

## Chapter IX

# An Exploration of the Value of Information Systems Certification: The Perspective of the Human Resource Professional\*

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## Abstract

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*Realizing that human resource (HR) professionals are often the gatekeepers to employment in organizations, this exploratory study examines the perceptions of HR professionals in relation to education, experience, and information system (IS) certification. Survey results were obtained from*

*approximately 100 HR professionals who are members of local chapters of the Society for Human Resource Management (SHRM) in North Carolina. We conclude that education, certification, and experience are imperfect substitutes for each other. In addition, there seems to be a joint or halo effect conferred upon a balanced candidate. HR professionals are also willing to associate substantial positive organizational benefits with certification, specifically: enhanced IT staff credibility, competitive advantage, level of service, consistency of service provided. HR professionals also associate substantial employee benefits with certifications, specifically: enhanced credibility, preparation for new position within the current organization, compensation, mobility, preparing for other certification tests, and meeting a job requirement.*

## **Introduction**

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Because the current information technology (IT) environment is characterized by rapid dynamic change, evolution of current technologies, and creation of new technologies, the skills portfolios of IT professionals are under constant pressure to develop in parallel. An important way to develop the IT skills portfolio is certification. While the perspectives of IT professionals and IT managers have been studied in the past (CompTIA, 2001), there has been no research on the perspective of human resource (HR) professionals toward IT certification.

The perspective of the HR professional is important. As the initial gatekeepers through which potential employees must pass to attain interviews with IT managers, the certification perceptions of HR professionals are worthy of study in and of themselves. In addition, the perceptions of HR professionals may have important implications for information systems (IS) curricula.

## **Background**

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A profession exists when its members are required to obtain requisite training, complete a certification process underpinned with rigorous standards, engage in continuing education, abide by a code of ethics, and submit to sanctions,

including loss of certification for malpractice or unprofessional behavior. Although routinely referred to as a profession, the IT field lacks explicit, generally accepted standards for requisite training and certification, a code of ethics, and sanctions for unprofessional behavior (Linderman & Schiano, 2001). While “profession” advocates carry out the painstaking process of consensus building, businesses’ support of and individuals’ quest for IT certification proceed at a fevered pace and rival the popularity of certification programs in professions such as Accounting, Architecture, Engineering, Financial Planning, Human Resources, Law, Medicine, Military, and so forth. While there is admittedly a lack of generally accepted IT certification standards, the staying power of IT certification is an important “profession”-like expression. Indeed, the popularity of certifications such as A+, CCNA, CNA, Network+, MCSE, and MOUS (Ray & McCoy, 2000; Noack, 2001) implies that there is a market for the knowledge base and skills associated with those certifications, and strongly hints that the Academe is not the only place that requisite training and continuing education can be acquired.

While some argue that certification is a fad, others argue that certification is here to stay and will increase in importance because certification: provides an independent assessment of a professional’s knowledge, raises professional stature, increases the knowledge base of both the individual and the organization in which the holder works, may provide an alternative to obtaining a graduate degree, may give job applicants an edge, can act as a knowledge refresher, and may aid employers in narrowing the applicant pool to manageable numbers (Cohen, 2001).

Certification’s current popularity is attested to by a number of recent events:

- 1) major Technical-Certification-Expo-2000 and 2002 conferences,
- 2) designation of March 2000 as Certification Month by 32 United States state governors,
- 3) the availability of over 400 business certifications, and
- 4) the increasing frequency of employment ads specifying specific certification preferences attest to certification’s popularity.

According to Adelman (2001), as of the year 2000, about 1.65 million individuals had earned 2.5 million IT certifications worldwide. Quasi-professions that lack certification are even being enticed to introduce certification to capitalize on commonly cited benefits (Leonard, 2002):

- 1) obtain further professional education and development,
- 2) move to a higher level of professional expertise,
- 3) improve career opportunities, and
- 4) enhance credibility by demonstrating mastery of a relevant body of knowledge (Barry, 2001; Library Administration and Management Association, 2002).

There also appears to be a growing international interest and participation in U.S.-based certification programs (Barber & Brackner, 2001). As the economy evolves, new opportunities arise outside of traditional service areas that motivate the need for new certifications to address the often-complex issues associated with emerging markets (AICPA, 2000; Braun, Mauldin, & Fischer, 2001; Freir, 2001; Gerbitz & Salea, 2001). Unfortunately, in some cases, certification proliferation causes confusion for consumers who are unfamiliar with a particular certification and the level of its prestige (Braun et al., 2001; Kraus, 1999). To some extent, this confusion syndrome is moderated, as a given specialization domain matures and convergence is achieved as to which certifications provide the greatest utility to individuals and organizations.

