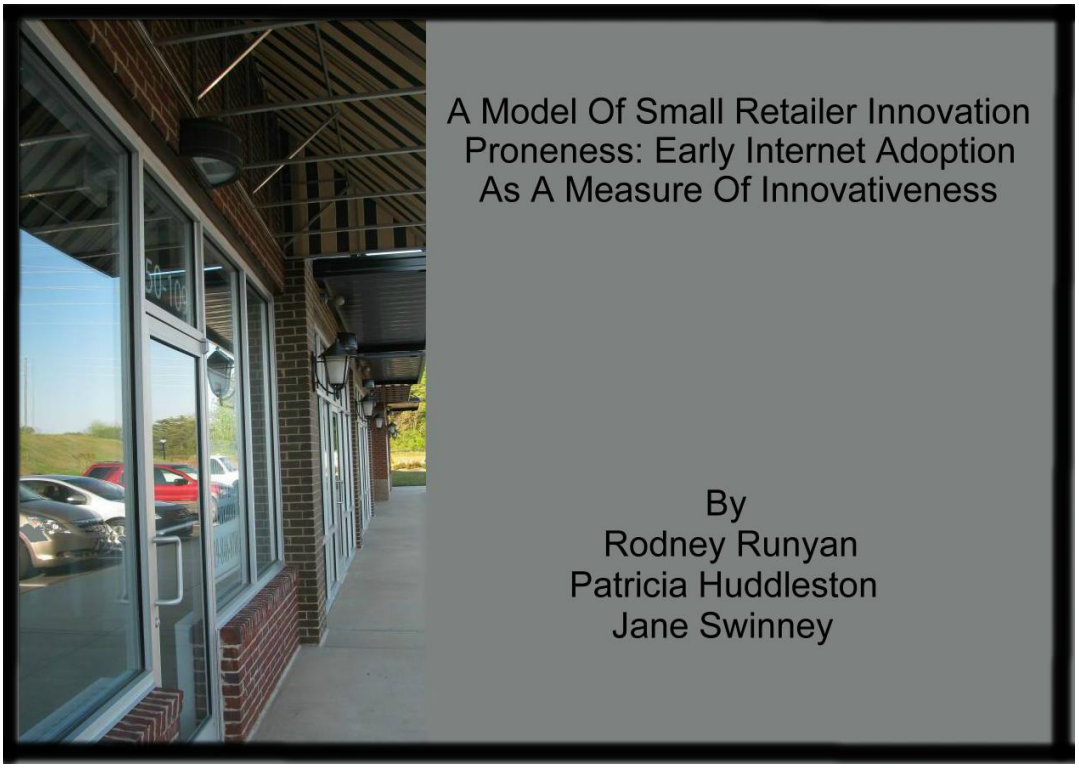

Peer Reviewed

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Abstract

The Internet is seen by many as a discontinuous innovation which is transforming the manner in which people communicate and shop and the ways in which businesses procure, market, and advertise their goods and services. This study examines the drivers of innovation adoption in small retailers. Using a structural equation model, the authors examine the effects of entrepreneurial tendencies and social capital on the proneness of small retailers in five towns in the United States to innovate by adopting the Internet as a business tool. Results show that, as expected, entrepreneurial tendencies are a key driver of innovative proneness. Social capital had no effect. Surprisingly, innovation proneness had no effect on small retailers' overall performance. Reasons for these findings are discussed, and implications for small retailers are offered.

Introduction

Over the past few decades, small retailers in the U.S. have faced wave after wave of threats to their existence. First it was the department store's move outside of the large urban centers, which was quickly followed by the advent of the suburban shopping mall.

Reilly's (1931) retail gravity theory correctly predicted that these large shopping malls would draw customers from smaller, less urban areas; thus increasing the competitive pressures on the small retailer. In the 1980's, the rapid growth of large discounters further eroded small retailers' customer base, and continued to do so throughout the 1990's. Small retailers who survived each of these "attacks" were likely to be ones who did not attempt to compete head-to-head with their larger counterparts.

The use of technology as a tool to compete with larger stores has been suggested by researchers (Igbaria, Zinatelli and Cragg, 1997), and many opportunities are available for the small retailer to use computer technology through the increased number and types of computer applications on the market. Yet, both empirical and anecdotal evidence point to a historical reluctance on the part of small business owners to adopt new technology. For example, though personal computer usage was a reality in nearly seventy percent of all retailers in America in the 1990's, usage was mainly limited to accounting and word processing applications (Cragg & King, 1993; Fuller, 1996). ,Yet larger retailers such as Wal-Mart, Target, Gap, etc., among other tasks, were using computers to track inventory, maximize profit margins, and procure merchandise. Larger businesses were the first to use bar coding and scanning technologies (e.g., Kmart; Wal-mart) to streamline their supply chain management efforts.

In general, small businesses have a lesser capability to use new technology due to a lack of resources and skill sets (Koh & Maguire, 2004). Maguire and Magrys (2001) found that small firms used technologies such as e-mail, Internet and fax much less frequently than medium-sized firms. The Internet can be categorized as an innovative technology, and it is considered by some to be a discontinuous innovation (Kenney & Curry, 1999).

