Mixed-Use Development:
Creating a Model of Key Success Factors

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In the 21st century, the growing population of higher income demographic groups and the growing consumer desire for live-work-play environments are contributing to the growth in mixed-use developments. While valuing efficiency, consumers are also driving the demand for more experience-based leisure activities such as entertainment and dining out and more social activities such as interacting with each other and feeling part of a community. In terms of a geographic shift, the population in metropolitan areas is increasing faster than in non-metropolitan areas. These demographic, lifestyle, and geographic factors support the need to develop successful mixed-use developments.

The objective of the study was to develop a model of key retail success factors of mixed-use developments by conducting case analyses. This was accomplished through five phases: Phase 1 (Literature Review), Phase 2 (Site Selection), Phase 3 (Data Collection), Phase 4 (Data Analyses), and Phase 5 (Model Development of Success Factors).

On-site consumer surveys and mail surveys of property managers were conducted in three types of mixed-use developments: vertical mixed-use, town center planned mixed-use, and corridor high-density residential mixed-use. Mail surveys from retailers were conducted in these three types and in two additional types: historic building adaptive mixed-use and neighborhood mixed-use.

Based on the analyses and the literature review, a model of success factors for mixed-use projects was developed. The success factors were identified as: balance of uses (i.e., mix of store types excluding big-box retailers), public spaces (i.e., stores inter-connected, cleanliness, and atmosphere), convenience (i.e., location, parking), and target customer (i.e., tourists and local residents).

Introduction

Since its widespread development during the 1950s, the planned shopping center industry has continuously reinvented itself through innovation. Highway construction and population movement to the suburbs in the early 1950s provided a unique opportunity for developing the enclosed shopping mall. Beginning in the late 1970s, regional shopping malls added entertainment and ambiance as key strategies to compete with non-store retailers. However, by the mid 1980s, over-expanded regional malls were losing their customer base, as a result of offering a similar store product mix as identical anchor stores (Donnelly, 1995; Haynes and Talpade, 1996). In an attempt to differentiate from this cookie-cutter mold, thousands of shopping centers were revamped and repositioned. However, this differentiation process is spawning its own series of look-alike centers (Anonymous, 1999).

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Other major shopping center trends were: the factory outlet mall of the 1970s, stressing brand-name goods at lower prices; the power center of the 1980s, emphasizing convenience, value orientation, and the depth and breadth of merchandise offerings provided by category killer stores and other tenants; and the cyber mall of the 1990s, driven by the information technology revolution (Kim et al., 2003). Each of these eras was a reaction to consumer and environmental factors that transformed the appeal of shopping centers through creative innovations. Changes continue today, requiring developers, retailers, and service providers to create new types of stores and shopping centers to stay competitive.

In the 21st century, two major trends have characterized metropolitan America: the resurgence of downtown areas and renewed interest in transit use and investment (Hemakom, 2002). As a result, new urbanism, which advocates increased densities and the concentrated live-work-play environment, is contributing to the shopping center trend of the 2000s; the mixed-use development (Bartlett, 2003).

The Changing Consumer Market

The increasing interest in mixed-use development can be explained by several socio-economic factors: more single young professionals, single-parent households, childless couples, earlier retirement ages, higher disposable income, and the growing importance of working at home and telecommuting (Coupland, 1997). It is projected that childless households will continue to represent an increased share of total household growth over the next 15 years, mainly due to the large increase in empty-nester households as a result of baby boomers aging ("Multifamily Housing in Mixed Use Activity Center," 1998). Another population trend is the increasing number of career professionals who choose to remain single through their 20s and 30s, postponing the desire to relocate to family-oriented suburbs. These consumer groups will contribute significantly to the local economy as they frequent local restaurants, leisure facilities and entertainment venues more than the average consumer (Coupland, 1997).

The bipolarization of our society into two major demographic groups, higher income and lower income households, is also driving changes in retail formats. The upper 20% of households in the United States consume more goods and services than the bottom 60% of all households combined. People in the upper 20%, with their additional discretionary income, require higher-quality goods and additional services (Marks, 2002). While valuing efficiency, they are also driving the demand for more experience-based leisure activities, such as entertainment and dining out and social activities including interacting with each other and feeling part of a community (Marks, 2002).

In 1990-2000, the population within metropolitan areas increased by 14%, while the non-metropolitan population grew by 10% (U.S. Census Bureau, 2000). These demographic, lifestyle, and geographic factors support the need for successful mixed-use developments.

Mixed-use developments can be classified into five categories ("Focused Growth Alternatives," 1999):

1) Vertical mixed-use, usually multistory buildings in central city locations;

2) Town center planned mixed-use, a distinctive pedestrian-oriented district offering a strong Main Street ambiance;

3) Historic building adaptive mixed-use, typically involves converting older buildings to a new mix of uses;

4) Corridor high-density residential mixed-use, located in commercial nodes, often clustered along arterial or neighborhood corridors; and

5) Neighborhood mixed-use, contained within a relatively small geographic area with a tight network of interconnecting streets and public spaces.

According to Coupland (1997), mixed-use development must (a) have three or more significant revenue-producing uses, (b) have significant physical and functional integration (including uninterrupted pedestrian connections), and (c) be developed in conformance with a coherent plan. Other than this definition, no framework exists to justify and analyze retail investments in mixed-use developments. The challenge, then, is to develop a model that explains the success factors of mixed-use developments.

Objective of the Study

The objective of the study was to develop a model of key success factors of mixed-use developments by conducting case analyses. The case analysis approach was used because it can provide examples of successful mixed-use development from a variety of urban settings and offer practical information for planning and implementation of mixed-use developments.

The Research

The project consisted of five phases as illustrated in Table 1: (1) Literature Review, (2) Site Selection, (3) Data Collection, (4) Data Analyses, and (5) Model Development of Key Success Factors.

Table 1. Phases for case analyses of mixed-use development.

