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## Destination Management Systems – Electronic Distribution Effectiveness amongst SMEs in the Hotel Sector

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# Destination Management Systems - Electronic Distribution Effectiveness amongst Small and Medium-sized Enterprises in the hotel sector.



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Queen Margaret University College

## Introduction

Tourism is an information intensive activity and the generation, gathering, processing, application and communication of information are vitally important for day-to-day operations (Buhalis 1994). Tourists rely on a wealth of information before making a decision and, therefore, the effective marketing and distribution of tourism is becoming increasingly dependent on IT (Horan and MacDonaill 1996). Hospitality operators, especially SMEs, have little data upon which to base an assessment of electronic distribution channel effectiveness with sparse look-to-book ratios being among the few metrics offered. This work will seek to assess effectiveness criteria from both client and server perspectives and will map both qualitative and quantitative data into a modelling process to represent the effectiveness of distribution channels, DMS in particular, and offer a methodology for SME electronic distribution channel benchmarking more generally.



## Aims & Objectives

- To evaluate electronic channel-choice strategies and outcomes amongst hotel SMEs
- To construct a methodology and generate a set of metrics for evaluating the DMS electronic channel
- To model and validate DMS metrics against peer systems and client assessment.
- Identify both expert and client (SME) views on channel effectiveness criteria
- Assess the DMS (VisitScotland) against these weighted criteria
- Generate guest volume, value and transactional metrics through log file analysis of the DMS (VisitScotland)
- Elicit SME data on guest volumes, values and sources
- Derive a channel-assessment model relating server and client data
- Validate this model through server and client iteration in Scotland and a parallel study in Ireland (Gulliver)



**Destination Management Systems (DMSs)** distribute a wide variety of tourism products, are generally government sponsored, and pay particular attention to representing small and independent tourism suppliers (Buhalis and Licata 2002). However, the market is realising that consumers do not want to deal with the problems of contacting multiple suppliers to make comparisons and purchases. Some, if not most, will want and will be prepared to pay for the level of service that comes from dealing with an intermediary, who will offer them advice and save them time and money (Bloch and Segev 1996). Consequently, DMS based channels are forecast to grow in importance (O'Connor 2001).



## Conceptual Framework.

**Electronic Distribution:** The manner in which hospitality companies bring their product to market remains a cornerstone of any competitive strategy. The number, variety and complexity of Web distribution channels are continuing to evolve, with most companies using multiple routes to get their product to the consumer (Castleberry, Hempell et al. 1998). Many hotel chains opt for as many routes as is feasible to try to reach the maximum audience. This approach is impossible from an SME's perspective as many of distribution channels are unavailable to SMEs (Starkov 2002). Hotel SME's must take a more discriminating approach to channel choice and, therefore, it is vital for SMEs to formally evaluate their distribution channel options.



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**Effectiveness:** Attempting to evaluate the effectiveness of hotel electronic channels of distribution is both complex and multifaceted (Castleberry, Hempell et al. 1998). Different types of hotels benefit in different ways from various channels and not all systems work as effectively for all types of properties (Bush 2000). Determining the effectiveness of a distribution channel makes clear business sense. The decision as to which channel(s) to use has become increasingly complex, and hotel managers currently have few tools and little guidance to help them to determine which best match their needs (Weill 1991).



**Small or Medium-sized Enterprises (SMEs)** in the hospitality industry offer by definition less than 50 rooms, employ fewer than 10 people, operate in lower reaches of the market and are often situated in tertiary locations (Buhalis and Main 1998). The European hotel sector is dominated by small operations with nearly 95% being classified as SMEs (WTO 1997). Only 30% of European hotels are affiliated to a chain, as against approximately 70% in the United States (Muqbil 1998) and the importance of SMEs to the European economy is widely recognised.



