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Categorization of multiple channel retailing in Multi-, Cross-, and Omni-Channel Retailing for retailers and retailing

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ABSTRACT

Business experts have enthusiastically projected a seamless, retail world where customers can shop across channels, anywhere and at any time. This type of multiple channel retailing is often referred to as Omni-Channel Retailing. Within academia, by contrast, there have been proportionately fewer attempts to systematically categorize the diversity of multiple channel retailing that currently exists. Hence, the concepts Multi-, Cross-, and Omni-Channel are used indistinctly. This article proposes a categorization of Multi-, Cross-, and Omni-Channel Retailing for retailers and retailing by means of a literature review, a taxonomy of multiple channel retailing, a literature classification table, and by way of illustration, a mobile Click and Collect shop.

1. Introduction

Shopping via multiple channels is a rapidly growing phenomenon, with companies continually adding new channels (e.g., Ansari et al., 2008; Coughlan et al., 2006; Geyskens et al., 2002) and customers increasingly using various devices anywhere and at any time (e.g., Avery et al., 2012; Balasubramanian et al., 2002). For instance, every household with Internet access in Germany owns 5.3 web-enabled devices, whereby the share of table PC ownership increased from 8% in 2012 to 19% in 2013 (Van Eimeren and Frees, 2013). Additionally, business-to-consumer smartphone sales grew by nearly 23% from 2012 to 2013 (BITKOM, 2013).

However, a seamless purchase decision process across multiple channels remains a distant future goal rather than current reality, as retailers face constraints such as channel integration difficulties, or challenges such as decentralized organization structures (Zhang et al., 2010). The result is a fragmented channel landscape in which services such as "reserve online and collect in store" depend on the customer's device or location. Why, therefore, do authors not distinguish between fully integrated multiple channel retailing, and retailing that only sells merchandise or services through more than one channel? To answer this question, this article reviews the retailing literature on multiple channels, categorizes and conceptualizes retailing by means of its channel interaction and integration, and classifies its literature accordingly. By way of illustration, a mobile Click and Collect shop is subsequently classified and described.

Thus, the sole objective of this article is to create and promote a shared understanding of multiple channel retailing categories for retailers and retailing. Unless retailing through multiple channels is classified into conceptual categories, its political, economic, social, and technological borders will remain indistinct. This in turn will interfere with theory construction, and with research into retailing issues and technologies.

We define "channel", like (Neslin et al., 2006), as a customer contact point or a medium through which the company and the customer interact.

2. Literature review

2.1. Literature search

We sourced the electronic database EBSCO for the literature review and searched by title and subject terms. Search terms included various combinations of "channel", "multi", "cross", "omni" and "retail" including plural forms (e.g., "channels"), delimiters (e.g., "multi-channel"), prefixes (e.g., "across"), and suffixes (e.g., "retailing").[1] Additionally, the references listed in the articles were

[1] We note that the prefixes "cross" or "omni" are "buzzwords" whose use is largely due to business experts that report on particular integrated retailing solutions or future retail solutions. This mainly causes the large exclusion in the second step of the screening procedure. We found that combined expressions of "cross" with "retail" or/and "channel" like Cross Channel Shopper spread in gray literature and business reports from 1995 onwards, whereas "omni" in combination with "retail" or/and "channel" has been occurring more frequently since 2010.

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screened to locate further literature (Hart, 1998). The search range spanned from June 2014 and extended back to 1990 to coincide with the commercialization of the Internet through World Wide Web technology (Campbell-Kelly and Garcia-Swartz, 2013). The launch of the World Wide Web seemed to signal that a seamless, retail world in which customers could shop across channels, anywhere and at any time was within reach (Alba et al., 1997; Peterson et al., 1997). Both conference proceedings and journals that tackled more than one channel were included, while gray literature such as reports, theses, dissertations and other material were excluded (Ridley, 2012). We classified an article abstract as relevant when the authors examined retailing through multiple channels, including search behavior. Furthermore, we only considered articles with an abstract available in English. To assess the impact of the academic articles obtained, the number of citations each article received from Google Scholar was divided by the number of years since its publication. Finally, we included only academic articles with an impact ratio higher than 8. Our literature search yielded 1580 articles, which were then reduced to 30 academic articles that met the inclusion criteria. The screening procedure is shown in Fig. 1.

2.2. Synthesis of the academic articles

To synthesize the concepts presented in the 30 academic articles, we use a table containing the following information per article: author/s, year of publication, channels investigated, retailer/s examined, concept/s used to describe channel interaction and/or integration, and the impact factor in descending order. For more clarity, we unified various forms of spelling (e.g., using "Multi-Channel" for "multichannel") and expressions (e.g., using "physical store" for "traditional store"). Table 1 illustrates the results of the literature review.

