

An Examination Of Technology And Organization's Change In Service Delivery To Meet Customer Expectations

Amelia S. Carr, Bowling Green State University, USA

ABSTRACT

The purpose of this study is to examine the role of technology and organization's change in service delivery to meet customer expectations in the movie rental industry. This research provides a review of relevant literature and presents a theoretical framework of the relationship between technology accessibility, customer technology preference, organization's change in service delivery, organization effectiveness in service delivery, and customer technology adoption. The following research question is addressed in the study: What is the role of technology as it relates to service delivery in the movie rental industry? The study offers four hypotheses derived from the theoretical framework and the literature. Survey data collected from customers is analyzed using exploratory data analysis. Four hypotheses were tested using regression models. All four hypotheses were supported based on the items included in the regression models. This study fills a gap in the literature on service delivery and technology changes. It differs from other studies by focusing on the customers' perspective of technology and the organization's effectiveness in service delivery.

Keywords: Technology; Service Delivery; Customer Expectations; Regression Analysis

INTRODUCTION

The movie rental industry has undergone a total change during the past decade. Many of the storefront operations that existed prior to 2009 are no longer in business. The same statement can be made for other service sector businesses. But, the movie rental industry was undergoing change prior to the recession of 2008-2009 (Gandel, 2010). The recession made it even more difficult since customer demand was affected in ways that the incumbent companies had not anticipated. Companies slow to adapt and mired in high overhead costs with diminishing demand for their product and services began to close their doors or file for bankruptcy. It was noted in the literature that one of the major challenges in business is companies' inability to sustain their performance and competitive advantage when technologies and markets change (Bower & Christensen, 1995).

While companies are quite adept at making incremental performance improvements to their existing technologies and giving their customers something more or better in the product/service attributes they already value, they often fail to meet the challenges of the technologies that introduce a radically different package of attributes from the one that mainstream customers typically value (Henderson & Clark, 1990). Organizations in the movie rental industry endured many set-backs due to radical technological changes. In an effort to survive among fierce competition, these organizations attempted to reposition their business strategies to meet competitive challenges and maintain service delivery to meet customer expectations in the movie rental industry. The objective of this study is to analyze the service delivery offered by the organizations in the movie rental industry as perceived by customers.

BACKGROUND

Trends in the movie rental industry were driven by changes in technology and a more competitive environment in terms of internet revolution, digitization of audio and video entertainment products and services, and the advances in information technology. New entrants to the market took advantage of the lower cost of market entry afforded by the explosion in technological advancements. By effectively implementing a variety of technologies, the new entrants to the market were able to gain a competitive advantage (Hitt et al., 2011). The technologies used to deliver movies to customers in the movie rental industry included direct-mail, on-line, downloading, movie kiosks, and on-demand video streaming. Some of the companies in the industry affected were Blockbuster Inc, Movie Gallery, Netflix, Coinstar's Redbox, and Time Warner. Early on, each organization in the movie rental industry tried various strategies that fit within their business model to remain competitive. Many of the movie rental chains made attempts to compete by offering more competitive pricing to customers without changing their business model or taking advantage of technology changes. Important sourcing, operating, and marketing strategies became critical for these organizations to grow their market share and respond to customer expectations. To better understand the service delivery changes made by organizations in the movie rental industry, we attempted to answer the following question: What is the role of technology as it relates to organization's change in service delivery?

In the remainder of the paper, we provide a framework of the relationship between technology accessibility, customer technology preference, organizations' change in service delivery, organization effectiveness in service delivery, and customer technology adoption. The elements in the framework are discussed and hypotheses related to the framework are offered. Then, we use survey data to test the hypotheses. Finally, we provide a discussion of the results and some implications for management.

THEORETICAL FRAMEWORK

The framework shown in Figure 1 is grounded in the strategic management theory. The strategic management theory provides an understanding of the need for aligning an organization with its internal and external environments in order to achieve a better competitive posture and company performance (Elms et al., 2010). While the focus of this study is not the use of information technology, we acknowledge the work by Davis (1989) on the technology acceptance model (TAM). The theory behind the TAM is grounded in the theory of reasoned action whereby a customer perceives the ease of use and the usefulness of a technology which leads to the intention to use and adopt the technology. The theory of reasoned action is helpful in understanding the process of deciding to use a technology. However, the framework goes beyond the TAM by exploring the consumer's perception of the service delivery of the product and the effectiveness of the organization in delivering the product.

