



**HAL**  
open science

## Business models: A challenging agenda

Charles Baden-Fuller, Vincent Mangematin

► **To cite this version:**

Charles Baden-Fuller, Vincent Mangematin. Business models: A challenging agenda. *Strategic Organization*, 2013, 11 no. 4 418-427 (4), pp.418-427. 10.1177/1476127013510112 . hal-00869707

**HAL Id: hal-00869707**

**<http://hal.grenoble-em.com/hal-00869707>**

Submitted on 4 Oct 2013

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

# Business models: A challenging agenda

Charles Baden-Fuller

Cass Business School, City University London, UK

and

&

Vincent Mangematin

Grenoble Ecole de Management, Grenoble, France

## **ABSTRACT**

The current literature on business models lies mainly in the literature on strategy and competitive advantage and focuses on their role as descriptors of actual phenomenon, often by reference to taxonomic categories. In this essay we explore how business models can be seen as a set of cognitive configurations that can be manipulable in the minds of managers (and academics). By proposing a typology of business models, that emphasises the connecting of traditional value chain descriptors with how customers are identified and satisfied, and how the firm monetizes its value, we explore how business model configurations can extend current work on cognitive categorization and open up new possibilities for organisation research.

## **Acknowledgements:**

**We acknowledge the valuable suggestions of the editors of the journal generally and Ann Langley in particular; and to Santi Furnari, Stefan Haefliger, Paul Nightingale and Andre Spicer; and the financial support of the UK Research Council (EP/K039695/1 Building Better Business Models).**

## INTRODUCTION

Why is the business model a useful concept for scholars of strategic organization? Clearly the concept has gained considerable traction in the business press and its community - but some scholars (e.g., Arend, 2013) have questioned whether it really does have value to scholars beyond established existing strategy concepts? In this essay we suggest that understanding the business model as a particular kind of configuration that is cognitively manipulable may add to our understanding of important organization issues. This perspective on business models sees them 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. We suggest that this last view offers considerable potential for future scholarship.

What exactly can be considered as a ‘Business Model’ has been the subject of much debate but - contrary to the sceptics’ view (Zott, Amit and Massa, 2011), - there is agreement among scholars: the model must link the workings inside the firm to outside elements including the customer side (explaining how value is created Amit and Zott 2001 and Teece 2010) and how that value is captured or monetized (as Teece, 2010 has emphasised).

Most of the current research on business models in the strategy domain, considers the business model as something real. Papers typically explore the connections between choice of business model and competitive advantage (see for instance Amit and Zott, 2001, Zott and Amit, 2007). And while some might object to the emphasis on competitive advantage – perhaps because the nature of the claims is often problematic (see for instance Durand and Vaara, 2009) – these criticisms are capable of being surmounted (c.f. Durand et al, 2008).

Other well established groups who examine business models as real things include economic historians. They have a clear and well embedded notion that innovation in business models has been associated with progress; they have not used the term business models but rather words such as ‘recipes’ or ‘modes’ to classify the real economic activity of firms or groups of firms, and discussed how changes in those recipes have defined *industrial revolutions* (see, for instance, Hounshell’s (1985) description of the dynamics of the change between the *Factory System* and the *American System*).

And in digging deeper into other branches of management, we see articles that look at the relationship between the business model (a relatively new concept) and the eco-system (a rather more well established concept) – see for instance; Adner and Kapoor (2010), and those that look at competition between business models – see for instance Casadesus-Masanell and

Yoffee (2007). In most of those papers, the business model is seen as a *meta* concept to exemplify firm strategy.

Most challenging and promising is the cognitive agenda. As Durand and Paoletta (2012) explain, categorical structures based on causal models represent a fertile avenue for researchers because such structures can help explain firm behaviours and organisational survival. In this context, business models have potentially a central place.

The business model in this agenda is not a complete description of what the firm does, but rather it should be stripped down characterization, that captures the essence of the cause-effect relationships between customers, the organisation and money. Hence, a business model is a special example of a configuration (as defined by Fiss, 2011).