2.3. Concepts of the academic articles

While retailing through multiple channels is sometimes categorized in gray literature, no formal categorization in academic articles exists. For instance, most business experts refer to a seamless, retail world in which customers can shop across channels anywhere and at any time as Omni-Channel Retailing (e.g., LCP Consulting, 2013). By contrast, most academics simply summarize it as Multi-Channel Retailing, irrespective of its diversity (e.g., Berman and Thelen, 2004; Zhang et al., 2010). In line with this, the combined search terms "omni", "channel", and "retail" yielded 151 articles, but only one academic article (Brynjolfsson et al., 2013).

In Table 1, we list the various terms for channel interaction and/or integration. As can be seen, the term Multi-Channel is used to describe both channels that are integrated (e.g., Neslin et al., 2006; Zhang et al., 2010) or interact with each other (e.g., Berman and Thelen, 2004), and channels that are not integrated (e.g., Avery et al., 2012; Tang and Xing, 2001) or do not interact (e.g., Verhoef et al., 2007; Balasubramanian et al., 2005; Venkatesan et al., 2007). A second term – Cross-Channel – is also used for the interaction of channels that are not integrated (e.g., Brynjolfsson et al., 2009; Falk et al. 2007; Montoya-Weiss et al., 2003; Van Baal and Dach, 2005) and for the interaction of channels that are integrated (e.g., Neslin et al., 2006; Zhang et al., 2010). Hence, the terms Multi- and Cross-Channel do not share a common meaning in academic literature, and thus their conceptual boundaries are blurred.[2]

[2] We further analyzed if the different use of the expressions multi/cross/omni can be linked to the researchers country or region of origin but found no patterns.

1. Search results from EBSCO by title and subject terms: n = 1,580 articles
2. 1,028 articles excluded because they were gray literature, or involved neither conference proceedings nor journals
3. Potential appropriate articles after the initial exclusion: n = 552 academic articles
4. 465 articles excluded for the following reasons: a) abstract not in English, b) abstract not relevant, or c) not more than one channel
5. Potential appropriate articles after the second exclusion: n = 87 academic articles
6. 57 articles excluded because of impact ratio lower than 8
7. Academic articles with an impact ratio higher than 8: n = 30 academic articles

Fig. 1. Literature search results.

We note that some academic articles use Multi-Channel as an umbrella term, and Cross-Channel to specifically address channel interaction. For example, Cross-Channel synergy (e.g., Avery et al., 2012; Neslin et al., 2006; Zhang et al., 2010). However, why do these articles use Multi-Channel both for retailing through fully integrated multiple channels, and for retailing that merely sells merchandise or services through more than one channel? In this scenario, where does the term Multi-Channel begin, and where does it end?

In short, the literature review shows that there have been relatively few efforts in academia to systematically categorize the diversity of retailing through multiple channels. As a next step, we identify several dimensions of channel interaction and integration, and construct concepts to distinguish and differentiate them.

3. Taxonomy of multiple channel retailing

3.1. Categorization of retailing through multiple channels

Although there seems to be common agreement that retailing through multiple channels is a complex and challenging set of activities (e.g., Agatz et al., 2008), to date no formal categorization of multiple channel retailing that satisfies its diversity exists. Hence, categorization is necessary to achieve consensus regarding the different channel interaction and integration categories within retailing, as well as to support accurate communication and harmonized thinking. Unless a diverse concept like "multiple channel retailing" is classified into common conceptual categories, its political, economic, social, and technological borders will remain indistinct. This in turn will interfere with theory construction and research into multiple channel retailing issues and technologies.

Berman and Thelen (2004) state that common characteristics of a well-integrated multiple channel strategy can include highly-integrated promotions, product consistency across channels, an integrated information system that shares customer, pricing and inventory data across multiple channels, and a process that enables store pick-up for items purchased from an online shop or catalog. Similar Neslin et al. (2006) identify five key challenges: data integration across channels; understanding customer behavior in a multiple channel environment; channel evaluation; allocating resources across channels, and coordination of channel strategies. Zhang et al. (2010) summarized the know-how required to craft integrated multiple channel retailing strategies, and listed as major challenges: organizational structure; data integration; consumer analytics; and evaluation and performance metrics. Schoenbachler and Gordon (2002) complemented this by indicating the importance of a customer-centric view to understand what drives multiple-channel buyer behavior. It follows that the diversity of multiple channel retailing depends on how processes and data are integrated from a retailer's point of view, and how

Table 1
Synthesis of academic articles.

