



European
Commission

High Level Group on

RETAIL COMPETITIVENESS

REPORT OF THE PREPARATORY WORKING
GROUP ON INNOVATION

*Internal Market,
Industry,
Entrepreneurship
and SMEs*

© European Union, 2015

The views and recommendations expressed herein are those of the High Level Group on Retail Competitiveness. This report does not represent an official position of the European Commission and in no way commits the institution.

High Level Group on

RETAIL COMPETITIVENESS

REPORT OF THE PREPARATORY WORKING GROUP
ON INNOVATION

July 2015

TABLE OF CONTENTS

EXECUTIVE SUMMARY	8
1. POLITICAL CONTEXT	9
2. RETAIL INNOVATION CONCEPT	9
2.1. Key Characteristics of Retail Sector Innovation	10
2.2. Types of Retail Sector Innovation	16
2.3. Specificities of Retail Sector Innovation	17
3. KEY INNOVATION DRIVERS	17
3.1. Consumers	17
3.2. Economic	18
3.3. Technological	18
3.4. Organisational	19
4. KEY INNOVATION BARRIERS	19
4.1. Awareness	19
4.2. Regulations and Policy Support	20
4.3. Availability of Skills and Human Resources	20
5. COLLABORATIVE NETWORKS	23
6. ANALYSIS OF RETAIL SECTOR ADDRESSABILITY IN EUROPEAN FUNDING SCHEMES	23
6.1. Horizon 2020 – Missed Opportunities	26
6.2. Horizon 2020 List of Calls for 2014/15 - Retail Sector Analysis	28
6.3. Horizon 2020 – Bridging the Gap	28
7. RECOMMENDATIONS	29
7.1. Retail Sector	29
7.2. Retail Associations	30
7.3. Policy-makers	30
8. MEASUREMENT OF THE RECOMMENDATIONS' PROGRESS	31
8.1. Sector Awareness	31
8.2. Retail Associations	31
8.3. Policy-makers	31
9. ANNEXES	32

PREPARATORY WORKING GROUP ON INNOVATION

Luís Filipe Reis, Chief Corporate Centre Officer, Sonae,
Chair of the Preparatory working group

Dieter Ahlert, Chair of Distribution and Retailing, University of Münster

Hans Carpels, CEO and President, Euronics International

Robin Goudsblom, Member of the Board, Lidl

Carsten Rasmussen, Senior Vice President responsible for Shopper Marketing and
Channel Development and member of Corporate Management, Lego

Roger Scarlett-Smith, President Consumer Healthcare Europe, Middle East and Africa,
GlaxoSmithKline

Franz Speer, Corporate Director Industry Affairs, Henkel

EXECUTIVE SUMMARY

The European commerce sector comprises 5.5 million companies. The sector employs 29 million people and represents 11% of the EU's GDP. Furthermore, this sector is estimated to add value in the amount of €1 trillion (10% of the EU total) to other sectors such as finance, real estate, ICT, transport, manufacturing and agriculture.

Innovation constitutes a key element for the competitiveness of the European retail sector. Through earnings, a very large capillarity that ensures direct contact with consumers and consumers participation in social media platforms, retailers receive almost instant feedback on how well they are performing. As a result, they adapt services and value propositions through continuous innovation.

Consequently, consumers are at the heart of the supply chain, driving innovation. Successful innovation will meet consumer demand and behaviour, and at the same time provide a return on investment. The High Level Group on Retail Competitiveness established an Innovation Preparatory working group^{1,2}. Its objective is to foster innovation among the retail sector and find ways to bring research results faster to the market. Therefore, the present report focus on the retail sector innovation, aiming to put forward key drivers and barriers, analyse the availability of European funding schemes addressing the issue and introduce a set of recommendations.

This work would not be possible without the very active support and collaboration of all the Preparatory working group members and the constant support of the European Commission. The Chairman of Innovation Preparatory working group thanks all of them for their commitment.

Due to continuously trying to answer to consumer and society demands, the sector is perceived as highly competitive, but on the other hand it is wrongly understood as weak in innovation.

Opposing, the report sets out and builds on the retail sector key innovation characteristics. These are: product and process innovators; engaging in collaborative networks with other partners of the supply chain, universities and other institutions; fostering both technological and non-technological innovation; and retailers exercise both radical and incremental innovation.

As outlined above, the consumer is clearly pointed out as the most important innovation driver. Economy and society are also natural boosts to innovation. Moreover, technology is progressively advancing, having a major role in the creation and development of processes and product, but also in consumer interaction.

¹ This report is essentially based upon the main findings of the Report from the Expert Group on Retail Sector Innovation, 30 October 2013.

² Annex VI makes an assessment of the implementation of the recommendations published by the Experts Group on Retail Sector Innovation.

On the opposite side, the retail sector also faces several damaging innovation barriers. It is clear that the lack of awareness is the most harmful one. If such was overcome by policy-makers as by retailers, certainly most of the remaining barriers would be broken.

Complex regulation and lack of policy support, as well as insufficient Human Resources and skills development are also obstacles to the sector innovation strategy.

In order to understand whether retail innovation is properly addressed in European funding schemes, the Preparatory working group carried out an in depth analysis of the Horizon 2020 programme.

The Preparatory working group's findings were that neither the European Commission had a comprehensive understanding of the innovation developed within the retail sector, nor the sector was fully aware of scattered topics within Horizon 2020 that could be used by retailers. There is a clear need to build better mutual awareness in order to stimulate the participation of the retail sector in innovation funding programmes. At the same time, innovation should be seen by the European Commission as an opportunity to spread knowledge and deliver strong messages to consumers, and in a broader sense to society. In the essence, the sector can help the European Commission in better achieving its goals.

In sum, the report recommendations promote a greater dialogue and share of information and experiences. They seek to guarantee tangible results in the application of innovation to the wider consumption, boosting therefore the European economy.



1. POLITICAL CONTEXT

The High Level Group on Retail Competitiveness established a Preparatory working group focusing on retail innovation. Retail innovativeness, which means innovative capabilities and innovative strength of retailers, is one of the “five key drivers for more competitive and sustainable retail services”, which the European Commission has identified within the European Retail Action Plan³ (ERAP).

The objective within ERAP is to encounter more innovative solutions in the retail sector, based on the idea that “stakeholders would benefit if research results were brought more rapidly to market”. In this context, ERAP action no. 8 stipulates: “The Commission will launch a retail innovation initiative (...) whereby the Commission, with the help of high-level experts, will explore how to ensure the retail sector can contribute to, and benefit from, innovative products, services and technologies. On that basis, the Commission will design concrete actions focused on boosting retail competitiveness, such as bringing research results to the market faster, integrating the e-commerce and brick-and-mortar environments, new ways of informing consumers about products, the development of innovation friendly regulations and standards, etc⁴”. In this context, an expert group, hosted by DG Research and Development, produced a report on retail sector innovation⁵.

The Preparatory working group, set up under the High Level Group on Retail Competitiveness, aims to identify the key determinants and barriers of retail innovation and put forward a set of recommendations. In doing so, it does not aim to assess the optimal degrees of innovation in the retail sector or to recommend measures to improve the degree of innovation in the retail sector. The Preparatory working group believes that the main role of the European Commission should be to foster innovation processes and liaise with Member States in:

- Eliminating the main obstacles to innovation processes;
- Overcoming barriers on implementation and introduction of innovative processes and business models within the retail sector.

Within retail innovation, both product development (or product advancement processes) and process development (or system advancement processes) are very important for the competitiveness of the retail sector (and industry). Examples can be found throughout products range, logistics, information and communications technology (ICT), sales management, store design, solution selling, services, and many more.

There are close interdependencies between product development in manufacturing and process development in the context of distribution and trade. Therefore any analysis of innovation in the retail sector should also consider the overall price-performance combinations which determine the shopping experience.

³ In January 2013, the European Commission issued a communication on “Setting up a European Retail Action Plan”. This was established on the grounds of a call from the European Parliament in its report on a “more efficient and fairer retail market” (July 2011) that was supported by the European retail sector associations.

