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Acceptance and Resistance to Corporate E-Learning: A Case From the Retail Sector

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Abstract

The purpose of this study was to investigate what influences employees' acceptance and resistance to a corporate e-learning initiative provided by a large retail chain. The research used a survey design to gather interview and survey data to examine the factors affecting learner interest in, and resistance to, training and e-learning. The results provided insight into the attitudes and perceptions of employees in a large retail chain about the training and identified areas for further attention to facilitate a best-practices approach for increasing participation. The research asked: What barriers and enticers in relation to e-learning are present in a group of employees offered an e-learning training opportunity? The driving and restraining forces that influence an individual's fields (also defined as an individual's life space) as indicated in Lewin's (1997) Force Field Theory were examined and used as a framework for analysis of the findings to gain a clearer understanding of which factors support or deter these employees from participation in e-learning in the workplace. Lewin suggested that consideration of what encourages learners to embrace new methods for learning is important but equally, the factors that cause resistance to learning must be thoroughly examined. Supporting factors such as the rationale for the training being well understood and detractors like insufficient time to complete the modules were identified. Findings indicate that time, meaningful recognition for participation, and personal and technical support need to be provided for the successful implementation of e-learning initiatives.

Résumé

Le but de cette étude était de déterminer les facteurs qui influencent l'acceptation ou la résistance des employés à une initiative de e-learning corporatif offerte par une grande chaîne de commerce au détail. La recherche a utilisé un design de sondage pour ramasser des données d'entrevues et de sondages, pour examiner les facteurs affectant l'intérêt de l'apprenant dans, ou la résistance à, la formation et au e-learning. Les résultats nous renseignent sur les attitudes et les perceptions des employés d'une grande chaîne de commerce au détail sur la formation et a permis d'identifier des façons de faciliter une approche « meilleures pratiques » pour augmenter la participation. Les questions de recherche étaient : Quelles sont les barrières et les facilitateurs en relation avec le e-learning présents dans un groupe d'employés à qui on offre une opportunité de formation? Les moteurs et les freins

qui influencent les champs d'un individu (aussi défini comme l'espace vital d'un individu), tel qu'indiqué par la théorie des champs de force de Lewin (1997), ont été examinés et utilisés comme cadre d'analyse des observations pour comprendre quels facteurs encouragent ou découragent la participation des employés à une formation e-learning au travail. Lewin suggère que considérer ce qui encourage les employés à accepter de nouvelles méthodes d'apprentissage est important, mais que les facteurs qui causent des résistances doivent aussi être examinés. Les facteurs de soutien, comme le rationnel derrière une bonne formation, et les facteurs décourageants comme le manque de temps pour compléter les modules de formation, ont été identifiés. Les résultats indiquent que le temps, la reconnaissance significative de la participation et le soutien technique doivent être fournis pour assurer une réalisation heureuse d'initiatives e-learning.

A shrinking labor force and Canada's participation in the global economy both contribute to the recent research and development of initiatives to ensure that Canadian workers' skills continue to remain current and competitive. Lifelong learning is today's reality, and many employers provide workplace-based learning, and more specifically, e-learning, as a way to permit employees to upgrade their skills and knowledge while on the job. Literature supporting these three foci: career-related training, e-learning, and workplace-based e-learning formed the basis of this research. For the purposes of this discussion, e-learning refers to individual, self-paced Internet courses; online learning indicates group-based instruction; and Web-based learning describes characteristics of both.

According to McGreal and Elliot (2004), "Education is one of the fastest-growing economic and social sectors in the world, and the use of new technologies is an integral and driving component of that growth." The Advisory Committee for Online Learning (2001) recommends that e-learning be the focus for delivery of skills-based training because of its relevance to the global market and its flexibility, availability, and affordability.

> Online learning will be central to fostering the lifelong learning culture that will be essential to sustaining a civil and prosperous society in 21st-century Canada. But these benefits will only be realized if the quality and accessibility of the e-learning experience are top priorities. (p. 28)

Much research to date supports the efficacy of workplace-based e-learning as a way to educate and train people. Aside from the commonly advertised cost reductions, e-learning provides consistency of learning, can be faster than traditional learning, and tailored to specific, individual needs (Clark, 2006). Although the numbers vary from 26% to 60% on the reduced learning times involved (Rayson, 2006), reducing the amount of time required to learn the subject matter benefits both the learner and the employer by increasing productivity more rapidly.

The interruptions to the instructional process that are often found in conventional educational settings are removed, and typically a higher level of interactivity exists and a capability for the learners to work at their own pace. Therefore, e-learning can engage and produce better results. In fact studies have shown that e-learning may be more effective in improving knowledge and skills because of its more personalized nature. Hall (as cited in Rayson, 2006) stated, "there is very strong evidence that computer-based training results in an equal or higher quality of learning over traditional instruction" (p. 24).

