No Response	6	2.9
Total	210	100.0

Research Questions #2 and #3:
Human Resources Professionals' Perceptions Regarding Job Applicants with Online MBA Degrees from For-Profit Universities

Human Resources Professionals' Perceptions Regarding Job Applicants with Online MBA Degrees from For-Profit Universities Compared to Applicants with MBA's from Traditional Universities

This section addresses the study's primary purpose, i.e., to develop a description of the perceptions of a group of HR professionals regarding job applicants with MBA degrees from traditional, for-profit, and online universities. Specifically, two research questions are addressed: Research Question 2: "What are the perceptions of human resources professionals regarding job applicants with online MBA degrees from for-profit universities?" and Research Question 3: "What are the perceptions of human resources professionals regarding job applicants with online MBA degrees from for-profit universities compared to applicants with MBA's from traditional universities?" The 14

key survey questions eliciting respondents' perceptions on these issues are summarized in Tables 4, 5, and 6. Table 4 shows frequency of responses to each question that was answered using a 5-point scale, and Table 5 shows these data for the questions that were answered on a 4- or 3-point scale.

Most of the questions were answered on a 5-point Likert-like scale of *Strongly agree* (scored as 5), *Agree* (4), *Undecided* (3), *Disagree* (2), and *Strongly disagree* (1). The mean and standard deviation (*SD*) of the responses to each question are reported in Table 6. For these items, a mean score of 3.5 would fall half-way between *Agree* and *Strongly agree*. It should be kept in mind while examining these results that some questions were phrased in a favorable direction (e.g., "I would recommend…"), others unfavorably (e.g., "…is not as effective…"). Means and standard deviations for the questions that were answered on a 3-point scale or 4-point scale are also shown in Table 6. In each case these were scored in a positive direction (1-3 or 1-4), such that a higher score indicates a more favorable view of the type of university highlighted in the question. Although the questions ranged widely and overlapped somewhat, they are grouped in Table 6 on the basis of being primarily concerned with one of the three categories of university.

Table 4

Respondents' Perceptions Concerning For-profit, Traditional, and Online Universities
(for questions on a 5-point scale) (n = 210)

Question		Strongly disagree	Disagree	Undecided	Agree	Strongly agree	No Response	Total
Q14 Are you confident in the accreditation of for-profit universities?	n	16	41	60	49	36	8	210
	%	7.6	19.5	28.6	23.3	17.1	3.8	100.0
Q16 Online learning is not as effective as in a traditional onground environment.	n	26	65	30	49	29	11	210
	%	12.4	31.0	14.3	23.3	13.8	5.2	100.0
Q17 An online course of study is not as challenging as traditional.	n	38	62	36	43	20	11	210
	%	18.1	29.5	17.1	20.5	9.5	5.5	100.0
Q18 A traditional onground MBA program provides a better business education.	n	13	42	40	55	49	11	210
	%	6.2	20.0	19.1	26.2	23.3	5.5	100.0
Q19 The quality of for-profit MBA programs is questionable.	n	20	42	56	57	24	11	210
	%	10.5	20.0	26.7	27.1	11.4	5.5	100.0
Q20 For-profit universities are not as reputable as traditional universities.	n	18	32	26	71	51	12	210
	%	8.6	15.2	12.4	33.8	24.3	5.7	100.0
Q23 Online MBAs earned from a for-profit univ. are accepted in the business world.	n	4	40	69	70	11	16	210
	%	1.9	19.0	32.9	33.3	5.2	7.6	100.0
Q26 I would hire a job candidate with an MBA earned online at a for-profit U.	n	6	11	45	101	32	15	210
	%	2.9	5.2	21.4	48.1	15.2	7.1	100.0
Q27 I would prefer to hire a job candidate with a traditional MBA degree.	n	10	35	28	63	59	15	210
	%	4.8	16.7	13.3	30.0	28.1	7.1	100.0
Q28 I prefer to hire a candidate with MBA from a U with which I am familiar.	n	6	39	23	83	44	15	210
	%	2.9	18.6	11.0	39.5	21.0	7.1	100.0

| | | Q29 I would recommend an online MBA
from a for-profit U to an employee. | *n*
% | 27
12.9 | 45
21.4 | 45
21.4 | 54
25.7 | 23
11.0 | 16

7.6 | 210
100.0 |

Table 5

Respondents' Perceptions Concerning For-profit, Traditional, and Online Universities (N=210) (for questions on a 3- or 4-point scale)

Question		Inferior…	Equivalent…	Superior…	No Response	Total
		…to an MBA earned at a traditional university				
Q21 An MBA earned from a for-profit university is	*n* %	116 55.2	78 37.1	1 0.5	15 7.1	210 100.0
Q22 An MBA earned online from a traditional university is	*n* %	76 36.2	112 53.3	7 3.3	15 7.1	210 100.0

		Not consid ered	Cons- idered infer- ior to trad	Cons- idered equiv- alent to trad	Cons- idered super- ior to trad	No Respo nse	Total
Q25 When reviewing resumes of potential job candidates, a job candidate with an MBA degree from a for-profit university is	*n*	19	99	74	2	16	210
	%	9.0	47.1	35.2	1.0	7.6	100.0

The data in Table 5 indicate that a for-profit MBA is generally viewed as inferior, but an online MBA from a traditional university is generally viewed as equivalent to a typical onground MBA from a traditional university. In addition, candidates with MBAs

60

from a for-profit university tend to be either not considered for hiring or considered

inferior to those candidates with MBAs from a traditional university. The HR

professionals surveyed seemed to accept online learning at traditional universities but

have a negative view of online learning at for-profit universities. The for-profit status of

the university appears to be of greater concern that whether or not the degree was

obtained online or onground.

Table 6

Means and Standard Deviations for Respondents' Perceptions Concerning For-profit,
Traditional, and Online Universities (on a 5-point scale except for Questions Q21, Q22,
& Q25) (n = 210)

Question	*n for valid responses*	Mean	*SD*
For-profit universities:			
Q14 Are you confident in the accreditation of for-profit universities (like Uof P, Kaplan, Keller DeVry)?	202	3.24	1.19
Q19 The quality of for-profit MBA programs (like UofP, Kaplan, Keller DeVry) is questionable.	199	3.12	1.17
Q20 For-profit universities (like Uof P…) are not as reputable as traditional universities (like OSU).	198	3.53	1.28
Q21 An MBA earned from a for-profit university (like UofP, Kaplan, Keller DeVry) is: *(3-pt scale)*	195	1.41	0.50
Q25 When reviewing resumes of job candidates, one with MBA from for-profit univ. is: *(4-pt scale)*	194	2.30	0.66
Q26 I would hire a job candidate with an MBA earned online at a for-profit university.	195	3.73	0.91
Q29 I would recommend an online MBA program from a for-profit university to an employee.	194	3.01	1.24

Traditional universities:

Q18	A traditional onground MBA program provides a better business education.	199	3.43	1.25
Q27	I would prefer to hire a job candidate with a traditional MBA degree.	195	3.65	1.23
Q28	I would prefer to hire a candidate with an MBA degree from a university with which I am familiar.	195	3.62	1.13

Online universities:

Q16	Online learning is not as effective as learning in a traditional onground (face to face) environment.	199	2.95	1.30
Q17	An online course of study is not as challenging as a traditional onground (face to face) course of study.	199	2.72	1.27
Q22	An MBA earned online from a traditional university is: *(3-pt scale)*	199	1.65	0.55
Q23	Online MBA degrees earned from a for-profit univ. (like Uof P…) are accepted in the business world.	194	3.23	0.91
Q29	I would recommend an online MBA program from a for-profit university to an employee.	194	3.01	1.24

The data in Tables 1 through 6 provided a profile of HR professionals and offered many insights with regards to their perception of online for-profit universities. The HR professionals surveyed were aware of for-profit universities providing online MBA degrees but less than half were confident in the accreditation of for-profit universities. The HR professionals surveyed also believed online learning was as effective as the traditional onground environment.   Half believed online is as challenging as a traditional course, but that the traditional, onground program provides a better business education. HR professionals were still split on the quality of a for-profit MBA, but strongly believed

for-profits are not as reputable as traditional universities. The findings support the idea that there are more concerns about degree from for-profits than the fact that these degrees are typically online.

