Segmenting the tourism market using perceptual and attitudinal mapping

Segmentace trhu turistiky na základě zjišťování dojmů a postojů návštěvníků

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Abstract: Decreasing numbers of tourists to the Czech Republic point at a weakening competitive position of Czech destinations during the most recent years. For many communities, tourism may be a short-lived economic dream when understanding of tourists´ perceptions and travel motives is lacking. The two objectives pursued in this study are 1) an identification of the positions of competing destinations and 2) an a-posteriori segmentation with psychographic variables. Market segmentation becomes the crucial factor in the strategic design process of target marketing. Like many other markets, tourism markets do not respond homogeneously to marketing activities. Subdividing visitors into useful groups may provide a basis for competitive advantage. Our study establishes taxonomy of visitors to Southern Moravia. The study tries to overcome well-known insufficiencies of single segmentation approaches by exploiting the advantage of the multivariate nature of combined push factors, pull factors, and other factors of more restrictive nature (i.e. time and money). The segmentation task employs multivariate data analysis techniques such as factor analysis, cluster analysis and multi-dimensional scaling. Recent research on the European Vacation Style Typology is incorporated.

Keywords: cluster analysis, multi-dimensional scaling, factor analysis, vacation typology

Abstrakt: Snižující se počty turistů přijíždějících do České republiky ukazují na pokles konkurenceschopnosti českých destinací v posledních letech. Pro mnoho českých obcí může být turismus pouze krátkodobým ekonomickým snem, jestliže chybí pochopení dojmů turistů a motivace cestování. Dva cíle, které tato studie sledovala, jsou 1) identifikace pozice konkurenčních destinací a 2) a-posteriori segmentace s psychografickými proměnnými. Segmentace trhu se stává rozhodujícím faktorem v procesu strategického návrhu cílového marketingu. Stejně jako mnohé jiné trhy, trh turistiky nereaguje na marketingové aktivity homogenním způsobem. Rozdělení návštěvníků do vhodných skupin proto může vytvořit základ pro konkurenční výhodu. Tato studie vytváří taxonomii návštěvníků jižní Moravy. Snaží se překonat známé nedostatky jednoduché segmentace využitím výhody multivariantního přístupu kombinace push-faktorů, pull-faktorů a dalších faktorů restriktivnější povahy (např. čas a peníze). Segmentace využívá techniky multivariantní analýzy dat, jako je faktorová analýza, cluster analýza a multidimensionální škálování. Jsou rovněž zohledněny výsledky nedávného výzkumu typologie evropského stylu trávení dovolené.

Klíčová slova: cluster analýza, multidimensionální škálování, faktorová analýza, typologie trávení dovolených

INTRODUCTION

Before the iron curtain was lifted, tourism and travel policies in the Eastern and Central European nations were strictly dictated by ideological considerations (see Kreck 1998 for an overview). Factually, tourism and socialism were contradictory terms (Allcock and Przeclawski 1990). In the Czech Republic, organizations like the Czechoslovakian Union of Physical Culture, state industrial enterprises, children camps and trade unions were sources of the collectivistic domestic tourism (Motka 1962). Holidays in one of the above mentioned facilities were considered a reward for outstanding job efforts. While domestic tourism was designed for rejuvenation of the physical and mental forces, international tourism, especially from the West, was used to earn hard currency, although with much suspicion toward Western tourists. Responsible for international tourism was the national agency Čedok. It controlled the means of transportation and acted as an intermediary for state agencies that looked after foreign tourists. Obtaining entry visa was less complicated if foreigners purchased a package through Čedok. Čedok also remained the main state agency for contracting foreign agencies worldwide (Carter 1991).

Centred around the city of Brno, in the south-eastern part of the Czech Republic, there lies the region of Southern Moravia (S.M.). Due to its warm climate, and its almost mediterranean charm with colourful vineyards and orchards, numerous romantic castles, winding river valleys, sharp cliffs, and scenic landscapes, S.M. has always been an inviting destination for travellers. Once the borders were re-opened after the Velvet Revolution in 1989, the number of foreign tourists started a rapid climb (Czech Bureau of Statistics 2001). Although the World

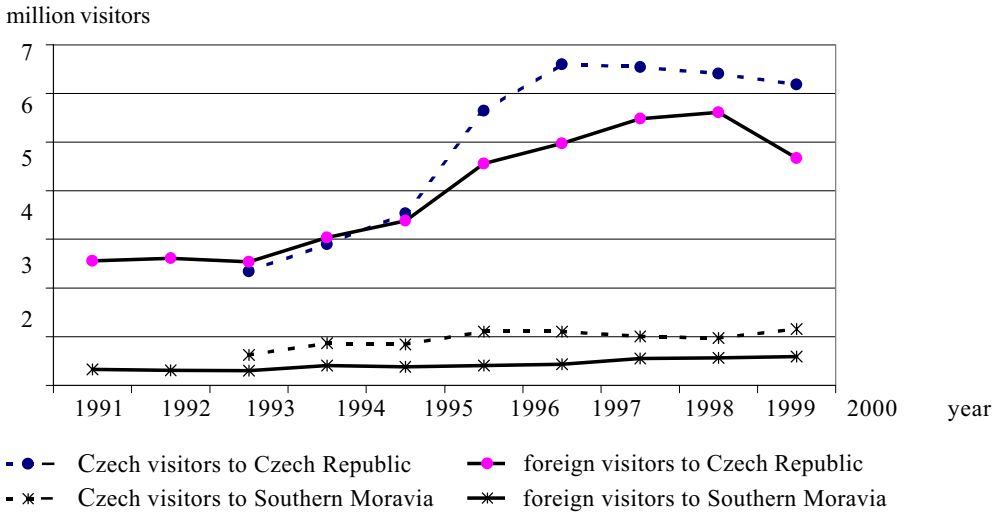

Figure 1. Annual number of tourists to Czech Republic and S.M. (after Czech Bureau of Statistics 2001)

Tourism Organisation estimates still project sizeable growth rates for the tourism industry in Central and Eastern Europe (Neidl and Mourek 2000), Czech destinations nowadays compete for vacationers not only against each other (e.g. S.M. against Prague, Western Bohemia, Central Bohemia or Northern Moravia) but additionally against international destinations. Evidence for a weakening competitive position of Czech destinations is provided by stagnating or even slightly decreasing numbers of tourists to the Czech Republic during the most recent years (Czech Bureau of Statistics 2001, see Figure 1).

