# Traveler Perceptions of a Destination as a Source of New Product Concepts: Q-Method Study of Summer Visitors to the Bay of Fundy

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#### Abstract

Innovation in general and new product/service development in particular are relatively unexplored processes in tourism. Tourism product/services are frequently delivered in conjunction with complementors. Product/service innovation in tourism therefore requires construction of bundles of product/services. This paper presents the results of an ideation exercise based on Qmethodology to identify new product/service concepts for summer visitors to the Bay of Fundy region, and illustrates the ways that new product delivery requires bundling of complementary product/services. Respondents sorted visual images of regional tourism and travel activities, and eight major segments of preferred travel experiences were identified. Visitors share interest in a small number of iconic attractions and diverge in their interest in physical outdoor activities, cultural consumption, and landscapes. Research findings suggest ways to bundle offerings to better accommodate desired experiences and communicate refined core product ideas to more sharply defined traveler segments.

#### Introduction

Innovation (the production and commercialization of new products and services and/or the adoption of new production processes) is the foundation of competitiveness. Firms competing on the basis on innovation must develop firm-specific capabilities, routines, and processes that permit products and services to be developed, introduced, and successfully commercialized. However, relatively little is known about innovation processes and their outcomes in the tourism industry. This paper presents the results of an ideation exercise based on Q-methodology to identify new product/service concepts for summer visitors to the Bay of Fundy region, and illustrates the ways that new product/service delivery requires bundling of complementary product/services. Results have implications for the practice of tourism entrepreneurship, tourism education, and innovation policy for the tourism sector.

# Product development in the tourism industry

Product development in the tourism industry is widely conceived as a process of coordinated planning of places or destinations along with the offerings that permit delivery of place-related visitor experiences. The resulting tourism product is conceived as a physical place embedded in rings of services (Smith, 1994). Knowledge of product or service development in tourism is

largely related to knowledge of destination development, and little has been written on firm-level product/service innovation experiences in tourism SMEs (Komppula, 2001).

The tourism industry is fragmented horizontally and vertically (Lafferty and von Fossen, 2001). From the perspective of destination-as-product, the main theoretical questions about tourism product innovation have to do with dynamics of destination development, the ways that destinations are perceived by travelers and the ways that these perceptions can be shaped, what are components of destinations, and how the relationships among the components of a destination are to be understood and managed (Smith; 1994; Murphy, Pritchard and Smith, 2000; Middleton and Clark, 2001.). This discussion has several parallels with the literature on industry clusters and agglomerations. It is clear that in the tourism industry, firms do not compete just individually but also (perhaps primarily) as groups or networks of service providers. Agglomeration of tourism service providers is one way that the firms in the industry attempt to solve coordination and value-production problems. Services are also aggregated and coordinated through tour operators and service delivery platforms such as destination management systems and other electronic intermediaries (Buhalis and Spada, 2000; Dale, 2003). These and other forms of coordination and purposive networking are drivers of destination development (Tinsley and Linch, 2001). Business network management competencies in SMEs are critically important business skills, and "in the small business sector, it is widely acknowledged that the constraint on development may be networking and knowledge of other businesses in the tourism sector" (Page, Forer and Lawton 1999: 446). The tourism and travel research literature contains numerous references to practices of coordination, inter-firm networking, and strategic alliance formation among firms as they go about building value chains or networks to deliver tourism experiences, and players in the tourism industry have begun to adopt cluster vocabulary and concepts in their thinking about destination development and management (cf. Gollub, Hosier and Woo 2001; Nordin, 2003).