In this framing, the business model is potentially separable from the firm's context, including the technology that it uses. Thus, when probing the business model of Amazon (in its founding mode as an on-line book seller), it is relevant to ask did “was Amazon deploying a novel business model” – as it claims on its website - or rather did Amazon sense an unfulfilled customer need for easier access to books, and fulfil that need (and get paid) by mobilizing highly contextual web-based technology with a generic established mail order business model (such as that used by Sears Roebuck) that was originally developed for clothes and appliances? In the second framing (the one we argue to be correct), the business model is not a complete description of everything the firm does, including the technology, but something more general that goes beyond explaining what has happened in a particular context to providing a configuration of cause-effect relations. Seeing business models as potentially alterable configurations can help industry managers think about how to act in future states of the world and can also assist researchers in developing new theories (see, for instance, Soda and Furnari, 2012).

In this paper we are concerned with the business model as a cognitive instrument, and to probe this potential we begin by carefully examining the components of the business model, before we explore more fully the research gaps and opportunities.

## **BUSINESS MODEL CONFIGURATIONS**

Most attempts to describe and classify business models in the academic and practice literatures have been taxonomic; that is developed by abstracting from observations typically of a single industry. With only a few exceptions, these attempts rarely deal fully and properly with all its dimensions of customers, internal organisation and monetization: see for instance Rappa (2004) and Wirtz, Schilke and Ullrich (2010). So far the literature lacks clear

typological classifications that are robust to changing context and time (Hempel, 1965). Here we suggest the typology that considers four elements: Identifying the Customers (the number of separate customer groups); Customer Engagement (or the customer proposition); Monetization; and Value Chain and Linkages (Governance typically concerning the firm internally)<sup>1</sup>. Each of these dimensions relates to the business model definition of either value creation or value capture, or both, and - as amplified below - lend themselves to creating sub-categories and thus the chance of a meaningful map of possibilities. Such a map can be overlaid onto the real world of an industry - or an entrepreneur's way of thinking - and by comparing the map with the complete typology we can identify the range of existing models. From such a map we can also consider possible but omitted types (perhaps because they have never been tried, or more commonly they have been tried and found not to work well). Table 1 gives examples of some business model configurations and we explain the dimensions more fully below.

TABLE 1 NEAR HERE

- **Identifying Customers:** identifies the firm's targeted user and customer groups. This identification includes the situation when it creates new customers, such as done by Facebook. Customer identification also specifies if the business model is one sided or multisided, that is if the users pays for the services received, or if there is another group of customers who pay for services when the core offering is provided for free. The internet and digital technology did not "invent" two sided platforms (they have long been around in newspapers and TV), but it did facilitate their expansion and encourage economists to model the interactions between the different groups (c.f. Rochet and Tiriolo, 2001 & 2003). In Table 1 we give the newspapers and Google advertising supported search engine examples.
- **Customer Engagement:** (sometimes called the value proposition). McGrath and MacMillan (2000) and Day and Moorman (2010) emphasize the need for identifying the value proposition from each of the customer's perspective, and this process involves a degree of creativity and sensing (see for instance Teece, 2010). We propose one of the oldest and most established distinctions in the literature: between 'project based system' and 'pre-designed (scale) based system' – often described as the 'taxi' and 'bus' systems.

---

<sup>1</sup> Much has been written on taxonomies versus typologies, see for instance McKelvey, 1975: a brief summary of the issues is given in Baden-Fuller and Morgan, 2010.