The study reported on here was conducted in late 2000 and early 2001, during the end of what has come to be characterized as the "Internet bubble." Use of the Internet at that time was not only innovative, but to many it was considered quite risky. Classic product life-cycle theory depicts the introductory stage of a product as being one of uncertainty, and characterized by high risk, high cost and low-levels of initial adoption (Levy & Weitz, 2001). Websites, and

the Internet that enabled their use, were new and unproven in terms of marketing. Comparing early and late adopters of the Internet by small businesses was used in a study by Masurel (2004). However, his study looked only at the outcome of Internet adoption in terms of productivity, and did not take into account why firms might adopt.

The adoption of technology can result in a competitive advantage in the marketplace (Levitt, 1983). Those firms that tend to be prone toward innovation likely have entrepreneurial tendencies (Covin & Slevin, 1989), and they are more likely to be successful (Covin & Slevin, 1989; Stone, 1995; Niehm, 2002). Therefore, this study reported on here extends the research literature on small firm innovation and determinants of firm success.

A structural equation model is proposed to test whether the data gathered fit the theoretical model proposed in this paper. A two-step process as recommended by previous researchers (Anderson & Gerbing, 1988) is utilized. The first measures used are tested in a confirmatory factor analysis, followed by testing the full structural model. Prior to testing the model, a review of the literature is offered to establish the framework for the latent constructs in the model and the proposed relationships between each. In the review, hypotheses are offered, followed by a brief description of the methods utilized and the sample. Finally, the results of the model fitting are presented and discussed in terms of potential management and research implications.

Conceptual Background

There is a paucity of research regarding the early adoption of the Internet by small businesses (Masurel, 2004). No one has considered the underlying characteristics of the small firm owner as antecedents of adopting the Internet as a business tool. Underlying characteristics can lead to a small business owner being more or less prone to innovation (Covin & Slevin, 1989; Lumpkin & Dess, 1996). Personal characteristics of the small firm manager are also seen as the key to e-business adoption in small firms (Hodson & Whitelock, 2003).

In the current study those characteristics are conceptualized as entrepreneurial tendencies and social capital. Little research exists regarding small retailers and their entrepreneurial tendencies, although the extant literature shows positive connections between entrepreneurial tendencies and small business performance in general (Covin & Slevin, 1989; Lumpkin & Dess, 1996; Wiklund & Shepherd, 2005). The connection then, between entrepreneurial tendencies and innovation proneness, is logical to infer. The connection between social capital and innovation proneness is not so obvious, although the effects of social capital upon small retailers have been investigated extensively (Miller & Kean, 1997; Miller & Kim, 1999; Miller, 2001). No research to date has modeled the relationship between social capital and innovation proneness and how social capital may impact small business performance within this framework. In the

following review of literature an argument is put forth to make this connection. Fillis, Johanssen and Wagner, (2004) make this same argument, and they note that the decision by a small firm to adopt forms of e-business is usually not made in isolation, but it is affected by their social network. Therefore, it is posited in this study that entrepreneurial tendencies and social capital make up a latent construct called innovation proneness, and the latent characteristic of innovation proneness will affect a small retailer's overall performance.

Review Of The Literature And Hypotheses To Be Tested

Entrepreneurial Tendencies:

Entrepreneurs are individuals who tend to be innovative risk takers (Schumpeter, 1934; Baumol, 1993). Schumpeter (1934) described innovation as the single characteristic that most characterizes an entrepreneur. Gagnon, Sicoote & Posada (2000) posited that entrepreneurs' behavior is guided by the opportunities that arise and that they choose their response to the opportunities based upon a cost-benefit analysis. Covin and Slevin (1989) developed a construct of entrepreneurial tendencies, which includes the dimensions of innovativeness and proactiveness. They used the term entrepreneurial orientation, which refers to the processes, practices, and decisions that lead to a new opportunity for a firm or individual. When small business owners act in an entrepreneurial manner, the business is more likely to be successful (Covin and Slevin, 1989; Stone, 1995) than if the owner does not act entrepreneurially.

Innovativeness:

Innovativeness is an important aspect of entrepreneurial tendencies because it reflects the means by which firms might pursue new opportunities (Lumpkin & Dess, 1996). Innovation is a process or product that is different from its predecessors in a radical way (Niehm, 2002). The Internet has transformed our lives over the past decade by adding time and place utility to shopping, communication, information search, etc. An innovation may also be defined as the *adoption of* a product or process that is new to an organization (Lumpkin & Dess, 1996). In other words, when a firm adopts an innovative product, the *firm* is acting in an innovative manner. Though we now clearly see the benefits of the Internet to small business, those benefits were not so readily apparent in the Internet's early stages. Lack of knowledge about the Internet made this innovation a risky proposition to small businesses. Small retailers adopting the Internet in the early years of this decade were pursuing new opportunities and could be classified as innovators.

