The 'Cruise Ship Railing Dance':
Conducting academic research in the cruise domain

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CRUISE RESEARCH OVERVIEW
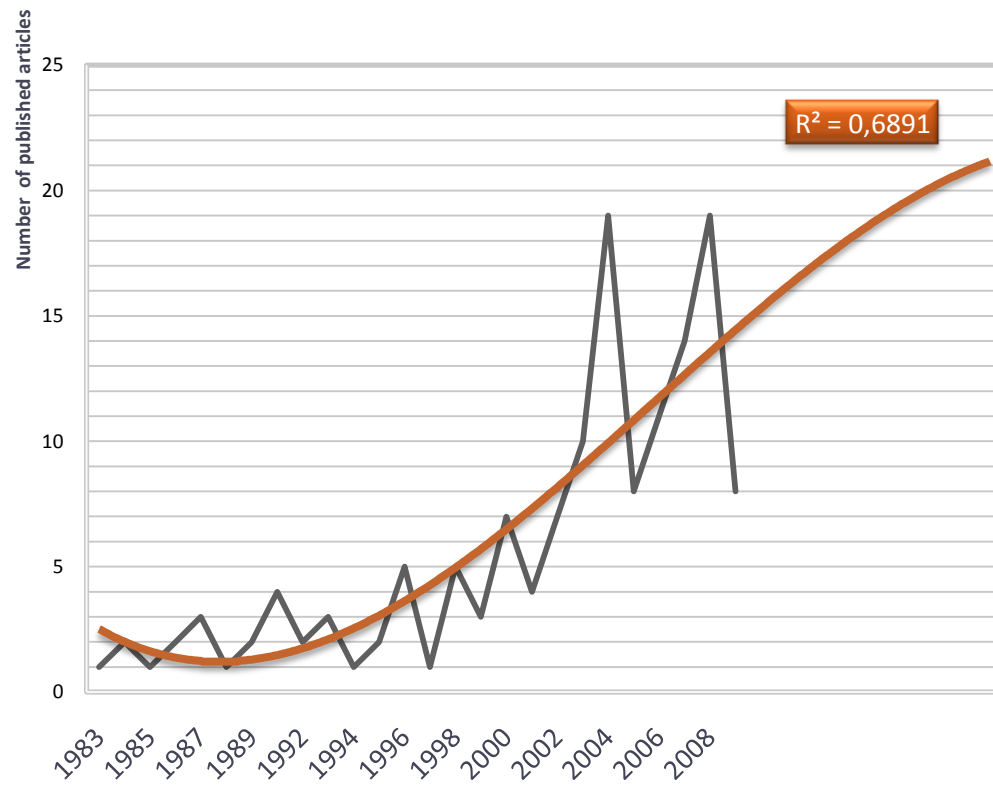
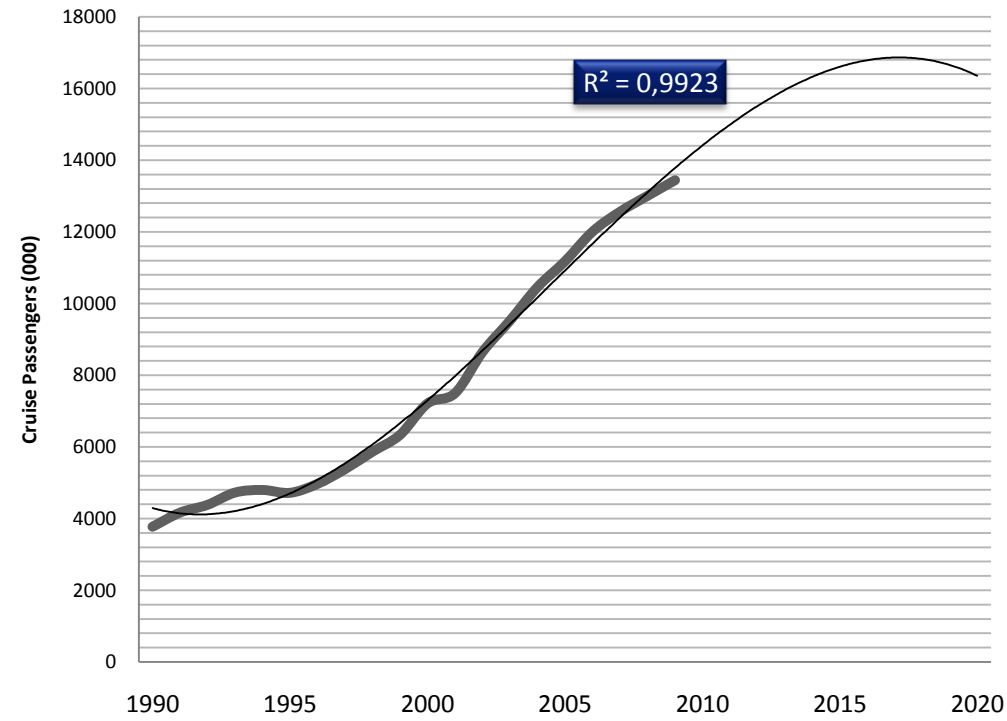*Status Quo*

