The Evolution Tornado Retail

By Prof. Dr. Bernd Hallier, Germany

real-

WAL★MART

METRO

Abstract

Retail has changed dramatically within a period of the last 60 years. Most obvious for the consumer is the physical outlet, which has developed from a small-size Mum and Papa service store to big hypermarkets as a self-service offer. While the assortment just after World War II consisted only out of basic food, during the next decades the product-range exploded due to more and more convenience for the consumers and a broad segmentation of tastes, package-sizes and me-too-choices. The Western part of Europe became an affluent society.

Less seen by the consumers but more by the experts and some dedicated academics is the change of the backstage in retail. The strategic tool to cope successfully with mass-distribution was the introduction of IT-systems in the 70ies of the last century. The key to control the flow of the individual product was the product- bar-code used by scanner at the cashier – later also enlarged by chips to control by Efficient Consumer Response (ECR) all the Total Supply Chain.

No attention at all was paid to the evaluation of philosophies offered by the steady upgrade of retail-technologies. While the period 1970/80 was still the push period , when the consumer industry wanted to push the penetration of its products the outlet was the “point of sales” (POS); in the 90ies due to ECR the outlet was rediscovered as the “point of purchase” (POP) with the buying decision and shelf-optimization as a central point; in the last decade big players like WalMart, ALDI, REWE push their outlets to be the “point of differentiation” (POD) to gain an Unique Sales Position (USP) in the market. The next big “technological jump forward” will be the intertwining of Facebook, YouTube, Twitter with new media of retailers. Consumers can gain much more impact onto the listing of products, onto services within a store. It might be the time when the outlets become a “point of consumers” (POC) again.

Key words: Total Supply Chain, innovation waves, POS, POP, future innovation-concepts

1. Introduction

Production, distribution and consumers can be defined as a Total Supply Chain, which is one of the most penetrated academic and operational views at the moment – but it mostly describes only the status quo or is a version of technical cooperation between suppliers and distributors (retail industry).

Not yet deeply analyzed is the evolution of production, distribution and consumer as a sustainable evolution over longer time-periods reflecting the introduction of a joint development of those three stakeholders. Innovation-cycles mostly do not emerge separately from one string of those three stakeholders alone, but are in a permanent interaction of influence. Only if this interaction between those three players is successful, then the market will experience a new wave of innovation.

The parameters of this thesis is the history of innovation of the total supply chain in Western Europe; time-cycles in America, in Southern Europe, South East and East Europe are different – for example due to consumer behaviour or simply due to the fact that in the former communist countries modern thoughts could only enter after the lift of barriers between East and West.

2.0 Innovation Waves

In macro-economics Nikolay Kontratjeff was the first to describe innovation waves/cycles (Kondratjew, 1926); on the company-level it was A. Schumpeter who analyzed the life-cycles (Schumpeter, 1961). In between is the retail industry as a segment of a national/international economy – the first descriptions of 25-year-long cycles starting from the year 1800 were described in 2004. After World War II those innovations had been in roughly 1950 the introduction of self-service/supermarkets, in 1975 the shopping centres and category killers like IKEA, ToysRus and in the year 2000 the internet with B2B and B2C (Bauer und Hallier, 1999; Hallier, 2004).

That rough pattern of course can be broken down into more detailed facets for the total retail industry – also as a bench-mark for the individual company performance.

2.2. The introduction of self-service.

In the 50ies and 60ies the traditional service-stores were challenged by “supermarkets” from America (ISB, 1988; Hallier, 2001). The characteristics of those markets is “self-service” which implies:

- products have to be pre-packed either in a depot of the retailer or directly from the supplier.
- The oral “recommendation” of the retailer has to be substituted by design and descriptions on the packed product or by in store advertising either at shelf or special presentation zones.
- In consequence the shelves within the stores had to be accessible
- The selection of products and the action of payment in the cash-zone were split

2.1 The Mum and Papa Service

Stores For Western Europe a new Chapter of Innovation in retail started after World War II. (ISB, 1988; Hallier, 2001; Hallier, 2004).

the 50ies of the 20th century in Germany for example the characteristics of the food sector had been:

- stores belonging mainly to consumer’s cooperatives
- with very atomistic influence onto the suppliers mostly in walking distances of some minutes for the consumers - organized instore in service concentrating to pack sugar, beans, butter, margarine from bulk
- delivery into the quantities demanded by consumers
- with a limited assortment of roughly 200 products
- offered by stores of about 30 to 40 square meters
- in towns quite often split into specialist-shops like milk-shops, fruit and vegetable shops ...