PURPOSE OF THE STUDY

Falling behind in the competition for vacationers will not only cost the Czech economy in terms of income and jobs but it will consequently retain her citizens from further closing up to the Western European standards. Because of the rural nature and the prominent role of agriculture in S.M., many rural communities are turning toward tourism to spur economic growth in light of the difficulties agriculture is facing in general. Hence, it is of paramount importance to gain additional knowledge about actual and potential visitors in order to provide tourism managers with the best possible guidance. For many communities, tourism may be a short-lived economic dream when the understanding of tourists´ perceptions and travel motives is lacking. If tourists´ perceptions and expectations are not fulfilled or exceeded, a positive attitude can soon turn sour. Market segmentation is a crucial factor in the strategic design process of target marketing. Like many other markets, tourism markets do not respond homogeneously to marketing activities. Hence, subdividing visitors into useful groups may provide a basis for competitive advantage. Our study establishes a taxonomy of visitors to S.M. The study tries to overcome well-known insufficiencies of single segmentation approaches detected in explaining tourism behaviour by exploiting the advantage of the multivariate nature of combined push factors, pull factors, and other factors of more restrictive nature (i.e. time and money). The segmentation task employs multivariate data analysis techniques such as factor analysis, cluster analysis and multi-dimensional scaling and proceeds from Zins´ research on European Vacation Style Typology (Zins 1999).

LITERATURE REVIEW: MARKET SEGMENTATION AND PRODUCT POSITIONING

Strategic marketing planning involves decision-making in two major areas: product positioning and market segmentation (Calantone and Mazanec 1991). Positioning refers to the process of establishing and maintaining a distinctive place in the market for an organisation and/or its individual offers (Lovelock 1991). Major stages in this process are illustrated in Figure 2.

When the "product" is a travel destination, tourism industry decision makers (regional tourist boards, travel service providers, hotel and hospitality managers, etc.) first must obtain an insight in the market in order to identify what product attributes determine the destination choice and how their product is perceived. Competing destination's play a prominent role by providing a frame of reference required for defining a position (Crompton 1992). Based on a realistic assessment of the destinations position in the market (strengths, weaknesses, competitors), the decision can be made what market segments to target and how to design the product.

Positioning decisions are based on the second domain of strategic marketing planning, the market segmentation stage. Management may face either of two situations. The first one is "a priori segmentation", the second one "a posteriori segmentation" (see Bagozzi 1986 for general distinction and Smith 1989 for applications to tourism research). "A priori segmentation" exists when a criteri-

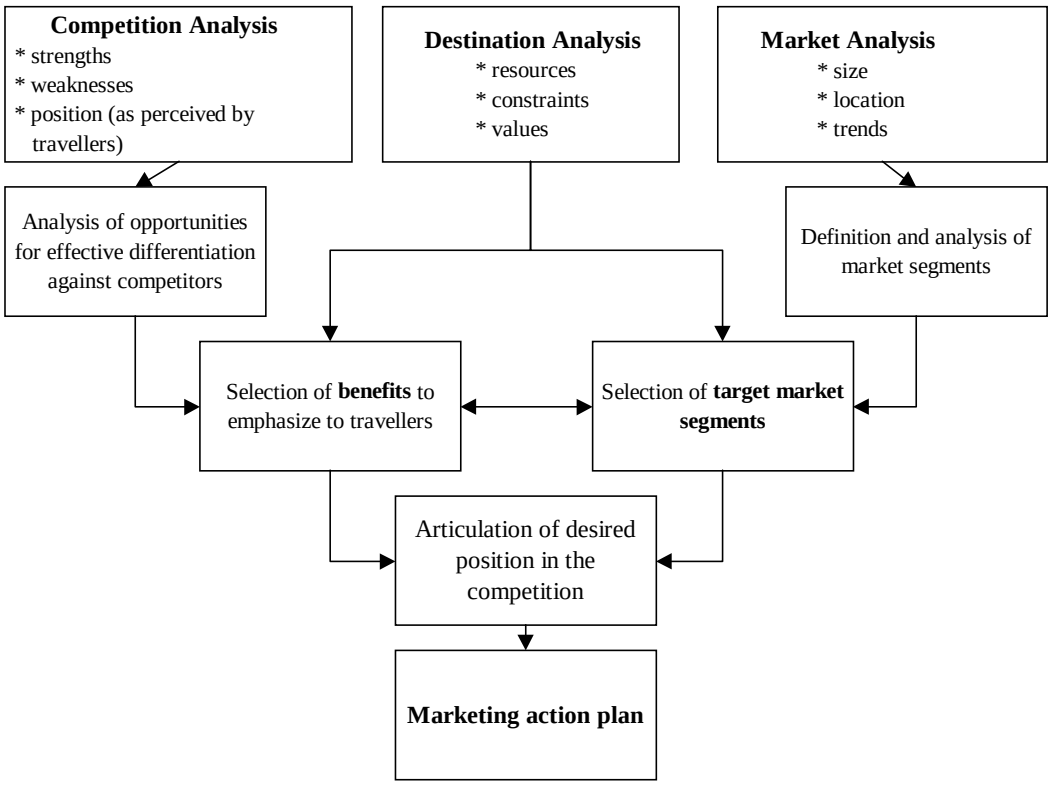

Figure 2. Developing a market positioning strategy for travel destinations (modified after Alford 1998)

on variable for dividing a global market into smaller segments is already known in advance. "A posteriori segmentation" is also known as the factor-cluster segmentation (Smith 1989). It is when the marketer has no prior knowledge about homogeneous groups in the market. In this case it is likely, that different segments exist (based i.e. on differences in motivational, attitudinal or behavioural factors) but they are largely unknown.