Proactiveness:

Proactiveness implies the use of some foresight in dealing with environmental change (Niehm, 2002; Covin & Slevin, 1989), rather than reacting after the fact. A proactive small retailer would be one who adopts an innovation before his competitors have done so, thus providing some potential first-mover advantages. When considering whether to adopt the Internet, small businesses were faced with many claims as to its usefulness. The Internet was touted as a tool by which firms could improve management processes, sales promotion, human resources, visual merchandising, and other aspects of running a small business. These are all areas where a firm or small business owner could employ innovative techniques to improve the performance of their business. Therefore, a small retailer who was an early adopter of the Internet and exhibited proactiveness may now be benefiting from being an innovator. Fillis, et. al., (2004) found that small business owners with high levels of entrepreneurial orientation exhibit high levels of e-business adoption rates.

Hypothesis 1a: Innovativeness and proactiveness are significant first-order indicators of the second-order factor of entrepreneurial tendencies.

Hypothesis 1b: A small retailer's entrepreneurial tendencies are a significant indicator of the latent construct of small retailer's innovation proneness.

Social Capital:

Portes & Sensenbrenner (1993) conceptualized social capital as the expectations for action within a group or organization that affect the economic goals of its members. Social capital is an intangible resource and a term originally used to describe relational resources, occurring in cross-cutting personal ties (Tsai & Ghoshal, 1998). Social capital is manifest from social structures comprised of relationships (Putnam, 1995). Close relationships can create trust and obligations and define expectations among trading partners (Gulati, 1995). Social capital can serve as a resource for small retailers if it helps to increase the number of local consumers who patronize their business.

Social capital theory provides a means to explain the interaction of local consumers and small retailers. Putnam (1993) found a positive relationship between the amount of available social capital in an area, and the area's economic well being. Miller & Kim (1999) found evidence that social capital does explain some of the "inshopping" of local consumers in rural communities. The concept of social capital is also the basis for Miller & Kim's (1999) work on level of attachment to community, and was found to be a positive influence on local consumers' attachment.

The components of social capital that are salient to the current research are reciprocity and trust (Tsai & Goshal, 1998). Relationships between individuals who have built trust and reciprocity through their networks have a comparative advantage (Burt, 1997; Tsai & Goshal, 1998), leading to deeper and finer-grained information exchange. If a small retailer can develop these types of relationships with local consumers, it may lead to better consumer feedback, and market knowledge. Berry (1993) for example, found that consumers' attitudes about a retailer's trustworthiness (a component of social capital) were important in forming patronage relationships.

Reciprocity:

The concept of reciprocity refers to a "network" in which each member has something to provide to the other. When something is provided, there is an expectation of some sort of *quid pro quo.* Reciprocity contributes to social capital through network members who amass favors, which can be called upon as resources when needed (Portes & Sensenbrenner, 1993). Favors called "in" may lead to increased tacit knowledge between members. Miller & Kean (1997a) refer to community reciprocity as an expected exchange between local consumers and local retailers. They found that local consumers were more likely to shop with local retailers when those retailers expressed a high level of support for the community. Lumpkin, Hawes and Darden (1986) had similar findings, but also found that consumer attitudes about relationships with local retailers were a more important determinant of patronage than any other variable. Support for the relationship between reciprocity's effect on small business owners was found by Miller (2001). In her study of consumers in two rural towns, consumer satisfaction with reciprocity levels was a significant predictor of inshopping behavior. Thus, reciprocity helps small business owners to develop social capital with local consumers.

Trust:

Trust is a component of loyalty that underlies a firm's ability to create or maintain loyal customers. Both terms are used interchangeably in the literature (cf. Chaudhuir & Holbrook, 2001; Datta, 2003). When a consumer develops trust in a brand or store, they become loyal towards that store or brand, even if changes occur in the future (Datta, 2003). This is the type of loyalty small retailers hope to develop as an insulator against the future incursion of large retailers in the future (Runyan & Johnson, 2003). Trust has been identified as one of the key consumer issues in shopping on the Internet, and has been widely reported in both the academic and trade press (Jones et al, 2001). Understanding this, it seems that small retailers who have a well developed level of social capital in their community might be able to transcend the trust issue with local consumers, and capitalize on the marketing and e-commerce opportunities that the Internet offers. If more trust can be built up through added interaction with the Internet, then the reciprocal actions of local customers would benefit small retailers, through increased purchases and positive word-of-mouth.

Existence of social capital may be fertile ground for expanding the small retailer's market, as mobile customers move to other locales but retain loyalty to the small businesses with which they have built relationships.

Previous research has not considered social capital as a contributor to innovation proneness. However, recent qualitative work by Fillis, et. al., (2004) conceptualized aspects of social capital such as trust and social networks, as being important to a small firm's adoption of e-business tools (e.g., website, e-mail, e-commerce). Lawson, Alcock, Cooper and Burgess (2003) found that trust (both internal and external to the firm) was negatively related to adoption of e-commerce by small firms. Enhancing customer relationships, as well as communication between customers and the small firm have been cited as reasons for adopting e-commerce (Bradshaw, 2001). Strengthening relationships with customers can be seen as a strategy for increasing the likelihood of reciprocity between customer and the firm. It may also be possible that customers drive an owner's desire to adopt innovations. For example, a customer is aware of the benefits of the Internet and passes that knowledge along to the small retailer during social interactions. This notion is supported by Fillis, et. al., (2004).