About one third of respondents indicated they were still undecided on whether or not online MBAs are accepted in the business world, although the large majority would hire a candidate with an MBA earned online at a for-profit university, but would prefer to hire a candidate with a traditional MBA and one that they are familiar with. There were no conclusive findings on whether or not they would recommend to an employee an online MBA program from a for-profit university.

Less than one percent of HR professionals surveyed believed an MBA earned from a for-profit university to be superior to an MBA earned at traditional university. This is consistent with the finding that half of the HR managers surveyed considered the job candidate with an MBA earned online from a for-profit to be inferior to a candidate with a MBA from a traditional university, even though most reported that their companies provide tuition reimbursement for online degree programs, which often come from for-profit institutions.

Two other sets of questions addressed respondents' perceptions about the MBA programs in different ways. The first asked respondents to rank-order the reputations of six non-traditional MBA programs (Table 7). In these rankings, a lower mean indicates a higher, that is, more positive, ranking. Also, it may be noted that a number of the rankings were skipped by up to 25 respondents. Presumably this was either because

respondents were not familiar with the program or did not consider their knowledge to be detailed enough to make distinctions among them. The data reported here did not attempt to correct for any effects of skipping some items.

The University of Phoenix (UOP) was most favorably ranked, although even this program received a wide range of rankings, as indicated by its mean of 2.73. For comparison, a perfect ranking would be 1.00; a completely random set of rankings would average 3.50. The high ranked received by UOP may indicate a perception of quality, or it may simply reflect name recognition gains through successful marketing.

The other set of items ranked were characteristics of new hires with MBA degrees (leadership, presentation skills, etc.). These are shown in Table 8. The most highly-ranked characteristic was "Experience in field," and the lowest ranked was "Graduate school attended." This suggests that the HR professionals in the study did not perceive the school from which job candidates received their MBAs to be as important as their experience and skills, regardless of where they were obtained.

Table 7
Rank Ordered Mean Rankings of the Reputation of For-Profit MBA Degree Programs

For-Profit MBA degree program	*n*	Mean	*SD*
University of Phoenix	148	2.73	1.90
Kaplan	124	3.23	1.39
Keller DeVry	130	3.30	1.37
Regis University	123	3.54	1.45
Walden University	132	3.55	1.68
Argosy	125	4.82	1.65

Table 8

Rank Ordered Mean Rankings of Importance in Selection of New Hires with MBA Degrees

	n	Mean	SD
Experience in field	192	2.10	1.79
Critical thinking	188	3.08	1.65
Leadership	189	3.35	1.54
Ability to work in teams	186	3.93	1.60
Technology skills	187	4.98	1.57
Presentation skills	185	5.07	1.43
Graduate school attended	185	5.52	1.86

Combined Scales

To examine the data in-depth with multi-item scales, three combined scales were generated from the 14 perception questions. Although there was some overlap in content, the questions fell into three broad categories: Perceptions related to traditional universities; perceptions about for-profits; and perceptions about online universities.

Of the 14 questions, 11 persons answered only one or no questions, while three persons answered only six. These respondents were dropped from the computation of combined scales. Eight persons skipped between one and four questions, so those missing answers were estimated by assigning a score based on the three or four other questions with the highest positive or negative correlations with the missing answer, across the whole sample. Negative correlations and questions on a 3- or 4-point scale were taken into account in this. As it happened, most of the respondents with missing

answers had tended to answer *3* (*Undecided*) to other 5-point questions, so estimated answers also tended to be neutral.

Three combined scales were computed. *Perception*: *For-Profit* was based on questions 14, 19, 20, 21, and 25 (see Table 6); *Perception*: *Traditional* on questions 18, 27, and 28 (see Table 6); and *Perception*: *Online* on questions 16, 17, 22, 23, 26, and 29 (see Table 6). Since some of the questions were scored on 3- or 4-point scales, and some were phrased in the negative, the combined scales were computed as the percentage of the highest possible score (after scores on the negatively-phrased questions were reversed, and after equalizing the weight of the 3- and 4-point questions). Thus, for example, a person who answered the first set of questions as negatively as possible toward for-profit universities would receive a score of *00*; a person who answered them as positively as possible would receive a *100*. A score of *2* on question 21 would be equivalent to a score of *3* on a 5-point scaled question. Descriptive statistics for the three combined scales are shown in Table 9.

Table 9
Means and Standard Deviations of the Combined Scales (N= 196)

Combined Scale	Mean	*SD*
Perception of Traditional, in % of highest possible	64.1	23.8
Perception of Online, in % of highest possible	50.6	20.5
Perception of For-profit, in % of highest possible	45.9	23.5

The means for the three perception scales were compared with a one-way-within-subjects (repeated measures) analysis of variance. The ANOVA results are shown in Table 10. The overall ANOVA was significant at the $p < .001$ (F = 27.7; df = 2, 194). The post-hoc tests showed that perceptions differed significantly among the three target types of institutions, such that Traditional was viewed most positively, followed by Online, and then by For-profit.

Planned simple contrasts were used to locate these sources of significance. The contrasts showed that perceptions differed significantly among the three target types of institutions, such that Traditional was viewed most positively, followed by Online, and then by For-profit.

Table 10
Summary of Within-Subjects Analysis of Variance comparing the Three Scales

Source	SS	MS	F^a
Overall	35243	17622	27.7***
Error	248082	1272	
Traditional vs. For-profit	65426	65426	33.2***
Error	384334	1971	
Traditional vs. Online	35910	35910	21.2***
Error	330679	1696	
For-profit vs. Online	4394	4394	29.3***
Error	29232	150	

$^a df = (2, 194)$ for overall test, $(1, 195)$ for comparisons.
*** $p < .001$.

Direct measures of relationships of the perceptions of the HR professionals of the three types of institutions were examined by computing correlation coefficients among the three combined scales. These are shown in Table 11.

Table 11
Intercorrelations among the Three Combined Scales (N= 196)

Combined Scale	Perception of Traditional	Perception of For-profit	Perception of Online
Perception of Traditional, in % of highest possible	—		
Perception of For-profit, in % of highest possible	-.765***	—	
Perception of Online, in % of highest possible	-.729***	.853***	—

*** $p < 0.001$ (2-tailed).

The strength and direction of the correlation coefficients indicate that the HR professionals who viewed traditional institutions positively tended to view both online and for-profits negatively and vice-versa. Those who viewed online institutions positively also tended to have positive perceptions of for-profits.

Research Question #4

Differences in Perceptions Based on Respondents' Characteristics

This section addresses issues raised in the second Purpose of the Study: to describe differences in the perceptions of human resources professionals based on independent criteria such as age, industry, location, familiarity with online learning and for-profit universities, and Research Question 4: What relationships exist between the perceptions of human resources professionals and key demographic variables?

Dichotomous Characteristic Variables

Perceptions of dichotomous groups of HR professionals regarding three types of institutions were compared with independent-sample t-tests. The dependent measures were scores on three combined perception scales. This analysis was done in two sets of dichotomous variables: a set of three personal variables, and a set of two variables relating to respondents' employers' practices. Descriptive and t-test data for the personal variables are shown in Table 12; data for the employer practice variables are shown in Table 13. Relationships between some dichotomous groups and other key demographic variables were examined with Fisher's Exact tests in 2 x 2 contingency tables. Table 12 displays comparisons on the three combined scales across three dichotomous respondent characteristics. Table 13 shows comparisons across two dichotomous questions related to the respondents' understanding of their employer's practices.

Table 12

Three Combined Scale Scores Compared across Dichotomous Respondent Variables

		N	Mean	SD	t	df	p
Q7 What is your gender?							
Perception of Traditional	Male	57	67.1	25.1	1.06	192	>.05
	Female	137	63.1	23.3			
Perception of For-profit	Male	57	44.2	23.4	-0.68	192	>.05
	Female	137	46.7	23.6			
Perception of Online	Male	57	48.4	21.9	-0.95	192	>.05
	Female	137	51.5	20.0			
Q1 Do you have input into hiring of personnel?							
Perception of Traditional	No	46	56.2	24.9	-2.63	194	<.001
	Yes	150	66.6	23.0			
Perception of For-profit	No	46	54.2	23.7	2.81	194	<.01
	Yes	150	43.3	22.9			
Perception of Online	No	46	57.4	19.9	2.61	194	<.01
	Yes	150	48.5	20.3			
Q10 Did you earn a degree from a							
Perception of Traditional	Traditional university	155	69.5	21.0	6.79	183	<.0001
	For-profit university	30	40.8	22.1			
Perception of For-profit	Traditional university	155	39.8	21.0	-7.87	183	<.0001
	For-profit university	30	71.9	17.5			
Perception of	Traditional	155	45.7	19.1	-8.44	183	<.0001

Online	university						
	For-profit university	30	71.6	14.6			

^a ^[a] All significances are 2-tailed.