Learners want to know that they will benefit from workplace training initiatives in their jobs. If the training is relevant, directly related to job performance, and supported by the employer, employees will be more open to learning and acquiring new skills (Brown & Ford, 2002; Rosenberg, 2001).

> Change processes have to address multiple points of inertia and resistance and have to be systemic rather than piecemeal. They call for clearly articulated and commonly accepted learner-centered teaching goals and values, and a matching of these to policies, procedures and resources. (Latchem & Hanna, 2001, p. 41)

Key to the successful introduction of an e-learning initiative in the workplace is to ensure that employees are engaged in the process. The best designed product will not effect the desired changes without understanding of what motivates people to learn and what barriers exist that preclude it. As Clark (2006) stated, "motivation is learner-centric, not trainer-centric" (p. 49).

Essential to effective implementation of an e-learning initiative is evaluation of its effects on the organization. According to Bloom (2003), high-level evaluation is not being done in most organizations, which results in a deficit of information on the effectiveness of e-learning compared with traditional training methods. Clark (2006) supports this assertion, stating that, "courses are rarely evaluated. The real output and results are rarely measured" (p. 41).

The purpose of this study was to investigate factors that influence acceptance of and resistance to a corporate e-learning initiative in order to identify factors affecting participation. The research sought responses to the following question: What barriers and enticers in relation to e-learning are present in a group of employees offered an e-learning training opportunity?

Background

A crucial factor for the success of an e-learning initiative is learner/employee motivation. E-learning is more successful when the

learners take the initiative for self-improvement rather than having training imposed on them. Employers need to be aware that if the training is imposed on the employees and they are resistant, then alternative inducements must be factored in to gain their commitment for the success of the e-learning initiative. "If a corporate e-learner isn't internally motivated, a company will have to step in" (Frankola, 2001, para. 1). Adult learners have varying ways of engaging in the learning process either by filtering new concepts through their frames of reference or by constructing new meaning from the experience. It is important for self-directed learners to consider those factors that would predispose adults to assume responsibility for learning (Hiemstra, 1997).

To take advantage of e-learning and the opportunity it presents, it is essential to develop an understanding of how to get employees engaged. Various factors need to be taken into consideration to ensure that barriers to learning are removed (Frankola, 2001). Even with well-designed courses, competent instructors, and stable technology, lack of support and/or understanding of learning preferences has a direct effect on the employee's acceptance of and participation in e-learning. External factors are more in the control of the employer, whereas internal factors, the beliefs and values that have a direct effect on a person's willingness to participate, are difficult to discern. Lewin's (1997) Force Field Theory examines the driving and restraining forces that influence an individual's life space, or *field*, and considers a multitude of interdependent factors with respect to behavior. He suggests that consideration of what encourages learners to embrace new methods for learning is important, but equally, the factors that cause resistance to learning must be thoroughly examined. If an individual is resistant to learning, it stands to reason that their level of participation will be low. Conversely, the argument can be stated that the lower the level of resistance, the higher the level of participation. Figure 1 illustrates this concept.

By identifying the factors that are associated with resistance, the opportunity exists to lessen their influence and increase participation in staff development. Gaining insight into the reasons for resistance requires an individualized examination of learners' perceptions. Olgren (2000) states, "Each individual is complex and unique and enters into a learning experience with a variety of backgrounds, attitudes, skills, and motivations" (p. 7). Burge (2000) suggests that for employers, "Rather than asking 'How do I motivate a learner?' it is more appropriate to ask 'What am I or others doing that is blocking the learner's intrinsic motivating drives?'" (p. 90).

Lewin (1997) states, "Learning as related to change in motivation deals either with a change in needs or a change in the means of their satisfaction" (p. 228). It is important to consider not only what encourages learners to embrace new methods for learning, but also the factors that

cause resistance to learning. According to Lewin, "The action of the individual depends directly on the way in which he perceives the situation" (p. 103).

Table 1, developed from Clarke (2006) and Rosenberg (2001), shows both types of internal forces to illustrate how learners' perspectives and beliefs can affect training outcomes. These characteristics were used to inform the development of the survey instrument.

For this research project, perspectives on, and participation in, three sub-areas of workplace learning were examined: career related training, e-learning, and workplace-based e-learning. In an iterative, integral process, all three sub-areas were examined to determine if the relationship between these sub-areas affected participation in workplace e-learning.

Methods

A survey research design involving interviews and self-administered questionnaires was used to examine the factors affecting learner interest in, and resistance to, training and e-learning. An employer in the retail sector using workplace-based e-learning training for the first time agreed to participate in the study.