⁴ Communication from the Commission to the European Parliament, The Council, the European Economic and Social Committee and the Committee of the Regions, setting up a European Retail Action Plan - COM (2013) 36 final (page 16).

⁵ http://ec.europa.eu/research/innovation-union/pdf/Report_from_EG_on_Retail_Sector_Innovation_A4_FINAL_2.pdf

- The Preparatory working group aims to identify the key determinants and barriers of retail innovation and put forward recommendations.
- The European Commission should support and liaise with Member States to improve retail innovation processes by fostering drivers and eliminating barriers.

2. RETAIL INNOVATION CONCEPT

Despite being recognised as highly competitive, the retail sector is wrongly perceived as poorly innovative when compared with other economic sectors.

2.1. Key Characteristics of Retail Sector Innovation

Retail competitiveness, growth and innovation depend first and foremost on the delivered retail function (e.g. contact function, information function, consultation, grouping of goods and quantities, adding value, etc.⁶). Retailers compete every day to provide the right range of products/services and price at the right location (physical or virtual). As a result of competitive pressure, retailers need to constantly innovate to keep pace with ever changing consumer demand and environment.

Retailers are both product and process innovators (and much more)

Leading retailers make significant investments in innovative distribution processes in order to better serve consumer needs and enable operational efficiency. Value proposition can be differentiated through channel or format innovation (e.g. brick-and-mortar vs. e-commerce, convenience vs hypermarkets). Furthermore, retailers have created their own brands and engaged in product and service innovation to create value to the consumer.

Moreover, due to the channels used by consumer, retailers are also increasingly using their back-of-store warehouse space as a distribution platform, to provide same-day shipping of merchandise ordered on-line by customers in the local catchment area.

Retailers are open innovators

Retailers are more likely to engage in open, collaborative innovation than many other sectors. It is common to use external as well as internal ideas, creating innovative solutions while co-operating with partners from the supply chain, such as for example through the Efficient Consumer Response (ECR) cooperation initiatives. Retailers are able to co-create value with suppliers. Examples include long term partnerships fostered through own brands or in category management with brand suppliers to serve consumers even better. Supply chain organisation also plays a positive role in promoting innovation⁷. Increasingly, retailers are collaborating with shopping centre developers and owners in developing innovative approaches to customer engagement. Shopping centre developers open “future labs” to test technical innovations and their acceptance from visitors.

⁶ See Professor Hans Buddeberg’s work on retailer’s functions in the marketplace. Buddeberg (1959, S. 21ff.). Professor Buddeberg was founder of the Retail Research Institute of the Saarland University (Germany).

⁷ The economic impact of modern retail on choice and innovation in the EU food sector, (September 2014) contracted by DG COMP; <http://ec.europa.eu/competition/publications/KDO214955ENN.pdf>

Retailers engage in both technological and non-technological innovation

Although the sector is focused on the investment in new technological systems, such as loyalty marketing systems, mobile web platforms or new payment methods, the importance of non-technological novelties must be highlighted, such as the new business models (illustrated by the emergence of convenience stores or deep category speciality concepts) and new merchandising and marketing approaches.

Retailers innovate both disruptively and incrementally

Retail sector innovation happens faster than consumers' needs evolve. It happens both radically, being easily recognised by consumers and other stakeholders, or it can have a more incremental nature, i.e. "step-by-step" (or based on an experimental optimisation approach), adding up continuous improvements that lead to significantly improved products, processes, marketing activities and organisational methods.

Due to strong competition in the retail sector, retailers are continuously innovating in order to catch the consumers' attention. Innovation comes from various grounds: new products, new business models, new services and solutions for consumers. Consumers are so used to be surprised that they take innovation for granted. Its many faces become indistinguishable at their eyes. Ultimately, it becomes difficult to recognise disruptive innovation, making it even more difficult to acknowledge incremental innovation. Incremental innovations are frequently not perceived by the customer but in fact conduct to tangible benefits and savings.

2.2. Types of Retail Sector Innovation⁸

Retail innovation can take five different forms which can be inter-related and are often combined. The four different types of innovation identified are: product innovation, process innovation, marketing innovation and organisational innovation. We also added two extra categories, technology innovation and sustainability innovation. The first four types derive directly from the Oslo Manual from the Organisation for Economic Co-operation and Development (OECD). Regarding the two last types – technological innovation and sustainability innovation – both are in fact subtypes that can ultimately be found in the former four types of innovation. However, due to the contemporary and stand-alone importance, they are mentioned separately to allow for a detailed analysis that is relevant for the understanding of retail innovation.

⁸ According to the Oslo Manual from the Organisation for Economic Co-operation and Development, The Measurement of Scientific and Technological Activities – Proposed Guidelines for Collecting and Interpreting Technological Innovation data; <http://www.oecd.org/science/inno/2367580.pdf>

Product Innovation

Retailers work on two kinds of product innovation – specific channel types or formats and own-brands.

Channel or format innovation is crucial to serve consumers best by meeting their constantly changing behaviour and needs. It's all about offering the right product and price at the right location (physical or virtual). It's by setting the right stimuli and incentives. It's by having the best processes in place to guarantee a continuous and efficient consumer supply. Moreover, retail locations such as stores and shopping malls are no longer pure marketplaces where buyers and sellers meet. They are places of entertainment and communication as they offer a 'third space' (shopping is as much about experiences, unique environments and customer service as it is about the merchandise).

The 'third space' is becoming more and more a very crucial aspect of our society. In times where many towns and cities have difficulty in ensuring meeting places for a wide range of important events (e.g. donation campaigns or as a platform to promote ideas for greater sustainability), retail locations act as a venue. The ability to innovate and to obtain market success can be seen in new growing retail formats. Retail format innovations include, for instance, drive formats, discounters, convenience stores, specialty retailers, drugstores linked to a supermarket, etc.).

Being an intermediary between consumer demand and supply, the retail sector promotes innovation in the manufacturing sector in order to respond to consumer demand for new and innovative products.

Retailers are deciding with their suppliers about how to channel specific consumer's choices towards consumers. Brand manufacturer innovations are playing a crucial role in attracting consumers to the retail stores. Furthermore, many retailers have been developing innovative products and have also been manufacturing their own products through own brand ranges. These investments are solemnly targeted towards the creation and establishment of a retail brand.

In this process, retail companies co-operate with different partners in the supply chain, especially SMEs, and innovate or promote innovation of new product characteristics (e.g. gluten-free products, reduced-fat products, reduced-sugar products, etc.). Moreover, retailers are in the best position to identify consumer needs and to bring new solutions to products, e.g. more easily transportable products. By establishing partnerships with universities, research centres or other academic facilities, retailers own brands are contributing to increase and diversify consumer choice by offering new and reliable products.



Example of innovation

The **Yämmi** kitchen robot created by SONAE provides easy affordable multifunction cooking machines.

Aware of this clear market expansion opportunity, SONAE created a new product and a new brand, made available and marketed in all formats. **Yämmi** includes various accessories and cookbooks, and is accompanied by a number of other complementary products and services, including a brand website, its own communication events and participation in many others, training store teams and a call centre to ensure the best customer service.

SONAE went further and developed another product, **SKINS Yämmi**. Consisting on stickers with six exclusive designs, customers can personalise their robots quite easily and at a low price. They are applied by simply sticking them to the robot's surface. The decoration may be removed, replaced, and even reused at any time, since peeling the skin off is simple and does not damage the machine. This is a creative and original way to create a personalised **Yämmi** without impacting stocks, quality tests or added costs! The solution found is low cost, immediate, made in Portugal and easily renewable.

With 22 thousand units sold during the first year, **Yämmi** is currently SONAE's bestselling non-food product.

For more examples please refer to annex I.

Process Innovation

Innovation in processes is fundamental to ensure continuous improvements in productivity and business profitability. For this reason retailers innovate not only on what they do but also on how they do it. These improvements affect the whole company in a positive way, ranging from stores to the central teams and warehouses.

