

## Exploring the adoption and processing of online holiday reviews: A grounded theory approach

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### ARTICLE INFO

#### Article history:

Received 5 March 2009

Accepted 15 December 2009

#### Keywords:

e-Tourism

Web 2.0

Holiday selection

Grounded theory

Online reviews

### ABSTRACT

The proliferation and increasing significance of online reviews for all kinds of consumption decisions imply the need for a better understanding of their influence in the tourism context. Holiday selection neither happens in a vacuum, nor is it exclusively based on online holiday reviews. In order to gain a holistic and realistic understanding one needs to consider: the concurrent influence of other, more conventional, holiday content elements (e.g. photos, textual descriptions), as well as the relevant cognitive mechanisms for processing this kind of information. With the aid of a purposively developed navigation prototype, respondents were subjected to a variety of holiday representations. Surprisingly early in the research process the ensuing observation and questioning unveiled fairly consistent patterns of content processing and decision-making. This explorative-qualitative study suggests that online reviews play a secondary, complementary role to holiday selection and that they are subjected to a set of heuristics before being adopted and utilised.

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### 1. Introduction

Over recent years a new term has emerged and received significant attention in the internet environment: Web 2.0 is the collective term for new technologies and websites, placing users into the centre of attention and enabling them to create the content instead of the company running the website (O'Reilly, 2005). Research has shown that users tend to trust peer reviews more than advertising and other content created by marketing departments and advertising agencies (Kardon, 2007). A potential explanation for this phenomenon could be related to the perception that sellers' product presentations tend to disguise negative aspects, whereas customers honestly evaluate strengths and weaknesses of the product (Park, Lee, & Han, 2007). Regardless of whether this perception is valid or not, the tourism sector is still confronted with managing the implications of user-generated content; mastering the challenge of navigating in a new world of content democratisation. Does Web 2.0 signal the end of marketing as we know it? Are conventional advertising and image campaigns a waste of resources? Is Web 2.0 the new competitive arena for public relations and marketing specialists?

Addressing such questions requires a deeper understanding of how consumers access, process and utilise user-generated content in the presence of 'competing' proprietary (i.e. company-generated) content. This involves comprehending the complex cognitive processing taking place and deciphering its manifestation into observed behaviour. In this respect, simple hypothesis testing, conventional survey research and sector-wide statistics are not sufficient and need to be complemented by interpretative approaches. Therefore, we have opted for a qualitative-exploratory research methodology (Grounded Theory), aiming at theory-building in our chosen domain: online reviews in tourism (e-Tourism 2.0).

The role of existing research on the topic and the utilisation of the corresponding literature also need to be carefully considered. Building on the findings of others is catalytic to the evolution of knowledge and indeed an essential component of any kind of scientific research. Nonetheless, it can also limit the theoretical scope, direct the questioning and influence the interpretations of researchers. Referred to as 'forcing' (Glaser, 1992), this is a general issue affecting the validity and relevance of explorative-interpretative research. Accordingly, Grounded Theory requires the researcher to refrain from reviewing existing literature at the initial stages of research. This guideline aims at countering the restrictive influence of pre-existing patterns and ideas (i.e. enables 'emergence'). A literature review ought to take place in an iterative manner, parallel to the data collection and its interpretation. Adherence to this principle clashes with the inclusion of a prior (to

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data collection), consolidated literature review. Consequently, secondary sources have been utilised throughout the entire paper aiming at: framing the research background, substantiating the chosen research methodology and supplementing the findings. Unconventional as it may seem, it can be argued that this type of purposively 'fragmented' literature review adds scientific rigour to the application of our chosen research methodology. This is in line with the call of various leading tourism scholars (e.g. Franklin & Crang, 2001; Goeldner & Faulkner, 1998; Ryan, 2005; Tribe, 2002, 2006), who have highlighted the need for extending the methodological toolkit of tourism research and for critically questioning its paradigmatic tradition. Responding to those calls justifies the approach selected and its 'unconventional' implementation.

## 2. Research background: online reviews and tourism

The term Web 2.0 has been extensively discussed in the tourism trade press and its implications are expected to be significant. According to Rogl (2007) Web 2.0 is already having a lasting influence on tourism and is reducing the knowledge advantage of tourism intermediaries and principals. Nowadays, nearly all big tour operators offer interactive features on their websites, as this is regarded a key driver of consumers' loyalty (Strobel y Serra, 2006). Holiday review sites are the most popular Web 2.0-enabled travel sites. Prominent examples of these are: [holidaycheck.com](http://holidaycheck.com), currently the most influential and largest holiday community in Germany (Strobel y Serra, 2006) and its role model [tripadvisor.com](http://tripadvisor.com), a US portal, displaying over 15 million reviews of hotels, sights and related tourism services.<sup>1</sup>