Several studies have explored the value of certification to certified professionals and to the business managers that employ certified professionals (AICPA, 2000; Barber & Brackner, 2001; Barry, 2001; CompTIA, 2001; Freir, 2001; Hrisak, 2001; Ray & McCoy, 2000; Schroeder & Reichardt, 2001). Professionals earn certifications to improve and assess skills, enhance credibility, improve compensation, increase productivity, open up new career opportunities, and measure training effectiveness. Seventy-six percent of certified professionals actually realized their certification-benefits expectations (CompTIA, 2001). Business managers cite improved credibility, employee productivity, higher level and consistency of service, competitive advantage, and ability to attract and retain highly qualified staff as the key benefits of certification. Ninety-two percent of business managers actually realized all or nearly all of their certification-benefits expectations (Ray & McCoy, 2000). While these earlier studies certainly reflect positively on certification, they overlook the value of certification to HR professionals. HR professionals are generally involved in all phases of the hiring process. They are often involved in approving position advertisements, screening resumes, and doing initial interviewing (Mondy, Noe, & Premeaux 1999). IT certifications are often indicated in position advertisements, as well as resumes and the interview

process. With recruitment and selection as basic HR functions, the HR professional is often the first barrier that an IT professional will encounter in pursuing employment with a particular organization. As the initial gatekeepers to employment, HR professionals' perceptions of IT certification is worthy of study in and of themselves. In addition, those perceptions may have important implications for IS curricula.

Despite the fact that certifications have historically had a negative impact on their salaries, many academics have nonetheless obtained certification to augment their skills. The quest for certification has recently been legitimized and indeed given a compelling mandate by the American Assembly of Collegiate Schools of Business' recommendation for greater interaction between academicians and practitioners (Marcis & Bland, 2001). There is, however, considerable debate as to whether certification has a place in the IS curriculum of four-year educational institutions. One side of the debate employs a generalist argument to make the case for excluding certification from IS curriculums. The generalist argument asserts that the primary mission of most four-year colleges and universities focuses on the development of students' critical thinking and analytical skills, and their appreciation for the arts, diverse cultures, foreign languages, the scientific method, and the history and politics of their own and other societies, not community-college-oriented, workforce-development training of vendor-specific certification (Brookshire, 2001). The other side of the debate uses a value argument to make the case for inclusion of certification in IS curriculums. The value argument focuses on the student, employer, and education institution benefits associated with specific student and professor certification in four major areas: hardware (A+, vendor-neutral), software (MOUS, vendor-specific, Microsoft Office User Specialist), networks (Network+, vendor-neutral), and systems design and analysis (MCP-Microsoft-Certified Professional, MCSD-Microsoft-Certified Solution Developer, and MCSE-Microsoft-Certified Systems Engineer, all vendor-specific). Benefits to students and employers correspond closely to those noted above in connection with IT professionals and IT managers. From an institutional perspective, certification provides an assessment tool for evaluating course and program content and student competencies, and may contribute to a program's visibility and respect (Ray & McCoy, 2000).

## **The Value of Certification**

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Smith and Nagle define value as “the objective worth to a customer of satisfying the benefits they seek from a product or service. It’s the potential level to which willingness to pay (WTP) can be raised, and revenue captured. . . .” They argue that while WTP is useful as a concrete value measure, the level and antecedents of value must be understood to set prices that reflect the real value of a product or service. The first objective of measuring value is to define the value creation system and the four or five value drivers that account for the majority of the value created for customers (2002).

This study is an initial exploratory attempt to understand the value creation system and value drivers of IS certification on HR professionals’ hiring decisions.

## **Problem and Purpose**

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While the perspectives of IT professionals and IT managers have been studied in the past, there has been no research on the perspective of the HR professionals toward IT certification. The purpose of the present study is to explore the perspective of the HR professional toward IT certification. The following objectives were motivated from the literature review and formulated to accomplish the purpose of this study:

1. Determine the value of IT certification to HR professionals relative to formal education and experience in the hiring decision for IT professionals.
2. Determine the organizational benefits of a certified IT staff from the perspective of HR professionals.
3. Determine the employee benefits of IT certification from the perspective of HR professionals.
4. Determine the relative credibility of IT certification as compared to other certifications in business and industry from the perspective of HR professionals.
5. Determine whether HR professionals prefer theory-based education or application-based education, and whether certification should be part of an information systems curriculum.

## Methodology

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Due to the exploratory nature of this study, the perceptions of HR professionals were solicited with a survey instrument (see Appendix A) that was given to members from local chapters of the Society for Human Resource Management (SHRM) in North Carolina. Parts of this survey reflect the design of portions of the CompTIA survey so that the data generated by HR professionals can be compared to data generated by IT managers and certified professionals (CompTIA, 2001).

## Presentation and Discussion

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Surveys were collect by the presidents of six local North Carolina SHRM chapters at a monthly meeting. Based on the indications of the presidents and the researchers' presence at several of these meetings, it is estimated that the response rate is in excess of 30%. From these meetings, 101 usable responses were obtained from SHRM members. In this section, demographic data will first be presented. The results will then be presented in order of the research questions answered.

