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STATE LEVEL RESEARCH: TYPOLOGY AND DIRECTION

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ABSTRACT

The increasingly competitive environment for travelers dollars compels state travel offices to review their long term plans. An important part of that planning process is the role research will play in understanding travelers behaviour. The types of research states might find most useful is the subject of this paper. Research studies are aggregated into four categories delineated as: Assessment, Monitoring, Product Positioning and Forecasting. Examples of each categorical type are briefly reviewed in terms of function and expected outputs. A strategy for designing an optimum research mix is also suggested.

STATE LEVEL RESEARCH: TYPOLOGY AND DIRECTION

INTRODUCTION

The decade of the 80's which started by ushering in a recession ended with the longest peacetime economic expansion in U.S. history continuing. Numbers of travelers closely followed the recession/growth cycle with total travelers in the early 80's below those recorded in the late seventies but increasing through the mid 80's to record highs by the end of the decade. Even with the recession in the early 80's state budgets for travel promotion and programs have grown dramatically averaging nearly 8% annual growth from 1980 through 1986 approaching the $300 million level (19). This has led to increasing competition for the travelers dollar (26). While the approach of budgeting additional funds for state promotion and advertising will work to increase visitation in the short run, long term success will depend on offering the types of attractions and services demanded by travelers. As early as 1983 the tourism market was considered a mature one (28) indicating that future increases in travel will come more from providing appropriate goods and services rather than from steadily increasing numbers of travelers. This will become even more critical as transportation costs increase and the national economy struggles through future recessionary periods.

Answers to how a state may monitor tourist flows, modify promotional campaigns and assess their various touristic products can be found through research. The types of research states may find most useful is the focus of this paper.

RESEARCH TYPOLOGY

A review of the travel/tourism literature reveals that research useful for state purposes may be broken down into four categories: Assessment, Monitoring, Product Positioning and Forecasting.

Assessment research is often conducted to measure the effectiveness of special promotions. Examples of Assessment research are the conversion studies performed on specific advertising campaigns to determine the extent the advertising message resulted in additional visitation.

Monitoring research is undertaken to periodically update state agencies on current travelers and their expenditure patterns. Examples of Monitoring research are visitor profile and economic impact studies.

Product Positioning research should be completed before initiating new promotions. The purpose of this type of research is to discover untapped markets and design new messages for existing markets. Examples of Product Positioning research can be found in market segmentation and image studies.

Forecasting research involves the science of prediction. It is often conducted to assist the private sector plan investment decisions. Many different techniques have been employed for forecasting. Some rely more on the collection of data and are therefore quantitative in nature whereas others utilize consensus building approaches and are more qualitative.

ASSESSMENT

The primary purpose of Assessment research is to determine the impact, in terms of increased business, of new promotions and provide information to decision makers about the value of the promotional campaign. The most common form of Assessment research utilized is the conversion study. The main focus of conversion studies is to estimate the percentage of inquiries to a specific promotional campaign that resulted in actual visitation to the state. Accomplishing this objective usually requires data collection via survey instruments which are administered to a sample of the population that has responded to a specific promotional campaign. Mail and telephone are the most common methods utilized for data collection. Hunt and Dalton (18) reviewed the two methods and reported little difference in terms of costs but concluded that of telephones provided more accurate results in a shorter period of time.

Conversion studies are often used to justify promotional expenditures and in that sense provide the type of information required to continue appropriations for state travel advertising. A sample of the approaches used to estimate actual visitation from inquiries can be found in Ballman et al. (1), Burke and Lindblom (4) and Woodside (36).

Criticism of traditional conversion studies is found in Silberman and Klock (30) who list the many problems inherent in their design. Among those criticisms is that researchers must be very careful of the sampling process in order to achieve a representative sample. Non response bias and the inability to factor out those visitors who had previously decided to visit before exposure to the promotional message are also concerns. Another problem is that conversion type research is sometimes used to collect visitor profile information. The appeal of this approach is that costs of collecting visitor profile information are substantally reduced or eliminated by combining the two types of research. Perdue and Botkin (26) discourage this approach as they find inquiry conversion studies to be inappropriate surrogates for collecting visitor profile information and vice versa.