The potential impact of consumer reviews can be significant, due to the specific nature of holidays. Firstly, holidays are intangible products, which are concurrently produced and consumed and therefore cannot be evaluated beforehand (Lewis & Chambers, 2000; Mundt, 2000). Moreover, holidays can be characterised as 'high involvement' and 'high risk' products as the degree of perceived relevance and personal importance is relatively high. Unlike commodities, a holiday purchase decision involves a more intensive content search and filtering (Jobber, 2004). It follows that consumer reviews constitute a significant and valuable input to holiday decision-making processes. Another trend underlining the potential of online reviews is related to the parallel (to the rise of Web 2.0) developments in the tourism distribution structures. The role of traditional travel agencies is diminishing, while electronic travel intermediaries, such as [Expedia.com](http://Expedia.com) for example, are increasingly dominating the holiday distribution landscape (Litvin, Goldsmith, & Pan, 2008). According to a recent study by the European Tourism Institute, only 22% of all holiday makers use online travel agencies to book their holidays (FVW, 2008). Their deficits in terms of personal contact and individualised consultation ('personal touch') can be substituted by online consumer reviews within their own website or through links to other portals (Litvin et al., 2008). Both the perceived risks of booking an intangible holiday and the lack of interpersonal contact with travel agents can be reduced by making use of online consumer reviews. This type of product information supports the decision-making process through the provision of indirect product experiences (Park et al., 2007), which in turn offer a first impression of the product before it is actually consumed. Apart from [holidaycheck.com](http://holidaycheck.com) and [tripadvisor.com](http://tripadvisor.com), a vast number of online product review platforms are available, enabling holiday makers to review hotels, sights, cruise ships and airlines.

It is worth mentioning that the potential of online consumer reviews extends beyond the individual consumer and their

decision-making. Online consumer reviews constitute a valuable source of management information for organisations. Online reviews affect brand-perceptions and customer relations. Through positive online feedback new customers can be acquired and retained at a relatively low cost. Alternatively, negative feedback could inhibit customer acquisition and reduce the value of brand in the longer term (Dellarocas, 2003). Organisations can utilise online reviews to improve their understanding of the market's reaction to their offering and subsequently feed this information into their product development and quality control processes (Dellarocas, 2003). The potential of Web 2.0 extends beyond internal process enhancements and brand development. Obtaining and maintaining competitive advantage in the dynamic tourism sector commands innovativeness and quick reactions to technological and social trends (Litvin et al., 2008). Consumer reviews, blogs and other social elements can be seen as additional holiday components, ultimately enriching the holiday experience at a relatively low cost, whilst improving the comparability, transparency and trustworthiness of holiday offerings (Papathanassis, 2007).

### 2.1. Research objective and rationale

Considering the above, online holiday reviews can have a considerable influence on individual travellers as well as an impact on the competitive reality of the tourism sector as a whole. Nonetheless, the relatively limited research in this domain (Ye, Law, & Gu, 2009), renders this contention speculative. Given the acclaimed importance of Web 2.0 for tourism, understanding how users perceive and utilise online holiday reviews under realistic conditions (i.e. in the presence and availability of 'competing', company-generated content) is not just relevant for practitioners but also challenging for academics.

## 3. Research methodology

In order to explore user perceptions and the utilisation of online holiday reviews for holiday purchase decisions, a qualitative approach was adopted. The decision was to apply the methodology proposed by the Grounded Theory (abbr. GT) approach (Glaser, 1978, 1998; Glaser & Strauss, 1967; Strauss & Corbin, 1990). GT is more of a research paradigm than a clearly prescribed methodology. As such it allows room for interpretation and adaptation, enabling the emergence of a research methodology (Dick, 2005). Our research is based on a purposeful implementation of the GT paradigm.

### 3.1. Development of a navigation prototype

Within conventional applications of GT, personal unstructured interviews are the predominant data collection method. With regard to researching online review perceptions, this technique has a decisive shortcoming. The terms 'online holiday review' and 'company-generated content' are rather abstract and can be variably (mis-)interpreted. Concretising the terms, by offering examples and / or specifying them further could be a potential solution to this problem. Attempting to do this verbally, during the progress of unstructured interviews would be time-consuming and still subject to inconsistency and misinterpretation. An alternative, more effective, solution would be to give the term 'content' a visible, concrete form. Hence, a navigational prototype was constructed. More specifically, a large html document was developed (Fig. 1), allowing respondents to scroll within and navigate between 6 similar holiday offerings (Fig. 2).

Both company (i.e. brochure-type info) and user-generated content (i.e. online reviews) were combined in the holiday offer

<sup>1</sup> <http://www.tripadvisor.com/> [Accessed on 16.07.08].

