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In TripAdvisor we Trust: Rankings, Calculative Regimes and Abstract Systems

Abstract
A proliferation of rankings and league tables increasingly permeate everyday life. An objective of this paper is to explain the profusion of such rankings, in particular on-line user review rankings, in contemporary society and what this means for our understanding of the role of accounting. The online travel website TripAdvisor and its hotel ranking system is a prominent example of this new phenomenon. The site increasingly appears to play the role of trusted intermediary for the ‘independent traveller’ who spurns the services of the traditional travel agent in favour of making their own holiday arrangements. In this paper, we undertake netnographic research to consider the way in which TripAdvisor rankings engender trust. Drawing on the site’s own operational features together with an analysis of the traveller commentaries hosted within the site, we argue that the case of TripAdvisor is a powerful illustration of an internet mediated abstract system (Giddens, 1990, 1991) that draws on calculative practices to construct trust. In addition, we speculate as to the implications of the proliferation of such internet mediated expert systems, both on the accounting profession, and on future accounting research.

Keywords: abstract systems, Giddens, rankings, TripAdvisor, trust, user reviews.

Introduction
The impact of the internet on social, organizational and public life is difficult to overstate (Castells, 2001). Parallel to these technological advances has been the rise in prominence of league tables and rankings (Espeland and Sauder, 2007). These developments have emerged in a context of rapid globalization which, inter alia, has witnessed the rise of budget airlines
and increased international travel. These three interrelated phenomena combine in the digitized form of traveller review websites. Our paper provides an analysis of one such website, TripAdvisor (www.tripadvisor.com), which we suggest is an illustrative example of an abstract system (Giddens (1990, 1991) that draws on calculative practices (Miller, 2001) to elicit trust. We believe that the insights offered by the case of TripAdvisor have important broader implications, potentially providing an understanding of the influential role of accounting, and calculative practices more generally, in the proliferation of ranking mechanisms that increasingly appear to pervade contemporary life. Moreover, we explore the potential ramifications of such user review websites for the accounting profession and future accounting research.

The pursuit of leisure, taken in the form of travel, is big business. For example, tourism is the UK’s fifth largest industry, worth over £115 billion pounds a year and employing over 2.6 million people.\(^1\) In addition to the commercial importance of tourism, the phenomenon of travel carries a cultural significance in contemporary society. At the most mundane of levels, the food we eat on a daily basis is influenced by foreign travel. At a broader level, our travel experiences influence and shape our prejudices and understanding of different cultures (Giddens, 2000). Leisure and recreational activities consequently constitute an important research site for any scholar wishing to further an understanding of the everyday cultural context of accounting (Jeacle, 2009).

Given the commercial and cultural significance of travel, it is disappointing then that it has been neglected within accounting scholarship. This disregard is perhaps all the more disconcerting in the light of recent events. The advent of ‘no-frills’ airlines, such as Ryanair

and Easyjet, has transformed the traditional airline service (Jones, 2005; Creaton, 2005). A further defining feature of modern travel is the role of the internet (Bray & Raitz, 2001), the medium by which such discount carriers can sell direct to their customers in a fast and inexpensive manner (Dogains, 2001). This combination of internet and low cost flight operator is a powerful one and has had a revolutionary impact upon the way in which the contemporary traveller books his holiday (Mintel, 2007). We are now witnessing the emergence of what the tourist industry refers to as the ‘independent traveller’. This is a traveller who spurns the services of their local travel agent in favour of a do-it-yourself approach to holiday arrangements. This development has inevitably created repercussions for the fate of the travel agent and tour operator, the traditional vehicles for holiday bookings (Keynote, Report, 2007), whose role was typically to act as important intermediaries in a market characterised by asymmetric information (Akerlof, 1970; Clerides, Nearchou, & Pashardes, 2005). In the absence of the services of such an intermediary, the independent traveller has sought new ways in which to replicate the trust which was previously invested in the face-to-face interaction with the expert system of the travel agent (Giddens, 1990).

One source of reassurance for the independent traveller is to simply book into a trusted hotel chain. Although, for many, the brand security these establishments offer can be simultaneously bound up with a blandness from which the independent traveller may wish to escape (Ritzer, 2008). Another alternative is to consult the national accommodation ratings published by the respective government body of the intended country of travel. However, national ratings rarely assess the quality of the holiday experience (Cormack, 1998) and can be difficult to compare across countries (Su & Sun, 2007).
One increasingly popular means by which the independent traveller seemingly sources assurance is by accessing personal recommendations via customer review websites. The importance of personal recommendations within the tourist industry has long been established (Cohen, 1972; Plog, 1974; Butler, 1980; Dearden & Harron, 1992; Morgan, Pritchard & Piggott, 2003; O’Neill, Palmer & Charters, 2002) and is known within the marketing literature as word of mouth (WOM) communication (Arndt, 1967; Carl, 2006). It is perhaps not surprising then that the advent of the internet has revolutionised the manner in which word of mouth opinions and recommendations on holiday destinations can be discussed and disseminated (Litvin, Goldsmith & Pan, 2008). Some of these review sites have become important obligatory points of passage, providing authoritative opinion over a particular domain. Such opinion hinges on a new form of expertise, which has its origins in the ‘authenticity’ of the opinions offered. The online recommendations and personal blogs hosted within the architecture of the world wide web are commonly referred to as electronic word of mouth communications or eWOM (Hennig-Thurau, Gwinner, Walsh & Gremler, 2004). The website TripAdvisor is a prominent example of an eWOM platform within the travel industry (Buhalis & Licata, 2002; Vermeulen & Seegers, 2009). Attracting millions of global visitors on a daily basis, TripAdvisor acts as a forum for everyday travellers to air their personal opinions regarding hotel quality whilst also reading the recommendations of fellow travellers. The culmination of such online commentaries is the creation of a hotel ranking list, the TripAdvisor Popularity Index, a clear numbering system which instantly signals a hotel’s level of quality and service. In this system, the independent traveller increasingly appears to place their trust.

That TripAdvisor has enjoyed remarkable cultural and commercial success over a short period is not in doubt. Why TripAdvisor has proved to be such a success is an interesting
question to speculate upon. As a relatively recent development, it possesses neither a wellspring of longstanding goodwill to tap into, nor is it part of an established tradition. One simple explanation would be to view TripAdvisor as the chance outcome of the coalescence of a range of factors such as technology, opportunity and new travel patterns. While undoubtedly such issues are important, we regard TripAdvisor as the digital manifestation of broader and historically grounded sensibilities: it fulfils the criteria for certainty, controllability and order. Therefore, TripAdvisor seems posed to produce rationality and truth. If the ‘hidden curriculum’ (Giddens, 1990) socializes us into an acceptance and enthusiasm for scientific knowledge, then TripAdvisor corresponds with the central precepts of this knowledge – it measures, ranks and orders in a systematic fashion – and that is, arguably, part of its intuitive appeal. Consequently, as a commercial enterprise TripAdvisor is irredeemably premised on creating ‘trust in the present’; indeed, to a large degree its whole business model is predicated on the successful commercialization of trust. This leads us to suggest that TripAdvisor is an illustrative example of an abstract system (Giddens (1990, 1991) that draws on calculative practices (Miller, 2001) to elicit trust. This has significant ramifications for our understanding of accounting, helping to yield insights into its role in the creation of trust and hence to explain the increasing profusion of league tables and ranking mechanisms that have come to characterise our audit society (Power, 1997).

The remainder of the paper is structured as follows. As the concept of trust appears to constitute such a central kernel to an understanding of TripAdvisor, the paper’s first section presents two perspectives on this issue. Following Free (2008), we draw on Mayer, Davis & Schoorman’s (1995) work on personal trust and Giddens’ (1990, 1991) notion of systems based trust. The second section outlines our methodological approach while the third section is devoted to detailing the operational functionality of the TripAdvisor website. Then drawing
on our earlier theoretical deliberations, the discussion section of the paper considers the trust
invested in TripAdvisor from the perspective of Mayer et al’s (1995) personal based trust
model before postulating the role of TripAdvisor rankings, and similar calculative regimes, in
the construction of systems trust (Giddens, 1990, 1991). We also speculate as to the
consequences for the accounting profession of the proliferation of such internet mediated
expert systems in the future. The final section contains some concluding remarks and
suggestions for future research.

Personal Trust, Systems Trust, and Calculative Regimes

That the issue of trust is complex and variegated is well established in the extant literature.
On the one hand it appears as a seemingly simple concept, one with which we may all feel
implicitly familiar from our own instincts, reasoning and interactions. On the other hand, it is
invested with a confusing degree of ambiguity and complexity, which plays out in the vast
amount of literature dedicated to the field from across an array of social science disciplines2.