Hypothesis 2a: Trust and reciprocity are significant and positive first-order indicators of the second-order factor of social capital.

Hypothesis 2b: Social capital is a significant indicator of the latent construct of small retailer's innovation proneness.

Innovation Proneness:

Innovation proneness is a concept that may be defined as a firm or individual's inclination to adopt new products or processes (Miller, 1983; Covin & Slevin, 1989). It has also been described as the degree to which a firm is relatively earlier in adopting new ideas, compared to its competitors (Rogers, 1983). Measures of innovativeness are ubiquitous in the literature. Cohn (1980) operationalized the construct as the number of innovations adopted by a firm. In terms of small firm Internet adoption, this could be seen as the different levels of computer connectivity a firm has adopted to date. For example, a small business which uses only email would be seen as adopting fewer innovations than one which uses e-mail, has a website, and conducts e-commerce. Kim (1980) looked at the rate of technological changes in processes over time. For small firms, the length of time since adopting the Internet, as well as intent to adopt in the future would be measures of a firm's technological change over time. Each of these indicate a small firm's proneness towards innovation.

Innovation proneness should lead to increased small firm performance (Covin & Slevin, 1989; Stone, 1995). Small firms which exhibit entrepreneurial tendencies such as innovation proneness can more swiftly achieve competitive advantages that lead to success (Fillis, et. al., 2004). Durkin and McGowan (2001) posit that small businesses can achieve greater success by developing e-business competencies.

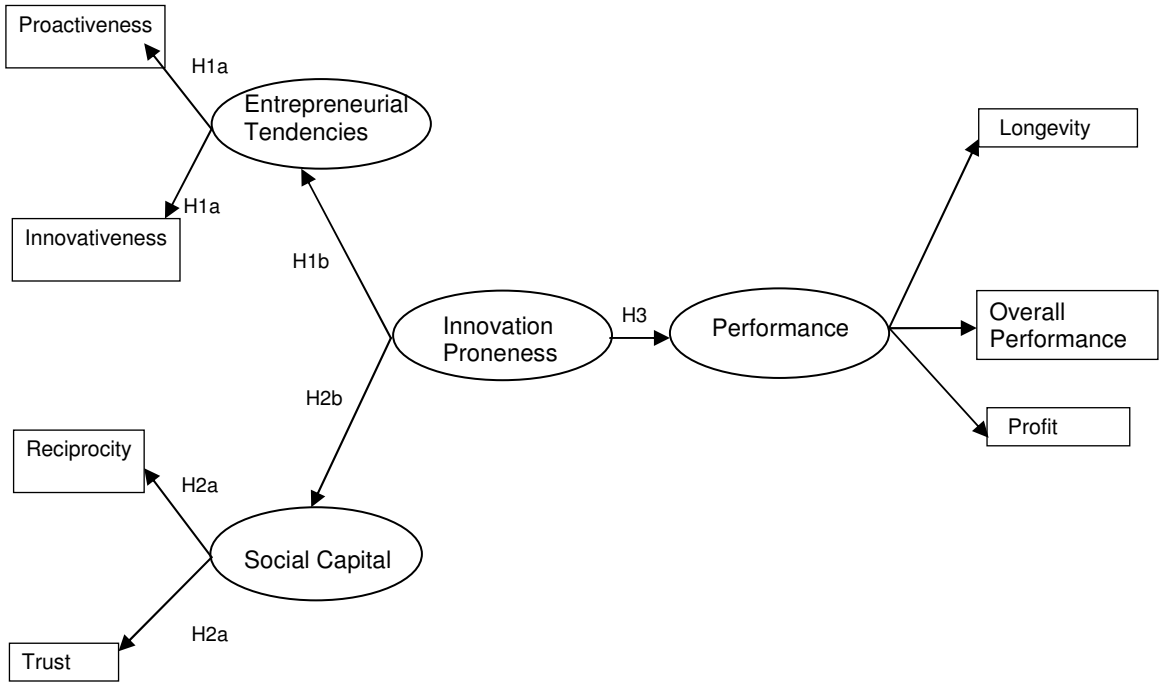
Hypothesis 3: Innovation proneness will have a significant and positive effect on small retailer performance.

The preceding literature and hypotheses help to form a framework where it is proposed that a small retailer's proneness towards innovation is a function of his/her entrepreneurial orientation and levels of social capital. Lifecycle theory tells us that only a small number of people tend to be innovators (Levy & Weitz, 2003). It is posited that a unique combination of high levels of entrepreneurial orientation and social capital will be significant indicators of a small retailer's innovation proneness. It is further posited that innovation proneness is a significant and positive predictor of small retailer performance.

Research Model

The conceptual model utilized in this study is shown below in Figure 1. It is based on the extant literature and the reviewed theoretical work.