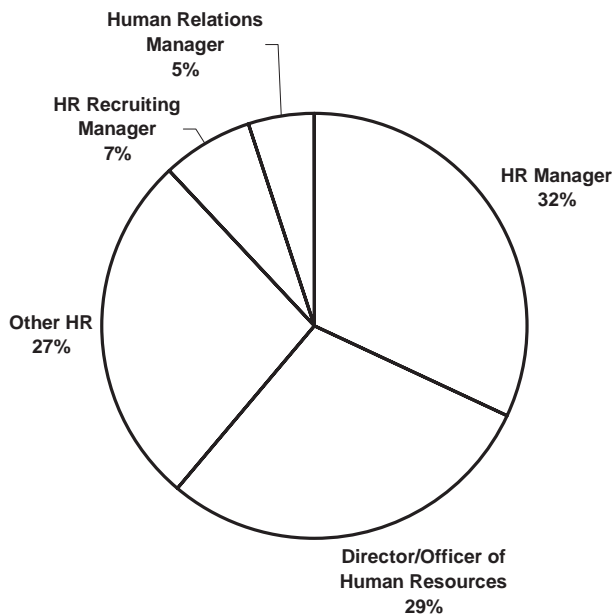
*Table 1: Descriptive Statistics for Demographic Data*

Demographics	Statistic				
	<u>N</u>	<u>M</u>	<u>SD</u>	Min.	Max.
Number of full-time employees currently in organization	93	4,178.89	15,249.92	4	85,000
Years served as a HR professional	95	12.13	8.35	0	33
Years served in a HR management position	94	8.64	8.10	0	32

## Demographics

To determine organizational and respondent characteristics, respondents were asked to disclose the number of years served as an HR professional and as an HR manager, the number of full-time employees in their organization, and their organizational affiliations. Table 1 shows that the average HR professional has served as an HR professional for about 12 years and as an HR manager for about 9 years, and currently works in a medium-sized organization (the range values and standard deviation suggest significant skewing is distorting the average employee's data). Figure 1 reveals that approximately 73% of the HR professionals (i.e., all but "others") participating in this study are in managerial positions and thus intimately involved in the hiring of new personnel (for ease of reference, all respondents are now referred to as HR professionals). This finding strengthens the meaningfulness of the HR perceptions that underpin the subsequent analysis of each of this study's five objectives.

*Figure 1: Job Title*





## Discussion of Research Objectives

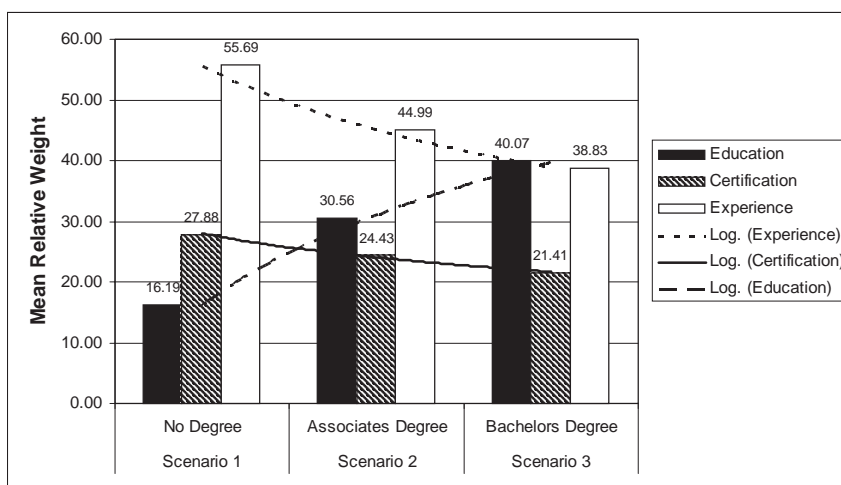
**Objective 1:** Determine the value of IT certification to the HR professional relative to formal education and experience in the hiring decision for an IT professional.

Objective 1 was measured by a set of three scenario questions. Respondents were asked to indicate the relative percentage weights (summing to 100%) that they would assign to education, certification, and experience when making a hiring decision in each of the following scenario contexts (the scenario ordering has been changed relative to the survey to facilitate discussion):

- 1) “Scenario 1: Candidate has no degree but several years of experience.”
- 2) “Scenario 2: Candidate has an Associates Degree from a Community College/Vo-Tech.”
- 3) “Scenario 3: Candidate has a Bachelor’s Degree from a University.”