Our review of accounting scholarship identifies a diverse range of contributions on the theme,
examining trust in the context of inter-organizational networks (Dekker, 2004; Tomkins,
2001; Vosselman & Van der Meer-Kooistra, 2009), management accounting change (Busco,
Riccaboni, & Scapens, 2006), performance related reward systems (Chenhall & Langfield-
Smith, 2003) and performance evaluation systems (Hartmann & Slapnicar, 2009). Other
forays into the field have considered the interrelationships between trust, corporate
governance and processes of accountability (Roberts, 2001) and speculated as to what role
trust in auditors plays in maintaining the social order of the financial community (Malsch &
Gendron, 2009). Notwithstanding these important contributions, a paucity of research on the
theme within accounting scholarship remains. To begin to redress this neglect, Free (2008)

2 See for example, the works of Deutsch (1958); Rotter (1967); Luhmann (1979); Moorman, Zaltman &
Despande (1992); Morgan & Hunt (1994); McAllister (1995); Hosmer (1995); Rousseau, Sitkin, Burt, &
suggests deploying Mayer et al’s (1995) integrative model on personal trust in addition to drawing on Giddens (1990, 1991) to explore how regimes of calculative practices, such as accounting, are implicated in the constitution of systems trust. We have similarly chosen to draw on these two seminal works to inform our own analysis of trust and, ultimately, its role in helping to make sense of the TripAdvisor phenomenon.

*Mayer et al (1995) and Personal Based Trust*

According to Mayer et al (1995, p.712) trust is best characterised as “the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party”. Effectively, the authors view trust as the willingness to take a risk, and the more trust that is invested in a relationship, the greater is the level of risk taking. One of the innovative aspects of Mayer et al’s (1995) model of trust was that it proposed the significance of personal relationships in its development rather than relying on the traditional view of trust as a personality trait (Schoorman et al, 2007).

Consequently, probing the characteristics of both trustor and trustee is at the core of the Mayer et al (1995) model. According to the authors, the characteristics of the trustor are a propensity to trust, in other words their willingness to trust in the absence of information on the trustee. Teasing out the characteristics of the trustee, on the other hand, allows an insight into why some individuals are trusted more than others. In other words, the authors seek to understand that which constitutes trustworthiness. Mayer et al (1995) outline three factors which explain trustworthiness; these can be considered as the antecedents of trust.
The first factor that leads to trust is ability: “Ability is that group of skills, competencies, and characteristics that enable a party to have influence within some specific domain” (Mayer et al, 1995, p.717). A belief in members’ abilities to bestow accurate and reliable information is therefore seen as having a positive impact on trust creation. The inclusion of ability into the model acknowledges that trust is a domain specific concept. In other words, the complexity of trust requires that it be defined and explored with reference to the situation specific research context (Lewis & Weigert, 1985; Zand, 1972). The second antecedent of trust is benevolence: “Benevolence is the extent to which a trustee is believed to want to do good to the trustor, aside from an egocentric profit motive” (Mayer et al, 1995, p.718). Benevolence assumes that the trustee possesses a positive orientation toward the trustor. Integrity is the final factor in determining the trustworthiness of the trustee. Integrity assumes “that the trustee adheres to a set of principles that the trustor finds acceptable” (Mayer et al, 1995, p.718). Integrity is inextricably bound up in the perceived credibility of the trustee and their sense of justice and fair dealing.

With regard to the interrelationship between the three antecedents, obviously, if a trustor believes that the abilities, benevolence and integrity of the trustee are high then this bestows a high level of trust and vice versa. However, the authors note that trust can be manifest in differing degrees along the continuum between these two extremes. The trustor’s propensity to trust also comes into play in each scenario. This factor can be influenced by the passage of time. Trust is generally viewed as a phenomenon that increases over time (Boon & Holmes, 1991; Lewicki & Bunker, 1996; Powell, 1996; Zaheer, McEvily, & Perrone, 1998). Mayer et al (1995) suggested that propensity to trust is an important factor at the early stages of a relationship. They contended that perceptions of ability and integrity would be formed quickly within a relationship but that judgements with regard to benevolence would develop
more gradually. Consequently, the effects of ability and integrity on trust are greater in the early stages of a relationship and the impact of benevolence is felt at a later stage.

*Systems Trust and Calculative Regimes*

Giddens’ analysis of trust featured as part of his broader project of trying to understand the contours of modernity (Giddens, 1990). For Giddens (1990) contemporary life is inextricably bound up with abstract systems. The importance he accords to such systems rests on their capacity to stretch social relations across time and space. This process is referred to as disembedding, “the ‘lifting out’ of social relations from local contexts of interaction and their restructuring across indefinite spans of time-space” (Giddens, 1990, p. 21). Symbolic tokens and expert systems are identified as central to the process of disembedding.

Consider first symbolic tokens: “Symbolic tokens are media of exchange which have standard value, and thus are interchangeable across a plurality of contexts” (Giddens, 1991, p.18). In the realm of everyday life for example, the wearing of a wedding ring serves as a symbolic token in that it communicates a message across time and space (Mills, 2000). Giddens himself does not explore symbolic tokens in any great depth and the example he uses, money, can be considered to be the quintessential symbolic token, it can be stored (time) and switched across locations (space). Other writers have sought to explore the concept further. For instance, scholars have applied the notion of symbolic tokens to topics as diverse as Enterprise Resource Systems (Ignatiadis & Nandakumar, 2007), the accounting / information systems package SAP (Hanseth, Ciborra & Braa, 2001), and the structure of DNA and the genetic code (McNally & Wheale, 1994). Within the accounting domain, the concept of symbolic tokens has been deployed in relation to corporate stocks and shares.
(Unerman & O’Dwyer, 2004) and ABC systems (Jones & Dugdale, 2002). In the context of this paper, the star rankings of hotels and the brand names of particular international hotel chains can similarly be viewed as symbolic tokens as they stretch space, by virtue of it being a standard or brand that is meaningful, and time, by virtue of a 5 star hotel booked now for next summer will probably remain a 5 star hotel in a year’s time.

Expert systems are another type of disembedding mechanism and form the second component of abstract systems. Giddens (1990) demonstrates how the relatively mundane rhythms of everyday life, such as transport systems, telephony, the world-wide-web, and electricity infrastructure, are structured by expert systems, something that broadly we all take for granted. In relation to travel, the simple act of going to a travel agent and booking a week’s holiday is predicated on the functioning of an expert system that traverses time and space. Expert systems are analytically and practically separate from the experts that function as “representative of abstract systems” (Giddens, 1990, p.85). Given the subject matter of this paper, it is noteworthy that Giddens (1990, p.85) specifically refers to the travel agent (along with, for example, dentists and accountants) as an example of an expert. While Giddens accords great import to expert systems, he is more circumspect about experts and expert knowledge itself. According to Giddens (1994), both experts and the laity are far more reflexive about the status of the knowledge claims that can be made by a canon of expert knowledge than they were in the past. The very arguments that establish the rationale for a body of knowledge ultimately subvert its authority (Lynch, 2000). Lay-expert relations in the travel industry offer a striking example of Giddens’s thesis: expert knowledge has generated categories of different classes of hotels that are readily accepted; yet the experience that a lay person has of hotels equips them to pronounce on what precisely counts as a good hotel.

3 Giddens (1990) points out that even a hermit opting out of society is reliant on the expert system surrounding nuclear power not going wrong.
Encounters with experts might be frequent or consultations might take place on a more episodic basis. According to Giddens (1990, p.85), the point at which a client interfaces with an expert is an access point to the expert system. In this interaction, a process of re-embedding occurs: “the reappropriation or recasting of disembedded social relations so as to pin them down ... to local conditions of time and place” (Giddens, 1990, p. 80). Thus the point at which a client visits a travel agency is the moment whereby the disembedded expert system for travel is re-embedded into the local context. The process of re-embedding at an access point is important in instilling both credibility and trust in the mind of the client (Giddens, 1990, p. 87), it relies heavily on the “facwork” (Goffman, 1969) of the expert i.e. does the travel agent seem knowledgeable, interested and competent to the client? When an independent traveller chooses to make a booking directly with a hotelier, the access point between the client and the expert system changes. It is no longer premised upon the facwork interaction with the agent, instead the expert system is accessed via the internet. In this scenario, the independent traveller places the trust, which was previously vested within the traditional intermediary, in their interactions with newly emerging customer review sites such as TripAdvisor. Much is vested in these interactions as they are “places of vulnerability for abstract systems, but also junctions at which trust can be maintained or built up” (Giddens, 1990, p. 88).

Indeed, the concept of trust is central to Giddens (1990) notion of abstract systems. His conception of abstract trust refers to the ways in which trust in systems of knowledge and expertise, invested with notions of objectivity and rigour, are central to modernity. Giddens (1990, p.88) poses the question: “why do most people, most of the time, trust in practices and social mechanisms about which their own technical knowledge is slight or nonexistent?” In answering this question, Giddens (1990, p.89-90) argues that from an early age we are
socialized into believing in science and technical rationality, characterised as the “hidden curriculum”, whereby, in effect, people make a “bargain with modernity in terms of the trust they vest in symbolic tokens and expert systems”. More generally, Giddens (1990, p.84) makes the point that Western society is predicated on the notion of a “trustworthiness of established expertise”. The corollary of this point is that we are socialized into being open to scientific knowledge but, more specifically, being receptive to rankings, numbers and calculative practices.