Table 13

Three Combined Scale Scores Compared across Dichotomous Organization Variables

		N	Mean	SD	t	df	(p)[a]

Q15 Does your organization check the accreditation of the university when considering hiring an applicant with a degree from a for-profit university?

		N	Mean	SD	t	df	(p)
Perception of Traditional	No	55	58.8	26.4	-2.27	147	<.05
	Yes	94	68.3	21.9			
Perception of For-profit	No	55	46.2	23.7	0.65	147	>.05
	Yes	94	43.6	23.9			
Perception of Online	No	55	51.2	20.0	0.89	147	>.05
	Yes	94	48.0	21.2			

Q12 Does your company provide tuition reimbursement for online degree programs?

		N	Mean	SD	t	df	(p)
Perception of Traditional	No	53	67.9	25.6	1.20	177	>.05
	Yes	126	63.1	23.8			
Perception of For-profit	No	53	43.0	25.5	-1.01	177	>.05
	Yes	126	47.0	23.0			
Perception of Online	No	53	46.9	22.6	-1.49	177	>.05
	Yes	126	52.0	19.8			

[a] All significances are 2-tailed.

Differences that were statistically significant showed clear patterns. In particular, Table 12 shows that respondents who had earned a degree from a traditional university rated traditional universities much more positively, while those with degrees from non-traditional universities rated non-traditional universities higher. Mean score differences were large: well over a standard deviation on each.

Table 12 also shows that HR professionals with input into hiring rated traditional universities significantly and substantially higher than non-traditional. Presumably, persons with input into hiring are in positions with more authority, at least relative to others in their organization. This could mean that in a large organization, an HR person might have 10 assistants but no say in hiring; in a small one, the single HR person might have input. But, since hiring input was not related to age (see discussion below) or gender (Fisher's Exact Test: $p= .149$), there is a possibility that persons with traditional degrees attain more authority. This finding may also indicate that HR professionals who actually have input into hiring decisions favor degrees from traditional institutions, while more favorable dispositions toward non-traditional degrees are found among those with no hiring input.

The relationship between hiring input/authority and perception of traditional, for-profit and online institution (scores on combined scales) was further explored with correlation coefficients. This analysis (N=196) revealed that hiring authority was significantly related to a lower perception of for-profit universities ($r = -.224$, df=194,

p<.01) and online universities (r = -.201, df = 194, p<.01) but was not related to perception of traditional universities (r = -.119, df = 194, p>.05).

Table 13 shows that those who view traditional universities much more positively than for-profit universities check accreditation of the university when considering hiring an applicant with a degree from a for-profit university. This may be because those HR professionals who view traditional universities much more positively are concerned about the quality of the for-profit degree program. Tuition reimbursement does not seem to be affected by the HR professionals' perception of traditional and for-profit universities. This may be because the company has a standard tuition reimbursement policy that the HR professional cannot change.

Finally, t-tests and Fisher's Exact tests (in 2 x 2 contingency tables) revealed that gender was not significantly related to key variables. As shown in Table 12, there were no gender differences in perception of traditional institutions (t=1.06; df = 192; p>.05), perception of for-profit institutions (t=-0.68; df = 192; p>.05) or perception of online institutions (t=-0.95; df = 192; p>.05). There were also no differences between males and females in having hiring input (Fisher's Exact test p = .533), degree earned from traditional or for-profit university (Fisher's Exact test p = .533), or awareness of for-profit universities (Fisher's Exact test p = .326).

Categorical Characteristic Variables

To analyze perceptions of traditional, online and for-profit institutions by HR professionals that had more than two categories, one-way ANOVAs were used with

scores on the three perception combined scales as the dependent measure. Relationships among demographic groups were studied with cross-tabulations and chi-squares. To improve accuracy of the chi-squares and make the ANOVAs more manageable, the categories within some variables were collapsed or reduced in number. These variables are labeled as *grouped* in Table 14.

Table 14 shows the descriptive and ANOVA data for the perceptions of the three types of institutions by the categorical variables.

Table 14
Three Combined Scale Scores Compared across Multi-group Respondent Variables

		N	Mean	*SD*	ANOVA
Q8 My age is: (grouped)*					
Perception of Trad	40 and under	91	67.5	23.3	$F_{(2,192)}= 1.88$
	41-50	51	60.1	25.5	
	over 50	53	61.9	22.7	
Perception of For-profit	40 and under	91	41.6	23.1	$F_{(2,192)}= 3.18*$
	41-50	51	47.6	24.2	
	over 50	53	51.4	22.6	
Perception of Online	40 and under	91	46.6	20.3	$F_{(2,192)}= 3.34*$
	41-50	51	54.4	21.4	
	over 50	53	53.7	19.2	
Q9 The highest degree you have obtained is: (grouped)					
Perception of Trad	HS or Associates	13	50.6	20.3	$F_{(2,193)}= 4.09*$

	Bachelors	74	61.2	22.9	
	Any grad	109	67.8	24.1	
Perception of For-profit	HS or Associates	13	61.8	20.0	$F_{(2,193)}= 4.05*$
	Bachelors	74	47.3	21.9	
	Any grad	109	43.0	24.2	
Perception of Online	HS or Associates	13	62.1	15.5	$F_{(2,193)}= 2.24$
	Bachelors	74	50.2	18.5	
	Any grad	109	49.5	21.9	

Q11 What is your level of self-assessed technology skills?

Perception of Trad	Novice	3	69.7	4.6	$F_{(2,192)}= 0.92$
	Fairly skilled	149	63.7	24.0	
	Power user	43	64.7	23.9	
Perception of For-profit	Novice	3	21.3	9.8	$F_{(2,192)}= 1.77$
	Fairly skilled	149	45.9	22.7	
	Power user	43	47.7	26.2	
Perception of Online	Novice	3	29.3	5.1	$F_{(2,192)}= 1.78$
	Fairly skilled	149	50.8	19.8	
	Power user	43	52.2	22.4	
Perception of Trad	less than 99	28	60.4	24.5	$F_{(3,191)}= 0.45$
	100 - 999	38	62.8	26.9	
	1,000 - 2,500	21	67.5	24.2	
	more than 2,500	108	64.9	22.6	
Perception of For-profit	less than 99	28	54.8	26.0	$F_{(3,191)}= 1.72$
	100 - 999	38	44.8	25.1	
	1,000 - 2,500	21	42.8	24.6	

	more than 2,500	108	44.2	21.5	
Perception of Online	less than 99	28	55.6	23.3	$F_{(3,191)}= 0.79$
	100 - 999	38	49.0	20.8	
	1,000 - 2,500	21	47.8	22.5	
	more than 2,500	108	50.2	19.1	
Perception of Trad	manufacturing	24	67.4	21.7	$F_{(5,155)}= 0.72$
	retail/ wholesale	13	71.7	19.1	
	healthcare	24	59.3	25.5	
	svce, non-med	62	65.9	23.6	
	ed or nonprofit	17	63.2	26.0	
	govt or military	21	61.1	19.3	
Perception of For-profit	manufacturing	24	43.5	23.6	$F_{(5,155)}= 1.75$
	retail/ wholesale	13	34.9	17.5	
	healthcare	24	51.8	20.6	
	svce, non-med	62	42.8	23.9	
	ed or nonprofit	17	47.2	26.3	
	govt or military	21	54.3	21.7	
Perception of Online	manufacturing	24	46.4	20.5	$F_{(5,155)}= 1.49$
	retail/ wholesale	13	40.5	15.2	
	healthcare	24	56.0	19.3	
	svce, non-med	62	48.4	20.5	
	ed or nonprofit	17	50.7	25.3	
	govt or military	21	55.4	20.0	

* $p< .05$.

Tukey post-hoc tests were performed on all analyses that showed significant overall differences. For Age groups, none of these were significant despite the fact that overall ANOVAs were significant for perceptions of traditional and for-profit online. This was probably due to the lack of power of the Tukey test. For the Highest degree

groups, both of the sets of Tukey tests were significant. These are illustrated in Table 15.