Survey respondents included employees who had and had not participated in e-learning training provided by employers. E-learning had been available to the employees for approximately 12 to 18 months when the survey took place, sufficient time for all modules to be completed.

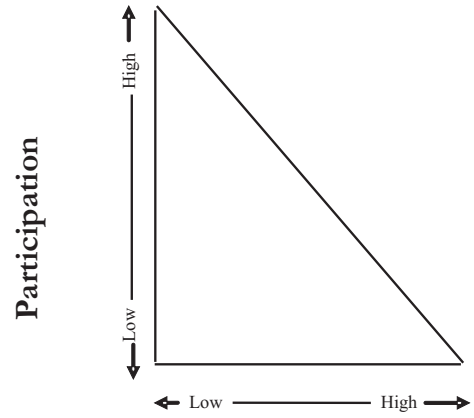

Figure 1.
Lewin's Force Field Theory.

Table 1
Internal Forces Affecting E-Learning in the Workplace

Restraining forces	*Drivers of acceptance*
Low self-confidence	High self-confidence
Fear of technology	Embrace technology
Fear of failure	Success orientation
Resistant to change	Positive view of change
Unsuccessful in previous training	Successful in previous training
Lack of self direction	Self-directed
Lack of long-range career goals	Identified long-range career goals
Concern about employer monitoring	No concern if employer monitors progress
Need for face-to-face interaction	Does not require face-to-face interaction
Training not valued	High value placed on training
Feeling of being too old to learn	Age irrelevant to learning capability
Long period since last training taken	Continually learning new things
Does not equate learning with work	Equates learning with work
Feels training is irrelevant to work	Feels training is relevant to work
Believes that learning will not pay off	Believes that learning will pay off
Ability cannot improve	Ability can improve
Job duties do not require new skills	Job duties can require new skills

(Clark, 2006; Rosenberg, 2001).

Training Materials

E-learning modules were verified for their adherence to quality instructional design principles. The modules effectively used graphics, text, and animations and incorporated orientation to the e-learning environment; presented information in logical progression and manageable chunks; and provided nonthreatening practice with feedback quizzes and a final assessment of learning using multiple-choice and true/false responses.

There were 30 modules in total in the training initiative with the first recognized milestone after the completion of 16. Participation versus nonparticipation was determined by these parameters. Participants who completed the entire program required 15 hours to do so (each lesson was designed to be completed in 30 minutes). Participants were permitted to complete the modules at home if they had the required technology, but most finished their training at work.

The modules had a self-test component built in to permit practice with feedback using positive reinforcements as the employee advanced through the materials. At the end of each module, a formal assessment of knowledge gained was completed that counted toward the overall tally for recognition and compensation. Rewards such as pins in bronze, silver, and gold were provided to acknowledge milestones. Other incentives

included draws for prizes, employee recognition postings on bulletin boards, and department recognition after a percentage of employees in the department had reached a milestone.

The materials were designed to provide the e-learning administrator in each retail location with the ability to assess completion rates. Employees were compensated in varying ways: some were paid $5 per module completed, whereas others received their normal rate of pay for the time spent learning.

Instruments

This study surveyed the sample of employees using a questionnaire to obtain reactions to the factors identified in the literature review and one-on-one interviews to provide opportunities for more detailed reactions.

Questionnaire. Questions in the questionnaire were developed to reflect the issues from the literature (Table 1) as supporting or detracting from participation. The questionnaire contained four sections labeled A-D. Section A gathered information on the respondent's training and employment background using ordinal categories; Section B used a 12-item, 4-point Likert-type response rating importance; Section C used a 15-item, 5-point Likert-type response rating agreement levels; and Section D captured basic demographic data. Sections B and C also included open-ended comment sections to allow for additional responses to the Likert-type response statements. To minimize response bias, item statements were mixed as much as possible to ensure that the respondents read each item before responding. The questionnaire required approximately 15 minutes to complete.

To ensure that the questions were clear and free of ambiguity, a pilot group of eight participants tested it for functionality in paper format. This formative evaluation was intended to eliminate any instrument glitches and to allow the study's participants to complete the questionnaire without incident.

Interviews. The 15 open-ended interview questions were designed to provide insights into the quantitative findings and obtain richer detail on the issues that employees felt were most relevant to the e-learning initiative. They probed the interviewees' perceptions and understanding about the e-learning initiative in the following areas: its relationship to, effect on, and importance to their jobs; the challenges of e-learning; learning preferences; and incentive programs for participation. The first two interviewees were able to answer the questions comfortably in the 30-minute time frame. All interviewees were given the opportunity to review their transcripts for final approval.