Consequently, the functioning of abstract systems relies in no small part on calculative practices. Such practices are inscribed in expert systems and enable *inter alia* the calculation of phenomena, the labelling of entities, the process of commensuration, and the ranking and ordering of entities. Aside from a few elliptical remarks relating to the production of trust and calculation of risk, Giddens has little to say about calculative practices and does not pursue his analysis in any depth. It is on this point that accounting scholarship has much to contribute by filling a potential void in Giddens’ analysis, especially through illustrating the manner that calculative practices function in, and are constitutive of, expert systems. For example, Free’s (2008) examination of the trust engendered within category management identifies the pivotal role of accounting-based techniques. “Category management’s accounting-based techniques contributed to system trustworthiness and came to be seen as a symbol of efficiency and objectivity across categories throughout the UK retail sector.” (Free, 2008, p.240).

Another important illustration of an expert system underpinned by calculative practices can be seen in Miller’s (2001, p.380) analysis of cost and management accounting which he characterizes as a: “variety of techniques for calculating costs, identifying deviations from
standards, producing budgets and comparing these with the actual results attained, calculating rates of return for investments, setting transfer prices for interfirm transactions, and much else besides”. Miller’s (2001) work engages with management accounting as an expert system that has achieved a degree of prominence and has powerful material and symbolic effects. For example, part of the power of management accounting as an expert system is predicated on its capacity to reduce complex phenomena to a single number, which allows organizations to make decisions over a wide range of factors, i.e. such as the decision to invest or divest. The potency of this process rests in part in simplifying matters, yet arguably of greater importance is its capacity to appear neutral and objective. This quality allows accounting numbers to appear ‘above the fray’ and seemingly uncontaminated by organizational politics. Miller (2001) recognises the privileged status numbers enjoy within contemporary society, a point shared by other scholars (Espeland & Sauder, 2007; Porter, 1996).

Consequently, our assertion is that calculative practices inscribed into expert systems underlie the creation of systems trust. This belief has significant implications. It can foster an understanding of an increasing array of situations in contemporary life, where actions are taken, beliefs are formed, and trust is invested, on the basis of the objectivity of numbers.

**Methodology**

The coming of the internet has opened up new vistas for researchers and offers them a highly “seductive data set” (Jones, 1999, p.12). The gathering of primary research data via the web has been termed Internet Mediated Research (IMR) by Hewson, Yule, Laurent & Vogel (2003). The benefits of this new methodology are pretty self evident: it allows the researcher access to a vast geographic area (the whole of the connected world at least) and usually on a
twenty-four-seven basis (Mann & Stewart, 2000, pp.17-24). It is also generally less intrusive and more economical than traditional methods of data gathering (Kosinets, 2002, p.70). Internet research as an emergent method may prove particularly useful to the social science scholar (Lee, Fielding & Blank, 2008). Commentators such as Rasmussen (2008, p.87) argue that social science research has “undergone a transformation” with the advent of this new mode of data collection. For example, the traditional questionnaire has undergone a significant revamp in the form of the web survey (Dillman, 2007). The web also provides a potentially rich site to study human behaviour. Observational techniques, one of the prime research methodologies of the social sciences (Frankfort-Nachmias & Nachmias, 1996), can similarly be applied to the world of the online forum (Hewson & Laurent, 2008). Indeed, the study of computer mediated communications within virtual communities presents a challenge to preconceived notions of what constitutes observation within the ‘real’ world (Mann & Stewart, 2000, p.84).

Ethnographic researchers turning their attention to the internet as a site of scholarly inquiry can draw on the methodological deliberations of commentators such as Hine (2000) and Kozinets (2002, 2006). Hine (2000) uses the term virtual ethnography to refer to this new form of research method, while Kozinets (2002) defines it as netnography:

‘Netnography’, or ethnography on the Internet, is a new qualitative research methodology that adapts ethnographic research techniques to study the cultures and communities that are emerging through computer-mediated communications. (Kozinets, 2002, p.62).
Clearly netnography is a particularly useful methodological choice for those scholars engaged in marketing research (Kozinets, 2002). On line communities are, after all, “technocultural gatherings of cyborg consumers” (Kozinets, 2006, p.281) and their study “offers a new window on the naturally occurring, rich and complex world of lived consumption.” (Kozinets, 2006, p.287). However, the value of virtual ethnography extends far beyond the sphere of consumer research alone. It potentially provides a means by which all social science scholars may observe a host of human behaviour. For the purposes of this paper, therefore, netnography poses a useful methodological basis from which we can examine a community of consumers of travel and the role which a calculative ranking regime plays within that community. Scott and Orlikowski (2009) have already drawn on netnography in their study of TripAdvisor from a sociomateriality perspective. We similarly adopt netnography as the methodological underpinning of our analysis of the travel website.

Our methodological approach was as follows. We first undertook an overview of the operational functionality of the TripAdvisor website. This involved becoming familiar with the features of the site, its hotel ranking mechanism and traveller review facility. We set out our findings from these investigations within the immediately following case study section of the paper. We then turned our attention more firmly onto the concept of trust by examining both the claims emanating from the site itself and the contents of commentaries within individual traveller reviews. As Kozinets (2002, p.64) observes “Netnography is based primarily on the observation of textual discourse”. In the Discussion section of the paper we draw upon such excerpts from the site, together with the hotel ranking mechanism itself, to suggest that the phenomenon of TripAdvisor can be considered as an illustrative example of how personal trust (Mayer et al, 1995) and systems based trust (Giddens, 1990, 1991) is constructed in contemporary society.
This methodological approach has limitations, the most obvious of which is the questionable generalizability of findings based on an analysis of a minute proportion of the user volume that a site such as TripAdvisor hosts. Nevertheless, we ascribe to Kozinets (2002, p.64) view that “interesting and useful conclusions might be drawn from a relatively small number of messages, if these messages contain sufficient descriptive richness and are interpreted with considerable analytic depth and insight”.

**Travel and Trust: The Case of TripAdvisor**

As its name suggests, TripAdvisor is a website which offers travel advice to its users. It does this primarily by way of providing rankings for hotels, restaurants and visitor attractions around the world. Founded in February 2000 by US citizen Stephen Kaufer (Livingston, 2007, p.361), the TripAdvisor brand has expanded to operate in twenty-seven countries. The business generates its revenue through advertising; the site hosts links to online travel booking sites such as Expedia, Orbitz, and hotels.com. It is easy to understand the attractiveness of the site to such online travel agencies: according to the organization’s fact sheet of 2011, over 40 million visitors (and hence potential customers) pass through the site every month. From the perspective of the traveller, TripAdvisor offers over 40 million traveller reviews to peruse and ranking lists for over 125,000 visitor attractions, 450,000 hotels, and 600,000 restaurants. The unique feature of TripAdvisor, as compared to traditional travel guides, is that its information and advice is effectively constructed from the accumulated opinions of fellow travellers. In other words, its travel guidance consists not of the musings of a handful of professional travel writers or paid assessors, but rather of the experiences of millions of everyday tourists. The site describes its function as follows:

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4 [http://www.tripadvisor.co.uk/PressCenter-c5-Our_Team.html](http://www.tripadvisor.co.uk/PressCenter-c5-Our_Team.html), accessed March 2011.
TripAdvisor is the world’s largest travel community where you can get real information, advice, and opinions from millions of travellers to plan and take your perfect trip. TripAdvisor is a place you can go for insights and tips, a place that is literally alive with experiences and opinions.\(^7\)

The main mechanism by which a traveller can share his experiences with fellow travellers is by writing and submitting a Traveller Review on an establishment:

A Traveller Review is a way for you to write about and share your experience at an accommodation, restaurant, attraction or location with fellow travellers. You can be 100% frank and honest about your experience as long as you adhere to our guidelines.\(^8\)

The main concern of the site’s guidelines appears to be in relation to ensuring the credibility of the review provided and to this end, TripAdvisor requires each reviewer to register their personal details with them, and does not allow the use of commercial email addresses. Owners and managers of reviewed establishments are permitted however, to respond to critical travellers’ comments regarding their services and facilities. Such responses are posted directly below the relevant traveller review. In the event that hotel management might be tempted to submit fictitious reviews of their own establishment, TripAdvisor has posted warnings within its ‘write a review’ section. Carrying the headline ‘we have zero tolerance for fake reviews!’ members are reassured regarding the site’s commitment to credibility and the penalties (such as monitoring the offending hotel’s reviews and alerting users to any dubious practices) that will be imposed on transgressing hoteliers. Despite these reassurances, the issue of fictitious reviewers is clearly problematic for TripAdvisor. The submission of

\(^7\) http://www.tripadvisor.co.uk/help/what_is_tripadvisor, accessed August 2009.
\(^8\) http://www.tripadvisor.co.uk/help/what_is_a_traveler_review, accessed August 2009.
biased reviews remains one of the core concerns that critics can levy against the integrity of the site.