Put simply, in each comparison, the two most extreme means were significantly different.

Those respondents with a graduate degree had a much higher perception of traditional

MBA programs compared for-profit MBA programs. Those respondents with a high

school or associates degree had a much higher perception of for-profit MBA programs

compared to traditional MBA programs. Sheffe's test, an alternative multiple comparison

test was performed but there was no difference in groupings.

Table 15
Post-hoc Comparison of Levels in Significant ANOVAs

Combined scale			
Perception of Traditional			
	HS or Assoc. deg	Bachelors degree	Graduate degree
Mean	50.6	61.2	67.8
Perception of For-profit			
	Graduate degree	Bachelors degree	HS or Assoc. deg
Mean	43.0	47.3	61.8

Note. Means that share an overline or underline do not differ significantly; others differ
at *p*< .05.

Table 16 shows the cross-tabulations and chi-squares for age groups by the

categorical variables.

Table 16

Comparison of Age Groups to Other Key demographic Variables

		Q8 My age is (3 groups)			
		40 & under	41-50	over 50	Total
Q1 Do you have input into hiring of personnel?					
No	N=	24	12	13	49
	%	24.7%	22.6%	23.6%	23.9%
Yes	N=	73	41	42	156
	%	75.3%	77.4%	76.4%	76.1%
Total	N=	97	53	55	205
	%	100.0%	100.0%	100.0%	100.0%

$$\chi^{2=}p>.05$$
df = 2   N=205

Q10 Did you earn a degree from a

		40 & under	41-50	over 50	Total
Traditional univ	N=	83	41	36	160
	%	87.4%	83.7%	75.0%	83.3%
For-profit univ	N=	12	8	12	32
	%	12.6%	16.3%	25.0%	16.7%
Total	N=	95	49	48	192
	%	100.0%	100.0%	100.0%	100.0%

$$\chi^{2=}p>.05$$
df = 2   N=192

Q13 Are you aware of for-profit universities

		40 & under	41-50	over 50	Total
No	N=	0	4	0	4
	%		7.5%		2.0%
Yes	N=	96	49	53	198
	%	100.0%	92.5%	100.0%	98.0%

Total	$N=$	96	53	53	202
	%	100.0%	100.0%	100.0%	100.0%

$$\chi^2 = p < .01.$$
$$df = 2 \quad N=202$$

Cross-tabulations and chi-squares revealed that age was not significantly related to key variables. Based on the data reported in Tables 12 and 16, neither age nor gender appeared to be related to the key issues in this study. As shown in Table 16, there was a significant difference in the 41-50 year old age group where all four respondents indicated they were not aware of for-profit universities. Neither age nor gender appears to be relevant to the key issues in this study.

Research Question #5

Perception Patterns of Online and Traditional MBAs
in the Framework of Innovation Diffusion Theory

This section addresses the third Purpose of the Study: to describe "the perceptions of acceptance of MBA degrees from for-profit and traditional universities in the framework of innovation diffusion theory," and Research Question 4: "What distribution patterns of perceptions of online and traditional MBAs emerges in the framework of innovation diffusion theory?" Based on the consideration of the online MBA degree from for-profit universities as an innovation, the researcher posited a working hypothesis that its acceptance – or diffusion – would show a range along the continuum proposed by Rogers (1962), Moore (1995) and Bass (1969). It was further hypothesized that the innovation diffusion model would provide a structure and vocabulary for analyzing and discussing the variations found in the study in acceptance of online MBAs from for-profit universities among various groups of HR professionals. Thus, the innovation diffusion theory set out in the models of Rogers (1962), Moore (1995) and Bass (1969) served as the conceptual structural and analytical framework for the study and for interpreting and discussion its findings.

The analysis is based on Rogers' (1962) bell curve of innovation diffusion as shown in Figure 1. The innovation in this study is online MBAs from for-profit universities. Diffusion of this innovation is defined as acceptance of these MBAs as

evidenced by positive perceptions of online MBAs and MBAs from for-profit universities and company policies regarding online MBAs from for-profit universities, i.e. hiring applicants with such degrees, tuition reimbursement for such degrees and recommendation of such degree programs.

Rogers (1962) defined diffusion as the process by which an innovation is communicated through certain channels over time among the members of a social system. Rogers classified diffusion in his innovation adoption framework into five onwards stages: innovators, early adopters, the early majority, the late majority, and laggards, with 2.5%, 13.5%, 34%, 34%, and 16% of the population represented in each group respectively. The adoption of an innovation, according to Rogers, is mainly affected by four elements: the innovation itself, communication channels, time, and the social system. Differences between stages were presented under headings, such as socioeconomic status, personality values, and communication behavior. Rogers' theory can be applied to both individuals and organizations (Cheng & Kao, 2004). His bell curve of innovation diffusion is shown in Figure 5.
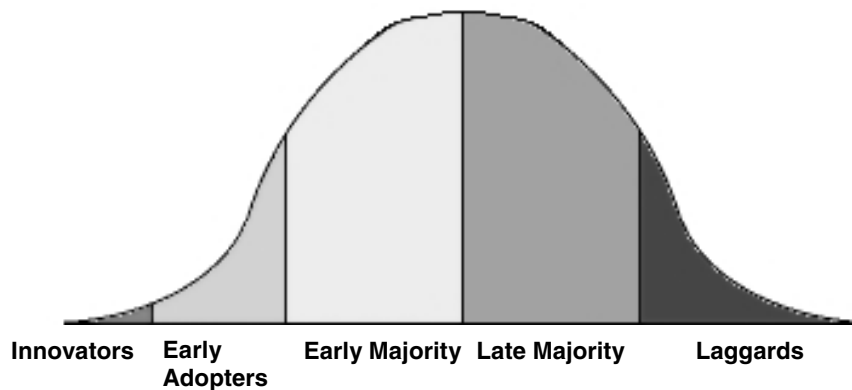
Figure 5. Innovation Diffusion Curve from Rogers (1962)

According to Rogers (1962), in the awareness stage "the individual is exposed to the innovation but lacks complete information about it" (p.163). At the interest or information stage "the individual becomes interested in the new idea and seeks additional information about it" (p.163). At the evaluation stage the "individual mentally applies the innovation to his present and anticipated future situation, and then decides whether or not to try it" (p.163). During the trial stage "the individual makes full use of the innovation" (p.163). At the adoption stage "the individual decides to continue the full use of the innovation" (p.163).

The data from the study indicate an acceptance of online MBA programs when they are offered by traditional universities. They also indicate difference in diffusion of the innovation of online MBAs, particularly from for-profits by HR professionals. The HR professionals surveyed seemed to accept online learning at traditional universities but have a negative view of online learning at for-profit universities. The for-profit status of

the university appears to be of greater concern than whether or not the degree was obtained online or onground.

Considering the time frame in which online degrees and for-profits have been in the marketplace and the innovation diffusion curve, it is no surprise that HR professionals are still in the evaluation stage. Interestingly, those HR professionals with a high school diploma and/or associates degree would be considered early adopters as they have a higher perception of for-profit universities. HR professionals with graduate degrees would fall in the late majority on the innovation diffusion curve.

The HR professionals surveyed were aware of for-profit universities providing online MBA degrees but less than half were confident in the accreditation of for-profit universities. The HR professionals surveyed also believed online learning was as effective as the traditional ground environment Half believed online is as challenging as a traditional course, but that the traditional onground program provides a better business education. HR professionals were still split on the quality of a for-profit MBA, but strongly believed for-profits are not as reputable as traditional universities. The findings support the idea that HR professionals with graduate degrees have more concerns about degree from for-profits (and are therefore in the late majority on the innovation diffusion curve) than the fact that these degrees are typically online.

About one third of respondents indicated they were still undecided on whether or not online MBAs are accepted in the business world, although the large majority would hire a candidate with an MBA earned online at a for-profit university, but would prefer to

hire a candidate with a traditional MBA and one that they are familiar with. There were no conclusive findings on whether or not they would recommend to an employee an online MBA program from a for-profit university. Less than one percent of HR professionals surveyed believed an MBA earned from a for-profit university to be superior to an MBA earned at traditional university. This is consistent with the finding that half of the HR managers surveyed considered the job candidate with an MBA earned online from a for-profit to be inferior to a candidate with a MBA from a traditional university thus placing those HR managers in the late majority.

