Perceptions and practices of innovation in retailing
Challenges of definition and measurement

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Abstract

Purpose – The purposes of this paper are to develop a more complete understanding both of the characteristics of innovation within retail firms and of the ways in which retailers perceive innovation and measure its effectiveness. Whilst there is a broad consensus that innovation is an application of new ideas that stimulate economic performance, the term attracts a wide range of interpretations that are largely contingent upon the context within which innovation occurs.

Design/methodology/approach – These aims are achieved through analysis at the level of the firm by means of qualitative research in the form of a series of in-depth interviews with more than 50 senior retail executives and other industry experts internationally.

Findings – The research results show that whilst retailers clearly recognise the important role of innovation for successful business performance, innovation in retailing nevertheless possesses a range of sector-specific meanings and measurement approaches that are distinct from more generic understandings of the phenomenon.

Originality/value – Whilst the paper summarises relevant literatures and presents the results of the primary research it also sets out a number of novel conceptual frameworks, which seek better to categorise the perceived meanings of retail innovation and the measurement tools most frequently employed to determine innovation effectiveness in retail firms. The proposed frameworks facilitate future scholarly exploration but are also of use to practitioners as a means of better understanding the nature of innovation within their businesses.

Keywords Innovation, Retailing, Organizational change, Meanings and definitions of innovation, Measures of innovation, Retail innovation

Paper type Research paper

Introduction

This paper aims to develop a more complete understanding of innovation within retail firms as well as of the ways in which retailers conceptualise it and measure its effectiveness. Whilst there is a broad consensus that innovation involves an application of new ideas that stimulate economic performance, the term attracts a wide range of other interpretations that are largely contingent upon the context within which the innovation occurs (Nelson and Winter, 1977; Damanpour and Schneider, 2006; Baregheh *et al.*, 2009; Townsend, 2010).

Early conceptualisations derive either from economics or organisation theory, and are predominantly based on a manufacturing-centred logic. Innovation within service industries, including retailing, has received less attention (Miles, 2000; Drejer, 2004; Djellal *et al.*, 2013) although this is changing. Whilst within retailing, the subject of this paper, definitions of innovation and the ways in which innovation effectiveness

might be measured remain notably under-researched and poorly understood (Wood *et al.*, 2008).

The flows of people, goods and money through the retail value chain have made retailers some of the most influential corporate actors in developed economies (Reynolds *et al.*, 2005), yet based on more conventional measures of innovation they score relatively poorly compared to other sectors such as pharmaceuticals, biotechnology or knowledge-intensive business services. For example, retailers exhibit lower levels of R&D intensity and numbers of patent registrations (Hughes, 2007). We might legitimately ask: what kinds of innovations do occur in retailing and what measures are used to assess its contribution to business performance?

This paper summarises relevant literatures and presents the results of the primary research into these questions in an attempt to provide greater conceptual clarity. It also sets out new frameworks aimed at better categorising the meanings of retail innovation and the measurement tools employed by firms. Finally, it explores some of the implications for both scholars and practitioners of the frameworks generated by the research.

Literature

Our goal in reviewing the broader literature on innovation is to achieve a more comprehensive assessment of the term, rather than to draw an a priori distinction between the generalised and sector-specific views of innovation.

Economists have long debated the various meanings of innovation. Early Schumpeter (1912) definitions account for a set of new outcomes contingent upon entrepreneurial behaviour, i.e.: the introduction of new goods; new methods of production; new markets; new sources of supply of raw materials; and new organisation of any industry. His innovation is essentially a "non-technological", "entrepreneurial" process of allocating available resources to new uses. Later economists characterise innovation mainly as radical technological change, causing fundamental shifts in the cost-quantity relationship and is measured through R&D intensity, or numbers of patents (Solow, 1957; Romer, 1990; Grossman and Helpman, 1994). From an evolutionary perspective innovation is defined as a socio-economic process dependent on "ex post" selection and learning than on "ex ante" forecasting. Its characterisations and effects could vary within different industry contexts, due to differences in institutional structures, R&D policies, or to managers' perceptions about the costs of or demand for innovation (Nelson and Winter, 1977).

The management literature goes beyond the sense that innovation is a radical technological change and conceive it as a broad range of outcomes or activities perceived to be new by innovating unit (i.e. a group or a business) (Zaltman *et al.*, 1973; Rogers, 1995; Gopalakrishnan and Damanpour, 1997). To this end, some scholars favour organisational definitions of innovation, since they involve the perceptions upon which managers act (O'Hare, 1988). Storey (2000) refers to contention over the very meanings of the term innovation, which in organisations is sometimes used loosely and interchangeably alongside terms like "invention" or "change". Further distinctions are made between "invention" and "innovation". Whilst "invention" is something novel for which a patent could be granted, "innovation" is characterised as commercialising novel ideas or as "the first positive sanction of the user". Here, measures of market or consumer acceptance of new ideas – rather than numbers of patents granted – provide better evidence of success rates for innovation (Akrich *et al.*, 2002, p. 188).