In order to understand the process of submitting a traveller review, we registered with the TripAdvisor site and entered its ‘write a review’ area. Within this section, the reviewer writes their narrative on their personal experience of staying in a particular establishment and is prompted to make a selection from five possible categories from which to rate the hotel (terrible, poor, average, very good, excellent). The latter rating allows TripAdvisor to create Traveller Ratings for every hotel, restaurant and visitor attraction within the site. This process involves calculating a summary score based on the quality, quantity and age of the individual traveller reviews. The end result of these calculations is an overall Traveller Rating for each establishment. This rating is prominently illustrated against each establishment by way of a five point indicator. The indicator uses the symbolism of the owl with five owl eyes representing the top rating (excellent). The total number of traveller reviews upon which this overall rating is based also appears alongside it, whilst the individual traveller commentaries are listed underneath in date order.

The Traveller Ratings provide a strong and instant signal of an establishment’s attractiveness to the traveller. As the TripAdvisor website pronounces: “Traveller Ratings are a measure of how well our travellers have liked each place”. The individual traveller commentaries then add more colour and depth to this five point score. For example, the following review of a London hotel is indicative of the degree of personal experience which is inherent within such commentaries:

We had one of the larger rooms on a hallway with only three rooms, so we experienced none of the noise mentioned in earlier reviews. As a matter of fact, our room was like a
haven from the cold, rainy city. It was so chilled on our last day that when I went to bed that night, I was rushing … to get under the covers; when I lifted the comforter, which had already been turned down for us, I discovered that some kind soul had prepped our bed with two hot water bottles! Along with the ‘plunder-the pantry’ benefit, the well-stocked minibar, the towel warmer in the bathroom, the ice, olives, and lemon slices for cocktails in the late afternoon, among other amenities, this personal touch of warming the bed on a cold night was over the top and wonderful. Each staff member greeted my husband and me by name whenever they saw us, and we wanted for nothing. This is the loveliest little hotel I've ever seen, and I can't wait to return!\(^9\)

Alongside such textual commentaries, reviewers can also upload their personal photographs onto the site. These images can then be used to validate the comments made within the narrative. As will be discussed later, this imagery may play an important role in verifying the ‘truthfulness’ of the independent traveller’s review.

In addition to the Traveller Rating, TripAdvisor also publishes a numerical ranking of establishments which it calls the Popularity Index. This index is constructed from a combination of the information in the Traveller Ratings and other published sources on destinations such as guidebook entries and newspaper articles, although increasingly this latter information source is becoming less relevant. As Stephen Kaufer, CEO of TripAdvisor comments, the user review provides “fresher information and tends to be more detailed. To many people, it’s more reliable” (Livingston, 2007, p.363). The Index is calculated using an algorithm (which is not made public) which places more emphasis on recent information. The ranking it produces runs from number one to the total number of establishments within that

city or vicinity which have been subject to a traveller review. Each individual ranking, and its place within the overall score (i.e. #10 out of 100 hotels) is then displayed in a very prominent manner against each listed establishment. In this way, an independent traveller wishing to visit a city for the first time can, by consulting the TripAdvisor site, find quickly and easily a comprehensive ranking of hotels, restaurants and visitor attractions in that vicinity.

Discussion

In this section we consider the way in which TripAdvisor rankings engender trust, both personal and systems trust. This has consequences for our understanding of abstract systems (Giddens, 1990, 1991) and the role of calculative practices (Miller, 2001) in the creation of trust. In addition, we speculate as to the implications of the proliferation of such internet mediated expert systems on the accounting profession.

TripAdvisor and the Construction of Personal Trust

First we draw on Mayer et al’s (1995) integrative model of trust to inform our understanding of the personal trust invested in TripAdvisor. The use of this model to examine trust relations within internet virtual communities more generally is well established (Jarvenpaa, Knoll, & Leidner, 1998; Ridings, Gefen & Arinze, 2002). Trust is seen to constitute an important component of knowledge sharing within virtual communities, one of the motivational factors behind the emergence and use of such forums in the first instance (Chai & Kim, 2010; Chiu, Hsu, & Wang, 2006; Hsu, Ju, Yen & Changa, 2007; Wasko & Faraj, 2000).

Applying Mayer et al’s (1995) model to the context of TripAdvisor, the user of the site can be regarded as the trustor, that trusting party who places their trust in the information provided
within the reviews and indices. In contrast, the reviewer of hotel accommodation, who posts their personal commentaries and ratings onto the site, can be regarded as the trustee, that party to be trusted\textsuperscript{10}. According to Mayer et al (1995), trust between two parties is based on both the trustor’s propensity to trust and the trustworthiness of the trustee. The latter is influenced by three antecedents of trust: ability, integrity and benevolence. Let us evaluate each of these three determinants of trust from the perspective of the TripAdvisor traveller reviewer.

Consider first the \textit{ability} of the TripAdvisor reviewer. Applying the Mayer et al (1995) model, the perceived competence of a reviewer is one of the determining factors as to whether they are trusted or not. The most obvious way in which a TripAdvisor reviewer can impart their ability and competence to users of the site is through the narrative content of their review. Within such a forum they can exhibit their expertise in the field of travel and hence their legitimacy in making pronouncements on the quality of a particular establishment. The number of contributions that each reviewer has made to the site overall can also be seen at this stage, which may further strengthen the reviewer’s credibility in the eyes of the user. The following review provides an excellent example of the manner in which an individual TripAdvisor reviewer seeks to establish trust on the basis of his comprehensive knowledge of Parisian hotels:

I have been to Paris many many times. Usually small rooms with old bathrooms and limited services. The Ambassador was the polar opposite. The lobby is beautiful with huge chairs and plenty of space for relaxing. We upgraded to a business class room

\textsuperscript{10} Although it is possible that the same individual can be both a trustor and trustee depending on the purpose of their visit to the site.
and it was spectacular, not just good for Paris, but would have been great even in the States … The breakfast was the topper. All I can say was, WOW. I have been all over the world and the only better breakfast was at the Conrad Tokyo (which was $1000/night)… And to those who complain you can hear the Metro - clearly they have never been to Paris. You can be at the Ritz or George V and still hear the Metro, it is part of life in Paris. I have heard the metro even on the 6th floor in some of the most posh hotels in Paris.¹¹

Available evidence certainly suggests that users of TripAdvisor appear to view fellow independent travellers as credible sources of reliable information on hotel accommodation. For example, Gretzel’s (2007, p.21) questionnaire of TripAdvisor users reveals that 61% of respondents believed that travellers’ reviews are a more reliable source of information than that received from traditional travel service providers. In addition, a 2010 Guardian / ICM survey found that there was a high degree of trust accorded to customer review websites, with TripAdvisor being specifically mentioned¹². Research into electronic word of mouth more generally, supports this stance, indicating that consumers place more value in the reviews and recommendations written by fellow consumers rather than by professional experts (Bickart & Schindler, 2001). Indeed, the recent extraordinary growth in the phenomenon of eWOM has been interpreted by researchers to be an indicator of the perceived credibility and independence of the opinions of fellow consumers as compared to traditional tourist information sources (Schmallegger & Carson, 2008, p.100). It is for this very reason, suggest Litvin et al (2008), that traveller review forums increasingly appear alongside electronic travel agency sites (such as Expedia). The trust which was traditionally invested in the local

¹¹ http://www.tripadvisor.co.uk/ShowUserReviews-g187147-d197578-r91810589-Radisson_Blu_Ambassador_Hotel_Paris_Opera-Paris_Ile_de_France.html#REVIEWS, accessed February 2011.
travel agent, they argue, is not easily replicated in the faceless electronic travel site. However, by encompassing the reviews of fellow travellers alongside their products, such internet travel sites attempt to harness the assurance and trust inherent in the word of mouth communication. Indeed, the contemporary tourist bloggers are “rapidly becoming the travel opinion leaders of the electronic age.” (Litvin et al, 2008, p.466).

The second antecedent of trust which Mayer et al (1995) propose is that of benevolence. Interpreting this from the perspective of TripAdvisor, does the user of the site consider it to be made up of a supportive and helpful community of fellow travellers? Certainly, the manner in which the TripAdvisor site welcomes the visitor into the site has resonances of a community of travellers:

It’s a place that feels like a neighbourhood coffee shop, a café, a pub. A friendly and relaxed community filled with unscripted and honest conversations between travellers like you.\textsuperscript{13}

The impression provided by the website is that it is contributed to by self-styled cosmopolitans, who share a habitus as to what is constitutive of a good hotel. A recent development to the TripAdvisor site connects it with the social networking website facebook, which allows facebook members to see how their on-line friends ranked particular hotels, something that further emphasises the notion of a likeminded community. Consequently the site seeks to make immediate connections and associations with its users, trying to create intimacy and a sense of community. This could be said to be an attempt to create a Res Public or civic life on the website. Such a notion may be very important to TripAdvisor as it is a

\textsuperscript{13} http://www.tripadvisor.co.uk/help/what_is_tripadvisor, accessed August 2009.
website premised not only on people trusting it, but also on contributing to it. After all, users posting reviews provide free labour for TripAdvisor. Ironically, while TripAdvisor’s expert system mimics a neo-liberal market it is created by the gift economy of individuals posting reviews. It is, therefore, a fascinating interplay of the market and the gift. However, Mayer et al (1995) suggest that the benevolent antecedent of trust may take time to develop and becomes more prominent in latter stages of the trust relationship. For frequent users of TripAdvisor therefore, this sense of benevolence may increase and with it their trust in the comments and ratings of other traveller reviewers.