Finally, the data pointed to differences in the diffusion patterns among industry that have never been revealed. Online MBA degrees from for-profit universities by industry are not uniformly diffused. HR professionals in the retail/wholesale industry have the highest or most positive perception of online for-profit MBA degrees and the lowest perception of onground traditional MBA degrees. The retail/wholesale industry HR professionals also have the highest or most positive perception of online traditional MBA degrees. HR professionals in the government/military industry have the lowest perception of MBA degrees from for-profit universities. Healthcare had the lowest perception of online MBA degrees from traditional universities and the highest perception of onground traditional MBA degrees.

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CHAPTER V

CONCLUSION

Summary of the Study

The purpose of this chapter is to provide conclusions, implications, recommendations and an overall summary of the research. The researcher sought to describe the perceptions of human resources professionals regarding the value of an online MBA from a for-profit university and to compare this perception to the perceived value of an MBA from a traditional onground university. This purpose was addressed in three parts:

(1)   The study developed a general or aggregate description of perceptions of a group of HR professionals.

(2)   The study described differences in the perceptions of human resources professionals based on independent criteria such as age, industry, location, familiarity with online learning and for-profit universities.

(3)   The study described the perceptions of acceptance of MBA degrees from for-profit and traditional universities in the framework of innovation diffusion theory.

The following questions guided this study:

(1)   What is the demographic profile of HR professionals who participated in this study?

(2)   What are the perceptions of human resources professionals regarding job applicants with online MBA degrees from for-profit universities?

(3)   What are the perceptions of human resources professionals regarding job applicants with online MBA degrees from for-profit universities compared to applicants with MBA's from traditional universities?

(4)   What relationships exist between the perceptions of human resources professionals and key demographic variables?

(5)   What distribution patterns of perceptions of online and traditional MBAs emerges in the framework of innovation diffusion theory?

The study provided guidance for working adults making enrollment decisions. It is also conceivable that companies not involved in this study will use this information to establish their position on job applicants with online MBA degrees from for-profit universities in relation to other companies. Finally, the study offered a diffusion snapshot of the current levels of acceptance of the new online MBA degree from for-profit universities as an educational innovation.

Summary of Findings

The HR professionals surveyed were aware of for-profit universities providing online MBA degrees, but less than half were confident in the accreditation of for-profit universities. The HR professionals surveyed also believed online learning was as effective as the traditional ground environment   Half believed online is as challenging as

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a traditional course but that the traditional onground program provides a better business education. HR professionals were split on the quality of a for-profit MBA but strongly believed for-profits are not as reputable as traditional universities. The findings support the idea that HR professionals with graduate degrees have more concerns about degree from for-profits (and are therefore in the late majority on the innovation diffusion curve) than the fact that these degrees are typically online. The innovation or acceptance of for-profit universities by industry was not equally diffused. Finally, the findings also support that skills and experience are more important than how and where the degree was obtained.

Conclusions

This research offered many insights and opportunities for more research. Innovation Diffusion theory (Rogers, 1962, 2003; Moore, 1995) provided a useful framework to discuss HR professionals' perceptions of online MBA degrees from for-profit and traditional universities. In general, acceptance of online and for-profit MBAs has mixed distribution among HR professionals. Acceptance is not uniformly diffused. HR professionals view online for-profit MBA degrees as inferior to MBA degrees from traditional universities. HR professionals view online MBA degrees from traditional universities equivalent to an MBA earned onground at a traditional university.

Further, HR professionals preferred to hire a job candidate with a traditional MBA earned from a university they are familiar with. This supports Rogers (1962, 2003)

who stated how people perceive things is strongly influenced by their past experience, education and cultural values. It also supports Bass (1969) that perception is related to personal experience, philosophy and exposure more than *reality* as shown in the research literature. For HR professionals, experience and critical thinking skills are more important than where the job candidate earned there MBA, however. Those HR professionals in the 40-and-under age group view for-profit universities more positively than those in the 41-50 and 50 + age group. HR professionals with a high school diploma or associates degree have a higher acceptance of for-profit universities than those HR professionals with graduate degrees. Despite concerns about online MBA degrees from for-profit universities, most companies offer employee tuition reimbursement for these degrees.

The concepts and language of innovation diffusion theory can be used to discuss perceptions of online MBA degrees from for-profit and traditional universities by HR professionals. The diffusion snapshot of the current levels of acceptance of online MBA degrees from for-profit universities as an educational innovation, clearly shows that overall, most HR professionals are in the late majority of acceptance as shown in Figure 6. HR professionals perceive online and onground MBA degrees from traditional universities as equivalent.
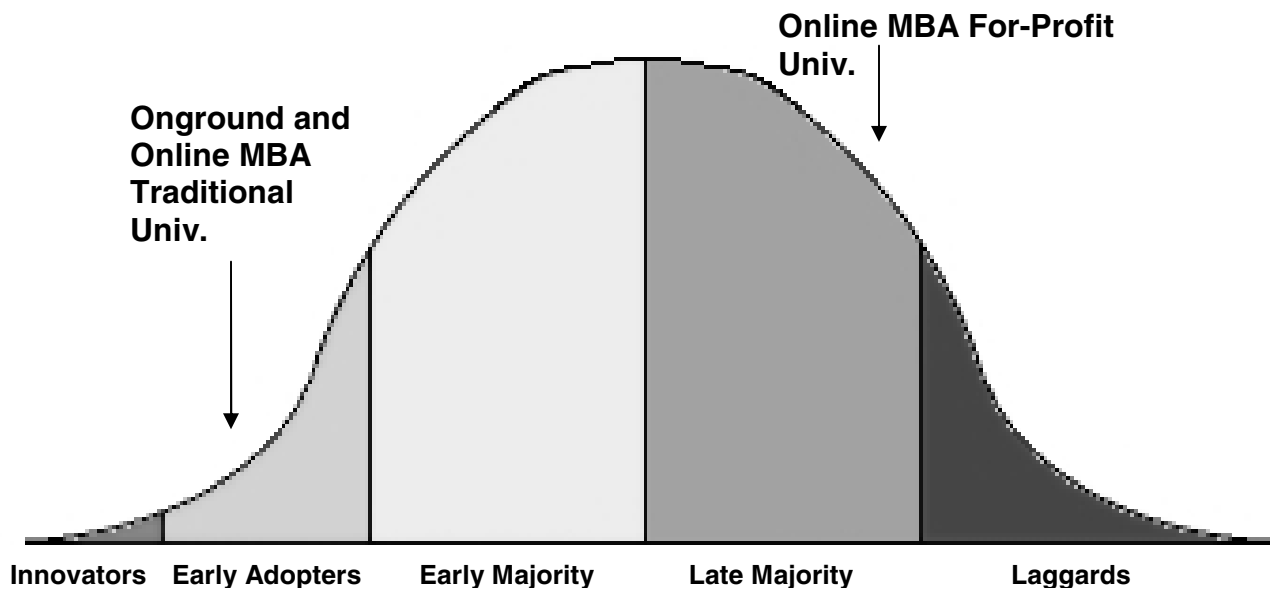
Figure 6. Diffusion snapshot of HR professionals' perceptions of acceptance of online MBA degrees from for-profit universities as an educational innovation.