As the products were not “pre-packed” of course no real branding could happen for most of the products. Branded goods like “Oetker”, “Bahlsen” were in minority. The consumer were guided by the oral advice of the shop-owner/-manager. Due also to small flats and without cooling-opportunities for butter, milk etc. consumers visited daily their neighbourhood-store. The outlet was not only supplying the consumers with products – but was within a limited radius a social communication centre.

- In general the cash-register was technically organized into “product-groups” with the result that payment was quick on the one hand side but also with the bad effect for the store not to have product-data.
- Generally the costs for personnel for the retailers decreased due to less manpower - Self-service became more competitive in comparison to service-stores

According to statistics from the original roots of the EHI Retail Institute the first 80 self-service stores in the Federal Republic of Germany had a size in-between 35 and 330 square meters in 1952; for 1958 the data of a panel for the size of the assortment shows about 1000 articles – 100 of them in non-food-segment. (2.2)

real-

WAL★MART

METRO

The ultimate focus to the purchasing consumer of course is the link between product-data from the scanners in combination with loyalty-cards which provide individual consumer-data; this is a development starting in the USA-market at the 80ies and in Europe with a time-long of twenties years in the beginning of the century. Also politically already the 80ies saw more influence of the consumer towards the total supply chain. One symptom was in Germany the “Green Party” demonstrating against Coca Cola-tins in nature, the waste in general, the burning of garbage in densely populated areas. The German Federal Government reacted by the appointment of a Minister of Environment. He established regulations downsizing one-way-package and to promote multi-trip; he started to add to the term “distribution” the term “redistribution”; he redefined “waste” into “reusable resource”. He – Prof. Dr. Klaus Toepfer – initiated the Kyoto-Protocol for sustainability and decrease of CO₂-emissions. For his packaging regulations in Germany Toepfer discovered the market-power of the retailers; he threatened to punish them – and forced the retailers by this action to influence the suppliers. DHI/EHI supported the initiative to create more awareness and helped to bridge the political vision and the applicability at retail and suppliers by workshops and the publication of five monographs dealing with this topic (DHI, 1991; EHI, 1993).(2.4)

2.3. On the way to mass-distribution

The phenomenon of the late 60ies and the 70ies is mass-distribution like characterized by Andy Warhol in his Coca Cola - picture 1 (Hallier, 2004). Mass-production and mass-distribution are the symbols of democratic consumption: “the president of the USA is drinking Coca Cola – you can drink Coca Cola – Coca Cola is on the shelves of your supermarket!” Due to the macro-economic recovery of Western Europe and prosperity within the Western World the personal income of consumers increased - followed by more demand – which was reflected by a growth of retail-space and a segmented product- assortment. EHI registered in 1966 still 0.25 million square meters sales-space growing in 1976 to 4.6 million and reaching 1986 about 6,7 million square meters. The potential size of the individual stores seemed never ending: a hypermarket near Cologne/Germany opened with about 35,000 square meters (25 years after the stores-size average of 35 square meters)

The store-size of course also reflected the explosion of the assortment: contrary to 200 articles at the Mum and Papa-store and 1000 articles at the first self-service store now hypermarkets offer on average 40,000 articles. The effect in the relationship between product-range and the consumer as a human being is characterized in the “99 cent” picture of A. Gurski, where within a nearly unlimited assortment only the discount price can be seen- and the consumer only plays the role of an “underdog” in the picture 2 (Hallier, 2009).

Nevertheless was and is the consumer not only the target, but he is also the driver of the development.