The final determinant of trust is *integrity*, the belief that the trustee behaves in an honest and principled fashion in all dealings with the trustor. This antecedent refers to an issue at the very heart of the TripAdvisor case: does the user of the site believe that the traveller reviews reflect the honest opinion of fellow travellers or are they the biased untruths of partisan hoteliers? In its dogged determination to represent the true version of events, TripAdvisor must as an organization, be seen to be hosting only the views of *real* travellers. The presence of fictitious reviews, written by a hotel’s own staff in order to boost its placing on the Popularity Index, is to be firmly avoided. Certainly the management of TripAdvisor have been vocal in their repudiation of any less than honourable entries in the site’s review process:

> For us it’s a responsibility, because we really want people to trust TripAdvisor. People absolutely post scathing reviews. But we don’t want to be spammed. We don’t want hotel owners to tell all of their employees to go write wonderful reviews of the property. So we have our techniques and our human and algorithmic ways to detect that
sort of fraud, to keep the accuracy of TripAdvisor as high as we can. (Stephen Kaufer, CEO, quoted in Livingston (2007, p.371)).

To what extent the management of TripAdvisor can actually enforce such a policy of fraud detection, given the volume of users, is of course questionable, however, they may be able to rely on the site’s own propensity to self discipline (Foucault, 1979). For example, the tendency of TripAdvisor reviewers to make reference to the comments made by other reviewers may ensure a degree of content credibility. In addition, as noted earlier, the ability to upload personal photographs onto the site for other fellow travellers to view provides a degree of validity to the narrative commentaries regarding an establishment. Although the photograph cannot be regarded as a “form of neutral evidence” (Parker, 2009, p.1115), the power of the pictorial image is still a compelling one (Becker, 1974; Warren, 2005). Interestingly, reviewers’ images themselves can also come to be caught up in the cross referential aspects of the site as the following review of a Tokyo hotel illustrates:

Our hotel room was much nicer than I expected – it has been recently redecorated and doesn’t have the IKEA feel seen in the older pictures on this site.¹⁴

In addition to these inherent controls, a recent investigation by O’Connor (2008) would appear to support the accuracy claims of TripAdvisor management. Using a sample of London hotels, the author finds little evidence of characteristics that typify false reviews and therefore disputes the accusation that the TripAdvisor site is compromised by false postings.

In summary, in TripAdvisor we find evidence of Mayer et al’s (1995) three antecedents of personal trust and hence this may explain the appeal of the site at one level. A further means of understanding the popularity of TripAdvisor, and the trust it engenders, is to consider it as an exemplar of Giddens’ systems trust.

*Trip Advisor, Calculative Regimes and Systems Trust*

1. *The use of symbolic tokens*

In analysing the TripAdvisor website, we witness a number of symbolic tokens which vary in their durability. The most prominent symbolic token hosted by the site is the Popularity Index, which consists of a ranking of hotels in a city or region. This is supplemented by the TripAdvisor Traveller Rating, which gives a 1 to 5 rating for each hotel. As discussed in an earlier section, the overriding function of a symbolic token is that it remains stable, which is, of course, the very quality that allows it to stretch time and space. In the case of TripAdvisor, while the categories and meanings of the symbolic tokens remain stable (being the number 1 ranked hotel in a city or being ranked as a 5 on the traveller rating), the recipients of particular symbolic tokens are subject to change. In other words, while the symbolic tokens themselves are constant, the hotels receiving them may shuffle around. In this regard, TripAdvisor symbolic tokens effectively stretch space but introduce a small element of risk in relation to stretching time. For example, it is highly likely that a hotel ranked at No. 4 one week might rise to No. 3 or fall to No. 5 the following week. Nonetheless the symbolic token provides a reasonable guide to the future; it is unlikely that a hotel will drop from No. 4 to No. 300, for instance, in a short time frame. In addition, this capacity to accommodate change and movement arguably endows the symbolic tokens with greater credibility as compared to
the seemingly immutable star ratings awarded episodically by tourist boards. As Phillip Cassell (1992, p.29) notes, symbolic tokens “only work when agents trust the value of symbolic tokens”. For hotels the continuous nature of the Popularity Index and the TripAdvisor Traveller Rating mean that any benefit derived from being a high rating hotel is always fragile as it could be subject to change. This aspect of TripAdvisor’s symbolic tokens is a feature of the moving market that is an attribute of the site’s expert system.

In addition to these continuous symbolic tokens, TripAdvisor’s expert system also bestows more ‘permanent’ symbolic tokens during its annual Travellers’ Choice ceremony\(^{15}\). Semiotically, the TripAdvisor logo used against awardees is encased by a Graeco-Roman gold cluster, evoking comparisons with the Olympics or Oscars. Like such events, there are a number of categories for which it awards symbolic tokens, these include: Top 25 Hotels in the UK chosen by Europeans; Top 10 Bargain Hotels in the World; Top 10 Trendiest Hotels in Europe. In contrast with the continuous symbolic tokens discussed above, such awards are a consecration of the hotel by TripAdvisor in that they are not fleeting but can always be referred to by an establishment (‘We were awarded best hotel in the UK in 2008’). In this regard, such symbolic tokens stretch time and space for time immemorial.

2. Expert systems and calculative practices

Giddens (1990) argues that trust is inscribed in abstract systems, which rely on the effective functioning of expert systems. Expert systems in turn rely on calculative practices. We contend that the calculative practices that comprise TripAdvisor’s expert system are located within the algorithm which creates the site’s famed rankings. Effectively, the algorithm

\(^{15}\) [http://www.tripadvisor.co.uk/TravellersChoice](http://www.tripadvisor.co.uk/TravellersChoice), accessed 15\(^{th}\) March 2011
accords various weighting to different aspects of the review form completed by travellers. The calculative practices produce two main rankings: the Traveller Rating ranking on a scale of 1 to 5 and the Popularity Index rating of the hotel in a particular city.

Looking more specifically at TripAdvisor’s Popularity Index, it provides the independent traveller with a clear and objective form of quantification from which to make hotel discriminations, and as such is invested with the objectivity and impartiality that are oft attributed to numbers. Indeed, the Popularity Index is perhaps a quintessential example of the “prestige and power of quantitative methods in the modern world?” (Porter, 1995, p.viii, preface). In many ways, the Popularity Index, explains the popularity of the TripAdvisor phenomenon itself. Resonant with Miller’s (2001) analysis, a single number instantly labels the perceived quality of an establishment and that number is invested with credibility all the more so because it was constructed from the experiences and seemingly honest opinions of fellow travellers. Moreover, the Popularity Index places hotels in hierarchical relationships to one another – highlighting which hotels are ‘better’ or ‘worse’. As an expert system, the rankings convert the numerous individual ramblings on the site into hard and objective fact. “TripAdvisor gives the subjective content of their reviews and ratings, a determinacy and reach they would not otherwise achieve.” (Scott & Orlikowski, 2009, p.20). From this perspective, trust becomes embedded in the clear hotel rankings of the site’s Popularity Index. Such a quantification process releases the traveller from the need to place personal trust in a travel agent, glossy hotel brochure or even the personal reviews within the site. Instead, trust is placed directly in the numbers: “reliance on numbers and quantitative manipulation minimizes the need for intimate knowledge and personal trust” (Porter, 1995, p.ix, preface). The power of the number in this regard is captured quite simply in the
following statement made by a TripAdvisor reviewer: “I found this hotel on TripAdvisor and stayed here because it was ranked #1”\(^\text{16}\).

In this manner, TripAdvisor’s abstract system communicates messages to travellers, alerting them to those hotels that are highly rated and to those to avoid. The ranking strips away complexity and disembeds the hotel in spatial and temporal ways. Spatially, it is possible to compare the hotel with other hotels in other locations; temporally, a hotel is unlikely to see sharp appreciations or declines in a short period, so it is possible to select a hotel for a future stay\(^\text{17}\). As such TripAdvisor rankings can be viewed as an example of Porter’s (1995) technologies of distance, a form of quantification of such global uniformity that it can be understood and transported around the world, or in this case, the world wide web.