Cruise Research
Following the Sector's Growth Trend

Cubic Extrapolation of cruise-related published articles

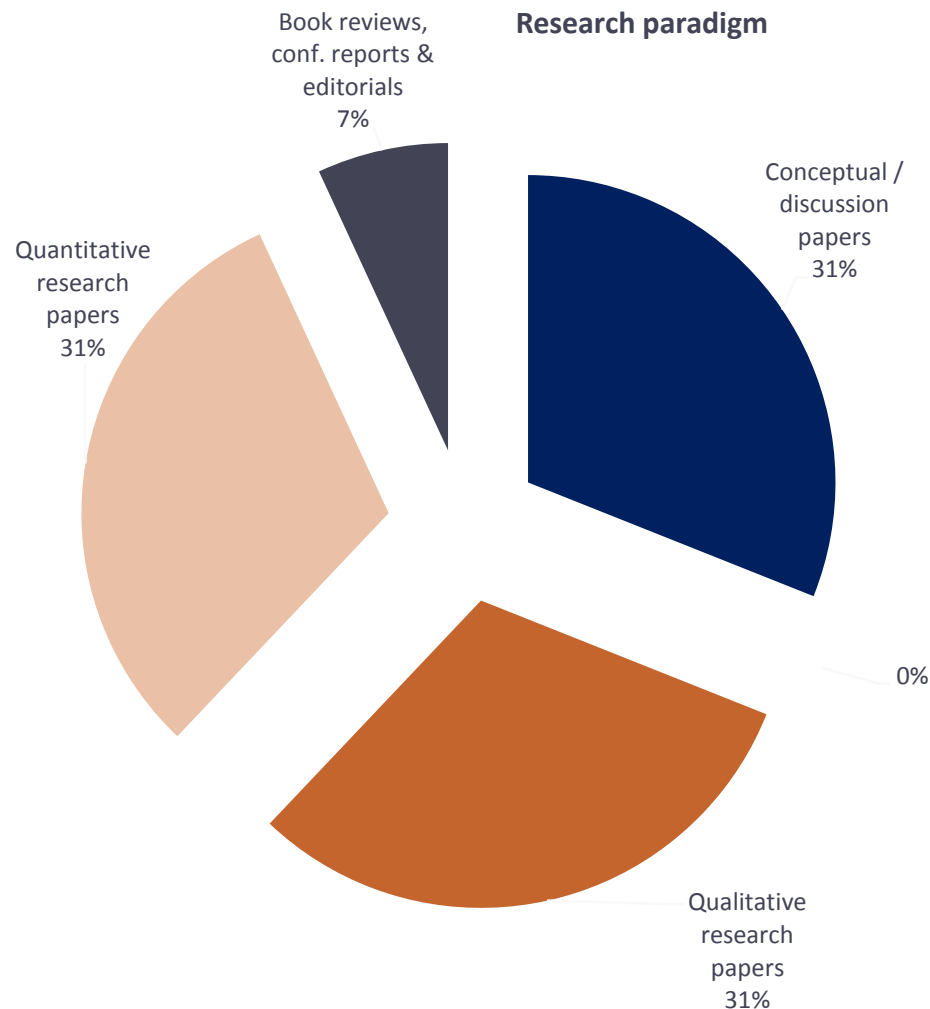Data Source: Papathanassis & Beckmann 2011