Participants

Interviews were conducted with 10 members of the respondent group (n=7 women and 3 men) to probe for the richer detail on employees' perspectives about e-learning. Therefore, it was important that these 10 members, who were selected as a cross-section of the sample, include both nonparticipants and participants and all age categories. Two people were managers, two were supervisors, and six represented the retail and cashier level of staff. Managers were not considered as the employer by the staff: the owner of the franchise was considered the employer, mainly because of the size of the staff complement and the reporting structure.

Data Collection

Two methods for completing the questionnaire were provided to the volunteer respondents. One was housed online in a secure environment programmed to permit only one response per person. User names and passwords were created that would not disclose the person's identity. The other method provided was the pen-and-paper approach. All but two individuals opted to use the pen-and-paper method of completing the questionnaire.

Questionnaires with sealable return envelopes were delivered to the stores. A poster was created to explain the purpose of the research and a letter of explanation (purpose, how information was protected, and how results would be shared) was attached to the front of each questionnaire. Distributing and collecting the questionnaires took approximately six months because of the geographical dispersal of the nine stores and the need to collect sufficient responses to obtain a representative sample.

Consent forms were provided, and only those who provided consent were screened for the interview portion of the survey. Interviews were conducted after questionnaires were collected and carried out over a three-month period to accommodate seasonal business flows. They were held with 10 members of the respondent group (7 women and 3 men). The interviewees were a cross-section of the participants and included both nonparticipants and participants and all age categories. Two people were managers, two were supervisors, and six represented the retail and cashier level of staff. These one-on-one interviews were conducted in a private area of the retail environment during the employees' shifts to provide convenience. The employees received their regular pay while off the floor for the session.

Employers were made aware that the research had passed the ethics review process of our university and that no individual employee information would be disclosed. All data provided in the final report to the employers was also aggregated for the entire group to protect the privacy

of the respondents. Specific information shared in the interviews that may have disclosed a person's identity was not used in any reports.

Data Analysis

Quantitative data from questionnaires were entered in the Statistical Package for Social Sciences (SPSS) and used to determine the respondents' orientation to the three sub-areas: training in general; their attitudes toward and perceptions of e-learning; and more specifically, workplace e-learning. Cross-tabulations of respondents' attitudes toward and perceptions of workplace e-learning with their demographic data provided in section A of the survey were run and analysis-of-variance tests were used to determine the presence of statistical significance. Bivariate relationships were examined using *t*-tests. These identify where a statistically significant relationship exists, but not the strength of that relationship.

Respondents

This study involved 123 employees of retail chain stores. The group was composed of 79 women and 44 men. We received a balanced response from all age groups, with the higher representation of participants coming from the 35-44 (26%) and 45-54 (26%) age ranges. The respondents were considered a group that represented the population because all worked for the same corporation with the same products, branding, and corporate culture. In addition, in terms of age and sex, this group closely represents demographics in the retail sector.

Forty-three percent identified their highest education level achieved as being grade 12, and 48.3% indicated that they had taken education beyond this level. Of these respondents, 77% indicated they had completed skilled trades or postsecondary diplomas or degrees. Nine percent did not have a grade 12 diploma.

Most respondents were long-term employees of this large retail chain, which demonstrates that for most of the sample, e-learning was a new approach to in-house training requiring a new learning culture to be developed.

Participation rates were obtained by grouping the numbers of modules completed. Those who had taken fewer than 16 modules were considered nonparticipants for the purposes of comparison. They included those who had completed none (16%), those who had completed 1-5 modules (11%), and those who had completed between six and 15 modules (10%). This is because sufficient time had elapsed since the introduction of the e-learning initiative to complete the modules had they been motivated to do so. This nonparticipant group comprised 37% of the sample. Ten percent completed between 16 and 19 modules, and 53% completed between 20 and 30 modules.

Findings

The quantitative data from the surveys are reported first. Topics of concern identified from the interview data that did not appear as findings of significance in the cross-tabulations are then described.

Career-Related Training

Comparing attitudes toward, and perceptions of, career related training. It was important to assess the employees' perspectives about training in general to establish a starting point for the analysis of the findings. If no orientation to training presented itself, then logically there would be no interest in e-learning either. Those who had taken no general career-related training or had started but not finished were the main focus in this analysis to assess whether this level of participation may have influenced perspectives.

The findings identify detractors and supporters as per Lewin's Force Field Theory for this e-learning initiative. Several relationships identified between career-related training taken and attitudes toward and perceptions of training were found to be statistically significant.

The responses in each category indicated that the level of participation in career-related training did not result in negative perceptions toward training. The findings indicate a positive perception toward training being provided by the employer whether the individual had been actively engaged in career related training or not. Interpretations of the findings indicate that the specificity of workplace-based training is more favorably received because of its relevance to the job. The sample's responses illustrate a more positive orientation to training than past behavior would suggest, establishing the basis for the next evaluation free of underlying negative biases.