The first construct in the framework is technology. Customer technology preference and technology changes stimulate the changes that occur as organizations seek various methods of delivering products and services effectively. While the literature suggests that customers may not easily be involved in the creation of a major innovation, Coviello and Joseph (2012) suggest that customers can play an active role in the innovation of new products. This study examines technology as it relates to service delivery rather than goods delivery. Once a technology is successfully adopted by organizations in the industry, the other organizations are left to react to the trend or fall behind (Clark, 1987). Organizations have to examine how the technology affects their business model, and evaluate their future service delivery offerings.

The framework, shown in Figure 1, includes organization's change in service delivery because when an organization is trying to make adjustments to existing strategies, it has to alter various aspects of the organization. Organization's change in service delivery in the framework demonstrates that a decision to make changes in the organization requires input from internal constituents including management and employees. The framework depicts that outcomes of the organization's efforts to adapt to technologies in their industry include customer adoption of the technologies and the organization's effectiveness in meeting customer expectation. Next, technology change is discussed.

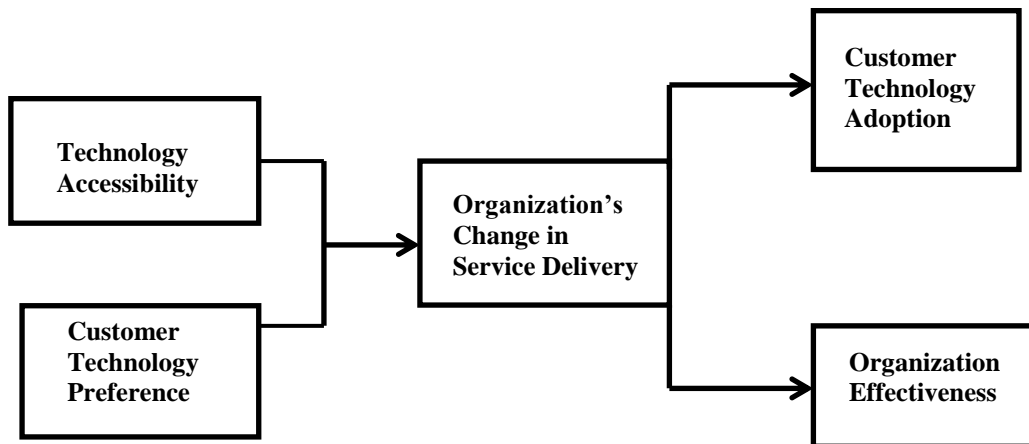


Figure 1: Framework of the Role of Technology and Organization’s Change in Service Delivery in Organization’s Effectiveness in Service Delivery and Customer Technology Adoption

LITERTURE AND HYPOTHESES

Technology

Technology change related trends and conditions can be viewed from the perspective of technology innovation (Hitt et al., 2011). The discrepancy between the technological innovations that customers are expected to use and what the customers actually use has been studied by applying a number of different theories including the diffusion of innovations (Keeling et al., 2006). How quickly technology diffusion occurs depends on the rate that customers move from awareness to adoption of a new technology (Rogers, 1962). In theory, the easier the technology is for customers to access, the more likely the customers will use the technology (Rogers, 1995). A number of companies gained access to the movie rental market by adopting digital and internet based technologies which customers were willing to use. In more established companies, top management was slow to respond to technologies changes because they did not perceive that the technologies would impact their business model. Thus, these companies delayed their efforts to implement a variety of technologies and lost customers (Randall, 2010).

According to Christensen (Euchner, 2011), it is critical for a company to understand what the customers are seeking and provide it to them at a price that is consistent with what they are willing to pay. Technologies, such as on-demand video streaming and internet downloading in the movie rental industry overtook mail order and video kiosk for service delivery of movie rentals. In an effort to remain competitive, movie rental companies adopted on-demand video streaming to deliver their movies (Gandel, 2010). This demonstrates that companies must continuously review their service delivery offerings to adjust to technology changes and customer preferences. Viewing newer technologies as an opportunity and quickly developing and implementing changes is important for companies to remain competitive. The rapid pace of technology implementation by competitors indicates the emerging trends in the industry. If the industry leader fails to adopt the new technology, their market share will be severely reduced (Hitt et al., 2011). Thus, the diffusion of technology in the movie rental industry had two main driving forces: competitors who introduced new technologies and consumers who signal to the market their preference for the new technologies over the existing technologies. The reviewed literature leads to the following hypotheses:

- Hypothesis 1:** Technology accessibility is positively associated with an organization’s change in service delivery.
- Hypothesis 2:** Customer technology preference is positively associated with an organization’s change in service delivery.