As shown in Figure 2, HR professionals, on average, place about 16% of the relative weight of their hiring decisions for no-degree candidates on education, apparently establishing the lack of a degree as something that has to be

Figure 2: Relative Weights Used by HR Manager in Hiring Decision for Hiring an IS Professional



explained, compensated for, or replaced by significant experience and meaningful certification. In moving to the case of candidates with an Associates Degree, HR professionals nearly doubled the relative weight associated with education. Clearly, having some sort of degree establishes an important milestone in the minds of HR professionals faced with a hiring decision. Please note that the increase in the relative weight of education is subsidized largely by a decreasing emphasis on work experience. As a practical matter, this study does not allow us to say how much experience places an Associates Degree candidate on par with the “many years of experience” of the no-degree candidate. However, it appears that relevant experience is highly valued and that it takes relatively less experience to place an Associates Degree candidate on par with a no-degree candidate.

In the case of a Bachelor’s Degree candidate, HR professionals strike an interesting balance between education and experience, and draw nearly equally upon certification and experience to strike that balance. The continued strong presence of each of these components suggests that they are imperfect substitutes for each other. That is, each component exerts its own positive influence on the perception formation of HR professionals. The log curves indicate that each tradeoff component experiences diminishing marginal returns in moving from the no-degree scenario to the Bachelor’s Degree scenario, suggesting the obvious outcome of the desirability of the balanced candidate. That is, there appears to be a joint or halo effect associated with having all three components adequately represented. Given the progression of educational achievement from no degree to a four-year Bachelor’s Degree, it appears that adequate education means a four-year degree. Unfortunately, however, this study does not allow us to define what adequate is for purposes of how much or what type of “in-field” work experience, or how many or which certifications.

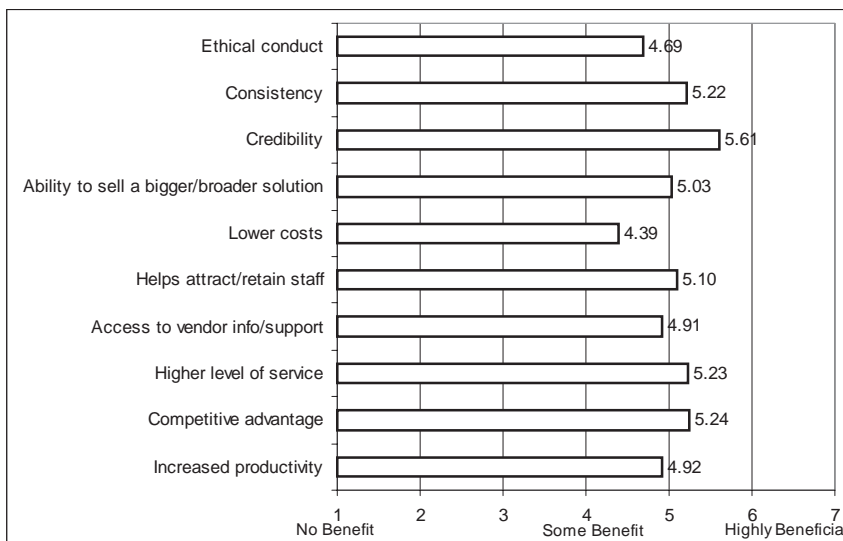
We note the relative flatness of the certification curve, the flattest of the three curves. Although the weight given to certification does diminish as education level increases, it is slight when compared to the decreased weight given to experience. Education and experience may be substitutes for each other to a point. The flat certification curve suggests that certification is a unique part of the hiring mix not substitutable by education or experience. The flat certification curve further suggests that certification is the least vulnerable to diminishing marginal returns and thus the best investment alternative, given a Bachelor’s Degree and adequate relevant experience, for becoming a more desirable, balanced job candidate.

Although more research is needed, the education-certification-experience dimensions may operationalize as theoretical breadth, technical depth, and practical application.

**Objective 2:** Determine the organizational benefits of a certified IT staff from the perspective of the HR professional.

Objective 2 was measured by a set of nine benefit factors drawn from the survey used in CompTIA’s 2001 Training and Certification Study (CompTIA, 2001). A tenth factor, ethical conduct, was added on an experimental basis to see to what extent HR professionals perceive that certification enhances ethical behavior, and thus the extent to which IS can be perceived as being more of a profession. Figure 3 discloses those factors along with HR professionals’ corresponding perceptions. In general, HR professionals felt that certification provides their organizations with at least “some benefit” for each of the factors. HR professionals also perceived substantial (substantial was selected as a modifier to communicate the notion that all of the findings are noticeably beyond the “some benefit, i.e., “5” demarcation) organizational certification benefits arising from enhanced IT staff credibility (5.61); enhanced competitive advantage (5.24); level of service (5.23); consistency of service provided (5.22);