E-Learning

Comparing attitudes toward and perceptions of e-learning. To determine what the detractors and supporters of e-learning were, it was important first to assess attitudes and perceptions about this type of training. A generally favorable opinion of e-learning was essential to allow for a subsequent unhindered evaluation of the specific factors causing resistance. Attitudes and perceptions were cross-tabulated for this analysis, with responses of *yes* or *no* to having taken e-learning training to identify associations. The focus of the analysis was on those who indicated that they had not taken e-learning training.

As shown in Table 2, approximately three quarters of the respondents suggested that the relevance of e-learning training to job duties was important or very important, and 79% indicated that completing all the e-learning sessions was important or very important. Attitudes toward

and perceptions of e-learning were generally positive, with eight statements being weighted statistically significant ($p<.05$).

Perceptions (Table 3) although favorable, illustrate that some people are not participating, perhaps because of underlying issues such as literacy or lack of the required technical skills to access the courses. It is important

Table 2
Employees' Attitudes and Perceptions About Career-Related E-Learning

Activity	*Response*							
	Not Important		*Somewhat Important*		*Important*		*Very Important*	
	f	%	f	%	f	%	f	%
My employer providing training to improve my skills is:*	1	1%	4	3%	43	35%	74	60%
The relevance of the e-learning/Interactive Distance Learning training to my job duties is:	1	1%	27	22%	44	36%	50	41%
Rewards and/or recognition from my employer for taking training is:	9	7%	23	19%	52	42%	37	30%
Having an instructor face-to-face to provide training is:	28	23%	40	33%	34	28%	20	16%
Keeping my skills up to date is:	2	2%	8	7%	51	42%	60	49%
Having time available on the job to participate in training is:	4	3%	16	13%	54	44%	46	37%
Being able to access training away from work, over the Internet is:	13	11%	32	26%	38	31%	38	31%
Completing all of the e-learning modules / Interactive Distance Learning sessions provided is:	6	5%	19	15%	59	48%	35	29%
Having a long-range career goal is:	6	5%	9	7%	43	35%	64	52%
Contributing to a more highly-skilled workplace is:	—	—	10	8%	54	44%	58	47%
Being able to provide feedback on the training is:	2	2%	22	18%	72	59%	25	20%
Seeing improvements to training materials, based on employee feedback is:	1	1%	17	14%	58	47%	46	37%

N=123 ; *$p<.05$.

to understand that, "Adult learners do not just need to revive rusty study skills; most need to develop a whole new set of learning and information literacy strategies" (Phillips & Kelly, 2000, p. 17). Others (15%) believed that e-learning participation should not be factored into performance reviews either, because they were unable to participate for valid reasons or because of possible misperceptions about performance reviews. And finally, some may not have understood the statements to which they were responding.

Workplace E-Learning

Comparing attitudes toward and perceptions of workplace e-learning. Based on the favorable attitudes and perceptions to career-related training and e-learning in general, we then focused on participants' orientation to workplace e-learning and their specific responses to this new initiative. Attitudes and perceptions to workplace e-learning were also skewed positively. With respect to attitudes, the assumption of barriers to participation is a safe one to make based on the importance ratings provided about employer-sponsored training. Also receiving a high response rate as somewhat important through to very important was the issue of having time on the job to participate, with both the participant and nonparticipant groups expressing similar views. Interview data also indicated a high level of interest for time to be provided on the job. Perceptions were generally positive and indicated that the materials were perceived to be easy to understand, the knowledge gained enabled the job to be done better, and that people were confident in their ability to learn on their own.

The issue of performance reviews showed variation, however, with the nonparticipant group probably concerned that their lack of involvement with e-learning reflected negatively in a review. An interesting response came from the participants who had completed 20 modules; one third of this group disagreed with this practice. Also, the fact that some people were not participating, perhaps because of underlying issues such as literacy or lack of the required technical skills to access the courses, appeared to be present.

Interview Data

The employee interviews represent the richer detail of employees' perspectives about e-learning training and provide further insights into the quantitative findings as well as illuminating other issues not captured in that data set. The qualitative information generated from the questions was categorized into themes and subthemes. A content analysis of the interview data found that the main concepts discussed were related to the course specifically, the cost and time, e-learning benefits, and rewards or recognition.