A rich literature also characterises types of manufacturing innovation as "incremental" or "radical" (Downs and Mohr, 1976; Dewar and Dutton, 1986; Nord and Tucker, 1987), "bottom-up or top-down" (Kimberly, 1979), "routine" or

"non-routine" (Dewar and Dutton, 1986; Nord and Tucker, 1987) and "sustaining" or "disruptive" (Christensen, 1997). Garcia and Calantone (2002) review various meanings of the term within new product development and propose an organising typology for defining product innovativeness from marketing, technological, macro- and micro-level perspectives. Innovation in services is less tangible or technology-based and therefore somewhat less easy to define and measure (Tether, 2005). Whilst an increasing body of literature differentiates patterns of services innovation (Pavitt, 1984; Barras, 1986; Gadrey *et al.*, 1995; Evangelista, 2000; Miozzo and Soete, 2001; Michel *et al.*, 2008), scholars generally agree that innovation in services remains under-researched and still poorly understood (Miles, 2000; Tether, 2005; Toivonen and Tuominen, 2006; Gallouj and Savona, 2009; Djellal *et al.*, 2013).

This has particularly been the case in retailing, where the innovation literature is relatively new and fragmented. Nevertheless a steady stream of recent publications is beginning to depict the retail innovation landscape. By analysing country-level retail data from the Community Innovation Survey (CIS5) and relating it to interview data, Reynolds and Hristov (2009) explored the nature and incidence of barriers to innovation in the sector. They concluded that, although definitions of retail innovation are still problematic, retailing is not inherently less innovative than other sectors within developed economies. Whilst organisational and regulatory barriers to innovation within the sector are perceived as low, retail firms identify risks in relation to costs – in particular the cost of finance – and the economic risks of innovation.

Other recent research highlights various innovation practices in the sector by exploring institutional change, characteristics of retail innovation, innovation output within various functional areas of a retail business, new retail technologies or channels to market. For instance Levy *et al.* (2005), Mitchell (2010) and Sorescu *et al.* (2011) continue the strong tradition of the earlier thinking on institutional change in retailing (McNair, 1958; Hollander, 1960, 1966; Christensen and Tedlow, 2000) by exploring drivers and patterns of retail model innovation. From a management perspective, Hristov (2007) highlights key characteristics and areas of retail innovation, whilst Medina and Rufin (2009) explore the mediating role of innovation on the broader strategic orientations of retailers. Their study concludes that retailers are active co-innovators within their supply chains and that innovation creates a strong impact particularly upon their market driving performance.

More focused research addresses innovation in specific functional areas such as retail planning, format and product development, shopper marketing, packaging, pricing, promotion or logistics (Reynolds *et al.*, 2007; Vernuccio *et al.*, 2010; Wood *et al.*, 2010; Grewal *et al.*, 2011; Hellström and Nilsson, 2011; Shankar *et al.*, 2011). Anselmsson and Johansson (2009) and Beckeman and Olsson (2011) study the influence of retailer brands on innovation in the broader consumer goods sector. Wong (2012) explores innovation in green product development, affirming a mediating role of green innovation on retailers' competitive advantage, whilst Grayson (2011) characterises innovation embedded in sustainability practices as a strategic value co-creation process among employees suppliers and increasingly customers.

A body of work examines the impact of new retail technologies, such as U-computing, self-service technologies or applications of RFID, on retailer productivity, operational processes and shopper behaviour (Bennett and Savani, 2011; Azevedo and Carvalho, 2012). Conversely Pantano (2014) describes retailers as passive adopters of new technologies and their innovation strategies as the means of enhancing their capacity of understanding markets and future trends, rather than developing new technologies *per se*.

Overall, we are not short of scholarly discussion on retail innovation. Nevertheless literature has yet to be found that clearly conceptualises the perceived meanings of innovation in retailing alongside its measurement practices. In fact Adams *et al.* (2008) observe a "curious lack of knowledge" about retail-specific performance measures of innovation in stark contrast to the intensely competitive and dynamic nature of the sector.

Methodology

This research adopts a qualitative methodological design and an inductive way of theorising (Burrell and Morgan, 1979; Gill and Johnson, 1991). Its units of analysis are the perceptions of senior managers both of innovation itself as well as of the measures of its effectiveness (Hodgkinson and Johnson, 1994; Coopey *et al.*, 1997; Kaplan and Norton, 2001; Porac *et al.*, 2002; Corbett *et al.*, 2007; Eggers and Kaplan, 2009; Lalit, 2011; Xu, 2011). The degree of external validity in such studies is always a consideration because of the tendency to employ smaller samples. Such limitations were minimised through the use of a larger mixed purposive sample, with respondents drawn from a variety of management and geographical milieux (Bryman, 1996). The sampling process was continuous rather than upfront, initially starting with a pilot group of practitioners and academics with whom we had undertaken preliminary discussions.

Qualitative interviews are a well established methodological approach in management science (Calori *et al.*, 1992; Boiral, 2003; Bryman, 2004; Reynolds *et al.*, 2005; Birkinshaw *et al.*, 2007). They have also been instrumental in understanding perceptions about the managerial challenges of innovation (Storey, 2000), in unravelling complex sector cognitions (Meindl *et al.*, 1994), or in comparing the cognitive structures of managers within and across industries (Bessant *et al.*, 2005; Reynolds *et al.*, 2007).

A pilot study sought to improve research focus and aid the design of a relevant interview instrument. The pilot included retail managers and industry commentators as well as academics in the areas of retailing, marketing and innovation. The interviews sought to validate the relevance of the topic and the extent of uncertainty over meanings and measurement. The pilot study was then followed by a new round of interviews with a larger purposive sample of 57 senior managers.