3. The Power of TripAdvisor: Signification and Legitimation

One could argue that for abstract systems to be considered as significant they need to have an impact on the social or material world, in other words they need to have power effects, or “the capacity to achieve outcomes” (Giddens, 1984, p. 257). In this section we will explore the extent to which TripAdvisor can be considered to have accrued power within the field of travel. Power is inescapably relational (Clegg, 1989) and a shorthand for understanding it is to view it as both a property of social structure and as the attempt by actors at exercising agency – which either results in changes in social structure or reproduces the status quo

\(^{16}\) http://www.tripadvisor.co.uk/Hotel_Review-g60763-d113317-Reviews-or10-Casablanca_Hotel_Times_Square-New_York_City_New_York.html#REVIEWS, accessed February 2011.

\(^{17}\) In his account of modernity Giddens (1990) draws a clear analytical distinction between expert systems and symbolic tokens, though emphasizing that together they comprise abstract systems. Our analysis suggests that, perhaps as a consequence of TripAdvisor’s digital form, the expert system and the symbolic tokens are mutually constitutive – the expert system has the capacity to create symbolic tokens which, in turn, affirms the expert system.
(Bachrach and Baratz, 1970; Giddens, 1984): “we can express the duality of structure in power relations in the following way. Resources (focused via signification and legitimation\textsuperscript{18}) are structured properties of social systems, drawn upon and reproduced by knowledgeable agents in the course of interaction” (Giddens, 1984, p.15).

The extent to which TripAdvisor can be considered a part of the firmament of the social structure of the travel industry rests on whether it has the capacity to exert power - in terms of signification and legitimation – on players within the travel industry. In exploring these issues it is worth noting that in the early years of the last decade it probably mattered little how TripAdvisor’s website represented various hotels through its abstract system. Writing in 2011, a decade after its foundation, the TripAdvisor abstract system is clearly influential in the travel industry and in popular culture more generally. Anecdotally speaking, it is not unusual to see symbolic tokens (such as plaques celebrating a hotel’s good ranking in TripAdvisor) adorning the front reception desks of prestigious hotels. This is a symbolic manifestation of TripAdvisor having inserted itself successfully within the social structure of the travel industry, and, consequently, possessing the capacity to exercise power within that industry. We will explore this insight further through Giddens’ articulation of signification and legitimation, which for the purposes of theorisation are analytically separate but, inevitably, overlap in practice.

Turning first to signification, Giddens (1979, p.11) views ‘interpretative schemes’ as comprising of the categories we employ to construct our sense of reality of the social world. In TripAdvisor’s case, these are represented by the Traveller Rating and the Popularity Index.

\textsuperscript{18} Giddens also considers domination as a structural property of power. However, in his theorization of the concept he makes a close association with the use of violence or, as in the case of the State, the monopoly over legitimate violence. In the \textit{Constitution of Society}, Giddens (1984) aligns himself closely with Bachrach and Baratz’s (1970) 2nd Dimension of power.
If social actors – customers, hoteliers, media commentators - draw upon these ratings and rankings as a means of providing understanding about a hotel then the abstract system can be said to exercise power. The act of using TripAdvisor, or to speak of how a hotel is ranked, is to reproduce its signification. One of the interesting aspects of TripAdvisor as a means of signification is that it is heavily derivative on existing symbolism and codes, yet from such commonly understood codes TripAdvisor has created its own way of making sense of hotels. In particular, the ranking of hotels in relation to one another marks a departure from drawing an implicit equivalence between hotels sharing the same star ranking.

The aspect of structure concerned with the establishment of norms and the provision of moral evaluation is, according to Giddens, the realm of legitimation. This is underpinned by the insight that power is most effectively exercised when it is deemed legitimate. Legitimation is understood by Giddens (1977, p.133) as “types of rules that are drawn upon as norms in the evaluation of conduct”. The corollary is that a particular institution or organization is deemed as legitimate to evaluate a particular sphere of life. As we have argued earlier, the edifice of TripAdvisor’s entire existence is premised on it being trusted, which goes to the heart of legitimation: why is it legitimate for the TripAdvisor website to provide judgements on hotels? One answer is that the legitimation of TripAdvisor is through its capacity to give ‘voice’ to the authentic opinion of independent travellers. If TripAdvisor’s signification, as seen above, provides the language to think about hotels, the abstract system is irredeemably based on providing an evaluation of hotels. That the abstract system ranks hotels is an act of legitimation as it marks out hotels that can be considered as good places to stay through to those that should be avoided. The algorithm of the expert system produces the ranking of hotels in a particular city; this is supplemented by the users’ commentaries which often venture into the realm of moral evaluation about a hotel. Such an evaluation is an exercise of
power that draws directly on issues of legitimation. TripAdvisor is a medium that facilitates a ‘reverse panopticism’ (Carter and Grieco, 2000) or a synoptic form of power (Clegg, Courpasson, and Phillips, 2005) where the many – i.e. users of TripAdvisor – observe the few – i.e. hotels.

In practice the social structure of travel, to which we argue TripAdvisor is now integral, draws on the interplay of signification and legitimation. The central question is whether it has the capacity to exercise the power over actors in the travel industry. We can see the power effects of TripAdvisor’s abstract system most prosaically from the perspective of both the traveller who consults the rankings and the hotel establishment that is listed within the rankings. Let us consider first the case of the independent traveller who consults the TripAdvisor site when planning a vacation. How does this individual react to the hotel rankings (which draw on signification as a means of talking about hotels and legitimation as a means of evaluating hotels) within TripAdvisor’s Popularity Index? According to the cofounder of TripAdvisor, Stephen Kaufer, the site’s hotel rankings have a very direct impact on the reservation choices made by those who consult them, which suggests that independent travellers are accepting of the signification and legitimation of TripAdvisor, which, in turn, reproduces the power of TripAdvisor:

Our traffic is so high now that we know, that for better or for worse, we have a significant impact on where visitors are choosing to stay. For every city we kind of have a satisfaction index; we rate which hotels our travellers like the most. If you’re ranked first or you’re ranked 20th, the number of reservations calls or bookings you’re going to get is going to change (Kaufer quoted in Livingston, 2007, p.371, emphasis added).
This quote is revealing as it demonstrates that TripAdvisor’s self-understanding is that it occupies a position of power (‘significant impact’) within the social structure of the travel industry and highlights that this is based on its abstract system (‘a satisfaction index’). Certainly the volume of traffic that the TripAdvisor site attracts would seem to indicate that it is part of the firmament of the social structure of the travel industry. The marketing firm Compete reports that the site received almost 18 million visits during the month of January 2011\(^{19}\), while Alexa, the web intelligence organization, ranks TripAdvisor as the 142 most visited website in the US\(^{20}\). The list of awards displayed on their website also attest to TripAdvisor’s popularity. For example, the site was the recipient of the 2007 Consumers Favourite Online Travel Information Provider by the British Travel Awards. Its broader cultural significance penetrated the sphere of Government in 2008, when the UK Minister for Health, Ben Bradshaw, announced: “I would never think of going on holiday without cross-referencing at least two guide books and TripAdvisor. We need to do something for the modern generation in healthcare”\(^{21}\). All of these instances point to TripAdvisor having both the power of signification, in that people are comfortable with and use the ranking system, and the power of legitimation, in that people are accepting of the ability of the TripAdvisor website to provide evaluations of hotels. In a process of structuration, the external confirmation of TripAdvisor provides it with further legitimacy.

The power exercised by TripAdvisor’s abstract system can also be seen from the perspective of the hotel establishment. For example, a change in the calculative practices that the site uses to calculate its Popularity Index can have a significant and immediate impact on hoteliers:


When we change our algorithm, it dropped some hotels and raised others. Our phones were ringing, because we had had a material effect on their businesses. (Kaufer quoted in Livingston, 2007, p.371, emphasis added).