When comparing HR professionals' perceptions of for-profits by independent criteria such as age, the data indicate acceptance is not uniformly diffused or complete as shown in Figure 7.
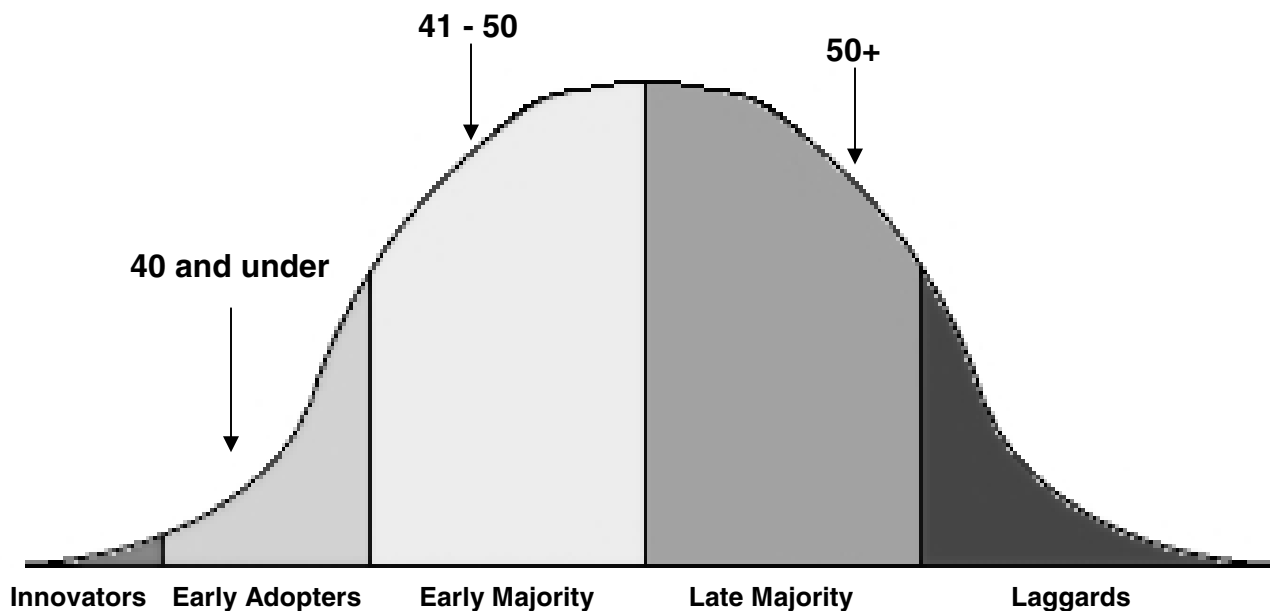
Figure 7. Diffusion snapshot of HR professionals' perceptions of for-profits by age.

The 50+ age group hold the lowest or most negative perception of for-profit universities. According to Rogers (1962), the late majority are skeptical and more traditional. This may be why the 50+ age group does not view for-profit universities as favorably as traditional universities.

When comparing the diffusion of HR professionals' perceptions of for-profit universities by highest degree obtained, the data also points to differences in diffusion as shown in Figure 8.
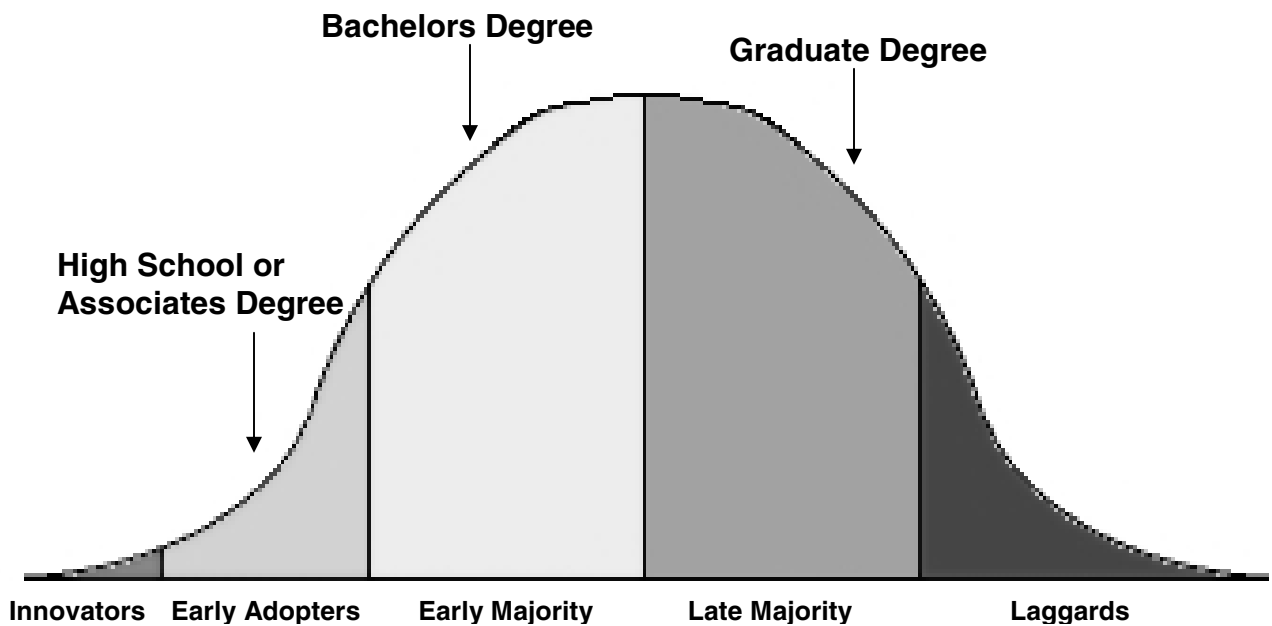

Figure 8. Diffusion of HR professionals' perceptions of for-profit universities by highest degree obtained.

Those HR professionals that hold a high school diploma or associates degree fall in the early adopter category and have much more diffusion than those with graduate degrees in the late majority. This may suggest those HR professionals without a Bachelors degree view the opportunity to obtain an MBA online from a for-profit more positively than those HR professionals who already have a degree.

Online MBA degrees from for-profit universities by industry are not uniformly diffused. HR professionals in the retail/wholesale industry have the highest or most positive perception of online for-profit MBA degrees and the lowest perception of onground traditional MBA degrees. The retail/wholesale industry HR professionals also have the highest or most positive perception of online traditional MBA degrees. HR professionals in the government/military industry have the lowest perception of MBA degrees from for-profit universities. Healthcare had the lowest perception of online MBA degrees from traditional universities and the highest perception of onground traditional MBA degrees. This indicates a preference for an onground or face to face learning environment. Diffusion of for-profit universities by industry is shown in Figure 8.
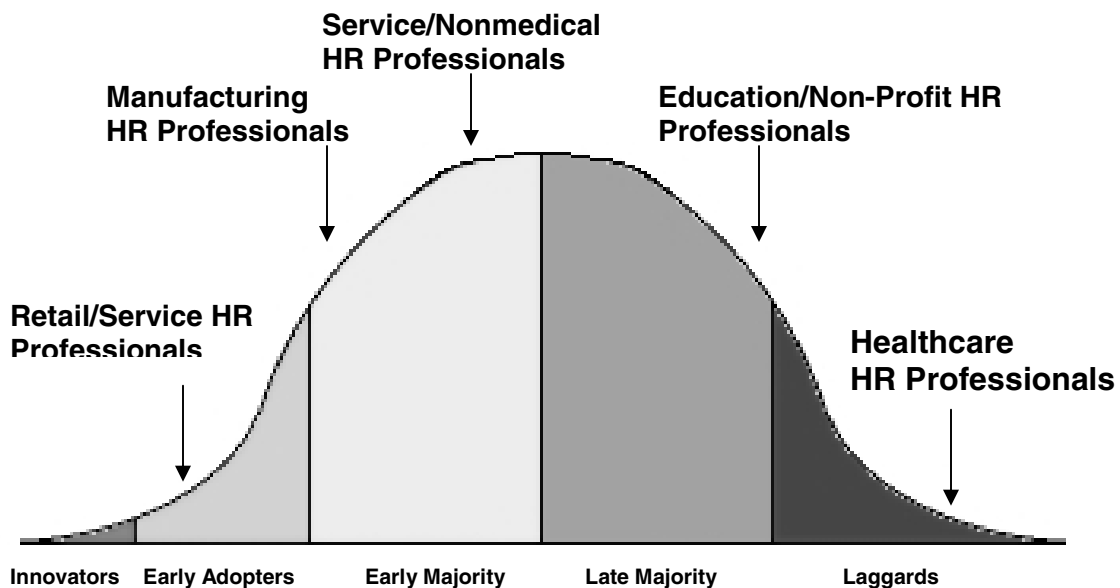

Figure 9. Diffusion of HR professionals' perceptions of for-profit universities by industry.

HR professionals' perceptions of online MBA degrees from for-profit universities do differ from organizational practice, as most HR professionals indicated that their company provides tuition reimbursement regardless of the university's for-profit or traditional status. Related to Bass (1969) internal factors, in the corporate world, the reality of meeting the need for skilled workers overrides personal preferences for where or how the MBA degree was obtained.

Considering the time and money spent in obtaining an online degree, does the degree hold the same value for employers as one earned onground at a traditional university? Data from this study indicate that HR professionals view online MBA degrees as inferior to MBA degrees earned at a traditional university. In this study, an online MBA degree from a for-profit university does not hold the same value as one earned from a traditional university. HR professionals do view MBAs earned online from a traditional university as equivalent to one earned onground from a traditional university.