The overall sample was divided into two sub-groups. In total, 46 were retail executives (REs) and 11 were non-retail executives (NREs). The REs were chosen from a "wish list" of innovative retailers, based on expert recommendations, industry peer validation, and past and present holders or nominees for innovation awards. This sub-group included senior managers from all major retail functional areas. The interviewed NREs came from leading consulting firms with retail practices as well as from professional associations with large retail memberships. These individuals, who often had previous managerial experience in retailing, were invited to present "broader-brush" views about innovation in the sector (see Table I).

In this way we sought to create a rich range of settings in which perceptions about the meanings of innovation could be explored. The sample benefited from referrals from early interviewees, which was a deliberate way of meeting precisely the people whom their peers saw as "champions" of innovation.

The interviews, conducted face-to-face over one to two hours, comprised two groups of questions related to: the meanings of innovation in the context of retail organisations; and the measures used by retailers to evaluate innovation effectiveness. A narrative approach guided interviewees through the main topics but also provided

them with an opportunity to frame responses according to their own logic and experiences. Managers were asked to illustrate their answers with examples.

We chose to disaggregate RE and NRE interviews. This approach was useful for comparing and evaluating the views of managers within and across sub-groups (Eisenhardt, 1989; Yin, 1994). The analytical process involved initial "broad-brush" coding of the interview transcripts along the key themes in the interview schedule. Emerging cognitive differences in the course of the interviews called for further, more detailed, coding of the data. The process was facilitated by NVivo® software, which was used to automate and organise the data rather than in the process of theory building.

Results

Meanings of innovation in retailing

The first set of questions directly addressed the meanings of innovation in retailing. REs and NREs were asked to characterise the term from their own perspectives. They were also asked to give examples of innovations, which they regarded as successful and which had achieved lasting organisational impact.

Both sub-groups acknowledged overwhelmingly the crucial role of innovation for the performance of retail businesses. Without innovation, they suggested, "like-for-like growth and profit margins decline and organisations run into life-cycle issues":

> You get about two years under the sun and then suddenly there is a new kid on the block […] ever so often you have to take a long hard look at yourself (CEO, Retailer).

Yet, our findings also indicated that there was a real range of meanings and interpretations among practitioners. Managers acknowledged that defining and measuring retail innovation was difficult, since innovation was typically a collective process involving many individuals from different functional areas – including suppliers and customers. The term was often perceived as an all-purpose one, needing to be more carefully specified:

> Innovation, it's too big a term. To communicate it, one has to break it into its component parts (Managing Partner, Consulting Firm).

Most REs preferred using what they regarded as more concrete and relevant language. Chairmen, CEOs and board members consistently related innovation to "strategy" or "change", seeing it either as the means to achieve certain strategic aims or the component of a strategy. In total, 28 REs characterised innovation either as a strategic priority or acknowledged its strategic consequences. Some also described innovation as

REs	No.	NREs	No.
Chairmen/CEOs	12	Chairman/CEOs (consulting firm, industry association)	3
Board/functional area directors	22	Managing/senior partner and consultants (consulting firm)	4
Heads of department/	12	Directors (industry association)	2
		Customer insight director (consulting firm)	1
senior managers		Technology and innovation executive (industry association)	1
Total	46		11

Table I.
The sub-samples of RE and NREs

Notes: Functional areas: marketing, strategy/business development, NPD/design, commercial, store development, supply chain, retail operations, HR, finance, IT

the "implementation of growth ideas", which delivered "points of difference" through "cultures of creative restlessness":

> I think there are a whole raft of small things that we do every day […] but innovation is not a term which is established in our vocabulary, so all the time I'm trying to translate between what I mean and what we do (CEO, Retailer).

Some compared stereotypical perceptions about innovation – a "radical departure" from "business as usual" (Downs and Mohr, 1976; Dewar and Dutton, 1986; Nord and Tucker, 1987), produced by scientists in "white coats" – with what they saw as a more realistic, retail-specific interpretation:

> We prefer to use "newness". Innovation somehow carries the meaning of a radically new idea […] The majority of our incremental growth comes from "newness" – which I would describe as a stage below innovation. We also use reinvention. If we talk about brand spanking new innovations, they are a tiny proportion of our sales, probably less than 0.5% but if we talk about reinventions, they are in excess of 25% (Commercial Director, Retailer).

New product development directors characterised innovation mostly in terms of a retail range of tangible products or categories with various degrees novelty (including radical/discontinuous or incremental/continuous innovations) (Garcia and Calantone, 2002; Story *et al.*, 2009):

> Yes […] and if I use the term "innovation" it could mean bringing something to market with high levels of novelty or a significant reformulation of its characteristics […] which meets previously unmet consumer wants or needs. It might be or it might not be! It might be simply repacking to make the qualities of the product on the shelf more apparent to the customer, there could be re-launches that are about getting the graphics more strong or making most of a claim. So we sell 4,500 products and we change about 2,000 of them every year […] About 1,500 are brand new and about 500 are just sort of improved and upgraded (Head of NPD, Retailer).

Most NREs also believed that "innovation" as a term was not part of retailers' regular vocabulary and that, in practice, apparently clearer language prevailed describing innovation through activities or outcomes: such as "change", "growth refresh strategy", "experimentation" "market testing", "freshness of range", and "customer-centric new product development and introduction", etc. In this sense, an innovation was:

> Any new or creative thing that improves or changes the way a retailer operates (Consultant).

