

Business Model Innovation: How Iconic Business Models Emerge

Tatiana Mikhalkina

Cass Business School, City University London

Laure Cabantous

Cass Business School, City University London

Abstract

Despite ample research on the topic of business model innovation, little is known about the cognitive processes whereby some innovative business models gain the status of iconic representations of particular types of firms. This study addresses the question: *How do iconic business models emerge?* In other words: *How do innovative business models become prototypical exemplars for new categories of firms?* We focus on the case of Airbnb, and analyze how six mainstream business media publications discussed Airbnb between 2008 and 2013. The cognitive process whereby Airbnb's business model became the iconic business model for the sharing economy involved three phases. First, these publications drew on multiple analogies to try to assimilate Airbnb's innovative business model into their existing system of categories. Second, they developed a more nuanced understanding of Airbnb's business model. Finally, they established it as the prototypical exemplar of a new type of organization. We contribute to business model research by providing an elaborated definition of the notion of the iconic business model which is rooted in social categorization research, and by theorizing the cognitive process that underpins the emergence of iconic business models. Our study also complements research on the role of analogical reasoning in business model innovation. Finally, we complement the market categorization literature by documenting a case of the emergence of a prototypical exemplar.

Keywords: *Business model innovation, categorization, analogical reasoning, prototypical exemplar*

Business Model Innovation: How Iconic Business Models Emerge

'I'd found the place through AirBnB.com, a Web site that lets people rent out their futons, spare rooms and entire apartments to travelers like myself; it's a cross between Craigslist, CouchSurfing and VRBO.com' (NYT, 14 March 2010)

'Blablacar.com connects people with spare seats in their car with folk needing a lift – like Airbnb for hitchhiking/ride shares' (FT, 16 June 2012)

'Last Tuesday, Mr. Lee announced the formation of a 'Sharing Economy Working Group', which the mayor said in an interview had as a goal creating legislation to give a tax break to companies like Airbnb' (NYT, 31 March 2012)

Introduction

Firms like Airbnb, Amazon, eBay, Dell and McDonald's, are known worldwide for their innovative business models, which disrupted the established logics of value creation and capture in their industry sectors, and quickly became iconic (Sabatier, Mangematin & Rousselle, 2010) - i.e., recognized as representing particular ways of creating and capturing value - and so have been widely copied across various industries. Amazon's innovative business model, for instance, reshaped firm classifications in the book-retailing sector and, indeed, the entire retail industry, by creating a new type of firm – the online retailer – that differed from traditional types of retail firms. Thus, business model (BM) innovations can modify how economic actors – such as consumers or financial analysts – think about firms, and even change the ways they think about market categories.

While the idea of an iconic business model - as advanced by Sabatier et al. (2010) - is appealing as it points to an important empirical phenomenon, it has received little scholarly interest. Thus we have a very limited understanding of the cognitive processes via which some innovative business models gain the status of iconic representations of particular types of firms. This neglect might be due to the fact that research on business model innovation tends to focus on the cognitive processes that take place in the minds of entrepreneurs (Enkel & Mezger, 2013; Sosna et al., 2010). As a result, business model scholars have little to say about the cognitive processes that take place beyond firm boundaries, and via which an innovative business model becomes iconic, i.e., a 'prototypical exemplar'¹ of a category of

¹ The terms 'exemplars' and 'prototypes' are often used interchangeably (see e.g., Navis & Glynn, (2011). In this paper, we

firms (Cantor & Mischel, 1979: 10). In this paper we study this phenomenon, aiming to advance cognitive research on business models by answering the following question: *How do iconic business models emerge?* - in other words: *How do innovative business models become prototypical exemplars for new categories of firms?*

While there are multiple definitions of the ‘business model’ concept, in this paper we adopt Teece’s (2010) generally agreed definition of business models as the logics of a firm’s value creation and value capture. To understand the process whereby innovative business models - originally generally associated with an instigator company - come to describe ‘*generic kinds of behaviour which are distinctly different*’ (Baden-Fuller & Morgan, 2010) and, in some cases, become iconic, we draw on the cognitive approach to business models. This perspective moves away from the idea that business models describe actual phenomena towards conceptualizing them as cognitive instruments that help economic actors make sense of (and classify) firms’ economic activities (Baden-Fuller & Mangematin, 2013). To complement this body of knowledge, we build on the literature on market categorization, which has recently been preoccupied with processes of category emergence (Breiger & Kennedy, 2005; Kennedy, 2008; Kocak et al., 2014; Lounsbury & Rao, 2004; Navis & Glynn, 2010; Schultz et al., 2014). This literature shows the important role that the media play in the emergence of market categories, and provides conceptual tools for our study of the emergence of iconic business models as prototypical exemplars of firm categories.

Empirically, we draw on a single case study of Airbnb, an online market platform created in 2008 that disrupted the hospitality industry by enabling individuals to rent rooms or entire flats and houses directly to travelers, and hence created a whole new source of supply in the hospitality sector. Airbnb’s business model quickly became a source of inspiration for other managers in the hotel industry and beyond, i.e., it became the iconic business model for the sharing (or peer-to-peer) economy.² To investigate the cognitive process whereby Airbnb’s business model became iconic, and contribute to renewing the way firms are categorized, we analyze media coverage of Airbnb between its creation in 2008 and 2013. Analyzing media coverage is a common approach in category emergence research (Kennedy, 2008).

Our study shows that the cognitive process whereby Airbnb’s business model became the iconic business model for the sharing economy took place in three phases. First, the media tried to assimilate Airbnb’s innovative business model into the category system of

use the term ‘prototypical exemplar’ to stress the distinction between ‘prototype as abstract entity’ and ‘prototype as exemplar’ views.

² We use sharing economy and peer-to-peer economy as synonymous.

extant business models by drawing on multiple analogies with existing iconic business models (e.g., eBay) and market categories (e.g., the hospitality industry). Second, given the persistence of perceived inconsistencies between the existing category system and Airbnb's new business model - and proof of its financial success - the media developed a more elaborate understanding of Airbnb's business model. Finally, as the media recognized the specificity of Airbnb's innovative business model, they established it as a prototypical exemplar of a new type of organization: the sharing economy type. As the media used Airbnb's business model to comprehend other firms' activities and business models, Airbnb's business model representation increasingly became detached from the actions of its instigator company.

In offering our three-stage model of iconic business model emergence, we make three contributions to the literature. First, we contribute to the literature on business models by elaborating on the notion of the iconic business model, and by shedding light on an important phenomenon that has been neglected thus far, i.e., the cognitive processes by which some innovative business models become iconic. In so doing, we also further develop the idea that business models have performative power (Doganova & Eyquem-Renault, 2009) - that is, the power to 'do things' (in our case, to reshape market categories). Second, we complement research on business models by showing that analogical reasoning, which has been shown to play an important role during entrepreneurs' creations of innovative business models (Enkel & Mezger, 2013), is also at play in the subsequent stages of such innovation, when the media attempt to comprehend newly created business models. Third, we complement the market categorization literature, which has recently been increasingly interested in the emergence of market categories (Navis & Glynn, 2010; Koçak et al., 2014), by documenting a case of the birth of a prototypical exemplar. And we show how, as they become iconic, some innovative business models come to exemplify new types of organizations. In so doing, our study suggests that industry grouping (based, for example, on similar products and services) is not the only possible basis for firm classification, and that innovative business models can reshape how the media and the market in general classify firms.

Literature Review

The Cognitive Perspective on Business Models

Most of the literature on business models has adopted an essentialist and functionalist view of them (Doganova & Eyquem-Renault, 2009: 1560), and has considered that they capture objective attributes or features of specific firms. From this perspective, business models are

conceptualized as “activity system[s] [that] enable[s] the firm, in concert with its partners, to create value and also to appropriate a share of that value” (Zott & Amit, 2010: 216). Following this essentialist approach, business model scholars have primarily been interested in identifying some of their specific characteristics, such as design themes which describe the architecture of the business model activity system or the design elements that describe the sources of value creation (Zott & Amit, 2010). They have also tried to map the variety of BM types that exist ‘out there’ by studying the specificities of business models in different industries, such as e-business (Zott, Amit, & Massa, 2011) or biotechnology (Bigliardi et al., 2005; Willemstein et al., 2007).

However, an emerging trend in the business model literature moves away from this essentialist approach to consider their cognitive significance. This perspective considers business models “not just as ‘real phenomena’ but as cognitive instruments that embody important understanding of causal links between traditional elements in the firm and those outside” (Baden-Fuller & Mangematin, 2013: 418). This cognitive perspective on business models is rooted in various papers, such as Chesbrough and Rosenbloom (2002), who stress that a successful business model “creates a heuristic logic that connects technical potential with the realization of economic value” (p. 529), and Tikkanen et al. (2005), who consider a business model as a system of material and cognitive components, i.e., “a firm belief system” (p. 793). This view has recently been further developed in Baden-Fuller and Morgan’s (2010) paper which conceptualizes business models as ‘models’ or ‘ideal types’ that mediate “between our ideas and theories on the one hand, and the things in the world we want to describe and explain in immediately practical ways” (p. 161). This paper, which identifies three main functions of business models – to provide the means to describe and classify businesses; to operate as sites for scientific investigation; and to act as recipes for creative managers – resonates well with Doganova and Eyquem-Renault’s (2009) exploration of the performative role of business models – that is, their ability to bring into being the very ‘things’ they are supposed to describe. Despite the fact that business models are ‘abstract’ models, they can have concrete effects such as “enrolling buyers and suppliers, persuading investors, and directing employees” (Perkmann & Spicer, 2010).

The Importance of Cognition in Business Model Innovation

The cognitive perspective has gained special traction in studies on business model innovation. Research in this stream highlights the importance of creativity (Teece, 2010), learning, experimentation (McGrath, 2010; Hayashi, 2009), and cognition more generally, in

new business model generation. Chesbrough and Rosenbloom (2002) consider experimentation to be an important element of business model innovation because it facilitates the act of cognitive reframing of established business models. Enkel and Mezger (2013) go a step further in showing the importance of analogical reasoning – a fundamental cognitive process – in business model innovation. They show that business model innovation often comes from cross-industry imitation: that firms deliberately engage in more or less structured processes of searching for a business model that can become an analogue and so inspire cross-industry business model imitation. In this context, a ‘new’ business model is not necessarily ‘new to the world’ but is novel in the context of a particular industry. This paper echoes the multiple case studies that have shown how entrepreneurs searching for innovative business models often imitate existing business models and import them into new industries. For instance, Martins et al. (2015) relate how the founder of Aravind Eye Care – a company that provides cheap eye care and eye surgery through a network of hospitals in India – found a ready analogue in McDonald’s business model: “it [Aravind Eye Care] is run like a McDonald’s, with assembly-line efficiency, strict quality norms, brand recognition, standardization, consistency, ruthless cost control, and above all, volume” (Rosenberg, 2013, as quoted in Martins et al., 2015).