*Figure 3: HR’s Perceived Organizational Benefits of Certified Staff*

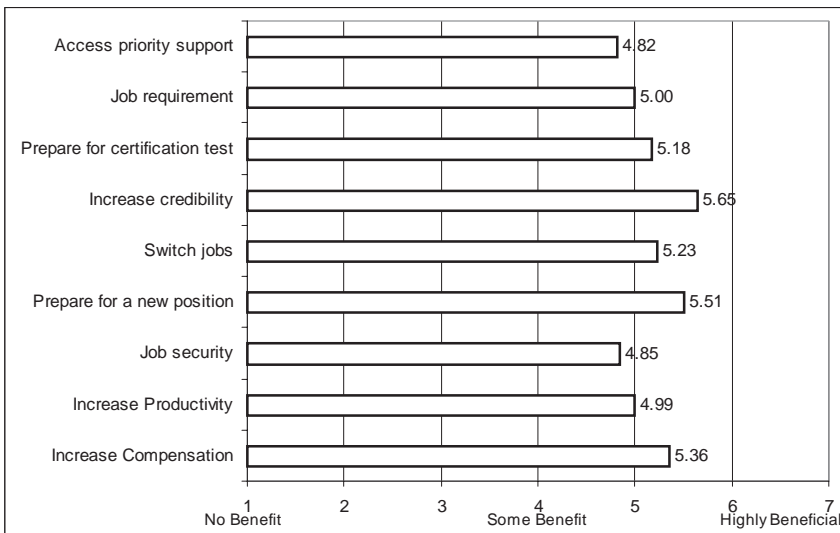


higher, improved ability to attract and retain staff (5.10); and ability to sell bigger/broader solution (5.03). With regard to ethical conduct, a “benefit” score of 4.69 suggests that HR professionals perceive certification as offering some benefit in regards to employee ethical conduct. It may be that HR professionals perceive that certification activates adherence to an implicit code of ethics and thus accommodates the perception that the IS profession takes on more “profession-like” characteristics. Explicit certification-related sanctions for unethical behavior would likely strengthen these ethical-conduct findings.

**Objective 3:** Determine the employee benefits of IT certification from the perspective of the HR professional.

Objective 3 was measured by a set of nine benefit factors drawn from CompTIA’s 2001 Training and Certification Study (CompTIA, 2001). Figure 4 discloses those factors along with HR professionals’ corresponding perceptions. In general, HR professionals felt that certification would provide their employees with at least “some benefit” for each of the factors. HR professionals also perceived substantial (as previously operationalized) employee certification benefits arising from their enhanced credibility (5.65), preparation for new position within the current organization (5.51), compensation (5.36), mobility

*Figure 4: HR’s perceived employee benefits of certification*

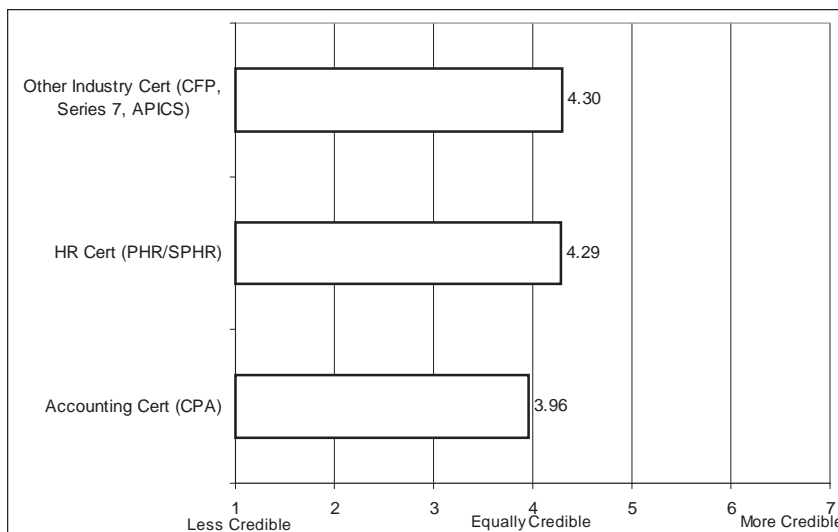


(5.23), preparing for other certification tests (5.18), and meeting a job requirement (5.00).

**Objective 4:** Determine the relative credibility of IT certification as compared to other certifications in business and industry from the perspective of the HR professional.

Objective 4 was examined with three questions that compared the credibility of IT certification to Accounting, Human Resource, and other industry certifications (e.g., CFP, Series 7, APICS, etc.). Figure 5 reveals that HR professionals view IT certification as having slightly more credibility than those from “other” industry certifications and their own HR certifications, and roughly equal credibility with the Accounting profession’s CPA certification. This finding is consistent with the findings associated with prior objectives, reflects HR professionals’ perceptions that certification helps organizations (if certified employees stay) and employees that certify, and thus makes a meaningful contribution to the perception that information systems is a profession.