NREs also suggested that as intermediary innovators, retailers appeared to be more comfortable with continuous rather than "punctuated" change, their innovation being an evolving envelope of products and services within a continuously changing retail offer. Whilst retailers were particularly good in "hearing the voice of the customer" and "innovating their propositions accordingly", this – they felt – was applied more operationally than strategically. When having to think more strategically, retailers appeared to innovate more cautiously. Whether such risk-averse behaviour was a direct consequence of the dynamic and consumer driven nature of retailing, or a consequence of typically tight profit margins and limited resources, was debateable.

Some NREs also characterised retail innovation as largely non-technological in nature. Respondents suggested that technology could be seen as more of a "hygiene factor" and an "enabler" of increasing efficiency and profitability:

> When you talk about innovation some people automatically assume technology. In retailing, this is not the case. I think it is more about generating ideas and producing points of

difference. As to technology, everybody has to have it, but with technology alone you will not sustain your competitive advantage (Manager, Industry Association).

In summary, our analysis of the respondents' definitions across the RE and NRE sub-groups suggested that innovation in retailing could be of two kinds: "behaviour-related" and "outcome-related" in character. The behaviour-related innovation represented organisational change activities with profound and measurable impact:

- Innovation as the means for change and growth: for instance "new supply chain models of leveraging product co-development with suppliers' or' retail channels integration". Change of a magnitude that constantly pushed a business "out of its comfort zone":

  So the definition of innovation is "improvement". I don't want to innovate and make things worse […] Innovation in my view is nothing more than a way to create positive change and it is long-lasting (Chairman and CEO, Retailer).

- Innovation as a facet of strategy: the majority of managers also characterised innovation as a facet of strategy, which ultimately achieved differentiation. In congested retail markets, the prevailing view was that a firm could not differentiate itself meaningfully through copying. It needed to innovate within broader framework of a corporate strategy with adequate resources:

  I think innovation is a tool of strategy […] I am looking three-five-seven years out do we need to go to new markets and what are the risks of that and what are the cash flow implications […] I see innovation as a tool of that strategy (CEO, Retailer).

In more tangible "outcome-related" terms innovation was associated with new products, services or ways of operating. Here, two related meanings emerged:

- Innovation according to types of outcomes: product range innovations were the most common examples. This was understandable, given their tangibility. But some managers extended their definitions to "related activities" such as "services", "operational processes" or "support structures", which provided "speed" or "scale" to market and translated new ideas into viable products/services. Some of the terms used included "assortment mix" or "retail services" innovation, "scale-up" innovation, "fast" or "slow" innovation':

  I think, rightly or wrongly, innovation is seen more from a product perspective than anything else, but newness in retailing goes beyond the physical product […] (Marketing Director, Retailer).

- Innovation in terms of degree of novelty: some respondents referred to "true innovation" vs "renovation", others wondered whether improvements, reformulations, re-packaging or re-launches could be classed as innovation. Examples ranged from "continuous improvement of making good practice better", to larger scale transformational step-change. The terms used included "semi-innovation", "adaptive innovation", "continuous innovation", "inventive innovation", "ground-breaking innovation" or "industry leading innovation":

  It could be something that has not been done in our company, but exists elsewhere. But basically innovation for me is a kind of "breakthrough" and it could be in terms of concept or in terms of organization or market research, but for me innovation is to make things differently (Marketing Director, Retailer).

Respondents acknowledged that innovation – be it a "behavior" or an "outcome" – is invariably embedded in organisational cultural norms, beliefs and values. Many also therefore spoke of :"innovativeness" as "achievement-oriented behavior", or an "innate drive to succeed" strongly conditioned by an "organisational culture of creative freedom" within a strategic framework.

Measures of innovation in retailing
How are the characteristics and success of retail innovation measured? Both sub-groups felt strongly that measurement of innovation and the evaluation of its effectiveness were critical for its better management. However, the challenge of measurement was seen to lie in iterative and largely transversal nature of retail innovation across different functional budgets and areas:

> It's very difficult and I mean very, very difficult, to define and measure innovation in some parts of the business. For instance, funnily enough, our design team don't get financially "bonused" for being innovative, that's part and parcel of what they do […] our buying teams on the other hand do get heavily incentivised (CEO, Retailer).

Whilst the majority of REs were convinced that in general, they did measure the effectiveness of most of their innovation adequately, many NREs argued that the measures of innovation in retailing were skewed towards more tangible performance outputs and were less attuned to what have been called the "secondary" effects of innovation (Townsend, 2010) – defined as longer term, less tangible, outcomes with perhaps profound organisational impact:

> In retailing there is a tendency of overestimating the short term and of underestimating the long term effects of innovation (Strategy Director, Retail Association).

Our analysis identified financial and non-financial measurement types. Most agreed that some kind of toolkit of financial measures and key performance indicators were employed, but NREs were more sceptical about the extent to which innovation specific measures existed (see Figure 1). There was also acknowledgement across the sample that some of the softer benefits of innovation – related to organisational learning, total impact on the business and brand equity – were less well understood, due to limitations
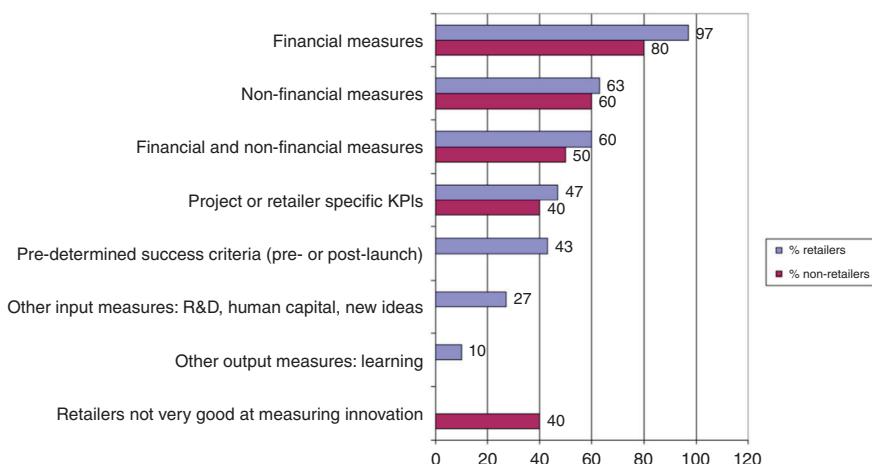