While these papers shed light on the process of business model innovation, their focus is solely on the minds of the entrepreneurs or top management teams involved: they do not explain how these innovative business models become widely known, to the extent that they are regarded as iconic representations of particular types of firms. To investigate the cognitive processes via which innovative business models become iconic, we need to incorporate insights from the literature on market categorization and category emergence.

The Important Role of the Media in Market Category Emergence

The literature on market categorization starts from the idea that categorization – a fundamental cognitive process that influences perception, interpretation, action, and provides the default conditions for making sense of the social world – plays an important role in how markets function (Hannan, Pólos, & Carroll, 2007). This literature contends that categories reflect “meaningful consensus about some entities’ features as shared by actors grouped together as an audience” (Durand & Paoletta, 2013: 1100) and are cognitive infrastructures that underpin markets and help market actors make sense of their business environments. In market settings, product (or service) categories enable producers to recognize competitors (Clark & Montgomery, 1999), consumers to compare offerings (Shrum, 1991), and critics to

classify products and firms (DiMaggio, 1987).

To date, research on market categorization has mostly studied the disciplinary nature of categories and shown the negative consequences of deviations from their taken-for-granted prototypical representations (Alexy & George, 2013). For instance, Zuckerman (1999) has shown that security analysts penalize conglomerate firms because they do not clearly belong to single industries, and hence do not conform to prototypes of firms in any one category. Other studies have shown how market categories limit the range of strategic actions that are appropriate for firms (Kraatz & Zajac, 1996; Powell, 1991; Sutton & Dobbin, 1996), and how a degree of similarity to a categorical prototype can assist firms in their founding, legitimacy, and effectiveness (Hannan, Pólos, & Carroll, 2007; Hsu, Hannan, & Kocak, 2009).

Recently, however, some categorization studies have moved beyond exploring categories' contents and their disciplining consequences to study the process of the emergence of market categories (Bingham & Kahl, 2013; Breiger & Kennedy, 2005; Kennedy, 2008; Kocak et al., 2014; Lounsbury & Rao, 2004; Navis & Glynn, 2010). These studies point to the important role that the media plays in the emergence, codification, and maintenance of market categories. Indeed, news media are one of the main sources by which the general public and market participants learn about and adopt new market categories (Koçak et al., 2014): they reflect and shape general public perceptions of markets (Vergne, 2010) and “exercise considerable influence on how organizations are known and made sense of by their external audiences” (Kjaergaard et al., 2011: 516). Schultz, Marin and Boal (2014) for instance, found that the legitimacy of new market categories develops through information exchange among market participants, which is made evident in media coverage of those market categories. In a similar vein, Rosa, Porac, Runser-Spanjol and Saxon (1999) showed that a shared understanding of the minivan as a new product category in the automobile industry emerged from repeated interactions in the media between producers, consumers, and journalists. Other studies have shown that the media do not offer neutral depiction of markets, but rather can be seen as a political arena in which market boundaries and product categories are negotiated (Hirsch, 1972), and that powerful players influence categorization processes. Lounsbury and Rao (2004), for instance, found that powerful incumbent producers in the American mutual fund industry were able to shape the categories used in the industry's media because it relied on the endorsement and support of those dominant industry players.

Category Prototypes as Abstract Representations vs. as Exemplars

As the above section suggests, the notion of a category prototype, which is central to the psychological literature on categorization (Rosch & Mervis, 1975), is a key concept in the market categorization literature. Specifically, students of market categories have proposed two views of category prototypes. On the one hand, some studies of market categories build on Rosch's (1978) study, which considers a category prototype to be an abstract representation that encodes the salient, or average, attributes of category members, but is not itself necessarily actually a member of the category (Pontikes & Hannan, 2014; Vergne & Wry, 2014). For instance, Navis and Glynn (2011) consider that the process of market category emergence starts with the definition of category attributes, which are "typically ill formed, in flux, and without a clear prototype or exemplar" (p. 486). (see also Navis & Glynn, 2010).

On the other hand, recent research on category emergence has adopted the 'exemplar view' of category prototypes³ (Glynn & Navis, 2013: 1126) which considers that a prototype is an actual member of the category (an average or extreme member), instead of being an abstract summary representation of that category (Nosofsky, 2011: 18). Market categorization researchers who have adopted this view of prototypes have found new market categories may sometimes house multiple distinct exemplars rather than one clearly defined prototype (Jones et al., 2012), which can emerge during early stages of the category's formation or on an ongoing basis (Munir, 2005).

Iconic Business Models as Prototypical Exemplars

The notion of an 'iconic business model' exists in the business model literature, but has received little elaboration. For Sabatier et al. (2010), who provide the most elaborated definition of this notion so far, an 'iconic business model' is one that has been labelled with the name of the company that introduced it or made it famous,⁴ rather than after some economic characteristics. Importantly, it is also a business model that has been widely recognized and well established as representation of a particular way of creating and capturing value. Amazon, 3M, Dell and Google are instances of firms that have initiated business models that have become iconic (Sabatier et al., 2010: 435). In the same way as an

³ In this view, people understand categories by storing individual category exemplars in their memories, and classify objects according to their similarity to these stored exemplars. For example, they represent the category of 'birds' by storing in memory the vast collection of different sparrows, eagles, ostriches etc., of which they have experience or knowledge. If an unfamiliar object is sufficiently similar to some of these exemplars, they will classify it as a 'bird'.

⁴ An iconic business model is not necessarily named after the firm that introduced it- but sometimes after the firm that made it famous (see, e.g., the Overture and Google case Johnsson and colleagues (2008)).

‘iconic brand’ (e.g., Coca Cola) is one that has come to represent something more than just a product or service (Holt, 2006), an ‘iconic business model’ represents more than merely the business model of the specific firm after which it is named: it is an innovative and groundbreaking business model that sets new standards in terms of creating and capturing value, and which becomes a source of inspiration for other market actors. Such business models describe ways of creating and capturing value that are copied and emulated by other entrepreneurs.

Sabatier et al.’s (2010) definition of an ‘iconic business model’ points to the notion of a category prototype, and implicitly refers to the exemplar view of such prototypes. Indeed, their definition suggests that iconic business models essentially function as prototypical exemplars, capturing the essence of a particular way of creating and capturing value (Sabatier et al., 2010; Baden-Fuller & Morgan, 2010). For the purpose of this study, we adopt the exemplar view of category prototype, and define an iconic business model as one that is a prototypical exemplar for a particular category of firms. Thus, in investigating the early stages of the emergence of an iconic business model, we study the cognitive process via which an innovative business model reaches the status of a prototypical exemplar.

Method and Data

In this paper, we study the cognitive process whereby an innovative business model comes to be regarded as iconic, and as exemplifying a particular type of firm. Such research calls for a longitudinal research design (Siggelkow, 2007), as we need to trace the emergence process over time. As our research is exploratory, we adopted the single case study research design (Yin, 2009).

Case selection

The Airbnb case. With our definition of ‘iconic business model’ in mind, we systematically read the literature on business models – which often draws on case studies – and discussed with academics working in the strategy and entrepreneurship fields to identify iconic business models. We found that the business models regarded as iconic include those introduced by firms such as McDonald’s, Southwest Airlines (Baden-Fuller & Morgan, 2010: 162), Amazon, 3M, Dell and Google (Sabatier et al. 2010), EBay, and Airbnb.

We selected Airbnb, an online platform founded in 2008 that allows owners to rent out unoccupied living spaces for short periods. It is essentially a marketplace platform, which connects hosts and travelers via its website and enables transactions without - unlike

traditional hotels - actually owning any rooms itself. Airbnb makes money by charging both hosts and guests transaction commissions, and in exchange provides services such as handling payments, a private messaging system, insurance, etc.. All hosts and guests have a verified profile, which includes recommendations and reviews by previous users.

Reading a sample of newspaper articles convinced us that Airbnb's business model is iconic: it has rapidly captured the attention of journalists, inspired multiple imitations in different industries (Boyd, 2012), and has become closely associated with a given category of firm - the so-called 'sharing economy':

Airbnb and The Unstoppable Rise of the Share Economy.(Forbes, 23 January 2013).

'There are a lot of copycats,' said Matt Murphy, a partner at Kleiner Perkins Caufield & Byers, bemoaning the number of pitches he has heard that start with: 'I'm the Airbnb of X, Y, Z'. (FT, 21 February 2013);

The 'sharing economy' – typified by companies like Airbnb or Uber, both of which now have market capitalizations in the billions – is the latest fashion craze among business writers (G, 27 May 2014).

We also noted that the media considered Airbnb's rise to have been 'meteoric': by the end of 2013 (only 5 years after its creation), it had already hosted more than 11 million guests in 34,000 cities around the world (Bradshaw, 2014), and had a market valuation of US\$10 billion (Edwards, 2014). Thus a five to six-year time span was deemed appropriate to study the process of iconic business model emergence in this particular case. Finally, studying the Airbnb case has advantages over studying some other 'veteran' iconic business models, such as McDonald's (founded in 1940), as the amount of data available about such cases would likely have been overwhelming.