$R^2 = 0,6891$

Cubic extrapolation of CLIA members' passenger numbers.

Data source: CLIA (2010)

$R^2 = 0,9923$

Research paradigm

Book reviews, conf. reports & editorials 7%

Quantitative research papers 31%

Conceptual / discussion papers 31%

0%

Qualitative research papers 31%

▶ Purpose question:
- Applied research (problem-oriented)?
- Pure research (knowledge-oriented)?
- Convenience research (researcher-oriented)?

▶ Originality question:
- Novel theories / hypotheses?

▶ Relevance question:
- Improved understanding of cruise-related phenomena?
- Impact on the development of the sector?
- Educational impact?

▶ Rigour question:
- Transparency & replicability?
- Contributions to the methodological toolkit?

APPLIED CRUISE RESEARCH

Quantitative Research & Cruising
Data Availability Determines Research Questions

Descriptive Statistics	Comparisons (ANOVA, Ch-Square, Cluster Analysis, Z- & t-Tests)	Association / Modelling (Wald Test, Univariate Analysis, Exploratory Factor Analysis)
• Examples: Marti, 1992; Teye & Lecrerc, 1998; Douglas & Douglas, 2004 • Sampling Frame: Mostly single cruise (or cruises of the same company) • Average sample size (primary): 340 • Secondary Data Sources: Sector indicators, Incidents, Websites, Brochures • Data collection method: Questionnaire Survey (primary), Content analysis (secondary)	• Examples: Moscardo & Morrison, 1996; Miller & Tam, 2000; Petrick, 2003; Sirakaya & Petrick, 2004; Cramer & Blanton, 2006; Brownwell, 2008) • Sampling Frame: Different voyages – same ship, secondary sources (e.g. GISS data, market research data) • Average sample size: 1188 (primary), 15570 (secondary) • Data Collection Method: Questionnaire Survey • Data recycling: Petrick, 2003 – Sirikaya & Petrick, 2004)	• Examples: Marti, 2004; Gabe & Lynch, 2006; Jones, 2007; Hung & Petrick, 2010;) • Sampling Frame (Av. Sample Size): Single port visitors (394), single cruise (300), undergraduates • Data Collection Method: Questionnaire Survey & Semi-structured interviews • Data Recycling: Hung & Petrick, 2010 x 2 (Journal of Tourism Management / Annals of Tourism Research)
Majority of Quant. Research (Turning funded market research into a published paper?)	**Second Most Frequent Quant. Research** (Data access opportunism?)	**Rare Quant. Research** (Lack of appropriate sampling frames?)