Figure 1.
Usage of financial and non-financial measures of innovation (% of RE and NRE noting the various measures)

in management accounting systems or lack of coordination among the various "budgeting silos":

> Yes, there are a number of ways [of measuring innovation]. I think financially […] is one way to do it, development of people is another way. I've seen innovation projects fail in all the measured ways that you could measure and accept that the people involved in it learn so much that you had to say for that benefit alone, that it benefited the company. So the people benefit is another very real, immeasurable in many cases way of evaluating it (Chairman and CEO, Retailer).

Financial measures. Financial measures of retailer performance provided visibility about the specific contribution of innovation to the business. They were seen as essential (see Figure 1):

> I look at all the things that are going to affect change, ninety-nine of them are finance-related; they have a financial benefit (CEO, Retailer).

Both groups gave many examples of financial measures applied to innovation activities, but there were three that stood out (see Figure 2):

(1) Sales and market share measures including "incremental sales in volume/value from new products (SKUs)/services", "like-for-like sales since launch", "total category uplift from new product introductions", and "sales densities" of new retail formats. Some retailers also had revenue targets for new products.

(2) Rate of return measures, e.g. ROI, ROIC, ROS[1]. These included "ROI from 6 to 12 months for new SKUs", "ROI of new retail formats", "ROI of new product introduction projects", "ROS targets for products (SKUs) after product launch", or "discounted cash flow", etc.

(3) Profit margins were considered a contributory factor in continuing or discontinuing a new product (SKU). Retailers often kept track of the direct product profitability of new products in view of optimising the overall assortment mix and pricing. At the outset, profit margin targets might be relaxed to give the new introductions "the chance to succeed".
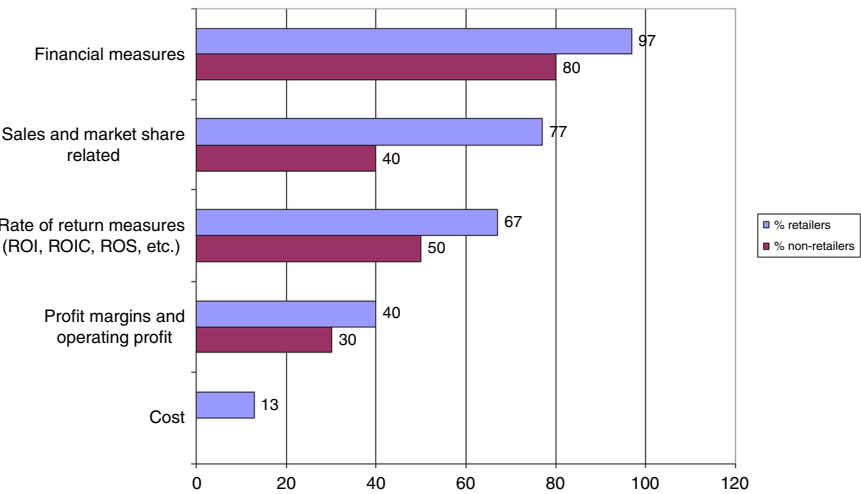

Figure 2.
Key financial measures of innovation (percentage of RE and NRE noting the various measures)

Non-financial measures of innovation. Non-financial measures of retail innovation, often more recently developed, sought to account for the share of new activities within a business or for the market success of these activities. Three types of measures stood out (see Figure 3):

(1) Number (or percentage) of new products in the retail product range. Respondents gave examples of at least one of the following: "number or percentage of new products, SKUs or product categories within a retail range", "percentage of new products sold [to date] compared to same date last year" ("like-for-like" share of new products in the range), "number of modified products vs entirely new products".

(2) Customer insight measures. Respondents believed that customer insights were essential non-financial indicators for successful innovation. NREs were critical of some retailers for not using more widely measures such as "rates of consumer acquisition and retention" through innovation, or measures of loyalty such as "net promoter scores", "customer satisfaction", "usage rates", "conversion rates", "frequency of purchase and repeat purchase" of new products.

(3) Time-related measures were designed to account for pre-or post-launch activities. So-called "time milestones" could track market penetration levels (e.g. rates of market share growth of new products in the first three, six or nine months since a product launch). Other time related measures included "time or speed to market".

Some respondents emphasised the need to understand the contribution of new retail concepts to store productivity performance, by projecting retail sales densities, and accounting for the retail space growth from new formats. REs particularly referred to "new brand" or "store image" measures, "competitive benchmarking" or "monitoring stock turnover from new products".