- Due to an increasing mobility of consumers those big-size-markets and Shopping-Centers could be established at the suburbs.
- As consumers live in bigger flats than in the 50ies they can store more products- Also their technical equipment at home (refrigerator) enables them to buy bigger units for longer consumption-periods
- Last but not least they changed their consumer-habits with the trend for more convenience. While in the 50ies they bought for example milk to keep it for three days in a bowl to produce their own yoghurt - now they select between low or high calories, between different fruit-tastes, between other ingredients. Another trend of modern consumption is to have seasonal fruit available all over the year as global supply offers “spring” also when he/she at the consumers’s home is experiencing just “autumn”.

Additionally the consumer stopped since the 70ies his habit to be loyal like at the Mum and Papa-time: he is using multi-choices! Self-services allowed him to become anonym. Also his opposite – the retailers – became anonymous. Due to self-service the store- owner could multiply his stores. From atomistic local retailers regional spider- networks/chain stores derived and in the 70ies names of cities/areas became synonyms of the retailer-network: Würzburg-Kupsch, Frankfurt-Latscha, Cologne/Köln – Stüssgen. Those chain-store-operations generated a certain win-win- situation between retail and suppliers: large scale economics. In hot-pursuit of retail expansion and to care for the danger of out-of-stock situation suppliers together with specialized agencies created in the 70ies POS-display-promotions. In the marketing- terminology this period remains as the “push-strategy”. Buying much from the supplier created rebates for the retailers which again could be passed on to the consumers to decrease prices and thereby again stimulated increasing demand and growth for those retailers with the lower price.

2.4. From POS to Point of Purchase (POP)

The permanent increasing speed of new articles from the producers, from new stores from retailers, also from store-segmentation and store-diversification on retail-level, created the need for data-management not to run out of control of the situation. Consultants and technical suppliers like IBM, Nixdorf started in the beginning of the 70ies to provide information-systems by electronic data-machines; retail got into a strong correlation with the technical development of hardware and software industry. In 1974 for example in Germany EHI and the Branded Goods Association (Markenverband) created as a joint-venture the German Accreditation for bar-coding (European Article Number) which had quickly cross-border-partner organizations.

The name “Coorganization” in Germany reflects the willingness of suppliers and retailers to work together. The scanner at the cash-zone of the retailer-outlet brought back to the retailer information about the sales of individual products on store-level. Next steps in the 80ies referred to the optimization of the shelf-space via international work-groups concerned with projects like “Direct Product Profitability (DPP/DPR)” and in the 90ies “Efficient Consumer Response (ECR)” (ISB, 1980; Hallier, 1987; ISB 1989; Heidel, 1990; DHI, 1992; EHI, 1994; Behrends, 2001). Especially the ECR shows that in the center of the total supply chain the consumer’s shopping basket was placed again: this meant a swing from the “push-action” to a “push-strategy”! Strategically retail got empowerment by those marketing-tools and gained the dominance over the suppliers (Hallier, 1995)

[.Picture 3: The Empowerment of Retail by Marketing-Tools(next page)]

The Empowerment of Retail by marketing-tools

Source: Prof. Dr. B. Hallier/EHI

Putting the idea into practice Претворяя идею в жизнь

In the 90ies another factor of change were several food-scandals like the British Cow Disease. Consumers in Germany were afraid that the meat at the stores came from the UK! Beef at that time (first BSE-crisis in 1994; second crisis in 1996) was an anonymous product – sometimes passing up to 10 different stages of farmers, animal wholesalers, slaughter houses, cutting houses, meat wholesalers, retailers. Again in Germany retailers became pro-active before national/regional governments the drivers for innovation for the Total Supply Chain. Organized by EHI in 1994 meat- experts meat suppliers and defined a system of tracking and tracing of meat and organized the control in a joint-venture of EHI and the farmers' CMA (Central Marketing Agency) called Orgainvent. Parallel government introduced ear-marking of cows. In 2002 the EU took over this facultative system as a mandatory EU-regulation (EU 178/2002) (EHI, 1997; EHI, 2001; EHI, 2005).