Activity	Method	Tools
Phase 1: Literature Review		
Review related literature to identify successful mixed-used developments throughout the U.S.	Secondary data analysis	Periodicals U.S. Census Bureau Industry Reports
Phase 2: Site Selection		
Select sites for each of the five types of mixed-use developments: Vertical mixed-use, Town center planned mixed-use, Corridor high-density residential mixed-use, Neighborhood mixed-use, and Historic mixed-use.	Secondary data analysis	Trade Publications Company Websites
Phase 3: Data Collection		
Retailer Survey		
Survey retailers for each of the five types of mixed-use developments: Vertical mixed-use, Town center planned mixed-use, Corridor high-density residential mixed-use, Neighborhood mixed-use, and Historic mixed-use.	Mail survey	
Consumer Survey		
Survey consumers for the following three types of mixed-use developments: Vertical mixed-use, Town center planned mixed-use, and Corridor high-density residential mixed-use.	On-site survey	
Property Manager Survey		
Survey property managers for the following three types of mixed-use developments: Vertical mixed-use, Town center planned mixed-use, and Corridor high-density residential mixed-use.	Mail Survey	
Phase 4: Data Analyses		
Retailer survey		
Survey retailers on the following perceptions: Perceptions of development trade area, Perceptions of target consumers, and SWOT.	Descriptiive Statistics Content Analysis	Frequency Percentage
Consumer data		
Survey consumers on the following perceptions: Perceptions of the shopping area, Perceptions of store attributes, and SWOT.	Descriptiive Statistics Content Analysis	Frequency Percentage
Property manager survey		
Survey property managers on the following perceptions: Perceptions of the mixed-use development, Perceptions of target consumers, Perceptions of design elements, and SWOT.	Descriptiive Statistics Content Analysis	Frequency Percentage
Phase 5: Model Development of Success Factors		
Develop a model of success factors based on data analyses and the literature review	Data analysis and content analysis from primary data. Compare the results to literature review to substantiate findings.	Data from: Retailers Consumers Property Managers

Phase 1: Literature Review

Mixed-use development, combining living, shopping and work space into one project, is nothing new. It was a predominant method of development in the U.S. until after World War II, when the downtown area was the location for many retailers and other business entities. The historical perspective of mixed-use development reveals that it has evolved in various forms, from having small-scale mixed land uses in the pre-industrial era, to increasingly mono-functional and planned areas in the industrial period, and to setting the scene for a wider mix of activities (e.g., entertainment and leisure) in the post-industrial period (Coupland, 1997).

While the popularity of mixed-use developments as an outlet for retail development has fluctuated through the years, there has been an undeniable resurgence in the demand to combine retail offerings with upscale residences in close proximity to entertainment, retail and work environments. In fact, mixed-use development has been considered a tool for downtown revitalization that can utilize opportunities to highlight a downtown's unique advantages. Hence, mixed-use developments generally focus on pedestrian-friendly environments, Main Street ambience, lifestyle-oriented merchandising, and convenient access ("Mixed-Use Projects Serve," 2000).

Mixed-use developments are a practical result of the demand to efficiently utilize buildings and provide housing above businesses (Bartlett, 2003). Mixed-use is often developed in high-density areas such as the central business district, high-use corridors, and near transit centers. They are often located on high-priced corners with convenient access because the residents typically have the income to support their preferences for smaller, upscale retailers (Marks, 2002). Despite many advantages to urban mixed-use living, there are a number of obstacles to mixed-use development as well. Possible obstacles include public-health and quality-of-life problems because of the proximity to neighbors (Angotti and Hanhardt, 2001) and possible noise filtering problems between commercial and non-commercial buildings or levels. In addition, retailers have reported concern over managing their store's image and the negative impact other retail or residential tenants might have on their desired image (Rowley, 1996).

Historically, local restaurants and shops were likely to be the first retail tenants in mixed-use developments. However, changing patterns of household development and lifestyle choices support the demand for various types of retailers. Among the examples are drug stores, offering convenience and health products to aging consumers; full-service restaurants, catering to upper income households; home furnishings and home improvement stores, assisting consumers in making their homes into sanctuaries; and retailers for selling technology-oriented products (Marks, 2002). Additionally, service-oriented retail businesses such as dry cleaners, financial, beauty, travel, insurance and medical care facilities provide a wide range of offerings (Anziani, 2002). Recently, national big-box retailers have moved out of the malls and into more urban locations in scaled-down store formats (Nadel, 2002).

Mixed-use developments have been tied to tourism and leisure in a variety of ways including, attractive physical environments, re-use of historic buildings and the conservation of area heritage (Coupland, 1997). Retailers in mixed-use developments can benefit from targeting tourists because visitors themselves provide a market for a range of services, such as cafes and restaurants, bars, shops, museums, galleries, and nightclubs (Jansen-Verbeke, 1994). Incremental retail benefits can be obtained from tourists because shopping and dining are the most popular activities among tourists; tourists spend 4-10 times more than local shoppers; and tourists are less price-sensitive and more inclined to purchase impulse items (Getz, 1993).

Although some malls have lost their customer base by over-expanding without accurate projection of changing consumer markets, a mixed-use development can adapt over time and be redeveloped for different uses, if demographics change (Fenley, 2003). This can secure an extended life for mixed-use developments compared to larger-scale traditional shopping malls that are positively managed.

Phase 2: Site Selection

Cities that have high population growth rates and have at least one mixed-use development were identified. Once cities were identified, specific mixed-use sites were chosen from these cities. Information for selecting the cities and mixed-use sites were gathered from government documents, industry reports, and the literature. A total of 13 sites geographically dispersed throughout the U.S. represented five mixed-use developments selected for the study. The five mixed-use types and examples include: vertical mixed-use, town center planned mixed-use, historic building adaptive mixed-use, corridor high-density residential mixed-use, and neighborhood mixed-use.

Phase 3: Data Collection

In order to check content validity and make adjustments prior to final data collection, a pretest was designed and distributed to 60 retailers at a town center planned mixed-use development located in the Southeast. A total of 23 retailers completed the survey. Based on the pretest, items were revised to ensure readability and a logical flow of questions.