Business models using the former create value by interacting with specific clients to solve specific problems (for example consulting firms – such as McKinsey, large law firms, and contract movie makers) – see Davies and Brady (2000); Hobday (2000). In contrast, those utilizing the bus system (car parts makers, car assemblers, mass fast food producers, etc.) add value by producing ‘one-size-fits-all’ goods or services in a repetitive manner via standardized, mass production processes – see Hounshell (1985), Chandler (1990), Nightingale (2000). This distinction falls close to that proposed by Thompson (1967 – Chap. 2) and supported by Drucker (1986) between intensive systems (firms organized in teams to undertake project work) and long linked systems (essentially mass production)<sup>2</sup>. Table 1 gives a few examples of both types of business models and notes the really interesting example that has both – Google appears to deploy a bus based user engagement system for search engine users but a taxi based user engagement system for its advertisers (who can tailor their advertising offering and set the price they are willing to pay).

- **Monetization:** is a key part of value capture and involves more than just pricing (the economists concern), but includes systems determining timings of payments, and identifies the costs and methods of collecting revenues. It also distinguishes between charging all users the same price (as in grocery supermarkets) and negotiated prices. Teece (1986) stresses the role of the system of complementary assets, pointing out how leveraging these assets can increase monetizing opportunities (and in particular the often discussed ‘razor-blade’ model, where part (generally, a little) of the revenues are collected early (when the service/product is purchased) and the rest (often a good deal more) from the supply of complementary assets (in this case, associated consumables) as it is used. When the supply of complementary assets is controlled by a separate firm (such as is the case in the franchise fast food systems noted in Table 1), the business model takes account of the complementary asset provider passing on some of its revenues to the original producer.
- **Value Chain and Linkages:** (sometimes called architecture or governance systems) are the mechanisms the firm uses to deliver its product or service to the customer (or in the case of multisided platforms to each of the customer groups). Here there are many valuable contributions, particularly by Amit and Zott, 2001 and by Casadesus-Masanell

---

<sup>2</sup> Both methods of engagement can take account of cultural goods as required by Ravasi, Rindova, and Dalpiaz (2012).

and Ricart, 2010, who stress the overall architecture of flows of information and governance of linkages. But even these fine contributions appear to overlook the situations where there are several user-customer groups requiring multiple interlinked value chains involving multiple technologies. Rather, all of these contributions rely more or less on many classical writings, such as those that emphasize the contrasts between vertical integration systems vs. horizontal contracting (e.g. Williamson, 1973), and the extensive discussions on the range of possible types of systems within contracting, such as hierarchies or networks (e.g. Miles and Snow, 1992; Lorenzoni and Baden-Fuller, 1995).

This four part typology is offered as a valuable insight, because it provides a set of clear and alternative types of models (Customers - one or two (or more) sided; Customer engagement - each group of customers being engaged either via a taxi or bus system; Monetization - customers pay directly at the time of sale or indirectly, perhaps over a period of time related to use; and Value Chain and Linking Mechanisms - most especially integrated vs. tiered hierarchically organized outsourcing or networked supply-chains). This set of models can be used to explain the various ways in which in various different contexts (industry and time) technologies (developed or yet to be developed) can be connected to fulfil customer needs and provide revenues for the connecting enterprise. The typology also shows how different business models can be applied to the same product and the same set of customers (for example an aircraft engine producer can offer its engines as a service on a taxi basis (through short term rental agreements) or to sell them outright, with servicing being provided as a complementary asset on the razor blade basis – see for instance Zott and Amit, (2010). Each of these business model configurations contains cause-effect explanations relating to the various possible configurations connecting customer needs, organizing delivery and monetization. In the next section we explore how this typological approach can inform the cognitive and organizational research agenda.

## **RESEARCH AGENDA**

It can be argued that researchers already recognise the role of businesses models in cognition, even if they did not use the exact phrase. For example Spender (1989) used the words ‘industry recipe’ to group firms following similar business models, and showed that managers identified with these groups in their thinking and acting. Likewise, Porac, Thomas and Baden-Fuller (1989) found that Scottish knitwear firms who shared a common view of

competition based on the similarity of their business approach adopted similar responses to competitive threats (Baden-Fuller and Stopford, 1994; Porac, Thomas and Baden-Fuller, 2011). Whilst this work did have a rough conception of the business model at its core, because the conception contained a set of causal beliefs about the nature of the customers, how value was delivered and captured it was a taxonomic (using exemplars) rather than a typological (conceptually derived) categorization. Although we know that cognitive categorizations are important for how managers conceive of both their strategies and their competition - as emphasized in Kaplan's (2011) review - the emphasis on taxonomies means we still do not fully understand how the nature of the categorization may influence the results. Only by considering typologies of business models that emphasize the configuration possibilities that transcend time and industry boundaries can we delve into the fundamental questions behind business models and their manipulability.