Table 3
Employees' Attitudes and Perceptions About E-Learning at Work

Activity	*Response*									
	Strongly Disagree		*Disagree*		*Neither Agree Disagree*		*Agree*		*Strongly Agree*	
	f	%	f	%	f	%	f	%	f	%
My employer has clearly explained how and why the e-learning/Interactive Distance Learning initiative relates to X Company's corporate objectives:*	1	1%	4	3%	9	7%	77	63%	28	23%
The management at my store strongly supports the new e-learning / Interactive Distance Learning initiative:*	—	—	2	2%	7	6%	59	48%	53	43%
E-learning / Interactive Distance Learning participation should be factored into my performance evaluation:*	5	4%	14	11%	13	11%	60	49%	28	23%
I am a person who embraces change:	2	2%	7	6%	13	11%	69	56%	27	22%
I enjoy using new technology (computers, Internet, diagnostic equipment, etc.):	—	—	5	4%	8	7%	70	57%	38	31%
When it comes to training, I am confident that I can learn most of what is being taught:*	—	—	—	—	2	2%	71	58%	47	38%
The knowledge I've gained through X Company's e-learning/Interactive Distance Learning project enables me to do my job better:*	1	1%	4	3%	17	14%	67	55%	31	25%
I am concerned that I may not pass the e-learning /Interactive Distance Learning modules:	36	29%	52	42%	17	14%	14	11%	2	2%
The e-learning / Interactive Distance Learning is interesting:*	3	2%	6	5%	16	13%	78	63%	16	13%

Table 3 (continued)

Activity	*Response*									
	Strongly Disagree		*Disagree*		*Neither Agree Disagree*		*Agree*		*Strongly Agree*	
	f	%	f	%	f	%	f	%	f	%
The e-learning / Interactive Distance Learning materials are easy for me to understand:*	1	1%	4	3%	8	7%	86	70%	21	17%
I am concerned that my employer may monitor my progress without my knowledge:	24	20%	55	45%	25	21%	15	12%	2	2%
Training should be provided away from work in a classroom:	19	15%	50	41%	32	26%	15	12%	5	4%
I am able to learn on my own without an instructor:*	—	—	4	3%	10	8%	75	61%	32	26%
I am at the stage in my life where I am not interested in learning new skills:*	54	44%	53	43%	12	10%	1	1%	1	1%
I am past the point of needing training in order to do my job well:*	48	39%	55	45%	9	7%	6	5%	3	2%

N=123; *$p<.05$.

Course specific. Those interviewed indicated that the course materials, the technology used, and the learning experience were favorable, which supports the findings from the questionnaires: 89% agreed or strongly agreed that the e-learning materials were easy to understand, and 79% agreed that the content was interesting. A high percentage, 89%, enjoyed using new technology for learning, especially the Internet and its flexibility, despite most preferring hands-on learning.

Suggested improvements centered on navigation and technology use issues and having the e-learning supported more on the retail floor when the skills learned were being put into practice. As Table 4 shows, there were no statistically significant differences in participation rates based on perceived level of competence with the technology. Approximately two-thirds of the sample was in the *participant* category regardless of stated level of computer skills.

Cost and time. Issues that arose included the general complaint of insufficient time to complete the lessons, staff coverage, students and part-time

workers, and recertification. Employees required an average of 15 hours of learning time to complete all 30 modules. Some interviewees indicated that not all employees were being paid for taking the courses—the employer had ceased to pay but expected participation. Thus the cost was borne by the employee to spend the time and often to use his or her own computer and high-speed Internet access. A comment submitted in the questionnaire was "e-learning is important, but we also need the time to do this and not all of us have computers at home." Criticism included the fact that the owners, being reluctant to force training on the employees, did not mandate that regular scheduling, including coverage, for e-learning participation be established. Another complaint was that part-time and student employees did not have sufficient time allotted for participation.

E-learning benefits. Most employees interviewed understood that the main focus for the e-learning initiative was to improve customer service and increase product knowledge, which would lead to a more strategic, competitive position for the company. Other benefits identified were that the training provided a consistent message and approach to all trainees, especially for orienting new staff.

Rewards and recognition. The final concept identified in the interviews was that of compensation and recognition for participation in e-learning. Interviewees stated that recognition was expected and acknowledgment appreciated. Over 72% of the employees agreed that it was important or very important to receive rewards and recognition for taking training.

Generally speaking, rates of pay were affected by successful completion of the e-learning modules. However, in some cases, salaried staff (managers and supervisors) were not compensated at all for participation in the training. The annual practice of conducting performance reviews did not take place in all nine environments. There was more dissention

Table 4
Computer Skills Ratings Versus Number of Modules Completed

Computer Skills Ratings	*Nonparticipants* *Number of modules*				*Participants* *Number of modules*	
	0	1-5	6-10	11-15	16-20	>20
Novice	5	2	0	3	3	19
Intermediate	12	8	5	3	7	38
Advanced	1	4	0	1	1	7
Total	18	14	5	7	11	64

Note: *N*=119.

about e-learning participation being factored into performance reviews by those who had not participated when they felt that their participation was justified and outside of their control.