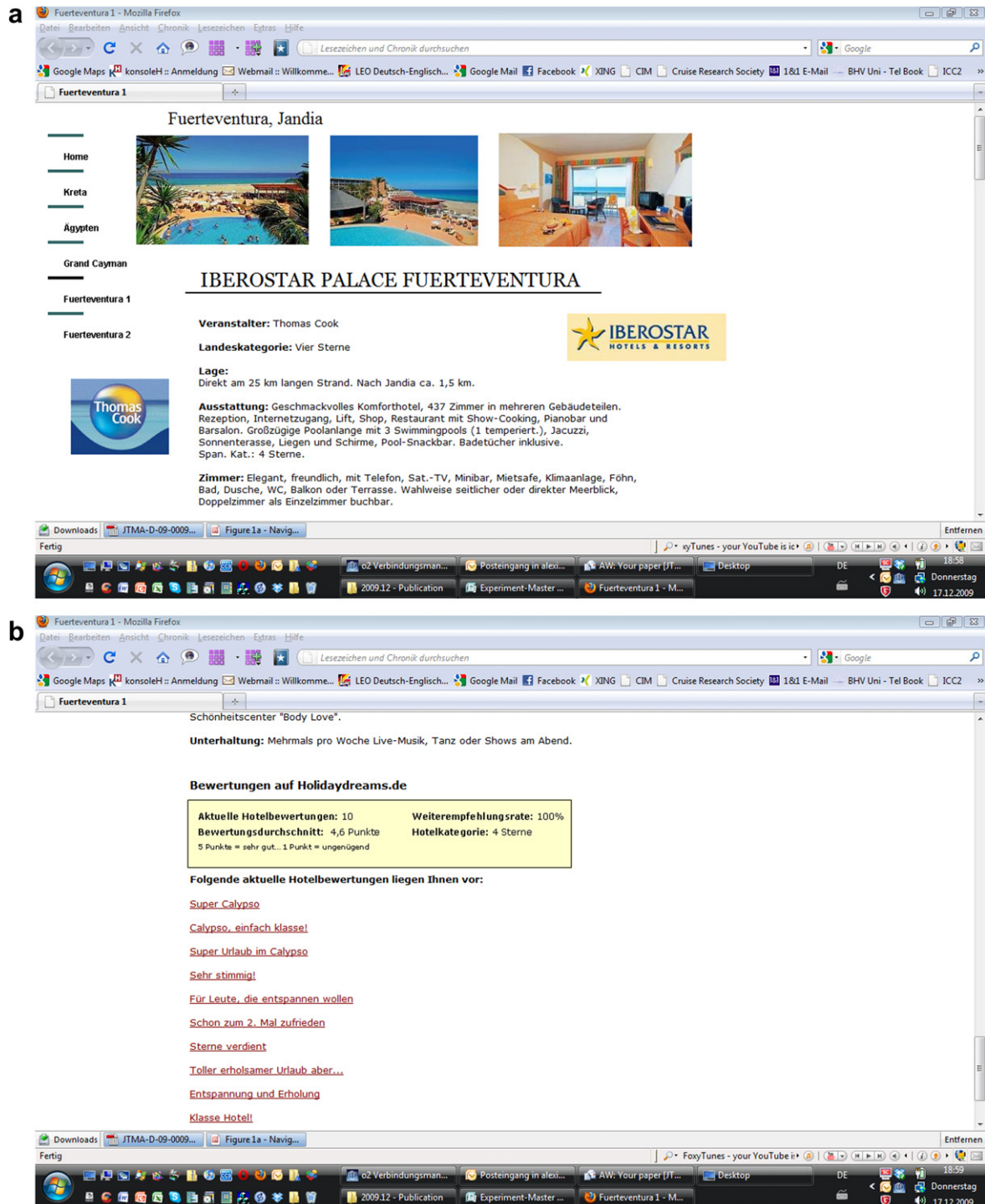


Fig. 1. Navigation prototype screenshots.

presentations. Each offer contained 2–3 pictures and standardised textual description identical to the ones found in tour operators' brochures. All offers were of similar standard in terms of service features and accommodation category. Prices were excluded from the holiday representations, as they could distract respondents from focusing on the content elements of the offers. The main point of difference between the 9 offers (Fig. 2) was the variation of online review 'branding'. Finally, sufficient offer variety was regarded as critical for emulating realistic conditions and for stimulating responses.

Apart from effectively scoping the discussion and specifying terms, the ability to navigate and scroll enables the attainment of observational data richness. In other words, respondents are free to explore content in a reality-simulating environment, allowing researchers to observe their online behaviour and reactions.

### 3.2. Sampling and data collection

Following 'mock sessions' between the researchers to test the navigational prototype and practice observation and interviewing

Destination	Accommodation	Online review setup
Crete	Hotel Vantaris Palace	Online reviews included (visible source: Holidaycheck)
	Hotel Mythos Palace	Online reviews included (visible source: offering tour operator – unknown brand)
Egypt	Jolie Ville Resort & Casino	Online reviews included (visible source: Holidaycheck)
	Sea Club	Online reviews excluded
Grand Cayman	The Reef Resort	Online reviews excluded
Fuerteventura	Iberostar Palace	Online reviews included (visible source: offering tour operator – Thomas Cook)
	Hotel Calypso Jandia	Online reviews included (visible source: offering tour operator – unknown brand)
	Fuerteventura Palace	Online reviews included (visible source: Holidaycheck.de)
	Hotel Calypso Jandia (Repeat instance)	Online reviews included (visible source: Hotelbewertungen.de)

Fig. 2. Navigational prototype structure.

guidelines, a total of 22 sessions were conducted. These took place between the 18th and 25th of May 2007.

This group was purposively selected and included subjects with varying family and occupational backgrounds (Fig. 3).

In compliance with the qualitative-explorative nature of our research, diversity was considered more important than representativeness. Hence, judgemental sampling was applied.

Each session consisted of three phases: Briefing, holiday offer navigation and follow-up interview (Fig. 4).

On starting the session, respondents were informed that their task was to navigate through all holiday offers until they reached a clear preference. They were instructed to assume that all the holiday offers were relevant and affordable to them. Whilst navigating, the interviewees were asked to express orally their thoughts and evaluate each individual holiday offer before proceeding to the next (i.e. 'think loudly'). In order to generate and enrich responses, the interviewer was equipped with a list of questions aimed at encouraging interviewees to elaborate on their comments and preferences ('probing'). Once the interviewee arrived at a clear preference, a follow-up interview was conducted focusing on the influence of hotel reviews on their decision. Each session lasted approximately an hour.

Our primary research reached saturation after 22 sessions. 'Saturation' is reached when additional qualitative data collection fails to reveal novel aspects, points or issues. In the context of GT, this point is reached when the discussions and observations start becoming repetitive, signalling the sufficiency of collected data. In qualitative research, saturation could be seen as the equivalent to

representativeness in quantitative studies. It is worth noting that 'saturation' was reached far earlier than expected. It was concluded that this was due to the clarity of terms enabled by the navigational prototype, combined with the probable presence of inherent human (i.e. demography-independent) cognitive mechanisms.