Author/s year of publication	Channels investigated	Retailer/s examined	Concept/s used to describe channel interaction and/or integration	Impact factor
Alba et al. (1997)	e.g., Physical store, Catalog, Online Shop, Interactive Home Shopping	Retailers in General	Interactive Home Shopping	125.8
Peterson et al. (1997)	Physical Store, Online Shop	Retailers in General	Equilibrium Structure of Product and Service Markets	77.9
Montoya-Weiss et al. (2003)	Physical Store, Telephone, Online Shop	Two Retailers	Cross-Channel Synergies, Cross-Channel Effects	36.2
Neslin et al. (2006)	e.g., Physical Store, Telephone, Online Shop, Mobile Shop	Retailers in General	Multi-Channel Customer Management, Cross-Channel Synergy, Cross-Channel Shoppers	34.6
Ansari et al. (2008)	Catalog, Online Shop (email)	One Retailer	Customer Channel Migration	32.5
Verhoef et al. (2007)	Physical Store, Catalog, Online Shop	Retailers in General	Multi-Channel Customer Management, Cross-Channel Synergy, Multi-Channel Purchasing Behavior	27.9
Schoenbachler and Gordon (2002)	Physical Store, Catalog, Online Shop	Retailers in General	Multi-Channel Shopping, Cross-Channels, Integrated across Channels	22.5
Balasubramanian et al. (2005)	Physical Store, Online Shop	Retailers in General	Multi-Channel Environment, Channel Choice Decision	21.6
Venkatesan et al. (2007)	Physical Store, Online Shop	One Retailer	Multi-Channel Shopping, Customer-Firm Interaction	20.0
Zhang et al. (2010)	e.g., Physical Store, Catalog, Telephone, Online Shop, Mobile Shop	Retailers in General	Multi-Channel Retailing, Synergies across Channels, Cross-Channel Effects	17.3
Brynjolfsson et al. (2009)	Physical Store, Catalog, Online Shop	Several Retailers	Cross-Channel Competition	17.2
Deleersnyder et al. (2002)	Physical Store, Online Shop	Several Retailers	Channel Cannibalization	16.3
Gupta et al. (2004)	Physical Store, Online Shop	Retailers in General	Consumer Channel Switching, Retail Channel Switching	15.1
Verhagen and Van Dolen (2009)	Physical Store, Online Shop	One Retailer	Multi-Channel Synergy	15.0
Avery et al. (2012)	Physical Store, Catalog, Online Shop	One Retailer	Multi-Channel Retailing, Cross-Channel Elasticities, Cross-Channel Synergy	14.5
Tang and Xing (2001)	Physical Store, Online Shop	Several Retailers	Multi-Channel Retailing	14.0
Hahn and Kim (2009)	Physical Store, Online Shop	Retailers in General	Integrated Multi-Channel Context, Multi-Channel Retailing, Multi-Channel Retailing Strategy	13.4
Van Birgelen et al. (2006)	Physical Store, Telephone, Online Shop	One Retailer	Multi-Channel Service Retailing, Customer Satisfaction across Channels	11.4
Verhoef et al. (2010)	e.g. Physical Store, Catalog, Online Shop, Mobile Shop	Retailers in General	Multi-Channel Management, Multi-Channel Retailing, Multi-Channel Retailer, Multi-Channel Shopping Behavior	11.3
Falk et al. (2007)	Physical Store, Online Shop	One Retailer	Cross-Channel Dissynergies	11.0
Schröder and Zaharia (2008)	Physical Store, Catalog, Online Shop	One Retailer	Multi-Channel Customer Behavior, Multi-Channel Retailing, Identical Market Approach across All Channels	10.3
Biyalogorsky and Naik (2003)	Physical Store, Catalog, Online Shop	One Retailer	Cannibalization Effect	10.0
Berman and Thelen (2004)	e.g., Physical Store, Catalog, Online Shop	Retailers in General	Well-integrated Multi-Channel Format/Strategy, Multi-Channel Retailing	10.0
Van Baal and Dach (2005)	Physical Store, Online Shop	Retailers in General	Cross-Channel Shopping, Free Riding, Cross-Channel Consumer Behavior	9.8
Noble et al. (2005)	Physical Store, Catalog, Online Shop	Retailers in General	Information Search and Purchase Behavior across Channels	9.8
Brynjolfsson et al. (2013)	Physical Store, Online Shop, Mobile Shop	Several Retailers	Omni-Channel Retailing	9.0
Anderson et al. (2010)	Physical Store, Catalog, Online Shop	One Retailer	None	8.8
Gensler et al. (2007)	Telephone, Online Shop	One Retailer	Multi-Channel Management, Multi-Channel Shoppers, Managing Multiple Sales Channels	8.6
Bock et al. (2012)	e.g., Physical Store, Online Shop	Retailers in General	Multi-Channel Retailing, Cross-Channel Sanctions, Cross-Channel Customer Services	8.5
Cho and Workman (2011)	Physical Store, Catalog, TV, Online Shop	Retailers in General	Multi-Channel Choice, Multi-Channel Retailing	8.0

Table 2
A taxonomy of multiple channel retailing.