Tourism scholars have long acknowledged the importance of knowing why people travel, which destinations they choose, and the factors that play an important role in the selection of vacation destination (see Figure 3). They have devoted much literature to the notion of "pull factors" and "push factors" (e.g. Mak and Moncur 1980; Kucukkurt 1981; Shih 1986; Davis and Sternquist 1987; Chun 1989; Um and Crompton 1990). Push (motivational) factors enable potential tourists to develop attitudes toward travelling in general. They involve cognitive processes such as the need for escape, socializing, belonging, self-esteem, and self-actualisation. Pull factors refer to man-made attractions, natural attractions, and socio-cultural attractions (Sirakaya, McLellan and Uysal 1996).

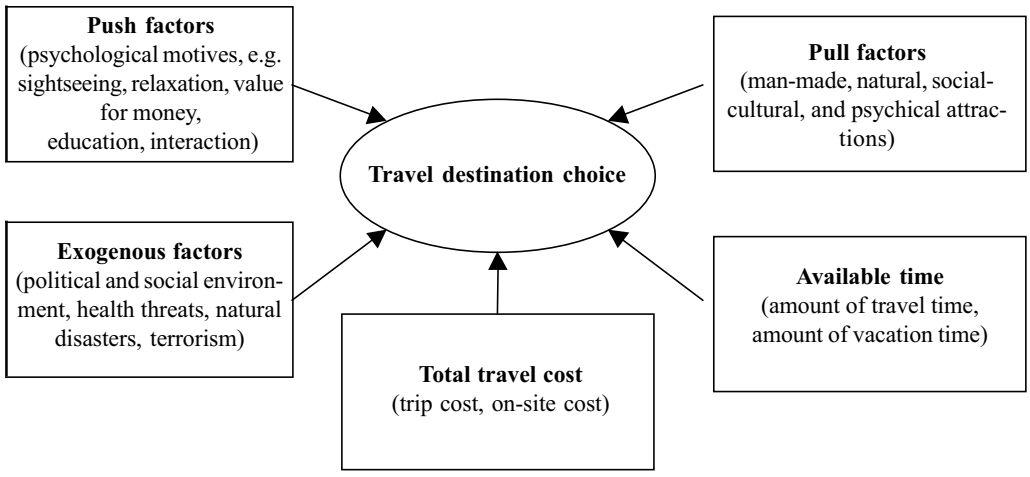

Figure 3. Factors affecting travel destination choices (after Sirakaya, McLellan and Uysal 1996)

Table 1. Seasonal distribution of foreign visits to Czech Republic (modified after Czech Bureau of Statistics 2001)

Per cent values based on monthly mean values 1996–2000											
Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
6.2	6.2	7.3	7.9	9.1	8.7	10.1	11.3	8.2	9.4	7.8	7.8

According to Calanzone and Mazanec (1991), a posteriori segmentation very often employs attitudinal or benefit variables for segmentation purposes; that is aggregation of individuals in a market into groups (segments) that have similar attitudes or seek similar benefits when choosing a travel destination. Tourism managers are likely to be interested in determining 1) which segments would support a given product category, 2) how the segments differ in their response to a range of different offerings (i.e. destinations), within that category, and 3) how they differ in their expectations. Hence, this kind of analysis appears to be very helpful. Tourism managers can use this kind of information in developing most effective advertising and promotion programs, choosing appropriate media vehicles, and deciding on required marketing expenditures and allocations. Since the search for actionable market segments is one of the key issues in marketing management in general, a number of psychographic and benefit segmentation applications to the tourism industry could be found (e.g. Calantone and Johar 1984, Mazanec 1984, Eagles 1992, Mansfield 1992, Hsieh, O´Leary and Morrison 1992, Mazanec 1992, Loker and Perdue 1992, Shoemaker 1994). A more extensive overview is given by Plog (1994).

METHOD

Data collection and sample characteristics

The entire project is based on an empirical study that focuses on summer vacations. Aggregated secondary data identify this season (July and August) as the main period of leisure visits to the country (Table 1).

Table 2. Sample profile (n = 248)

Demographic variable	N	Value	%	
			CZ	others
Citizenship	248		87.5	12.5
Age (years)		15–24	25.8	0.4
		25–34	21.4	2.8
		35–44	17.7	4.0
		45–54	12.5	2.4
		55–64	6.0	3.2
		65 and older	2.8	0.8
Sex		female	51.6	8.5
		male	34.7	5.2

In the summer of 2000, a survey was carried out at several locations focusing on visitors to S.M. Interviewers distributed 300 questionnaires to tourists (18 years or older) that were staying at least one day for holidays in that area. The sample used for further processing of the data consisted of 249 usable questionnaires (return rate: 71%). This survey was designed with a strong emphasis on S.M. position in the competition.

Considering a tourist destination like S.M., the marketing audience is national as well as international. Consequently, any attempt to segment the market has to include both tourists of domestic as well as of the foreign origin in a suitable sample. Table 2 holds the profile of the sample in terms of demographic variables (nationality, age, gender).

Measurements

To cover a range of competitors, seven national and seven international travel destinations were identified (Czech Bureau of Statistics 2001). Respondents´ preferences were elicited by asking them to rank the selected destinations.

Motivational, attitudinal and other variables representing cognitive and emotional states of mind with respect to a particular journey were employed as well as the accompanying travel related activities. Forty statements were found to be related to a summer vacation. The corresponding item battery has been developed and successfully employed in previous travel research by Zins (1999). The battery was slightly adapted to fit this particular summer vacation. Measurement was conducted through a 5-point Likert scale ranging from 1 “strongly disagree” to 5 “strongly agree”.

RESULTS

Identification of close competitors

Control questions confirmed that a vast majority of the travellers had spent at least one of the previous summer vacations during the past five years at another destination, either domestic or international. This experience enables the vacationers to evaluate competing destinations according to their preferences. Tables 3 and 4 hold the mean ranks for selected international and domestic destinations.