Quantitative Research & Cruising
Main Issues & Implications

Absence of global sampling frames

Data availability determines research question / objectives

Novel research area

Under-developed research infrastructure

Cruising = Pre-paradigmatic field of research

Cruising = Fragmented field of research
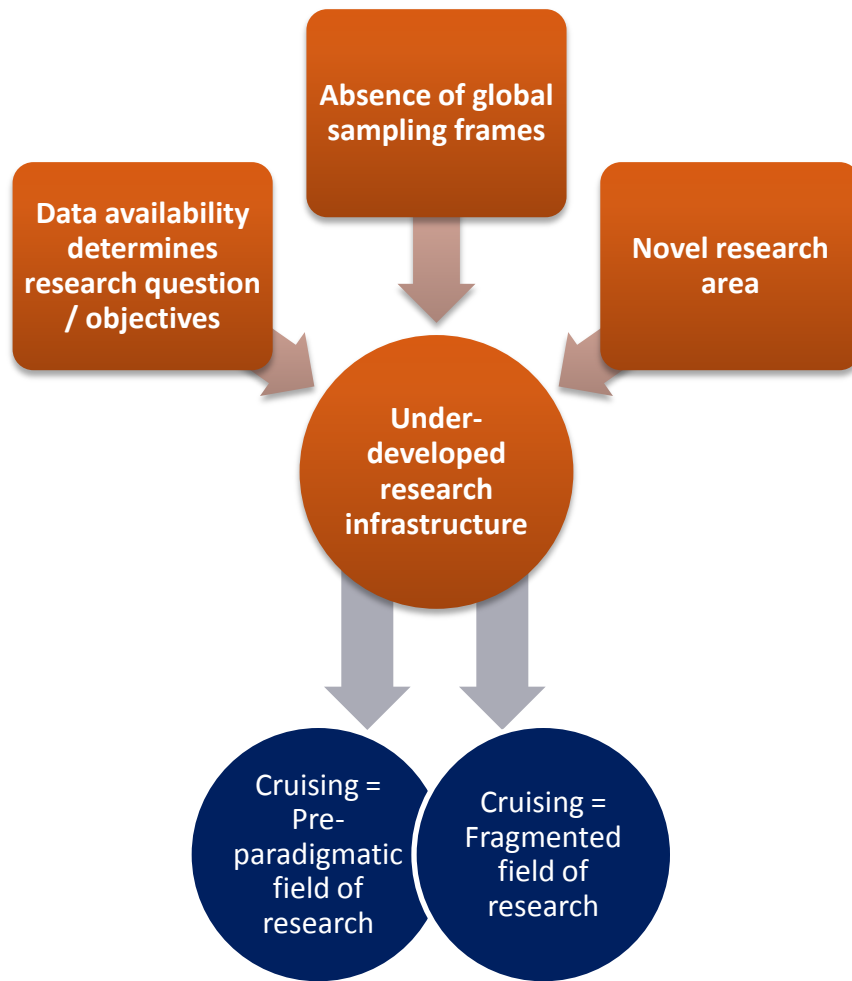
Bridging the practice-research gap

- Academic practitioner journals (more focus on research relevance and discussion – wider audience)
- Closer involvement with professional associations (e.g. port alliances)
- Executive education for practitioners (bringing them closer to academia)

Academic networking

- Data / access sharing
- Development of research agendas
- Long-term research projects (beyond the scope of a single paper)