Dimension 1	Dimension 2	Concept	Category	Examples
No interaction can be triggered by customer	More than one channel or all channels widespread at that time	Multi-Channel Retailing	I	• Merchandise purchased from the online shop cannot be collected and returned in physical stores • Coupons cannot be redeemed across channels
No integration is controlled by retailer			II	• No customer, pricing, and inventory data are shared across channels • Inconsistent merchandise or services across channels
Partial interaction can be triggered by customer		Cross-Channel Retailing	III	• Merchandise purchased from the online shop or catalog can be collected or returned in physical stores • Merchandise information on mobile shop can be retrieved by scanning QR or bar codes in physical stores or catalogs • Customers gets information and directions to the next physical store where the merchandise is available triggered by location services while shopping on an online shop or mobile shop • Customers can check in with their mobile phones in physical store to get alerts for special offers while shopping
Partial integration is controlled by retailer			IV	• Customer, pricing, or inventory data are shared across at least two channels • Coupon push message from the mobile shop triggered by a physical store located nearby
Full interaction can be triggered by customer	More than one channel but not all channels widespread at that time		V	• Access to customer data, such as a wish list, on more than one channel but not all channels, e.g., the customer gets access to his wish list on the mobile, online shop, and in physical stores by asking a sales person but retrieving the wish list from the channel catalog of the retailer is not currently possible. • Booking the same flight via the telephone, online, and mobile is possible, but it is not possible to book it via the channel's physical store. • Coupons can be redeemed across all channels but not via the mobile shop
Full integration is controlled by retailer			VI	• Customer, pricing, and inventory data are shared across all channels but the retailer does not offer his merchandise via/by the channel catalog • Merchandise and services are consistent across all channels except the channel physical store
Full interaction can be triggered by customer	All channels widespread at that time	Omni-Channel Retailing	VII	• Coupons can be redeemed across all channels • Customers can return merchandise regardless of where they bought it from
Full integration is controlled by retailer			VIII	• Customer, pricing, and inventory data integration is controlled on all channels by the retailer • Merchandise and services are consistent across all channels

channels interact from a customer's point of view (Berman and Thelen, 2004; Neslin et al., 2006; Schoenbachler and Gordon, 2002; Zhang et al., 2010).

The proposed taxonomy therefore classifies multiple channel retailing according to two dimensions: (1) whether channel interaction can be triggered by the customer, or is controlled by the retailer; and (2) how many and what channels are considered. Furthermore, column 3 in the taxonomy shows the proposed concept and column 4 the respective category of the concept. Both retailers and retailing can be categorized in the taxonomy. Retailing is categorized according to the channels currently being investigated; retailers are classified according to the most diverse multiple channel retailing category they offer. For instance, a retailer that offers services for customers such as "reserve online and collect in store" (Category III) is referred to overall as a Cross-Channel Retailer. However, we note that a retailer that does not provide a Cross-Channel service within its own physical store can also be categorized as Cross-Channel Retailer. For instance, Ebay proposes pickup points at Argos stores in the UK. A physical retailer, who sells online through Amazon for instance, is a Multi-Channel Retailer if the customer cannot trigger any interaction and the retailer controls no integration between its physical store and its Amazon online shop. The proposed taxonomy of multiple channel retailing is shown in Table 2.

3.2. Multi-Channel Retailing: Categories I and II

Categories I and II refer to Multi-Channel Retailing. Although the retailer offers more than one channel or all channels widespread at that time, these channels coexist without the possibility for the customer to trigger interaction, nor the possibility for the retailer to control integration. If the customer cannot redeem coupons across channels, for example, Category I would apply, as from the customer's viewpoint, the channels do not interact. In another case, if the retailer cannot control the integration of the channels, for instance because the customer, pricing and inventory data across channels cannot be shared, it would be considered a Category II, as from the retailer's viewpoint the channels are not integrated.

3.3. Cross-Channel Retailing: Categories III and IV

Categories III and IV of multiple channel retailing refer to Cross-Channel Retailing. Contrary to Multi-Channel Retailing, with Cross-Channel Retailing the customer can trigger partial interaction and/or the retailer can control partial integration of at least two channels or all channels widespread at that time. For example, if the customer can purchase merchandise from an online shop and return it to a physical store, this would be part of Category III, since from the customer's viewpoint the channels partially interact. If the retailer controls partial integration of the channels, it belongs to Category IV. For example, if the customer receives a coupon push message from the retailer's mobile shop that is triggered by a physical store nearby, the channels are partially integrated from a retailer's viewpoint. If the customer then redeems the coupon in the physical store, this constitutes a multiple channel retailing interaction from the customer's viewpoint, and would again be classified as Cross-Channel Retailing Category III.