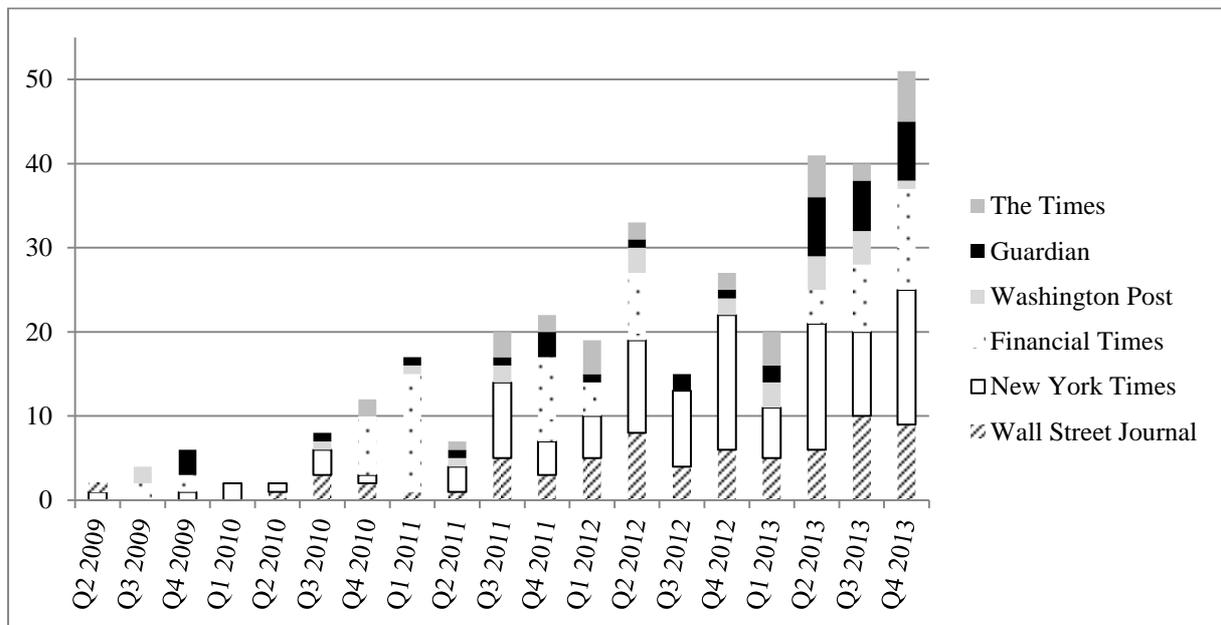
Data collection

To study the cognitive process by which Airbnb's innovative business model became iconic, we systematically analyzed how six mainstream media publications had talked about the company since its creation in 2008. Media coverage has been seen as the "central process through which knowledge and evaluations about a firm crystallize into a 'social fact'" (Lang & Lang, 1988: 79), so its analysis has become common in studies of category emergence.

Newspaper article collection. We searched the Factiva database for appearances of the term 'Airbnb' in the body of newspaper articles published in English between 1 January 2008 and 31 December 2013, finding 2,458 articles from more than 15 sources. To make the sample more manageable, we focused on the top five established media sources, selected according

to the number of articles they printed about Airbnb in the study period: the *Wall Street Journal* (WST), the *New York Times* (NYT), the *Financial Times* (FT), the *Guardian* (G), and *The Times* (T).⁵ As we found very few articles from 2009, we added the *Washington Post* (WP) to our list as it was one of the few top-10 sources of articles dated 2009. As Figure 1 shows, our final sample comprised 347 articles from these six newspapers.

Figure 1. Article distribution by selected source and quarter



Fragment Identification. We imported all 347 articles into NVivo software and ran an automatic search to identify the fragments of text that mentioned Airbnb. We then read the 1052 text fragments that the search returned, and adopted a rule of using fragments of up to 60 words that included the term ‘Airbnb’, which captured the context and allowed for identifying meaningful units of analysis (Alvi, 2011). Adopting this criterion led to a final number of 665 text fragments. Table A1 in the Appendix shows that the number of articles and text fragments increased over time from 16 text fragments in 11 articles in 2009, to 299 fragments in a total of 152 articles in 2013.

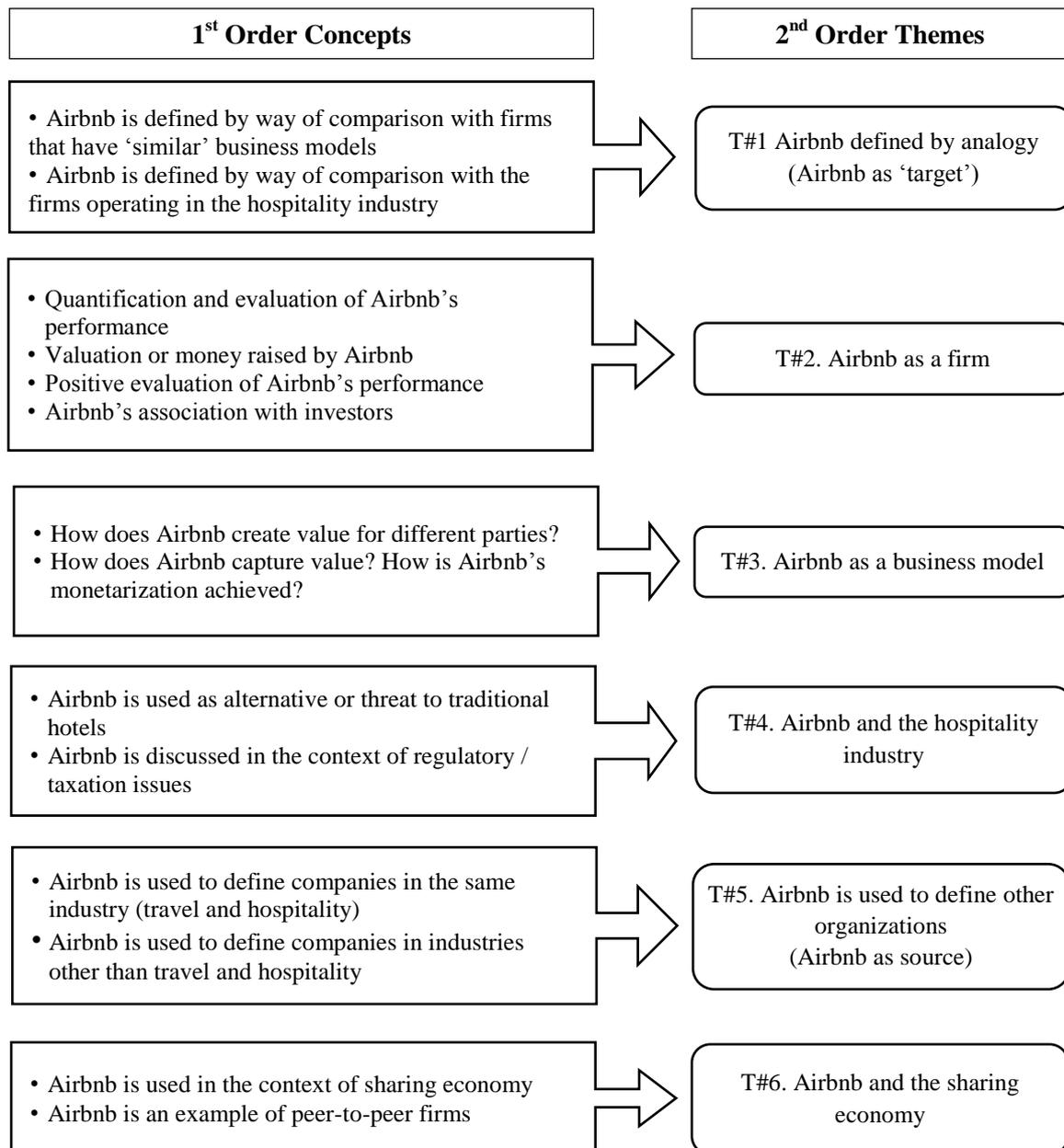
Data analysis

We used qualitative content analysis to analyze these 665 text fragments. This type of analysis allows researchers to study people’s cognitive representations (Gephart, 1993; Huff, 1990; Woodrum, 1984), and has been widely used in strategy research (Carley, 1997; Osborne et al., 2001). We analyzed our data in three phases using the N-Vivo software. We

⁵ We excluded the *International New York Times* as it mostly duplicates articles published in the *New York Times*. Most of these newspapers have been used in prior research (Rindova et al. (2007), and are viewed as rich information sources that report on events and provide interpretations (Haunschild & Beckman 1998).

first read the text fragments with the aim of identifying how Airbnb was defined or described in the media. Although our approach was mainly inductive, it was informed by our knowledge of the business model and market category literatures. This first round of coding allowed us to capture all the most important concepts and ideas the media discussed in relation to Airbnb. We refer to these codes as our ‘first-order concepts’ (Gioia et al., 2012), as shown in Figure 2, which summarizes our data structure.

Figure 2: Data Structure



In our second analysis phase, we re-read all our first-order concepts and identified six second-order themes (see Figure 2). Our first theme, which we termed ‘Airbnb defined by analogy’, groups all the text fragments we coded in which Airbnb was the ‘target’ of a sense making exercise, and in which its business model was defined by reference to those of other firms. It reflects the analogical reasoning that sustains the media’s attempts at assimilating Airbnb into its existing categorization of firms. The second theme – ‘Airbnb as a firm’ – refers to codes where the media point to typical firm attributes, such as its investors, its financial performance, etc. in discussing Airbnb. The third theme – ‘Airbnb as a business model’ – is consistent with our definition of a business model (i.e., focusing on the logic of a firm’s value creation and capture) and captures the media’s attempts to define Airbnb by explaining and elaborating its business model, and by specifying some of the model’s elements. We relied on the literature on business models (Casadesus-Masanell & Zhu, 2013; Teece, 2010) to code all the text fragments associated with this theme. Our fourth theme – ‘Airbnb and the hospitality industry’ – points to the importance of media discourse that showed Airbnb as opposing traditional hospitality business models. Here, the intention was not to define Airbnb in comparison to hotels (as in the first theme), but to position Airbnb within its competitive space. We then created a fifth theme – ‘Airbnb as a source domain’ – to group quotes where the media used Airbnb as a representative of a type of organization so as to make sense of other new firms. Finally, our sixth theme included quotes that considered ‘Airbnb as an example of the sharing economy’. Tables A2 to A4 in the Appendix provide illustrative quotes for each of the concepts included in these themes, and Table A5 reports some statistics on these themes.

In the third phase of our analysis, we sought to understand the dynamics of these six themes in order to develop a process model to describe how Airbnb’s innovative business model became iconic, and came to represent a prototypical exemplar for firms operating in the sharing economy. We counted systematically the frequencies of the appearances of the codes we identified, and cross-tabulated those frequencies against publication dates (years) to try to identify temporal patterns in the appearance of the different codes. Counting and cross tabulating are useful to identify trends (Bergh & Holbein, 1997), and content analysis researchers use these techniques as they consider that changes in the frequency with which words are used reflect at least a change in what the media pays attention to, if not in cognitive schema (Namenwirth & Weber, 1987 as cited in Duriau, Reger, & Pfarrer, 2007). We also analyzed the co-occurrence of certain codes, as co-occurrences of keywords can be seen as reflecting associations between the underlying concepts involved (Huff, 1990; Weber, 1990).