Picture 4: Round Table for Demand and Supply (Putting the idea into practice)

That tracing and tracking activity demonstrates an important shift for the academic discussions defining “retail-institutionalized” or “process-oriented”: the EHI-retailers acted also on behalf of their wholesalers (or their own wholesale-activity) and the suppliers-modern retailers are part of a supply chain. This special role of a driver for innovation for new thinking on behalf of consumers’ interests also is reflected by the EHI initiative to stimulate “good agricultural practice” first by “EUREPGAP” and later by the enlarged “GLOBALGAP” as well as lately also by the initiative “Environmental Retail Management” (EHI, 1999; EHI, 2000; 2008; www.european-retail-academy.org/ERM)

Summarizing those trends and initiatives it can be stated that the Point of Purchase (POP) – thinking gives more weight to the consumers than the POS-thinking, but it also shows the gaining influence of Non Government Organizations (NGO) like the EHI Retail Institute, Orgainvent or GlobalGap onto the Total Supply Chain and legislation.

Taking over responsibility not only for the retail-level but for all the Total Supply Chain the backstage becomes involved into business of wholesale, packaging, processing, agriculture, watering and pesticides etc. Retail is drifting strongly away from its definition as “institutionalized retail” towards a definition of “process-oriented retail”. Due to the company size of the top-players and the global activities of the retailers the consumers keep the retailers much more reliable than in the past. Responsibility becomes also part of the competitiveness and communication.

EHI Retail Institute created for the communication with third partners in July 2008 in the internet the environmental platform: www.european-retail-academy.org/ERM and introduced a three years research-program with the title “Environmental Retail Management” (News of August 15th 2008 at www.european-retail-academy.org/ERM). One of the first steps was a theoretical benchmark-project with the title Environmental Retail Flow Chart (News December 19th 2008). Taken all environmental oriented efforts concerning the buying, distributing, marketing of products along the Total Supply Chain as 100 percent – the retailers could judge themselves how much of their efforts in percentage of that total would concern each of the individual steps within the Total Supply Chain.

A comparison of that self-check by several retailers shows that the emphasis by the individual players is in 2009 still very different.

Table 1: Environmental Flow Chart

Level	%	%	%	%	%	%
<i>Agriculture</i>	30	-	25	5	17	-
<i>Processing/packaging</i>	20	25	10	15	13	-
<i>Building (depots/outlets)</i>	10	-	15	35	20	50
<i>Shopfitting/processing</i>	20	-	15	5	21	40
<i>POS/Advertising</i>	10	25	20	5	16	5
<i>Consumer Lifestyle</i>	10	50	15	35	13	5

Even if on the horizontal level there is the same percentage with two companies the action behind can be very different. For example might on the agricultural level Retailer 1 claim that he is acting environmentally because he is pushing the GlobalGAP-standard, Retailer 2 is promoting integrated production, Retailer 3 organics, Retailer 4 helps Fair Trade, and Retailer 5 is sourcing locally. The conclusion from that Environmental Flow Chart in the beginning of 2010 is that there is a big need to work out methodologies to compare and evaluate the activities of the competitors. And by this claim retailer becomes partner of scientific research.

2.5. The Point of Differentiation (POD)

Due to the change of the atomistic retail structures to oligopolies on the national or even to a certain degree European level retailers are more and more competitors in one region, in one city. When in Germany in 1980 the first 5 top-ranking food retailers together had a market-share of about 26 percent – now in 2010 their share of the total distribution is together at about 80 percent.

Picture 5: Concentration in German Food Retail

Concentration in German Food Retailing

Development 1980-2000/ Scenario 2010
Market Shares Top 5

EH Retail Institute®
2010 81,6%

Picture 5

Source:
M+M Eurodata

The market power has shifted within the Total Supply Chain from the production towards retail- and most probably will give the consumers more and more influence in the future. It has to be kept in mind that at the moment the annual turnover of the US- retailer WalMart has the equivalent size of the GNP of Switzerland! Under the hypothesis of EHI (based by annual discussions with retailers) that retailers invest about 1 percent of this turnover into the IT-sector of their company, this means an annual investment of WalMart of 3 bln. Euro to follow-up its daily transactions.