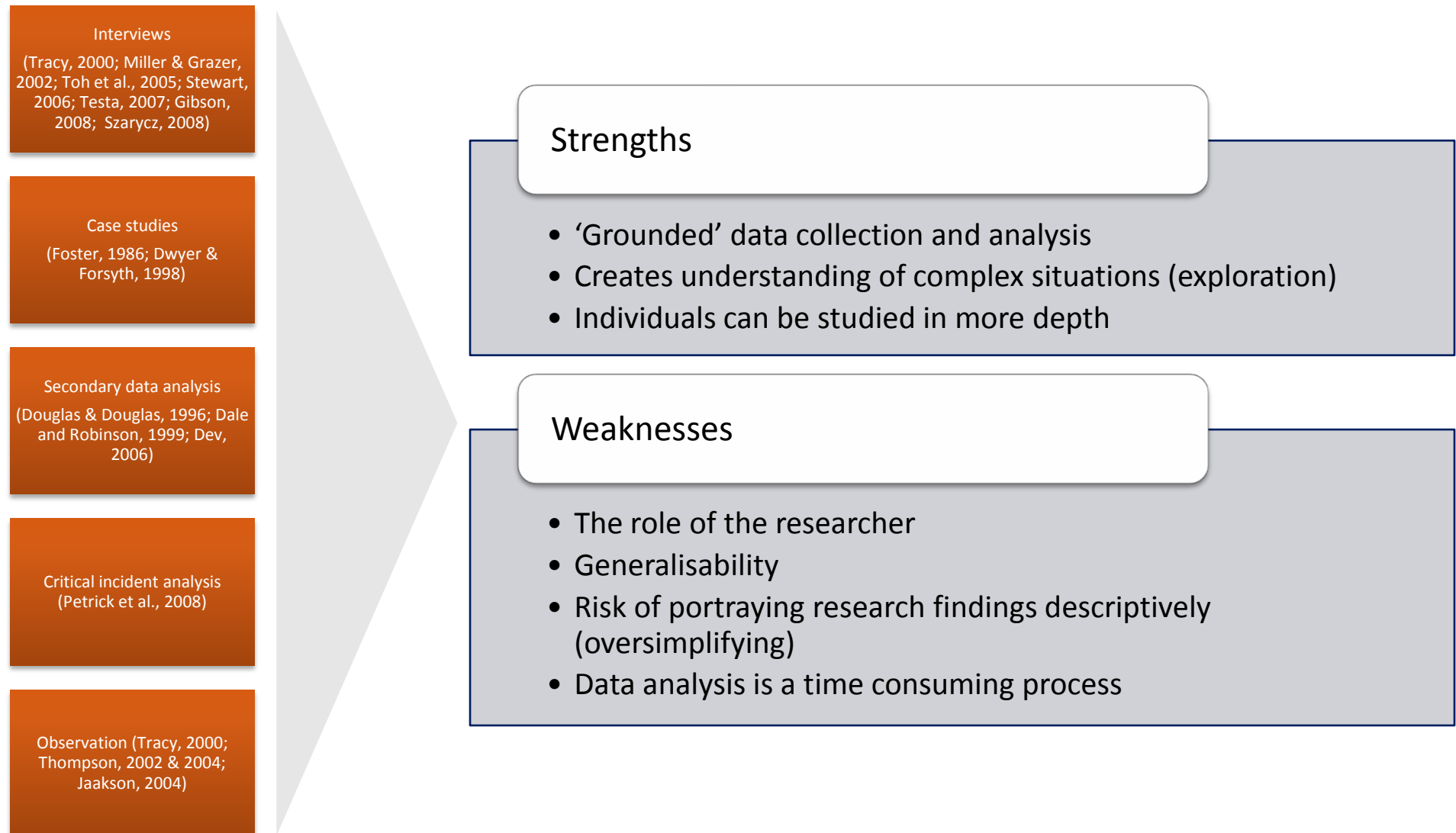**Qualitative research requirement**

- Identification / creation of testable models / theories
- Theoretical / research continuity

Potential of online research methods

- Internet as a global sampling frame
- Open access
- Population Representiveness?

Qualitative Inquiry in the Cruise Industry Methods Applied, Strengths & Weaknesses

Interviews
(Tracy, 2000; Miller & Grazer, 2002; Toh et al., 2005; Stewart, 2006; Testa, 2007; Gibson, 2008; Szarycz, 2008)

Case studies
(Foster, 1986; Dwyer & Forsyth, 1998)

Secondary data analysis
(Douglas & Douglas, 1996; Dale and Robinson, 1999; Dev, 2006)

Critical incident analysis
(Petrick et al., 2008)

Observation (Tracy, 2000; Thompson, 2002 & 2004; Jaakson, 2004)

Strengths

- 'Grounded' data collection and analysis
- Creates understanding of complex situations (exploration)
- Individuals can be studied in more depth

Weaknesses

- The role of the researcher
- Generalisability
- Risk of portraying research findings descriptively (oversimplifying)
- Data analysis is a time consuming process