Discussion: typologies of innovation in retailing
Further interpretative synthesis allowed us to combine patterns across the two cases into conceptual frameworks depicting the shared perceptions of innovation among REs
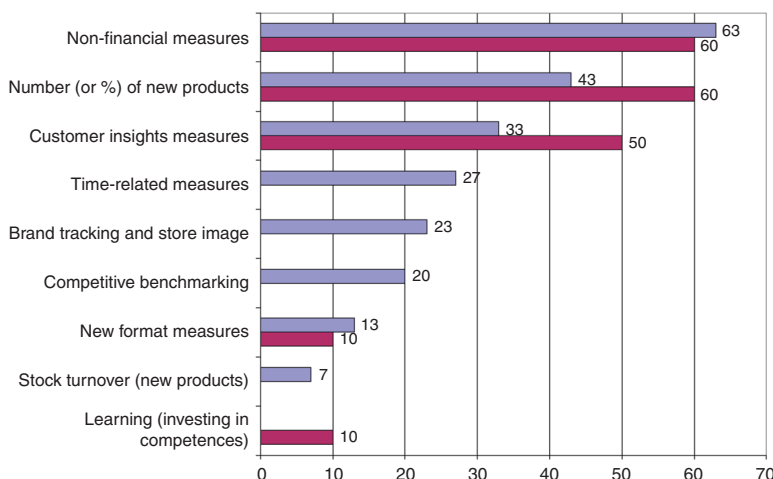

Figure 3.
Key non-financial measures of innovation (percentage of RE and NRE noting the various measures)

and NREs (Dopson and Fitzgerald, 2006). Whilst "behavioural- and outcome-related" retail innovation highlighted definitional distinctions described in the extant literature (Damanpour and Gopalakrishnan, 2001), in practical terms, managers were more comfortable thinking in terms of innovation as revolving around two axes; "organisational impact" and/or "areas of application". Figure 4 illustrates how these two interact.

Innovation according to impact
The research results suggested that although both "behavioural" and "outcome-related" retail innovation tended to be incremental and continuous, there was evidence of longer term, "step change" innovations representing strategic departure from established practices. Such innovation combined the efforts of multiple business areas. It involved leadership at a senior level, at times profound organisational change and required major investment in both financial and management resources. Examples of strategic innovation in grocery retailing included diversification by "sector hopping" from food to non-food and to financial services, the development of new retail concepts for international markets. It also included innovative business models of multichannel, digital and mobile retailing or social media marketing, which delivered extension or differentiation of the retail offer. Many of these were initially managed as separate strategic initiatives or projects:

> I look at businesses that we should buy or develop, new ways of looking at our business. So the Business Development Director is intimately involved in partnerships and strategic innovation development (Business Development Director, Retailer).

Operational innovation, be it "behavioural" or "outcome-related", translated a strategic vision into a set of more tangible activities. Innovation of this kind was predominantly, though not exclusively, continuous and incremental: for example, an extension of a

	Offer/customer - related	Support - related	Organisation - related
Strategic	e.g. The development of a new "big box" fashion store concept for retail parks e.g. A transition from a 3,000 to a new 12,000 sq. ft. store footprint e.g. Unveiling retail's first carbon neutral eco-store	e.g. The introduction of a new IT suit of business applications for CRM and supply chain management e.g. New distribution centre, fully automated in line with a fast fashion business model of buying in six-week cycles	e.g. External innovation networks linking up venture capital firms with business start-ups working with the retailer on innovation projects e.g. An accelerated NPD initiative providing 52 annual product themes
Operational	e.g. Extending the organic range of products from 300 to 1,000 SKUs e.g. In-store "retrofitting" of car components; satellite navigation, indirect vision mirrors e.g. Developing a new own label portioned coffee capsules system	e.g. Experimenting with electronic shelf-edge labelling, for automatic refreshing of prices throughout the store e.g. New delivery model of route planning optimisation	e.g. The introduction of "corporate merchandising guidelines" to maintain clear brand positioning e.g. "Best welcome initiative" for new employees joining the retailer

Figure 4.
A retail innovation matrix

private label range or experimentation with a new checkout queue management system. Such innovation benefitted incremental growth, operational efficiency and the quality of customer service. It could take place in any functional area of a business, although managers tended to single out areas such as store operations, marketing or new product development. Operational innovation would be funded through cyclical planning and budgeting processes and would therefore have short development and introduction timeframes of between three and 18 months. It would involve continuous "experimentation" within designated "test" or "lab" stores or wider series of market trials:

> The organization has constant need for fresh ideas […] with potential to drive new revenue streams (Chairman, Retailer).

Although the boundaries between strategic and operational innovation could at times be blurred, the two were differentiated on the basis of their organisational impact, the level at which they were managed, or through the amount of resources involved.

Innovation according to application areas
In the course of the interviews, managers identified 359 different examples of "strategic" or "operational" innovation. Those included improvements, extensions, "new-to-company" and "new-to-market" innovations and comprised three main areas of application:

(1) Offer/customer-related innovations (60 per cent) were front-line innovations including new product lines, product categories, retail services, store formats or channels to market. We saw these ranging from more tactical extensions in the number of SKUs within a product range through to more strategic diversification of the overall retail offer. This type of innovation was critically important for retailers since it was visible, customer-facing and was seen to have major impact on brand positioning, growth and differentiation. Such innovations were invariably developed on a cross-functional basis, drawing on expertise from marketing, buying, NPD, retail operations and would also actively involve external suppliers and buyers:

> There is product innovation and there are merchandising innovations, there are store format innovations and there are communications innovations. In an ideal world, you would want all those innovations focused on one point (Retail Marketing Director).