Process innovation aims at the optimization of the supply chain which can be achieved by innovative information system technology in order to control the merchandise and reduce the time products take to reach stores, their environmental impact and product or food waste. This kind of innovation also requires co-operation with partners in the supply chain. One of the best collaboration examples along the value chain are the future value chain initiatives from the Consumer Goods Forum. Manufacturers, retailers and service providers are working together to understand the upcoming challenges and to define the right answers to serve the consumers better and at less costs. Process innovation many times take place behind scenes (e.g. warehouse technical improvements), therefore consumers do not always see it happening. In this area retailers and manufacturers are is a straight network with GS1. Its main objective is to achieve the best level of efficiency as possible and to reduce costs. However, certain improvements are easily felt and overwhelmingly appreciated by consumers, such as freshly baked bread made available several times per day.

Example of innovation

Vendor-managed Inventory (VMI) or supplier managed stocks is a logistic tool or enabler to improve the performance of the supply chain. The supplier has in this case access to the stocks and sell-out data of the customer on central warehouse and sometimes also on store level. A third-party logistics provider can also be involved to make sure that the buyer has the required level of inventory by adjusting the demand and supply gaps.

As a symbiotic relationship, **VMI** makes it less likely that a business will unintentionally become out of stock of a good and reduces inventory in the supply chain. Therefore the business stock risk is shared between stakeholders throughout the same supply chain.
For more examples please refer to annex II.

Marketing Innovation

Marketing innovation is a very important tool for retail since retailers have to deal with faster changing customer behaviour and media consumption habits. There is a strong increase in the variety of media channels and the challenge is to cover the relevant channels. Such is achieved by using better and more personalised marketing tools. New marketing approaches such as loyalty marketing systems (club card/loyalty card concepts/shopping apps), in the long run, have great influence upon consumers' behaviour. Customer segmentation, customer relationship management systems and better use of publicly available databases can help to better target consumer needs and shopping trends. Social media channels allows direct communication with consumers, creating a shopping experience by connecting with local communities, e.g. through promotional or marketing events.

Example of innovation

One interesting case about marketing collaboration has been shown on the 2013 ECR Germany conference. Deep shopper knowledge from both sides in combination with the right marketing mix enables both parties to make shoppers switch from one channel to another:

ECR Award 2013: CM & Shopper study: Switching shoppers from one channel to another.

This case shows how deep shopper knowledge from manufacturer side in combination of shopper knowledge and the right action plan from retailer side can make shopper switch from one channel to another. The basis for the cooperation was the well-known 8 step category management approach. New in the process was the usage of shopper data which lead to shopper segmentation and segment related marketing mix usage⁹.

For more examples please refer to annex III.

⁹ <https://www.gs1-germany.de/news-detail/meldung/ecr-award-2013-smarte-kooperationen-bringen-branche-und-verbraucher-nach-vorn-298/>

Organisational Innovation

To become a successful retail innovation, the innovation must be extensively supported by organisational processes and by the environment within the organisation.

Retailers are constantly reinventing and organising themselves so as to better serve its customers and to better adjust to ever changing market conditions. It also implies adopting innovative management methods and procedures that may have an impact on performance, on the environment, on resources, on satisfaction and even on savings.

To sustain a continuous and consistent improvement, retailers strongly believe in the importance of training their staff so that they have all the necessary tools to help them build a successful company. Innovation in training is a fundamental commitment towards the future.

Retailers seek the involvement of their employees to create, develop, improve and introduce new concepts, products and services. By this means, their creative potential is encouraged. Retailers do this through creative and knowledge sharing workshops among employees across all functional areas, levels of career and seniority. In addition, retailers broadened the spectrum by involving external elements. Retailers seek to increase their collaboration with other sectors in order to learn and create value from this exchange of experiences (see chapter 5.)

Example of innovation

Taking invoicing as an example, turning the process electronically automated, the direct and indirect work can be dramatically reduced, while efficacy and reliability increase. This is an example of incremental innovation that over time achieved a status of disruptive innovation.

Touchless brought to SONAE greater efficiency in the invoicing process.

Of the more than 2.8 million invoices received annually, 80% are already in electronic format. With the introduction of the Touchless process, most of these invoices are now recorded, verified, approved and made available for payment automatically. The existence of deviations and delays in the reception, processing and approval of invoices called for a high number of employees to perform these tasks. With the implementation of this new process, now more than two million invoices are completed automatically, without human interaction. We managed to reduce the time of direct and indirect work spent in the processing and approval of invoices and reduce paper invoices, which involve physical storage space. SONAE further improved the quality of financial reporting on purchases and suppliers. The total cost savings is estimated to surpass 12 Million Euros per year.

Technology Innovation

Technological innovation is changing the sector and presently numerous technological innovations are emerging.

Distribution centres are using technology to be more efficient and to enable more speed and accuracy in retailers' logistics. The stores have self-scanning or self-checkout systems that facilitate shopping; mobile communications can be used for on-line shopping or to help customers finding their products according to recipes or promotion available. Moreover, technology enables a fully integrated

omnichannel approach. Customers expect a barrier free multichannel experience. Services such as 'click and collect', click and reserve or the online product availability check of local stores are taken for granted. The challenge for most retailers will be to connect the local inventory management systems with their online shops in real time.

Example of innovation

Internet had started to revolutionize the world and made it a truly global place. Mobile internet & social web have marked its recent evolution and have forever changed the way we communicate and live. So far, the number of internet users reached 2.7 billion, representing almost 40% of the worldwide population. But it is only the beginning and the Web 3.0 (integration of off and on-line) is already kicking in. Estimations suggest that there will be around 30 billion wireless connected objects in the world in 2020. This will certainly have impacts in the way we live in our homes.

HomeSmart Wireless charging – Technology based innovation

With smartphones being a natural part of our lives, IKEA wants charging to become a natural part of our homes. And that's why IKEA created a range of wireless chargers that make mobile charging a lot more accessible, yet a lot less obvious.

The product works through wireless charging technology integrated in the furniture (bedside tables, lamps, charging pads). The devices are charged just by placing them on the furniture. All wireless chargers come with an USB outlet, making it possible to charge additional devices too.

The standard is provided by Qi, a global company that provides wireless charging technology. The technology has been integrated into IKEA's new products of the **HomeSmart** collection. IKEA's innovation is not new technology – it has been around for while – but integrating it into home furnishing and therefore making it accessible to the many people is a novelty.

For more examples please refer to annex IV.

Sustainability Innovation

Increasingly more important is innovation on sustainability along the value chain. Improving the sustainability of products or common processes (e.g. logistics) or guiding shoppers to more sustainable consumption needs efforts from manufacturer and/or retailer side.

Example of innovation

ECR Demand side Award 2014: Recycling initiative - Usage of recycled plastic from the yellow bins

This case was presented at last year's ECR conference. It shows the need of broaden collaboration along the entire value chain to come up with sustainability innovations.

Werner & Mertz, Rewe, Green Dot, Alpla, Unisensor and the Wildlife Protection Society have created with recycled Initiative an inter-process cooperation and at the same time a real innovation. In order for PET bottles Frog cleaning products to

increase the amount of recycled raw materials significantly, not only PET secondary raw materials were used from the «yellow bag» but also developed a new formula for transparent PET bottles, The result is a sustainability standard for effective upcycling plastic packaging corresponding to consumers' needs and proven by 100,000 sold PET bottles in the testing phase¹⁰.

For more examples please refer to annex V.

2.3. Specificities of Retail Sector Innovation

The retail ecosystem innovates across its value chain on ways that are sector-specific and not always fully understood by “traditional” ways of measuring innovation. Retail has to innovate differently due to the retail function (setting the right store format with the related marketing mix) compared to the manufacturer function (development, production and marketing of products). The key focus for retail is keeping the point of purchase (brick-and-mortar or online) as attractive as possible for consumers by continuously re-launching the shopping experience following the changing consumer behaviour and needs.

There has recently been growing awareness and recognition among national and European policy makers and academia of the importance of retail innovation and its contribution to European economic growth and job creation.

However, it is difficult to evaluate retailers' innovation activities when traditional statistical surveys only take into account industrial R&D and patent filings or licensing revenues. Innovation in the retail sector is done differently.