3.4. Cross-Channel Retailing: Categories V and VI

Categories V and VI of multiple channel retailing also refer to Cross-Channel Retailing. In comparison to the Categories III and IV, the customer can trigger full interaction and/or the retailer can control full integration of at least two channels but not for all channels widespread at that time. If, for example, the customer can access his personal data such as a wish list on more than one but not all channels, this would be part of Category V as from the customer's viewpoint, the respective channels fully interact. If the retailer controls full integration of the channels but not all those widespread, Category VI applies. For example, if the customer, pricing, and inventory data are shared across all channels except the channel catalog, the channels are fully integrated from the retailer's viewpoint.

3.5. Omni-Channel Retailing: Categories VII and VIII

Categories VII and VIII refer to Omni-Channel Retailing. The retailer offers the customer all channels that are currently widespread, which at present means the physical store, catalog, telephone, online shop and mobile shop.[3] Additionally, the customer can trigger full interaction and/or the retailer controls full integration of all channels. If, for instance, customers can return merchandise regardless of where they bought it from, then Category VII applies, since the channels interact fully from the customer's viewpoint. Category VIII means that the retailer has full control over channel integration. For example if the retailer shares customer, pricing, and inventory data across all channels, the channels are fully integrated from the retailer's viewpoint.

3.6. Hybrid forms of multiple channel retailing

In some cases channels do not interact from a customer's viewpoint (Category I), but they are partially integrated from a retailer's viewpoint (Category IV). For example, customers might receive a coupon push message from the mobile shop when they are close to a physical store (Category IV), but only be able to redeem the coupon in the mobile shop – not in the physical store (Category I). In conclusion, the multiple channel retailing is categorized in Multi-Channel Retailing Category I and Cross-Channel Retailing Category IV, and the retailer is referred to as a Cross-Channel Retailer. Exceptions are the Cross-Channel Retailing Categories V and VI and the Omni-Channel Retailing Categories VII and VIII, which cannot coexist with the Multi-Channel Retailing Categories I and II: Customers cannot access customer data on all the retailer's channels, widespread or not, unless the integration of customer data across all respective channels is controlled by the retailer. By contrast, Omni-Channel Retailing Categories VII and VIII can coexist with the Cross-Channel Retailing Categories III and IV. For instance, a retailer is able to control all customer, pricing and inventory data across all channels widespread at that time (Category VIII), but has elected to restrict customer access to customer and pricing data only (Category III). Fig. 2 shows the possible hybrid forms.

3.7. Conceptualization of Multi-, Cross-, and Omni-Channel Retailing

Referring to (Levy et al., 2013) the proposed three concepts in the taxonomy, namely Multi-, Cross-, and Omni-Channel Retailing, are defined as follows.

Multi-Channel Retailing is the set of activities involved in selling merchandise or services through more than one channel or all widespread channels, whereby the customer cannot trigger channel interaction and/or the retailer does not control channel integration. Hence, a Multi-Channel Retailer sells merchandise or services through more than one channel or all widespread channels, whereby the customer cannot trigger channel interaction and

[3] Mobile shop refers to mobile application as well as mobile or online websites with responsive design who are adjusted to mobile devices like smartphones or tablets.

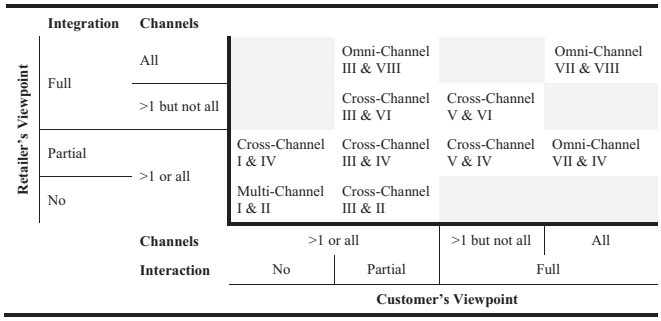

Fig. 2. Hybrid forms of multiple channel retailing.

the retailer does not control channel integration.

Cross-Channel Retailing is the set of activities involved in selling merchandise or services through more than one channel or all widespread channels, whereby the customer can trigger partial channel interaction and/or the retailer controls partial channel integration. Hence, a Cross-Channel Retailer sells merchandise or services through more than one channel or all widespread channels, whereby the customer can trigger partial channel interaction and/or the retailer controls partial channel integration.