*Figure 5: IS Certification Credibility, Compared to Other Certifications*



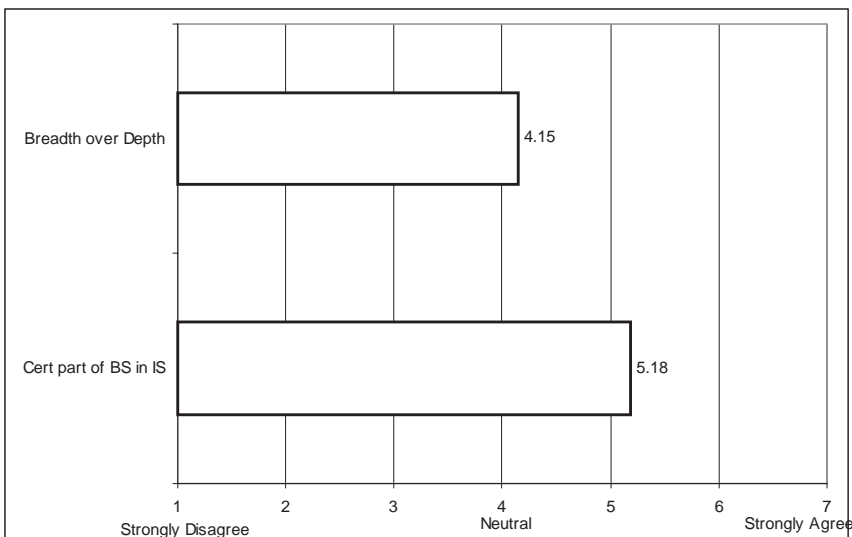
**Objective 5:** Determine whether HR professionals prefer theory-based education or application-based education, and whether certification should be part of an IS curriculum.

Objective 5 was evaluated by asking respondents to state the extent to which they agreed with two statements:

- 1) “A Bachelor’s Degree curriculum in Information Systems that produces breadth of knowledge (i.e., a theoretical foundation) is more valuable than a Bachelor’s curriculum that produces depth of knowledge (i.e., technical or applied skills).”
- 2) “Certification courses should be part of the Bachelor’s Degree curriculum.”

As noted in Figure 6, HR professionals were very nearly neutral (i.e., 4.15) with regard to Question 1, suggesting that there ought to be a balance between theoretical and technical and applied components in IS curriculums. With regard to Question 2, HR professionals’ 5.18 metric (i.e., somewhat agree) seems to indicate that certification may be a meaningful way of introducing depth to the curriculum and thus striking that balance.

*Figure 6: Certification in a Four-Year Degree Program*



## Conclusion

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This exploratory study yields a number of interesting insights into HR professionals' information systems certification perceptions and the implications those perceptions have for IS curriculums. Based on the findings of this study, we can conclude that certification, education, and experience are imperfect substitutes for each other. Thus, each component exerts its own unique, positive influence on HR professionals' perception formation. In addition, there seems to be a joint or halo effect conferred upon a balanced candidate. The relative weights of the three dimensions in an HR professional's hiring decision for a job candidate with a Bachelor's Degree seems to be 40% education, 20% certification, and 40% experience, with education and experience receiving approximately equal weights, and certification receiving half of the weight of education or experience. In light of their neutrality towards the task of declaring either a theory-based or a technical/application-based IS curriculum most desirable, HR professionals seem to be suggesting that there ought to be a balance between theoretical and technical and applied components in IS curriculums.

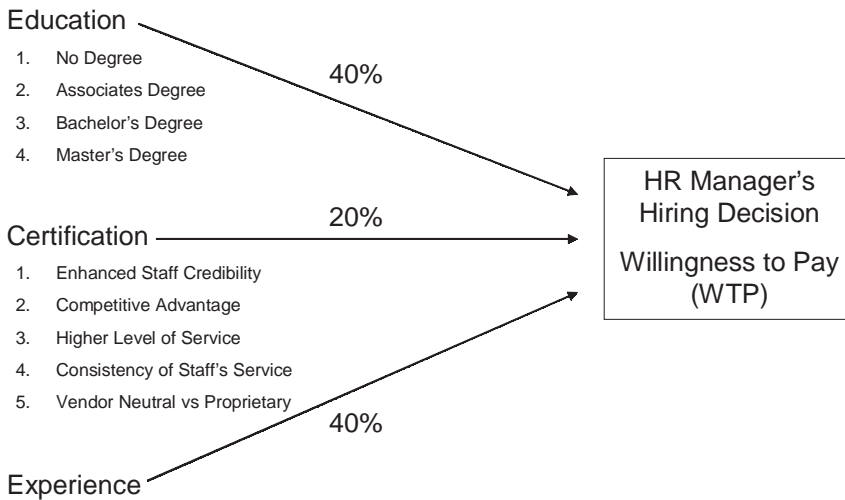
We can also conclude that HR professionals are willing to associate substantial positive organizational benefits with certification, specifically: enhanced IT staff credibility, competitive advantage, level of service, and consistency of service provided. HR professionals also associate substantial employee benefits with certifications, specifically: enhanced credibility, preparation for new position within the current organization, compensation, mobility, preparing for other certification tests, and meeting a job requirement. Finally, HR professionals view IT certification as having about the same level of credibility as certifications from other business service areas.