### 3.3. Open coding

Following each session, keywords were noted, interpreted and enriched with the observations made. Assembled, the resulting notes constituted the study's 'codebook' (i.e. open coding activity). Video-recording was also employed to serve as input for further analysis and interpretation after the completion of the data collection effort. The purpose of deferring the utilisation of recordings to a latter point was to adhere to the principle of 'emergence' by limiting the risk of 'forcing' (Glaser, 1992).

Codes were categorised according to the type of content they were related to. Subsequently, codes referring to photos and textual descriptions (i.e. not directly related to holiday reviews) were abandoned. Single-instance codes, semantically unrelated to the rest, were also excluded (Fig. 5).

## 4. Findings and discussion

The session-codebook (Section 3.3) was used as a basis for axial coding. This activity involved identifying and organising interrelationships between codes (i.e. observed phenomena). For this task the interpretation framework outlined by Borgatti (2008) was used.

Subject	Age Group	Occupation	Education	Gender
1	18-25	Trainee (services)	Vocational training	Female
2	18-25	Worker (industrial)	Vocational training	Male
3	18-25	Student	Undergraduate education	Female
4	26-35	Trainee (industrial)	Secondary education	Male
5	26-35	Student	Undergraduate education	Male
6	18-25	Student	Undergraduate education	Female
7	26-35	Trainee (industrial)	Post-Graduate education	Male
8	18-25	Student	Undergraduate education	Female
9	18-25	Worker (industrial)	Vocational training	Male
10	26-35	Accounting employee	Undergraduate education	Female
11	36-45	Academic	Postgraduate education	Male
12	18-25	Student	Undergraduate education	Female
13	26-35	Bank employee	Vocational training	Male
14	18-25	Civil servant	Vocational training	Female
15	18-25	Civil servant	Secondary education	Male
16	18-25	Student	Undergraduate education	Female
17	26-35	Worker (industrial)	Vocational training	Male
18	18-25	Student	Undergraduate education	Female
19	46-55	Medical worker	Vocational training	Female
20	18-25	Student	Secondary education	Female
21	46-55	Medical worker	Vocational training	Female
22	46-55	Independent contractor	Postgraduate education	Male

Fig. 3. Sample characteristics.

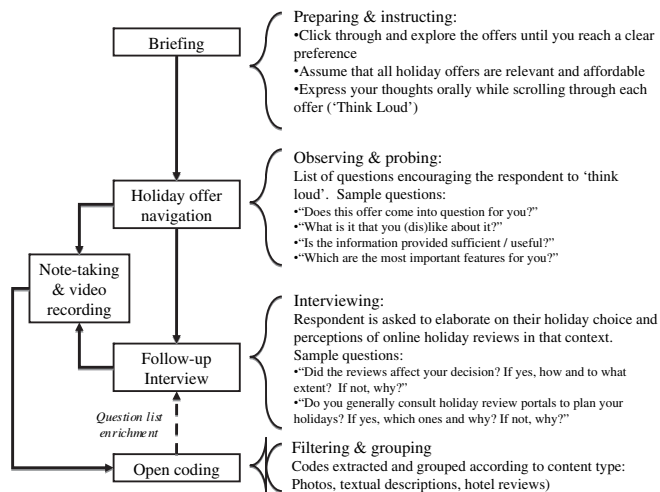


Fig. 4. Interview session structure and process.

The author underlines that each recorded socio-behavioural phenomenon evolves within a particular context, which cannot be ignored. Related causal conditions as well as behavioural consequences ought to be considered and explicitly stated. In other words, the recorded phenomena need to be explained and interpreted. In turn, those phenomena are to be labelled and categorised by the researcher(s).

The results of this stage are largely dependent on the researcher's domain-related experience and subjectivity. Albeit constituting a synthesis (i.e. not analytical process), this safeguards against creating a 'folk model' (Borgatti, 2008), whilst adhering to the emergence principle and qualitative character of the chosen methodology. On the basis of our collected data and aided by our knowledge and experience of the tourism sector<sup>2</sup> we identified and proposed a total of 8 variables (potentially) affecting the adoption degree of holiday reviews in the holiday decision process. Those variables were grouped under the categories: adoption readiness, source-related assessment heuristics and content-related assessment heuristics.

#### 4.1. Adoption readiness

The first category consists of 'perceived accessibility' and 'perceived richness'. In other words, the preconditions of actively engaging with the consumption of holiday reviews are:

##### 4.1.1. Perceived accessibility

4.1.1.1. *Indicative code.* "I look at reviews quite often and know which sites to visit. But someone who is not as experienced with surfing the net would probably be overwhelmed by all those sites and pages of reviews."

When asked, users appeared positively predisposed towards online user-reviews in general. Online holiday reviews are perceived as an additional content element, increasing information richness (Gretzel & Yoo, 2008). The ease of accessing them online is perceived as a welcome and useful extra. Users appreciate additional content depending on the ease of accessing it. This factor is frequently encountered in literature (e.g. Cox & Dale, 2001;

Kaynama & Black, 2000; Perdue, 2001; Wan, 2002), with small variations in terminology and definition.

In general, online holiday reviews could be regarded as relatively easy to access and mentally process. However, this is not universally applicable. Internet experience, connectivity issues and online registration workflows may well decrease the perceived accessibility for certain user groups. Moreover, given the proliferation of online consumer reviews and review portals, extracting the relevant information ('opinion mining') is a challenging task (Zhan, Loh, & Liu, 2009). Thus, perceived accessibility can be seen to extend beyond online access and bandwidth restrictions.