Silberman and Klock (30) propose a modified travel cost model (7) with travel advertising inserted as an explanatory variable as a means of overcoming some of the problems identified above. Although their approach has merit and appears methodologically sound, data and technical expertise requirements may make their approach less acceptable to market researchers with limited statistical grounding.

MONITORING

Monitoring is probably the most common form of research conducted or funded through state travel offices. Depending on the research design information useful for product positioning purposes can also be obtained. The intent of Monitoring research is to initially establish baseline information regarding visitors and/or impacts resulting from their travel to the state and then periodically update the information. Economic impact studies are a form of Monitoring research and due to their political relevancy have been in high demand. The main reason for estimating economic impact is to determine the importance of travel to state economies. This information can then be compared to estimates of the economic importance of other industries to assist in the legislative appropriation process. An example of economic impact research is the U.S. Travel Data Centers' travel economic impact model which, through periodic primary data collection efforts, estimates travelers expenditures in each of the states. Criticism of USTDC's model (21) centers around it's omission of secondary impacts (multiplier effects) and impacts due to foreign visitation. Mak (21) proposes a Regional Input-Output model, which he calls RIMS II, modified from the one produced by the U.S. Department of Commerce, Bureau of Ecomonic Analysis to overcome some of the problems identified above. Both the USTDC's model and RIMS II are monitoring models in the strictest sense. That is they measure the level of expenditures due to visitations but they do not explain the underlying reasons for changes in the magnitude of the expenditures.

More recent advances in estimating economic impact have led to the development of indices or barometers. Secondary data that states collect on a periodic basis (i.e. sales or lodging tax) provide the necessary information to develop indices. Although the use of secondary data can be criticized due to various problems inherent in its collection, as long as methods to collect the data remain constant the index provides an accurate measure of change over time. The underlying assumption being that a true measure of economic impact is not as important as monitoring the direction and magnitude of change. Because data used in the construction of an index is often collected and reported at the county or regional level and may be released monthly or quarterly it is possible to monitor the performance of the travel industry much more closely than with traditional economic impact studies. They also have the advantage of being much less costly to produce as primary data collection efforts are unnecessary. Examples of barometers or indices that have been developed can be found in the tourism literature (23, 2, 22, 20).

Although the focus in the preceding section has been on the economic impact of tourism there is increasing attention being given to the need for more studies focusing on the environmental and socio-cultural impacts of the industry. A discussion of the approaches utilized to conduct those studies is not a concern of this paper because at the present time that research has been primarily region or community specific and not state level.

Many times states want more information about visitors than provided through economic impact studies. Types of information desired would include origin of visitors, length of stay, region of visitation, expenditures by category, party size, purpose of visit etc. Collecting data of this nature generally involves survey research and can be expensive. Visitor profile studies however have the added advantage of acquiring information not only useful for monitoring purposes but if appropriate methods are employed, product positioning can be accomplished. There are many techniques used to collect visitor profile information. Enroute, intercept and port of entry/exit surveys are the ones most commonly employed. Some techniques employ a diary survey format in order to track expenditures and visitation patterns for the entire length of stay.

Published literature contains examples of visitor profile studies that have been completed for states (8, 25, 16, 17). For a more detailed description of the various techniques used to collect visitor profile information, inherent problems in research design of these studies and means to overcome the problems the reader is referred to Gartner and Hunt (13).

Recently a "trip index" model originally developed by Pearce and Elliott (24) to estimate length of stay in a particular area in relationship to the entire trip has been modified by Uysal and McDonald (34) to provide visitor profile data and segment travelers into groups useful for marketing purposes. This is an example of a monitoring study being used for product positioning purposes.

PRODUCT POSITIONING

Product positioning is the marketing art of identifying unique product characteristics for a particular consumer group(s) and developing promotional messages for that group(s). Increasing competition between states for a maturing travel market compels state travel offices to seriously consider conducting or sponsoring product positioning research. This type of research is actively pursued by academic researchers and provides the greatest opportunity for innovative investigation.

Much of the positioning research focuses on market segmentation. Markets are segmented based on demographics, geographics or psychographics and various statistical techniques are applied to identify unique characteristics of the various segments. Promotions are then directed at those segments emphasizing the special feature of the states tourism products determined to be of interest to the particular segment. Studies of this nature have been conducted by Rovelstad and Blazer (28), Stynes (31), Crompton (9) and Woodside et al. (37).