Cross-Channel Retailing is also the set of activities involved in selling merchandise or services through more than one channel but not all widespread channels, whereby the customer can trigger full channel interaction and/or the retailer controls full channel integration. Hence, a Cross-Channel Retailer sells merchandise or services through more than one channel but not all widespread channels, whereby the customer can trigger full channel interaction and/or the retailer controls full channel integration.

Omni-Channel Retailing is the set of activities involved in selling merchandise or services through all widespread channels, whereby the customer can trigger full channel interaction and/or the retailer controls full channel integration. Hence, an Omni-Channel Retailer sells merchandise or services through all widespread channels, whereby the customer can trigger full channel interaction and/or the retailer controls full channel integration.

The following Fig. 3 summarizes the key findings and leads to more simplicity regarding the use of the categorization not only in academia but also for retailer and retailing in the field.

A categorization from the customer's viewpoint starts from the left side; and the retailer's viewpoint from the right side. If both sides are known to the categorizer, the result will be a hybrid form as shown in Fig. 2 and both sides of the interaction by the customer from the left and the integration by the retailer from the right have to be determined. Regarding the hybrid forms the variant lines indicate the dominating concept, for instance, full channel interaction of all widespread channels which can be triggered by customer and partial channel integration by retailer is classified as Omni-Channel Retailing, since the thin broken line connects the hybrid form Category VII and Category IV. The concept Cross-Channel is visualized with thick broken lines and the Multi-Channel concept with a consistent line.

4. Literature classification table

Table 3 classifies the academic articles obtained from the literature review according to the two dimensions of the taxonomy. Classifications are based on the information provided in the articles. If, for example, no information is given as to whether or not the retailer controls integration, the article is classified from the customer's viewpoint only. Academic articles that belong to two multiple retailing categories are underlined. The term "widespread" applies to all channels that were widespread at the time the respective articles were published.

According to the proposed taxonomy, Anderson et al. (2010) correctly use the term Multi-Channel Retailer to describe a retailer who sells merchandise through more than one channel, whereby the customer cannot trigger channel interaction and the retailer does not control channel integration. By contrast, Neslin et al. (2006) use the term Multi-Channel Customer Management to describe a seamless customer interface and experience across channels. According to our categorization, however, the article by Neslin et al. (2006) must be classified as Omni-Channel Retailing Category VII and VIII, since the retailer's customer management controls full integration of all widespread channels, and the customer can trigger full interaction between channels. Although Brynjolfsson et al. (2013) include the term Omni-Channel Retailing in their academic article's title, they only consider the interaction and integration of the three channels of physical store, online shop, and mobile shop. Hence, the article by Brynjolfsson et al. (2013) is classified as Cross-Channel Retailing Category V and VI, since not all widespread channels interact with each other. Specifically, the channels "catalog" and "telephone" are missing. Interactive Home Shopping (IHS) enables customers to shop anywhere and at any time, since Alba et al. (1997) use the term "home" merely to indicate that the customer can shop in a location other than a store. They view IHS as an additional channel, as they propose that retailers with an IHS presence can use IHS to presell merchandise as well as check its availability in physical stores. This would enable customers to pick it up or have it delivered from the physical store (Alba et al., 1997). Hence, the article is also categorized in Cross-Channel Retailing Category V and VI. Verhoef et al. (2010) are categorized as Cross-Channel Retailing Category IV as the main focus of their paper is only the integration on individual customer data from the retailer's point of view. Therefore it addresses partial integration as opposed to full integration whereby the retailer can control full integration between the channels. By contrast, Schoenbachler and Gordon (2002) focus on a customer-centric approach and encourage the development of synergistic channel alternatives rather than competing ones. Since they do not believe that full interaction is necessarily demanded by customers, the paper can be classified as Cross-Channel Retailing Category III.

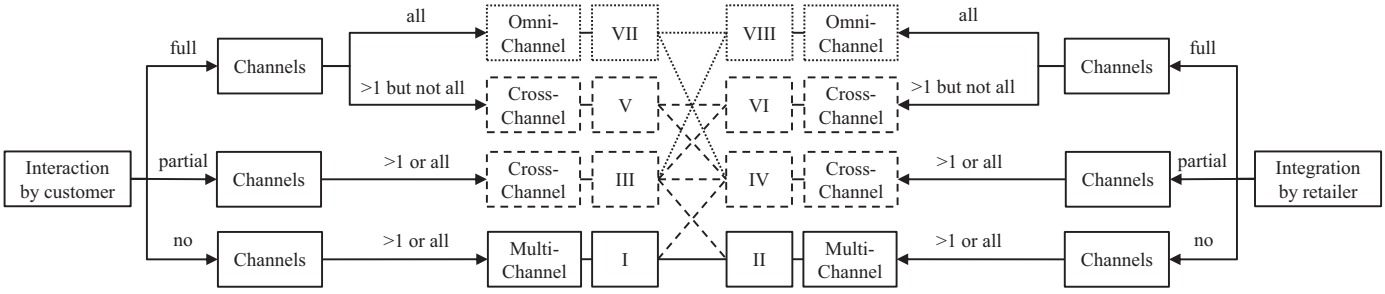

Fig. 3. Categorization tree in Multi-, Cross-, and Omni-Channel Retailing for retailers and retailing.