Summary of Findings

The interview findings provided insight into the questionnaire data by adding the more human elements that come from exploring issues at the personal level. When we explored the themes within and related them to the quantitative findings of significance, certain issues came to the surface. Interview responses revealed that lack of sufficient time to complete the e-learning lessons was an underlying theme throughout the discussions, and generally there was broad support for the initiative and a real understanding of its purpose. Other issues raised were about using meaningful incentives and performance reviews that factored in e-learning participation. The results provided insight into the attitudes and perceptions of employees about the training and identified areas for further attention to facilitate a best-practices approach for increasing employee participation.

Findings in Relation to Lewin's Force Field Theory

Lewin's (1997) Force Field Theory examines the driving and restraining forces that influence an individual's life space, or field. The intrinsic drivers of learner acceptance and the restraining forces that lead to resistance to e-learning need to be better understood in order to encourage staff participation. For this organization's retail stores, higher participation levels will lead to improved employee skills and increased product knowledge, which in turn should promote more effective customer service. Customer loyalty, by extension, will improve the organization's position in a highly competitive retail environment by increasing its bottom line. Lewin states, "Learning as related to change in motivation deals either with a change in needs or a change in the means of their satisfactions" (p. 228). In applying Lewin's Force Field Theory to the findings, we extrapolated the following supporters and detractors.

Supporters

The key supporter for this e-learning is the level of importance (96%) that employees placed on their employer providing them with work-related training. This investment in improving job-related skills demonstrates the value that the employers place on their staffs, and it is obviously appreciated. Other supporters that were identified by employees as essential were having increased product knowledge, stronger customer service skills, and being compensated and recognized for participation in e-learning.

Detractors

The key detractor based on the findings was the lack of time in which to complete the lessons. Of special note was the consideration of staff that worked on a part-time basis and students. Ninety-seven percent of the sample stated this to be somewhat important through to very important. Of the nonparticipant group, 86% felt it was somewhat important to very important. Other detractors coming from the results of the data collection, in no particular order, include insufficient support and coaching, the lack of meaningful incentives, and in some cases, no remuneration for completing the lessons. Other detractors include technology inadequacies—plug-ins, server freezes, and not having high-speed access or new enough equipment—and no practical assessment of e-learning on the store floor.

Conclusions

Based on the findings, and referring to the restraining forces and drivers of acceptance in Table 1, the following conclusions can be drawn.

Conclusion 1. Attitudes and perceptions about e-learning are generally positive, reflecting that the sample is on-side to the e-learning initiative: most say that it is important or very important that their employer provide them with training. Staff believe that this training enables them to do their jobs better, and it is important to them that they complete the lessons. They feel that they can learn what is being taught, can learn on their own, and enjoy learning new skills, especially hands-on. They also believe that they contribute well to their work environments.

Conclusion 2. The e-learning materials are considered interesting, easy to understand, and relevant to people's jobs. For those who did not indicate this to be true, restraining forces may be self-confidence, a need for face-to-face interaction in learning, literacy, and/or comfort with the use of the technology used to access the courses.

Conclusion 3. Staff are aware that customer service based primarily on product knowledge is the essential determinant in the organization's competitiveness in the retail sector. E-learning effectively delivers product information and customer service training. This means that the employers have done a good job at building awareness and support for the strategy and have tied corporate objectives to the strategy.

Conclusion 4. Rewards and recognition are important and should be meaningful. The use of the graded levels of recognition should continue, as certain employees do attach importance to this measure of accomplishment. Other forms of incentives for participation are needed. Feedback on training and e-learning should be sought by the employers and acted on. Performance reviews should factor in e-learning participation, because it relates to the delivery of quality customer service through product knowledge; however, consideration must be given to staff on an individual basis

for their levels of success. Individual learning plans with realistic goals and support may be required to mitigate barriers.

Conclusion 5. Proper time management is crucial for staff to complete the lessons and to the success of the e-learning strategy, as completing the e-learning modules is important to employees. Staff participation levels would increase if they were regularly scheduled to take lessons, whether to achieve the highest-level status or to recertify.

Recommendations

The following recommendations were developed based on the findings. In some cases, stores have already put in place strategies similar to these suggestions. It would be prudent for the employers to review the items on this list and compare them with current practice for consideration in their strategic planning as a means to increase participation rates.

Recommendation 1. Schedule staff to take e-learning during work shifts on a regular basis—determine a workable ratio of lessons to shifts to allow for floor coverage and cost considerations based on seasonal flows. If staff prefer to take lessons at home, develop clear expectations for a minimum acceptable standard for completion of lessons. Compensate staff equitably for workplace-related training.

Recommendation 2. New staff should complete the customer service modules before starting on the floor and should be aware of the expectation of achieving a minimum acceptable standard of completed lessons during their probationary period.