One of the problems encountered with market segmentation product positioning for state touristic products is the inability to adequately measure the extent satisfactory substitute products exist in a state with lower economic distance for the traveler. For example market segmentation may reveal that significant numbers of downhill skiers exist within a previously untargeted, geographically close market. However destinations further away may actually be in a better position to capture that share of the ski market due to better and less expensives access provided by commercial air service. Economic distance therefore is less for the distant destination. The geographically close destination, to succeed in attracting new downhill skiers, must identify and promote other aspects of the skiing experience not available in the economically closer destination. Successful product positioning therefore requires knowledge of competitors products, in terms of attributes sought, in order to delineate and market comparative advantages. Research efforts in this area are receiving increasing attention and provide the best opportunity for states to remain competitive through repositioning of their touristic products.

Product positioning research has received frequent attention in the professional tourism literature. No one model or technique has been accepted as the most useful for this line of inquiry. For example Scott et al (29) used discriminant analysis to measure touristic product attributes to help explain travelers decision to visit Massachusetts. Similar discriminant analysis work was conducted by Phelps (27) to identify touristic images of Menorca. Goodrich (15), using multidimensional scaling identified "benefit bundles" to explain different images tourists held of various destinations. Gartner (14), using multidimensional scaling techniques investigated the underlying product attributes of four western states. Other studies using different statistical techniques for product positioning purposes have been performed by Embacher and Buttle (11) who used repertory grid analysis and Calantone et al (6) using correspondence analysis.

The level of statistical complexity is higher with product

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positioning research than with many of the assessment or monitoring types of studies. Much of it is performed on a contractual basis as state offices do not normally employ market researchers to carry out the type of studies reported above.

FORECASTING

The primary function of forecasting research is to predict future travel flows to an area. Accurate prediction is very useful for the industry as investment decisions can then be made based on actual demand. Unfortuately accurate predictions are difficult, if not impossible, to make due to the influence of exogenous factors. Van Doren (38) portrayed a picture of constant change in the tourism industry for the 80's due to the influence of exogenous factors, in particular increasing fuel costs and inflationary pressure. Many of those factors which had less of an impact during the late 80's are now reappearing as viable forces of change. Even with the problems encountered in accurate forecasting, costs associated with not forecasting are high and may lead to erroneous measures of future demand which can seriously affect development decisions (6).

More than the tourism sector is affected by inaccurate forecasts. Transportation systems may not be upgraded in time to handle increasing traffic flows leading to congestion problems which can seriously impact area economic development and residents perceptions of the value of tourism to the community. Community support services (e.g. medical) may also be overwhelmed. The consequences of not forecasting are such that attempts to find accurate forecasting models continue.

Many methods, both quantitative and qualitative, have been utilized to develop forecasting models. Regression, time-series. Delphi and judgment aided, gravity and trip generation models have all been used with varying degrees of success (3, 10, 12, 32, 35). Calantone et al (6) and Uysal and Crompton (33) provide excellent reviews of the various methods utilized for forecasting and their applicability to tourism. It appears that the quantitative methods (i.e. regression, time-series) which require hard data are the most useful in the short run and qualitative methods (i.e. Delphi, executive judgment) more applicable for long range forecasts (33). The likelihood of unpredictable change increases as the forecasting time frame lengthens decreasing the value of past data as an accurate predictor of future events. Uysal and Crompton (33) suggest combining quantitative and qualitative methods to improve forecasting models.

RESEARCH MIX

The four research categories listed above provide the means to collect the core of information required to guide state tourism planning. However all four types do not need to be conducted simultaneously. Because of the costs involved in collecting primary data it is often

necessary to develop a research plan that prioritizes needs and budgets expenditures over time. Some of the questions that must be asked in developing the plan include: What information currently exists on tourism in the state? Is tourism considered a viable industry by state politicians? Does the current budget for tourism reflect the industries value when compared to funding levels for other state agencies representing other industries? Have resent travelers been identified in terms of origin, length of stay, purpose of visit etc.? Is there a perceived need for additional visitors and if so during what time of the year?

Only after setting priorities can a research plan of work be developed. Since most states have already conducted or sponsored market research in the past (28) it should not be difficult to assess past efforts and prioritize present needs. The following discussion leading to a suggested research mix is predicated on the following assumptions: (1.) States will always be in a position of accountability for appropriated tourism dollars; (2.) Competition between states for travelers will continue to exert pressure to explore different marketing strategies; (3.) Limited resources for state tourism planning and development efforts will require decisions be based on current information.

Monitoring research, especially economic impact information, has high value due to its political significance. Determining the importance of travel to state economies can result in larger budgets for marketing and promotion efforts. The costs of economic impact studies can be substantially lower than for other types of research due in large part to advances in model development. For example states can buy into the U.S. Travel Data Centers Economic Impact model at substantially less cost than conducting the research themselves. As previously mentioned the use of barometers or indices has the disadvantage of not measuring total economic impact but rather the level of economic activity and its change due to tourism. The advantages however are that once model construction is completed the costs of operation is very low because they rely on periodically collected secondary data. Therefore reports can be issued quarterly or in some cases monthly and can be made region specific.

States should also consider using barometers or indices to adjust total economic impact estimates. For example if total economic impact information is known for a specific time period the barometer reading for that period is taken as the base and future fluctuations in the barometer can be used to estimate percentage changes in total economic impact.

The types of monitoring research that profile visitors are extremely important not only in terms of understanding present visitors travel behavior but also to establish baseline information for product positioning efforts. Visitor profile analyses, conducted periodically, can be used to gauge the effectiveness of promotion and advertising efforts in terms of meeting specific objectives (i.e. increasing length of stay). Monitoring changes in travel patterns can also help evaluate regional attraction development. Disadvantages of visitor profile studies are primarily in terms of cost. The reliance on primary data collection efforts tends to make this type of research expensive. Costs can be reduced by not conducting visitor profile research on an annual

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basis. For example the Institute of Outdoor Recreation and Tourism at Utah State University, under contract to the State of Utah, developed a research program to complete visitor profile studies on a rotating basis. Two separate studies, nonresident motor vehicle visitors and commercial air passengers, were completed every three years. The third year of the cycle was reserved for special projects which were more of an exploratory nature such as image analysis (product positioning), motorcoach or resident travel behavior (monitoring). The visitor profile studies used a diary method for data collection which also provided economic impact information thereby completing two types of monitoring research at one time.

Product positioning research should be conducted after sufficient baseline information is available. In the increasing competitive travel market this type of research provides the greatest opportunity to identify appropriate attraction development for specific market segments that have the greatest potential to increase travel market share.

Monitoring research, as previously mentioned, can provide some information for product positioning purposes. Market segmentation studies are feasible and relatively easy to perform with data collected through visitor profile research. However experimental research designs provide the best opportunity to explore new positioning possibilities. There are certain disadvantages which come with experimental research that often leads states to conclude that it may not be worthwhile. Disadvantages include the technical and statistical sophistication required to develop a workable research design and analyze results. Often that expertise must be contracted which can increase costs which are already high due to the need, in most cases, to collect primary data. Costs could be reduced by collecting data needed for product positioning purposes at the same time monitoring studies are underway. This is not always possible though because product positioning often focuses on the potential traveler and monitoring research, especially visitor profile studies, is more concerned with the present traveler. The level of expertise required to interpret results can also be very high which can lead to some very useful information being neglected or ignored.

States should not exclude product positioning studies from their research mix because of the disadvantages cited above. The rewards can be substantial in terms of new business and promotional directions and often offset the cost. If the research is to be contracted, the proposal submission process can reduce uncertainty risk by providing for an examination of the various research designs, level of interpretation consultation provided and cost. Product positioning should be an integral component of each states research mix because of its potential to increase travel market share through the identification of new markets, direct marketing efforts and guide attraction development.

Ideally assessment type research such as conversion studies should follow new product positioning strategies. Often it is completed because it becomes politically expedient to quickly justify additional travel related appropriations. To be most useful this research should be completed after specific new markets are identified and promotional programs are planned, developed and implemented for those markets. This approach would not only determine the value of the new positioning

strategy but could also be used to pretest various positioning strategies to select the one with the greatest chance of success.

One advantage of assessment research is that the methods used to collect and analyze data have received sufficient attention and do not require a great deal of technical or statistical expertise to master. There are still bias problems inherent in the designs but they are not of a sufficient magnitude to render the results ineffectual. Costs can fluctuate depending on the research design chosen but surveys are generally short and high response rates are common thereby reducing cost per response.