Organization Change

Successful organizations understand that the organization’s change in service delivery must take organizational culture into consideration. Organizational culture has a key role in influencing how well the

individual members of an organization are integrated into it (Rousseau, 1990). Organizational culture aids individuals to comprehend the organization's purpose and teaches them the norms for behavior in the organization (Deshpande & Webster, 1989; Pheysy et al., 1971). Since organizational culture is an important element in strategic decisions, organizations that seek to make changes within the organization should promote a culture that supports the change (Arogyaswamy & Byles, 1987).

Structured organizational decisions can help the organization achieve benefits such as cost efficiency, uncertainty reduction, and effective information processing; however, as the organization faces turbulence in the markets, their current business practices can hinder their ability to select and acquire new information and knowledge. In other words, their core competencies may become core rigidities (Burgelman et al., 2004). The management team's inability to recognize, assimilate, and apply new information and knowledge can weaken the organization's competitive position. The organization would be unable to adjust to disruptive technologies if the organization lacked the required capabilities within the organization.

Companies should continuously update their capabilities whenever technology disruptions and change happens (Eisenhardt & Martin, 2000). As products reach the maturity phase of their product life cycle, movie rental companies must sustain product/service development and continue to implement the latest technology (Chase et al., 2009; Nash, 2009). Staying abreast of the changing environment helps a company to make the right decisions concerning pricing strategies to match the company's product/service offerings (Johnson, 2010; Netherby, 2007; Winer, 2001). Allowing for a variety of service delivery options provides more flexibility to meet customer expectations (King, 2009a; King, 2009b; King & Netherby, 2009; Holmes, 2009). As noted by Clayton Christensen, (Euchner, 2011) an organization must go beyond merely listening to the customer. They must be able to understand how to meet the customer's present and future needs using the most effective methods that will allow their organization to stay ahead of the competition. The customer may not be giving a clear indication of what they want so the management team has to be capable of understanding the market and what trends are occurring or might occur in the future (Michel et al., 2008). This is how management can respond to a technology that may appear to be simple yet meets an unexpressed need of customers. Based on the reviewed literature, the following hypotheses are offered:

Hypothesis 3: Organization's change in service delivery is positively associated with increased organization effectiveness in service delivery.

Hypothesis 4: Organization's change in service delivery is positively associated with increased customer technology adoption.

DATA COLLECTION

The method used in this study included two focus groups and survey data collection. During the focus groups, it was identified that the data collection phase should come from a cross-section of individuals. Based on the focus groups and a review of the literature, a survey instrument was developed to gather data from the customers' perspective on the movie rental industry. The sample and survey instrument are discussed below.

Sample and Survey Instrument

For investigation of the customer's perspective of technology and service delivery in the movie rental industry, the survey data was collected from a random sample of 500 potential movie rental customers on the campus of a major university located in the Mid-West United States. The total population at the University was 20,000 individuals. Of the random sample of 500 potential respondents, 189 individuals completed the survey for this study. This represents a 38 percent response rate. The surveys were administered via personal interview (Groves & Kahn, 1979). The potential respondents were informed that their participation was totally voluntary and their survey responses would be kept confidential. To ensure that each respondent was able to make a rental purchase decision, all respondents were required to be at least 18 years of age and have made a movie rental purchase prior to participating in this study. The surveys contained a serial number for record keeping of each survey given to a potential respondent. This was helpful to track the number of surveys administered and completed. The average respondent's age was between 20 and 30 years; their ages range was from 18 to 70 years.

The average respondent was single, from a geographic area with a population 100,000 people or less, completed high school, and earned \$40,000 or less per year.

The survey instrument contained questions pertaining to the constructs in the framework shown in Figure 1. The survey items were measured using a five point Likert scale. The survey included multiple scale items for each construct included in the framework (See Appendix A). The survey instrument was pre-tested for clarity by five academics. This was an exploratory study so all of the scales used in the study were developed for the study.