- Retail innovation is consumer-centric, retailers innovate to gain competitive advantage;
- Retail innovation is embedded in daily tasks rather than a dedicated activity;
- Retail is an innovation multiplier, reaching millions of consumers very quickly;
- Retail innovation is often “invisible” to the consumer, as many innovations take place in behind-the-scenes processes.

The main objective of retail innovation is increasing consumers' shopping experience and meeting their changing needs. Although many innovation activities within the sector are naturally focused on increasing efficiency, boosting productivity and speeding up administrative processes, the most effective kind of retail innovation occurs when there is a re-engineering of the shopping process in a more holistic and radical way.

- The retail sector is highly innovative.
- Retailers are open innovators. They search and bring innovation to the community by establishing partnerships throughout the supply chain with consumers, universities and other stakeholders.
- Disruptive and radical innovation is present in retail: development of new products; business models' innovation (new store and commerce concepts) and new services and solutions for consumers.
- Retail innovation is also incremental, adding up continuous improvements that lead to significantly developed products, processes, activities, methods and new solutions for consumers. Thus generating a very positive impact on competitiveness.

¹⁰ For more information: <http://www.ecaward.de/>

3. KEY INNOVATION DRIVERS

Innovation in the retail sector is driven by numerous factors that enable the sector to implement changes and compel the sector to invest in innovative solutions.

3.1. Consumers

The most important driver of retail innovation is consumers. Understanding the demographic and economic trends as well as the behavioural changes of consumers is crucial to the retail sector¹¹.

The way consumers behave is constantly changing and it is necessary to monitor and accompany these changes with new products and packaging, new store concepts and new business models, etc.

Consumer needs and expectations are constantly changing, putting pressure on retailers to constantly refresh their assortment.

The population in Europe is ageing and the structure of households is now smaller. European consumers are better educated but the entrance in the labour market happens later and has become more difficult. The population is more concentrated in cities and regions with huge economic powers and seek value for money using internet to compare prices and reduce spending. In addition, consumers seek for brands that have good environmental and social practices. Transparency and information are also important factors.

3.2. Economic

The economic crisis and the competition within the sector naturally boost innovation. Considering that the retail and wholesale sectors represent 11% of the EU's GDP and employs 29 million people¹², new and innovative solutions applied by the retail and wholesale sectors have a real impact on EU's economy and on consumer's day-to-day routines. Although cost efficiency and low prices are fundamental concerns within retailers' innovation strategies, others such as product range and availability, quality, store atmosphere and queues are equally important. Consumers take these factors into account when shopping.

The growth of electronic commerce (e-commerce) across Europe and the ease in entering the retail market develop the existing business models and are important competition triggers. Furthermore, consumers are much closer and more involved in the innovation process and co-operate in the creation of value in the supply chain.

¹¹ "What the customer really wants" is a multichannel study by Roland Berger Strategy Consultants and ECE (2013). 42.000 customers across Germany were interviewed about their shopping habits and nearly 2,000 respondents kept a personal diary of their shopping activities.

¹² Information gathered by EuroCommerce.

3.3. Technological

Technology is rapidly changing the retail sector. On one hand, it is used to create new products and services that can be entirely new or used to substitute other of the same. On the other hand, technology can be applied on efficiency improvements to existing processes.

As a result of our society going digital, retailers have to provide new processes that use technology and that are available to everyone every time. Consumers also increasingly expect a personalised service that is transparent.

The use of technology, especially e-commerce, is fundamentally changing the business model in the retail sector. The mobile internet and the use of mobile devices increase information make prices more transparent and enhance competition between companies even further. However, it also raises new questions on consumer privacy, impact on labour markets, creating a level playing field for all retail channels and consumer behaviour.

In fact, the availability of internet on mobile devices, the development of mobile payments, cloud computing, collection of “Big Data” and 3D printing are some of the new technologies that will change business models and consumer choice.

3.4. Organisational

Retail companies need to have an innovation-friendly organisation. It includes an environment that promotes new processes, sharing of ideas and a flexible organisational structure.

Such environment will foster potential changes. Senior management is also considered to have a profound impact in shaping the company’s strategy and organisation. The range of skills required is impacted as retailers need to constantly anticipate and adapt to competitive pressures. Training and upskilling play an important role in this context. Other relevant factors are the collaborative strategies between retailers, suppliers and partners from other sectors.

- The most important driver of retail innovation is the consumer. The sector must adapt itself to the fast-changing demographic, economic and societal trends.
- Nowadays consumers are highly involved in the innovation process due to the close contact they have with retailers through all channels.
- Technology is changing the retail sector. Consumers expect to have a personalised service that is available everywhere and at all times.



4. KEY INNOVATION BARRIERS

The retail sector faces several damaging barriers, which cause difficulties for new entrants in this sector to effectively compete and also for existing retailers to develop innovative solutions.

4.1. Awareness

The retail sector faces lack of awareness in different ways. Retail innovation is not optimally integrated into the EU's innovation system. Firstly, retailers tend to consider innovation as part of their daily work and business environment rather than a dedicated activity. Then, retailers are also insufficiently informed about most of the EU supporting programmes (e.g. Horizon 2020 and COSME) that aim to promote innovation, which explains their low participation. Finally, retail sector innovation and its benefits to consumers and economy, must be better promoted vis-à-vis policy-makers so as to generate a better understanding among the same.

4.2. Regulations and Policy Support

The completion of the Single Market and its balance is essential for a successful European retail sector and would allow companies to grow and better plan their innovation strategies.

The legal framework that is applicable to the retail sector is ample and sometimes complex. The sector has to comply with many different regulatory requirements that, when considered as a whole, are very burdensome, especially to SME retailers. Regulation affects directly, or indirectly, the ability of retailers to innovate and shape the sector. For example, regulation that restricts the establishment of stores licencing and product ranges in certain areas influence the way the sector develops through different business models.

The lack of legal harmonisation and transparency in certain areas are key barriers to retail investment in the EU. For example, the legal uncertainty on intellectual property (IP) law is a barrier to innovation, especially when technological innovation is concerned. Therefore, retailers hesitate to develop new technological solutions due to the problems related to a very complex IP law that is not yet fully implemented. In addition, the VAT rates and the complexity of complying with different VAT schemes are an important regulatory barrier. Moreover, different data protection laws within the EU are increasingly proving to be complex for cross-border innovation. Furthermore, completing the digital single market, including creating a level playing field for all channels, is fundamental for the retail sector to fully embrace the digital challenge. Overly long and burdensome retail planning processes in Member States create uncertainty to retail real estate investors, hampering the realization of innovative shopping concepts.

Therefore, it is important to have a high-quality, business-oriented and innovation-friendly regulatory framework and cut unnecessary administrative burdens. Furthermore, regulatory changes should take into consideration the possible impact on retail innovation, thereby avoiding any negative effects on this.

4.3. Availability of Skills and Human Resources

Successful innovation projects are often based on co-operation between retail businesses, firms from other sectors or companies involved in scientific research. However, there is still plenty of room left for co-operation in retail innovation-related education and training. The strategic framework for European cooperation in education and training enhances creativity and innovation, including entrepreneurship. All levels of education and training – including the acquisition of transversal competences – should be promoted and the functioning of the knowledge triangle, education-research-innovation, should be ensured.

Partnerships between companies and educational institutions as well as broader learning communities should be promoted.

Universities, training bodies and research institutes should be encouraged to offer education that includes retail sector and technology-specific skills. An advanced and practice-oriented University Trainee Program to improve the retail innovativeness and competitiveness in the European Union could be a step forward.

This is very important to SME and there is a need to use creative mechanisms for providing such retailers with support, such as through the use of vouchers for training and education.

A final barrier is the pooling of non-business related knowledge. The near future of retailing is shaped by the developments of ICT and omnichannel solutions that require not only business but application of knowledge developed in other disciplines. Retail education and training have traditionally focused on a more business-oriented knowledge but new trends adopted by retailing are not necessarily coming from business-related areas – but rather from the ICT sector, computer science, neuropsychology, mathematics, biology or aesthetics.