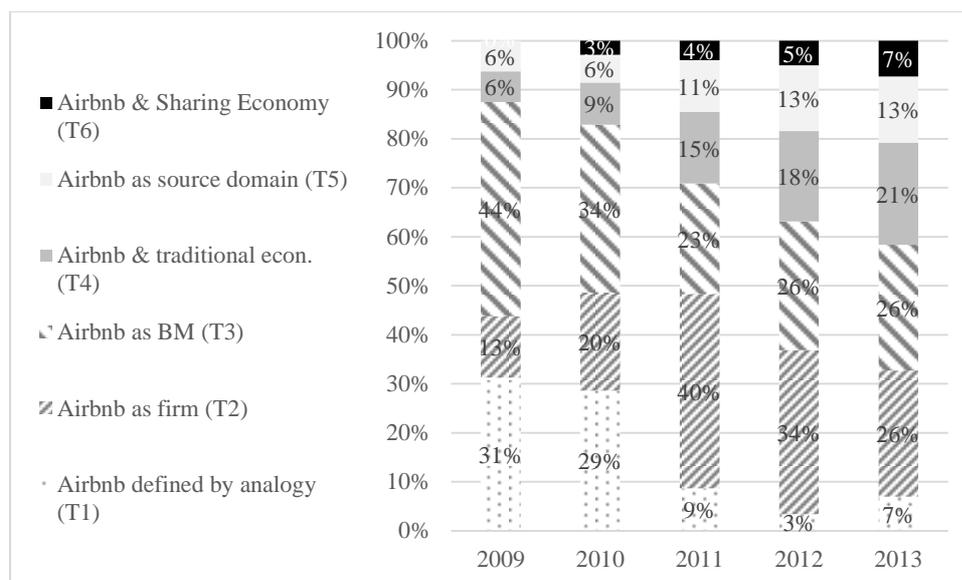
Findings

We first present the three-stage model of iconic business model emergence that arose from our data analysis, and then provide a rich description the media’s discourse in each phase.

A three-stage model of iconic business model emergence

Our analysis suggests that Airbnb’s recognition as an iconic business model took place in three stages. In the first – ‘Assimilating Airbnb’s business model through analogies’ – the media discourse was largely characterized by attempts to make sense of Airbnb by making analogies either with existing firms – such as eBay – or existing market categories, such as the hospitality industry. Figure 3 shows that theme #1 ‘Airbnb defined through analogies’ was a dominant theme over the first two years, accounting for 31% and 29% of the text fragments we coded in 2009 and 2010 respectively. However, this theme suddenly dropped to 9% in 2011, and became only marginal in 2012 and 2013, when it accounted for only 3% to 7% respectively of the media discourse.

Figure 3: Percentage (%) of each theme in the total number of ‘coded’ text fragments*



* Percentages (%) were calculated using the total number of ‘coded’ fragments of text. For more information see Table A5.

In the second stage – ‘Elaborating Airbnb’s business model and legitimacy tipping point’ – the media’s attention shifted away from analogies with existing firms, perhaps because Airbnb was becoming established as a successful firm that did not fit well with existing market categories. Instead, the media tried to build a more complex understanding of Airbnb, and elaborated on its business model by better specifying how exactly it created and captured value.

In a third and final stage, the media gave Airbnb's business model the status of iconic business model for the sharing economy. As the media recognized the specificities of its innovative business model, it began to refer routinely to Airbnb as 'the typical' sharing economy firm. This means it gradually considered Airbnb's business model as iconic, i.e., as the prototypical exemplar of peer-to-peer firms' business models. Two patterns support this finding, as Figure 3 shows. First, the 'Airbnb and the sharing economy' theme (#6) became increasingly important over time: while it was absent in 2009, by 2013 this theme accounted for 7% of the media discourse. Second, Figure 3 shows that the trends of the appearance of fragments associated with themes #1 (Airbnb defined by analogy) and #5 (Airbnb as source domain) diverged: while the proportion of theme #1 in media discourse decreased consistently over time (from 31% in 2009 to 7% in 2013), the proportion of theme #5 increased consistently (from 6% in 2009 to 13% in 2013). This pattern shows that the media shifted the analogies it employed, from defining Airbnb by referring to other firms, to defining other firms by referring to Airbnb. We will return to this finding later (see Phase 3 and Figure 4 below).

Phase 1: Assimilating Airbnb's business model through analogies (2009-2011)

In the first phase, the media tried to understand this new firm by assimilating it within an established categorization of firms based on the product/services they offered. Primarily, it attempted to define Airbnb by analogy with firms in the hospitality industry (hotels, hostels, etc.), as it delivers the same kind of services: renting rooms to travelers. This was the most common analogy in 2009 and 2010, accounting for 40% and 38% of all theme #1 quotes in those years respectively, suggesting that the media considered the hospitality industry as the 'natural' home industry for Airbnb, given its activity:

Airbnb operates a website that matches up travellers with locals who are willing to rent out an extra bedroom or guest suite, turning every home into a potential mini-hotel. (T, 16 November 2010).

However, a closer analysis of the text fragments associated with the hotel analogy reveals that, in many instances, the media were not entirely satisfied with the analogy, and pointed out important differences between Airbnb and traditional accommodation providers:

Since its debut in 2008, the company (...) has booked more than two million nights of lodging all over the world. But it's not a hotel. Instead, it allows people to rent out their entire home or apartment - or just a room or a bed - to others who find Marriott boring or want to see life in a new area as a local would (NYT, 12 November 2011).

This quote describes Airbnb as a firm that rents rooms to travelers – and thus provides the

same services as traditional hotels – but which, in essence, is not a hotel. Recurring elements of the ‘same, but different’ theme are the lack of standardization in Airbnb’s accommodations and the risk – or a sense of adventure – associated with this new firm, implying that its users were somehow special: Airbnb is definitely not ‘*for the person who wants to stay at a hotel in Midtown*’ (WP, 26 July 2009), rather it is for a different type of users, such as ‘*travelers seeking an alternative to hotels*’ (NYT, 8 April 2012). The media also commented on the fact that Airbnb differs from a traditional hotel in that – in contrast to the major global hotel chains with which it competes – ‘*it doesn’t own a single bed*’ (NYT, 21 July 2013), and the travelers rent the rooms not from companies but from ‘real’ people (like them). The fact that the media pointed to differences between Airbnb and traditional hospitality industry firms, and looked for other analogies for the new firm, suggests that it initially struggled to understand Airbnb’s innovative business model.

As the media’s attempts to assimilate Airbnb into the existing hospitality industry category were not entirely satisfactory, because this category could not encompass the entirety of the firm’s emerging representation, the media also drew on other analogies to define Airbnb and its business model. Two frequently used such analogies were with firms known for their original business models – eBay and Couchsurfing. Airbnb was defined for instance, as an ‘*eBay-style marketplace...*’ (FT, 30 July 2011); as a firm operating a website ‘*which functions as an eBay-style intermediary...*’ (FT, 29 July 2011); as an ‘*upgraded version of Couchsurfing*’ (NYT 17 May 2009); or as ‘*grown-up Couchsurfing*’ (G, 8 September 2012).

In drawing on analogies with other firms who were known for their innovative business models, but which operated in other industries, the media tried to build a more comprehensive view of Airbnb, whose business model it definitely perceived as being novel. The multiple analogies that the media used simultaneously reveal different aspects of Airbnb’s business model, and suggest that analogical reasoning played a key role in the early stage of its emergence: it was one of the main information processing methods that the media used to make sense of the innovative firm. Our findings show that, during the first two years, the media relied largely on such analogies to build its representation of the new firm, suggesting that they initially tried to assimilate Airbnb within their existing representation of market categories, rather than to recognize the novelty and change their existing representations of the market. But analysis of media coverage towards the end of the phase suggests that it was beginning to move on from trying to assimilate Airbnb into existing market category representations, and was beginning to change those representations to

recognize the novelty of Airbnb's business model.

Phase 2: Elaborating Airbnb's business model and legitimacy (2011)

As Airbnb grew and appeared to be increasingly financially viable, the media trumpeted its financial success:

You might have noticed that everyone is talking about Airbnb. 2013 is the year that it polevaulted out of the San Francisco startup scene and went global, mainstream, ubiquitous. (G, 15 September 2013).

As Figure 3 shows, the share of theme #2 ('Airbnb as a firm') fragments in the total of coded discourses doubled in just one year, from 20% in 2010 to 40% in 2011.⁶ This meant that, instead of defining Airbnb via analogies with other firms or iconic business models, the media increasingly defined Airbnb as a firm by quantifying its performance:

Airbnb adds about 1,000 new home listings every day, with 150,000 properties in total, and has seen the average number of nights booked double since the beginning of the year. (FT, 23 May 2012).

In addition to proposing a stand-alone definition of Airbnb focused on its economic and financial dimensions, the media now also developed a subtler understanding of how Airbnb created and captured value, suggesting a better comprehension of its business model. When we analyzed the fragments of text associated with theme #3 ('Airbnb as a business model'), we found that the complexity of the media's discourse about Airbnb's business model – as measured by the number of elements in such fragments that were associated with its business model – increased with time. In 2009, the media's description of Airbnb's business model included 5 elements (connecting parties, cost-cutting for travelers, social value, special experience, and trust), whereas it included 6 elements in 2010, 8 elements in 2011 and 2012, and a peak of 9 elements in 2013 (see Figure A1 in the appendices). Among the new elements added was that of value capture, which was not mentioned in 2009, suggesting that the media did not initially comment on how exactly Airbnb was supposed to make money. This element first appeared in 2010 and remained salient in the subsequent years:

Airbnb's business model is simple: the company takes a 6 per cent to 12 per cent cut on each booking. Guests pay Airbnb in advance by credit card in their local currency. The company holds the payment until 24 hours after the guest arrives to ensure that the accommodation is as described. It then transfers the money to the host in their local currency. (T, 16 November 2010).