Figure 1. Conceptual Model



Measures:

Measures used to operationalize the constructs of the proposed model were identified from focus group interviews conducted with small retailers in downtown business districts in some Midwestern cities. Scales using a 5-point Likert scale with anchors on strongly disagree (1) and strongly agree (5), were employed to measure the manifest variables, which were indicators of the latent constructs. Innovativeness and proactiveness were the indicators for the latent construct of **entrepreneurial tendencies.** The latent construct of **social capital** was indicated by trust and reciprocity. For the endogenous latent construct of **innovative proneness,** two variables were used as indicators: current levels of technology use and current use of or intention to create a website. These two variables were measured on ordinal scales. Small retailer **performance** was indicated by three ordinal variables: relative performance of the business, relative profit of the business, and firm longevity. Where reverse coding or summing of variables was required, SPSS 11.5 was used prior to and model fitting.

Sample:

We first conducted focus group interviews with small retailers in two medium-sized (20,000-40,000) Midwest towns (early 2000). A relatively small number (2 of 12) of these retailers had created or purchased websites for their businesses, though several noted that many of their fellow retailers were discussing the future possibilities of a company website. The quantitative data were gathered from a convenience sample of mostly small businesses, in the downtown shopping districts of five small-to-medium-sized cities in the United States. The sample was varied in that one city was located on the west coast, one in the northwest, and the other three in the Midwest sections of the U.S. Each city had a population ranging from 12,000 to 55,000. A total of 410 surveys were disseminated in the five cities, with 239 useable surveys returned (for a 58 percent response rate). Surveys were hand delivered by either a member of the research team or an employee of the respective Downtown Development Authority (DDA). In three cities surveys were collected by hand (by the DDA employee), while in the case of the other two, business owners were asked to mail their surveys back to the researchers. The response rates for the cities where the surveys were picked up personally were significantly higher than the other two cities. Sample characteristics can be found in Table 1 below.

Table 1. Sample Characteristics

Sample Characteristic	Frequency	Percentage*
Gender		
Male	96	40.2
Female	127	53.1
Age		
40 or less years	77	32.2
41-50 years	58	24.3
51 years and over	67	28.0
Education		
High school or less	90	37.6
Some college	89	37.3
College graduate	35	14.6
Post-graduate degree	9	3.8
Family Business		
Yes	162	67.8
No	69	28.9
Years in downtown		
6 or less	64	38.6
7-15	39	25.3
16-30	66	24.7
31 or more	52	23.2
Years of current owner		
6 or less	77	38.7
7-15	53	26.6
16-30	52	23.2
31 or more	19	9.5
Full-time employees		
None	9	3.8
1-2	89	37.2
3-5	69	28.9
6 or more	38	15.9
Part-time employees		
None	34	14.2
1-2	80	33.5
3-5	55	23.0
6 or more	36	15.1
* Less than 100% due to missing data		

Analysis And Model Testing

Structural equation modeling was used to test the hypotheses and causal links between entrepreneurial orientation and social capital, innovation proneness, and performance of small retailers (Hypotheses and results are shown below in Table 2). A two-step process, as suggested by Anderson and

Gerbing (1988) was used, where confirmatory factor analyses were conducted on the measurement model, prior to testing the structural model. Estimates were obtained using maximum likelihood estimation in Lisrel 8.7.

Table 2. Parameter Estimates – Measurement Model

Path Label	Parameter Estimate	t-value	Standardized Estimate
Reside, Reciprocity	.53	6.34*	.49
Commun, Reciprocity	.68	8.55*	.69
Outside, Reciprocity	.29	6.65*	.52
Purchas, Reciprocity	.19	4.09*	.32
Believe, Trust	.33	6.15*	.53
Service, Trust	.14	3.13*	.23
Good, Trust	.68	7.76*	.88
Sell, Innovativeness	1.19	15.18*	.89
If, Innovativeness	.95	13.93*	.83
My, Innovativeness	.36	5.37*	.36
Cities, Innovativeness	.52	7.95*	.51
Site, Proactiveness	.39	6.05*	.44
Aspect, Proactiveness	.48	6.87*	.50
Website, Proactiveness	.72	7.89*	.57
Inform, Proactiveness	.69	10.55*	.78
Join, Proactiveness	.19	3.98*	.30
Reciprocity, Trust	.47	5.22*	
Reciprocity, Innovation Proneness	-0.17	-1.94	
Reciprocity, Proactiveness	-0.09	-0.98	
Trust, Innovation Proneness	0.00	0.01	
Trust, Proactiveness	-0.02	-0.21	
Innovation Proneness, Proactiveness	.41	5.74*	
*p<.05			
χ^2 =139.52, df=97, n=239, p=0.003, RMSEA=.043, AGFI=.90			

The measurement model was estimated using a multi-step approach to CFA. Due to a large number of variables, we averaged these into a smaller number of indicators for latent constructs (Yuan, Bentler & Kano, 1997). This is also referred to as parceling, and it has been shown to produce better and more accurate measures of model fit than using original scale indicators (Yuan, et. al., 1997; Bandalos, 2002).