Recommendation 3. Assess incentives used and poll staff to discover others that have meaning. Broaden the selection beyond the pins and add to the list of options based on the suggestions from staff that are affordable and meaningful. When using draws for trips and other rewards, keep the deadlines reasonably short and the employees informed of the outcomes.

Recommendation 4. Provide formal training to e-learning administrators—Train the Trainer—on how to implement the e-learning in the stores and troubleshoot technical problems. Administrators should offer periodic workshops to employees in each store on how e-learning works and provide one-on-one coaching when necessary and/or use in-house "champions" (employees who embraced e-learning and are known to be helpful to others with their efforts) for added support to employees. Factor e-learning administration into the administrator's job description and provide sufficient time to do this (if not being done already). Provide the e-learning administrators from all nine stores with the opportunity to share their experiences on best practices and allow for potential future collaboration.

Recommendation 5. Department supervisors need to assess the day-to-day application of the e-learning by staff and act as mentors when re-

quired to ensure that the lessons are being applied. Management must lead by example and obtain gold-pin status if they have not already done so. This demonstrates the importance of e-learning and facilitates its adoption into the corporate culture.

Recommendation 6. E-learning lessons should be kept fresh to encourage future participation by the employees already engaged. The rationale for recertification must be clear to staff and its relevance understood. Ensure that the criteria for recertification are not too stringent so as not to discourage but rather to maintain or, ideally, increase the level of enthusiasm.

Suggestions for Future Research

The results can be generalized to the population of this organization, but not to the retail sector as a whole, as the study did not draw a multi-organization, random sample. A second limitation was the scope of the research, which emphasized the participants' perspectives of barriers to e-learning rather than including data on organizational factors that might influence and cause resistance to corporate e-learning. To further understanding of how e-learning is perceived and attitudes toward this type of training in the workplace broadly, this research must be replicated with a broader sample.

E-learning effectiveness can be measured as any training can be: through the learners' initial reaction, to assessment of learning through knowledge gained, to demonstration of the new skills or application of knowledge in the performance of daily work duties, and finally through the metrics of return on training investment by measures such as increased profitability, reduced employee turnover, increased staff morale, and increased use of the training itself. By understanding the forces that can negatively affect e-learning participation and eliminating barriers to its effective implementation, employers can benefit from the value of this type of training.

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References

Advisory Committee for Online Learning. (2001). *The e-learning e-volution in colleges and universities: A pan-Canadian challenge*. Ottawa: Communication Branch, Industry Canada.

Bloom, M. (2003). *E-learning in Canada: Findings from 2003 e-survey*. Ottawa: Conference Board of Canada.

Brown, K., & Ford, J.K. (2002). Using computer technology in training. In K. Kraiger (Ed.), *Creating, implementing, and managing effective training and development* (pp. 192-233). San Francisco, CA: Jossey-Bass.

Burge, E.J. (2000). Synthesis: Learners and learning are the issues. In E. Burge (Ed.), *The strategic use of learning technologies* (pp. 89-95). San Francisco, CA: Jossey-Bass.

Clark, D. (2006). The psychology of learning. *Epic*. Retrieved May 10, 2006, from: http://www.epic.co.uk/content/resources/white_papers/benefits.htm

Frankola, K. (2001, June 3). Why online learners drop out. *Workforce Management*. Retrieved March 5, 2004 from: http://www.workforce.com/archive/feature/22/26/22/index.php

Hiemstra, R. (1997, September). *Working with the self-directed learner*. Paper presented at the First World Conference on Self-Directed Learning. Montreal.

Latchem, C., & Hanna, D.E. (2001). Processes of organizational change. In C. Latchem & D.E. Hanna (Eds.), *Leadership for 21st century learning* (pp. 41-53). London: Kogan Page.

Lewin, K. (1997). *Resolving social conflicts and field theory in social science*. Washington, DC: American Psychological Association.

McGreal R., & Elliott M. (2004). *Technologies of online learning (e-learning). Theory and practice of online learning*. Athabasca, AB: Athabasca University.

Olgren, C. (2000). Learning strategies for learning technologies. In E.J. Burge (Ed.), *The strategic use of learning technologies* (pp. 7-16). San Francisco, CA: Jossey-Bass.

Phillips, M., & Kelly, P. (2000). Learning technologies for learner services. In E.J. Burge (Ed.), *The strategic use of learning technologies* (pp. 17-26). San Francisco, CA: Jossey-Bass.

Rayson, S. (2006). Organizational benefits of e-learning. *Epic*. Retrieved May 10, 2006, from: http://www.epic.co.uk/content/resources/white_papers/benefits.htm

Rosenberg, M. (2001). *E-learning: Strategies for delivering knowledge in the digital age*. Toronto, ON: McGraw-Hill.

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