We suggest that rather than asking whether managers are following the iconic descriptors of their industry, we should consider whether there are fundamental cause-effect configurations that drive behaviour. For example, do managers who use 'taxi' based customer engagement see the world differently from those who use 'bus' principles? In both cases, they may compete for the attentions of the same customer group but their approaches are likely to be very different. And do managers that adopt vertically integrated systems think of the world differently from those that subcontract - and does it matter how those relationships are organized? This approach allows old questions to be revisited using the business model lens, yielding results that are capable of being flexible to time and place. In short, using manipulable characteristics, the typological business model approach enables scholars and firms to model the activity and to articulate different activities within the firm.

Our typology of the business model classification reveals a new category that has received too little attention – that of the multi-sided model, where managers have to consider more than one kind of customer. Researchers can explore what difference in cognitive capacity is required to take on this level of complexity – for it certainly does not easily fit into traditional concepts of customer categorization that is driven by a single customer group. And related to this, does the not-for profit business model (often two sided, with a social enterprise being supported from a separate community - whether the state or commercial patronage provides the funds) also require managers to adopt novel cognitive frames. Research on social business models (see for instance Thompson and MacMillan, 2010) typically assumes that there are differences rather than actually identifying them. This



approach of exploring multi-sided business models has the potential to unpick some of the interesting challenges surrounding “big data”, an important new phenomenon.

The typological categories implied by business model research may also have relevance for the work we do on organizational survival of entrepreneurial firms. Following Perkmann and Spicer (2010), we ask whether, in the minds of observers and key actors, there is a perceived status ordering among business models? Are some preferred, and if so when and why? And by whom? For example, when might consumers prefer organizations to make their own products rather than outsourcing their manufacture? Is there an assumption that the products of a taxi based system will be of higher quality than those of a bus system? And critically, should the multi-sided business model be considered as a boundary spanning category; and essentially weaker than a single-sided model – or is it a novel category that challenges traditional views (like *nouvelle cuisine* in French culinary history– see Rao, Monin and Durand, 2002) and thus an opportunity? The success of Google and Facebook suggests the latter - but the process by which these new business models became established is not fully understood. The whole question is of particular relevance to start-ups that seek support from investors. As Dogonova and Yquem (2009) explain, entrepreneurs often refer to business models to try to gain legitimacy – but is it fashion or logic that determines what gets supported?

Finally, the business model is a model - and embedded within it is a set of cause-effect relationships. Without using the term business model, the potentially powerful effect of ‘causal claims’ is carefully explored by McKenzie in the context of financial markets (see for instance Mackenzie, 2008): but we do not know enough about how such relationships work for entrepreneurial firms. Is a detailed and coherent business model that is strongly supported by management theories necessarily more effective than one that is vague and dependent only on empirical observations? Detailing the logic within a business model may have value for some audiences (such as venture capitalists), but it may also constrain managerial thinking and the capacity to innovate such models (see for instance the suggestions of Sabatier, Rouselle, Mangematin, 2010, and Sosna, Trevinyo-Rodriguez, Velamuri, 2010). It is well known in many quarters (such as medicine) that the science of explanation lags the knowledge embodied in technology.

The nature of the causality embedded in a business model does not only influence entrepreneurial start-ups: the same cognitive challenge is also critical for established firms

(c.f. McGrath, 2010, Doz and Kosonen, 2010). Tripsas and Gavetti (2000), Chesbrough and Rosenbloom (2002) and Chesbrough (2010) have all noted that some executives are unable to comprehend the possibility of adopting business models that are “new to the firm” for their emerging technologies, even when it is apparent that other firms in their sectors have adopted such models. Teece (2010) suggests that managers need to engage in customer sensing (that is identifying new customer groups and their needs), and exploring how this takes place in established firms is yet a further promising avenue for research.