First-order confirmatory factor analyses were conducted for each of the exogenous constructs in the model; then the full measurement model was estimated. From the full measurement model, one can assess the validity of the nomological network, as well as discriminant and convergent validity through the evaluation of between-construct correlations (Byrne, 1999). Those indicators that

loaded significantly and in the posited direction, were then summed to create indicators of the latent constructs in the structural model.

In order to obtain the best fitting measurement model, the covariance matrix factor loadings were examined, as well as the largest standardized residuals. This served to verify construct validity. Those indicators with positive and significant factor loadings were determined to indicate convergent validity. Those that did not have significant loadings, or displayed large residuals were dropped from further use in the model. Discriminant validity was determined from the assessment of appropriate modification indices.

Confirmatory Factor Analyses:

Following the Anderson and Gerbing (1988) method, confirmatory factor analyses (CFA) were conducted for each of the first order factors. Using standardized residuals and modification indices as guides, some observed variables were dropped prior to fitting the measurement model (See the Appendix for all measures.) Each CFA exhibited acceptable fit, convergent and discriminatory validity. So, we moved to the full measurement model.

Following the confirmatory factor analyses, a full measurement model was estimated to establish convergent and discriminant validity for all first order factors. After first fitting the data to the model, the fit was not acceptable. There were no excessive standardized residuals, but modification indices (based on Lagrangian multipliers tests) suggested allowing the error variances of two proactiveness indicators to covary. These two variables involved the small retailers' perceptions of using the Internet as a group to benefit the entire downtown. Though they were measuring similar concepts, they were distinct enough to keep both in the model.

The model was re-specified with the suggested change, and the fit was greatly improved (X^2 =139.52, df=97, p=.003 RMSEA = 0.04, AGFI = .90). All of the observed indicators loaded on only one latent construct, confirming the discriminant validity of the measures. Each of the parameter estimates were significant and positive, thus the measures exhibited convergent validity as well, and can be seen along with t-values, in Table 3 below.

Table 3. Parameter Estimates – Structural Model

Path Label	Parameter Estimate	t-value	Standardized Estimate
Proactiveness, Entrepreneurial tendencies	.23	5.98*	.48
Innovativeness, Entrepreneurial tendencies	1.00		1.00
Reciprocity, Social Capital	1.00		1.00
Trust, Social Capital	.13	4.05*	.26
Technology Level, Innovation Proneness	1.00		.53
Transactions, Innovation Proneness	.60	6.89*	.59
Entrepreneurial tendencies, Innovation Proneness	.69	6.81*	.81
Social Capital, Innovation Proneness	.14	1.45	.37
Innovation Proneness, Performance	.00	-0.95	.04
Longevity, Performance	1.00		.07
Overall Performance, Performance	-12.34	-2.20*	1.96
Profit, Performance	-0.95	-1.90	.12
*p<.05			
χ^2 =40.39, df=29, n=239, p=0.08, RMSEA=.041, AGFI=.96, NNFI=.95			

Structural Model- Hypothesis testing:

Following the measurement CFA, we parceled the measurement indicators of the first-order factors. The averaging approach to creating composite variables was used, whereby the mean of the all the variables manifesting from a construct became the new indicator variable (Yuan, et. al., 1997). The structural model was specified and achieved good fit (X^2 =40.39, df=29, p=0.078, RMSEA = 0.041, AGFI = .96, NNFI=.95). Table 3 above provides parameter estimates and t-values for the model.

Hypotheses can be tested by examining the path (parameter) estimates between the independent (exogenous) variables and the dependent (endogenous) variables. Results for each of the hypotheses can be found in Table 4 below.

Table 4. Hypothesis Testing

Hypothesis	Variable/Factor Relationships	Results
H1 a	*Innovativeness and proactiveness are significant first-order indicators of the second-order factor of entrepreneurial tendencies.*	supported
H1 b	*A small retailer's entrepreneurial tendencies are a significant indicator of the latent construct of small retailer's innovation proneness.*	supported
H2 a	*Trust and reciprocity are significant and positive first-order indicators of the second-order factor of social capital.*	supported
H2 b	*Social capital is a significant indicator of the latent construct of small retailer's innovation proneness.*	not supported
H3	*Innovation proneness will have a significant and positive effect on small retailer performance.*	not supported

Hypothesis 1a stated that innovativeness and proactiveness were significant indicators of entrepreneurial tendencies. This was supported based on the direction and magnitude of the path coefficients exhibited in the model. Both indicators had large effect sizes (Kline, 1998). These results support the previous research that has shown that innovativeness and proactiveness are indicators of entrepreneurial tendencies (Covin & Slevin, 1989). These tendencies are positive in nature and help predict success (Lumpkin & Dess, 1996).

Hypothesis 1b posited that entrepreneurial tendencies was a significant predictor of innovative proneness of small retailers. This was supported by the data, as the path estimate was positive and significant at the $p<.05$ level. This confirms the idea that those who hold and exhibit entrepreneurial tendencies like proactiveness and innovative thinking are more likely to behave in innovative ways (Lumpkin & Dess, 1996). Respondents in the year 2000 and 2001 would certainly have considered purchasing a website for their business as being both risky and perhaps forward thinking. Based on information from the trade press, small retailers with a business website would have been early adopters at that time. Early adopters are those who adopt products that are in the innovation stage of the product life-cycle.