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## Methodology

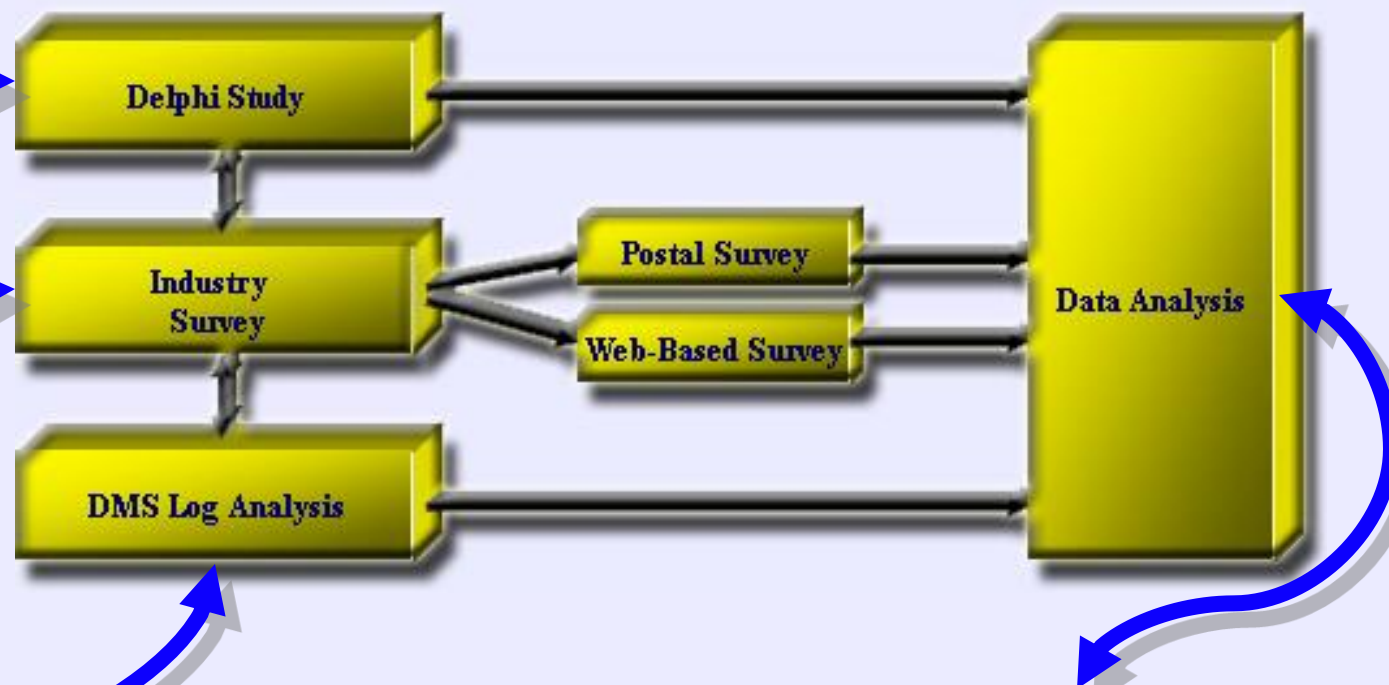
**Delphi Study:** The first tier is concerned with qualitative research conducted using a Delphi study in conjunction with server and client survey work to generate, validate and prioritise a portfolio of weighted criteria that could be used to evaluate the general effectiveness of a DMS as a channel of distribution for hotel SMEs. This assessment looks at both the client's and server's perspectives but does not assess the consumer's perspective on effectiveness.



**Industry Survey:** This tier will deal with a mainly quantitative survey conducted amongst SMEs to assess their agreement with the range of evaluation criteria generated from the initial qualitative work and to evaluate the effectiveness of a DMS from an SME's perspective. Taken together these stages offer a means of assessing both the perceived effectiveness from both client and server sides and thus provides the foundation for relating this to the quantitative data generated through the final tier.



**DMS Log Analysis:** The final tier will be based upon an in-depth examination of the DMS based website (VisitScotland) through consolidation and re-treatment of their server log files. A detailed analysis of the log files can then be undertaken in an attempt to assess the effectiveness of the DMS based website for each of the SMEs. This will be achieved by identifying the respondents to the industry survey and by analysing the activity to their part of the DMS through the log files to establish how effectively the DMS is working for them. The log analysis data for each SME will then be compared with the data extracted from the industry survey for that particular SME to provide an overall picture of the effectiveness of the DMS to each particular SME. The derived methodology and proposed metrics will be validated through the triangulation of the results from each of the three tiers of the process.



## Expected Results

- ⊙ A comprehensive weighted set of criteria for evaluating the effectiveness of a DMS.
- ⊙ An in-depth analysis of the effectiveness of a core DMS based website.
- ⊙ A robust and tested methodology for both Indirect and Direct conversion ratios.
- ⊙ An expert system that will aid hotel SMEs in the evaluation and management of their distribution channels.
- ⊙ Recommendations on the improvement of DMS effectiveness.

## Completion Stages

Completion Stages	Duration	2003				2004				2005				2006				2007		
		Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3			
- <b>PhD. Process</b>	<b>60 mons</b>	[Timeline bar from Qtr 4 2003 to Qtr 3 2007]																		
Literature Review	4 mons	[Timeline bar from Qtr 1 2003 to Qtr 4 2003]																		
- <b>PhD Planning</b>	<b>7.25 mons</b>	[Timeline bar from Qtr 1 2003 to Qtr 3 2004]																		
Topic Selection	1 mon	[Timeline bar from Qtr 1 2003 to Qtr 1 2003]																		
+ <b>Devise Conceptual Framework</b>	<b>5.75 mons</b>	[Timeline bar from Qtr 2 2003 to Qtr 3 2004]																		
+ <b>Decide Research Strategy</b>	<b>0.5 mons</b>	[Timeline bar from Qtr 2 2003 to Qtr 2 2003]																		
- <b>Primary Research</b>	<b>43.75 mons</b>	[Timeline bar from Qtr 2 2003 to Qtr 3 2006]																		
+ <b>Delphi Study</b>	<b>14 mons</b>	[Timeline bar from Qtr 2 2003 to Qtr 4 2004]																		
+ <b>Industry Survey</b>	<b>14.75 mons</b>	[Timeline bar from Qtr 3 2003 to Qtr 4 2005]																		
+ <b>Log Server Analysis</b>	<b>11 mons</b>	[Timeline bar from Qtr 4 2003 to Qtr 3 2005]																		
Cross Tabulate Data	4 mons	[Timeline bar from Qtr 3 2006 to Qtr 4 2006]																		
Finish Primary Research	0 mins	[Timeline bar from Qtr 3 2006 to Qtr 3 2006]																		
PhD Write Up	9 mons	[Timeline bar from Qtr 3 2006 to Qtr 2 2007]																		
PhD Submission	0 mins	[Timeline bar from Qtr 2 2007 to Qtr 2 2007]																		

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