Obstacles to (Qualitative) Inquiry in the Cruise Industry & Recommendations

Consensual Issues

- Particularly for studies not primarily focusing on economic advantages for the cruise operator
- Ethical considerations regarding covert vs. overt research

The Objective Nature of Cruise Ships

- Geographic nature sets boundaries for research
- Fragmentation of the industry
- Population diversity

Qualitative studies that create an understanding of a variety of situations from a variety of perspectives

Innovative research approaches that help to overcome the identified obstacles

Research Resources (financially & time)

THE POTENTIAL OF EMERGING ONLINE RESEARCH METHODS

Data Mining Example – Cruise Critic

Online Content Analysis – Data Mining
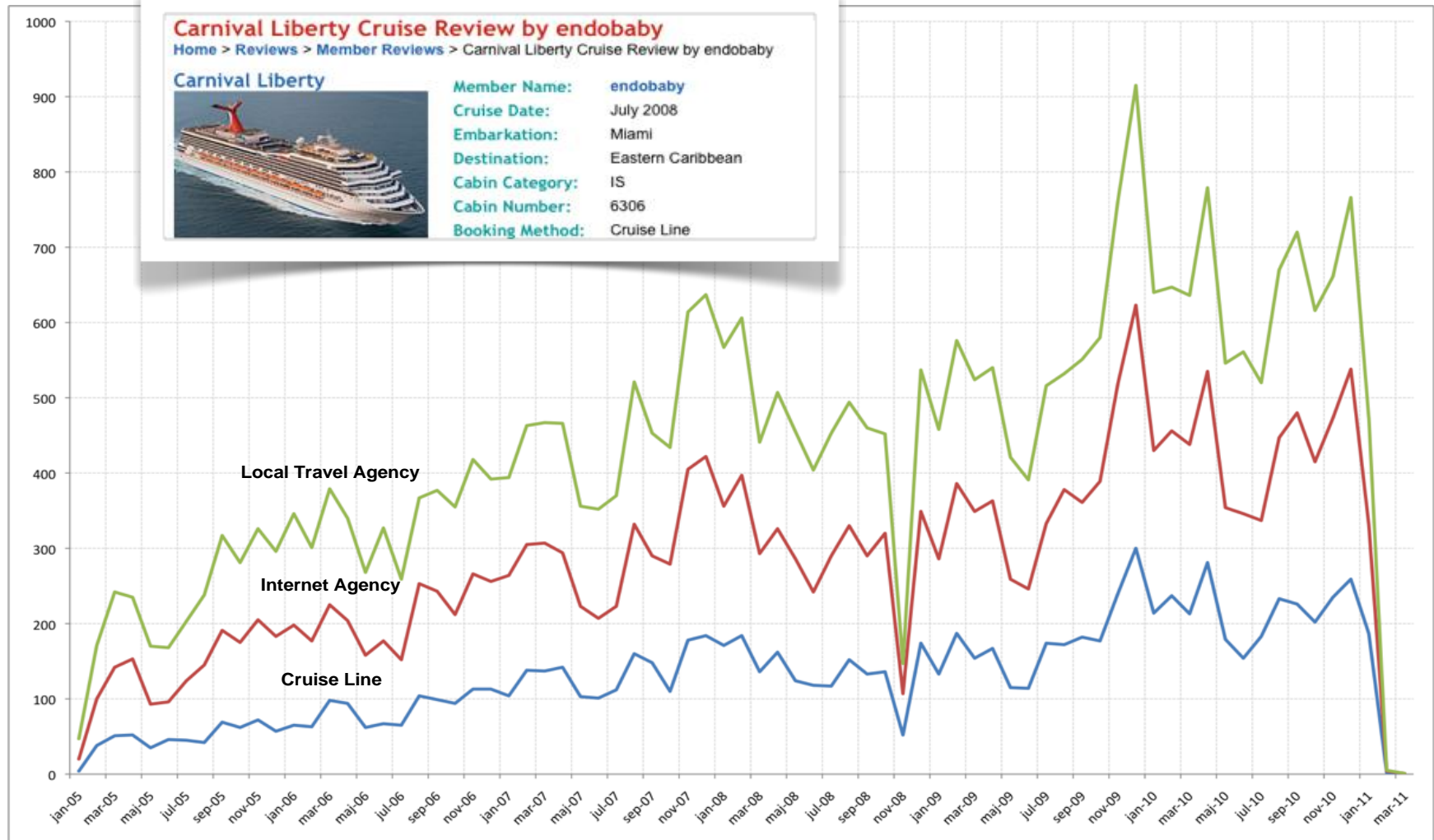# Data Source