Although respondents have been surveyed in S.M., Southern Bohemia is considered the most attractive

Table 3 Respondents´ ranking of international vacation destinations

Destination	Mean rank (standard error)		
	CZ respondents	other respondents	all respondents
France	2.95 (1.79) [a]	2.71 (1.96)	2.93 (1.81) [a]
Spain	3.44 (2.12) [a b]	4.45 (2.08)	3.57 (2.14) [a b]
Austria	3.64 (2.15) [c]	4.55 (1.82)	3.72 (2.10) [c]
Croatia	3.90 (2.00) [b]	5.07 (2.00)	4.03 (2.05) [b]
Italy	4.21 (1.82) [c d]	3.45 (2.29)	4.15 (1.89) [c d]
Czech Republic	4.78 (2.14) [e d]	3.72 (2.36)	4.66 (2.20) [d e]
Germany	6.26 (1.84) [e]	4.86 (2.12)	6.12 (1.92) [e]
Hungary	6.54 (1.62)	5.16 (2.30)	6.40 (1.46)

Note: A pair of means with the same superscript indicates a significant difference between the two groups with *** $p > 0.001$. Scores ranged from 1 (highest preference) to 8 (lowest preference).

Table 4. Respondents' ranking of Czech vacation destinations

Destination	Mean rank (standard error)		
	CZ respondents	other respondents	all respondents
Southern Bohemia	2.82 (1.63) [a]	3.17 (2.12)	2.86 (1.71) [a]
Czech Paradise	2.90 (1.67) [b]	3.86 (1.79)	2.97 (1.69) [b]
Southern Moravia	3.19 (1.97) [a c]	2.63 (1.77)	3.13 (1.96) [a c]
Krkonoše Mountains	3.80 (1.88) [b c d]	3.29 (2.02)	3.77 (1.89) [b c d]
Karlovy Vary	3.96 (1.70) [e]	4.00 (1.75)	3.96 (1.70) [e]
Prague	5.90 (1.95) [d e f]	2.40 (1.82)	5.50 (2.22) [d e f]
Western Bohemia	6.18 (1.44) [g]	6.47 (1.28)	6.20 (1.43) [f g]
Northern Bohemia	7.00 (1.31) [f g]	6.00 (1.58)	6.92 (1.35) [g]

Note: A pair of means with the same superscript indicates a significant difference between the two groups with *** $p > 0.001$. Scores ranged from 1 (highest preference) to 8 (lowest preference)

among the selected Czech destinations, followed by the Czech Paradise. S.M. is ranked only third. Corresponding aggregated ranks are primarily due to Czech respondents since foreign vacationers exhibit the highest preference for Prague and the Moravian South.

Among the international destinations, France is considered the top destination while the Czech Republic is positioned sixth. Amongst Czech travellers, the motherland is not considered an attractive place to spend a summer vacation.

The eight domestic and the eight foreign destinations were further consolidated into a perceptual map, each with a reduced number of dimensions[1]. The rank scores were fed in a metric multi-dimensional scaling procedure (Kruskal 1964a and Kruskal 1964b, Takane, Young and De Leeuw 1977, Carroll and Green 1997). The two-dimensional solutions (see figures 4 and 5) appeared to come with good quality parameters (Kruskal´s Stress = 0.085 and 0.058, RSQ = 0.960 and 0.986). The interpretation of this reduced space of destination choice determinants is as follows; the area covered by each segment correlates with the share of the Czech vacationers market. Further interpretation of the dimensions draws from the dispersion of the clusters Figure 4 and 5.

Foreign destinations

Here, dimension 1 (x-axis) can be labelled according to the polarity between traditional and modern with traditional representing the negative and modern the positive pole. The vacation destinations (East-) Germany and Hungary are representatives of the traditional hemisphere while France and Spain represent the modern, just recently available extremes. The second dimension (y-axis) is mainly characterised by the opposing destinations Austria and Spain/Hungary. Considering the positions of other countries, it seems fair to assume a distinction education & brain versus relaxation & body. Accordingly, vacationers consider the destinations below the x-axis to be more suitable for (sun-) bathing and relaxing while countries closer to the positive pole ap-

[1] The international destinations were mapped for Czech respondents only.

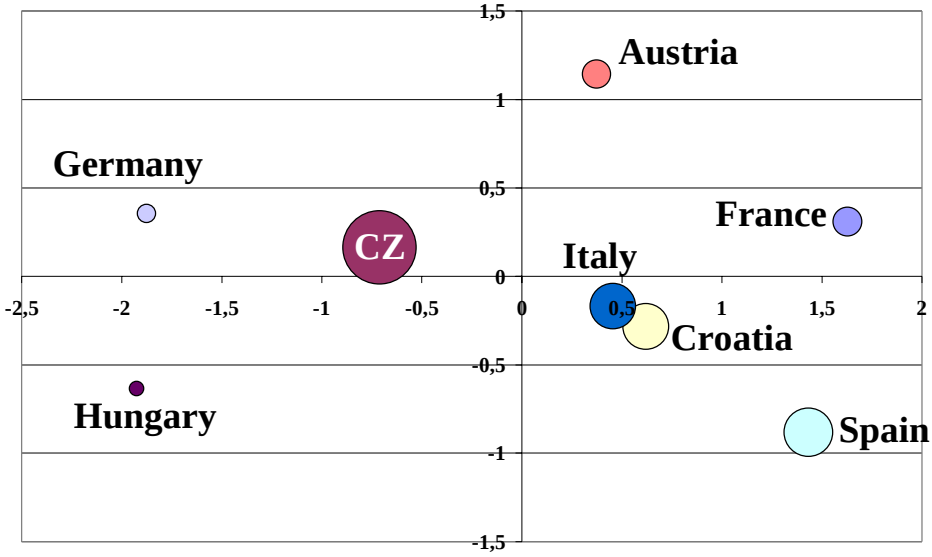

Figure 4. Czech Republic's competitive position among 8 international vacation destinations (STRESS = 0.085, RSQ = 0.960, Czech respondents only)