##### 4.1.2. Perceived richness

The respondents claimed to have used holiday review websites at least once to plan a holiday. Indeed, both online reviews and company-generated online content have become an integral part of the holiday planning and decision-making. The diffusion of internet enables users to routinely invest time in information-seeking activities. Clemons and Gao (2008) argue that the increased amount of information available to consumers ('informedness') is significantly affecting their behaviour. Consumers can obtain information on what is available for them and select what fits their preferences most precisely. The authors argue that consumers 'behave as if informedness matters' actively engaging in information-seeking activities and rewarding it with increased purchases. In short, consumers value information availability and take advantage of it. Given the intangibility and inseparability of the holiday service, information availability in conjunction with source-diversity reduces decision-making uncertainty (Klein, 1998). Moreover, this kind of pre-booking activity could be regarded as a vital element of the overall holiday experience. Online holiday reviews are seen as an informational enrichment to what is already available through conventional sources. This finding is compliant with the findings of numerous researchers (e.g. Jarvenpaa & Todd, 1997; Liu & Arnett, 2000; Rice, 1997; Schmidt, 1996). Perceived richness, defined as the amount of information and multiplicity of sources required to satisfy one's requirement of informedness, could possibly be extended to include entertainment value.

Online holiday reviews are considered to be complementary to conventional holiday content. From a cognitive perspective, users engage in information-seeking activities to minimise the risk associated with the purchase of an intangible and inseparable service bundle. Under this premise, the active search for online reviews and their processing are dependent on the corresponding information acquisition costs and marginal benefits.

#### 4.2. Source-related heuristics

The second category, 'source-related assessment heuristics', contains the variables: 'macro-reputation' and 'micro-reputation'.

##### 4.2.1. Macro-reputation

4.2.1.1. *Indicative codes.* "I do not really trust reviews. Anyone can post them and the information they provide is less useful, for me, than the actual photos. Who has the time to read all that?" "I am not sure that this is a reputable source (Hotelbewertungen.de), but I like the bar-charts. There is little to read and percentages are better than stars (holiday rating scale)."

The brand of the holiday review website did not appear to make a difference in the holiday decision-making process. A possible explanation could be that holiday review websites are relatively new in the tourism landscape and have not yet established themselves as reputable entities in the eyes of the customers. Users focus

<sup>2</sup> The authors of this paper combine 10 years professional experience (in tourism systems development and holiday marketing & distribution) with a research specialisation in the field of e-tourism.

more on the actual content of the reviews and rely more heavily on company-generated content.

Users' disposition towards online holiday reviews in general and their beliefs regarding their trustworthiness (i.e. macro-reputation) influence the extent to which they are subjected to heuristic processing and their degree of inclusion in the decision-making process. In short, if someone believes that online holiday review portals are in principle not to be trusted, they are more likely to either ignore them altogether or be very critical and rigorous with their content.

#### 4.2.2. *Micro-reputation*

4.2.2.1. *Indicative code.* "TUI is a better brand than Holiday-blitz.de and I can be sure I will get what I want. If something goes wrong I can always complain. [...] When it comes to the reviews, I am bit sceptical. They have an interest in leaving out negative reviews!"

Tour operator brand was considered important and appeared to play a major role in the holiday selection. Holidays are still not considered a commodity and represent a non-routine purchase. In this respect brand awareness and brand loyalty are dominant factors for purchase decisions (Vermeulen & Seegers, 2009). Branding is the key value driver in tour operating since it encourages customers to transfer their risk and delegate their information-seeking activities to another entity. Users weigh their own assessments against the reputation of the company organising and offering the described holiday.

The label "Tested by Stiftung Warentest" (German non-profit certification organisation) and a good grade in the test enhanced trust towards an online holiday review source. 'Stiftung Warentest' is a well-known and respected entity, conducting product reviews in a variety of sectors. Their testing methodology is considered transparent and their findings are presented in standardised and simplified format. Users are familiar with this format and trust its source. Users seemed to project the credibility of the 'Stiftung Warentest' to the holiday review source.

Especially under conditions of unfavourable macro-reputation, branding is particularly decisive since it allows online review websites to positively differentiate themselves by being perceived as more credible (i.e. micro-reputation). Our research also suggests that review website branding is not as decisive as the actual content of the online reviews. This may imply that online review providers would be ill-advised to invest in expensive brand-building. In the medium term, investing in the quality of online review content is presumably more effective. Content quality reflects the rigour and transparency of content management processes (Papathanassis, 2004, 2008). Indeed, the success of online review providers may well have little to do with 'selling' and 'promoting' their content. Perhaps it is more about their content-related process architecture and its visible (to the user) implementation.

### 4.3. *Content-related heuristics*

The third and last category is labelled: 'content-related assessment heuristics'. Parallel to assessing the sources of the online review, users semiconsciously apply a variety of cognitive heuristics for evaluating its contents. By doing this they determine the extent to which it can be utilised as a decisional input.

#### 4.3.1. *Perceived factuality (review instance)*

4.3.1.1. *Indicative codes.* "Reviews are opinions and subjective, but if the sales descriptions are fake, I can complain and get money back."

"Whether someone says that the pool is an 'oasis' or believes it is 'spectacular' does not mean much to me. I want to know exactly

what the pool is like, without the sauce. Then I can decide whether it is an 'oasis' for me!"