That hotels contact TripAdvisor if the algorithm changes highlights that the hotels recognize the structural power of TripAdvisor in mobilising allocative and authoritative resources (Giddens, 1984, p.33), in other words the rating has ‘material effects’. It also illustrates that small changes in the algorithm used by the expert system may have amplified effects, i.e. a very minor change might lead to a hotel slipping from No. 6 in the popularity index to No. 12, which might seem like a major fall. Indeed, it is clear that major hotel chains now routinely engage with TripAdvisor, a recognition of the power the website has in shaping public opinion. For instance, many hotels refer directly to their TripAdvisor rankings within their publicity material; Accor, the French hotel group, uses TripAdvisor feedback on the website of its Sofitel chain. This can be explained as Accor according legitimacy to TripAdvisor and signalling to its potential customers that TripAdvisor is a reliable guide. Other chains (such as Radisson and Hilton) actively engage with TripAdvisor by responding to negative reviews made against their establishments using the site’s management response facility. Such responses highlight how the signification and legitimation dimensions of TripAdvisor have the potential to exercise power over hotels. For example, in response to one reviewer’s criticism of the noise emanating from a nearby tram line, the Public Relations Manager of the Hilton Dublin hotel posted the following reply:
I am glad to say that we have, only last week, installed triple glazing to our “tram” rooms, this ensures that the noise is minimal, ensuring a peaceful and relaxing stay.\(^\text{22}\)

Other hotels, rather than enrolling TripAdvisor into their story, have been more critical. As we noted above, power is always relational and it is generally accepted that power is always accompanied by resistance (Giddens, 1984; Haugaard, 2002; Lukes, 2005). At the time of writing, a legal action against the site is being organized by Kwikchex, an on-line reputation organization who represent 800 UK hotels. The central tenet of the legal action is that the hoteliers are unhappy with the reviews posted on TripAdvisor. The legal challenge is therefore, in effect, a challenge to the legitimacy of TripAdvisor. If the legal action succeeds it will curtail, at least in the short-term, the power of TripAdvisor. Conversely, the risk for the litigants is that if their case fails it could provide juridical legitimation of TripAdvisor. However, whatever the outcome of this litigation it is clear that in the space of a decade TripAdvisor has carved out a powerful digital presence for itself within the social structure of tourism. Indeed, the signification and legitimation of TripAdvisor within the social structure of the travel industry is such that it has begun, at least in the UK, to disrupt longer established rankings of hotels. In January 2011 the English Tourist Board announced that it was considering ending the traditional one to five star ranking of hotels in favour of user reviews\(^\text{23}\). The significance in terms of power is that it would amount to the English Tourist Board dropping the traditional mode of signification (‘what star rating is a hotel?’) and legitimation (‘that industry experts determine the rating of a hotel’) that they have employed. It is striking that their proposals cede their authority as experts to users. In the discussion of their thinking behind the proposals they acknowledge TripAdvisor by name and accept that


user reviews might provide a more reliable basis for rankings hotels. This is a fascinating
glimpse of a British tourist rating agency acknowledging the legitimacy of TripAdvisor. In a
further development the British Government’s Department for Media, Culture and Sports is
proposing to remove its approval of the current English Tourist Board rating system in favour
of user based reviews\textsuperscript{24}. In Giddensian terms, if this is enacted it will constitute the
withdrawal of state backed legitimation to the existing abstract system of signification for
ranking hotels in England. Consequently, in the context of both endogenous pressure, from
within the English tourist board, and exogenous pressure, from government, it is probable
that user reviews will replace ‘official rankings’ as the dominant means of signification and
legitimation of hotels within the social structure of the UK travel industry.

4. User-experts and reflexive knowledge

The experience of TripAdvisor can be regarded as analogous with recent developments in the
media, which has seen the rise of bloggers and ‘non-expert’ columnists contributing to on-
line fora. While this is clearly enabled by technology it reflects, following Giddens (1990), a
broader scepticism toward established forms of authority which are increasingly displaced by
a greater reliance on lay opinion. Lay opinion derives its credibility from being the authentic
voice of experience, uncompromised by corporate life and other vested interests. That the
non-expert is privileged raises questions about expertise. TripAdvisor appears to preference
lay experience over formalized expertise, with the attendant notions of dilettantism resonating
with Richard Sennett’s (1998) insights into the role of the amateur. Following Giddens
(1990), TripAdvisor can be seen as an abstract system that is constituted by lay expertise,
thus, it can be regarded as a quintessential example of reflexive knowledge. In this regard,

\textsuperscript{24} http://www.bighospitality.co.uk/In-the-Spotlight/Tourism/Government-set-to-abandon-support-for-hotel-star-
\textsuperscript{rating-system}, accessed April 2011.
TripAdvisor taps into a reflexive sensibility to expertise, whereby ‘official experts’ are given less credibility than regular people:

I think people like to read a professional opinion, and on the website we have links to lots of professionally written content because we believe it is valuable. What professional opinion can't do well is provide 300 perspectives – which is about the average number – on a single hotel in a city. What 300 gives you is a great perspective on good days and bad days at the hotel. And the hotels that always deliver on expectations are the ones that stay in the top 10. (Stephen Kaufer, June, 2010)

The paradox is that while TripAdvisor is an expert system producing symbolic tokens, it simultaneously exhibits a scepticism towards ‘official’ expertise, preferring to rely on the views of its users. It is interesting to note that this scepticism appears to be a feature of TripAdvisor reviews more generally, such as those providing commentaries on restaurants to frequent and places to visit. While our analysis here has been limited to the hotel review functionality of the site, we found the following traveller review of a Moroccan visitor attraction aptly captures the pervasive tension between lay opinion and the professional expert.

We spent ages looking for this place because our guide book gave it such a good review. But when we got there, all we saw was a small building that had no ticket office or anything so we just went in and looked around. There were mere displays of some jewellery and definitely not worth what the guide book had written.

The TripAdvisor expert system is therefore a mechanism that allows expression for its ‘community’ of users, rather than formal experts.

Summary: TripAdvisor, Trust and Accounting

In summary, we believe that the central premise of understanding the popularity of TripAdvisor is that it is trusted by its users, with its business model being centred on the commercialization of trust. The issues of truth and trust certainly appear to be very much at the core of TripAdvisor’s rhetoric. Its slogan is: ‘Get the truth, then go’ and its search facility is entitled “Find hotels travellers trust”. Visually, the TripAdvisor logo is that of the eyes of the owl, wise and all seeing, seeking out the truth in a panopticon-like manner. We suggest that this trust can be analysed in two ways, drawing on each of the works of Mayer et al (1995) and Giddens (1990, 1991). Such a combination speaks to the complex nature of trust that plays out in localised situations, as well as at a more abstract level. This is reflected in Free’s (2008) choice to use both frameworks to try and gain a rich understanding of trust. Similarly, Barrett and Gendron (2006) make a comparable choice, opting for Sztompka (1999) to understand personal trust while using Giddens to interpret expert systems. There are notable analytical openings between these two theoretical lenses on trust. This is perhaps most salient when looking at Meyer et al’s (1995) antecedents of personal trust (benevolence, competence and integrity) and the moment at which an expert system is accessed in Giddens’ (1990, 1991) analysis. For instance, the moment of access to an expert system, re-embedding in Giddens’ terms, is also the point at which issues of personal trust come to the fore in Giddens’ (1990, 1991) analysis; it is where the commensurability between the two models can be most clearly seen. In Giddens’ (1990, 1991) discussion of the interactions between expert and user at the access point, he draws on ethnomethodology to highlight the
vulnerability of the moment and the importance of personal dynamics. This is where Meyer et al’s (1995) framework on personal trust becomes applicable.

We see this interconnection between the two theories on trust within the case of TripAdvisor. Drawing on Giddens (1990, 1991) TripAdvisor can be regarded as an expert system that generates knowledge and symbolic tokens that categorize and define hotels. The expert system is a calculative practice that engenders trust; it offers its users the objectivity and rationality of hard numbers. Moreover, this ranking regime relies on the input of lay people. In this regard TripAdvisor is the quintessence of a reflexive modern expert system, relying on the interaction between expert system and user. The system is a disembedding mechanism that is re-embedded on every occasion a review is posted on the site. It is precisely at this point of re-embedding that Mayer et al’s (1995) theory of personal trust is played out. The process of re-embedding is an access point which, as Giddens (1990) notes, is a juncture at which systems trust becomes secondary to personal trust. At the access point therefore, the legitimacy of TripAdvisor’s expert system is potentially called into question: if users trust the reviews, the result is that TripAdvisor’s legitimacy is reproduced through time and space; if users doubt the ability, benevolence and integrity of fellow travellers then this lack of personal trust compromises TripAdvisor’s abstract system. If this was to continue, the central proposition of TripAdvisor, that of trust, would be fatally undermined. This point highlights vividly the importance of both personal and systems trust for understanding the phenomenon that is TripAdvisor. While diverse in form, both are essential to gaining a comprehensive overview of a complex concept.

*TripAdvisor and the Consequences for the Accounting Profession*
A central premise of our paper is that TripAdvisor is far from a whimsical or ethereal phenomenon, but instead we regard it as indicative of the growing tendency for user review websites to gain traction in proffering influential opinions across a range of different social activities. To put it simply, we do not anticipate there being less user review websites in a decade’s time! In exploring the implications of this trend for the accounting profession we find it instructive to turn to the work of Barrett and Gendron (2006). These authors conducted an insightful analysis of an assurance initiative pursued by North American accounting institutes a decade ago. The initiative, which sought to create a “new market for auditor expertise” (Barrett and Gendron, 2006, p.632), involved accountants auditing the e-commerce systems of client firms, which if successful would lead to the firm being awarded the WebTrust seal. It was thought that awardees would elicit greater trust from consumers of their e-commerce facility, in other words, that a market for the firm’s product could be created by leveraging off the accountancy profession’s reputation as “reliable trust providers in capital markets” (Barrett and Gendron, 2006, p.632). However, the accounting institutes’ assumption in this regard proved to be misplaced. The paper highlights the difficulties encountered by accountants when trying to sell the WebTrust audit, as they struggled to establish trust with potential clients. At a general level, the authors note that the public at large is far less trusting of accountancy firms than the corporate world might be, especially in the wake of various scandals around the audit of firms. Clearly traditional audit suffers from a crisis of representation (Macintosh, 2002).