As previously mentioned forecasting research has received a great deal of attention in the literature and has high value for investment and planning decisions. There are various methodologies utilized ranging from the relatively simple (e.g. historical trend) to the very complex requiring large amounts of hard data. Due to the influence of exogenous factors however the time frame for forecasting accuracy can be relatively short.

Once information on current users is known forecasting research should begin. The reason for this is that certain factors may affect one market more than another and it is important to understand where the present group of travelers is coming from to be able to adjust accordingly. For example past economic downturns due to declining oil prices were regional in nature. Other sectors of the economy continued to grow at the same time as those that were oil related declined. If visitor profile studies indicated that a primary market was heavily dependent on one industry than forecasting methodologies can take that into consideration. Failure to understand present markets could lead to forecasting research that is unable to predict some of the exogenous factors affecting regional travel behavior.

Forecasting research, which can be complex and costly, does not have to be conducted on an annual basis. Assuming there is little change in a particular market's economy, predictive values may be accurate for an extended period. If exogenous shocks do occur it would be prudent to conduct additional forecasting research shortly after the event to avoid the consequences of over investment in attraction development.

SUMMARY

In an attempt to summarize the above discussion and guide research planning efforts at the state level Figure 1 was created. Contained in Figure 1 are different criteria for evaluating the four categories of research presented in this paper. The four categories are evaluated based on cost, methods, level of complexity, purpose and outputs, and planning recommendations. Planning recommendations place the highest priority on establishing and updating impact and visitor profile information which in this paper is categorized as monitoring type research. Identifying new markets receives the secondary priority (Product Positioning) followed by assessment research which is used to evaluate the effectiveness of promotions targeted at new markets.

Forecasting research, which is needed to guide investment and attraction development, receives the lowest priority. This does not mean that forecasting research is nonessential. It has high value and should be included in the research mix but its importance is overshadowed by the need to complete or initiate the other types of research first.

The question of whether the four types of research should be contracted to an outside group or completed in house has been broached but not completely answered in this paper. The level of marketing research expertise present or planned in state travel offices will determine to a great extent the answer to that question. However it would be extremely difficult to find an individual with the ability to organize and direct a marketing team capable of conducting all four types of research reviewed in this paper.

The need for research at the state level is expected to increase as travelers become more discriminating and competition for their business escalates. States presently operating without research as an integral component of their tourism marketing plan should reevaluate that plan. States which already conduct or sponsor tourism research should evaluate past performance and where appropriate, restructure research priorities to meet specific objectives. In both cases information contained in this paper can be used to guide the research evaluation process.

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Research Selection Criteria Matrix

Figure 1

Research Category	Methods	Primary Purpose(s)	Complexity & Cost	Planning Recommendation
Assessment	Conversion Modified Travel Cost	Evaluation of Promotion and Advertising Efforts	Models have been developed reducing complexity. Cost is low for primary data collection efforts.	Should follow product positioning research and be used to evaluate new promotions and advertising.
Monitoring	Impact Studies (primarily economic) Barometers Indices Visitor Profiles	Establishment of baseline information and periodic updates. Budget Justification.	Models exist keeping complexity low. Costs low if an already developed model is used and secondary data is available. Exception for visitor profile analysis which has relatively low complexity but high cost due to the collection of primary data.	Top priority. Needed to establish baseline information and should be completed before other research.
Product Positioning	Multidimensional scaling Repertory Grid Discriminant Analysis Correspondence Analysis	Identification of new markets and opportunities to increase travel flow from established markets. Uncover new strategies and products for promotion and advertising.	Complexity is high because many of the models are still experimental. Requires collection of primary data making costs high.	Follows initial monitoring research and should continue annually in order to investigate new markets.
Forecasting	Time-series Delphi Judgment Aided Focus Groups Gravity/Trip Generation	Provides information on future travel patterns for investment and planning decisions.	Complexity can be high. Experimental models are still being tested. Qualitative methods have higher cost because of the requirements of soliciting opinions and information from consumer panels. Quantitative methods have lower cost depending on the availability of secondary data.	Do not need to be conducted annually, but should be undertaken more frequently when exogenous factors change rapidly.