- The awareness gap between policy-makers and the retail sector is mutual and must be bridged so as to allow a better management of the European innovation funding schemes.
- Innovation will be fostered by a context of smart and lean regulation where entrepreneurial spirit and ideas can grow and have the ability to enter the market quickly.
- Limited skilled labour force must be overcome through the promotion of education and training partnerships between companies and institutions.

5. COLLABORATIVE NETWORKS

Retailers, being so close to the consumer, integrate shopping behaviour trends, which constitute a real driver for business development and growth. This proximity to the consumer allows retailers to be a hub for competition and improvement, as they have the power to impact upstream in the supply chain, pulling innovation, and downstream, mobilising consumer's engagement.

Retailers pursue open, collaborative innovation, recognising the value of sharing knowledge and developing ideas together. As such, retailers strengthen partnerships with other retailers, suppliers and academia, opening their doors and providing insights on their way of working, thus creating precious collaboration opportunities.

Thriving business depend on fostering exchange of ideas across a broad spectrum of players, both from inside and outside the retail sector. Hence, the retail business promotes open innovation networks which generally include partners from different

industries (ICT, Biotech, Professional Services, others) and of very different type (start-ups, SME's, academia, others). It involves all entities that can bring creative solutions and ensure that the business will succeed its strategic goals. Due to the complexity of the transversal competencies needed to satisfy every different aspect of the customers' experience, open innovation creates and shares consistent value.

The retail sector has a long experience in open innovation models, which besides sharing value throughout partners, is more efficient and allows for the cooperation of trans-disciplinary organisations which promote innovation quality throughout the value chain.

Retailers follow a path of exchange of ideas that starts internally, among employees, departments, branches, etc. and externalise it to the supplier, producer, designer, researcher and scientific and technological systems. All focus on the various parameters of demand, being it social, ecological/environmental or economic.

On the other end of the supply chain, consumers are increasingly requiring more transparency on origin, quality, sustainable production, fair trade, distribution and selling of good. They become the main actor when defining what they want, driving innovation. How do then consumers engage in broad collaborative networks? Over the social media, by influencing businesses through social platforms, or by sharing ideas and preferences as enthusiastic crowdsourcing participants.

Examples of Collaborative Networks

Consumer Goods Forum

Bring together consumer goods manufacturers and retailers in pursuit of efficient and positive business practices. The goal is to benefit shoppers, consumers and the world without impeding competition.

The forum addresses some of the most important issues the face the sector globally:

- Sustainability – acting together to position the industry as a leader in protecting against climate change, reducing waste and promoting compliance with good working and environmental practices
- Food Safety – increasing confidence in the delivery of safe food globally through the continuous improvement of food safety management systems
- Health & Wellness – empowering consumers to make the right decisions and helping them to adopt healthier lifestyles
- End-to-End Value Chain & Standards – identifying and implementing global standards, protocols and principles for the management of data, processes and capabilities that span the value chain

GS1

GS1 is a non-profit organisation that develops and ensures the standardization of data and processes for manufacturers and retailers to make business more efficient.

Efficient Consumer Response (ECR) Initiative

One of the best examples of collaboration along the value chain is the ECR Initiative. Brand manufacturer brought their consumer insights to the projects, logistic providers developed better solutions for more efficient logistic processes and retailers incorporated this knowledge in advanced category management projects.

SONAE's Continente Producers Club

Founded in 1998, Continente (the mainstream brand of SONAE's food retail business unit) Producers Club (CPC) results from SONAE's desire to support Portuguese producers more closely. CPC has a significant impact on national and regional economic development.

The strategic objectives of CPC essentially promotes national products in accordance with SONAE's standards of quality and safety and, to that end, offers consistent and structured support to its members. At the same time, producers have a guaranteed stream to channel their production.

CPC takes the lead in providing a key link between production and consumption, through its in-depth knowledge of consumer trends and requirements. It also encourages continuous investment in training and support of its members, so that the sector in which it is involved becomes increasingly competitive against a background of global competition.

At the end of 2013, CPC had 267 members and represented 254 M€ of purchases.

Tesco CE Innovation Centre in Krakow

The CE Innovation Centre aims at increasing the scale of cooperation between Tesco and suppliers and means great export opportunities for their partners. It is responsible for the entire process of product development - from specifications and components, through packaging designs, to the preparation of visual identification. The key to the success of the project is an international expert team who works closely with the retailer's Slovakian, Hungarian, Czech and European suppliers. The Innovation Centre will be working on the products that are tailored to the needs of the markets of Central Europe - Poland, Czech Republic, Slovakia and Hungary.

International Council of Shopping Centre (ICSC) - Innovation Group

ICSC has recently established a European Innovation Group to enable members to be more proactive in identifying consumer behaviour. The European Innovation Group is going to invite not only shopping centre professionals but also futurists and innovation experts from other industries to create a powerful and inspirational platform for discussing cross innovation ideas.

European Commission B2B Collaborative networks

The FIWARE PPP project consists on a generic open source ICT - app development - platform for consumers and companies developed with the support of DG CONNECT. The apps are developed under various themes, such as smart city, energy, agriculture, logistics and environment. For each of these areas there are accelerators (universities, chambers of commerce, etc.) that announce calls for presentation of new and innovative apps and fund the mentoring and networking activities.

The FI-SPACE is a B2B software that aims to provide a connection between companies and professional users. Its main goal is to boost the development of a collaborative and integrated service, through an original set of domain apps available for various supply chain businesses (transports, logistics and agro-food). This multi-domain collaboration and integration service is based on the FIWARE core platform and future internet technologies.

Other networks

Other examples of existing networks are the retail labs in Germany¹³ and Sweden¹⁴ or research centres with a retail focus working together with industry such as the Swedish Institute for Innovative Retailing, Gothenburg University Centre for Retailing or the Oxford Institute of Retail Management.

- Retailers engage in collaborative innovation recognising the value of sharing knowledge and developing ideas together.
- Consumers demand more and more transparency throughout the supply chain. In consequence they actively participate in collaborative networks through social media platforms.

6. ANALYSIS OF RETAIL SECTOR ADDRESSABILITY IN EUROPEAN FUNDING SCHEMES

The Preparatory working group's main goal is to understand the current fit relative to retail innovation in European funding schemes (e.g. in Horizon 2020) in order to identify opportunities for a better alignment. Furthermore, the Preparatory working group aims to identify the main drivers (e.g. best practices) and barriers (e.g. burdensome regulation innovation) and assess the potential outcome of a more innovative-friendly economic atmosphere for the retail sector in Europe.

The Preparatory working group undertook an analysis of the European funding opportunities for the retail sector (Horizon 2020). In this context, the Preparatory working group conducted, among others, a survey on innovation EU-level funding opportunities in the retail sector among EuroCommerce members and an analysis on retailers' participation in European innovation funding mechanisms prior to Horizon 2020.

Through this evaluation, the members' feedback and the meetings with European Commission officials, a number of conclusions and recommendations to improve innovation funding opportunities will be conveyed to the European Commission.

6.1. Horizon 2020 – Missed Opportunities

With the aim to understand if – from a retailers' point-of-view – innovation is properly addressed in Horizon 2020, the Preparatory working group did an evaluation, following a methodological approach that aims to clarify the existing links between the different types of innovation and the retail sector mainstream applications. The analysis was done on the four types of innovation that derive directly from the Oslo Manual from the OECD (product, process, marketing and organisational innovation) and on technological innovation as a stand-alone type of innovation (transversal to the four types of innovation). Although technological

¹³ <http://www.innovative-retail.de/index.php?id=84&L=2>

¹⁴ <http://www.hb.se/en/Research/Research-at-the-University/Handelslabbet---The-Retail-Lab/>

innovation is in fact a subtype that can ultimately be found in the four types of innovation, due to its contemporary and stand-alone importance, it is mentioned separately to allow for a detailed analysis that is relevant for the understanding of a differentiated retail innovation (for more details see chapter 2.2).

As referred, retail sector innovation happens both disruptively and incrementally with the same impact and relevance. Nevertheless, its incremental nature is very strong due to the fact that incremental innovation is more recurrent and higher in number when compared with disruptive innovation. Incremental innovation takes place as continuous improvements that lead to significantly improved products, processes, marketing activities and organisational methods.