Data for the main study were collected via a mail survey from retailers and property managers and an on-site survey from consumers. Surveys of property managers solicited information to better understand income producing components of the mixed-use development (e.g., retail, residential, and offices), competitive strategies (e.g., advertising, pricing, and special events), and perceptions of the business environment (e.g., growth, decline, and uncertainty). Surveys distributed to retailers and consumers asked for their perceptions of retail offerings, importance of store attributes, and target customers. Additionally, SWOT (Strength, Weakness, Opportunities, and Threats) analysis was completed by retailers, consumers, and property managers.

Mail surveys were completed by property managers of three mixed-use types: vertical mixed-use, town center planned mixed-use, and corridor high-density residential mixed-use. In order to increase the quality and quantity of the survey, a $100 value gift card was provided to each property manager respondent for completing the survey. For mail surveys from retailers, 13 sites representing five mixed-use types were used: vertical mixed-use (3), town center planned mixed-use (6), historic building adaptive mixed-use (1), corridor high-density residential mixed-use (1), and neighborhood mixed-use (2). As a result, a total of four completed surveys were collected from property managers (2 from town center, 1 from corridor, and 1 from neighborhood) and 88 surveys from retailers (25 from neighborhood, 3 from corridor, 17 from vertical, 41 from town center, and 2 from historic).

Consumer data were obtained from only three sites from which researchers could obtain permission to do on-site surveys. The three sites represented vertical mixed-use, town center planned mixed-use, and corridor high-density residential mixed-use. To ensure adequate sample diversity, data collection was implemented at a variety of times and days of the week. Interviewers intercepted shoppers as they were walking in the pedestrian area of the development to ask for their participation in the survey. Prospective respondents were offered a gift card valued at $5 to secure participation. A total of 96 consumers completed the survey.

Phase 4: Data Analyses

Data analysis in the form of simple tabulations was conducted on the retailer, consumer and property manager responses to determine frequencies of responses. Content analysis was used to identify themes from the SWOT responses. Comparisons were made between the frequency results and SWOT analyses to identify consistencies between respondent groups. Survey response categories were collapsed to aid in interpretation. For instance, 'strongly agree' and 'agree' were collapsed into 'agree,'; 'very important' and 'important' were collapsed into 'important.'

Retailer Responses

Examining the sample of 88 retailers, 39% were local retailers, 25% were regional chains, 25% were national chains, and 11% were international chains. The products retailers carried in their stores varied: clothing (26%), sporting goods (8%), books (7%), restaurants (25%), home décor (16%), cookware (1%), electronics (2%), personal care items (9%), food (15%), furniture (8%), and other types of products (37%). The number of employees of the retailers also varied: 5 or less (44%), 6-15 (30%), 16-25 (7%), 26-35 (3%), and 36 or more (16%). The majority (54%) of the respondents were store owners, 32% were store managers, 8% were company presidents, and 3% were assistant managers.

Participants were asked questions regarding their perception of the mixed-use development where they were located. They were asked to rate their level of agreement or disagreement with statements regarding balance of uses, public spaces, communication with the management office, location/convenience, development image and target customers. The results are shown in Table 2, Panel A.

Regarding balance of uses, 78% did not feel that mixed-use developments should include big-box retailers, and 54% did not feel that mixed-use developments should include more national chains, while 70% of the retail respondents agreed that mixed-use developments should include more local tenants. In relation to public spaces, retailers agreed customers like an outdoor shopping mall (62%), but weather affected business in an outdoor shopping area (88%). Over half of the respondents agreed that customers utilized the park-like settings, grounds were kept clean, and there were enough interconnecting sidewalks. On the other hand, 49% did not feel there were adequate public restrooms for customers. When asked about communication with the management office, retailers agreed that they had a good relationship with the management office (68%) and the management office communicated with stores through regular meetings or newsletters (65%). Related to questions concerning convenience, 69% of retailers agreed that their store was in a good location within the development, but 56% disagreed that there was adequate parking for customers. Regarding image, 83% of retailers did not feel that residential tenants negatively affected the development image and 66% did not notice noise problems within the mixed-use development. In the last category, target customers, retailers agreed that the development attracted tourists (79%), the development attracted locals (61%), and the residents who live in the development shopped at their stores (50%). Eighty-four percent of respondents agreed that they had many repeat customers and 64% agreed that the management office organized special events that boost customer traffic.

In the second section of the retailer survey, respondents were questioned about their perception of the importance of store attributes to consumers. They were asked to rate store attribute importance regarding product, convenience and service. The results are listed in Table 2, Panel B. In the product category, 51% of respondents reported that low price was not important to their customers. On the other hand, respondents perceived several product attributes as important to customers: product quality (98%), attractive displays (86%), uniqueness of product (85%), up-to-date items (82%), wide product selection (72%), and well-known brands (50%). Several convenience attributes were also perceived important: convenient location (84%), ease of parking (73%), and easy-to-locate merchandise (70%). Service was perceived to be extremely important to customers, as indicated by respondents' agreement with several attributes: friendly salespeople (99%), customer service (98%), knowledgeable salespeople (97%), and no hassle return policies (50%).

Table 2, Panel A. Retailer perception of the mixed-use development.

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Balance of Uses					
Mixed-use developments should include big box retailers such as Toys R Us, Michaels, etc.	47 (53.4%)	22 (25%)	11 (12.5%)	4 (4.5%)	4 (4.5%)
Mixed-use developments should include more national chains	27 (30.7%)	20 (22.7%)	23 (26.1%)	14 (15.9%)	4 (4.5%)
Mixed-use developments should include more local tenants	1 (1.2%)	1 (1.2%)	24 (27.8%)	38 (44.2%)	22 25.6%
Public Spaces					
Customers like an outdoor shopping mall	0	3 (3.5%)	30 (34.9%)	31 (36%)	22 (25.6%)
Weather affects business in an outdoor shopping area	1 (1.1%)	3 3.5%	7 (8.0%)	30 (34.5%)	46 (52.9%)
Customers utilize the park-like settings	2 (2.4%)	9 (10.7%)	13 (15.5%)	30 (35.7%)	30 (35.7%)
The management office ensures the grounds are kept clean	2 (2.3%)	5 (5.8%)	13 (15.2%)	32 (37.2%)	34 (39.5%)
There are enough interconnecting sidewalks between stores	3 (3.5%)	3 (3.5%)	18 (20.9%)	28 (32.6%)	34 (39.5%)
There are an adequate amount of public restrooms	25 (28.4%)	18 (20.5%)	26 (29.5%)	15 (17%)	4 (4.5%)
Customers attend the regularly scheduled community events	5 (5.8%)	4 (4.7%)	30 (34.9%)	31 (36%)	16 (18.6%)
Communication with Management Office					
The management office communicates with stores effectively	11 (12.5%)	12 (13.6%)	24 (27.3%)	31 (34.2%)	10 (11.4%)
I have a good relationship with the management office	4 (4.6%)	7 (8%)	17 (19.6%)	27 (31%)	32 (36.8%)
The management office communicates with stores through regular meetings or newsletters	9 (10.2%)	9 (10.2%)	13 (14.8%)	27 (30.7%)	30 (34.1%)
Convenience					
My store is in a good location within the development	5 (5.8%)	9 (10.4%)	13 (14.9%)	21 (24.1%)	39 (44.8%)
I feel my store would gain more business if it was in a better location within the development	22 (25.5%)	16 (18.6%)	20 (23.3%)	12 (14%)	16 (18.6%)
There is adequate parking for customers	26 (29.5%)	23 (26.1%)	13 (14.8%)	17 (19.3%)	9 (10.2%)

Table 2, Panel A. (continued)

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Image					
Residential tenants negatively affect the development image	48 (55.2%)	24 (27.6%)	10 (11.5%)	5 (5.7%)	0
I notice noise problems within this mixed-use development	24 (27.3%)	34 (38.6%)	19 (21.6%)	7 (8%)	4 (4.5%)
Target Customer					
This development attracts tourists	5 (5.7%)	3 (3.4%)	11 (12.5%)	21 (23.9%)	48 (54.5%)
This development attracts local residents	0	9 (10.2%)	25 (28.4%)	31 (35.2%)	23 (26.1%)
Residents who live in this development shop at this store	6 (6.8%)	5 (5.7%)	33 (37.5%)	22 (25%)	22 (25%)
I have many repeat customers	0	2 (2.3%)	12 (13.8%)	32 (36.8%)	41 (47.1%)
The management office works to boost customer traffic	6 (6.8%)	15 (17%)	22 (25%)	29 (33%)	15 (17%)
The management office organizes special events that boost customer traffic	7 (8.0%)	6 (6.8%)	19 (21.6%)	38 (43.2%)	18 (20.5%)

Table 2, Panel B. Retailer perception of the importance of store attributes to customers.

Store Attribute	Not Very Important	Not Important	Neutral	Important	Very Important
Product					
Low price	26 (30%)	18 (20.7%)	29 (33.3%)	9 (10.3%)	5 (5.7%)
Product quality	0	0	2 (2.3%)	23 (26.1%)	63 (71.6%)
Wide product selection	2 (2.3%)	1 (1.1%)	21 (23.9%)	39 (44.3%)	25 (28.4%)
Uniqueness of product	1 (1.1%)	0	12 (13.6%)	21 (23.9%)	54 (61.4%)
Up-to-date items	2 (2.3%)	3 (3.4%)	10 (11.4%)	28 (31.8%)	45 (51.1%)
Attractive displays	1 (1.1%)	1 (1.1%)	10 (11.6%)	33 (37.9%)	42 (48.3%)
Well-known brands	9 10.6%)	5 (5.9%)	20 (23.5%)	23 (27.1%)	28 (32.9%)
Convenience					
Convenient location	1 (1.1%)	2 (2.3%)	11 (12.5%)	43 (48.9%)	31 (35.2%)
Ease of Parking	1 (1.1%)	3 (3.4%)	20 (22.7%)	30 (34.1%)	34 (38.6%)

Table 2, Panel B. (continued)

Store Attribute	Not Very Important	Not Important	Neutral	Important	Very Important
Easy-to-locate merchandise	2 (2.3%)	3 (3.5%)	21 (24.4%)	36 (41.9%)	24 (27.9%)
Service					
Customer service	0	0	2 (2.3%)	18 (20.5%)	68 (77.3%)
No hassle return policy	15 (17.4%)	5 (5.8%)	23 (26.7%)	21 (24.4%)	22 (25.7%)
Friendly sales people	0	0	1 (1.1%)	16 (18.2%)	71 (80.7%)
Knowledgeable sales people	0	0	3 (3.4%)	20 (22.7%)	65 (73.9%)

Finally, retailer participants were asked to list strengths, weaknesses, opportunities, and threats associated with the development where they were located. Of the 67 retailer respondents who completed the SWOT analysis, the most frequent responses are listed in Table 2, Panel C. Strengths of the development mentioned by many respondents included: mix of stores (36%), atmosphere (31%), location (31%), uniqueness (19%), good restaurants (10%), and tourist attraction (10%). Several weaknesses of the development were also listed: mix of stores (34%), parking (25%), management (18%), weather (9%), and high rent (7%). Opportunities of the development were identified as advertising/marketing (21%), mix of stores (16%), and more scheduled events (7%). Threats to the development addressed were: competition (27%), mix of stores (21%), parking (15%), weather (15%), and management (7%).

Consumer Responses

Examining the demographic characteristics of the sample of 96 consumer respondents, 66% of respondents were female and 52% were married. The consumer respondents represented 72% Caucasian/white, 9% African American/black, 6% Asian, 6% Multi-racial, 3% Spanish/Hispanic/Latino, 1% Native Hawaiian or other Pacific Islander, and 2% Other. Respondents also represented a wide spectrum of age categories: 18-24 years old (8%), 25-34 years old (22%), 35-44 years old (29%), 45-54 years old (21%), 55-64 years old (9%), and over 65 years old (1%). The largest number of respondents (38%) reported an annual household income of over $100,000, followed by $50,000-$99,999 (31%) and less than $49,999 (26%). In terms of residential area, 6% lived less than a mile away from the shopping area; 20%, 1-3 miles; 16%, 4-5 miles; 25%, 5-10 miles; and 32%, over 10 miles from the shopping area.

Table 2, Panel C. Retailer SWOT analysis.

	Town Center	Vertical	Corridor	Neighborhood	Total
	(n = 31)	(n = 11)	(n = 2)	(n = 23)	(n = 67)
Strenths					
Mix of stores	14 (45.2%)	4 (36.4%)	1 (50%)	5 (22%)	24 (36%)
Atmosphere	8 (25.8%)	8 (72.7%)	1 (50%)	4 (17%)	21 (31%)
Location	11 (35.5%)	5 (45.5%)	1 (50%)	4 (17%)	21 (31%)
Uniqueness	5 (16.1%)	2 (18.2%)	0	6 (26%)	13 (19%)
Good restaurants	5 (16.1%)	2 (18.2%)	0	0	7 (10%)
Tourist attraction	1 (3.2%)	2 (18.2%)	0	4 (17%)	7 (10%)
Weaknesses					
Mix of stores	16 (51.6%)	3 (27.3%)	0	4 (17%)	23 (34%)
Parking	7 (22.6%)	1 (9.1%)	2 (100%)	7 (30%)	17 (25%)
Management	6 (19.3%)	0	0	6 (26%)	12 (18%)
Weather	4 (12.9%)	2 (18.2%)	0	0	6 (9%)
High rent	4 (12.9%)	0	0	1 (4%)	5 (7%)
Opportunities					
Advertising/Marketing	8 (25.8%)	1 (9.1%)	0	5 (22%)	14 (21%)
Mix of stores	7 (22.6%)	2 (18.2%)	0	2 (9%)	11 (16%)
More scheduled events	0	2 (18.2%)	1 (50%)	2 (9%)	5 (7%)
Threats					
Competition	11 (35.5%)	1 (9.1%)	0	6 (26%)	18 (27%)
Mix of stores	9 (29%)	2 (18.2%)	1 (50%)	2 (9%)	14 (21%)
Parking	6 (19.3%)	1 (9.1%)	0	3 (13%)	10 (15%)
Weather	4 (12.9%)	1 (9.1%)	1 (50%)	4 (17%)	10 (15%)
Management	3 (9.7%)	0	0	2 (9%)	5 (7%)

Note. No SWOT responses from retailers (n = 2) of Historical Building Adaptive Mixed-Use.

Consumer shopping patterns were examined next. Types of stores in the development respondents shopped in were: clothing stores (79%), food stores (52%), home décor stores (46%), sporting goods stores (41%), personal care stores (38%), bookstores (35%), electronics stores (25%), furniture stores (25%), and cookware stores (20%). Eighty percent of these respondents indicated they patronized restaurants in the development. In terms of shopping frequency in the development, 30% shopped once a week, 16% shopped twice a week, 15% shopped once a month, 33% shopped twice a month, 4% shopped every other month, and 2% of consumer respondents shopped once a year.

Consumer respondents were asked questions regarding their perception of the shopping area in which they were currently visiting. The results of consumer perceptions of the development are located in Table 3, Panel A. Regarding balance of uses, 62% disagreed that the development should include more large retailers, 31% were neutral about the statement that the development should include more national chains, and 44% of consumer respondents were neutral about the statement that the development should include more local tenants. In relation to public spaces, 76% of consumers liked an outdoor shopping area. There was inconsistency regarding how weather affected their patronage to an outdoor shopping area; 41% felt weather affected their patronage and 31% did not. The same was true for utilization of park-like settings; 41% agreed they used park-like settings but 43% did not. Over 80% of consumers agreed that the grounds were kept clean and that there were enough interconnecting sidewalks. On the other hand, 34% were neutral toward the statement that there were adequate public restrooms.

When asked about communication with the stores, approximately 40% disagreed that they received communication from stores regarding promotions, 57% did not notice advertising for the shopping area. Related to questions concerning convenience, 66% agreed that the location of the shopping area was a primary reason they shopped there, and 81% agreed that stores within the shopping area were all easily accessible. Forty-six percent of consumer respondents agreed that there was adequate parking in the shopping area. Regarding image, 64% of respondents disagreed that residential tenants negatively affected the area's image and 72% did not notice noise problems within the shopping area. In the last category, target customers, 39% of respondents were neutral about the statement that the development attracts tourists, 76% agreed that the shopping area attracted locals, and 81% of the respondents were repeat customers to the shopping area. The primary reason they shopped there was uniqueness of the shopping area (60%), not low prices (46%).

Table 3, Panel A. Consumer perception of the mixed-use development.

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Balance of Uses					
This shopping area should include more large retailers such as Toys R Us, Michaels, etc.	41 (42.7%)	18 (18.8%)	20 (20.8%)	12 (12.5%)	5 (5.2%)
This shopping area should include more national chains	17 (17.9%)	21 (22.1%)	29 (30.5%)	21 (22.1%)	7 (7.4%)
This shopping area should include more local tenants	6 (6.3%)	17 (17.7%)	42 (43.8%)	20 (20.8%)	11 (11.5%)
Public Spaces					
I like an outdoor shopping area	2 (2.1%)	8 (8.3%)	13 (13.5%)	26 (27.1%)	47 (49.0%)
Weather affects my patronage to an outdoor shopping area	14 (14.7%)	22 (23.2%)	20 (21.1%)	21 (22.1%)	18 (18.9%)
I utilize the park-like settings in this shopping area	22 (22.9%)	19 (19.8%)	16 (16.7%)	18 (18.8%)	21 (21.9%)
The grounds in this shopping area are kept clean	1 (1.1%)	0	8 (8.4%)	42 (44.2%)	44 (46.3%)
There are enough interconnecting sidewalks between stores	3 (3.1%)	9 (9.4%)	8 (8.3%)	38 (39.6%)	38 (39.6%)
There is an adequate amount of public rest-rooms in this shopping area	14 (14.9%)	26 (27.7%)	32 (34.0%)	14 (14.9%)	8 (8.5%)
I am aware of the special events at this shopping area (e.g., concerts)	23 (24.5%)	17 (18.1%)	27 (28.7%)	19 (20.2%)	8 (8.5%)
Communication					
I receive communication from stores in this shopping area regarding promotions (e.g., sales, coupons)	21 (22.1%)	17 (17.9%)	24 (25.3%)	24 (25.3%)	9 (9.5%)
I notice advertising for this shopping area (e.g., billboards)	24 (25.3%)	30 (31.6%)	25 (26.3%)	9 (9.5%)	7 (7.4%)
I am aware of the professional offices in this shopping area (e.g., doctor's office, lawyer, accountant)	19 (20.0%)	18 (18.9%)	21 (22.1%)	19 (20.0%)	18 (18.9%)
I am aware of things this shopping area does to boost customer traffic (e.g., special events, frequent shopper points)	17 (17.7%)	19 (19.8%)	31 (32.3%)	17 (17.7%)	12 (12.5%)
Convenience					
The location of this shopping area is a primary reason I shop here	6 (6.3%)	8 (8.3%)	19 (19.8%)	27 (28.1%)	36 (37.5%)
The stores within this shopping area are all easily accessible	4 (4.2%)	5 (5.2%)	10 (10.4%)	44 (45.8%)	33 (35.4%)
There is adequate parking in this shopping area	16 (16.7%)	16 (16.7%)	20 (20.8%)	22 (22.9%)	22 (22.9%)
Image					
Residential tenants negatively affect the area's image	36 (39.6%)	22 (24.2%)	21 (24.1%)	9 (9.9%)	3 (3.3%)

Table 3, Panel A. (continued)

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I notice noise problems within this shopping area	33 (34.4%)	36 (37.5%)	15 (15.6%)	8 (8.3%)	4 (4.2%)
Target Customer					
This shopping area attracts tourists	5 (5.2%)	15 (15.6%)	37 (38.5%)	19 (19.8%)	20 (20.8%)
This shopping area attracts locals	4 (4.3%)	3 (3.2%)	16 (17.2%)	34 (36.6%)	36 (38.7%)
I am a repeat customer to this shopping area	1 (1.1%)	6 (6.3%)	11 (11.6%)	24 (25.3%)	53 (55.8%)
The low prices in this shopping area are a primary reason I shop here	19 (19.8%)	35 (36.5%)	25 (26.0%)	11 (11.5%)	6 (6.3%)
The uniqueness of the shopping area is a primary reason I shop here	4 (4.2%)	11 (11.5%)	23 (24.0%)	33 (34.4%)	25 (26.0%)

Table 3, Panel B. Consumer perception of the importance of store attributes.

Store Attribute	Not Very Important	Important	Neutral	Important	Very Important
Product					
Low price	5 (5.2%)	8 (8.3%)	35 (36.5%)	19 (19.8%)	29 (30.2%)
Product quality	0	0	3 (3.1%)	24 (25.0%)	69 (71.9%)
Wide product selection	0	2 (2.1%)	13 (13.5%)	28 (29.2%)	53 (55.2%)
Uniqueness of product	0	6 (6.4%)	21 (22.3%)	24 (25.5%)	43 (45.7%)
Up-to-date items	0	2 (2.1%)	9 (9.4%)	27 (28.1%)	58 (60.4%)
Attractive displays	2 (2.1%)	5 (5.3%)	18 (18.9%)	38 (40.0%)	32 (33.7%)
Well-known brands	3 (3.1%)	4 (4.2%)	21 (22.9%)	24 (36.5%)	43 (33.3%)
Convenience					
Convenient location	0	3 (3.0%)	22 (13.5%)	35 (35.4%)	32 (47.9%)
Ease of Parking	2 (2.1%)	3 (3.1%)	17 (17.7%)	32 (33.3%)	42 (47.8%)
Easy-to-locate merchandise	0	2 (2.1%)	14 (14.6%)	30 (31.3%)	50 (52.1%)
Service					
Customer service	0	0	4 (4.2%)	32 (33.3%)	60 (62.5%)

Table 3, Panel B. (continued)

Store Attribute	Not Very Important	Important	Neutral	Important	Very Important
No hassle return policy	0	6 (6.3%)	8 (8.4%)	24 (25.3%)	57 (60.0%)
Friendly sales people	0	1 (1.0%)	4 (4.2%)	27 (28.1%)	64 (66.7%)
Knowledgeable sales people	0	1 (1.0%)	7 (7.3%)	24 (25.0%)	64 (66.7%)

Table 3, Panel C. Consumer SWOT analysis.

	Town Center (n = 30)	Vertical (n = 16)	Corridor (n = 44)	Total (n = 90)
Strengths				
Mix of stores	20 (66.7%)	4 (25%)	14 (31.8%)	38 (42.2%)
Atmosphere	1 (3.3%)	5 (31.3%)	14 (31.8%)	20 (22.2%)
Access	3 (10%)	1 (6.3%)	7 (15.9%)	11 (12.2%)
Restaurants	1 (3.3%)	1 (6.3%)	8 (18.2%)	10 (11.1%)
Transportation	0	4 (25%)	0	4 (4.4%)
Weaknesses				
Parking	2 (6.7%)	5 (31.3%)	21 (47.7%)	28 (31.1%)
Mix of stores	1 (3.3%)	7 (43.8%)	4 (9.1%)	12 (13.3%)
Traffic	9 (30%)	0	0	9 (10%)
Access	7 (23.3%)	1 (6.3%)	0	8 (8.9%)
Opportunities				
Mix of stores	4 (13.3%)	6 (37.5%)	12 (27.2%)	22 (24.4%)
Parking	1 (3.3%)	0	5 (11.4%)	6 (6.7%)
Atmosphere	4 (13.3%)	0	0	4 (4.4%)
Threats				
Parking	1 (3.3%)	2 (12.5%)	10 (22.7%)	13 (14.4%)
Traffic	5 (16.7%)	0	5 (11.4%)	10 (11.1%)
Mix of stores	6 (20%)	0	2 (4.5%)	8 (8.9%)
Clientele	0	7 (43.8%)	0	7 (7.8%)

In the second section of the survey, consumers were asked to rate the importance of store attributes related to product, convenience and service. Consumer perceptions of the importance of store attributes are listed in Table 3, Panel B. Several product attributes were perceived important: product quality (97%), wide product selection (84%), up-to-date items (88%), attractive displays (74%), uniqueness of product (72%), well-known brands (70%), and low price (50%). Convenience was also very important as indicated by several attributes with high percentages of agreement: convenient location (83%), easy-to-locate merchandise (83%), and ease of parking (81%).

As in the case of retailers, consumers also perceived service extremely important in terms of customer service (96%), friendly salespeople (95%), knowledgeable salespeople (92%), and no hassle return policies (85%). Participants were also asked to list strengths, weaknesses, opportunities and threats associated with the development in which they were currently visiting. Of the 90 consumer respondents who completed the SWOT analysis, the most frequent responses are listed in Table 3, Panel C. Most of the respondents indicated various strengths: mix of stores (42%), atmosphere (22%), access (12%), restaurants (11%), and transportation (4%). These respondents also identified several weaknesses: parking (31%), mix of stores (13%), traffic (10%), and access (9%). Opportunities were identified as: mix of stores (24%), parking (7%), and atmosphere (4%). Threats addressed were: parking (14%), traffic (11%), mix of stores (9%), and clientele (8%).

Property Manager Responses

Among the four property managers, two were from town center planned mixed-use developments, one was from a corridor high density mixed-use development, and one was from a vertical mixed-use development. The overall average percentage breakdown of the development tenant mix was reported as: 48% retail, 17% residential, 8% entertainment, and 27% offices. The occupancy rate average was 96%. Three property managers estimated the development's trade area as over 10 miles and one estimated the radius to be 1-3 miles. The property managers estimated the age category of the largest percentage of the population within the development's trade area to be 35 to 54 years of age.

Property managers were asked questions regarding their perception of the mixed-use developments in which they were currently working. Since the sample size of property managers was so small ($n = 4$), an overview of the most frequent responses will be reported here. When asked about balance of uses, three property managers did not feel that mixed-use developments should include more big-box retailers or national chains. Furthermore, three respondents were neutral on the statement that mixed-use developments should include more local tenants. Regarding questions about public spaces, all property manager respondents agreed that customers liked an outdoor shopping mall, green spaces were frequently used, customers utilized the park-like settings, and there were enough interconnecting sidewalks.

There was not a consistent response for the statements regarding convenience factors (i.e., adequate parking and adequate public restrooms). When replying to questions about development image, all property manager respondents felt that residential tenants did not negatively affect the development image and all disagreed with the statement that there were noise problems within their mixed-use development. In response to questions about the target customer, all property manager respondents indicated agreement that the development attracted tourists, local residents, residents from the development, and that there were many repeat customers.

In the second section of the survey, managers were asked to rate the importance of each attribute regarding product, convenience and customer service. In relation to product attributes, three property managers indicated that low price was not very important to customers, while one felt it was important. All property managers agreed on the importance of product quality, uniqueness of product, up-to-date items, and well-known brands. With regard to questions concerning convenience, the property managers displayed split responses of neutral, important, and very important to store attributes of convenient location, ease of parking, and easy-to-locate merchandise. The service attributes property managers perceived important were: customer service, friendly sales people, and knowledgeable sales people.

In the third section of the survey, property managers were asked to rate the importance of specific design elements in a mixed-use development. All four property managers rated uniqueness, aesthetics, modernization, Main Street ambiance, and pedestrian-friendly as important elements to mixed-use developments.

Finally, property managers were asked to list strengths, weaknesses, opportunities and threats associated with the development in which they were working. The most frequent response by property managers for a strength was "mix of stores," the most frequent weakness listed was "parking," and the most frequent threat was "competition."

Comparison of Frequency and SWOT Analysis

Agreements with "outdoor shopping," and disagreement with "image" and "noise problems," were consistently reported in the survey questions regarding perceptions of the mixed-use development by all three groups of respondents: retailers, consumers and property managers. Regarding store characteristics, all three groups reported "product quality" as very important; they reported "customer service," "friendliness," "knowledgeable salespeople," "convenient location," "easy-to-locate merchandise," "product uniqueness," "selection," "up-to-date items," and "attractive displays" as important. The strength, "mix of stores" and the weakness, "parking" were responses included most frequently in the SWOT analysis of all three groups of respondents.

Inconsistencies among responses to questions regarding the importance of store attributes of retailers, consumers and property managers were also found. "Low price" was a store attribute listed as not very important by retailers (51%) and property

managers (75%), but important according to consumers (50%). Another inconsistency in responses was "ease of parking." Eighty-one percent of consumers and 73% of retailers reported "ease of parking" important, but only 50% of property managers reported it as important and the other 50% reported "ease of parking" as neutral. "No hassle return policy" was rated very important by 60% of consumer respondents, important by 50% of retailers, but had mixed responses from property managers. Further, "attractive displays" was reported as important to 74% of consumers and 86% of retailers, but neutral to 50% of property managers.

There were inconsistencies in consumer, retailer and property manager perceptions of the mixed-use development for weather, balance of uses and parking. Eighty-eight percent of retailers and 75% of property managers agreed that weather affects business in an outdoor shopping area, yet only 41% of consumers agreed that weather affects their patronage of an outdoor shopping area. All three groups agreed that the development should not include more big-box retailers, and 50% of property managers reported that mixed-use developments should include more national chains. While 70% of retailer respondents reported that mixed-use developments should include more local tenants, 44% of consumers and 75% of property managers were neutral on this statement. Fifty-six percent of retailer respondents disagreed with the statement that there was adequate parking in the development, yet 46% of consumers agreed that there was adequate parking, and 50% of property managers reported there was adequate parking. This information is slightly incongruent with the SWOT analysis that reported parking as a weakness by all three groups of respondents.

Understanding some of the inconsistencies in responses could be illuminated by observing the demographics of the respondents. The highest percentage of retailer respondents (39%) was from local retailers; therefore it follows that they would promote more local stores in mixed-use developments. Further, the revenue generated by national chain stores is most likely the largest business opportunity for property managers, therefore their response to include more national chain stores can be seen as self-preserving. Another incongruity in the results emerged as primary data were compared to the literature. The literature suggests possible noise filtering problems between commercial and non-commercial buildings or levels and possible negative impacts residential tenants have on retailers' desired image (Rowley, 1996). The results of the primary data collected indicate that residential tenants did not negatively affect the development image and there were no noticeable noise problems within the development.

Table 4. A model of key success factors for mixed-use development.

Balance of Uses	Public Spaces	Convenience	Target Customer
Mix of store types, excluding big-box retailers	Stores interconnected	Location	Tourists
Atmosphere	Cleanliness	Parking	Local residents of the development

Phase 5: Model Development of Key Success Factors

To develop a holistic model, the research team drew inferences from data collected from retailers, consumers, and property managers. In addition, the team reflected on key findings from previous research. Based on our analyses and the literature review, the research team developed a Model of Key Success Factors for Mixed-Use Development, which can be seen in Table 4.   Analyzing frequency of responses from the data, the most frequent and consistent ratings by consumers, retailers and property managers were selected for model development. The success factors were identified as: balance of uses (i.e., mix of store types excluding big-box retailers), public spaces (i.e., stores inter-connected, cleanliness, and atmosphere), convenience (i.e., location and parking), and target customer (i.e., tourists, locals, and residents of the development). Thus, the model encompassed retail environment, retail market, and consumer factorsAlthough these key success factors are simple in nature, they validate and confirm anecdotal and trade reports. Data from all three respondent groups (i.e., retailers, consumers, and property managers) supported this model. This convergence of results from these varied perspectives has not been previously reported in the literature.

Implications

One of the major trends in retail shopping venues today is mixed-use development. More and more of this type of development are appearing across the United States; therefore, it is essential, for strategic planning, to identify key success factors for mixed-use developments from the perspective of the property manager, retailer and consumer. This study identified key success factors relative to balance of uses, public spaces, convenience and the target customer.

From the property manager/developer perspective, it would be important to use this information to enhance strengths and correct problems within the development. For example, creating a unique atmosphere is an important success factor. This could be accomplished through a theme incorporated in the name, design and promotions of the development. It could also be accomplished through creating a "main street" feeling through architecture, landscaping, etc. In addition, property managers should understand the needs and frustrations of consumers, and attempt to address these needs. For example, consumers reported parking as important; therefore, property managers should make efforts to meet this consumer need.

As a retail manager, the results are also important because the success factors could be paramount to the decision to locate within a mixed-use development. For example, a retailer should examine the store mix, making sure a balance of store types that drive consumer traffic is present before deciding to locate within a particular development. Retailers should also evaluate their product mix to ensure that it would appeal to tourists, locals, and residents of the development. This would require a thorough understanding of the lifestyles, attitudes, and/or product preferences of consumers. This could be determined through the collection of primary data, retail characteristics of the shopping area, or demographic information about local consumers.   Results indicated that retailers did not always know what the consumer wanted as illustrated in the discrepancies between the perceptions of retailers and consumers. For example, over 50% of the retailers did not feel low price was important to consumers, but over 50% of the consumers indicated that low price was important. These discrepancies are likely results of the lack of communication between retailers and consumers. It is critical for a retail manager to determine, from their target customer's perspective, what store attributes are important. After identifying the attributes that are important to the target consumer, steps could be taken to better meet the consumer's needs.

References

Angotti, T., and E. Hanhardt (2001), "Problems and Prospects for Healthy Mixed-Use Communities in New York City," *Planning Practice and Research*, 16, 145-154.

_____ (1999), "Redesigning for the Future," *Chain Store Age*, 75(8), 122-126.

Anziani, R. (2002), "Town Centers: It's All in the Mix," *Shopping Center World*, (May), 210-211.

Bartlett, R. (2003), "Testing the 'Popsicle Test': Retailing of Retail Shopping in New Traditional Neighborhood Development," *Urban Studies*, 40(8), 1471-1485.

Coupland, A. (1997), *Reclaiming the City: Mixed-Use Development*, London: E & FN SPON.

Culp, L. (2003), "Mixed Results for Mixed-Use," *National Real Estate Investor*, 45(8), 24-28.

Donnelly, H. (1995), "Entertaining Questions," *Stores*, 77(7), 8.

Fenley, G. (2003), "Reinventing the Mall," *Display & Design Ideas*, 15(4), 20-23.

_____ (1999), "Focused Growth Alternatives: Mixed-Use Case Studies," Leland Consulting Group, (March).

Getz, D. (1993), "Tourist Shopping Villages: Development and Planning Strategies," *Tourism Management*, (February), 15-26.

Haynes, I. B. and S. Talpade (1996), "Does Entertainment Draw Shoppers?" *Journal of Shopping Center Research*, 3(2), 29-48.

Hemakom, R. (2002,), "New Directions," *Journal of Housing and Community Development*, 59(September/October), 32-40.

Kim, Y-K., P. Sullivan, C. Trotter and J. Forney (2003), "Lifestyle Shopping Center: A Retail Evolution of the 21st Century," *Journal of Shopping Center Research*, 10(2), 61-94.

Marks, D. (2002), "Retail Industry Continues to Consolidate Due to More Efficient Retailers and Changes in Consumer Values," *Shopping Center World*, 31(5), 142-143.

McMahon, E. T. (1999), "Smart Growth Trends," *Planning Commissioners Journal*, 33(Winter), 4-5.

"Mixed-Use Projects Serve," (2000), *Chain Store Age*, (January), 144-148.

"Multifamily Housing in Mixed Use Activity Center," (1998), National Multi Housing Council.

Nedel, B. (2002), "Big Box in the Big City," *Shopping Center World*, 27-34.

Rowley, A. (1996), "Mixed-Use Development: Ambiguous Concept, Simplistic Analysis and Wishful Thinking?," *Planning Practice and Research*, 11(December), 85-97.

_____ (2001), 2001 U.S. Census Bureau.. U.S. Department of Commerce.