Table 3
Literature classification table.

Dimension 1	Dimension 2	Concept	Category	Classification of Academic Literature
No interaction can be triggered by customer	More than one channel or all channels widespread at that time	Multi-Channel Retailing	I	Anderson et al. 2010 Ansari, Mela, & Neslin, 2008 Balasubramanian, Raghunathan, & Mahajan, 2005 Bock et al. 2012 Brynjolfsson, Hu, & Rahman, 2009 Cho & Workman, 2011 Falk et al. 2007 Gensler, Dekimpe, & Skiera, 2007 Gupta, Su, & Walter, 2004 Hahn & Kim, 2009 Montoya-Weiss, Voss, & Grewal, 2003 Noble, Griffith, & Weinberger, 2005 Schröder & Zaharia, 2008 Van Baal & Dach, 2005 Van Birgelen, Jong, & Ruyter, 2006 Venkatesan, Kumar, & Ravishanker, 2007 Verhagen & Van Dolen, 2009 Verhoef, Neslin, & Vroomen, 2007
No integration is controlled by retailer			II	Anderson et al. 2010 Avery et al. 2012 Biyalogorsky & Naik, 2003 Brynjolfsson, Hu, & Rahman, 2009 Deleersnyder et al. 2002 Tang & Xing, 2001
Partial interaction can be triggered by customer		Cross-Channel Retailing	III	Peterson, Balasubramanian, & Bronnenberg, 1997 Schoenbachler & Gordon, 2002
Partial integration is controlled by retailer			IV	Peterson, Balasubramanian, & Bronnenberg, 1997 Schröder & Zaharia, 2008 Verhoef et al. 2010
Full interaction can be triggered by customer	More than one channel but not all channels widespread at that time		V	Alba et al. 1997 Brynjolfsson, Hu, & Rahman, 2013
Full integration is controlled by retailer			VI	Alba et al. 1997 Brynjolfsson, Hu, & Rahman, 2013
Full interaction can be triggered by customer	All channels widespread at that time	Omni-Channel Retailing	VII	Berman & Thelen, 2004 Neslin et al. 2006
Full integration is controlled by retailer			VIII	Berman & Thelen, 2004 Neslin et al. 2006 Zhang et al. 2010

Even though some articles (e.g., Avery et al., 2012; Hahn and Kim, 2009; Verhoef et al., 2007) make suggestions for Cross-Channel Retailing, for instance, “buy online with free in store pickup, or online coupons that can be redeemed in store”, the academic articles are classified as Multi-Channel Retailing because the actual channels investigated are not integrated from a retailer’s viewpoint, or do not interact from a customer’s viewpoint. Furthermore, we do not consider search behavior across channels to be channel interaction triggered by the customer. As an example, Van Baal and Dach (2005) investigate customer behavior across the two channels of online shop and physical store. They use the term Cross-Channel Shopping to describe customer behavior with regard to searches and purchases. However, we classify the literature as Multi-Channel Retailing, since the customer’s search behavior cannot trigger interaction between the channels.

A hybrid form of multiple channel retailing is described in the article by Schröder and Zaharia (2008). The authors (Schröder and Zaharia, 2008) examine a retailer whose market approach is identical across different channels with regard to assortments, pricing, service policies, communication policies and store branding (Cross-Channel Retailing Category IV), but focus on examining the buying process stages of “information prior to purchase” and “purchase” across channels from a customer’s viewpoint. Since we do not view search behavior across channels as interaction triggered by the customer, the article (Schröder and Zaharia, 2008) also belongs to Multi-Channel Retailing Category I. Verhoef et al. (2007) classify the academic article by Montoya-Weiss et al. (2003) as a single channel study. By contrast, our proposed classification considers every investigated channel. Thus, the academic article by Montoya-Weiss et al. (2003) is categorized as Multi-Channel Retailing, since three channels are examined and the customer can, for instance, choose between the channels “telephone” and “online shop”, but cannot trigger channel interaction.