Hypothesis 2a posited that reciprocity and trust were significant and positive indicators of the latent factor of social capital. This hypothesis was supported, as both factors loaded strongly on the social capital construct. The

effect size of reciprocity was large, while trust exhibited a moderate, but significant effect size. Both trust and reciprocity have been shown to be strong indicators of social capital (Lumpkin, Hawes and Darden, 1986; Tsai & Ghoshal, 1998; Miller, 2001).

Hypothesis 2b stated that social capital is a significant predictor of innovation proneness. Social capital was found to have a positive relationship with innovation proneness, but though the effect size was moderate (.37), it was not statistically significant. This specific relationship (social capital's effect on innovation) has not been tested before empirically, though some authors have suggested the relationship (Hodson & Whitelock, 2003; Fillis, et. al., 2004). Social capital has been found to reduce the tendency of consumers to shop outside a community (Miller & Kean, 1997). In other words, the more trust that consumers have in local retailers and the more the retailer reciprocates support in the community, the more likely are local consumers to shop locally.

During the time period in which the data were gathered, there were stories in the media on a near daily basis about the Internet and e-commerce. From the focus groups, it was clear that small retailers did not know if the Internet was really here to stay. However, they did worry about their local customers perceiving them as being less "up-to-date" without a website. Simpson & Docherty (2004) cite being perceived as "up-to-date" as a reason for small firms to adopt e-commerce. It was not clear from the focus group, nor the Simpson & Docherty (2004) work, whether social capital inhibited or encouraged innovation (e.g., Internet adoption).

Covin (1991) describes the difference between entrepreneurial firms and conservative ones. The conservative business owner is one who prefers to conduct business in more traditional ways. Traditional methods for the small retailer would include personal service and attention, which would lead to increased social capital (Gulati, 1995). By viewing social capital and innovation proneness from this angle, it can be argued that those small retailers who value and build social capital amongst their customers might have viewed Internet adoption negatively during its early stages. Focus group feedback pointed to those small retailers who had solid businesses being less interested in trying to sell to anyone other than their local customer. So, it seems likely that those retailers with high levels of social capital were ones who saw no need to go "outside" the realm of the local consumer.

Hypothesis 3 stated that innovation proneness would have a significant and positive effect on small retailer performance. Performance was indicated by three observed variables of small retailer performance: business longevity, relative profitability compared to the previous year, and overall relative performance compared to the prior year. Interestingly, longevity was the only positive indicator of performance. Relative overall performance and relative profitability were both negative indicators of small retailer performance. This

means that the longer a store was in business, the more likely it was that they had experienced a decrease in performance over the previous year.

Hypothesis 3 was not supported by the data. There was no relationship between the level of a small retailer's innovation proneness and their performance. Considering prior research involving innovativeness and performance (Miller, 1983; Covin & Slevin, 1989, Niehm, 2002), this is surprising. However, Masurel (2004) found in a study of small firms that early adopters of the Internet performed better than those who adopted late. Since little has been done in the area of small retailer innovativeness, and even less concerning e-commerce and performance, it is difficult to draw comparisons.

Although Fillis, et. al. (2004) *posited* that small firms who did not adopt e-commerce would have declining performance over time, they found just the opposite. The authors posited that many small firms seek to control the size of their business, thus avoiding an innovation like the Internet which might have grown business beyond the point of control. This behavior could be viewed as a strategic decision. This may seem contrary to the goals of most business owners (i.e., purposefully retarding growth). However, this is supported in the entrepreneurship literature. Carland, Hoy, Boulton and Carland (1984) introduced the concept of a small business orientation. They theorized that there is a difference between an entrepreneur and a small business owner. This has been empirically confirmed subsequently (Runyan, Droge and Swinney, 2008). The key differences are growth and profit goals. A small business person is more focused on personal goals than growth and profit goals. Such focus on personal goals and lifestyles (Fillis, et. al., 2004) may suppress the drive to innovate.

Discussion And Implications

This research can be characterized as exploratory in nature. We tested relationships between the theoretical constructs of entrepreneurial orientation, social capital and innovation pronenesss, in a new setting. Entrepreneurs tend to focus on opportunities and initiate activities (Covin & Slevin, 1989) that enable firms to grow and deal with change. Innovativeness may lead to a novel approach to doing business; thus causing evolution or economic change (Schumpeter, 1934). Therefore, it seems important to determine if those small retailers who are prone to innovate are also those who are entrepreneurial in nature and work to develop social capital in their community.