The Preparatory working group's analysis on Horizon 2020 shows results that are not favourable to incremental innovation. The Preparatory working group could not find an adequate fit relative to retail incremental applications since most calls lean towards technological innovation that aims to disrupt the market. Therefore, **as a general rule, Incremental innovation lacks addressability in Horizon 2020.**

Table I reflects the importance of the different types of innovation for the retail sector and the cross-relation of opportunities identified in these areas in Horizon 2020.

Types of innovation (Oslo Manual)	Retail applications	Example	Importance for the Retail Sector	Inclusion in H2020
Product	Development of new products and services (DNPS) made by external partners or suppliers (under retailers' supervision and requirements).	DNPS under open innovation models	Medium	Low
Process	Continuous improvement of processes on efficacy and mainly on efficiency. Application to both general and specialty processes.	Kaizen; Company-wide processes; Customer-facing interfaces; Customer-centric retailing (CCR); Promotional actions.	High	Low
Marketing	Product improvements such as new design or packaging. New promotional and pricing models. CCR & customer intelligence development. Communication and customer-facing solutions based on technologies such as augmented reality, virtual stores, and others.	Product improvements: design & packaging; CCR; Customer intelligence; Technological based customer interfaces and communication.	High	Low
Organisational	Best practices and business knowledge sharing throughout the company, internal communication methodologies & workflow optimizations.	Kaizen; Improve work; Sharing actions; New Business Models.	Medium	Low

Table I:

In the same way, Table II (below) does the same analysis as Table I, but focusing on technological and sustainability innovation.

Before starting the breakdown on technology innovation, it is important to distinguish innovation from investigation. Investigation can be defined as the transformation of resources into knowledge. Innovation can be defined as the transformation of knowledge into value for society. This distinction is important in order to understand the difference between technology investigation and technology application.

Retailers mainly address technological innovation from a technology application (or smart-follower) perspective. Although the company may not be the global leader in a particular technology and/or the original innovator, it applies modifications and business processes so that such technology can be introduced in the mass-market. In fact, retailers sponsor the breakthrough, by introducing relatively new and uncertain technologies. They mature the related processes, so that the whole solution is stable and safe for being rolled out to the marketplace. This is a mandatory balance between risk and benefit to ensure a positive experience for millions of consumers.

From a technological application perspective, Horizon 2020 misses opportunities since, in retailers' point-of-view, it is mainly focused on technology investigation. **Technological innovation in Horizon 2020 leans towards technology investigation; in consequence technology application strategic position can only find very little support.**

Innovation sub-type (transversal to all types of Innovation)	Retail applications	Example	Importance for the Retail Sector	Inclusion on H2020 work programme
Technological	Several technological applications of the product, process, marketing and organisational innovation. Recent efforts have addressed big data processes for CCR and mass-analytics, mass personalization processes, logistics and transportation technologies and customer-facing technologies.	Big Data; RFID; Analytics; Store technology: augmented reality, virtualization, digital experiences;	Medium – Technology investigation High – Technology application	High – Technology investigation Low to Medium – Technology application
Sustainability	Good working environmental practices along the value chain	Intelligent collaboration Lower consumptions Waste recycling	Medium	Medium

Table II:
6.2. Horizon 2020 List of Calls for 2014/15 - Retail Sector Analysis

KEY ENABLING TECHNOLOGY			Topics of Interest
	Information and communication Technologies	ICT 16-2015	Big data - research
ICT 19-2015		Technologies for creative industries, social media and convergence	Creative industries
ICT 20-2015		Technologies for better human learning and teaching	Social Media
ICT 24-2015		Robotics	Corporate learning
ICT 30-2015		Internet of Things and Platforms for Connected Smart Objects	Robotics
ICT 13-2014		Web Entrepreneurship	Internet of Things
ICT 31-2014		Human-centric Digital Age	Web
ICT 35-2014		Innovation and Entrepreneurship Support	Digitalization
Nanotechnologies, Advanced Materials, Biotechnology and Advanced Manufacturing and Processing	FoF 10-2015	Manufacturing of custom made parts for personalised products	Customization
	NMP 18-2014	Materials solutions for use in the creative industry sector	Made-to-order
	NMP 35-2014	MBusiness models with new supply chains for sustainable customer-driven small series production	

SOCIAL CHALLENGES

			Topics of Interest
Secure, clean and efficient Energy	EE 17-2015	Driving energy innovation through large buyer groups	Energy efficiency
	EE 20-2014/2015	Project development assistance for innovative bankable and aggregated sustainable energy investment schemes and projects	
Smart, green and integrated transport	MG.5.2-2014	Reducing impacts and costs of freight and service trips in urban areas	e-Commerce Logistics Efficiency
	MG.6.1-2014	Fostering synergies alongside the supply chain (including e-commerce)	
	MG.7.1-2014	Connectivity and information sharing for intelligent mobility	
Europe in a changing world-inclusive, innovative and reflective societies	INSO-2-2014	Understanding and supporting business model innovation	Business Model Innovation
Secure societies – protecting freedom and security of Europe and its citizens	PHC 28-2015	Self-management of health and disease and decision support systems based on predictive computed modelling used by the patient him or herself	Nutrition Customer data Privacy Food waste Health
	DS-5-2015	Trust e-Services	
	WASRE-2-2014	A systems approach for the reduction, recycling and reuse of food waste	
	PHC 26-2014	Self-management of health and disease: citizen engagement and health	

6.3. Horizon 2020 – Bridging the Gap

The Preparatory working group's findings were discussed with the European Commission (EC)¹⁵ and there was mutual recognition that neither the EC had a comprehensive understanding of the innovation developed within the retail sector, nor the sector was fully aware of scattered topics within Horizon 2020 that could be used by retailers. **Bridging this gap is essential both to drive innovation within the retail sector and to enable the release of its full potential.** Doing so through a joint procedure would make both parties keen to get involved and proactively participate in the process.

The EC highlighted that, like other sector groups, Retail was welcome to take part in the design and definition of the work programmes. Then, making sure that, from a strategic point-of-view, relevant topics impacting on specific retail innovation would be included.

- There is a reciprocal knowledge gap between retailers and the European Commission regarding retail innovation.
- Bridging the gap: there is a need to build better mutual awareness in order to stimulate the participation of the retail sector in innovation funding programmes.
- The Retail Sector needs to have broader representation and influence in the preparation of the work programmes (i.e. participation in advisory groups)

7. RECOMMENDATIONS

In order to stay competitive, the retail sector needs to continuously reinvent itself. At the same time societal changes are a huge boost for the sector's unceasing improvements, as it must constantly adapt to consumers growing needs. As such, the retail sector takes innovation very seriously. The consumer-centric approach is the motto for retail innovation and, double sided, for the sector competitiveness.

Still, the retail sector is not perceived by society and, in particular, by policy-makers as an innovative sector. Such induces great challenges to retail ecosystem itself, but adds strain to regulatory entities as well as to decision-makers in charge of designing incentives for competitiveness or research and innovation programmes. All this also requires collaboration and interaction, not achieved without the necessary representation of the retail sector in related fora.

The recommendations that derive from the analysis of the Preparatory working group on Innovation of the High Level Group on Retail Competitiveness are in line with those of the Expert Group on Retail Sector Innovation¹⁶. They therefore

¹⁵ DG GROW (Internal Market, Industry, Entrepreneurship and SMEs); DG RTD (Research and Innovation); DG CONNECT (Communications, Networks, Content and Technology) and Commissioner for Research, Science and Innovation.

¹⁶ Please refer to annex VI

reinforce and complement the former.

The following recommendations are displayed in three vectors: retail sector, retail associations and policy-makers.

7.1. Retail Sector

- Innovation must be seriously embraced by the retail sector. It needs to shed light on innovation examples that benefit consumers and society as a whole. Such examples must be shared among retailers, policy-makers and other stakeholders.
- The retail sector must promote sharing of information between retailers and between these and policy-makers. Such can be achieved through the sector involvement in EC relevant events, contribution for call for ideas and availability to participate in advisory groups which define topics and evaluate innovation funding programmes.
- Retailers need to make strong applications to innovation funding programmes and defend them relentlessly against all barriers and difficulties, actively showing their importance as investment-enhancers and job-creation tools.
- Retailers must engage in collaborative networks: they should invest in better and tailored skills, inviting science and technology experts to get insight on ways of working and supporting sound education policies¹⁷.
- The retail sector should continue to promote good working environmental practices, waste reduction and food safety management to ensure sustainability along the value chain.