⁶ This sudden shift in media attention in 2011 coincided with two incidents which drew public attention to the firm: i) an Airbnb guest vandalized the apartment she was staying in, which increased media comments about Airbnb; ii) Airbnb secured substantial funding, which led to media comments about Airbnb's financial valuation.

Another new element the media added to the description of Airbnb's business model was the element of trust:

At some level, though, individuals on sites such as Airbnb have already voted with their feet. A new infrastructure will be needed to support this spreading economy, and trust will lie at its heart. (FT, 2 May 2013).

Overall, during this second phase, the media's attention shifted from acknowledging Airbnb as a novel phenomenon, and trying to define it within the established category system to inquiring into it more fully and appreciating its complexity and specificity. Indeed, the media commented widely on Airbnb's success and economic performance, and also provided a richer description of its business model, suggesting a greater understanding of the reasons for that success. Increase in the number of its business model elements that the media identified suggests that a more elaborate picture of how exactly Airbnb created value for different parties emerged and became stabilized. Having started with a description of the kind of services it delivered by analogy with firms from the hospitality industry, the media began to enquire more deeply into questions about the firm's business model in this phase, fleshing out elements of its business model that were not immediately apparent, such as the fact Airbnb did not own assets but facilitated access, or pointing out that trust was a prerequisite in its business model.

Phase 3: Airbnb's business model gains the status of the iconic business model of the sharing economy (2012-2013)

In the third and final stage, Airbnb's business model reached the status of an iconic business model, and became the prototypical exemplar of BMs for sharing economy firms. Our text fragments reflected this phenomenon in four main ways. First, the media increasingly talked about Airbnb as being in opposition to the traditional hospitality industry, as reflected by the rising importance of theme #4 'Airbnb and the hospitality industry' in the media discourse between 2009 (6%) and 2013 (21%), which recognized Airbnb as being a representative of a distinct category (see Figure 3). As the media acquired a deeper understanding of Airbnb and its business model, it increasingly excluded the firm from the traditional hospitality category, seeing it as a 'replacement' or an alternative to hotels, especially in cities 'like New York, where [hotels] rates are generally absurd' (NYT, 12 November 2011). Moreover, the media often described Airbnb as a serious competitor and threat to hotels, by pointing to the fact that it had disrupted and 'hurt' the entire 'hotel industry' (WSJ, 22 October 2013):

Established accommodation businesses have also come under threat from companies such as Airbnb, which allow homeowners to rent spare rooms to travellers - often

charging less than a standard hostel. 'They have a different product, but they're going after the same customers', said Mr Mooney (FT, 12 April 2013)

Along with this increasing depiction of Airbnb as a threat to the hospitality industry, the media also more frequently associated Airbnb with discourse about regulatory issues, because the incumbents – the traditional hotels – reacted strongly to Airbnb's arrival in their competitive space. They fought back and tried to enroll legislators in their battle by claiming that Airbnb's business model rested on illegal practices:

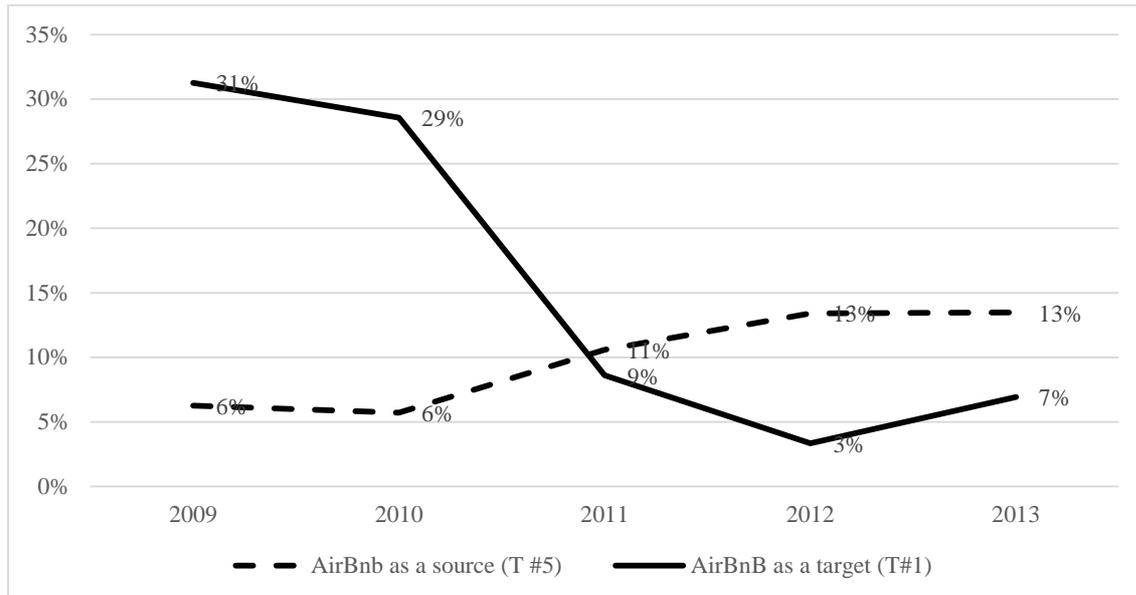
The 'sharing economy' has many fans but Eric Schneiderman, New York State's attorney-general, is not one of them. He has demanded that Airbnb (...) hand over records of its 15,000 hosts in New York City to verify that they pay taxes levied on hotels. (FT, 15 October 2013)

The second element that suggests that Airbnb reached the status of iconic business model relates to the shifting pattern of the analogies the media used. As it elaborated a richer representation of Airbnb, as a firm, as a business model, and as a threat to traditional hotels, it increasingly used Airbnb to define the identity of other firms. Figure 4 shows clearly that, over time, the media defined Airbnb less via analogies, and engaged increasingly with the new firm as a source domain to make sense of less familiar firms: theme #5 ('Airbnb as source domain') accounted for 13% of the media discourse in 2012 and 2013 (as against only 6% in 2009 and 2010). Airbnb was increasingly used to comprehend other firms from the same industry better – such as 9flats or Wimdu, which were described as '*Airbnb's European rivals*' (FT, 23 May 2012) – or new firms operating in other industries, such as pet care – '*DogVacay is described as the 'Airbnb for dogs''*' (FT, 5 June 2013), or car rental or parking. For instance, in the UK, ParkatmyHouse was described as being '*similar to the online lodging service Airbnb, except you're renting parking spaces instead of a room*' (NYT, 21 January 2012). Comparisons with firms in many other sectors abound, as the following quote suggests:

[Airbnb has] been so successful that half the tech start-ups these days go around flattering themselves with Airbnb comparisons: there's an Airbnb for boats, and one for power tools, and probably one that will let you rent out your extra sheep to fertilize somebody's lawn. (NYT, 12 May 2013).

Figure 4 illustrates this shift in the analogies the media used, which began during 2011, as Airbnb became used more frequently as a source of analogy than as a target.⁷

⁷ Note that Figure 4 reports the same data as that presented in Figure 3, but differently: it focuses only on Themes #1 and #5 in order to show the shift in analogies more clearly.

Figure 4: Airbnb and media analogical work: From target analogy to source analogy.*

* Percentages (%) were calculated using the total number of ‘coded’ fragments of text. For more information see Table A5.

Third, as Airbnb was increasingly used as a source domain to define what other new firms were and how they created value, it was also increasingly talked about in the context of the rise of the sharing economy, as reflected by the increasing importance of theme #6 in media discourse (Figure 3). Airbnb was seen as a pioneer of the emerging peer-to-peer economy: it is the ‘*company that spurred the sharing trend with air mattresses in a San Francisco apartment*’, (WP, 8 September 2013), and so became seen as representing this new category of firms, and thus the prototypical exemplar of sharing economy firms:

Venture capitalists last fall valued the sharing economy's rising star—a service called Airbnb Inc. that lets people rent their homes, or rooms in their homes, to strangers—at \$2.5 billion. (WSJ, 14 January 2013).

Finally, as the media established Airbnb as a prototypical exemplar of the new peer-to-peer market category, they also increasingly dissociated Airbnb as a firm from Airbnb as a business model exemplar, as if the iconic business model could now have a life of its own. Counting the co-occurrence of codes relating to Airbnb as a firm (theme #2) and Airbnb as source (theme #5) captures this change (as Figure 4 shows) to illustrate the divorce between the firm and its business model: in 2011, the percentage of co-occurrence of these two codes in the same paragraph was 8%, but it dropped sharply to 2% in 2012 and just 1% in 2013. This change indicates that Airbnb as a label for a type of business model stopped being associated with the firm’s specific actions, behavior or performance, and took on a life of its own, functioning as a prototypical BM exemplar. Over time the iconic business model, which

was still generally labelled with the name of Airbnb as its instigator firm, became increasingly divorced from discourse about the actual firm, and functioned as a culturally shared prototypical exemplar for a particular category of firms – those operating sharing economy, or peer-to-peer business models.

Discussion and Conclusion

In this paper, we have described the cognitive process whereby the media gradually conferred the status of iconic business model for the peer-to-peer economy on Airbnb's business model, and in so doing, recognized it as a prototypical exemplar for those used by peer-to-peer firms. We have shown that the process whereby Airbnb's innovative business model became iconic was progressive – we identified three stages – and relied on fundamental cognitive mechanisms, such as analogical reasoning. Specifically, we found that the media first tried to assimilate Airbnb within its existing category system by drawing on multiple analogies with firms operating in the hospitality industry or with iconic business models. However, as Airbnb's innovative business model did not fit into the existing category system acceptably, the media went on to give the new phenomenon its own meaning, which it achieved through a deeper elaboration of Airbnb's business model. Finally, as the media increasingly understood the specificities of Airbnb's business model, it eventually recognized a new type of 'peer-to-peer' organization, which Airbnb exemplified. Once the media recognized Airbnb's BM as iconic, it stopped associating the business model with the firm's actions, so that the business model almost took on a life of its own, and started to function as a prototype exemplar.