(2) Support-related innovation (22 per cent) encompassed ICT, supply chain and broader operational systems. Such innovations were less visible from a customer (or shopper) point of view but nevertheless essential for the efficient delivery of the retail offer and for its overall appeal. For example, the "Store-Friendly Supply Chain programme" of a major health and beauty retailer was instituted to achieve uninterrupted on-shelf availability across their extensive product range. Similarly the innovative supply chain model or a major on-line bookstore had enabled them to offer free delivery of books internationally:

> One project over which we have been working is the optimisation of our business processes and the redesign of our management information systems. We are closely looking into all our processes and how they can function in better co-ordination (CEO, Retailer).

(3) Organisation-related innovation (18 per cent) comprised innovations with strategic or operational significance that provided the management and delivery frameworks needed to sustain the previous two. Typical was business

model innovation, which might include new organizational structures, operating routines, or administrative processes:

> Twice a year […] all of us, the senior management, go on a "road show", visiting different regions […] I talk about our performance, future priorities and figures […] other directors and our host – the regional manager will also address the audience. We have been running the road show […] as a useful platform for communication (CEO, Retailer).

As a result of these various typologies, we propose a retail innovation matrix designed to comprehensively categorise the innovations occurring within retail businesses (Figure 4). We also provide examples from this research to show how such a matrix could be used either as a decision-making tool for innovation planning or for visualising and assessing a mix of innovation activities at various decision levels.

Measures of innovation in retailing and their integration
Finally, our more textured cross-case analysis also identified vertical measurement systems in use within retail firms, combining financial and non-financial metrics at various levels of accountability. These comprised:

- project specific systems;
- functional level systems; and
- corporate level systems.

According to managers, project measurement systems were the most customised. They were designed with specific project outcomes in mind and tracked the extent to which the project's objectives were met in terms of inputs, outputs, timescales, budget limits or management time. They comprised both financial and non-financial measures. Measuring the efficiency of innovation projects at functional level was usually a responsibility of the functional directors as budget holders (see Figures 5 and 6). In the case of larger, corporate-level projects these measuring systems would usually be developed by the CFOs in consultation with the participating functional areas. The heads of business development would also play a major role in the process since in many retail organisations their departments would be responsible for the "end-to-end" project management of strategic innovation.

Functional measures were designed to account for non-project specific innovation that took place within individual functional areas. For instance, NPD departments would usually have a set of efficiency measures that tracked performance in terms of profitability, cost/benefit, time and process management, technological output or market success. These measured "newness with functional flavor" as well as departmental contributions towards the overall corporate innovation output.

Finally, corporate level measures generally tracked the incremental contribution of innovation and comprised mainly financial measures of performance. The focus would be on the impact of innovation on revenue growth or profitability. However, whilst acknowledging the benefits of other measures – such as "R&D intensity", "number of new ideas", "number of ideas going through a particular stage-gate" or human capital measures including "staff involved in NPD", "staff time invested in new initiatives" – managers agreed that such measures were less commonly used at corporate level amongst retail organisations.

We propose a two-dimensional matrix, which illustrates measures quoted in our research but also provides a useful tool for a more targeted design of new measures of innovation performance (see Figure 5).

	Project specific measures	Functional level measures	Corporate level measures
Financial	e.g. NPD Project Incremental sales and ROI on the cost of the project	e.g. NPD Department: Departmental ROI – how much profit the department generates from their own brand and exclusive portfolio, divided by the cost of the department and the cost of design in a year	e.g. Financial benchmarking measures Productivity/profitability per sq. m (sq. ft) Productivity/profitability per SKU or category
Non-financial	e.g. NPD Project Peoples' time relative to number of SKUs launched	e.g. Marketing Area: Measuring the "hot spots" of a newly designed website by overlaying the individual web pages to identify areas of highest "click-through" rates Conversion rate – "click-through" to purchase	e.g. Brand tracking Store image measures Customer satisfaction Number of new products

Figure 5.
Measures of
innovation matrix

	Offer/customer - related innovation (strategic/operational)	Support - related innovation (strategic/operational)	Organisation-related innovation (strategic/operational)
Project specific measures (financial/non-financial)			
Functional level measures (financial/non-financial)			
Corporate level measures (financial/non-financial)			

Figure 6.
Integrative
measuring grid

Going further in the level of integration we also propose a single measuring grid comprising the three application areas of innovation and three types of retail measurement, which could be the basis for building comprehensive assessment methodologies for innovation planning and strategising. The grid accounts for the key areas of innovation, the level of decision making, the measuring systems and the types of measures involved or in need to be developed. It provides a useful tool for practitioners to achieve greater visibility across innovation activities and facilitates the development of appropriate measures for assessing their effectiveness (see Figure 6).

Managerial implications and conclusions

Through this research, we have sought to undertake an exploration of the managerial perceptions surrounding innovation in retailing. Our aims have been to achieve a greater depth of understanding, rather than simply breadth or statistical significance. Eisenhardt and Graebner (2007) remind us that the object of the kind of sampling we have employed is to select cases purposefully in order to illuminate an idea or construct, with the goal of developing novel theories about little known phenomena, rather than necessarily to test these empirically.