This cognitive blindness among established firms seems to have provoked legislators in the UK to require (in the 2006 Companies Act) that boards of directors charged with companies’ governance be explicit about their business model choices and be held responsible for them. Whilst we know a great deal about change management in general, relatively little work has been done to isolate and examine particular instances of business model change, and so legitimize the thinking of governance scholars and of this government policy.

### **Final comment**

Business models serve many purposes for management researchers, as has been explained by Baden-Fuller and Morgan (2010), and our understanding has been informed in part by the wider discussion of models in the thinking processes of scientists and economists reported in Morrison and Morgan (1999), and Morgan (2012). Inspired by these insights, we emphasize that business models can be used to categorize the business world; and exploring the nature of business model categories (such as those outlined in this paper) and what these categories might mean for managers provides a potentially rich agenda for cognitive researchers. And in this exploration we stress that business models are ‘manipulable instruments’ which can be used to explore cause and effect and understand the world of business better. In this conception, we can explore when and how business model thinking can assist entrepreneurial start-ups gain resources and achieve their purpose more effectively; or probe more deeply how different business model conceptions can act as a constraint or an opportunity for managerial thinking in established firms seeking to innovate their models to adapt to new technological, environmental or market challenges.

## BIBLIOGRAPHY

- R. Adner and R. Kapoor, 2010, Value creation in innovation ecosystems: how the structure of technological interdependence affects firm performance in new technology generations, *Strategic Management Journal*, 31: 306-333
- R. Amit and C. Zott, 2001, Value Creation in E-Business, *Strategic Management Journal*, 22: 493 -520
- R. Arend, 2013, Business Model: Present and Future, *Strategic Organization*,
- C. Baden-Fuller and M. Morgan, 2010, Business Models as Models, *Long Range Planning* 43: 156-171
- C. Baden-Fuller and J.M. Stopford, 1984, *Rejuvenating the Mature Business*, Boston, Harvard Business Press
- R. Casadesus-Masanell and J. Enric Ricart, 2010, From Strategy to Business Models and on to Tactics, *Long Range Planning*, 43: 195-215
- R. Casadesus-Masanell and D. Yoffee, 2007, Wintel: Cooperation or Conflict, *Management Science*, 53: 584–598
- A.D. Chandler, 1990, *Scale and Scope*. Harvard University Press, Cambridge
- H. Chesbrough, 2010, Business Model Innovation: Opportunities and Barriers, *Long Range Planning* 43: 354-363
- H. Chesbrough and R.S. Rosenbloom, 2002, The role of the business model in capturing value from innovation: evidence from Xerox, *Industrial and Corporate Change*, 111: 529-555
- A. Davies and T. Brady, 2000, Organizational capabilities and learning in complex product systems: towards repeatable solutions *Research Policy* 29: 931-953
- G. Day and C. Moorman, 2010, *Strategy from the Outside-in: Profiting from Customer Value*, New York: McGraw Hill
- L. Doganova and M. Eyquem-Renault, 2009, What Do Business Models Do? Innovation Devices in Technology Entrepreneurship *Research Policy*, 38:1559-1570
- Y.L. Doz and M. Kosonen, 2010, Embedding Strategic Agility: A Leadership Agenda for Accelerating Business Model Renewal, *Long Range Planning*, 43: 370-382
- P.F. Drucker, 1986, What is a Business? Chapter 6 in *Management, Tasks, Responsibilities, Practices*; New York, Truman Talley Books
- R. Durand, O. Bruyaka, and V. Mangematin, 2008, Do science and money go together? The case of the french biotech industry, *Strategic Management Journal*, 29(12): 1281-1299.
- R. Durand and E. Vaara, 2009, Causation, Counterfactuals and Competitive Advantage, *Strategic Management Journal*, 30: 1245-64
- R. Durand, and L. Paoella, 2012, Category Stretching: Reorienting Research on Categories in Strategy, Entrepreneurship, and Organization Theory *Journal of Management Studies* 50/6: 1100–1123.
- P. Fiss, 2011, Building better casual theories: A fuzzy set approach to typologies in organizational research. *Academy of Management Journal*. 54 :393-420
- C. G. Hempel, 1965, Fundamentals of Taxonomy, and Typological Methods in the Natural and Social Sciences, in *Aspects of Scientific Explanation* New York: Macmillan 137-172
- M. Hobday, 2000, The project-based organisation: an ideal form for managing complex products and systems? *Research Policy* 29(7-8): 871-893.
- D.A. Hounshell, 1985, *From the American System to Mass Production: 1800-1932*, Johns Hopkins University Press, Baltimore
- S.Kaplan, 2011, Research in Cognition and Strategy: Reflections on two decades of progress and a look to the future, *Journal of Management Studies* 48: 665-695
- G.Lorenzoni and C. Baden-Fuller, 1995, Creating a Strategic Centre to Manage a Web of Partners, *California Management Review*, 37 (3): 146-163
- J. Magretta, 2002, Why Business Models Matter, *Harvard Business Review*