Positive reviews did not appear to be the most important factor in the holiday decision-making process. Most respondents justified their choices on the basis of the brochure descriptions and commented on the images. Images, holiday features and offerings as well as the resort facts were perceived as more important due to their factual nature and suitability for reclamation purposes. During the follow-up interviews a number of respondents mentioned that they prefer thematically structured, concise reviews that focus on simply describing the facts and refrain from extensively narrating the feelings of the reviewer. Therefore, perceived factuality could be defined as the conciseness, standardisation, and specificity of a holiday description. Narrative and explicit emotionality are seen as a sign of subjectivity and reduce the 'perceived factual value' of a description or a review.

#### 4.3.2. *Perceived neutrality (review instance)*

4.3.2.1. *Indicative code.* "This one here seems to like everything... Was he on drugs during his holiday?"

Overly positive reviews, lacking criticism, were perceived as exaggerated and were viewed with suspicion. Users are guided by the principle that the absence of flaws suggests falsification and / or irrelevance, thus excluding the reviews from their decision-making process. The positive reactions towards the existence of negative reviews have been documented in previous studies (e.g. Meijer & Kleinnijhuis, 2006; Vermeulen & Seegers, 2009).

Here, 'perceived neutrality' refers to an 'acceptable' balance between negative and positive reviews of a holiday product, penalising over-representation of favourable content. This is inversely related to 'perceived realism', which allows (and arguably demands) a minimum degree of unfavourable content within an online review instance. This may well act as a sign of credibility and confirmation of expertise. A 'critical mindset' is both expected and appreciated within the context of holiday reviews.

#### 4.3.3. *Negative bias (review grouping)*

Negative reviews appeared to have a greater impact than positive ones. Respondents spent significantly more time examining and commenting on critical reviews. The underlying belief is that negative reviews do not entail a falsification incentive. This ignores the plausibility of falsifying negative reviews to damage a competitor.

The motives behind unfavourable content tend to be regarded as more altruistic and genuine warnings from peers. The proliferation of such warnings regarding a particular subject suffices to produce an unfavourable decision. This type of reaction was also observed by Lee, Park, and Han (2008:01), who conducted an experiment on the effect of negative online consumer reviews and discovered that a high proportion of negative online consumer reviews leads to a conformity effect (i.e. respondents agreed with the reviewers).

#### 4.3.4. *Perceived realism (review grouping) and source projection*

4.3.4.1. *Indicative codes.* "If I see two pages of praising reviews I can't help but wonder... Can it be that everyone loved this place? It is simply too good to be true. There are always those who complain."

"Is this really a review site or an advertising banner?"

A small number of negative reviews did not seem to affect the selection of a holiday offer.

It is assumed that no holiday can be perfect and therefore it is reasonable to expect a small number of negative reviews. In many cases, they were perceived as useful and entertaining.

	Total number of codes identified	(-) Codes not related to holiday reviews		(-) Single-instance codes		(=) Number of codes adopted & merged	
	Number	Number	%	Number	%	Number	%
Holiday navigation phase	108	81	75%	4	4%	23	21%
Follow-up interview phase	27	0	0%	1	4%	26	96%
Total	135	81	60%	5	4%	49	36%

Fig. 5. Open coding results.

In addition, the existence of negative reviews was seen as a credibility indicator for the online review source. A diversity of opinions and a balance between positive and negative reviews can act as an ‘acid test’ reflecting the usefulness and relevance of an online review source (e.g. website). If there are no negative reviews the users may well disregard the source altogether. Here one could assume that the application of ‘mental filters’ and ultimately the degree of content acceptance partly spills over to the source’s micro-reputation. Acceptable online review content arguably enhances the credibility of its source. As mentioned earlier, trust in the content management process is transferred to its outputs. The reverse also holds. Acceptable results instil trust in the underlying content management process

4.3.5. Content-related heuristics and cognitive biases

Even if the effectiveness and validity of such heuristics may be questioned, they appear not only to be present but also common. Glaser and Strauss (1967:79) contend that local, context-specific theories are principally related to and stimulated by higher-level, more substantive theories. Indeed, upon examination of psychology literature one cannot help noticing parallels to known cognitive biases.

For example, ‘fundamental attribution error’ (Ross, 1977) refers to the tendency of humans to emphasise dispositional over situational factors. Taking for example ‘perceived neutrality’ and/or ‘perceived realism’, the proportion of positive reviews or respectively the absence of negative reviews, may have nothing to do with the authenticity of the reviews. It may simply be that this ‘review-mix’ reflects genuine opinions. Why should a holiday not be ‘too good’ for ‘all reviewers’? In turn, ‘confirmation bias’ (Baron, 2000; Edwards & Smith, 1996; Nickerson, 1998; Wason, 1960) refers to the selective filtering of information in accordance with one’s preconceptions. This could be relevant in explaining the influence of ‘source macro-reputation’ on the application rigour of content-related heuristics and reliance on their results.

In fact, one may be tempted to conclude that the proposed model is a mere context- and purpose-specific expression of common human decision-making mechanisms. Obviously, this does not prove the universality of our findings, but nonetheless validates them.

5. Proposed model

5.1. Theoretical modelling

Following axial coding, the GT approach suggests the identification of a core category (or variable) and relating the other categories to it (Dick, 2005). This step is referred to as ‘selective coding’ and presumes the existence of a core concept or theory, which encapsulates and explains the observed phenomena (Borgatti, 2008). None of the above-mentioned variable categories were identified as clearly dominant during our interviewing. We did note however that despite the availability of other content types, all respondents referred extensively to online reviews and the issues concerning the use of them during their decision-making process.