We see this research contributing to both the practitioner and academic understanding of innovation. Our findings tell us that retailers engage in far more innovation than either they, or commentators, acknowledge. Indeed, many retailers are reluctant to use the term innovation because of what they are led to expect from conventional interpretations. According to retail managers, the vast majority of innovations described "incremental newness", involving "experimentation", "continuous improvements" or "refinements" to products, technologies and practices within broader strategic and cultural frames that, together, provide a directional narrative. The open, distributed, incremental, non-technological and often hybrid nature of innovation in the sector means that retailers innovate differently; they see innovation through a "retail lens". Managers should embrace this difference.

In this respect, therefore, it is not so much the degree of novelty that should concern managers, rather the areas of application in which the innovation takes place. Successful innovations in the three areas we have derived from the data in our retail innovation matrix would allow firms to deliver better customer-oriented retail offers, a higher speed to market and more effective organisation.

At the same time, it is clear that the measurement and management of innovation in the sector is not always coherent. The majority of managers believe that innovation in retailing is certainly measured at various levels but not always adequately. Managers often measure what it is easy or conventional to measure arising from innovation (such as short-term financial benefits) rather than measuring what matters (such as longer term behavioural or organisational transformation). This seems to explain some of the apparent disconnect between the more strategic and primarily customer-oriented application areas of innovation, vs more operationally focused methods of measuring innovation where firms seem to have more effective tools in respect of short term, tangible performance targets. However, many of these financially oriented measures appeared less suited for immediately evaluating innovation in process design, customer services, organisational change and learning, in marketing, training and development or for evaluating the longer term impact of strategic innovation. These softer benefits are perceived as less well understood, partly due to limitations in management accounting systems and partly due to lack of clarity and coordination among the various "budgeting silos", as innovation cuts across

conventional boundaries within the firm. Although some progress has been made in tracking the share of new initiatives, there is broad acknowledgment that new, innovation-specific measures are needed to capture the total impact of innovation across multiple retail activities: there are "blind spots" within the measurement mix.

Our research proposes frameworks which, when integrated within a single measuring grid, could command considerable potential to aid firms in devising and deploying measuring methodologies more comprehensively and more precisely relevant to the meaning and utility of innovation in the retail sector. In particular, the integrative measurement grid requires a comprehensive set of project-specific, functional level and corporate level measures to be identified and related to innovations occurring in any of the three application areas within the retail firm.

In academic terms this research seeks to provide a fuller understanding of innovation by highlighting perceptions, practices and challenges experienced in the retail sector. The broader innovation literature eloquently accounts for the various technological and organisational meanings of innovation. Nevertheless, there is considerable scope to understand better the "localized" meanings of innovation by untangling these at the level of the retail firm. Without a good grasp of this context we cannot really understand meanings and, without clarity in meanings, we can neither understand practices nor assess impact. And so we have sought to contextualise the research field connecting areas of innovation such as the retail offer (Reynolds *et al.*, 2007; Anselmsson and Johansson, 2009; Beckeman and Olsson, 2011; Grewal *et al.*, 2011), the retail model (Sorescu *et al.*, 2011) and the underpinning retail technologies (Fernie *et al.*, 2010; Azevedo and Carvalho, 2012).

It is clear that whilst more "traditional" innovation typologies of "product vs process", "incremental vs radical", "technological vs management-related" are familiar ones, when we look through a "retail lens" we see meanings and reach conclusions influenced by practice, not least as a result of the intermediary role of the sector. Our analysis suggests, for example, that in retailing, a less categorical description of innovation than as a radical transformation holds. Radical transformations do occur in retailing but they appear from our study to be much less frequent in incidence compared to the continuous, incremental innovation at strategic and operational levels within the three key application areas we have identified, which is often more appropriate to the circumstances and characteristics of the sector in incrementally addressing customer needs. However, this is not the same thing as saying that retail innovation is a piecemeal, reactive process. Unlike the categorisation of Pantano (2014) of retailers as passive adopters of innovation, our research suggests that the innovation that does take place is active, constant and complex (from the management point of view) and involves innovation co-creation (rather than adoption from others), which capitalises on the market matching capabilities of retailers as intermediaries in a value chain in which they are closest to the consumer Market driving innovations are often co-created with the retailer acting as the innovation "hub" (Hristov, 2007; Medina and Rufin, 2009). This also resembles the multi-dimensional notion of "open innovation" as a collaborative process of leveraging internal and external resources and outputs which delivers growth (Chesbrough, 2003; Gassmann *et al.*, 2010) and where value is often co-created within a supply chain of internal and external relationships, including multiple suppliers (Akrich *et al.*, 2002; Vargo and Lusch, 2004; von Hippel, 2005; Vargo *et al.*, 2008).

Similarly, innovation in retailing appears less specifically technology-focused and more about continuous change, contrary to many authors (Tether, 2005; Pantano, 2014). For the retailer, the retail offer, the associated processes and required

organisation are configured in relation to changing market needs, in which technology is simply a means to an end. This is much closer to the entrepreneurial notion of innovation as an allocation of available resources to new uses.

To conclude, to our knowledge, this is the first qualitative study of innovation in retailing that explores perceptions of the meanings of innovation and the tools employed to measure its effectiveness, based on a detailed examination of practice. It is inevitably limited in that it is designed around a purposive sampling method from which generalisability is hard. However, the frameworks we have developed seek to enhance both the conceptual clarity of retail innovation as well as being designed to act as a stimulus for practitioners to address and resolve some of the challenges they face when managing that innovation. For scholars, we have sought to extend the peripheral vision of those studying innovation by means of a detailed and nuanced sectoral appreciation.

Note

1. ROI, return on investment; ROIC, return on investment capital; ROS, return on sales.

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