Beyond documenting the trajectory of Airbnb's business model in the media, our study offers three contributions to the literature, as follows:

A greater understanding of what iconic business models are and how they emerge

First, our study contributes to the literature on business models by elaborating on the notion of the iconic business model (Sabatier et al., 2010). While this notion refers to an important economic phenomenon – not only Airbnb's business model, but also those of Ebay, McDonald's and Southwest Airlines disrupted the established value creation and capture logics in their sectors, and became iconic – it has received little elaboration so far. We provide a more elaborated definition of the iconic business model notion, one that is rooted in the literature on social categorization. We consider an iconic business model as an innovative business model which is imitated across industries and is considered as a prototypical exemplar for a particular category of firms. For instance, in our case, Airbnb's innovative

business model has been imitated in many sectors, such as pet care and car rental and parking sectors, and has gradually come to be regarded by the media as the prototypical exemplar (or at least, the best example) of the business models employed by the emerging category of peer-to-peer firms.

Beyond linking the notion of iconic business model to the well-established concept of prototypical exemplar (Cantor & Mischel, 1979), we also connect the notion with that of performativity (Callon, 2007; Doganova & Eyquem-Renault, 2009). Business models do more than ‘describe’ new ways of creating and capturing value: they also bring into being the very things that they describe - firms with new ways of creating and capturing value. In the case of an iconic business model, its performative power is even clearer, as being iconic means becoming the prototype exemplar for a category of firms, and implies being imitated. Thus, an iconic business model not only brings a new firm into being – the firm that created and first experimented with it as an innovative business model – it also brings into being a whole new category of firms – those that imitate the new business model.

A refined understanding of the role of analogical reasoning in business model innovation

Second, our study complements cognitive research on business models by refining our understanding of the role of analogical reasoning in business model innovation. Cognitive studies on business model innovation usually focus on what happens in the minds of the entrepreneurs who create new businesses, and examine their cognitive processes as their new ventures are created (Enkel & Mezger, 2013). It has not yet studied what happens, cognitively speaking, after an innovative business model is created – but cognitive processes are likely to play a key role in subsequent business model innovation stages. The newly created business model needs to be cognitively understood by other entrepreneurs, who might (or might not) consider it worth imitating; and by the media, and the general public, which might (or might not) recognize it as ‘novel’ - and so, maybe, iconic.

Our study has focused precisely on this latter point. We studied the cognitive process which led the media to recognize the ‘novelty’ of a particular business model up to the point that it even regarded it as iconic, and as the prototypical exemplar of a category of firm. In studying this process, we showed that analogical reasoning is a key process underpinning the emergence of an iconic business model. Our study therefore complements cognitive research on business models by showing the importance of analogical reasoning in business model innovation (Enkel & Mezger, 2013), thus further theorizing its role in the phases following business model innovation.

Generally, our study points to two important cognitive mechanisms. First, when a new

business model is launched, our study suggests that it is initially comprehended via analogies: the media attempt to define the firm and its new business model in terms of existing industry categories by comparing it with incumbent players representing iconic business models or established category prototypes. This line of reasoning is consistent with cognitive research that suggests that the use of analogies is especially likely when the new target entity is sufficiently different and challenging, as in the case of the introduction of new technologies (such as computers), as analogies help assimilate the unfamiliar by mapping it into established categories and defining it in relation to existing schemas (Bingham & Kahl, 2013; Gentner, 1983; Holyoak & Thagard, 1997). Second, our study suggests that, as they become iconic, innovative business models shift from being the targets of analogical reasoning to being the source of analogies for defining other firms. This finding is in line with the categorization literature, which shows that when new categories become part of generalized knowledge structures, they are used to interpret new stimulus arrays and become reference points in market stories about new products (Rosa, Porac, Runser-Spanjol, and Saxon, 1999).

Our study thus shows the value of a cognitive lens in business model research, adding to the well-documented stages of business model innovation by entrepreneurs. Future studies could complement our cognitive study of iconic business emergence by adopting a socio-cognitive approach. For instance, it would be interesting to study how different market actors engage differently with iconic business models, and the various roles they play in the emergence of such models.

Considering business models as an alternative basis for firm classification

Third, we contribute to the market categorization literature, which has recently been interested in market category emergence issues (Koçak et al., 2014; Navis & Glynn, 2010), by documenting a specific case of the emergence of prototypical exemplar. We show how an innovative business model, as it becomes iconic, comes to exemplify a new type of organization, and hence can serve as a basis for a new firm classification.

A common view in categorization literature is that “a new market category exists when two or more products or services are perceived to be of the same type or close substitutes for each other in satisfying market demand; the organizations producing or supplying these related products or services are grouped together as members of the same market category” (Navis & Glynn, 2010, p. 440). As a result, this literature focuses on industry grouping, or groupings of firms based on similar products and services. Our study suggests that industry grouping is not the only basis of firm classification, and that innovative business models can reshape the way the media classifies firms. Thus it moves beyond the view of categories as

‘constraining’ (Glynn & Navis, 2013), and shows that they can be generative, and serve as creative resources for organizational innovation and change (p. 1132). It calls for broader interpretations of market categories that go beyond product-based groupings enabling transactions between producers and consumers, and competition among producers.

Acknowledgements

The authors thank the editors of this special issue and two anonymous reviewers for their comments on prior versions of this paper, a preliminary version of which was presented at EGOS 2014 in Rotterdam. This research was funded in part by EPSRC.

References

- Alexy O. & George G. (2013). Category divergence, straddling, and currency: Open innovation and the legitimation of illegitimate categories. *Journal of Management Studies*, **50**(2): 173–203.
- Alvi F.H. (2011). Rethinking the institutional contexts of emerging markets through metaphor analysis. *Management International Review*, **52**(4): 519–539.
- Baden-Fuller C. & Mangematin V. (2013). Business models: A challenging agenda. *Strategic Organization*, **11**(4): 418–427.
- Baden-Fuller C. & Morgan M.S. (2010). Business models as models. *Long Range Planning*, **43**(2-3): 156–171.
- Bergh D. & Holbein G. 1997. Assessment and redirection of longitudinal analysis demonstration with a study of the diversification and divestiture relationship. *Strategic Management Journal*, **18**(7): 557-571.
- Bigliardi B., Nosella A. & Verbano C. (2005). Business models in Italian biotechnology industry: a quantitative analysis. *Technovation*, **25**(11): 1299–1306.
- Bingham C.B. & Kahl S.J. (2013). The process of schema emergence: assimilation, deconstruction, unitization and the plurality of analogies. *Academy of Management Journal*, **56**(1): 14–34.
- Boyd E.B. (2012). AirBnB clones making 2012 the year of peer-to-peer accommodations. *Fast Company*. Available at: <http://www.fastcompany.com/1809842/airbnb-clones-making-2012-year-peer-peer-accommodations>.
- Bradshaw T. (2014). Airbnb valuation soars to \$10bn. *Financial Times*.
- Breiger R.L. & Kennedy M.T. (2005). Behind the one-way mirror: Refraction in the construction of product market categories. *Poetics*, **33**(3): 201–226.
- Callon M. (2007). What does it mean to say that economics is performative? In: MacKenzie D., Muniesa F. and Siu L. (eds) *Do economists make markets? On the performativity of economics*. Princeton University Press.
- Cantor N. & Mischel W. (1979). Prototypes in person perception. *Advances in Experimental Social Psychology*, **12**: 1–47.

- Carley K.M. (1997). Extracting team mental models through textual analysis. *Journal of Organizational Behaviour*, **18**(1): 533-558.
- Casadesus-Masanell R. & Zhu F. (2013). Business model innovation and competitive imitation: The case of sponsor-based business models. *Strategic Management Journal*, **34**(4): 464-482.
- Chesbrough H. & Rosenbloom R. (2002). The role of the business model in capturing value from innovation: evidence from Xerox Corporation's technology spin-off companies. *Industrial and Corporate Change*, **11**(3): 529-555.
- Clark B. & Montgomery D. (1999). Managerial identification of competitors. *The Journal of Marketing*, **63**(3): 67-83.
- DiMaggio P. (1987). Classification in art. *American Sociological Review*, **52**(4): 440-455.
- Doganova L. & Eyquem-Renault M. (2009). What do business models do? *Research Policy*, **38**(10): 1559-1570.
- Durand R. & Paoletta L. (2013). Category stretching: Reorienting research on categories in strategy, entrepreneurship, and organization theory. *Journal of Management Studies*, **50**(6): 1100-1123.
- Duriau V.J., Reger R.K. & Pfarrer M.D. (2007). A Content analysis of the content analysis literature in organization studies: Research themes, data sources, and methodological refinements. *Organizational Research Methods*, **10**(1): 5-34.
- Edwards J. (2014). Airbnb takes new funding at a \$10 billion valuation. *Business Insider*.
- Enkel E. & Mezger F. (2013). Imitation processes and their application for business model innovation: An explorative study. *International Journal of Innovation Management*, **17**(1): 1-34.
- Gentner D. (1983). Structure-mapping: A theoretical framework for analogy. *Cognitive Science*, **7**(2): 155-170.
- Gephart R. (1993). The textual approach: Risk and blame in disaster sensemaking. *Academy of Management Journal*, **36**(6): 1465-1514.
- Gioia D.A., Corley K.G. & Hamilton A.L. (2012). Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. *Organizational Research Methods*, **16**(1): 15-31.
- Glynn M.A. & Navis C. (2013). Categories, identities, and cultural classification: Moving beyond a model of categorical constraint. *Journal of Management Studies*, **50**(6): 1124-1137.
- Hannan M.T., Pólos L. & Carroll G.R. (2007). *Logics of organization theory: Audiences, codes, and ecologies*, Princeton University Press.
- Haunschild P. & Beckman C. (1998). When do interlocks matter?: Alternate sources of information and interlock influence. *Administrative Science Quarterly*, **43**(4): 815-844.
- Hayashi A.M. (2009). Do you have a plan 'B'? *MIT Sloan Management Review*, **51**(10-11).
- Hirsch P. (1972). Processing fads and fashions: An organization-set analysis of cultural industry systems. *American Journal of Sociology*, **77**(4): 639-659.
- Holt D. (2006). Toward a sociology of branding. *Journal of Consumer Culture*, **6**(3): 299-302.
- Holyoak K. & Thagard P. (1997). The analogical mind. *American Psychologist*, **52**(1): 35-44.
- Hsu G., Hannan M.T. & Kocak O. (2009). Multiple category memberships in markets: An integrative theory and two empirical tests. *American Sociological Review*, **74**(1): 150-169.
- Huff A.S. (1990). *Mapping Strategic Thought*, John Wiley & Sons.

- Johnsson J., Dolbeck, A. & Meza P. (2008). *Searching for revenue on the internet: Yahoo! acquires Overture*. Stanford Graduate School of Business. The Case Centre.
- Jones C., Maoret M., Massa F.G. & Svejenova S. (2012). Rebels with a cause: Formation, contestation, and expansion of the de novo category 'modern architecture', 1870–1975. *Organization Science*, **23**(6): 1523–1545.
- Kennedy M.T. (2008). Getting counted: Markets, media, and reality. *American Sociological Review*, **73**(2): 270–295.
- Kjaergaard A., Morsing M. & Ravasi D. (2011). Mediating identity: A study of media influence on organizational identity construction in a celebrity firm. *Journal of Management Studies*, **48**(3): 514–543.
- Koçak Ö., Hannan M.T. & Hsu G. (2014). Emergence of market orders: Audience interaction and vanguard influence. *Organization Studies*, **35**(5): 765–790.
- Kraatz M. & Zajac E. (1996). Exploring the limits of the new institutionalism: The causes and consequences of illegitimate organizational change. *American Sociological Review*, **61**(5): 812–836.
- Lang G.E. and Lang K. (1988). Recognition and renown: The survival of artistic reputation. *American Journal of Sociology*, **94**: 79–109.
- Lounsbury M. & Rao H. (2004). Sources of durability and change in market: A study of the reconstitution of classifications in the American mutual fund product categories. *Social Forces*, **82**(3): 969–999.
- Martins L., Rindova V. & Greenbaum B. (2015). Unlocking the hidden value of concepts: A managerial cognition perspective on business models and business model innovation. *Strategic Entrepreneurship Journal*. article first published online 10 Feb 2015
- McGrath R.G. (2010). Business models: A discovery driven approach. *Long Range Planning*, **43**(2-3): 247–261.
- Munir K. (2005). The social construction of events: A study of institutional change in the photographic field. *Organization Studies*, **26**(1): 93–112.
- Namenwirth J. Z. & Weber R.P. 1987. *Dynamics of Culture*. Boston: Allen & Unwin.
- Navis C. & Glynn M.A. (2010). How new market categories emerge: Temporal dynamics of legitimacy, identity, and entrepreneurship in satellite radio, 1990–2005. *Administrative Science Quarterly*, **55**: 439–471.
- Navis C. & Glynn M.A. (2011). Legitimate distinctiveness and the entrepreneurial identity: influence on investor judgments of new venture plausibility. *Academy of Management Review*, **36**(3): 479–499.
- Nosofsky R. (2011). An exemplar model of classification. In A.J. Pothos & E.M. Wills (Eds.). *Formal Approaches in Categorization*. Cambridge University Press: 18–40.
- Osborne J.D., Stubbart C.I. & Ramaprasad A. (2001). Strategic groups and competitive enactment: a study of dynamic relationships between mental models and performance. *Strategic Management Journal*, **22**(5): 435–454.
- Perkmann M. & Spicer A. (2010). What are business models? Developing a theory of performative representations. *Research in the Sociology of Organizations*, **29**: 269–27.
- Pontikes E. & Hannan M. (2014). An ecology of social categories. *Sociological Science*, **1**(August): 311–343.
- Powell W. (1991). Expanding the scope of institutional analysis. In DiMaggio P.J. & Powell W.W. (Eds.). (1991). *The New Institutionalism in Organizational analysis* (Vol. 17). Chicago: University of Chicago Press.

- Rindova V., Petkova A. & Kotha S. (2007). Standing out: how new firms in emerging markets build reputation. *Strategic Organization*, **5**(1): 31–70.
- Rosa J.A., Porac J.F., Runser-Spanjol J. & Saxon M. S. (1999). Sociocognitive dynamics in a product market. *The Journal of Marketing*, **74**: 64–77.
- Rosch E. (1978). Principles of Categorization: 27–48, in Rosch, E. & Lloyd, B.B. (eds), *Cognition and Categorization*. Lawrence Erlbaum Associates, Hillsdale
- Rosenberg T. (2013). A hospital network with a vision. *nytimes.com*. Available at: http://opinionator.blogs.nytimes.com/2013/01/16/in-india-leading-a-hospital-franchise-with-vision/?_php=true&_type=blogs&_r=0
- Sabatier V., Mangematin V. & Rousselle T. (2010). From recipe to dinner: Business model portfolios in the European biopharmaceutical industry. *Long Range Planning*, **43**(2-3): 431–447.
- Schultz P.L., Marin A. & Boal K.B. (2014). The impact of media on the legitimacy of new market categories: The case of broadband internet. *Journal of Business Venturing*, **29**(1):34–54.
- Shrum W. 1991. Critics and publics: Cultural mediation in highbrow and popular performing arts. *American Journal of Sociology*, **97**: 347-375.
- Siggelkow N. (2007). Persuasion with case studies. *Academy of Management Journal*, **50**(1): 20–24.
- Sosna M., Trevinyo-Rodríguez R.N. & Velamuri S.R. (2010). Business model innovation through trial-and-error learning: The Naturhouse case. *Long Range Planning*, **43**(2-3): 383–407.
- Sutton J. & Dobbin F. (1996). The two faces of governance: Responses to legal uncertainty in US firms, 1955 to 1985. *American Sociological Review*, **61**: 794–811.
- Teece D. (2010). Business models, business strategy and innovation. *Long Range Planning*, **43**(2-3): 172–194.
- Tikkanen H., Lamberg J.A., Parvinen P. & Kallunki J.P. (2005). Managerial cognition, action and the business model of the firm. *Management Decision*, **43**(6): 789–809.
- Vergne J.P. (2010). Toward a new measure of organizational legitimacy: Method, validation, and illustration. *Organizational Research Methods*, **14**(3): 484–502.
- Vergne J.P. & Wry T. (2014). Categorizing categorization research: Review, integration, and future directions. *Journal of Management Studies*, **51**(1): 56–94.
- Weber R. 1990. *Basic content analysis*, Sage.
- Willemstein L., van der Valk T. & Meeus M.T.H. (2007). Dynamics in business models: An empirical analysis of medical biotechnology firms in the Netherlands. *Technovation*, **27**(4): 221–232.
- Woodrum E. (1984). ‘Mainstreaming’ content analysis in social science: Methodological advantages, obstacles, and solutions. *Social Science Research*, **13**(1): 1-19.
- Yin R.K. (2009). *Case Study Research: Design and Methods*. Sage.
- Zott C. & Amit R. (2010). Business model design : An activity system perspective. *Long Range Planning*, **43**(2-3): 216–226.
- Zott C., Amit R. & Massa L. (2011). The business model: recent developments and future research. *Journal of Management*, **37**(4): 1019–1042.
- Zuckerman E. (1999). The categorical imperative: Securities analysts and the illegitimacy discount. *American Journal of Sociology*, **104**(5): 1398–1438.

Biographies

Tatiana Mikhalkina is a PhD candidate at Cass Business School. She is currently working towards completing her thesis on the topic of business models and categorization. She received her MSc in Organizational and Social Psychology from the London School of Economics and Political Science. *e-mail: tmikhalkina@gmail.com*

Laure Cabantous is a Senior Lecturer at Cass Business School. She has a long lasting interest in the study of decision-making processes and cognition, calculative practices and performativity. Her research has been published in journals such as *Organization Science*, *Organization Studies*, and the *Journal of Management*. *e-mail: Laure.Cabantous.1@city.ac.uk*

Appendices

Table A1. Number of articles and fragments of text mentioning Airbnb by quarters

	2009					2010					2011					2012					2013					Grand Total
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	
Articles	0	1	4	6	11	2	2	8	12	24	17	7	20	22	66	19	33	15	27	94	20	41	40	51	152	347
Fragments	0	1	11	4	16	5	2	20	17	44	4	12	83	35	134	26	56	32	58	172	38	80	90	91	299	665

Table A2: Themes #1 and #2 and associated 1st order concepts: Illustrative quotes

2 nd order theme	1 st order concept	Illustrative Quotes
Airbnb defined through analogies (T#1)	Analogy with Hotel: 'Airbnb is like a hotel...'	Positive analogy (Airbnb is like an hotel) <ul style="list-style-type: none"> • <i>The site makes every home a mini-hotel (The Times 16 February (2012)</i> • <i>Home-rental listing sites, such as HomeAway and Airbnb, have aided the trend by providing a service that allows homeowners to advertise their properties, essentially turning their homes into pop- up motels (WSJ 24 November (2012)</i> Negative analogy (Airbnb is different from a traditional hotel) <ul style="list-style-type: none"> • <i>In homage to its roots, they called the company Airbnb, which has grown so large, so fast that it is now the equivalent of a major global hotel chain -- even though, unlike the Hilton, it doesn't own a single bed (NYT 21 July (2013)</i>
	Analogy with Ebay, or Couchsurfing	<ul style="list-style-type: none"> • <i>Airbnb and similar sites try to prevent bad behavior by letting people leave ratings and reviews of both hosts and travelers, much like eBay (NYT 25 July (2011)</i> • <i>Grown-up couchsurfing needs some safeguards (Guardian 8 October (2011)</i>
Airbnb as a firm (T#2)	Airbnb's history	<ul style="list-style-type: none"> • <i>Airbnb started in a living room in San Francisco when its founders decided to rent a couple of air mattresses in their shared apartment during a design conference (NYT 25 July (2011).</i>
	Airbnb's quantified performance	<ul style="list-style-type: none"> • <i>Airbnb has been very successful since its launch in (2008. It clocked 3m guests last year and built its accommodation listings to 300,000 - including 500 castles and (200 tree houses - according to the company's (2012 figures.(FT 22 February (2013)</i>
	Airbnb is a successful firm	<ul style="list-style-type: none"> • <i>Probably the first accelerator was Paul Graham's Y Combinator in Silicon Valley. Since (2005 it has fostered almost 500 start-ups, including big successes such as Airbnb and Dropbox. (FT 17 October (2012)</i>
	Airbnb's value/valuation (monetary)	<ul style="list-style-type: none"> • <i>To compete, Airbnb raised \$112m last year, valuing the company at \$1.3bn. It funnelled the money into expansion, opening offices in London, Paris, Barcelona, Milan, Moscow, Copenhagen and in São Paulo (FT (20 June (2012)</i>
Airbnb's investors	<ul style="list-style-type: none"> • <i>Canal Plus, Astro, an Asian investment group and Lakestar, which also has stakes in Spotify and Airbnb, are among the new companies to invest in the Los Angeles-based venture (FT 13 September (2013)</i> 	