What is the employability reality for those earning an MBA from a for profit university? The data show that HR professionals prefer to hire candidates with MBA degrees from a traditional university, specifically one they are familiar with. Experience and critical thinking skills, however, outweigh the for-profit or traditional status of the university. The data does not pragmatically support for-profit education for success in obtaining employment.

For working adults making enrollment decisions, those considering earning an MBA degree from a for-profit university should be very experienced in the industry in

which they hope to gain employment and have strong critical thinking skills to outweigh the negative perception of the study's sample of HR professionals about online MBA degrees from for-profit universities. This further suggests a for-profit MBA program may be better suited for those who are already established in their field and simply want a promotion. Those adults without experience in their chosen field or those who need to develop critical thinking skills should consider a traditional university for their MBA program or further investigate the perception of the for-profit MBA degree in their own industry.

Most employers offer tuition reimbursement for online MBA degree programs from for-profit universities, suggesting at the organizational level online MBA degrees from for-profit universities are accepted. Benefits packages do not seem to mirror hiring practices, however. This may mean employers want employees to stay on the job and the online for-profit model better serves employees who are juggling full-time employment, business travel and family responsibilities.

As for-profit universities strengthen their academic program and rethink and reshape their academic structure, input from HR professionals, specifically those with hiring authority, is critical. For-profit universities have yet to overcome the stigma of diploma mills as the Internet makes it very easy for such businesses to operate. This negative perception remains with HR professionals as does concern over accreditation. For-profit universities should focus on the pragmatic reality that their degrees are still perceived as inferior to traditional universities by HR professionals. While organizations

are receptive to offering tuition reimbursement for online MBA degrees from for-profit universities, the data revealed HR professionals continue to be skeptical. This may indicate that the for-profit universities are not delivering on their promise of employment to students. Although HR professionals perceive *no significant difference* in online and onground MBA degrees from traditional universities as equal, HR professionals do not grant equal value to online MBA degrees from for-profit universities.

As traditional universities look to the future of higher education, meeting the needs of the employer should be a critical component. Employers are funding the online for-profit universities through tuition reimbursement because employees need to remain on the job and attend classes. Traditional universities have the perceptual benefit in the eyes of the HR professional, but must consider the needs of the organization. HR professionals want the job candidate with the traditional MBA degree but the practical need for employees on the job is overriding the perceptual benefit. Funding the online for-profit universities through tuition reimbursement is not a preference among the sample of HR professionals in this study, but the for-profit universities are meeting the needs of the organization for an educated workforce that can remain on the job and attend school. The need for skilled workers overrides perceptual bias and personal selection. Traditional universities may be overlooking the big picture with respect to the needs of the employer.

HR professionals are aware of for-profit universities like the University of Phoenix, but do not recognize them. For-profit universities should begin targeting those

HR professionals in the healthcare industry who have the most negative perception of for-profit universities, followed by HR professionals in the education and non-profit segment. For-profits must move HR professionals from the awareness stage to the adoption stage by educating them on the merits of for-profit universities. Conversely, student recruitment should focus on those in the retail/service and manufacturing industries whose HR professionals indicate a more positive perception toward for-profit universities.

HR professionals should be aware of the differences between diploma mills and accredited for-profit universities. Differing philosophical perspectives on the role of higher education make influence perception. Is there a negative perception of the online for-profit MBA degree because the for-profit university is in business to make a profit?

In addition, HR professionals should consider their organization's benefits package with regards to tuition reimbursement. The data suggests hiring practices do not support for-profit universities when the benefits packages do. HR professionals should further investigate the quality and credibility of for-profit universities, as these professionals could be rejecting high quality job candidates on the basis of perceptual bias of for-profit universities rather than the candidate's overall ability to perform the job.

Organizations who offer tuition reimbursement for online for-profit MBA programs should make certain their HR department will promote employees who obtain an online MBA from a for-profit university. There may be a disconnect between the HR professional and the person actually doing the work. They should also encourage

employees to determine whether or not their career field recognizes for-profit MBA programs.

Recommendations

This study attempted to provide greater information about HR professionals' perceptions of job candidates with online MBA degrees from for-profit universities. With this information the researcher's intent was to provide greater knowledge of the hiring landscape and employment reality for those considering an online MBA degree from a for-profit university. Although the study provided some insight on HR professionals' perceptions of both online MBA programs from for-profit and traditional universities, further research is warranted.

Future areas of study recommended:

(1) A replication of the survey of HR professionals at a later date to see if diffusion changes over time

(2) A replication of the survey of HR professionals to determine if perceptions are the same for undergraduate and doctoral degrees from for-profit universities

(3) A replication of the study in specific industries on a global scope

(4) A query of educational institutions to see if they accept online MBA degrees earned at for-profit universities for acceptance into doctoral programs

(5) An investigation of graduates of online MBA programs at for-profit universities to determine placement rates

(6) A query of HR professionals in the 50+ age group to determine why they have a negative perception of for-profit universities

(7) A query of traditional and online for-profit MBA graduates to determine if university status affects hiring bonus and starting salary

(8) A query of employers to determine how many would use obtaining an MBA online from a for-profit university as a basis for promotion

(9) An investigation of HR professionals' educational philosophies related to their views on for-profit universities and the purpose of education

(10) An investigation of where HR professionals' obtained their degrees related to their views on for-profit universities

(11) A query of employers to determine if there is a disconnect between HR professionals' perceptions of for-profit universities and employee perceptions of for-profit universities

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Table A
Mean of Age groups Compared across Dichotomous Variables

	N	Age group Mean	SD	t	df	Sig.
Q7 What is your gender?						
Male	61	2.8	1.0	0.66	201	n.s.
Female	142	2.6	1.1			
Q1 Do you have input into hiring of personnel?						
No	49	2.6	1.1	-0.66	203	n.s.
Yes	156	2.7	1.0			
Q10 Did you earn a degree from a						
Traditional university	160	2.6	1.0	-1.80	190	n.s.
For-profit university	32	2.9	1.1			
Q15 Does your organization check the accreditation of the university when considering hiring an applicant with a degree from a for-profit university?						
No	56	2.6	1.1	-0.71	151	n.s.
Yes	97	2.7	1.0			
Q12 Does your company provide tuition reimbursement for online degree programs?						
No	56	2.7	1.2	0.39	90.35887	n.s.
Yes	128	2.7	1.0			

Script for Online Questionnaire

To: HR.com Member

FROM: HR.com

RE: Important HR Survey – MBA Programs

Dear HR.com Member:

You are asked to participate in a research study conducted by Maryann Lamer, doctoral candidate, from the College of Education at Oklahoma State University. The results of this research will contribute to a doctoral dissertation assessing the perceptions of HR professionals related to job candidates with MBA degrees earned online at for-profit universities.

Please click on the link to access the survey. The survey is 30 questions and will take only 10 minutes to complete.

http://www.surveymonkey.com/s.asp?u=999932343629

Confidentiality:

Any information obtained in connection with this study that can be identified with you will remain confidential.

You understand that
- Your consent is given voluntarily without being coerced or forced
- You may refuse to participate and if you agree to participate, you may stop at any time

Oklahoma State University wants to make sure you are treated in a fair and respectful manner. If you have questions about how you are treated as a research participant or for general questions about the study, please contact my advisor, Dr. Lynna Ausburn at alynna.okstate.edu or me, Maryann Lamer at mlamer99@yahoo.com.

By completing and submitting this survey, you are indicating that you are at least 18 years of age and consent to participate in this study.

Completing this survey is an investment of your valuable time. Thank you in advance for your cooperation.