7.2. Retail Associations

- Retail associations must defend their members' retail innovation interests, while cross-sectorial associations should work collaboratively on common industry solutions.
- The retail associations must put a strong effort in marketing the sector's best practices and fostering collaboration and awareness among its members.
- Retail associations should sponsor the creation of a dedicated structure to handle the sector's specific innovation related issues. This structure should work as the sector's representative when dealing with the European institutions. It

¹⁷ I.e. Career-integrated Executive MBA Programme for Innovation and Network Management in Retail, Sales and Services from the Westfälische Wilhelms-Universität Münster, Marketing Center Münster. For more information please refer to annex VII.

should focus on the understanding of the innovation trends and barriers.

7.3. Policy-makers

- The retail sector is constantly innovating in products, services and formats and policy-makers (most important, the EC) need to be aware of and acknowledge this. For this matter, the High Level Retail Competitiveness findings on retail innovation should be broadly shared through communication documents (e.g. brochure). The gap between retail innovation and the European Commission must be bridged.
- Policy-makers could make good use of the retail sector as it can be a means of disseminating innovation, delivering strong messages and inducing environmentally sustainable practices. Due to its capillarity and privileged contact with consumers, the sector can help the EC in better achieving its goals.
- The EC should establish a permanent or ad-hoc structure with a focal point that acts as interlocutor with the retail sector and collects ideas, opinions or specific needs of the sector vis-à-vis innovation trends.
- Horizon 2020 funding initiatives should take into account the specificities of the retail ecosystem.
- The EC should call for the involvement of retailers in advisory groups that define innovation funding programmes.



8. MEASUREMENT OF THE RECOMMENDATIONS' PROGRESS

In order to assure a follow up of the recommendations presented in the previous chapter, here is suggested a brief set of examples that could be taken forward as actions to monitor implementation.

8.1. Sector Awareness

Number of retail innovation calls presented under Horizon 2020 programme in one given year vis-à-vis the year before.

8.2. Retail Associations

Number of meetings held with the EU institutions and public affairs actions/events organised in order to promote a retail innovation agenda.

8.3. Policy-makers

Number of retail oriented calls under Horizon 2020 created in one given year vis-à-vis the year before.

Number of innovation projects approved under Horizon 2020 in one given year involving retailers' vis-à-vis the year before.

Number of retail representatives present in advisory groups (that define topics and evaluate innovation funding programmes) in one given year vis-à-vis the year before.

9. ANNEXES

Annex I

More Product Innovation examples

Lidl Nappies

For the first time, Lidl is using a whole new nappy technology for its Toujours drylock® Nappies whereby no cellulose or adhesive is used in the absorbent core of the nappy. Thanks to the innovative drylock® technology, the nappy is highly absorbent and offers great protection against leakage.

The innovative drylock® technology also positively contributes to saving resources:

- The absorbent cushions are totally free of cellulose which means that no trees have to be felled for the production of the raw materials
- Massively reduced use of adhesives
- The compactness of the nappies saves packaging material and achieves optimum utilisation of capacity in transit

Advantages for children and parents:

- Extra-thin: Less bulky than our traditional nappies
- Flexibility: Outstanding comfort and freedom of movement, just like with underpants
- Great protection against leakage through active absorption
- Extremely practical and space-saving – at home and when out and about

For more information: <http://www.lidl.de/de/toujours/b272>

Lidl Kitchen Towels & Toilet Tissue

Lidl is the first retail company to offer kitchen towels and toilet tissue with reduced CO2 emissions. In comparison to 2009, the selection of raw materials and the manufacturing process of FLORALYS recycled paper has been optimised to allow a reduction in CO2 emissions of 10%! The CO2 (carbon) footprint considers all the greenhouse emissions right through the entire development process up to the distribution by Lidl. Included are, therefore, all upstream and downstream processes, such as raw material extraction and the disposal of waste.

Objectives:

- Development of environmentally friendly products by reducing CO2 emissions
- Consumer awareness/education
- Acceptance of responsibility in the areas of environment and climate

Data/Facts:

- 10% less CO2 emissions. Further developed products achieved higher savings of CO2 emissions (up to 15% less CO2 emissions)
- Calculation of the CO2 footprint is based on ISO 14040 and PAS 2050

For more information: <http://www.lidl.de/de/co2-reduktion-bei-hygienepapier/s858>

Annex II

More Process Innovation examples

Future Value Chain

2016 Future Value Chain

The speed of change and a sense of urgency will drive the evolution of the value chain over the next decade. Is the consumer products and retail industry ready? This new study, from the Global Commerce Initiative, Capgemini and Intel, defines a unique vision of the total value chain.

2018 Future Value Chain: Succeeding in a Volatile Market

This report – from the Global Commerce Initiative, Capgemini, HP and SAP – brings together insights and analysis from 130 executives from Europe, North America, China, India, Japan and across Asia and examines the changing trends and dynamics that will impact the consumer products and retail industry in the coming decade.

2020 Future Value Chain: Building Strategies for the New Decade

This report provides a framework to help the industry and individual companies understand the trends that impact our business, envision how they will impact, and then formulate plans to benefit our business from those changes. The report is published under the auspices of The Consumer Goods Forum, with support from Capgemini, HP and Microsoft.

Future Value Chain 2022: Industry Initiatives Address Challenges of the Digital World and the Fight for Resources

This report takes a close-up look at two key megatrends – Digital World and the Fight for Resources – and their implications for the industry. It also presents three related initiatives and their associated action plans to begin to address these trends. The report is published under the auspices of The Consumer Goods Forum, with support from Capgemini.

For more information: <http://www.futurevaluechain.com/downloads/>

Automation of the Battery Room at SONAE's Azambuja Warehouse

Most innovation processes are triggered with the aim to achieve the best level of efficiency as possible and reduce cost. For this reason, we can find many examples of technical improvements, which can lead to the maximisation of fill rates of trucks, reducing fuel consumption, or improve logistics that lead to cost reduction.

At Sonae MC's warehouse at Azambuja, more than 150 electric cargo handling machines are used daily. The process of switching more than 300 batteries was carried out manually, requiring workers to put in great physical effort, given that some may weigh as much as 2 tons. Due to their great weight, these were placed along the floor, occupying a considerable space of the warehouse.

As a means to overcome these difficulties, in 2013 SONAE developed a new project at the Azambuja warehouse: a robot for moving batteries. This was designed internally, bearing in mind our specific needs.

By placing batteries on a shelf with four levels, which was only made possible with this robot, we've managed to reduce the space occupied by this operation by

approximately 75%. With great control over the batteries' loading time, based on a FIFO schedule, SONAE extended their useful lives by reducing the long-term costs associated with their early replacement. Other qualitative benefits include greater control over the entire process, increased safety and subsequent reduction of accident risk.

The investment was recovered in less than 2 years.

Annex III

More Marketing Innovation examples

The aim of the Greek week at Lidl

The Greek Country Week is just one of many examples in which a multitude of European suppliers are given direct access to the European single market. Other country weeks exist, such as the Italian, French, British, Spanish, Dutch and Scandinavian, etc., ones.

- Expansion of the export volume of Greek products
- Promotion of Greek suppliers and service providers
- Increase the visibility of our Eridanous own brand with the aim of making its quality and taste accessible to customers from other European countries

Benefits for Greek suppliers:

- Outlet for manufacturers without intermediaries
- Marketing in approx. 10,000 Lidl stores in 25 European countries
- Print, online and TV advertising campaigns
- Access for suppliers to the EU single market, including the ensuring of legitimate food labelling and the necessary compliance with national regulations and standards
- Use of the Europe-wide Lidl logistics

Data/Facts:

- Distribution to approx. 10,000 Lidl stores
- Marketed in 25 European countries
- Steady increase in the sales volume, range and supplier base

Guiding shoppers

ECR Europe Conference 2013: Breakout session (Henkel, Colruyt, CSCP; A.I.S.E.): Guiding shoppers to more sustainable consumption.