## Future Research

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Exploratory research is valuable as a preliminary procedure for construct definition and hypothesis development. This study, as an initial exploratory attempt to understand the value creation system and value drivers of IS certification on HR professionals' hiring decisions, has found value as the first step in constructing the conceptual framework for future research on the value

Figure 7: Framework for Future Research



of IS certifications. A next step is to develop and test hypotheses using a measurable construct such as customer willingness to pursue (WTP), as seen in Figure 7. The use of willingness to pursue, in place of the willingness to pay construct, is used in this model because of the HR professional's gatekeeper role in the process. Once the HR professional has determined the merits of the individual applicant, the applicant will be pursued via other organizational means.

Additional research possibilities include looking at the influence of a Master's Degree and internships upon the value of IS certification, the influence of outsourcing either the HR or the IS function on the value of certification, and the influence of HR professional education in reference to the differing levels and type of IS certifications on the value of certification.

## Endnote

- \* *An early draft of this chapter was presented at the Americas Conference on Information Systems, AMCIS, Dallas, Texas, August 2002.*



## References

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- AICPA (2000). IT credential to help CPAs make business sense out of technology. *Journal of Accountancy*, (July), 95-98.
- Adelman, C. (2001). The medieval guild in cyberclothes: International dimensions of industry certification in information technology. *Tertiary Education and Management*, 7(3), 277-292.
- Barber, R.L., & Brackner, J.W. (2001). Certification. *Strategic Finance*, (September) 71-72.
- Barry, J.N. (2001). Certification, is it worth the price? *Library Journal*, (February), 96.
- Braun, R., Mauldin, S., & Fischer, M.A. (2001). The CFE designation in perspective. *The CPA Journal*, (April), 42-48.
- Brookshire, R.G. (2001). Information technology certification: Is this your mission? *Information and Technology, Learning, and Performance Journal*, 18(2), 1-2.
- Cohen, D. (2001). Is certification in your future? *HR Magazine*, (June), 296.
- CompTIA. (2001, November 15). *2001 Training & Certification Study*. Available online at: <http://www.comptia.org>.
- Freir, K.D. (2001). Certification corner: Certification statistics and demographics. *Cost Engineering*, 43(8), 13.
- Gerbitz, K., & Salea, R.S. Market research: Data suggest demand for global business credential skills. *Journal of Accountancy*, (September), 65-66.
- Hrisak, D.M. (2001). Global challenges call for more CMAs and CFMs. *Strategic Finance*, (June), 46-49.
- Kraus, W.E. (1999). Certification improvement thanks to peer review. *Cost Engineering*, 41(4), 22-24.
- Leonard, B. (2002). A brief history of HRCI. *HR Magazine*, (March 14). Available online at: <http://www.hrci.org/about/history.html>.
- Library Administration and Management Association. (2002, March 12). *Certified Public Library Administrator (CPLA) Certification Program Overview*. Available online at: <http://www.pla.org/projects/certification/certification.html>.

- Linderman, J.L., & Schiano, W.T. (2001). Information ethics in a responsibility vacuum. *The Data Base for Advances in Information Systems*, 32(1), 70-74.
- Mondy, R.W., Noe, R.M., & Premeaux, S.R. (1999). *Human resource management* (4<sup>th</sup> ed.). Upper Saddle River, NJ: Prentice-Hall.
- Ray, C.M., & McCoy, R. (2000). Why certification in information systems? *Information and Technology, Learning, and Performance Journal*, 18(1), 1-2.
- Marcis, J.G., & Bland, E.M. (2001). The value of professional certifications in academe. *Atlantic Economic Journal*, 29(1), 116.
- Noack, D. (2001). Certification mystification. *Link-Up*, 18(5), 17.
- Schroeder, D.L., & Reichardt, E. (2001). IMA 2000 salary guide. *Strategic Finance*, (June), 24-37.
- Smith, G., & Nagle, T. (2002). How much are customers willing to pay? *Marketing Research*, (Winter), 20-25.

## Appendix A: The Survey

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### Information Systems Certification

### S U R V E Y

This survey is part of a study concerning the benefits of information systems (IS) certification and the implications those benefits have for curriculum design. Please respond to all applicable questions. ***Your individual responses will be completely anonymous, treated confidentially, and used in summary form only.*** Thank you for your support.