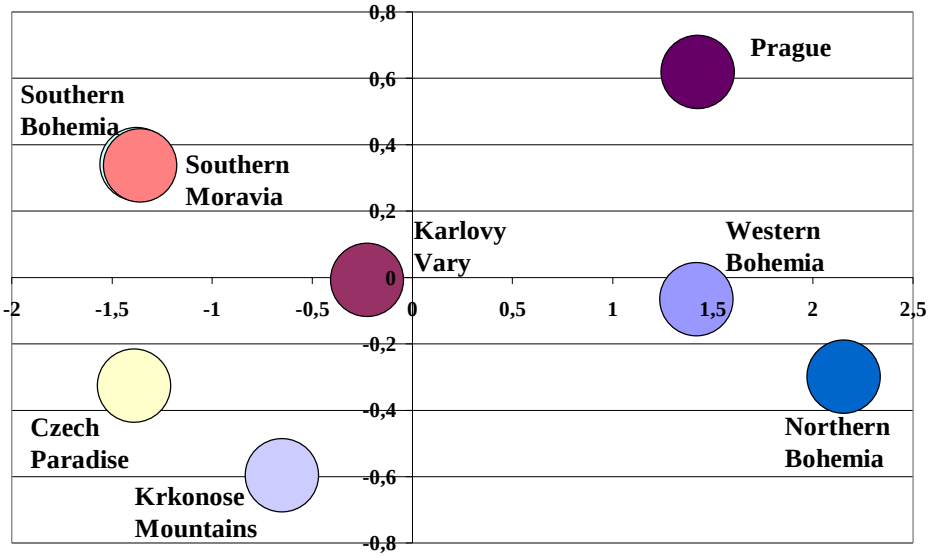

Figure 5. Southern Moravia's competitive position among 8 Czech Vacation destinations (STRESS = 0.058, RSQ = 0.986)

pear to be more of cultural interest. Remarkable is the close proximity of Italy and Croatia indicating a strong similarity between the destinations according to the perception of Czech respondents.

Czech destinations

The horizontal dimension (*x*-axis) can be labelled according to the polarity between sunny & warm and cloudy & cool climate with warm representing the negative and cold the positive pole. Hence, the destinations Southern Bohemian, S.M. and the Czech Paradise are representatives of the sunny and warm hemisphere while Northern Bohemia represents the cool extreme. The vertical dimension (*y*-axis) is mainly characterised by the two opposing destinations Prague and the Krkonoše Mountains. Hence, a dimension between the poles culture & education versus nature & body appears to be reasonable. This is supported by the position of other clusters with e.g. S.M. with its abundance of castles and historical sights closer to the cultural pole while the traditional hiking destinations the Czech Paradise and Northern Bohemia position themselves closer to the nature pole. Remarkable is the extremely tight position of Southern Bohemia and S.M. This proximity visualizes the almost identical perception of both destinations by travellers and is an unequivocal indicator that both domestic destinations are most close competitors for vacationers.

Table 5. Factors in destination choice

Factors	Factor loading	Eigen-Value	Percentage of variance	Cronbach´s Alpha
Comfort		2.45	15.9	0.79
* easy access	0.83			
* accomodations	0.83			
* convenience and comfort	0.79			
* short travel time	0.67			
Security		1.91	4.1	0.72
* feel safe	0.88			
* safety and security	0.87			
* relax	0.62			
Water		1.82	3.6	0.68
* hot springs	0.83			
* sunny and warm	0.78			
* swimming	0.73			
Wellness		2.02	3.1	0.67
* body care facilities	0.80			
* dietary and medical treatment	0.77			
* healthy life	0.66			
* exercise sports	0.62			
Nature		1.83	7.0	0.67
* natural attractions	0.85			
* harmony with nature	0.82			
* hiking and trailing	0.66			
Fun		1.70	7.7	0.61
* adventure and excitement	0.80			
* night life	0.79			
* enjoy and have fun	0.67			
Money		1.65	4.8	0.59
* high travel costs	0.80			
* costs of living	0.76			
* spoiled environment	0.68			
People		1.68	4.0	0.57
* local people´s hospitality	0.84			
* friendly locals	0.82			
* social interaction	0.54			
Festival		1.36	5.0	0.53
* festivals	0.83			
* exercise creativity	0.83			
Food and drinking				
Cultural attractions				
Speak my language				
Folkloristic events				
Arrangements for children				
Historical sights				
Personality				
Animation programs				
Shopping opportunities				
Fitness training				
Tennis and golf				
Novelty of the place				

Identification of vacation styles

To reduce the number of dimensions, the forty motivational and attitudinal statements were subjected to factor analysis. In order to identify themes in the destination choice within the subjects´ responses, a principal component factor analysis (SPSS routine) with Oblimin rotation was conducted. In the process, the minimum Eigenvalue of 1.0 was used as cut-off criterion. For each tourist orientation scheme, only the constituent statements with factor loadings of more than .60 were retained. The results indicate that the selected items may be correctly assigned to nine factors (see Table 5): the value for the Kaiser-Meyer-Olkin (KMO) criterion is .870 and the explained variance is .552. The reliability measure Cronbach´s Alpha ranges from .53 to .79. The factors were labelled "comfort", "safety & security", "water", "wellness", "nature", "fun & joy", "money", "people", and "festivals". Twelve more single statements were also retained for further analysis since they carried an additionally important information to be used in the segmentation process. Respective factors were each based on a single item only and appeared to be not connected to any of the previous factors.

Due to the small size of the international visitors cell, the results of a comparison of destination choice factors for domestic and foreign visitors have to be interpreted carefully (Table 6). Results of a t-test provide information on the significance of different mean values. While domestic vacationers place significantly higher values on safety & security, novelty, animation, water and tennis & golf, foreign visitors place more emphasis on the cultural factor. Differences in other factors in vacation destination choice were not found to be significant.

