

Critical Success Factors for Distance Education Programs

Ben Martz

University of Colorado at Colorado Springs, USA

Venkat Reddy

University of Colorado at Colorado Springs, USA

INTRODUCTION

Distance education is playing an ever-growing role in the education industry. As such, it is prudent to explore and understand driving conditions that underlie this growth. Understanding these drivers and their corresponding concerns (Table 1) can help educators in the distance education field better prepare for the industry.

BACKGROUND

Distance education's primary driver is that it is the major growth segment in the education industry. In 1999, nearly 80% of the public, four-year institutions and over 60% of the public, two-year institutions offered distance education courses. Over 1.6 million students are enrolled in distance courses today. Over 90% of all colleges are expected to offer some online courses by 2004 (Institute of Higher Education Policy, 2000). Corporations envision online training warehouses saving large amounts of training dollars. Combined, the virtual education market and its sister market, corporate learning, are predicted to grow to over \$21 billion by the end of 2003 (Svecov, 2000).

A second major driver is employer expectations. Fundamental job market expectations are changing. Today, employees are not expected to stay in the same job for long periods of time; 20-plus year careers are not expected. The current modes of careers include multiple careers, combi-

nations of part-time work in multiple jobs, telecommuting, leaving and re-entering into the full-time work force, switching jobs, and so forth, and today's employee easily accepts the need to maintain a level of knowledge current with the career demands (Boyatzis & Kram, 1999). To complement these changes in employer expectations, employees have begun to accept the need for life-long learning.

A third driver is the profit potential. Cost savings may be obtained and if significant enough may drive up demand and costs may be lowered. For example, elective classes that do not have enough students enrolled in them on-campus may pick up enough distance students to make teaching the course more feasible (Creahan & Hoge, 1998). A final driver is the institution's mission. Most educational institutions serve a geographical region, either by charter or mission, and a distance-learning program may be a practical method to help satisfy this strategic mission (Creahan & Hoge, 1998).

However, the "commercialization" of education raises its own concerns about the basic process of learning (Noble, 1999). For example, are there any problems fundamental to the distance environment because of limited social interaction?

Retention may be one such problem. Carr (2000) reports a 50% drop-out rate for online courses. Tinto (1975) compared the learning retention of distance groups with traditional groups and found that the social integration was a key factor in successful retention of traditional

Table 1. Influences on the distance education industry

<i>Table 1. Influences on the distance education industry</i>	
Drivers	Concerns
Growth segment in education industry	Retention
Job market expectations	Fading Back
Life-long learning as an education paradigm	Less social learning
Profit center for educational institutions	Trust & isolation
Possible strategic competence	Impact of technology

groups. Haythornthwaite et al. (2000) think they found another one. They looked at how social cues such as text without voice, voice without body language, class attendance without seating arrangements, and students signing in without attending Internet class impacted students “fading back.” They found that the likelihood of students “fading back” is greater in distance-learning classes than in face-to-face classes. From the United Kingdom, Hogan and Kwiatkowski (1998) argue that the emotional aspects of this teaching method have been ignored. Similar concerns are raised from Australia, where technology has been supporting distance-teaching for many years, as Hearn and Scott (1998) suggest that before adopting technology for distance teaching, education must acknowledge the social context of learning. Finally, two other factors, trust and isolation, have been researched by Kirkman et al. (2002), whereby communication helped improve the measures of trust in students using the virtual environment.

By definition, the paradigm of distance education changes the traditional education environment by expanding it to cover geographically dispersed learning. In turn, this means that students will probably respond differently to this environment than they do to the traditional classroom. In addition, academic researchers have always been interested in explaining how people react to

the introduction of technology. This body of work can be useful to the distance education environment.

Poole and DeSanctis (1990) suggested a model called adaptive structuration theory (AST). The fundamental premise of the model is that the technology under study is the limiting factor or the constraint for communication. It further proposes that the users of the technology, the senders and the receivers, figure out alternative ways to send information over the channel (technology). A good example here is how a sender of e-mail may use combinations of keyboard characters or emoticons (i.e., :) – sarcastic smile, ;) – wink, :o – exclamation of surprise) to communicate more about their emotion on a subject to the receiver.