Context

Ratings

Text

Online Content Analysis – Data Mining
After retrieval & post-processing

|	overall_rating	dining	public_rooms	cabins	entertainment	spa_fitness	shore_excursions	embarkation
1	5.0	5.0	5.0	5.0	5.0	3.0	<NA>	3.0
2	1.0	5.0	3.0	1.0	6	3.0	<NA>	5.0
3	4.0	4.0	4.0	4.0	3.0	<NA>	4.0	4.0
4	5.0	5.0	4.0	6	4.0	<NA>	5.0	4.0
5	2.0	3.0	3.0	2.0	2.0	2.0	<NA>	1.0
6	3.0	4.0	5.0	4.0	3.0	5.0	3.0	4.0
7	6.0	5.0	5.0	6	3.0	<NA>	<NA>	5.0
8	2.0	1.0	2.0	1.0	4.0	<NA>	<NA>	1.0
9	4.0	4.0	5.0	5.0	3.0	<NA>	<NA>	5.0
10	5.0	5.0	5.0	4.0	3.0	5.0	4.0	5.0
11	6.0	5.0	5.0	6	5.0	<NA>	4.0	6
12	5.0	6	5.0	5.0	4.0	5.0	6	5.0
13	3.0	1.0	4.0	4.0	2.0	4.0	<NA>	3.0
14	4.0	4.0	5.0	4.0	4.0	<NA>	<NA>	4.0
15	5.0	6	5.0	6	6	5.0	6	6
16	5.0	4.0	5.0	5.0	4.0	<NA>	<NA>	2.0
17	4.0	4.0	6	6	4.0	6	2.0	4.0
18	4.0	4.0	4.0	4.0	3.0	3.0	<NA>	5.0
19	3.0	2.0	2.0	5.0	3.0	4.0	3.0	5.0
20	5.0	4.0		6		4.0	3.0	6
21	5.0	5.0	5.0	5.0	3.0	4.0	5.0	3.0
22	6.0	5.0	6	5.0	6	5.0	<NA>	6
23	1.0	1.0	5.0	5.0	2.0	3.0	1.0	5.0
24	6.0	6	6	6	5.0	5.0	3.0	5.0
25	4.0	4.0	3.0	5.0	3.0	2.0	<NA>	4.0
26	5.0	5.0	6	6	5.0	3.0	3.0	3.0
27	4.0	3.0	4.0	4.0	3.0	<NA>	<NA>	4.0
28	5.0	5.0	6	5.0	5.0	5.0	<NA>	6
29	3.0	3.0	3.0	3.0	2.0	4.0	3.0	4.0
30	5.0	3.0	5.0	5.0	6	6	<NA>	6
31	2.0	1.0	3.0	1.0	2.0	<NA>	5.0	4.0
32	6.0	6	5.0	1.0	6	5.0	<NA>	5.0
33	6.0	6	6	6	6	<NA>	6	6

X new

Source: CruiseCritic.com data set, The R Project for Statistical Computing.

Online Content Analysis – Data Mining Context

N = 33873. Source: CruiseCritic.com data set.