Therefore, we decided to set ‘online review utilisation’ as the core category.

Returning to the initial research objective (i.e. perceptions and utilisation of online reviews), our analysis identified a number of potentially relevant categories/variables, revealing information processing heuristics. Those variables were meaningfully organised in a core concept, which constitutes the main deliverable of GT (Fig. 6). It is important to note that this conceptualisation constitutes an interpretative synthesis (i.e. not subject to a conscious systematic process).

5.2. Tentative hypotheses

The proposed core concept could be expressed in a set of tentative hypotheses, lending themselves to empirical testing:

5.3. Content user acceptance cycle (CUAC)

Pursuing the relationship between human cognition and information processing further, the proposed framework (relating variable categories) can also be transformed into a linear behavioural model. The starting point of the content acceptance process could be the decision to incorporate online holiday reviews in the decision-making process. Depending on their perceived accessibility and richness, the user proceeds with deciding whether to invest effort in utilising them or not. In the case of a positive decision to proceed (i.e. adoption readiness), the review-sources are heuristically assessed. This requires more mental effort and time than the semi-binary decision involved in the previous step, but significantly less effort than heuristically assessing the content itself, which would be the final step. ‘Go-ahead’ decisions in every phase, regardless of whether semiconscious or unconscious, feed-back to the process. Presumably after a number of positive iterations, the rigour and influence of such heuristics gradually

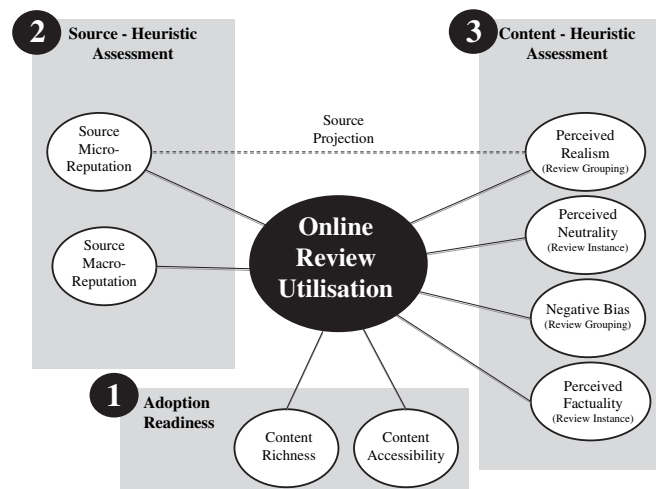


Fig. 6. Core concept – perceptions and utilisation of online holiday reviews.

Category	Factor description	Resulting tentative hypothesis
1. Adoption Readiness	Perceived accessibility	H1a: The more accessible holiday online reviews are perceived to be, the more likely they are to be utilised for holiday decision-making
	Perceived richness	H1b: The more relevant information holiday online reviews are perceived to contain, the more likely they are to be utilised for holiday decision-making
2. Source-related Heuristic Assessment	Source macro-reputation	H2a: Users' predisposition towards online holiday reviews in general is correlated to the probability of utilising them for holiday decision-making
	Source micro-reputation	H2b: Brand awareness of a particular holiday review source is correlated to the probability of utilising it for holiday decision-making
3. Content-related Heuristic Assessment	Perceived factuality	H3a: The more structured and concise a review is, the more likely it is to be utilised for holiday decision-making
	Perceived neutrality	H3b: Online holiday reviews perceived as excessively positive are less likely to be utilised for holiday decision-making
	Perceived realism & source projection	H3c: In the absence of negative online holiday reviews within a source, users are less likely to utilise the reviews of that source for holiday decision-making
	Negative bias:	H3d: Negative reviews are more likely to be utilised for holiday decision-making (than positive ones)

Fig. 7. Core concept – resulting tentative hypotheses.

decrease, until they are no longer applied. The reviews are adopted on their merits; on the basis of trust. This process is illustrated in Fig. 8.

At the core of such behaviour is the contention that humans strive for 'cognitive economy'. In order to deal with today's information (or content) overload, consumers are very selective in the information they choose to process. This corresponds to the findings of Davenport and Beck (2000), who state that in today's economy there is more scarcity of attention than scarcity of information. As a consequence, business leaders ought to pay more attention to getting attention. Although the authors are referring to the management of employee attention, their findings are easily transferrable to end-consumers (Morville, 2005).

## 6. Conclusions and limitations

### 6.1. Implications for practice

Understanding consumers' interactions and perceptions of online holiday reviews is also relevant for business sectors other than tourism. The proliferation of internet usage and the ever-increasing utilisation of online reviews to guide purchase decisions need to be formally incorporated in marketing strategies. This is

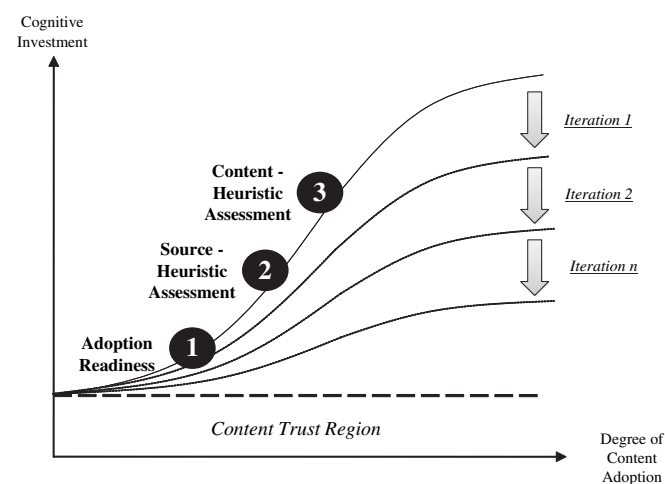


Fig. 8. Content user acceptance cycle.

particularly relevant for information-intensive service providers, due to the intangibility and inseparability of their offers.

Marketing practitioners are faced with a number of challenges. The contention that consumers strive for informedness (Clemons & Gao, 2008) is supported by our research. Consumers are indeed utilising and combining various content sources. From a total of 135 codes identified, only 40% were directly related to online holiday reviews. The rest referred to formal tour operator (i.e. brochure type) descriptions of the photos. Moreover, consumers seem to have an extended set of heuristics to filter content. Despite their deficiencies, such heuristics act as an effective filtering mechanism posing a challenge for tourism companies' marketing and promotion efforts. Dealing with the challenge of Web 2.0 involves significantly more than effective web-design. It requires the development, control and maintenance of novel content management processes.

In an environment where consumers act as 'skilled product researchers' it would be more effective to 'work on the facts' rather than 'with the facts'. Alternatively stated, there is a multiplicity of holiday content sources, consumers are empowered and willing to access them and they are developing sophisticated cognitive mechanisms to process the information available to them. Under such conditions, the effort put in 'beautifying' (e.g. 'sea-side room' – to be confused with 'sea-view'), or even manipulating content (e.g. by flooding the web with fictional reviews) could be seen as ineffective and misplaced. By focusing on an accurate and factual, rather than merely appealing, service representation, tourism intermediaries increase their value-added in the tourism distribution chain. Ultimately, online and offline service retailers are primarily information brokers. Their increase in value and reputation are not just dependent on what they sell or promote, but also on how they go about it.

This requires a radical change of strategic direction for tourism intermediaries. Content management needs to extend beyond mere brochure production. Embracing automated workflow management and online data mining technologies would enable the integration of the information flow between holiday component suppliers and end-customers into a company's marketing strategy. Automated workflow management makes it possible to collect, update and verify the vast content provided by holiday component suppliers on a continuous basis. In turn this enables the provision of accurate and up-to-date information across all channels. Similarly the utilisation of data mining technologies could enable the efficient utilisation of online reviews for marketing research purposes.



So, instead of heartening consumers to book a holiday, e-enabled content management could result to producing holiday offerings that better comply with the requirements and expectations of consumers. Electronic holiday content may not be controllable anymore, but its utilisation is manageable!

### 6.2. Research contribution

In line with a need for a better understanding of how cognition affects the relationship between online holiday reviews and consumer behaviour (Vermeulen & Seegers, 2009:126) our research resulted in a workable conceptualisation, explaining how potential holiday consumers adopt and process online reviews. The resulting causal model readily lends itself to further refining and empirical testing. From a theory-building perspective a behavioural model is proposed, illustrating a generic adoption process from an individual user's point of view. This could be utilised for larger scale exploration and experimentation.

Besides a theoretical contribution, this paper contains a methodological enrichment. Framing and concretising the research domain with the aid of a navigational prototype, proved to be very effective and efficient; producing satisfactory and sound results. Bearing in mind the complexity and intrinsic nature of the topic, saturation was reached after a relatively small number of sessions. Such an 'electronically – supported Grounded Theory approach (e-GT)' still complies with the principle of emergence, whilst enhancing communication between interviewer and interviewee (i.e. less 'abstraction noise'). Even though it may be suitable for human-computer interaction studies, its applicability in other areas is yet to be demonstrated. Nevertheless, the underlying principle of utilising visual representations (or even tangible objects) to concretise the research object could be beneficial in other research domains.

### 6.3. Methodological limitations and further research

Apart from the inherent limitations of GT, there are a number of other study-specific issues that merit attention. To begin with, the models proposed have a strictly tentative character. They consist of a number of systematically derived ('grounded') hypotheses which need to be further discussed and developed (Fig. 7). Therefore, it is essential they are subjected to rigorous peer review. The corresponding feedback is intended to set the foundations for the development of a complete and integrated set of testable hypotheses. Despite its proven benefits, the utilisation of a navigational prototype remains a rudimentary simulation of online reality. As such it is liable to bias and misrepresentations of reality due to its structural design, aesthetics, navigational logic and content. A potential measure to minimise this risk could involve conducting the study online, in real time, using existing online review portals. Even though this may appear to be a better approximation of reality, the presence of other, 'content-remote' variables (e.g. holiday end-price, web-design and network connection differences) would render this kind of in-depth exploration virtually unmanageable. In this respect, an alternative, seemingly more realistic setup, could turn out to be counter-productive.

The participants of this study have a similar cultural background (i.e. Northern Europeans). It could be argued that cognitive mechanisms and heuristics are to a large degree subject to socialisation. Therefore, the restricted cultural scope of this study should be highlighted as a limitation to its validity and findings. At the same time, this limitation presents the opportunity of replicating this type of research in other cultural settings.

Finally, it is worth noting that our findings relate to tourism. Holiday consumption could be described as an emotionally driven, relatively expensive and information-intensive process. According

to Clemons and Gao (2008), in situations where delight is the primary driver and when there is significant variation of product features and prices, the extremes of product reviews seem to play the dominant role in consumer decision-making. This is not the case for commodities, where the means and not the extremes matter. This particularity needs to be taken into account before generalising this study's findings for the entire spectrum of holiday consumption or when transferring them to other sectors.

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