DATA ANALYSIS

Using exploratory data analysis, we conducted correlation analysis to identify the underlying variables for each of the constructs in the study. Exploratory factor analysis revealed the variables for technology accessibility (TC), customer technology preference (TP), organization’s change in service delivery (OC), organization’s effectiveness in service delivery (OE), and customer technology adoption (CTA) loaded on five distinct factors as expected. All of the factor loads were above or near .50 as shown in Table 1. Table 2 shows the correlations between the factors and the Cronbach’s Coefficient Alpha levels for each factor. All of the Cronbach’s Coefficient Alpha levels were above 0.70 which is desired (Churchill, 1979). The hypothesized relationships were tested with the variables for each factor in the model.

Table 1: Standardized Regression Coefficients Exploratory Factor Analysis Varimax Rotation

Factors	Variables	Loads
TC	Var 1	0.70
	Var 2	0.66
	Var 3	0.47
CTP	Var 4	0.62
	Var 5	0.79
	Var 6	0.64
CTA	Var 7	0.69
	Var 8	0.56
	Var 9	0.55
	Var 10	0.65
OE	Var 11	0.64
	Var 12	0.70
	Var 13	0.75
	Var 14	0.76
OC	Var 15	0.69
	Var 16	0.65
	Var 17	0.61

Note: N = 170 observations, 19 of the 189 observations were dropped during the analysis due to missing data.

Table 2: Correlations between Factors, Standardized Cronbach’s Coefficient Alpha

Factor	OC	OE	CTA	TC	CTP
OC	0.7491				
OE	0.3332	0.8308			
CTA	0.2867	-0.1268*	0.7356		
TC	0.2870	0.5216	-0.1135*	0.7517	
CTP	0.2628	0.0016*	0.2977	0.1377	0.7472

* Note: Asterisk denotes not significant at p < .05. Standardized Cronbach’s Coefficient Alpha level shown along the diagonal for each factor.

Using the data from the sample of 189 surveys, regression analysis was used to test the relationships among (1) technology accessibility and organization’s change in service delivery, (2) customer technology preference and organization’s change in service delivery, (3) organization’s change in service delivery and organization effectiveness in service delivery, and (4) organization’s change in service delivery and customer technology adoption. The results of the regression analysis indicated that all of the hypotheses were supported. For Hypotheses 1 and 2, the relationships between TC and OC, and CTP and OC were significant (F (1, 167) = 12.83, p < 0.001). The adjusted R-square for the multiple-regression model was 0.1228. The regression coefficient for TC was

positive and significant ($t = 3.51, p < .001$) and the regression coefficient for CTP was positive and significant ($t = 3.30, p < .005$). For Hypothesis 3, the relationship between OC and OE was significant ($F(1, 168) = 20.99, p < .001$). The adjusted R-square for the regression model was 0.1058. The regression coefficient for OC was positive and significant ($t = 4.58, p < .001$). For Hypotheses 4, the relationship between OC and CTA was significant ($F(1, 168) = 15.05, p < .001$). The adjusted R-square for the regression model was 0.0768. The regression coefficients for OC was positive and significant ($t = 3.88, p < .001$). A test for interaction effect revealed no significant interactions. The regression models are shown in Table 3.

Table 3: Regression Models for the Hypothesized Relationships in the Framework

Dependent Factor	Independent Factor(s)	Independent Factor Parameter Estimate, t-value, p-value
<p>Model 1 – Hypothesis 1 & 2 Organization’s Change in Service Delivery (OC)</p> <p>$R^2 = .1332$ Adj $R^2 = .1228$ $F(2, 167) = 12.83, p = .001^{**}$</p>	<p>Technology Accessibility (TC)</p> <p>Customer Technology Preference (CTP)</p>	<p>0.2426 $t = 3.51$ $p < .001^{**}$</p> <p>0.1613 $t = 3.30$ $p < .005^*$</p>
<p>Model 2 - Hypotheses 3 Organization Effectiveness in Service Delivery (OE)</p> <p>$R^2 = .1110$ Adj $R^2 = .1058$ $F(1, 168) = 20.99, p < .001^{**}$</p>	<p>Organization’s Change in Service Delivery (OC)</p>	<p>0.4587 $t = 4.58$ $p < .001^{**}$</p>
<p>Model 3 - Hypothesis 4 Customer Technology Adoption (CTA)</p> <p>$R^2 = .0822$ Adj $R^2 = .0768$ $F(1, 168) = 15.05, p < .001^{**}$</p>	<p>Organization’s Change in Service Delivery (OC)</p>	<p>0.4517 $t = 3.88$ $p < .001^{**}$</p>

Notes: (**) indicates significant at $p < .001$, (*) indicates significant at $p < .005$.

DISCUSSION

Discussion of the Research Question

This study sought to answer the research question: What is the role of technology as it relates to organization’s change in service delivery in the movie rental industry? Anecdotal evidence suggests that technology played a major role in the movie rental industry and has greatly affected organizations and customers.

For the research question, technology accessibility was measured in terms of its ease of use, the variety of options available to customers, and the reasonableness of the terms for which the customer must agree to use the technology. The data suggests that customers believe that the technologies offered by movie rental companies for service delivery of movie rentals are more than acceptable. The average score for each variable ranged between 3.55 and 4.0 on a 5 point likert-scale (See Appendix A). We examined the customer’s perspective on the information technology used by various companies to deliver movie rental service to their customers. Respondents were asked about their technology preference for renting movies. Renting movies through internet download to the television, internet download to an i-pod or an i-phone, and internet download to a computer are all various types of service delivery methods that customers considered more preferable. Customers indicated a low preference for using only one type of service delivery for renting movies. When asked if they only used one type of service delivery method, none of aforementioned methods received overwhelming support as the method of choice. The data suggests that customers do not have a strong preference for using only one method for renting movies. Based on the descriptive statistics, use of appropriate internet technology increases the service delivery options for organizations to rent movies to their customers (See Appendix A). We discuss the hypotheses in the next section.

Discussion of Hypotheses Based on the Regression Analyses Results

The study examined the relationships among technology accessibility, customer technology preference, organization's change in service delivery, customer technology adoption, and organization effectiveness. Four hypotheses were tested using three regression models. The results of the first hypothesis test revealed that the relationship between technology and organization's change in service delivery was significant based on the items included in the regression model. It was believed that providing quality service delivery is an important factor in achieving competitiveness and information technology plays a role in this process (Yadav & Paliwal, 2011). This finding was interesting since it indicated that customers' perception of technology with respect to ease of use, variety of options, and reasonableness of the terms had some predictive association with an organization's change in service delivery. From an industry perspective, movie rental companies struggled with developing service delivery that connects with the customer's perception of the different technologies available in the industry. Some movie rental companies filed bankrupt after having tried to find the right service delivery offerings based on what they thought would be acceptable to their customers. Other movie rental organizations adapted their service delivery offerings even after they entered the movie rental industry. Technology continued to challenge the organizations that remained in the movie rental industry as they sought to understand what technologies to make available to their customers. Organizations with the flexibility to adapt their service delivery offerings as new technologies were made available seemed to be more successful in their industry (Tallon, 2010). Understanding the customer proved to be vital for the organizations to remain competitive (Ray et al., 2005).

The second hypothesized relationship was supported. The study indicated that customer technology preference had a relationship with organization's change in service delivery. Understanding what technologies their customers preferred often led to companies making the right decision about what technologies to implement. Surveying the customers about their technology preferences helped the organization to plan for future deployment and implementation of technologies. Organizations that ignored their customers' preferences suffered from customer rejection of the type of technology implemented when it was not a customer preference. Competitors that met the customers' needs by providing service delivery offerings consistent with the customer preferences took away market share from those organizations that ignore their customers' technology preferences. As more technologies became available, customers seemed to be eager to use them. Based on this study, the use of i-phones, i-pads, and computers have transformed how customers interact with movie products. These technologies were readily available and easy for customers to use. Thus, organizations had to stay abreast of what their customers' technology preferences were to continue to attract and keep their customers.

The third hypothesis refers to the relationship between organization's change in service delivery and organization effectiveness in service delivery. This hypothesis was supported. The organization's change in service delivery construct measures the initiatives taken by the movie rental company and the organization effectiveness construct measures customers' perceived effectiveness of the initiatives regarding delivery, availability, pricing, and billing. In each case, these areas were considered to be important to the customer. One might question, why is it so difficult for the movie rental company to implement the right service delivery offerings (Chao et al., 2010)? In some cases, the movie rental company is so focused on gaining market share that they lose sight of what is important to the customer. In other cases, the movie rental company is so focused on out maneuvering the competition that they lose sight of their bottom line. Striking a balance between meeting customer expectations and remaining profitable is critical for the movie rental company to remain effective. This study suggests that pricing is important but availability may be slightly more important to the customer. One phenomenon about the movie rental industry is that some companies focused a great deal on lowering prices. As a result, this caused movie rental companies with higher overhead cost to offer price discounts to try to remain competitive. Unfortunately, the organizations with higher overhead costs could not sustain their price discounts and this sent mixed signals to their customers. So, the movie rental organizations must have service delivery offerings that are compatible with their cost structure and meets customers' expectations. A key to success is for a company to have a portfolio of service delivery offerings (Xue et al., 2007).

By changing the organization to better serve customers, focus on customer needs, and making improvements in service delivery, the movie rental companies have been able to improve their organization effectiveness as perceived by the customers (Hue & Hacker, 2002). In today's fast paced ever changing business

environment with new technologies available for service delivery of movies to customers, it is critical for the movie rental organizations to remain vigilant and not become complacent in their business practices. Winning and keeping customers has to be on the forefront of their business executives' agenda as they implement changes and attempt to meet customer expectations (Meuter et al., 2000).

The fourth hypothesized relationship between organization's change in service delivery and customer technology adoption was also supported. This relationship is interesting because it suggests that, as long as the service delivery methods meet the customers' expectations, customers will adopt the technologies that organizations make available to them (Hsu et al., 2010; AL-Majali, 2011; Griffy-Brown et al., 2011). For example, movie rental organizations that make their products available through download to various devices can increase the usage of these technologies by their customers. With the introduction of new technologies to rent movies to customers, movie rental organizations continue to attract customers who also adopt these new technologies. The logic is that the movie rental organizations provide the customer with a valid use for the new technology, so the customer is more willing to adopt the new technology (Keeling et al., 2006). When a new technology is introduced to the customer by one movie rental organization, the other movie rental organizations make adjustments to the technologies they offer to customers in an effort to remain competitive. Based on this study, the customer's usage of different service delivery methods may be a function of convenience. Often customers have access to smaller devices such as i-phones and i-pads when they are away from their computer or television. This study implies that providing the customer the convenience of having a variety of service delivery methods to use would meet the needs of more customers.

IMPLICATIONS FOR MANAGEMENT THOUGHT

While this study is focused on the movie rental industry, it is relevant to service delivery in other industries as well (Sharma & Sharma, 2011; Kromidha et al., 2011). Technology should be considered of high importance regardless of whether the organization is a new entrant to the industry or an established competitor (Nemcova & Dvorak, 2011). Organizations that are in a position to devote resources to the research and development of what customers want and what customers are willing to pay, can develop the appropriate service delivery offerings to remain competitive. Of course, the management team has to be supportive of any changes that are put in place so that no mixed signals are given to the employees or the customers about which directions the organization is pursuing. Much effort has to be taken over the long-term to develop and maintain good customer relationships (Heskett et al., 2008). It is important for the management team to recognize the importance of their employees in delivering a high level of service delivery to their customers (Bernoff & Schadler, 2010). This is true in industries where the competition between service organizations is fierce and in industries where the competition is moderate (Bridge, 2011). While this seems very obvious, it is not uncommon to find organizations in the both private sector and the public sector that ignore the importance of training their employees to deliver a high level of customer service.

CONCLUSION

This study raises a number of questions and provides a theoretical framework of the relationship between technology accessibility, customer technology preference, organization's change in service delivery, organization effectiveness in service delivery, and customer technology adoption. Service delivery methods are constantly changing as a result of technology. This is impacting a number of industries in the service sector. Better understanding of the customer and the market is one of the first steps in determining which technologies to implement and which technologies to forego. Future studies should explore other industries and the impact of technology on those industries. Given the role of technology, as discussed in this study, and the continuous development of service delivery methods in service industries, this remains a fruitful area for research.

AUTHOR INFORMATION

Amelia Carr earned her Ph.D. from Arizona State University in Business Administration specializing in Supply Chain Management. She is currently a Professor and the Chair of the Department of Management at Bowling Green State University where she teaches courses in Supply Chain Management and International Business. She has

published numerous academic journal articles in publications such as the *Journal of Applied Business Research*, *American Journal of Business*, *Journal of Operations Management*, *Business Horizons*, *International Journal of Productions and Operations Management*, *Organization Development Journal*, and *Industrial Marketing Management* to mention a few. E-mail: ascarr@bgsu.edu

REFERENCES

1. AL-Majali, M. (2011). The use of theory reasoned of action to study information technology in Jordan. *Journal of Internet Banking and Commerce*, 16(2), 1-11.
2. Arogyaswamy, B., & Byles, C. M. (1987). Organizational culture: Internal and external fits. *Journal of Management*, 13(4), 647-659.
3. Bernoff, J., & Schadler, T. (2010). Empowered: In a world where one angry tweet can torpedo a brand, corporations need to unleash their employees to fight back. *Harvard Business Review*, July-August, 95-101.
4. Bower, J. L., & Christensen, C. M. (1995). Disruptive technologies: Catching the wave. *Harvard Business Review*, 73(1), 43-53.
5. Bridge, R. G. (2011). Get connected for better service. *Marketing Management*, Winter, 21-25.
6. Burgelman, R. A., Christensen, C. M., & Wheelwright, S. C. (2004). Strategic change processes. *Strategic Management Journal*, 16, 477-495.
7. Chase, F. R., Chase, R. B., & Aquilano, N. J. (2009). *Operations and supply management* (12th ed.). Boston: McGraw-Hill/Irwin.
8. Chao, C., Mockler, R., & Gartenfeld, M. (2010). Movies: Download vs. rental. *Review of Business Research*, 10(1), 94-98.
9. Clark, K. (1987). Managing technology in international competition: The case of product development in response to foreign entry. In M. Spence & H. Hazard (eds.), *International competitiveness* (pp. 27-74). Cambridge, MA: Ballinger.
10. Coviello, N., & Joseph, R. (2012). Creating major innovations with customers: Insights from small and young technology firms. *Journal of Marketing*, 76(November), 87-104.
11. Davis, F. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319.
12. Deshpande, R., & Webster, F. (1989). Organizational culture and marketing: Defining the research agenda. *Journal of Marketing*, 53(January), 3-15.
13. Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: What are they? *Strategic Management Journal*, 21(10/11), 1105-1121.
14. Euchner, J. (2011). Managing disruption: An interview with Clayton Christensen. *Research Technology Management*, 54(1), 1-17.
15. Elms, H., Brammer, S., Harris, J., & Phillips, R. (2010). New directions in strategic management and business ethics. *Business Ethics Quarterly*, 20(3), 401-425.
16. Gandel, S. (2010). How Blockbuster failed at failing. *Time*, 176(15), 38-40.
17. Griffy-Brown, C., Chun, M., & Koepfel, H. (2011). Using customer-facing technology to create new business value: Insight from the public and private sector into the changing value equation. *Journal of Technology Management for Growing Economies*, 2(2), 21-33.
18. Groves, R., & Kahn, R. (1979). *Surveys by telephone – A national comparison with personal interviews*. New York: Academic Press, Inc.
19. Henderson, R., & Clark, K. (1990). Architectural innovation: The reconfiguration of existing product technologies and the failure of established firms. *Administrative Science Quarterly*, 35(1), 9-30.
20. Heskett, J., Jones, T., Loveman, G., Sasser, W. E., & Schlesinger, L. (2008). Putting the service-profit chain to work. *Harvard Business Review*, July-August, 118-129.
21. Hitt, M. I., Ireland R. D., & Hoskisson, R. E. (2011). *Strategic management competitiveness and globalization* (4th ed.). Canada: South-Western College Publishing.
22. Holmes, E. (2009). Blockbuster offers videos via internet. *Wall Street Journal*, January 14th, B4.
23. Hsu, F., Chen, T., & Wang, S. (2010). The role of customer values in accepting information technologies in the public information service sector. *The Service Industries Journal*, 30(7), 1097-1111.
24. Johnson, F. G. (2010). Blockbuster struggles while the DVD thrives. *AR (Absolute Return & Alpha)*, 1(8), 1.

25. Keeling, K., McGoldrick, P., & MacAulay, L. (2006). Electronic kiosks in retail service delivery: Modeling customer acceptance. *Journal of Marketing Channels*, 14(1/2), 49-76.
26. King, D. (2009a). Blockbuster downloads to TiVo. *Video Business*, March 30th, 3.
27. King, D. (2009b). Blockbuster shifting stores toward sales. *Video Business*, October 5th, 5.
28. King, D., & Netherby, J. (2009). Blockbuster partners for cable VOD. *Video Business*, September 28th, 4.
29. Kromidha, J., Muca, B., & Sholla, A. (2011). Adoption of information and communication technology in Albanian tourism industry in global setting: Challenges and benefits. *Journal of Information Technology and Economic Development*, 2(1), 64-73.
30. Meuter, M., Ostrom, A., Roundtree, R., & Bitner, M. (2000). Self-service technologies: Understanding customer satisfaction with technology-based service encounters. *Journal of Marketing*, 64(3), 50-64.
31. Michel, S., Brown, S., & Gallan, A. (2008). Service-logic innovations: How to innovate customers not products. *California Management Review*, 50(3), 49-65.
32. Nash, K. (2009). Blockbuster's cliffhanger: The onetime king of movie rentals grabs for a comeback. *CIO*, 22(9), 30-39.
33. Nemcova, Z., & Dvorak, J. (2011). The model of e-commerce strategy focused on customers. *Economics and Management*, 16, 1292-1297.
34. Netherby, J. (2007). Slow to download. *Video Business*, June 18th, 17.
35. Pheysey, D. C., Payne, R. L., & Pugh, D. S. (1971). Influence of structure at organizational and group levels. *Administrative Science Quarterly*, 16(1), 60-73.
36. Randall, R. (2010). No business is exempt from potential disruption of new strategy. *Central Penn Business Journal*, September 3rd, 13.
37. Ray, G., Muhanna, W., & Barney, J. (2005). Information technology and the performance of the customer service process: A resource-based analysis. *MIS Quarterly*, 29(4), 625-652.
38. Rogers, E. (1962). *Diffusion of innovations* (4th ed.). New York: The Free Press.
39. Rogers, E. (1995). *Diffusion of innovations* (5th ed.). New York: The Free Press.
40. Rousseau, D. M. (1990). Assessing organizational culture: The case for multiple methods. In B. Schneider (Ed.), *Organizational climate and culture* (pp. 153 -192). San Francisco: Jossey-Bass.
41. Sharma, N., & Sharma, G. (2011). Customers' perspectives regarding e-banking: An empirical investigation. *The IUP Journal of Management Research*, 10(4), 31-43.
42. Tallon, P. (2010). A service science perspective on strategic choice, IT, and performance in U.S. banking. *Journal of Management Information Systems*, 26(4), 219-252.
43. Winer, R. (2001). A framework for customer relationship management. *California Management Review*, 43(4), 89-105.
44. Xue, M., Hitt, L., & Harker, P. (2007). Customer efficiency, channel usage, and firm performance in retail banking. *Manufacturing and Service Operations Management*, 9(4), 535-558.
45. Yadav, S., & Paliwal, P. (2011/2012). Re-engineering service delivery process: Case of a natural gas utility. *Journal of Services Research*, 11(2), 155-176.

Appendix A

All Variables used a Likert Scale of 1 to 5 where 1 = Strongly Disagree and 5 = Strongly Agree

Variables	Means	Std Dev
Technology Accessibility:		
Var 1 – The new technologies are easy to use	4.00	1.07
Var 2 – There are a lot of options	3.90	1.10
Var 3 – The terms are reasonable	3.55	1.06
Customer Preference for Technology: I prefer to rent movies using		
Var 4 – internet down load to my i-pad or i-phone	2.63	1.40
Var 5 – internet down load to my computer	3.19	1.42
Var 6 – internet down load to my TV	3.08	1.41
Customer Technology Adoption:		
Var 7 – I only use my i-pad or my i-phone for movie rentals	1.82	1.17
Var 8 – I only use my computer for video streaming for movie rentals	2.41	1.40
Var 9 – I only use the video rental kiosk for movie rentals	2.31	1.33
Var 10 – I only use mail delivery for movie rentals	1.91	1.23
Organization Effectiveness in Service Delivery: The movie rental company is very effective -		
Var 11 – in getting the movies to the customer	3.76	1.14
Var 12 – at providing access to their products and services when customers want them	3.75	1.02
Var 13 – at setting the price to meet customer’s expectations for movies	3.59	1.07
Var 14 – at providing accurate information on charges to customer’s bill	3.80	0.98
Organization’s Change in Service Delivery:		
Var 15 – Customer service is better since the movie rental company made changes to its business operations	3.26	1.00
Var 16 – Employees are more focused on the customer since the movie rental company made changes to its business operations	3.00	0.89
Var 17 – Product variety has improved since the company made changes to its operations	3.30	1.06

NOTES