Small retailers that succeed over the long term are likely ones that adapt to change in a positive way. Innovation should, therefore, be one of the characteristics of a successful small retailer. One possible explanation for the lack of relationship between innovation proneness and performance is that our study was conducted early in the innovation life cycle for the Internet. In the early

stages of innovation, there are often high costs associated with its adoption and low or non-existent profits (Peter & Donnelly, 2001). Thus, it may be that small retail entrepreneurs have yet to reap the benefits of adopting this innovation, but in the long term, this relationship may change. Fillis, et. al., (2004) suggest that when considering the benefits of e-business adoption, small firms should consider those that are long-term rather than short-term. For future research, it might be useful to consider the time frame under which innovations are adopted and use time as a moderating variable. Further, because businesses are reluctant to reveal actual performance figures, our measures of actual performance could not be utilized for this analysis (due to severe non-response for that item). Thus, it is possible that a more finely calibrated measure of performance might yield a positive relationship between innovation proneness and performance.

The trade press has documented the growth of e-commerce during the past decade. Those innovative prone retailers who adopted the Internet in 2000 were on the upward curve of the diffusion life cycle. The Internet may be both a good proxy for measuring innovation proneness as well as a poor proxy. The Internet was (and is) an innovation that is discontinuous in nature. It did not just improve on existing technology, it rendered much of what preceded it obsolete. It completely changed the way many companies do business, the way many people shop, and the way many people communicate.

For this reason, it is, perhaps, necessary to consider the nature of the innovation in determining if we should accept the notion that a retailer who did not adopt the Internet is less prone to innovate in other ways. Retailers who have been in business for an extended period of time might be more set in their ways and, as a result, more reluctant to adopt such a discontinuous innovation as the Internet (at least early in the life cycle). However, it may also be that as retail entrepreneurs become more set in their ways, they become somewhat entrenched in their business model.

Prior research has shown that size is a factor in adopting e-commerce, and that as firms grow in size they are more likely to adopt (Daniel & Myers, 2000). The literature points to a positive relationship between entrepreneurial tendencies and firm performance (c.f., Covin & Slevin, 1989; Niehm, 2002). The results of our study do not show that a lack of entrepreneurial bent is an inhibitor of the adoption of e-commerce by small retailers. This should be viewed with caution despite the fact there is little data in the literature to either support or refute these findings. Again, this is due to the dearth of research on the topic. Yet, if the findings of studies such as Masurels (2004) that show positive results for early adopters are true, those and our study could serve as a wakeup call to small retailers to renew their entrepreneurial spirit.

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Appendix 1. Covariance Matrices

Covariance Matrix

	TECHLEV	TRANSAC	LONGEV	OVERALL	PROFIT	PROAC	INNOV	RECIP	TRUST
TECHLEV	2.77								
TRANSAC	0.63	1.43							
LONGEV	-0.26	0.00	2.05						
OVERALL	0.11	0.02	-0.12	0.40					
PROFIT	0.06	0.05	0.05	0.12	0.59				
PROAC	0.10	0.03	-0.03	-0.01	-0.02	0.38			
INNOV	0.41	0.36	-0.13	0.02	0.02	0.16	0.72		
RECIP	0.02	0.02	0.03	0.01	0.02	0.00	-0.06	0.25	
TRUST	0.05	-0.03	0.03	0.07	0.01	0.01	-0.01	0.06	0.24

Covariance Matrix- Latent variables

	INNOV	RECIP	TRUST
INNOV	0.72		
RECIP	-0.06	0.25	
TRUST	-0.01	0.06	0.24

Appendix 2. Questionnaire Measures

TRUST	Parameter Name	Reliability
Consumers believe the downtown business owners are honest business people.	BELIEVE	.480
Consumers believe that downtown businesses offer good quality for the price.	GOOD	
Consumers appreciate extraordinary service by downtown merchants.	SERVICE	
Consumers believe that downtown business owners are willing to place special orders for their customers.*	DROPPED	
Consumers believe that downtown businesses stand behind their products.*	DROPPED	
RECIPROCITY		.584

Consumers believe the service departments at downtown businesses are willing to repair merchandise purchased in another town.*	DROPPED	
Consumers expect to purchase most products at a discount price.	PURCHASE	
Consumers can find everything they need at downtown businesses.*	DROPPED	
Local consumers shop outside the community.	OUTSIDE	
Local residents have a strong sense of loyalty to the community.	RESIDE	
Local businesses actively support this community.	COMMUN	
PROACTIVENESS		.692
A group website for downtown would be beneficial to my business.	WEBSITE	
A downtown website should be used to inform local customers of products and services that are available downtown.	INFORM	
I believe that most downtown businesses will benefit more from advertising on the Internet than from conducting e-commerce.*	DROPPED	
The internet is a way for small stores to "join forces" to increase our buying power.	JOIN	
A website that includes many small towns would increase our buying power.	SITE	
The most important aspect of a downtown website would be marketing the site to local consumers.	ASPECT	
INNOVATIVENESS		.825
I could sell my products or services on the Internet.	SELL	
If my business were on the Internet, it would benefit from e-commerce.	IF	
Consumers in other cities would want to buy the products/services my store sells.	CITIES	
If I had an e-commerce website, my total sales would increase.	MY	
My store would benefit more from its own website than a group website.*	DROPPED	

*Dropped from final measurement model