- B. McKelvey, 1975, Guidance for the Empirical Classification of Organizations. *Administrative Science Quarterly*, 20: 509-525
- R. McGrath and I. MacMillan, 2000, *Discovery Driven Planning*, Boston: Harvard Business Press
- R. McGrath, 2010, Business Models: A Discovery Driven Approach, *Long Range Planning*, 43: p247-261
- D. Mackenzie, 2008, *An engine not a camera: How financial models shape markets* Cambridge: Mass, MIT Press
- R. Miles and C. Snow, 1992, The Causes of Failure in Networked Organizations, *California Management Review*, Summer 34 (2): 53-72
- M. S. Morgan, 2012, Modelling as a Method of Enquiry - Chapter 1 of M. S. Morgan, *The World in the Model*, Cambridge and New York: Cambridge University Press
- M. Morrison and M.S. Morgan (1999) Mediating Instruments Chapter 2 in M. S. Morgan and M. Morrison (eds) *Models as Mediators*, Cambridge University Press, *Ideas in Context Series*, p10-37
- P. Nightingale, C. Baden-Fuller and M. M. Hopkins, 2011, Projects, Project Capabilities and Project Organizations, in G. Cattani, S. Ferriani, L. F., F. Täube (ed.) *Project-Based Organizing and Strategic Management (Advances in Strategic Management, Volume 28)*, Emerald Group Publishing Limited, 215-234
- P. Nightingale, 2000, The product-process-organisation relationship in complex development projects, *Research Policy* 29(7-8): 913-930.
- M. Perkmann and A. Spicer, 2010, What are business models? Developing a theory of performative representations, *Research in the Sociology of Organizations*, 29: 269-279
- J. Porac, H. Thomas and C. Baden-Fuller, 1989 Competitive Groups as Cognitive Communities: The Case of Scottish Knitwear Manufacturers, *Journal of Management Studies* 26(4): 397-416
- J. Porac, H. Thomas and C. Baden-Fuller, 2011, Competitive groups as cognitive communities: The case of Scottish knitwear revised, *Journal of Management Studies*. May 2011, 48(3), 646-664.
- H. Rao, P. Monin and R. Durand, 2002, Institutional change in Toque Ville: Nouvelle cuisine as an identity movement in French cuisine, *American Journal of Sociology*, 108: 795-843
- M.A. Rappa, 2004, The utility business model and the future of computing services, *IBM Systems Journal*, 43(1) 32-42
- D. Ravasi, V. Rindova and E. Dalpiaz, 2012, The cultural side of value creation, *Strategic Organization*, 10: 231-239
- J.-C. Rochet and J. Tirløe, 2001 & 2003, Platform Competition in Two-Sided Markets, unpublished mimeo, subsequently rewritten in a more technical form in 2003, *Journal of the European Economic Association*, 1(4): 990-1029.
- V. Sabatier, T. Rousselle and V. Mangematin (2010), From recipe to dinner: Business model portfolio in the European biopharmaceutical industry, *Long Range Planning* 43: 431-447
- G. Soda and S. Furnari, 2012, Exploring the typology of the plausible: Fs/QCA counterfactual analysis and the plausible fit of unobserved organizational configurations, *Strategic Organization*, 10: 285-296
- M. Sosna, R. N. Treviño-Rodríguez and S. R. Velamuri, 2010, Business model innovation through trial and error, *Long Range Planning*, 43(2/3): 383-407
- J.-C. Spender, 1989, *Industry Recipes: The Nature and Sources of Managerial Judgement*, Oxford: Basil Blackwell
- D.J. Teece, 2010, Business Models, Business Strategy, and Innovation *Long Range Planning* 43: 172-194
- D.J. Teece, 1986, Profiting from technological innovation: Implications for integration, collaboration, licensing and public policy. *Research Policy* 15 (6): 285-305.
- J.D. Thompson, 1967, *Organizations in Action* New York: McGraw Hill
- J. Thompson and I. MacMillan, 2010, Business Models: Creating new markets and societal wealth, *Long Range Planning* 43: 291-307