Table A3: Theme #3 and associated 1st order concepts: Illustrative quotes

2 nd order theme	1 st order concept	Illustrative Quotes
Airbnb as a business model (T #3)	Value Capture: How Airbnb makes money	• <i>Airbnb, a service that lets people rent their homes to travelers, for rates comparable to a hostel or hotel, with the company taking a slice of the fee</i> (NYT 23 September (2012))
	Value creation: Monetization of assets	• <i>This framework of trust has unlocked huge value from unused bedrooms. "In the last 12 months in Paris, we've generated \$240 million in economic activity," Chesky said</i> (NYT 21 July (2013))
	Value creation: Connecting Parties	• <i>Airbnb.com connects travelers with locals who are offering a place to stay, whether it is a couch, a private apartment or a castle</i> (NYT 8 January (2012))
	Value creation: Cost Cutting	• <i>To make your roubles go further, stay in the bright dorms of the city's newest hostel, the Safari (...) or check out airbnb.co.uk, which offers studios and apartments in the centre from £63 a night</i> (Guardian 5 January (2013))
	Value creation: Convenience	• <i>To use Airbnb, site visitors search for listings in their destination city. Once they have found a place, they can send a message to the host with any questions about the room or its location. They then pay for the stay in full using a credit card or PayPal. Airbnb holds the money until a day after guests check in, ensuring that they are not swindled out of their cash</i> (NYT 25 July (2011))
	Value creation: Make Money	• <i>The sites offer guidance on how much you can expect to earn. Airbnb.co.uk has a tool to estimate what your home is worth based on location, the time of year you are letting it and how much space you have to offer. You can opt for a basic pricing structure (...) or an advanced pricing structure, marking out different rates for weekends or for summer months. You can also charge a cleaning fee and set up a security deposit with your guests.</i> (The Times 10 March (2012))
	Value creation: Social Value	• <i>The label is applied to a diverse mix of companies, some of them far removed from the power sector. Cleanweb enthusiasts often point to Airbnb, a web site that connects people seeking vacation accommodation with others looking to rent out their homes, reducing the use of hotel rooms -- and, in theory, the number of hotels that need to be built</i> (NYT 19 June (2013))
	Value creation: Special Experience:	• <i>But it's an intimate thing, staying in somebody's home. Blecharczyk says that Airbnbbers want a more authentic experience than staying in a hotel. And it is that. If boutique hotels defined the 90s and (2000s in tourism, someone's spare room (or spare castle) will possibly define whatever we're calling the (2010s. But then, all things considered, I'd take an Airbnb over a Ramada Inn. Even with a mouse</i> (Guardian 15 September (2013))
	Value creation: Trust	• <i>The company interviews homeowners and displays reviews on its website to boost confidence among users. It also holds rental payments in escrow to comfort hosts</i> (FT 25 July (2011))

Table A4: Themes #4, #5 and #6 and associated 1st order concepts: Illustrative quotes

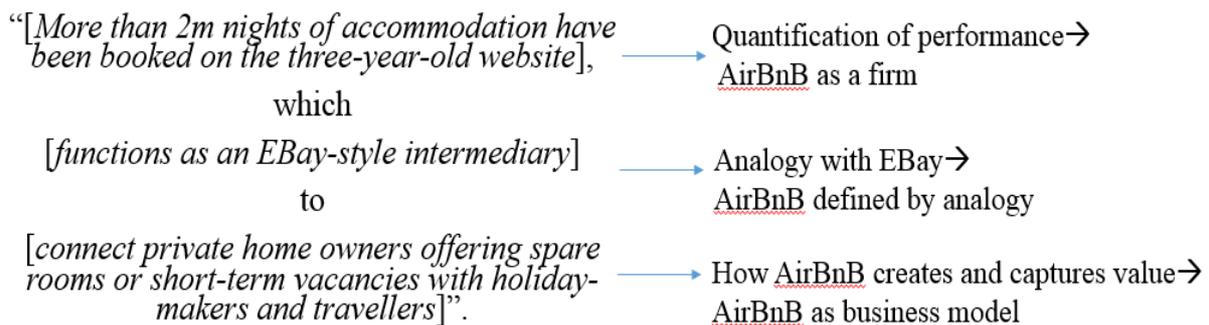
2 nd order theme	1 st order concept	Illustrative Quotes
Airbnb and the hospitality industry (T#4)	Airbnb is a threat to the traditional hotel industry	<ul style="list-style-type: none"> • <i>Airbnb: A spare room website: game over for hotels?: Why choose an overpriced and dull hotel when you could stay in a loft, a houseboat or a tree house anywhere in the world? Is Airbnb - spare rooms to let - about to take down the hotel industry? Carole Cadwalladr checks in to the 'sharing economy'</i> (Guardian 15 Sept (2013))
	Regulation & Counter attack (from traditional industry):	<ul style="list-style-type: none"> • <i>In response to this sudden scrutiny, Airbnb has joined other online booking sites such as HomeAway and TripAdvisor to form the Short Term Rental Advocacy Center (Strac) to fight 'restrictive short-term rental regulations at the local level'</i> (FT 22 June (2013))
Airbnb as source domain (T#5)	Within industry clone comparison:	<ul style="list-style-type: none"> • <i>I lined up the car with Halil and reserved a room through Wimdu, a spawn of Airbnb that rents different styles of accommodations owned or run by individuals</i> (WP 8 September (2013))
	Within industry simple comparison	<ul style="list-style-type: none"> • <i>Perhaps most relevant to business travellers is Onefinestay, which describes itself as an 'unhotel'. It offers houses and apartments in Paris, London, New York and Los Angeles and, unlike Airbnb, includes cleaning, maid services and a meet and greet</i> (FT 16 October (2013))
	Cross industry comparisons Airbnb for x, y, z	<ul style="list-style-type: none"> • <i>Peer-to-peer car sharing remains in the trial stage; it can be found in San Francisco and a few other places. It has a long way to go before it becomes the auto equivalent of Airbnb, the surprise success story for peer-to-peer sharing of space in apartments and houses</i> (NYT 19 February (2012))
Airbnb and the sharing economy (T#6)	Airbnb is used in the context of the sharing economy	<ul style="list-style-type: none"> • <i>'Systems like RelayRides fit into a larger 'sharing economy', Haddad said. Other examples of sharing marketplaces include Airbnb, whose platform allows individuals to rent their property as short-term lodging to guests, or TaskRabbit, which lets people earn money by completing errands requested by other users, Haddad noted</i> (WP 7 January (2013))
	Airbnb as an example of peer-to-peer firms	<ul style="list-style-type: none"> • <i>'There are scores of other sites, too, from major players such as US-based home rental giant Airbnb to fledgling new arrivals. Growing numbers of people are making use of these sharing websites - known in tech circles as online 'peer-to-peer rental' services - and for a variety of reasons'</i> (Guardian 8 Jun (2013)).

Table A5. Summary of coded themes by year

Second-order theme / Year	2009	2010	2011	2012	2013	Total
Airbnb defined by analogy	5	10	13	6	17	51
Airbnb as a firm	2	7	60	60	63	192
Airbnb as a business model	7	12	34	47	63	163
Airbnb & hospitality industry	1	3	22	33	51	110
Airbnb & sharing economy	0	1	6	9	18	34
Airbnb as source domain	1	2	16	24	33	76
Total # of ‘coded’ fragments*	16	35	151	179	245	626
Total # of fragments^u	16	44	134	172	299	665

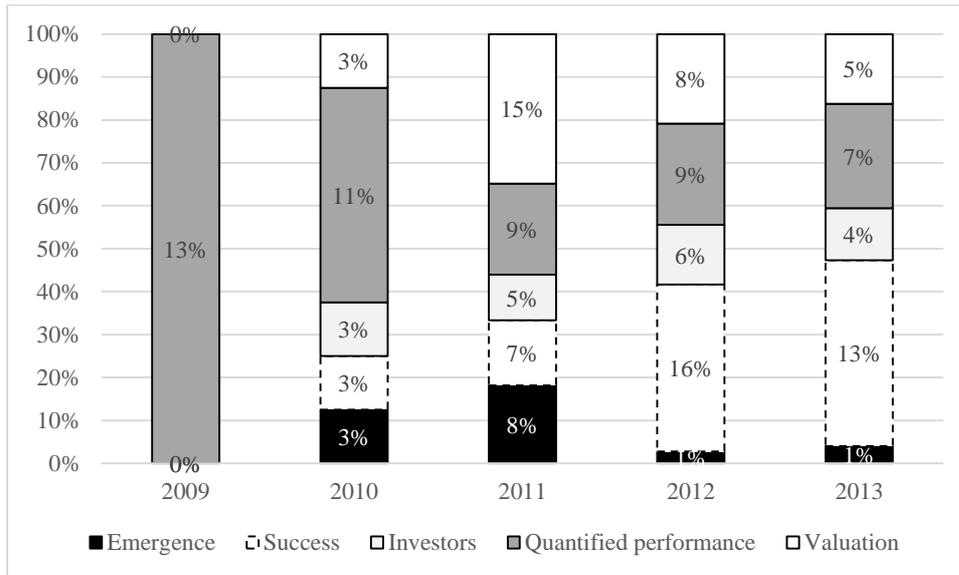
* Some fragments of text were attributed to several first-order concepts, while others were not assigned to any first-order concepts. As a result, the total number of ‘coded’ fragments can be greater or smaller than the total number of fragments. For instance, we identified 44 fragments of text referring to Airbnb in (2011, but we only have 35 ‘coded’ fragments. On the other hand, in (2012, some fragments of texts were attributed to several themes; hence there are more ‘coded’ text fragments than there are text fragments in (2012.

For example, the fragment: *‘More than 2m nights of accommodation have been booked on the three-year-old website, which functions as an Ebay-style intermediary to connect private home owners offering spare rooms or short-term vacancies with holiday-makers and travellers’* (FT 29 July (2011) is assigned to the three following themes: T#1 (Airbnb defined by analogy), T#2 (Airbnb-as-firm), and T#3 (Airbnb-as-business model)



^u All percentages (%) in the text and figures were calculated with the total number of “coded” fragments.

Figure A1. Theme #3 ‘Airbnb as a firm’ code structure*



*Label shows percentage of all coded fragments