## Balancing Trade-offs in the Hiring of an Information Systems Professional

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For questions 1 through 3, please indicate the relative weights that you would use to make a hiring decision for an IS professional:

1. Scenario 1: Candidate has an Associates Degree from a Community College/Vo-Tech

**Education** \_\_\_\_\_% + **Certification** \_\_\_\_\_% + **Experience** \_\_\_\_\_% = **100%**

2. Scenario 2: Candidate has a Bachelor's Degree from a University

**Education** \_\_\_\_\_% + **Certification** \_\_\_\_\_% + **Experience** \_\_\_\_\_% = **100%**

3. Scenario 3: Candidate has no degree but several years of experience.

**Education** \_\_\_\_\_% + **Certification** \_\_\_\_\_% + **Experience** \_\_\_\_\_% = **100%**

## Organizational Benefits of Certified Staff

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For questions 1 through 10, please indicate the extent to which you feel each of the designated items is an **organizational** benefit of certification using the following scale:

	No		Some			Highly	
	Benefit		Benefit			Beneficial	
1. Increased productivity/tasks completed quicker.....	1	2	3	4	5	6	7
2. Competitive advantage.....	1	2	3	4	5	6	7
3. Higher level of service.....	1	2	3	4	5	6	7
4. Access to vendor information/support.....	1	2	3	4	5	6	7
5. Helps attract/retain staff.....	1	2	3	4	5	6	7
6. Lower costs.....	1	2	3	4	5	6	7
7. Ability to sell a bigger/broader solution.....	1	2	3	4	5	6	7
8. Credibility.....	1	2	3	4	5	6	7
9. Consistency.....	1	2	3	4	5	6	7
10. Ethical conduct.....	1	2	3	4	5	6	7

## Employee Benefits of Certification

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For questions 1 through 9, please indicate the extent to which you feel each of the designated items is an **employee** benefit of certification using the following scale:

	No		Some			Highly	
	Benefit		Benefit			Beneficial	
1. Increase compensation.....	1	2	3	4	5	6	7
2. Increase productivity.....	1	2	3	4	5	6	7
3. Job security.....	1	2	3	4	5	6	7
4. Prepare for a new position/responsibility.....	1	2	3	4	5	6	7
5. Switch jobs.....	1	2	3	4	5	6	7
6. Increase credibility.....	1	2	3	4	5	6	7
7. Prepare for certification test.....	1	2	3	4	5	6	7
8. Job requirement.....	1	2	3	4	5	6	7
9. Access priority support.....	1	2	3	4	5	6	7

## Certification Credibility

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For questions 1 through 3, please indicate the extent to which you feel information systems certification has comparable credibility to the designated certifications using the following scale:

	Less	Equally			More		
	Credible		Credible		Credible		
1. Accounting certifications: ex. CPA (Certified Public Accountant). .....	1	2	3	4	5	6	7
2. HR certifications: ex. PHR/SPHR (Senior/Professional in Human Resources). ...	1	2	3	4	5	6	7
3. Other industry certifications (CFP, Series 7, APICS, etc.).....	1	2	3	4	5	6	7

## Certification in a Four-Year Degree Program

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For questions 1 and 2, please indicate the extent to which you are in agreement with the indicated proposition using the following scale:

	Strongly	Neutral			Strongly		
	Disagree		Agree		Agree		
1. Certification courses should be part of the Bachelor's Degree curriculum in Information Systems.....	1	2	3	4	5	6	7
2. A Bachelor's Degree curriculum in Information Systems that produces breadth of knowledge (i.e., a theoretical foundation) is more valuable than a Bachelor's curriculum that produces depth of knowledge (i.e., technical or applied skills).....	1	2	3	4	5	6	7

## Comments

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Please provide any comments that you feel would be helpful to this study.

## Background Information

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1. How many years have you served as a human resources professional?  
\_\_\_\_\_ Years
2. How many years have you served in a human resources management position? \_\_\_\_\_ Years
3. What is your current job title? \_\_\_\_\_
4. How many full-time employees currently work in your organization?  
\_\_\_\_\_ Employees
5. Which of the following best describes your organization's primary business activity?

- |  |  |   |   |
|--|--|---|---|
| <input type="checkbox"/> Agriculture/Mining/Construction | <input type="checkbox"/> Information Systems             | <input type="checkbox"/> Trade & Retail | <input type="checkbox"/> Transportation & Public Util |
| <input type="checkbox"/> Nondurable Manufacturing        | <input type="checkbox"/> Government                      | <input type="checkbox"/> Health Care    | <input type="checkbox"/> Other _____                  |
| <input type="checkbox"/> Durable Manufacturing           | <input type="checkbox"/> Finance, Insurance, Real Estate | <input type="checkbox"/> Services       |   |

***Thank You for your time and assistance!***

Please check the box if you would like a summary of this study and then fill out the personal information table below.

Personal Information (please fill this section out only if you would like a summary of this study):

Name:

Address: