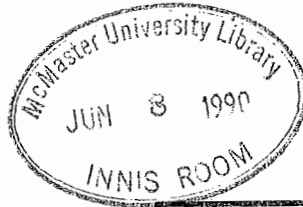# FACULTY OF BUSINESS

RESEARCH AND WORKING PAPER SERIES

Modeling the Tourist's Urban
Experience: A New Approach to
International Tourism Product
Development Based on
Urban Quality of Life

by

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CANADA

Modeling the Tourist's Urban Experience:

A New Approach to International Tourism Product Development

Based on Urban Quality of Life

A new way of identifying key strategic variables for the development and
international marketing of a nation's urban tourism products is conceptual-
ized. The attractiveness of cities is assessed from numerous urban livability
measures and subjective importance weights obtained from a survey of foreign
tourists. This urban attractiveness index forms part of a causal model of the
urban tourist's experience, and identifies factors causing variations in
tourist satisfaction with a visit to a city. The model would enable strategic
planners to specify the antecedents of urban tourist satisfaction with greater
precision. This would indicate the appropriate means of marketing a country's
major cities, for the purpose of international tourism development.

THE PROBLEM

The growing influence of a global economy on the affairs of nations is

particularly visible in the sphere of international tourism. Many countries

are currently at the threshold of a comprehensive international tourism policy

and strategic planning is gaining in importance for managers in a country's

tourism industry. Faced with this situation, strategic planners and managers

who have a futuristic orientation toward international tourism must practice a

higher level of marketing professionalism, based on reliable research, in

order to compete internationally (see, for example, Tourism Tomorrow: Towards

a Canadian Tourism Strategy 1985).

The type of research required focuses on two important problems. Every

country has a set of tourism products that are attractive, to various degrees,

to international tourists. These products may be its national parks and

wildernesses, its architectural accomplishments, geographic location or

climate, entertainment centres, historic sites, or its towns and cities.

Thus, one problem is devising procedures to assess the attractiveness of its

tourism products against some established standard, so that strategic planners

and marketers will know where they can best compete internationally. In

particular, a country's most internationally competitive tourism products and travel generators may well be its large cities, because of the sophisticated urban experiences they can offer, and a standardized assessment of urban attractiveness could reveal this. Yet, very little work has been done to formally measure and represent the overall attractiveness of a country's urban tourist destinations, in terms of the availability and variety of their core attractions, unique environments, special facilities, ancillary services and infrastructure.

A second research problem is obtaining information on the urban tourist's experience. As the next section will show, there is also very little rigorous, research-generated knowledge about the experiential nature of an international tourist's visit to the city and the antecedents or causes of satisfaction or dissatisfaction with the urban visit. What is needed here is a better understanding of the relationships among an urban visitor's prior expectations, actual experiences and post-visit satisfaction. In summary, without a standardized assessment of a country's urban tourism products—namely, its cities—planners and marketers cannot know where their competitive strengths or weaknesses lie in the highly competitive arena of international tourism. Furthermore, without a conceptual model of the urban tourist's experience, marketing practitioners and government policy-makers are hampered in any systematic effort to develop, market and promote a nation's internationally competitive cities for the purpose of tourism.

This paper addresses both problems. It develops a method for systematically measuring a city's touristic attractiveness, and incorporates this measure in a causal model to explain the level of a tourist's satisfaction with the urban visit. Such a model highlights the important experiential variables leading to tourist satisfaction or dissatisfaction and suggests key

strategic variables for a city's international tourism marketing efforts.

THEORETICAL APPROACH

Measuring Urban Attractiveness

Surprisingly little research has been done, to date, to develop measures of the attractiveness of cities, for the purpose of tourism development. Husbands (1983) addressed the problem of inferring the touristic attraction of entire countries by analyzing data on tourist flows between countries and then deriving an "attraction scale" from this spatial analysis. A similar geographer's approach was taken by Pearce and Elliott (1983), who developed a "Trip Index," which relates the number of nights spent at a destination, to the total length of a trip or holiday, in order to infer, to a somewhat limited degree, the attractiveness of a city and a national park. Sarramea (1980) devised and tested a marine-climate index (based on climatic factors and sea water temperature) for French seaside resort towns in order to estimate their attractiveness to tourists at different times of the year.

A literature search revealed only two studies that made any attempt to quantify and operationalize an overall assessment of touristic attractiveness for a particular geographic region. Gearing, Swart and Var (1974) proposed and developed a set of 17 criteria for measuring the attractiveness of touristic areas in Turkey, then used the judgements of 26 tourism experts to assign importance weights to each criterion. These weights were multiplied by the experts' evaluations of different touristic areas and an overall score of touristic attractiveness was derived for each area. Applying this same conceptual framework and approach to measure touristic attractiveness, Var, Beck and Loftus (1977) established a set of weighted attractiveness scores specifically for several large touristic regions and several smaller touristic districts in British Columbia. The study found a close correlation between

the attractiveness indices and the volume of nonresident visitors to British Columbia staying in each touristic region. Both studies used the same 17 criteria to evaluate touristic attractiveness (Table 1).

Table 1

General Criteria for Evaluating Touristic Attractiveness

Group Heading	Criterion
Natural Factors	Natural beauty Climate
Social Factors	Artistic and architectural features Festivals Distinctive local features Fairs and exhibits Attitudes toward tourists
Historical Factors	Native historical settlements Religious significance Historical prominence

Recreational and Shopping
  Facilities
	Sports facilities
	Educational facilities
	Facilities conducive to health,
	  rest, and tranquility
	Nighttime recreation
	Shopping facilities

Infrastructure and Food
  and Shelter
	Infrastructure above minimal
	  touristic quality
	Food and lodging facilities
	  above minimal touristic quality

(From Gearing, Swart & Var 1974)

Finally, Ritchie and Zins (1978) based their study on this same set of criteria, in order to determine their relative importance to the overall attractiveness of a tourism region. The opinions of tourism and cultural affairs experts were used to obtain importance measures for these criteria, as well as for 12 elements of the cultural attractiveness of a region, i.e., handicrafts, language, traditions, gastronomy, art/music, history, work,

architecture, religion, education, dress, and leisure activities. However, the study did not report any attempt to actually evaluate the touristic attractiveness of a particular region, on the basis of the weighted criteria.

It can be argued that most of the criteria which determine the attractiveness of a city to its citizens, to migrant workers, to investors, to corporate employees and to retirees will also be of consequence to the urban tourist. For example, as Gunn (1972, pp. 60-61) points out, "Fortunately, many of the things citizens want for their cities are the same things desired by tourists...the answer really is a simple one--perhaps too simple to be recognized. The kinds of cultural and economic goals the people of a community and its environs set for themselves can be the most productive in creating the metropolitan area most tourists want to see." It is not hard to see the interrelationship between the resources, facilities, attractions and infrastructure sought by citizens and those sought by visitors, and these, therefore, become a part of tourism planning (Gunn 1979, p. 313).

The point being made, here, is that city livability measures should form the conceptual basis of measures of a city's attractiveness for international urban tourism. Thus, a method of assessing city livability, quality of life, or degree of urban sophistication (in the cultural, leisure, transportation, safety and security, housing and accommodation, economic, health, educational and recreational domains) is a valuable tool for compiling inventories of urban tourism resources and describing their touristic appeal. What follows is a summary of some studies and problems related to the measurement of city attractiveness or livability, or urban life quality.

Two general methods have been used to measure human well-being in a city. One method uses objective standard-of-living variables such as number of telephones per capita, crime rates, pollution indices, percent of budget spent on education, and so forth. A contrasting approach is the measurement of

subjective well-being, as reported in the quality-of-life and social indicators research literature. The subjective method is based upon surveys of citizens' perceptions of their happiness or satisfaction with various domains of life (e.g., Abbey & Andrews 1985; Campbell et al. 1976; Headey 1983; Michalos 1980). Recently, several writers have taken a comparative approach to urban livability, employing both objective and subjective criteria to compile livability ratings for different cities (e.g., Bowman, Giuliani & Minge 1981; Boyer & Savageau 1985; Sunbelt Retirement 1978). These books have been aimed primarily at retirees and at groups wishing to relocate within a country. Blouin's (1983) study contrasted the quality of life in Montreal against that of Toronto by rating each city's performance on over a hundred objective and subjective variables related to culture and leisure, transportation, safety, accommodation, economy, outdoor recreation, health and education.

Two problems arise with these comparative rating methods. First, there is no standardized set of variables on which to perform the urban livability measurements; nor is there a standardized procedure for measuring the variables. Each study has used its own set of variables and measurement approaches to rate the different cities. Second, the question of what weights to assign to each variable has not been resolved. Several studies have derived overall urban livability scores by a simple aggregation of variables, with no regard to the relative importance of each factor to individual citizens (e.g., Blouin 1983; Boyer & Savageau 1985; Flax 1970). Some have provided a city's ratings on each variable and have suggested a primitive weighting scheme, leaving it to the reader to derive overall livability scores (e.g., Bowman, Giuliani & Minge 1981). Others have suggested that the variables could be assigned weights by experts, using either the Delphi technique, in order to arrive at a consensus (Gunn 1979, p. 272), or a

systematic method of computing the average of the many experts' normalized

weights (Gearing, Swart & Var 1974). A fourth approach in calculating the

overall livability scores has been to obtain the weights for each variable

from a survey of citizens (Pierce 1984) or to ask the inhabitants of an urban

residential area to rate the area on each livability variable, in addition to

providing its importance weight (Martineau 1976). This fourth approach seems

intuitively more acceptable, since an urban livability index derived with

citizens' weights would reflect the priorities of citizens, themselves.

It is the approach proposed in this paper, i.e., to represent the

subjective importance weights of the individual tourist, or even of a tourist

segment, in the calculations of a city's attractiveness for urban tourism.

Modeling the Urban Tourist's Experience

Urban attractiveness is only one dimension of the urban tourism

experience. A review of the consumer behavioral and tourism research

literature on satisfaction/dissatisfaction suggests that the interrelationship

between the tourist's urban experience, prior expectations and satisfaction

can be modeled as in Figure 1. The model is supposed to represent the causes

of variations in tourist satisfaction (S) with an urban tourism product.

Theoretical constructs are represented as circles and are essentially the

unobservables of the tourism experience. The hypothesized relationships among

these constructs are represented by the arrows leading from one circle to

another. Each connecting arrow bearing a parameter represents one

equation (i.e., causal relationship) in a system of simultaneous equations.

Non-connecting arrows and their parameters represent the error terms in these

equations. Hypothesized correlational relationships have been drawn as curved

line segments. The squares indicate operational definitions of the

theoretical constructs, i.e., empirical procedures for representing and

measuring the underlying constructs, via self-report or questionnaire.

Figure 1

A Causal Model of the Urban Tourism Experience
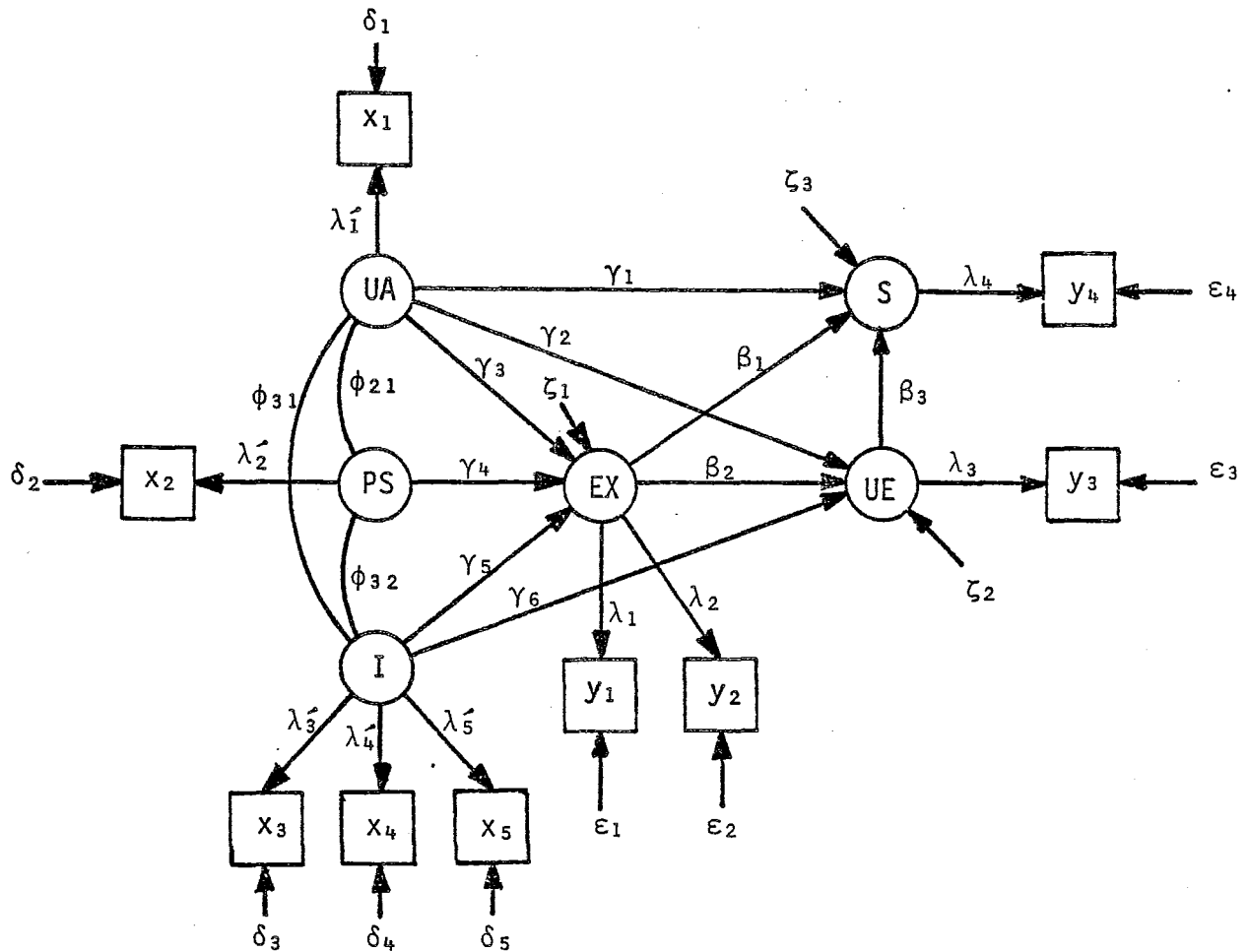
This model hypothesizes that the endogenous variable tourist satisfaction (S) is directly caused by two other endogenous variables, the urban experience (UE) and the tourist's expectations (EX) of what the impending urban tourism experience is going to be like. Expectations can be said to reflect the anticipated performance of the tourism product. Furthermore, the urban experience is hypothesized to be a direct function of expectations.

As the work of Pizam, Neumann and Reichel (1978) has suggested, "...tourist satisfaction is the result of the interaction between a tourist's experience at the destination area and the expectations he had about that destination." Engledow (1977) also has proposed that satisfaction results

from the interaction of the person's level of expectations and his or her perception of the outcome of a consumption decision, i.e. the actual consumption experience. In their own model of the consumer satisfaction process, Woodruff, Cadotte and Jenkins (1983) explicitly incorporate the construct of expectations (mediated by attitudes and prior product-performance experience) and show it as directly affecting product use experience which, in turn, either confirms or disconfirms expectations and results in satisfaction or dissatisfaction with the product.

Figure 1 also shows that expectations (EX) are caused by three exogenous variables, urban attractiveness (UA), prior satisfaction (PS) from any previous visits to the same city, and the amount of different types of information (I) acquired about the city, by the tourist. In addition, urban attractiveness is hypothesized to have a direct influence on satisfaction (S) and the urban experience (UE), the latter also being directly affected by information. Woodruff et al. (1983) proposed that product expectations are a function of prior product experience and past satisfactions with its performance, as well as attitudes formed from the consumer's exposure to information. In the case of international tourism, such information could come from marketing efforts by travel agents and governments, prior visits to the city, and from general stimuli like books, films, studies and word-of-mouth communications. Accordingly, the independent variables x_3, x_4 and x_5, in Figure 1, are three measures which represent the urban tourist's prior information (I) in the proposed methodology. They are type and amount of information acquired from marketing sources, history of prior visits, and extent of prior knowledge from general sources.

Prior satisfaction (PS) is operationalized by x_2, a five-item Likert-scaled questionnaire to measure this construct. Independent variable x_1 is the index of urban attractiveness (UA) proposed in this paper (see following

section on Methodology). Expectations (EX) are measured with two Likert-type questionnaires assessing how strongly urban tourists believe that the destination city, (a) possesses or can deliver the 17 touristic attractiveness criteria listed in Table 1 (y_1), and, (b) has qualities which the visitor wishes to avoid, e.g., high costs, unfamiliar customs, high crowding, heavy traffic, poorly marked roads and routes, high crime rate, unhelpful citizens, etc. (y_2).

The tourist's actual urban experience (UE) is operationalized through dependent variable y_3, a composite measure of the tourist's experiences, sensations and impressions with each item on the expectations measures, y_1 and y_2, and on nine major domains of city life measured in the index of urban attractiveness (x_1). Since the touring of cities is a highly experiential consumption decision, the measurement of the urban experience proposed here follows the recommendations of Holbrook and Hirschman (1982), i.e., the experiential nature of travel, leisure, entertainment, recreational and sensory opportunities calls for an investigation of the mental events surrounding the act of consumption so as to capture sensory pleasures, imagery, esthetic enjoyment and emotional responses. Thus, the measure of the urban experience, y_3, aims to capture the strength of the tourist's emotions surrounding experiences on each item and domain of city life that applies to that particular visit.

Finally, satisfaction with the urban tourism experience (S), represented by dependent variable y_4, is measured with a post-visit questionnaire adapted to the city or metropolitan area under study, and based on the 32-item Likert-scaled questionnaire developed by Pizam, Neumann and Reichel (1978) which assesses the visitor's satisfaction on seven criteria: accommodations, foodservice, accessibility, attractions, cost, amenities and facilities, and hospitality.

METHODOLOGY

It is useful, at this point, to propose a methodology with which to obtain the necessary data in order to (1) measure urban attractiveness, and (2) model the international tourist's urban experience. The examples drawn for this discussion will use the case of United States tourists visiting Canadian cities, although the case of North American tourists visiting, say, Barcelona, Madrid, Malaga and Sevilla could have served just as well.

Measuring Urban Attractiveness

The method begins with a systematic assessment of Canada's major urban tourism products, two of which will be singled out as examples, namely Montreal and Toronto. Each city is evaluated on Boyer and Savageau's (1985) 54 livability variables covering nine major domains:

1) Accommodation;

2) Health care and environment;

3) Crime;

4) Transportation;

5) Education;

6) Arts and culture;

7) Recreational opportunities;

8) Climate and terrain;

9) Economics.

The data permitting the researcher to perform these evaluations are available from the set of objective and subjective livability measurements of these two Metropolitan Statistical Areas (MSAs) collected by Blouin (1983), which can be updated, as required.

The second step converts the raw livability measures into relative performance measures based on the urban livability performance scores of all 329 MSAs in the United States plus these two Canadian MSAs. Data on the 54

livability variables for the United States MSAs are available in Boyer and
Savageau (1985). For example, Montreal's scores on crime rates, cost of
public transit, hours of sunshine in July, or number of ethnic restaurants are
expressed as a ratio of the best-performing North American city's scores on
each of these criteria.

Third, to meet the objective of creating an urban attractiveness index
which explicitly captures the individual's priorities, each tourist inter-
viewed during the phase described in the next section provides a subjective
importance weight for each livability variable. The urban attractiveness
index for Montreal or Toronto is then computed for each tourist, as follows:

$$\text{Urban Attractiveness index for tourist i} = \frac{\sum_{j=1}^{k} \frac{W_{ij} X_j}{X_{j\,max}}}{\sum_{j=1}^{k} W_{ij}} \times 100, \qquad (1)$$

where X_j = the city's raw score on livability variable j

$X_{j\,max}$ = the best performance on variable j among the 331 cities
being compared

W_{ij} = tourist i's subjective importance weight for variable j

k = total number of livability variables = 54.

Thus, the urban attractiveness index will vary between 0 and 100 and reflects
the desirability of different amenities, facilities and attractions of a city
to each individual tourist.

Modeling the Urban Tourist's Experience

This second phase of the methodology is a survey of visitors in each of
the Canadian cities, in order to collect data on the independent and dependent

variables of the urban tourism experience model in Figure 1. The population of interest, in this example, is all pleasure tourists who are United States residents staying in either of these metropolitan areas. A practical sample frame might be all registered guests giving a United States residential address and staying a minimum of four nights for non-business travel at a hotel or motel in Metropolitan Montreal and Toronto. A stratified random sampling plan would ensure that the sample correctly represents single tourists, couples, families with children, and non-nuclear-family groups, several major age categories, different visiting months, and a cross-section of hotel room rates.

Survey respondents are contacted soon after their initial hotel/motel registration for an interview at a prearranged time, near the beginning of their stay. Individual, computer-assisted interviews take place in a rented meeting room equipped with micro-computer driven, interactive, self-administered questionnaires. Respondents enter their answers directly through the computer keyboard, in response to questions about prior satisfaction with any previous visits to the same city (variable x_2 in Figure 1), prior information about the city from three different sources (x_3, x_4 and x_5), and expectations about the impending experience to be offered by this city (y_1 and y_2). Tourists also provide a set of subjective importance weights for the 54 livability variables that comprise the urban attractiveness index (x_1).

Computer-interactive interviewing is recommended over traditional methods for a number of reasons. It virtually eliminates paperwork; there is no interviewer bias; question order can be automatically randomized or rotated to reduce order bias; preprogrammed skip and branching logic for some questions makes response errors less likely; manual data recording and coding afterwards are eliminated because answers are stored instantaneously in data-file format directly on a magnetic diskette in the micro-computer; the respondent is able

to answer more quickly and in a semi-confidential manner. Finally, there is evidence that computer-assisted interviewing generates more respondent interest and involvement in the questionnaire task and is actually perceived as fun by many respondents (see Broughton 1985; Liefeld 1986).

At the end of their city visit, the tourist respondents are reinterviewed in order to obtain measures of the urban experience (y_3) and satisfaction with the visit (y_4).

The survey data represent measurements for each of the variables in the causal model of Figure 1. The causal model is represented as a system of structural equations. The data can, therefore, be subjected to a computer program which takes the structural equation approach to calculate the maximum likelihood and standardized estimates of the parameters in Figure 1 (as well as their standard errors). This statistical program is known as LISREL V (Joreskog & Sorbom 1981) and is capable of testing the validity and adequacy of the model specified in Figure 1 and of diagnosing an incorrect specification of cause and effect.

CONCLUSION

The ultimate goal of the concepts proposed in this paper is to identify key strategic variables for the development and marketing of urban tourism products on an international level. The methodology outlines a procedure for indexing the touristic attractiveness of cities which is amenable to international standardization, and includes this index in a causal model of the tourist's experience of visiting a city. The proposed experiential model is based on findings published in the consumer satisfaction/dissatisfaction literature and includes factors which are hypothesized to cause variations in tourist satisfaction with a visit to an urban center.

A confirmation of the correct form of the causal model would enable strategic planners and managers in the tourism industry to specify the

antecedents of urban tourism satisfaction with a fair amount of precision. This would reveal appropriate means of marketing a country's urban tourism products, since the model would define critical points or stages where marketing inputs could influence the tourist's decision to travel to and experience its major cities. The nature of each stage could be examined with the purpose of designing and implementing specific marketing mix strategies.

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