Maryann Lamer
Oklahoma State University
918.639.1906
mlamer99@yahoo.com

Questionnaire

1. Do you have input into hiring of personnel?
   YES
   NO

2. Within the next six months, how likely are you to hire an employee with an MBA?

   Very Likely
   Likely
   No Opinion
   Unlikely
   Very Unlikely

3. Your position is

   HR Director
   HR Manager
   Hiring Manager
   Benefits Manager
   HR Coordinator
   Support Staff
   Other (please specify)

4. Approximately how many people are employed by your company?

   less than 25
   between 25 and 99
   between 100 and 999
   between 1,000 and 2,500
   more than 2,500

5. Which of the following best describes the industry in which your company operates

manufacturing
retail and wholesale sales
healthcare
banking, finance, insurance
utilities and energy
services
education or nonprofit
government or military
media or communications
Other (please specify)

6. You are located in

Alabama
Alaska
Arizona
Arkansas
California
Colorado
Connecticut
Delaware
Florida
Georgia
Hawaii
Idaho
Illinois
Indiana
Iowa
Kansas
Kentucky
Louisiana
Maine
Maryland
Massachusetts
Michigan
Minnesota
Mississippi
Missouri

Montana
Nebraska
Nevada
New Hampshire
New Jersey
New Mexico
New York
North Carolina
North Dakota
Ohio
Oklahoma
Oregon
Pennsylvania
Rhode Island
South Carolina
South Dakota
Tennessee
Texas
Utah
Vermont
Virginia
Washington
West Virginia
Wisconsin
Wyoming
Outside the U.S. (please specify)

7. What is your gender?
   Male
   Female

8. My age is

under 30
31- 40
41-50
51-60
over 60

9. The highest degree you have obtained is

High school
Associates degree
Bachelors degree
Masters degree
Doctorate

10. Did you earn a degree from a

 Traditional university (like Oklahoma State University or Penn State)
 For-profit university (like University of Phoenix or DeVry)
 Not applicable

11. What is your level of self-assessed technology skills?

None (no experience with computers)

Novice (know how to do basic functions, can use basic functions in a few software
programs, have basic Internet skills such as opening and navigating websites, can send
and receive email, can use key-word search engines)

Fairly skilled (know how to do most things I need, can function skillfully in a variety of
software, can perform such Internet functions as plug-in download and install)

Power user (can do advanced software and hardware tuning, can modify systems settings
and install new hardware components, is a sophisticated user of a variety of high-end
software, can create own web pages)

12. Does your company provide tuition reimbursement for online degree programs?

YES
NO
Unsure

13. Are you aware of for-profit universities (like University of Phoenix, Kaplan, Keller
    DeVry) providing online MBA degrees?
YES
NO

14. Are you confident in the accreditation of for-profit universities (like University of Phoenix, Kaplan, Keller DeVry)?

Strongly agree
Agree
Undecided
Disagree
Strongly disagree

15. Does your organization check the accreditation of the university when considering hiring an applicant with a degree from a for-profit university?

YES
NO
Unsure

16. Online learning is not as effective as learning in a traditional onground (face to face) environment.

Strongly agree
Agree
Undecided
Disagree
Strongly disagree

17. An online course of study is not as challenging as a traditional onground (face to face) course of study.

Strongly agree
Agree
Undecided
Disagree
Strongly disagree

18. A traditional onground MBA program provides a better business education.

Strongly agree
Agree
Undecided
Disagree

Strongly disagree

19. The quality of for-profit MBA programs (like University of Phoenix, Kaplan, Keller DeVry) is questionable.

Strongly agree
Agree
Undecided
Disagree
Strongly disagree

20. For-profit universities (like University of Phoenix, Kaplan, Keller DeVry) are not as reputable as traditional universities (like Oklahoma State, University of Nebraska or UCLA).

Strongly agree
Agree
Undecided
Disagree
Strongly disagree

21. An MBA earned from a for-profit university (like University of Phoenix, Kaplan, Keller DeVry) is

Superior to an MBA earned at a traditional university

Equivalent to an MBA earned at a traditional university

Inferior to an MBA earned at a traditional university

22. An MBA earned online from a traditional university is

Superior to an MBA earned onground at a traditional university

Equivalent to an MBA earned onground at a traditional university

Inferior to an MBA earned onground at a traditional university

23. Online MBA degrees earned from a for-profit university (like University of Phoenix, Kaplan, Keller DeVry) are accepted in the business world.

Strongly agree
Agree
Undecided
Disagree
Strongly disagree

24. Please rank according to the reputation of the MBA degree program. 1 is the highest and six is the lowest.

1 2 3 4 5 6

Argosy
Kaplan
Keller DeVry
Regis University
University of Phoenix
Walden University

25. When reviewing resumes of potential job candidates, a job candidate with an MBA degree from a for-profit university is

Considered superior to a job candidate with an MBA from a traditional university

Considered equivalent to a job candidate with an MBA from a traditional university

Considered inferior to a job candidate with an MBA earned at a traditional university

Not considered in the hiring process

26. I would hire a job candidate with an MBA earned online at a for-profit university.

Strongly agree
Agree
Undecided
Disagree
Strongly disagree

27. I would prefer to hire a job candidate with a traditional MBA degree.

Strongly agree
Agree
Undecided
Disagree
Strongly disagree

28. I would prefer to hire a candidate with an MBA degree from a university with which I am familiar.

Strongly agree
Agree
Undecided
Disagree
Strongly disagree

29. I would recommend an online MBA program from a for-profit university to an employee who was considering returning to graduate school.

Strongly agree
Agree
Undecided
Disagree
Strongly disagree

30. In selection of new hires with MBA degrees, please rank the following in order of importance. 1 is the most important and 7 is the least important.

Experience in field

Graduate school attended
Leadership
Presentation skills
Technology skills
Ability to work in teams
Critical thinking

VITA

Maryann Lamer

Candidate for the Degree of

Doctor of Philosophy in Occupational Education

Thesis: A DESCRIPTION OF THE PERCEPTIONS OF HUMAN RESOURCES
          PROFESSIONALS REGARDING MBA DEGREES FROM FOR-PROFIT
          AND TRADITIONAL UNIVERSITIES IN TERMS OF ROGERS'
          DIFFUSION OF INNOVATIONS THEORY

Major Field: Occupational Education

Biographical:

        Personal Data:
        Address: 1216 E. Kenosha #299 Broken Arrow, OK 74012
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        Email: mlamer99@yahoo.com

        Education:

              B.S.   Communication   University of Tulsa (May 1991)
              M.A.   Journalism   University of Oklahoma (May 1994)
              M.B.A. Marketing   Southern Nazarene Univ.(June 2000)
              Ph.D.   Occupational Education Oklahoma State University (July 2007)

Experience:

Lamer Gray Marketing and PR   2003 - present
Clark Seals and Global Bearings   1994 - 2000
Thrifty Car Rental HQ   1991 - 1994

Name: Maryann Lamer   Date of Degree: July 2007

Institution: Oklahoma State University   Location: Stillwater, Oklahoma

Title of Study: A DESCRIPTION OF THE PERCEPTIONS OF HUMAN RESOURCES
PROFESSIONALS REGARDING MBA DEGREES FROM FOR-PROFIT AND
TRADITIONAL UNIVERSITIES IN TERMS OF ROGERS' DIFFUSION OF
INNOVATIONS THEORY

Pages in Study: 122   Candidate for the Degree of Doctor of Philosophy

Major Field: Occupational Education

Scope and Method of Study: This was a descriptive study utilizing online survey
methodology and quantitative data techniques to analyze human resources (HR)
professionals' perceptions of job candidates with MBAs earned online from for-profit
universities. Subjects were a national sample (N = 210) of HR professionals representing
numerous different types of businesses and industries. The study was limited to analysis
of perceptions regarding MBA degrees. The theoretical framework for the study was the
Diffusion of Innovations (DOI) theory developed by Rogers, with the innovation for the
study defined as online MBA degrees from for-profit universities.

Findings and Conclusions: The HR professionals surveyed were aware of for-profit
universities providing online MBA degrees, but less than half were confident in the
accreditation of for-profit universities. The HR professionals surveyed also believed
online learning is as effective as the traditional on-ground environment. Approximately
one-half believed online courses are as challenging as traditional courses but that
traditional on-ground programs provide a better business education. HR professionals
were split on the quality of for-profit MBAs but strongly believed for-profit universities
are not as reputable as traditional universities. The findings indicated that online MBA
from for-profit universities was not uniformly diffused/accepted among various groups of
HR professionals. HR professionals with graduate degrees reported stronger concerns
about degrees from for-profits, and were therefore in the late majority on the Rogers
innovation diffusion curve. The HR professionals also had more concern for the fact that
MBAs were obtained from a for-profit institution than the fact that these degrees are
typically online. The study indicated that the diffusion of online MBAs from for-profit
universities was not equal among industries. Retailing and manufacturing were most
accepting of these degrees, while education/training and health care were least accepting.
Findings also revealed that skills and experience are more important to HR professionals
than how and where the degree was obtained, and that online MBAs from for-profits
appear to be more acceptable for job advancement than for initial job attainment.

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