- M. Tripsas and G. Gavetti, 2000, Capabilities, cognition and inertia,; Evidence from digital imaging, *Strategic Management Journal*, 21: 1147
- O.E. Williamson, 1973, Markets and Hierarchies, *American Economic Review*, 63:316-32
- B.W. Wirtz, O. Schilke and S. Ullrich, 2010, Strategic Development of Business Models: Implications of the Web 2.0 for Creating Value on the Internet, *Long Range Planning* 43/(2-3): 272-290
- C. Zott and R. Amit, 2007, Business Model Design and the Performance of Entrepreneurial Firms, *Organization Science*, 18: 181-199
- C. Zott and R. Amit, 2010, Business Model Design: An Activity System Perspective, *Long Range Planning* 43/(2-3): 216-226
- C. Zott, R. Amit and M. Massa, 2011, The Business Model: Recent Developments and Future Research. *Journal of Management*, 37: 1019-1042

**TABLE 1: Business Model Examples**

	<b>Customer Sensing</b> Are users paying? If not who are the other customers?	<b>Customer Engagement</b> 'Taxi' or 'Bus'	<b>Monetization</b> When, What and How is money raised?	<b>Value Chain &amp; Linkages</b> integrated, or hierarchy or networked
<b>Fast food chain – franchised BM</b>	<b>Simple BM</b> consumer pays	<b>Bus</b> Scale based	<b>Complement Assets</b> Franchisee collects money from consumer and passes on fee	Highly tiered system of suppliers and franchisees, who are linked hierarchically
<b>Boutique strategy consultant BM</b>	<b>Simple BM</b> Customer pays	<b>Taxi</b> Bespoke projects	<b>Value</b> Often priced on the basis of fee plus share of the value created	Almost all value is delivered by the firm, little outsourcing, a network relationship with client
<b>Newspaper (1990s) BM</b>	<b>Two-sided BM</b> Readers pay per copy, but Advertisers contribute bulk of revenues	<b>Bus</b> Readers and advertisers are given bus service	<b>Simple</b> Everyone pays close to point of use	Content and production are typically hierarchical but sometimes networked
<b>Search Engine (Google) BM</b>	<b>Two-sided BM</b> Free for users, but advertisers pay	<b>Bus</b> for users <b>Taxi</b> for advertisers	<b>Value</b> Advertisers pay after service is delivered	Complex tightly controlled linkages orchestrated by firm

Notes: © Table reserved to Charles Baden-Fuller, 2013, reproduced under licence