Ultimately, the key to realizing the potential of distance education is trading off the benefits and the concerns to produce a quality product. In the new Malcolm Baldrige evaluation criteria, companies are asked to better show a program’s effectiveness through customer satisfaction. In turn, Gustafsson et al. (2000) show customer satisfaction linked significantly to quality at Volvo Car Corporation. Finally, in their more broad analysis of well-run companies, Peters and Waterman (1982) deemed customer satisfaction as a key factor contributing to the companies’ performance.

Table 2. Questions that correlate significantly to satisfaction

ID	Question Statement	Correlation	
		Coef.	Sign.
16	I was satisfied with the content of the course	.605	.000
17	The tests were fair assessments of my knowledge	.473	.000
18	I would take another distance course with this professor	.755	.000
19	I would take another distance course	.398	.000
20	The course workload was fair	.467	.000
21	The amount of interaction with the professor and other students was what I expected.	.710	.000
22	The course used groups to help with learning	.495	.000
23	I would like to have had more interaction with the professor.	-.508	.000
26	The course content was valuable to me personally	.439	.000
28	Grading was fair	.735	.000
30	Often I felt “lost” in the distance class	-.394	.000
31	The class instructions were explicit	.452	.000
33	Feedback from the instructor was timely	.592	.000
34	I received personalized feedback from the instructor	.499	.000
36	I would have learned more if I had taken this class on-campus (as opposed to online)	-.400	.000
37	This course made me think critically about the issues covered.	.423	.000
38	I think technology (email, web, discussion forums) was utilized effectively in this class	.559	.000
39	I felt that I could customize my learning more in the distance format	.254	.001
42	The course content was valuable to me professionally	.442	.000
43	I missed the interaction of a “live,” traditional classroom	-.341	.002
46	Overall, the program is a good value (quality/cost)	.258(1)	.017
LOHITECH	Aggregate of Yes votes in Q6 through Q15	.270(1)	.012
(1) While significant, the low correlation coefficient below .300 should be noted			

4 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/critical-success-factors-distance-education/14309

Related Content

Reversible Watermarking in Medical Images Using Sub-Sample and Multiple Histogram Modification

Lin Gao, Yunjie Zhang and Guoyan Li (2020). *Journal of Information Technology Research* (pp. 75-90).
www.irma-international.org/article/reversible-watermarking-in-medical-images-using-sub-sample-and-multiple-histogram-modification/264759

Ethics of New Technologies

Joe Gilbert (2009). *Encyclopedia of Information Science and Technology, Second Edition* (pp. 1450-1453).
www.irma-international.org/chapter/ethics-new-technologies/13767

Research Data Management (RDM) in the Fourth Industrial Revolution (4IR) Era: The Case for Academic Libraries

Nse Emmanuel Akwang and Jonathan Ndubuisi Chimah (2021). *Handbook of Research on Information and Records Management in the Fourth Industrial Revolution* (pp. 17-37).
www.irma-international.org/chapter/research-data-management-rdm-in-the-fourth-industrial-revolution-4ir-era/284715

TAM Model Evidence for Online Social Commerce Purchase Intention

Zhang Ying, Zeng Jianqiu, Umair Akram and Hassan Rasool (2021). *Information Resources Management Journal* (pp. 86-108).
www.irma-international.org/article/tam-model-evidence-for-online-social-commerce-purchase-intention/270887

An Ensemble of Random Forest Gradient Boosting Machine and Deep Learning Methods for Stock Price Prediction

Lokesh Kumar Shrivastava and Ravinder Kumar (2022). *Journal of Information Technology Research* (pp. 1-19).
www.irma-international.org/article/an-ensemble-of-random-forest-gradient-boosting-machine-and-deep-learning-methods-for-stock-price-prediction/282707