# What are the Experience Segments in the Bay of Fundy Destination Product/Service Mix?

Competitive travel destinations are places that are able to develop favorable positions in the tourism market by developing and conveying images that targeted segments of visitors find attractive and providing services that appeal to these visitors and that are consistent with destination identity (Kotler, Haider, and Rein, 1993). Common bases for tourism market segmentation include demographic, socioeconomic, geographic, behavioral, and psychographic attributes (McIntosh, Goeldner, and Ritchie, 1995; Cooper et al., 1995). This paper uses an empirical exploratory research approach, Q method, to identify segments of tourism experience preferences among Bay of Fundy summer visitors. This exercise helps to identify and interpret underlying dimensions of the Bay of Fundy destination image among current summer visitors, showing that visitors in different experience segments make important distinctions among the various elements of the Bay of Fundy destination product/service mix. By grouping activities into product/service bundles that are marketed to specific segments, tourism firms can increase revenues and provide travelers with an above average experience that will motivate repeat visits. Below I describe the travel experience preferences expressed by these visitor segments and suggest specific ways in which more specialized travel products and services can be developed in the Bay of Fundy region to improve its positioning in the tourism marketplace and contribute to the competitiveness of the region as a travel destination.

Many studies of visitor travel activity preferences are based on rank-ordered lists of items that can be aggregated or correlated with visitor attributes. For example, Oh, Uysal and Weaver (1995) correlated travel motivations to identify bundles of products for distinct segments of travelers. In the case of the Bay of Fundy, items of visitor interest in regional travel product/services can be inferred from the Fundy Coastal Drive Consumer Profile, which reports that on a scale of one to ten, "eating fresh seafood" was ranked first or second by 61 percent of respondents. In descending order of expressed interest were saltwater beaches (ranked first or second by 44%), whale-watching (37%), museums or art galleries (28%), crafts/antiques/artwork (27%), light-houses/covered bridges (26%), hiking/biking/walking trails (25%), wildlife viewing (23%), festivals/special events (21%), farmer's markets (19%), Acadian culture (16%), learning a new skill (15%), kayaking/canoeing (13%), fishing (13%), nightlife (11%), aboriginal culture (11%), golf (9%), and spas (7%) (Tourism and Parks New Brunswick 2002b).

How are interests in one activity related to interests in other activities? This paper uses Qmethod to provide insights into the experiential preferences of summer visitors in the Bay of Fundy region. In this method, respondents rank order items – in this case, photographs of attractions and visual icons that make up the Bay of Fundy's inventory of destination components. Qmethod provides a systematic and rigorous means of objectively describing human subjectivity through the combination of qualitative and quantitative analysis (Brown 1996). The methodology has been applied in many disciplines such as political science, marketing, psychology, sociology, public policy, marketing, and health care.<sup>1</sup> A number of researchers have used Qmethodology in landscape perception research (see the discussion in Fairweather and Swaffield 2001). However, the use of Q-sorted images in tourism destination research is relatively novel.

# Methodology

The items to sort (Q-deck) consisted of a "concourse" of photographs of 44 main tourist attractions in the Bay of Fundy region. These images were selected from a sample of several hundred with the help of Bay of Fundy travel industry experts in order to have a balanced representation of the possible tourist activities from the Bay of Fundy region in New Brunswick, Nova Scotia, and Maine. Only mainstream tourism activities or experiences that are commonly associated with the prevailing Bay of Fundy destination image were included in the formulation of the Q deck. Each image was printed on a laminated card along with a short description of the image. The deck of images was pretested on several individuals, resulting in a number of adjustments to eliminate duplication or images that respondents found difficult to identify.

Tourists were interviewed in a two-week period at the New Brunswick tourist bureau near Saint John, at the Mariner's Inn in Chance Harbour, and at various Bed & Breakfasts in the Saint John area.<sup>2</sup> Tourists were requested to participate in a project aimed at developing specific tourist packages that would appeal to Bay of Fundy summer visitors. Those who agreed to participate were asked to sort the 44 images of Bay of Fundy visitor experiences from "most attractive" to

<sup>&</sup>lt;sup>1</sup> For full descriptions of the method see McKeown (1988) or Brown (1980).

<sup>&</sup>lt;sup>2</sup> R. Khari's contribution to the collection of interview data is acknowledged.

"least attractive," in a forced-distribution pattern.<sup>3</sup> Respondents were also asked to explain their choices. In total 42 interviews were conducted. Most of the respondents were from Central or Western Canada or the United States.

Data were analyzed with *PCQ for Windows*, a commercial software program for Q method research. This software performs factor analysis and graphical and varimax rotation of the factors. A seven-factor varimax rotated solution provided the best fit with the data. In this solution, 36 sorts load significantly and uniquely on only one factor at a 5% probability level. One factor is bipolar, and four sorts are confounded. In this solution all seven eigenvalues are greater than 1.5, and 52 percent of the variance in the matrix is accounted for.

# Results

Because of the bipolar factor, eight distinct visitor experience segments of the Bay of Fundy are described by the data. Each factor represents preference for a specific mix of Bay of Fundy tourism experiences. By viewing tourism experience preferences through the lenses provided by the typal Q sorts, it is not difficult to imagine the kinds of products and services that would appeal to tourists in each segment. Figure 1 illustrates this point with a typal Q sort and associated preferred images for Factor E.

**Factor A, Outdoor exploring,** prefers relatively active outdoor activities: biking, whale watching, bird watching, hiking, beach walking, trail walking, and kayaking, and for experience of local music, tides, and the Hopewell Rocks. The least attractive activities and experiences include highly organized, urban, or passive vacation activities: golfing, the city harbor, cruise ships, shopping, resort hotels, fog, sport fishing, summer cottages by the sea, and outdoor bars. Outdoor Explorers are middle-aged people who are not interested in camping for long periods, and they have some interest in historical and cultural activities. They would probably respond to packages containing physically active but not too strenuous outdoor excursions interspersed with cultural relaxation and lodging in interesting places. These visitors need a selection of outdoor equipment (bicycles, kayaks) to rent, a good trail infrastructure, maps, guides, and transportation to and fro.

**Factor B, Boats and coasts,** prefers active, water-related vacation activities: sailing, whale watching, kayaking, cruise ships, coastal horseback riding, and biking. Factor B is least interested in passive consumption of picturesque coastal landscapes: foggy coastal environments, marine coastline experiences, views of fishing villages, urban harbors, beachcombing, seaside cottages, museums, and wildflowers - activities in sight of water. They are also interested in some cultural events and accommodation in resort hotels, but not in educational or scientific aspects of the marine environment.

 $<sup>^{3}</sup>$  The card sorting procedure involves intermediate steps and methodological considerations that are not described here. Figure 1 shows the forced distribution pattern and the scores for a typal Q sort. For further methodological details and presentation of all data see Davis and Khare (2002).

**Factor C, Coastal Environment Observers,** prefers active observational but not strenuous outdoor coastal experiences: beach walking, whale watching, bird watching, tide watching at the Hopewell Rocks, other tidal scenes, as well as for observation of charming outdoor natural or cultural scenes: Kingsbrae Public Gardens, the Reversing Falls, the Acadian Festival, and wild flowers, and tides. Coastal Environmental Observers avoid outdoor sports and other strenuous outdoor activities. Individuals seeking Coastal Environmental Observer experiences probably prefer to organize their own holidays but would appreciate using well-informed accommodations in a coastal environment as a base of operations.

**Factor D, the Complete Bay of Fundy Tourism Experience,** expresses strong interest in the primary Bay of Fundy visual icons: lighthouses, the Reversing Falls, the Hopewell Rocks, whale watching, and walking on the Fundy Trail. This experience segment is defined primarily in terms of the prevailing images of the Bay of Fundy destination product that are found in tourism and travel brochures. This factor is the closest of the eight to a mass tourism segment in the region. Seekers of the Complete Bay of Fundy Tourism Experience seem to take a cafeteria approach to the enactment of their travel experience by sampling everything once. Their interests are therefore broad and they can be tempted by visits to destination icons as well as by physical activities such as sailing and horseback riding, and by postcard coastal landscapes and public gardens. However they do not visit the region in order to experience local cultural or historical amenities or outdoor recreational activities. They are casual visitors who drive to the region and plan as they go.

**Factor E, Out and About,** values urban and cultural experiences and short coastal experiences accessible by foot: fine dining, old/historic Saint John, walking trails, coastal hiking, seafood dining, the Acadian Festival, historic inns, whale watching, and the Hopewell Rocks. Exponents of Factor E do not wish to partake of organized outdoor activities or experiences in formal cultural institutions. Out and About is most interested in the cultural and maritime *urban* amenities offered by the Bay of Fundy region. This is the only experience segment expressing interest in historic Saint John. Out and Abouters clearly see themselves spending significant amounts of time in the city, leaving for a coastal hike or whale observation and returning to dine or spend the evening in a historic inn or outdoor bar. This experience segment seems especially to appeal to Canadian couples in their forties and fifties. Out and Abouters may respond to customized travel planning services.

**Factor F+ (Social Recreation)** and **F- (Intimate Bay Experience)**, is the only bipolar factor, meaning that some individuals have opposite travel experience preferences (fortunately, these individuals were not travelling together.) The "positive" pole of Factor F (F+) expresses preference for group-oriented outdoor sports and activities in parklike settings: golfing, camping, outdoor picnicking, the Upper Clements Recreational Park, King's Landing Historical Theme Park, and for some relaxing restauration: fine dining, cruise ships, and outdoor bars. This segments expresses dislike of less organized, individually-oriented or "learning" vacation experiences such as the Huntsman Marine Museum Touchtank, horseback riding, cottages by the sea, walking along the beach, kayaking, foggy scenes, sailing, wild flowers, the marine coastline, and shopping. One respondent, a female, loaded negatively on Factor F, indicating a preference for the relatively informal and intimate coastal exploratory and shopping activities expressed in Factor F-. We label factor F- the "Intimate Bay Experience". Factor F+ is similar to Factors E and G in

its interest in urban bars and dining, but distinguishes itself by its focus on activities that take place in highly organized outdoor places – parks, golf courses, campgrounds, picnics, and cruises. Factor F- represents a desire for intimate environmental and cultural exploratory experiences and purchasing opportunities in uncrowded, out of the way parts of the region. The interest of Factor F- in cottages may represent an opportunity to develop a long term repeat visitation relationship with Factor F- individuals.

**Factor G, Coastal Culture** is oriented toward experiencing four components of the Bay of Fundy destination product: the icons, maritime urban amenities (especially bars and dining), the coastal natural environment via bird- and whale watching, and the charming, quaint, or educational aspects of the Maritime built environment. Factor G is the only segment to express interest in covered bridges, fishing villages, museums, and ferries – the more subtle features of the regional cultural landscape that were not developed with visitors from outside the region in mind.

#### **Discussion and Conclusions**

Summer visitors to the Bay of Fundy differ in their orientation toward physical outdoor activities, cultural consumption, and preference for landscape experiences. An incipient mass tourism segment (Factor D) seeks to consume the primary Bay of Fundy travel products. Other segments emphasize physical encounters with coastal environments, interaction or passive observation of natural or cultural attractions, and urban amenities. Factors C, E, F-, and G are most interested in experiencing the more subtle environmental and cultural aspects of the Bay of Fundy destination product. Factor A seems to represent a middle-age version of outdoor adventure tourism that deserves to better understood. Further research is needed to develop interpretations of the experience preference of these segments.

Most tourism firms are SMEs and so are unlikely to possess formalized routines or toolkits for development of new tourism products. Processes of entrepreneurial opportunity recognition predominate. In this paper I have described a relatively inexpensive method for generating new product concepts from visitors' perceptions of destination elements. The main utility of Q-Method for product concept generation in tourism is that it suggests how visitors may perceive value in specific bundles of products and services. The challenge of new product development for SMEs is to arrange for delivery of these bundles. The number of product/services (scope of offerings) provided by individual tourism SMEs is unrelated to profitability, while managerial skill is directly related to profitability (Lerner and Haber, 2000). In other words, visitors want bundles of products and services, but business logic among small service providers favors specialization. Improvement in product/service innovation processes in the tourism industry must rely in part on improvement in coordination mechanisms and incentives for concurrent complementary innovation among groups of firms.

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	factors						
	Α	B	С	D	Е	F+	G
1.Local music playing in Upper Clements Recreational Park	2	-1	1	-3	1	0	-1
2.Golfing on the Algonquin golf course in St. Andrews	-3	-1	-3	-1	1	3	-1
3.Recreational Park showing Upper Clements in Digby	1	0	-1	1	-2	3	0
4. Camping in a public campground	1	1	-3	-3	-1	3	-1
5.Resort Hotel in St. Andrews	-2	1	-1	0	0	1	-1
6.The touchtank at The Huntsman Marine Museum	-1	-1	-1	0	0	-3	-3
7.Kingsbrae Public Gardens in St. Andrews	0	1	2	2	-1	-1	-1
8.Horseback Riding along the Fundy Coast	1	2	-3	2	-3	-3	-1
9.Beach swimming at Rockwood Park	1	1	0	0	-1	1	-2
10.Biking in Grand Manan	3	2	-2	1	1	-1	0
11.Seafood Dining in Saint John	0	0	1	0	2	0	2
12. The city harbour in Saint John	-3	-2	0	0	1	1	-1
13.Walking along the New River beach	1	-2	3	0	0	-3	-1
14.Fog shown on the New River beach	-2	-3	-1	-2	-3	-2	1
15.Sport fishing showing fly fishing	-2	0	-3	-3	-1	-1	0
16.Lighthouse at Green's Point in Maine	0	0	1	3	1	0	3
17.Sailing on the Bay of Fundy	1	3	1	2	0	-2	1
18. The Reversing Falls in Saint John	-1	1	2	3	0	-1	3
19.The Acadian Festival	1	1	2	-2	2	1	0
20.Wild flowers in Saint John (lupins)	0	-3		-1	0	-2	-2
21.Outdoor picnicking in Digby	0	0	-2	-2	-3	3	-2
22.Fine dining in upscale restaurant	0	-1	1	0	3	2	2
23.Cruise ship entering the Saint John Harbor	-3	2	0	1	0	2	-2
24.Historic Inn in St. Andrews	-1	-1	0	0	2	0	0
25.Old/Historic Saint John	-1	0	1	0	3	-1	0
26.The Imperial Theatre in Saint John	0	2	0	-3	1	1	0
27.The marine coastline in Pocologan	-1	-3	0	-2	-2	-2	0
28.Whale watching in St. Andrews	3	3	3	2	3	0	1
29.Lowtide/Hightide of the Bay of Fundy	2	-1	2	1	-1	1	2
30.Birdwatching showing the Atlantic Puffin	3	0	3	-1	-1	-1	2
31. The Historical Theme Park in King's Landing	1	2	0	-2	-2	2	0
32. The walking trails at the Fundy Trail Parkway	2	0	-1	1	3	0	-3
33.Summer cottages by the sea in Pocologan	-2	-2	-1	-1	-1	2	-2
34.Rock-Hounding at the St. Martins caves	0	1	-2	1	0	0	-3
35. Joggins Fossil Cliffs in Nova Scotia	1	-2	-1	2	-3	-1	1
36.Shops in Digby	-3	-1	1	0	0	-2	-3
37.Hopewell Rocks	2	3	3	3	2	1	3
38.Kayaking at the Fundy Trail	2	3	-2	-1	0	-3	0
39.Fishing Village in Deer Island	0	-3	0	-1	-1	0	2
40.Covered Bridge	-1	0	0	0	1	0	1

# Table 1: images and scores for each factor

41.Outdoor bar on the Saint John Boardwalk	-2	0	-1	-1	1	2	3
42.Hiking on the Fundy Trail	3	1	-2	3	3	0	1
43.NB Museum in Saint John showing the marine room	0	-2	1	1	-2	-1	1
44. The Peninsula Princess Ferry	-1	-1	0	-1	-2	1	1

# Figure 1

Typal Q Sort and images of preferred experiences from Factor E, "Out and About"

-3 ·	-2	-1	0	1	2	3
21 3 35 4	3 27 31 43 44	4 7 9 15 29 30 33 39	5 6 13 17 18 20 23 34 36 38	1 2 10 12 16 26 40 41	11 19 24 28 37	22 25 32 42

# Images of preferred experiences from Factor E



Fine Dining, Inn on the Cove Restaurant (SJ) 22



Old/Historic Saint John 25



Hiking, Euroly Trail 42



Walking Trail, Euroly Trail Parkway 32



Historic Inn, Windsor House (St. Andrews) 24



Seafood Dining, Billy's Seafood Company Restaurant 11



Hopewell Rocks 37



Acadian Festival 19