The literature classification table illustrates a research focus on Multi-Channel Retailing in comparison to research on Cross- and Omni-Channel Retailing. More precisely, very few academic articles with an impact ratio higher than 8 on Cross- and Omni-Channel Retailing exist. For instance, both academic articles, by Chatterjee, (2010) and by Cameron et al. (2012), would have been classified as Cross-Channel Retailing literature if their impact factor had been higher than 8. In conclusion, academia should focus further on Cross- and Omni-Channel Retailing issues in future research.

5. A mobile Click and Collect shop

The following section shows that the academic taxonomy is also applicable for retailers and retailing in the field regardless of the channels they use. It describes a new retailing format, a mobile Click and Collect shop, and categorizes it in the proposed

taxonomy by way of illustration and as a stimulus for future research.

A mobile Click and Collect shop belongs to the channel category of "mobile shop" and connects the retailer's mobile shop with its physical store channel. It enables the customer to order from the mobile shop, and then collect the merchandise at a physical store or a collection point. In short, it combines the strengths of physical stores with those of a mobile shop. Customers can reserve or buy anywhere and at any time at the mobile shop (Balasubramanian, Peterson, and Jarvenpaa, 2002), and retailers can sell additional merchandise and services (eBay, 2013), increase the repurchase intention (Chatterjee, 2010), establish a relationship with the customer (Alba et al., 1997), and add customer value through a good shopping experience (Alba et al., 1997; Balasubramanian et al., 2005).

Using the proposed taxonomy, retailing through a mobile Click and Collect shop can be classified as Cross-Channel Retailing. The customer can trigger partial channel interaction (Category III), and the retailer controls partial channel integration, since promotions from the mobile Click and Collect shop are triggered by a nearby physical store (Category IV).

In conclusion, a mobile Click and Collect shop offers additional benefits for customers and retailers alike and its investigation can add useful input to the Cross-Channel Retailing domain.

6. Conclusion

6.1. Discussion and implications

Whereas several attempts have been made in business to categorize multiple channel retailing, relatively little effort has been made in academia to systematically classify its diversity. Consequently, the use of the concepts Multi-, Cross-, and Omni-Channel in academic articles is blurred. In order to clearly define the boundaries of these conceptual categories, we identified a taxonomy of multiple channel retailing by means of a literature review. This formal categorization handles the rapidly growing complexity and diversity of multiple channel retailing more clearly and succinctly.

Equally important, is a shared understanding in academia of the various categories of channel interaction and integration for retailing and retailers that can support accurate communication and harmonized thinking. Hence, we propose the concepts Multi-, Cross-, and Omni-Channel Retailing and Multi-, Cross-, and Omni-Channel Retailer. These distinctions will improve theory construction, and facilitate research into retailing issues and technologies.

6.2. Limitations and future research

In conclusion, we believe this article has contributed to a shared understanding of multiple channel retailing categories for retailers and retailing. However, the article is subject to limitations that can provide stimuli for future research.

Since our sourcing only includes search data from the electronic database EBSCO, caution must be used when generalizing our search results to other databases. Although we screened the references listed in the articles to locate further articles (Hart, 1998), it would be worthwhile to source other databases such as Scopus in similar depth.

The possibility of conformation bias, which describes the tendency to promote information that confirms one's theory, is a ubiquitous phenomenon (Nickerson, 1998). We have attempted to minimize this in our research by means of a systematic literature review so that readers who dispute our conclusion can readily conduct their own re-review by adding or subtracting articles or inclusion criteria (MacCoun, 1998).

Another limitation is that the authors of the academic articles obtained know more about their data sets, investigated channels and examined retailers than we can synthesize when reading their articles cover-to-cover. The only way to guarantee a fully accurate classification is for researchers to deliberate their own articles, and determine their own classifications. All our classifications are based on the content of the academic articles, with no knowledge or assumptions beyond it.

As with any taxonomy, there are many details that do not neatly fit within the given classifications. For example, although catalogs are becoming increasingly digitalized, a customer is not currently able to access his wish list through a classic paper catalog. For this reason, the interaction and integration of all widespread channels is considered a future scenario. In other words the taxonomy is time noncritical, as it implies through the additional clause of all widespread channels "at that time" that in the future a classic paper catalog will probably not be widespread anymore.

The literature classification table demonstrates that research on Cross- and Omni-Channel Retailing with a high impact factor is sparse compared with research on Multi-Channel Retailing. Accordingly, academia should focus further on Cross- and Omni-Channel Retailing issues in the future. As a stimulus for future research in the area of Cross-Channel Retailing we introduced a mobile Click and Collect shop by way of illustration, listed its benefits for customers and retailers, and ended by emphasizing potential Cross-Channel synergies.

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