Table 6. Comparison of destination choice factors

Factor	Mean value		*T*-value for difference
	CZ respondents (n = 213)	other respondents (n = 31)	
Safety & security	3.19	2.74	0.011
Nature	3.13	2.92	0.193
Personality	3.10	3.13	0.843
People	3.04	3.08	0.792
Food	2.98	3.03	0.744
Novelty	2.94	2.37	0.015
Animation	2.60	1.42	0.000
Fun & joy	2.57	2.33	0.124
Money	2.46	2.32	0.417
Water	2.39	1.85	0.004
Comfort	2.20	2.13	0.621
Wellness	2.01	1.98	0.863
Culture	1.98	2.90	0.000
Children	1.72	1.32	0.062
Tennis & golf	1.68	1.10	0.008
Fitness programs	1.65	1.97	0.193
Festivals	1.61	1.72	0.524
Folk	1.55	1.61	0.752
Shopping	1.44	1.48	0.838
History	1.22	1.24	0.941
Language	0.59	0.63	0.794

Identification of homogeneous visitor groups

To establish the taxonomy of the destination choice segments, cluster analysis was employed to group subjects which exhibited similar orientation patterns. Respondents who scored similarly on the extent to which they did or did not exhibit the various orientations became part of a single cluster. For that purpose, first the single linkage method (identification of subjects that exhibited unlikely extreme values that were then discarded) then the Ward method were employed. Quick cluster analysis divided subjects into segments with low intragroup variance and high between-groups variance. To further validate the cluster solution, multivariate analysis of variance (MANOVA) and a univariate analysis (ANOVA) were conducted. MANOVA examined the overall differences in orientations among the clusters, while ANOVA determined in which individual orientations the clusters differed. Significant statistical differences were subjected to a conservative multiple comparison test (Scheffé) to identify pairwise differences.

After a careful examination of four, five, six, seven, eight, nine and ten cluster solutions, it was determined that a six cluster solution provided the most meaningful distribution of subjects. The selected six clusters corresponded well with those in the European Vacation Style Typology (Zins 1999). Table 7 holds the results of the cluster procedure, including the group mean for each of the six vacation style clusters/ segments on each of the 21 destination choice themes. The table also holds the results of the validating MANOVA and ANOVA procedures. Further, the results of the Scheffé paired comparison procedures indicate that numerous pairwise differences were significant (see superscripts).

The six vacation style segments differed significantly across the 21 vacation orientations as did the six vacation style segments across each orientation. Examination of ANOVA scores reveals that comfort was the most decisive factor in differentiating the segments in the sample ($F = 24.7$, $p \leq 0.001$). The other factors (except for language), although highly significant at $p \leq 0.001$, had smaller scores indicating that the differences in those factors across the segments were smaller.

The first vacationer segment included 35 percent of the subjects. Since this is the largest segment, the most satisfactory results would provide some distinctive characteristics that destination marketers could use. This is only partially the case. An examination of the vacation style orientation mean scores and Scheffé results displayed in Table 7 shows that a majority of the respondents represent a common denominator sort of segment. The segment had relatively high mean scores on comfort,

Table 7. Cluster analysis / identification of destination orientations

Factor	Cluster						p
	C1	C2	C3	C4	C5	C6	
Comfort	2.58[a]	1.67 [ab]	3.18 [b]	3.22 [ab]	2.63 [bc]	3.27 [abc]	0.000
Food	1.60 [a]	1.15 [b]	3.64 [abc]	2.25 [abc]	1.87 [c]	2.44 [abc]	0.000
Water	2.38 [a]	1.65 [ab]	2.82 [b]	3.04 [ab]	3.00 [ab]	3.06 [ab]	0.000
Money	2.53	3.15 [a]	2.06 [a]	2.97	2.47	2.36 [a]	0.000
Safety & security	1.67 [a]	1.30 [b]	1.88 [c]	2.99[abcd]	1.65 [d]	1.95 [bd]	0.000
Wellness	2.81 [a]	2.00 [ab]	3.20 [b]	3.31 [b]	3.37 [ab]	3.24 [ab]	0.000
Culture	3.16 [a]	1.60 [ab]	3.36 [b]	3.12 [b]	3.87 [abc]	2.59 [abc]	0.000
Language	1.84	1.80	1.64	1.25	1.33	1.46	0.034
Folk	3.41	2.80 [a]	3.00	4.08 [a]	3.83 [a]	3.46	0.001
Children	2.95 [a]	2.10 [ab]	4.55 [abc]	4.37 [abd]	4.08 [ab]	3.31 [bcd]	0.000
History	2.12 [a]	4.15 [ab]	2.27 [b]	2.04 [b]	2.67 [bc]	1.69 [bc]	0.000
Personality	1.93	1.65 [a]	2.09	1.79	2.54 [ab]	1.71 [b]	0.001
Animation	2.34 [a]	1.40 [ab]	2.91 [b]	3.63 [abc]	3.87 [abd]	2.24 [cd]	0.000
Shopping	3.80 [a]	2.55 [ab]	4.45 [bc]	3.83 [b]	3.58	3.26 [c]	0.000
Fitness	3.49 [a]	2.50 [ab]	3.45 [c]	3.25 [d]	1.75[acde]	3.87 [be]	0.000
Tennis & golf	2.76 [a]	2.25 [b]	4.55 [ab]	3.92 [ab]	3.67 [ab]	4.00 [ab]	0.000
Novelty	2.09 [a]	1.10 [ab]	1.73	2.37 [b]	2.67 [b]	2.20 [b]	0.000
Nature	1.83 [a]	1.90	1.51 [b]	2.57 [abc]	1.83 [c]	1.79 [c]	0.000
Festivals	3.54 [a]	2.60 [ab]	2.82 [c]	3.19 [d]	4.02[bcde]	3.36 [be]	0.000
Fun & joy	2.34 [a]	1.82 [b]	3.33 [abc]	2.07 [cd]	3.11 [abd]	2.55 [bc]	0.000
People	1.98	1.57 [a]	2.58 [a]	1.85	2.11	1.90	0.006
						multivariate	0.000
%	35.5	8.7	4.8	10.4	10.4	30.3	
(n)	82	20	11	24	24	70	

Note: A pair of means with the same superscript indicates a significant difference between the two groups with $p \leq 0.01$. Example: considering the factor comfort, groups C2, C4, and C6 are significantly different from group C1; they share C1´s superscript "a". Scores ranged from 1 (strongly disagree) to 5 (strongly agree).

food, and safety & security while the high mean score on the item language was not significantly different. The segment was not motivated by extreme destination choice orientations, instead the trips are for recreation and relaxation without being engaged in too many activities. The segment's modus operandi appears to gravitate toward relaxation and safety & security. Therefore, the first segment was labelled *"relax-in-safety tourists"*.