Online Content Analysis – Data Mining Analysis
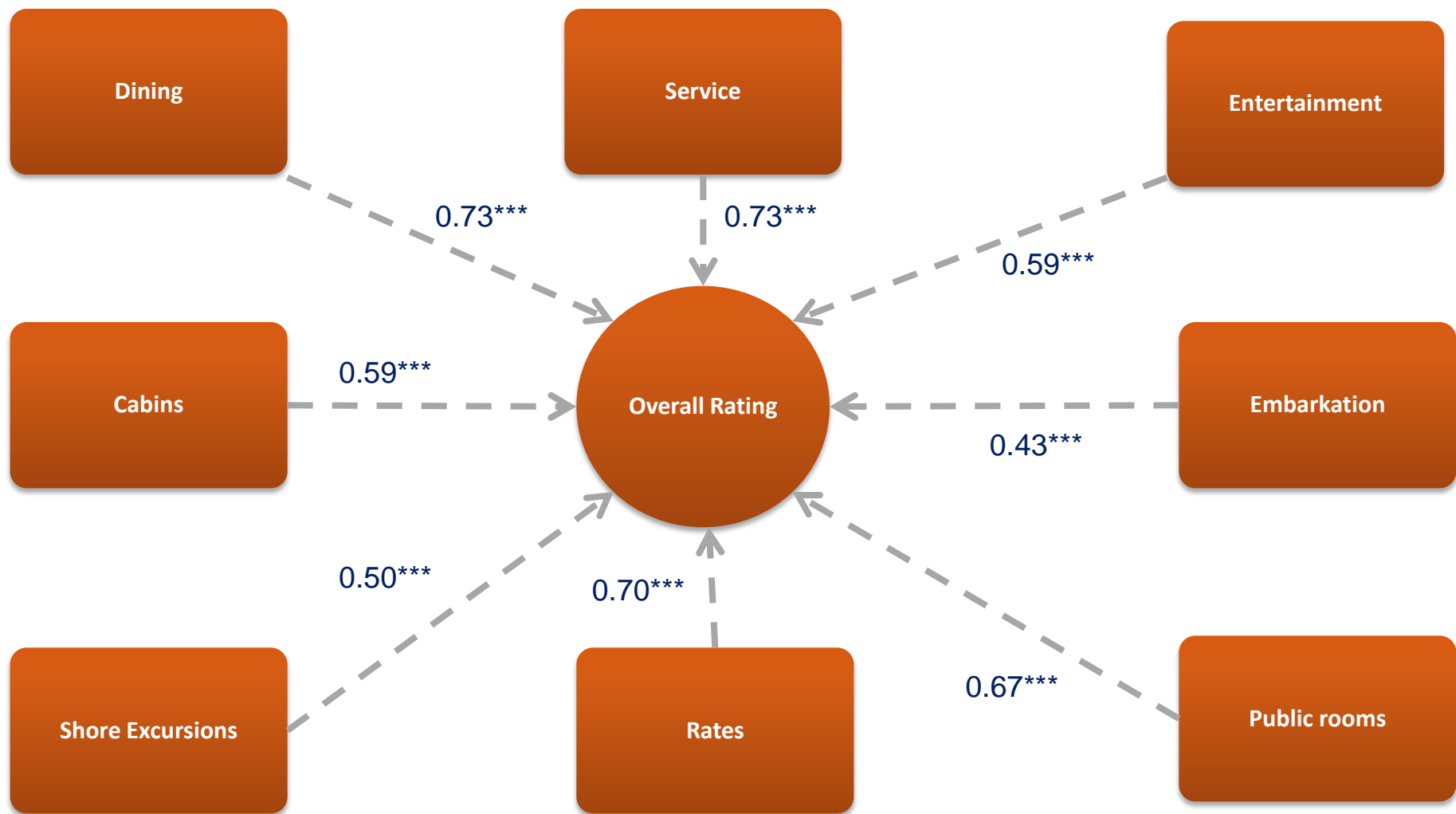
*** Correlation is significant at the 0.01 level. **N** = 17066. Source: CruiseCritic.com data set.