Table 2: Potential IT-budget of Retail Players

1 Percent of annual turnover invested in electronic data processing for selected companies

Company	Absolut Ammount
WalMart	2 850 million dollar
Carrefour	790 million dollar
Metro	600 million dollar
Auchan	320 million dollar
Coley Myer	180 million dollar
Number 10 Germany	50 million dollar
Number 20 Germany	16 million dollar
Number 1 Turkey	11 million dollar

The problem of oligopolies is to find ways for differentiation in the eyes of the consumers! The ECR-models of the 90ies and the beginning of this century are quite often based on industry-data linked to socio-demographic data of regions. (Hallier, 1997; Hallier, 1999). If assortments are optimized in that way it has the following effects:

- the assortments of the retailers in one area get all the same profile; the customer in the end does not see any differences of the stores of the retail competitors
- according to a standard rule of experience 80 percent of the turnover is covered by 20 percent of the articles. In consequence this means for higher profits on retail-level assortments should be cut down to discounter-sizes.
- If the assortment is the same - then the prices are in the focus; again a factor of discount.

As in the globalizing world with theoretically unlimited free trade there is an over- supply of products the power-swing enables retailers to put pressure onto the suppliers to decrease the production-prices or to increase margins – but the retailer is “mis-using the low price for discounting himself – eroding his profits too! Such a “downswing tsunami” can be watched at the agricultural level in Germany in 2009 – which ended in October 2009 by a subsidy of 280 million Euros from the EU- Commission alone for the milk-farming to give farmers a chance for survival of their production line! Consumers who perhaps had been happy at first about low milk- prices will be confronted later to pay higher taxes to fill that deficit in the EU-budget in the end.

To get out of the downswing of low prices there could be three tactical tools: - more exclusive promotions with suppliers with an increase of value - more private labels - more branding of retail with soft-factors
At least it can be stated that the situation is not the same everywhere in Europe: for example concerning the margins/profits the UK is much better off than Germany in food-retail; in Croatia the national coop is still market-leader, while in Poland among the top-ten food retailers there is no original Polish company any more since 10 years after the lift of the borders; a company like IKEA created an own life-style- concept and split by this in the awareness of the consumers from its former competitors and is able to establish its own incomparable pricing-strategy

2.6. Future Innovation-Concepts

Technology after the introduction of bar-codes and scanners in 1975 now changes roughly from the year 2000 onwards the interactive relationship between retailers to customers again but also retailers to producers. Some of the most important reasons:

- The introduction of the internet is in mail-order-business substituting the printed catalogue. The bankruptcy of Quelle in Germany in 2009 shows that for example this company did not change quickly enough like its competitor Otto-Versand (Hallier, 2010; Mattmüller, 2010).
- But internet is also challenging the traditional brick-and-stone business. If there is a speed of 1 percent growth of market-share in the internet-business - then within that 25 years innovation cycle a total of 25 percent is lost for the traditional retail channels. Other (negative or positive) scenarios of growth are of course possible too!
- Retailers therefore change market-concepts for example to increase convenience in the processing of food-preparation towards ready meals in their traditional supermarkets. New vocabularies are invented like “meal- assembling”- Retailers organize company-crossing loyalty –cards not only in an effort to fix the consumer to their stores but “to catch the fish” in a network of segment- specialists.
- But retailers use those data of course also generally for market-research. It might be questioned in how far they substitute applied scientific work of traditional market-research-agencies in the future.
- A good example for a retail-outlet to test about 50 technical innovations under real buying environment is the Metro Future Stores 1 and 2. (Hallier, 2004; Hallier, 2009).
- The second Metro Future Store now is testing mobile shopping concepts by the mobile phones of the consumers – which might have quickly an enlarged market-share (at least already now to be seen in countries like South Korea or even China).
- Other technologies being used are electronic chips which enable RFID or WLAN to optimize the supply flow or availability of products at the shelf.
- The Internet is also changing the retailer-supplier relationship by B2B- paperless communication. Suppliers which are not able to compete in those technologies are getting listed out.
- The Internet and RFID enable also to enforce tracing and tracking of animals or demands for good agricultural practice with decreasing chemicals. In those cases retail becomes an agent on behalf of the consumers or at least segments of them.
- The Internet allows the consumer not only more transparency about product- prices or the above tracing of the production-lines but also enables him to become a “retailer” himself/herself by systems like Ebay.
- Last but not least consumers can gain bigger impact onto retail and suppliers by systems like Facebook, You Tube, twitting. They can evaluate products and stores and use their influence by consumer-networks.
- Retailers on the other hand could use those platform for dialogue, building up initiatives among such communities ...
- ... even offering “public space” within their stores for those communities. For example it might be thinkable that in evening or on Sundays some space within the store might be available for local “amateur-cooks”.
- A retail outlet would get partly event –character as a potential stage for the nearby community