More pertinent however to our analysis of TripAdvisor, the Barrett & Gendron (2006, p.644) study speaks of the difficulties encountered by auditors in developing “confidence in their abilities as trust providers in the e-commerce domain”. Effectively the accountancy profession, which was one of the 20th century’s most successful professional projects,
struggled when trying to extend its jurisdiction into internet related matters. In of itself this comparative failure may not be of great concern, but it might be a harbinger of broader shifts relating to abstract systems and trust. For instance, customer review websites such as TripAdvisor appear to act as a means of producing trust and comfort, and thus far this has taken place outside of the accountancy profession’s orbit. There is potential for innovation from such websites to begin to redefine the nature of how we come to audit certain phenomena. Power (1997) notes that definitions of audit are illusory and the practices constantly evolve, but since the 1930s, it has been predicated on the assumption that audit will be carried out by professionally qualified auditors. If practices from customer review websites become more prominent they could make serious in-roads into the professional jurisdiction of the accountancy profession.

The notion of expertise is of course central to this discussion. TripAdvisor effectively problematises the role of expert labour. The implication is that the expert opinion, posted by the anonymous TripAdvisor user, differs from expertise legitimated by professional credentials. It is an expertise that derives its warrant from ‘real-world’ experience and is more democratic in flavour. The boundary between expert/non-expert is, of course, a social construction (Latour, 1993). Various writers (Beck, 1992; Beck, Giddens & Lash, 1994; Giddens, 1994) have highlighted that the relationship between experts and trust is complex, with increasing scepticism towards experts being apparent. Integral to Bauman’s (1991) liquid modernity thesis is the growing distance between systems of expertise and end users – a situation that leads to decreased trust in experts but also to the growth of new forms of evaluation. Online evaluations have according to David & Pinch (2008, p.353) ushered in a new form of expertise, relying on “real-world performance within the system” rather than credentialism. For the accounting profession, this poses the question: does all accounting
information need to be produced and validated by accountants? Or, can much of this work be conducted by a user-community as in the case of TripAdvisor. Of course, we are not suggesting collapse of the professional jurisdiction of accountants prompted by a TripAdvisor style customer review website. Yet it may well be that some services currently provided by accountants could be usurped by the ‘expert user’ in future years.

In such a scenario, perhaps it may be a case of ‘if you can’t beat them, join them’. If indeed ranking systems such as TripAdvisor are the new world order, then a question for the accounting profession to consider is whether this situation might lead to new auditable contexts. The groundwork for such investigations has already been established within accounting scholarship by Free, Salterio & Shearer (2009) in their insightful study of the audit of Financial Times MBA league tables. As Free et al (2009, p.123) observe, the recent growth in rankings and league tables present audit firms with an opportunity as the provision of an audit or assurance service “potentially offer a means of differentiating the growing number of rankings providers.” Whether such a verification exercise would be effective or not from the perspective of the user of such rankings is of course another question; would TripAdvisor users for example, be more trusting of the site’s hotel rankings if it carried the seal of approval of a Big Four firm? Perhaps the key to such a conundrum rests in the distinction which Barrett & Gendron (2006) observe between the corporate world and the general public. If the latter are not so easily impressed as the former by the insignia of the audit firm, then it may well be the case that the user review of the future takes precedence over the professional pronouncement.

In concluding this section on the impact of TripAdvisor for the future of the accounting profession, we are cognisant of recent research into the digitization of science (Dougherty &
Dunne, 2011). Changes in innovation processes in the pharmaceutical industry have indicated that computers are not merely used as a tool, method or means of storage but have opened up a new vista for science. Essentially Dougherty & Dunne (2011) argue that two distinct epistemic communities of scientists have evolved (those that work manually and those whose science is conducted entirely on computers) which is leading to the creation of new science professions. This is analogous to developments in architecture, where digitilisation has changed understandings of space. For instance, the use by signature architects, such as Frank Gehry, of digitalized modelling has changed the practice of what it is to be an architect. Digital technology is therefore having profound effects on the diverse worlds of science and architecture. This raises fascinating questions as to its potential impact on the accounting profession. We would speculate that the internet will have far reaching effects on audit and accounting and while we know a great deal about how audit looked in the 20th century, the potentialities of audit in the 21st century are still in formation. It is our view that 21st century accountability will look very different from its 20th century predecessor and that TripAdvisor offers glimpses of the future.

**Conclusion**

The phenomenon of TripAdvisor can be seen as another fascinating example of the rapid growth in the number of rankings and league tables published in recent years. Indeed, TripAdvisor and its ilk may well be the face of things to come. Internet evaluations of goods and services are now commonplace. Influential websites provide ratings for activities as diverse as the relative merit of various books and cds (amazon.com) through to the teaching prowess of university professors (ratemyprofessor.com). As Espeland and Sauder (2007, p.1) observe: “In the past two decades demands for accountability, transparency, and efficiency have prompted a flood of social measures designed to evaluate the performances of
individuals and organizations.” We believe that such social measures of performance represent “one of the important and challenging trends of our time” (ibid., p.37).

Consequently, an objective of this paper is to contribute to a body of scholarship that attempts to explain the profusion of such rankings in contemporary society and what this means for our understanding of the role of accounting in the creation of trust. A characteristic of many of these ranking websites is that they rely on user reviews and appear to be trusted. We argue that, in the case of TripAdvisor at least, this trust stems not only from the personal trust emanating from knowledge exchange within virtual communities, but also from the systems trust inherent in its numerical rankings. We consequently believe that the case of TripAdvisor is a powerful illustration of an internet mediated abstract system (Giddens, 1990, 1991) that draws on calculative practices (Miller, 2001) to construct trust. Such a stance may have a much wider impact for understanding the role of accounting in everyday life. For example, if we, as a community of accounting scholars, can perceive and argue that calculative practices constitute a foundational component of the trust so engendered within the rapidly growing profusion of such user review sites, then we establish an incredibly important role for our discipline within contemporary society.

We are aware that our study has limitations. From a methodological perspective, we are conscious that our analysis of the TripAdvisor case is drawn solely from the content of its website; we have not conducted any interviews or surveyed tourists or other relevant actors within the travel industry. Our stance with regard to the trust invested in TripAdvisor is informed by its popularity as a website. Our perception of the power of TripAdvisor rankings, and the reactivity to them, is limited to the evidence we find in the tourism and marketing literatures, which in turn is restricted due to the fact that the website only emerged in 2000.
Our musings can therefore be categorized as primarily theoretical in nature. However, not withstanding these deficits, we believe that our analysis of the phenomenon of TripAdvisor, and the trust it appears to engender, has potentially significant ramifications for our understanding of the proliferation of ranking mechanisms in contemporary society, and more importantly, for the influential role of accounting, and calculative practices more generally, within their operation.

In postulating upon future avenues of research suggested by our study of TripAdvisor, we might also consider the prevalence of such ranking mechanisms as illustrative examples of the expanding scope of audit society (Power, 1997). In other words, the presence of these and other league tables may be indicative of a society in which we witness the verification of everything (Pentland, 2000). Certainly auditing has become enrolled in the production of legitimacy, comfort, and trust, and is this not what TripAdvisor similarly seeks to provide to its users? While we acknowledge that the setting, a travel website, is not one which would be traditionally associated with audit, nevertheless, this should not preclude its consideration. After all, “the power of auditing is the vagueness of the idea” (Power, 1997, p.7), and this allows for the expansion of the broad assurance project into ever expanding territories. From this perspective, it is possible to regard TripAdvisor as a verification process that creates trust. After all, its hotel reviews are conducted by seemingly neutral and objective parties, akin to the independence of the audit opinion, and as we have discussed earlier, it appears that trust, particularly that placed by the public at large, has come increasingly to be placed in lay opinion over expert knowledge. Consequently, further scholarly research which seeks to understand the creation of trust through the scaffolding of audit society would be insightful.
Our paper might also prompt future accounting researchers to refocus the frame of their investigations, or indeed to completely invert them. In other words, rather than commencing an analysis with a particular accounting practice in mind and then reflecting on how it interacts with its social and organizational context, we would suggest positioning oneself in front of the social phenomenon first. Of course, such a stance moves us initially away from the centre ground of our discipline; it sets us at the boundaries of the craft, in unsure waters. But is accounting not at its most interesting at these margins (Miller, 1998)? If accounting as a discipline is to lead, rather than merely follow the adventures of other social sciences (Chapman, Cooper & Miller, 2009), then accounting scholars must surely learn to take a leap into the dark on occasion. By recognising a significant social phenomenon, such as TripAdvisor, and untangling the accounting angle which informs its operation, we may discover a means of connecting accounting with the social in new and imaginative ways. In the process, it potentially allows scholars from the broader social sciences to engage more fully with the discipline of accounting. Accounting then comes to shape social theory rather than merely follow it. This is potentially the next step to take in furthering accounting’s agenda.

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