The second segment included nine percent of the subjects. It is in sharp contrast to the one described before. This segment had the highest score for a number of orientations, including comfort, food, water, safety & security, wellness, culture, animation, novelty, fun & joy and locals. History and money are of the lowest importance to them. These travellers want to have excitement and challenge, fun and entertainment during their holidays. They want it all and they are willing to pay for it. Therefore, this group was labelled *"demanding pleasure traveller"*.

The third segment comprised 5 percent of the sample. This group had the distinctively highest score on the nature and on the money orientation. Otherwise, the portrait of these vacationers is mainly characterised by average values. Yet, the nature and money orientation are absolutely outstanding. Individuals in this group love the unspoilt nature and untouched landscapes. Consequently, it was labelled *"nature-loving vacationers"*.

The fourth segment is made up of 10 percent of all subjects. Respondents placed the significantly highest value on language and development of their personality while exhibiting lowest scores for folk, safety & security, and animation programs. These travellers are little interested in comfort, and they are little engaged in activities around the themes water or wellness. They want to spend their vacation at a place where people speak a common language and they exhibit a high interest in developing their own personality. Together with the following segment five, this cluster holds the highest relative percentage of foreign tourists. The segment was labelled *"cultural interactionists"*.

Fitness training is the outstanding characteristic of travellers in the fifth segment, comprised of another ten percent of vacationers. Orientations with low and lowest values are festivals, animation programs, and cultural attractions. Distinctive travel motive for this segment is the need for physical exercise. This care of one's health is accompanied by the desire to regain the spent energy through good food and an orientation toward a safe and

Table 8. Profile of the six vacation style segments

Domestic destination	Cluster						*p*
	C1	C2	C3	C4	C5	C6	
Western Bohemia	6.32	6.32	5.64	6.35	6.05	6.08	0.673
Karlovy Vary	3.84 [a]	2.21[abcde]	4.09 [b]	4.75 [c]	4.45 [d]	4.13 [e]	0.000
Czech Paradise	2.83	3.58	2.82	2.86	3.45	2.97	0.461
Southern Bohemia	2.84	3.95	2.91	2.92	2.62	2.68	0.116
Prague	5.84	5.25	6.00	5.13	5.14	5.25	0.444
Southern Moravia	3.24	4.30 [a]	3.45	3.17	3.00	2.66 [a]	0.044
Northern Bohemia	7.18	6.63	7.09	6.74	6.35	6.91	0.174
Krkonoše Mountains	3.78	3.42	4.00	3.45	3.71	4.08	0.711
						multivariate	0.014

Note: A pair of means with the same superscript indicates a significant difference between the two groups with $p \leq 0.05$. Scores ranged from 1 (highest preference) to 5 (lowest preference).

secure environment, hence resulting in the label *"care-free wellness tourists"*.

The sixth and final segment included thirty percent of subjects. This type of vacationer stresses language and personality almost like the cultural interactionists. Yet, the really outstanding travel motive is a desire to spend the vacation at places with lots of historical sights. This desire coincides with a disregard for comfort, water-related and wellness activities. Fitness programs are of the least importance. The segment was labelled *"sightseeing individualists"*.

Profiling visitor segments

MANOVA and ANOVA with Scheffe´s test were used to profile the vacation type segments. The analysis made it possible to determine whether the segments differed with respect to (1) the ranks assigned to domestic and foreign destinations and (2) demographic variables.

MANOVA results (see Table 8) reveal that the vacation style segments differed with respect to the ranking of the domestic destinations. They differed little with respect to the ranking of foreign destinations and not at all with respect to demographic variables. ANOVA reveals, further, that the segments differed significantly with respect to their ranking of the Czech domestic destinations Karlovy Vary and S.M. Furthermore, ANOVA results show significant differences between the group of pleasure travellers (whose members rank the destination significantly highest) and all other segments for the destination Karlovy Vary. The destination S.M. is ranked significantly higher by the group of sightseeing individualists compared to pleasure travellers.

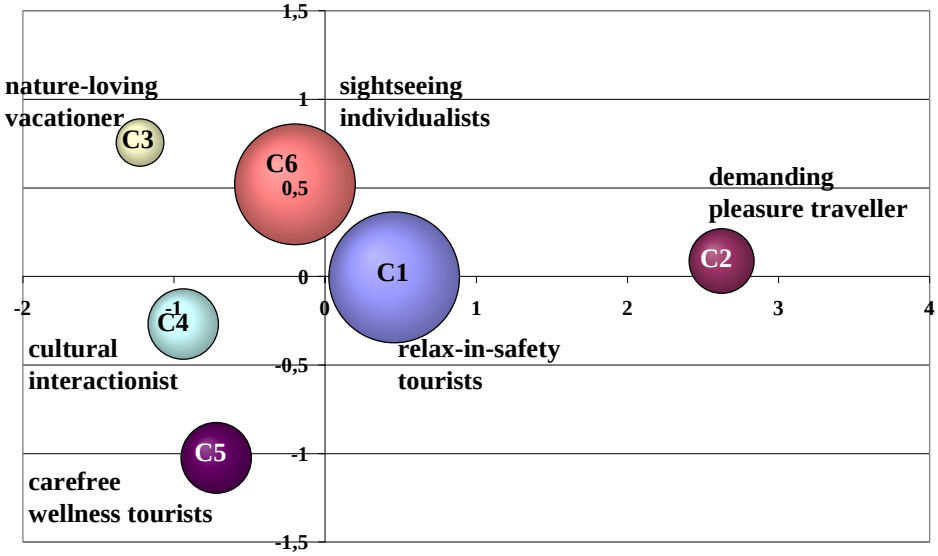

Figure 6. Visitor clusters in a MDS (STRESS = 0.081, RSQ = 0.969)