In general technology will gain great influence onto future store concepts – but also delivering many alternative options to segment its marketing-offers. While in the concept of POD there are mainly the two players’ suppliers and retailers to determine the product-range, the visual merchandize, the service, now new technology opens the game also for more direct influence of the consumer via modern media. In the terminology of the former chapters the future could perhaps be called POC standing for “point of communication” or in the extreme even “point of customer” as the dialogue with him will be in the focus of retailers and suppliers.

Figure : From bilateral to trilateral dialogue

Past and Present: bilateral

Future: trilateral

3. Conclusions

Seeing the development from POS to POC on the time-axis it can be stated that the trend is from “sales to “marketing”.

Figure: From Sales to Marketing

The POS-period of mass-distribution has changed via the impact of consumer- behaviour (POP) to more segmentation and differentiation (POD) and aiming towards customized activities (POC) with the support of the direct customer-dialogue by the help of new media. If seen in a three-dimensions presentation the development of the new technology enables in this new century retailers to regain the direct retailer/consumer – relationship of the Mum and Papa store – but the Evolution Spiral (tornado) of retail creates a new Point of Customer (POC) above the old swing of the Mum and Papa store:

Figure: Evolution Tornado Retail

While traditionally such a “repetition of the situation” is called in literature “the wheel of retailing” (Savitt, 1984) the three-dimensions-view shows that in history always the parameters change:

- of course the modern shopping centres starting around 1975 in Western Europe are a “repetition” at the concept “all under one-roof” of the start of the department-stores around 1875
- of course the internet-catalogue in 2000 is a “repetition” of the printed catalogue from 1925

but: the consumers, the retailers, the suppliers are on a much higher level! The technological, sociological development of each of the three stakeholders influences each other. Taken this mind-set as a tool of analysis of the situation of the national retail of a country it can be even used as a benchmark to evaluate internationally the status quo of that national economy concerning its competitiveness, concerning its power of innovation. It also becomes obvious that the “history of retail outlets” could be analyzed by a broad range of interdisciplinary experts – and could be enlarged within a matrix to different countries/regions. Therefore this contribution is not the final stage but the hopefully starting point of further international scientific cooperation.

Figure: From Sales to Marketing

Source: Prof Dr. Bernd Hallier/ EHI Retail Institute

Figure: Evolution Tornado Retail

In the keynote-speech at the workshop about "Branding" Prof. Dr. Hallier explained the Evolution Tornado Retail and its triangle between supply/retail/exhibitions as a case-study of the world leading fair for technical retail innovations EuroShop. The next Retail Asia Expo 2011 will be in June 14-16th.

(http://cms.berndhallier.de/index.php?option=com_content&task=section&id=1&Itemid=2)

On the occasion of the summit the organizer Prof. Dr. John Stanton/SJU and Prof. Dr. Bernd Hallier/ERA agreed to run continuously courses for Environmental Retail Management on the SJU campus. The first seminar will start in September 2010 about "best practice examples for Good Agricultural Practice as a gate for food marketing". The seminar will be under the leadership of Prof. Stanton and Prof. Hallier - supported by SJU staff and the EHI subsidiaries GlobalGAP and Orgainvent (<http://www.european-retailacademy.org/index.php?start=15>)

Prof. Dr. Bernd Hallier

References:

- Behrends, Ch. (2001). An der Schnittstelle zwischen Theorie und Praxis, in : Hallier, B., Praxisorientierte Handelsforschung. Cologne
- Bauer, H-J. und Hallier, B. (1999). Kultur und Geschichte des Handels. Cologne DHI (1991). Verpackungsverordnung und Entsorgung im Handel. Cologne DHI (1991). Anforderungen des Handels an Verpackungen. Cologne DHI (1991). Verpackung und Umwelt im Handel. Cologne
- DHI (1992). Auf dem Weg zur „Direkten Produkt-Rentabilität“. Cologne EHI (1993). Mehrwegverpackungen. Cologne EHI (1994). Scannersysteme- Neue Impulse für Organisation und Marketing, Cologne
- EHI (1997). Elektronische Identifikation und Rückverfolgbarkeit von Tieren, Cologne EHI (1999). Eurep GAP, Verification 2000, Cologne EHI (2000). Eurepgap, Implementation, Cologne EHI (2001). Transparenz in der Wertschöpfungskette „Fleisch“, Cologne
- EHI (2005). Tracing and Tracking, Cologne
- Hallier, B. (2001). Praxisorientierte Handelsforschung. Cologne
- Hallier, B. (2004). EuroShop. Cologne
- Hallier, B. (2009). Modern Stores, Moscow
- Hallier, B. (1987). Sich ins Regal hineinrechnen, in: absatzwirtschaft 10/1987
- Hallier, B. (1995). Der Handel auf dem Weg zur Marketingführerschaft, in: absatzwirtschaft, 3/1995
- Hallier, B. (1997). Wal Mart-Mythos führt zur falschen ECR-Positionierung, in: Dynamik im Handel 4/1997
- Hallier, B. (1999). Wird ECR zum Club der Großen?, in: von der Heydt, A. (Hrsg.), Handbuch Efficient Consumer Response, Munich
- Hallier, B. (2010). Systemkonkurrenz zwischen stationären Handel und Versandhandel, in : Mattmüller, R., Versand-Handels-Marketing, Frankfurt/Heidel, B. (1990). Scannerdaten im Einzelhandelsmarketing, Wiesbaden
- ISB (1980). „Physischer Warenfluss“. Cologne
- ISB (1988). 50 Jahre Selbstbedienung, Sonderausgabe, Cologne
- ISB (1989). Logistikgerechte Versandverpackungen und Ladungsträger. Cologne
- Kondratjew, N. (1926). Die langen Wellen der Konjunktur, in: Archiv für Sozialwissenschaft und Sozialpolitik. 56
- Mattmüller, R. (2010). Versand-Handels-Marketing, Frankfurt
- Schumpeter, J. (1961). Konjunkturzyklen. Eine theoretische, historische und statistische Analyse des kapitalistischen Prozesses, Göttingen
- Savitt, R., (1984). The „Wheel of Retailing“ and Retail Product Management, in: European Journal of Marketing, Volume 18, issue 6/7

Internet:

Environmental Retail Management, www.european-retail-academy.org/ERM GlobalGAP-Organisation, www.globalgap.org Orgainvent, www.orgainvent.de

Definitions

The Evolution Tornado of Retail is an enlargement of the Wheel of Retail. While the Wheel's theory is the repetition of situations over a time-period the evolution tornado links the repetition with the technological/sociological upgrade of the development over the time-period

POS (Point of Sales-Marketing) was developed in the 60ies/70ies to decline out-of- stock situations inside the stores and to push sales by sales-supporting-materials. It was created by the suppliers and used mainly (only) in the interest of the individual supplier.

POP (Point of Purchase) is focusing the buying-behaviour of the consumer. The POS-Push action is transformed to a POP-Pull Action. Supplier and retailer are on the same eye's height – acting on behalf of the consumers.

POP (Point of Differentiation) is stressing the branding of a retail-outlet – to underline the difference between company A and company B, the difference of the offer C to offer D. The main actor is the retailer – putting his image above the brand-interests of the suppliers; using quite often private labels to demonstrate uniqueness.

POC (Point of Consumer) defines the outlet as an interface of consumer-groups voicing their interests via new social media like Facebook, YouTube, LinkIn etc. The POC might combine shopping , eating/drinking, entertainment.