Mapping different vacationer types

The six groups of vacationers were further consolidated into a perceptual map with a reduced number of dimensions. The 21 object scores were fed in a metric multi-dimensional scaling procedure (Kruskal 1964a and Kruskal 1964b, Takane, Young and De Leeuw 1977, Carroll and Green 1997). The two-dimensional solution (Figure 6) resulted in good quality parameters (Kruskal´s Stress = 0.081, RSQ = 0.969). The interpretation of this reduced space of destination choice determinants is as follows: The area covered by each segment correlates with the size of the cluster. Interpretation of the dimensions draws from the dispersion of the clusters and the underlying determinants described before. Dimension 1 can be labelled according to the polarity between traditional and modern with traditional representing the negative and modern the positive *X*-axis. Hence, the types nature, culture, and exercise are representatives of the traditional hemisphere while the hedonic pleasure travellers represent the modern extreme. The second dimension (*Y*-axis) is mainly characterised by the two opposing traveller types nature-lover and wellness tourists. Both are seeking almost completely different types of vacations, not a single orientation that scores high (low) for one type achieves a similar score for the other type. As the type nature lies closer to the positive pole, it is fair to assume a distinction indoor versus outdoor. However, a closer examination of significant differences between the two extreme types points at more subtle differences. The results resemble more of the Eurostyles typology (Mazanec and Zins 1994) with an axis from materialism to idealism. This is supported by the position of other clusters with e.g. the personality-building sightseeing type closer to the positive pole.

DISCUSSION

The results support strategic planning i.e. by asking questions like "Is this situation desirable?", "Do local and regional tourism managers and community authorities want this position?", "What future actions are necessary to improve the competitive position for a destination?", and "How to get an edge against the toughest competitors?".

Czech Republic's position as an international destination as perceived by the Czech respondents is favourable on one hand in that no other country is perceived similarly. This is good news since the missing proximities to selected international vacation destinations point at a relatively unique position with no immediate competitors. Accordingly, no immediate differentiating efforts appear to be required on a national basis. On the other hand, the established position close to the origin of the *x*- as well as the *y*-axis suggests a middle-of-the-road position that is likely to attract little interest of vacationers due to a lack of outstanding offers. Rank six amongst eight selected international destinations is a clear indicator for this lack of attractiveness. Consequently, Czech vacationers are very likely to spend future summer vacations in foreign countries as long as no appropriate measures are taken to make a summer vacation in their motherland more attractive.

The position of the domestic vacation destination S.M. as perceived by travellers is only slightly better. Vacationers perceive the destinations S.M. and Southern Bohemia almost identically with a significantly better ranking of the latter. Given the choice, substantial numbers of vacationers will spend future summer vacations in Southern Bohemia and not in S.M. Moreover, although positioned slightly different, the destination the Czech Paradise is ranked as high as S.M. indicating a more favourable overall perception by travellers. Strong efforts are required to position the destination S.M. more favourably against these competitors to ensure future visits in sufficient numbers.

Respective efforts should focus on selected vacationer types rather than trying to attract all types of vacationers. Special emphasis has to be placed on market segments that are sizeable (i.e. the relax-in-safety tourist) and/or exhibit strong preferences for this destination (i.e. the sightseeing individualists). Visitor types with apparently no interest in the destination S.M. (i.e. family escapists, comfort seekers, and ambience seekers) either have to be taken off the list of target groups (a short-term and low cost approach) or the perception and profile of the destination have to be adapted carefully to meet the needs and wants of these segments (with significant changes to be expected in the perception by other segments). In any case, changes in perception and ranking of vacation destinations have to be monitored periodically to avoid unfavourable developments and to stay ahead in the competition for visitors.

LIMITATIONS OF THE STUDY

There are three potential problems which may impose limitations on the results of this research. First, although the respondents of this study possessed relatively diverse demographic characteristics, the sample was obtained during a period of three months at only five selected locations. Such a sample may differ from the target population because of noncoverage. Official statistics exhibit a ratio between foreign and domestic tourists to S.M. of 2 to 1. The corresponding ratio in the sample was 7 to 1 having been obtained by a random sample procedure ("survey every 5th passers-by"). However, there is no secondary statistical data available allowing to discriminate between the number of day visitors against overnight stays. Hence, a high percentage of day visitors from the region could explain the difference. Altogether, it cannot be excluded that the sample population could have biased the results (Gierl 1995).

A second limitation of this study involves the validity of the psychographic items presented to the travellers. Since the main purpose was to identify competing desti-

nations and to characterise summer vacationers to S.M., no attempt was made to validate the construction of the items to a more universal model. The authors acknowledge that the items given to the vacationers as the sole determinants of vacation decisions may not represent all the actual factors which play an important role for the choice of vacation destinations in the Czech Republic; in fact, the authors expect that other factors will have to be considered i.e. when segmenting visitors to an alpine ski resort (e.g. High Tatra).

A third limitation of this study lies in the measurement instrument itself. The Likert scale does not have the ability to distinguish between subtle differences in attitudinal levels.

CONCLUSIONS

Clear and distinctive product positioning must be an integral part of any destination marketing strategy, due to the inherent characteristics of the destination product and the increasingly complex needs of the tourist. Key players in the hospitality, tour operator and transportation sectors have pursued successful positioning strategies which have been driven by effective market segmentation and brand management. This leads to the immediate question as to why the Czech Republic travel destinations have not yet incorporated similar policies into their marketing strategies.

Psychographic segmentation proved to be a useful technique to explore the perceptual worlds of travellers and tourists. Demographic variables proved to be incapable of explaining the destination choice and ranking. However, a better understanding of how to adapt destinations to visitors requires more. The application of the MDS analysis as a strategic instrument outlined the use of market segments as strategic units for the purpose of marketing a destination. In the case study, the map dimensions are descriptive in nature. Future applications could expand their exploratory power be supplementing data on purchase power or measures of satisfaction. Moreover, for each segment a separate market attractiveness - competitive strength matrices could be developed (see Zins 1999) to assess the competitive position of a particular destination, i.e. S.M. in more detail. Future research should be encouraged examining cross-national and intra-national visitor segments in more detail.

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