This case underlines the need of intelligent collaboration to change consumption patterns and to guide shoppers to more sustainable consumption.

By 2050 the world will have a population of nine billion – two billion more than today. And as Neil Coles, of the Centre on Sustainable Consumption and Production pointed out, we will need the equivalent of six planets Earth to do so if we continue at current rates of consumption.

With that sobering thought in mind, a Henkel team in a session on The Route to Sustainable Consumption posed the question: just how do we create more sustainable consumption patterns?

Drawing on the findings of a Henkel European shopper study, Consuming responsibly they concluded that sustainability has little influence on shopper behaviour and argued the need for consumer education by industry. It should be about responsible consumption rather than less consumption, they suggested. They were joined by the International Association for Soaps, Detergents and Maintenance Products, who gave practical examples of initiatives, and by Colruyt's, who described how the Belgian retailer succeeded with a project to inform and educate staff and consumers on the sustainable use of concentrated liquid detergent.

Annex IV

More Technology Innovation examples

SONAE - Continente.pt Shopping Lists app (Technology based innovation)

The creation and updating of the Continente Online shopping list is essential for our customers, allowing them to organise their next shopping experience in advance.

Until now, whenever customers wished to update their shopping list, they could only do so directly on the Continente Online website. However, because it isn't always possible given that one needs to have a device to access it, customers have to have a list based on paper.

With the new Continente.pt Shopping Lists app, customers may now create and update shopping lists in a very convenient way, by opening their cupboard doors and scanning the bar codes of the items they wish to purchase. When the list is complete, customers just need to send it to Continente Online's shopping cart and finish the transaction at the website. The app also allows codes to be scanned in other locations, such as metro stations in Lisbon and Porto, which currently exhibit walls with Continente products.



Annex V

More Sustainability Innovation examples

LIDL - Dairy products made from Bavarian farm milk from certified farms

With the introduction of its new own brand, “The Great Taste of Home”, in January 2010, Lidl created a new range for domestic products from German regions. The new brand fulfils the ever-increasing customer demand for food from different regions of Germany. With the brand name, “The Great Taste of Home”, the connection is made with a high-quality promise where regional top quality is paramount.

For example, for dairy products made from Bavarian farm milk from certified farms which are taking part in the programme, Lidl guarantees

- Compliance with the regional and quality criteria “Geprüfte Qualität - Bayern” (“Tested quality – Bavaria” – Bavarian quality and origin traceability system)
- Keeping of the dairy cows in a free stall system and
- Cows are exclusively fed with non-GM feed
- An additional premium to the dairy’s regular milk price.

The dairies also receive an allowance for the costs of separate collection, production and bottling of the milk.

To date (as at 1st January 2015), Lidl has paid out about 9.5 million euros to the approximately 260 participating farms; this corresponds to a sum of 36,000 euros per working farm.

Objectives:

- Sustainable development of regional agriculture
- Compliance with regionality and quality (certification + state supervision)
- Compliance with animal husbandry criteria
- GMO-free feed
- Consumer information by means of information campaigns and promotional activities

For more information: <http://www.ein-gutes-stueck-heimat.de/>

IKEA - A new of doing business and supporting people and communities

Social entrepreneurs are in the business of making everyday life better in their communities. They use business as a way to tackle social and environmental challenges such as reducing poverty and empowering women.

Since 2012, IKEA works with social entrepreneurs to co-create limited edition collections for sale in selected IKEA stores. All profits from the sale of these collections go back to the initiative to support long-term partnerships with social entrepreneurs around the world.

The purpose of starting this initiative was to find additional ways to create a better everyday life for the many people, combining business and social development. Social entrepreneurship was identified as an interesting movement that combines both sectors.

This is a way for IKEA to explore new and innovative ways of working. The partnerships with social entrepreneurs allow IKEA to work with small-scale social enterprises who would otherwise not meet the company's regular demands of supply when it comes to capacity. In this initiative IKEA works very closely with partners to educate them about product development, quality requirements and simple process to meet customer satisfaction. This is also a possible plant school for new IKEA suppliers as the social enterprises grow and develop. However, it's important for IKEA to support the enterprises in their development and not to make them dependent on IKEA as their only market linkage.

For IKEA, the partnerships with social entrepreneurs gives access to skilled artisans who work with traditional handicraft like pottery, embroidery, hand-women textiles and natural fibres. Every products is made by hand, which gives IKEA the opportunity to offer customers something unique

IKEA is currently working with social entrepreneurs in India, Thailand, Sweden, Denmark, Indonesia and the USA, and actively looking for new partners around the world.

For more information:www.ikea.co.uk/PeopleandCommunities

Annex VI

Implementation of the Recommendations of the Final Report of the Retail Innovation Expert Group (from the European Retail Action Plan)

The Report of the Retail Innovation Expert Group issues four groups of recommendations on the following topics:

- a) Build better awareness
- b) Prompt greater participation by retail firms of all sizes and sectors in European innovation funding and projects
- c) Invest in retail skills and education
- d) Seek to ensure that policymakers use a “retail reflex” in their thinking

We requested EC to inform us about the ongoing initiatives regarding the recommendations of the Final Report of the Retail Innovation Expert Group. The EC informed us that the ongoing work, on each topic, is the following:

a) Build better awareness

This report and relevant retail innovation issues are to be disseminated inside the EC services responsible for this policy area. In particular, it has been shared with DG GROW due to the important impact the report can have for SMEs. The report was shared with the EC (DG GROW?) unit that is responsible for producing the Innovation Union Competitiveness Report (IUC). Discussions are already ongoing on the possibility of creating an indicator that would monitor the innovation performance of the retail sector. This would be included within a broader sectorial assessment in the next IUC.

b) Prompt greater participation by retail firms of all sizes and sectors in European innovation funding and projects

The EC produced an internal guidance note on how to include service innovation in Horizon 2020 calls. This note is aimed at helping the policy makers drafting the Horizon 2020 work programmes in a way that better addresses the service innovation dimension. Retail is mentioned specifically in this guidance note.

c) Invest in retail skills and education

The recommendations of the report were presented to national social partners and to the European social partners leading the Skills Council. The EC also presented the reports' recommendations on the kick-off meeting of the European Skills Council in April. The EC believes that it is the European Skills Council that has to make the decision on these recommendations.

d) Seek to ensure that policymakers use a “retail reflex” in their thinking

The EC will send a letter to the Trade Associations presenting the report, sharing with them the methodology and suggesting it could be used to screen a specific area (e.g. multichannel or e-commerce).

Annex VII

An advanced and practice-oriented University Trainee Program to improve the retail innovativeness and competitiveness in the European Union could be a step forward. The creation of a specialised MBA-Program in Innovation and Network Management in Retail, Sales and Services can be thought as an interactive training for a qualification as an «Innovation Manager in Retailing and Distribution» conducted alongside a person's job.

Draft Outline for a Career-integrated Executive MBA Programme for Innovation and Network Management in Retail, Sales and Services

(Westfälische Wilhelms-Universität Münster, Institut für Handelsmanagement und Netzwerkmarketing)

The present conceptualisation of a further education programme for managers in the retail and distribution sector was initiated within the context of the deliberations of the EU Commission's High Level Group on Retail Competitiveness in Brussels and was devised with the support by the International Centre for Franchising and Cooperation in Münster (institute management: Dr. Martin Ahlert).

Background of the initiative for further education:

As described in point 5 of the European Retail Action Plan, the EU Commission aims to improve the skills of employees in the European retail sector – particularly for small and medium-sized companies (SME) as well as cooperative company networks. To this end, it is deemed appropriate to design and establish – if necessary in close cooperation with the EU member states – an innovative concept for training and further education for the practical application in the companies. This measure should help to sustainably strengthen competitiveness and innovation in this sector.

Particularities and focus of the practical training concept:

As soon as possible, it is intention for the proposed initiative for further education to be set up as an academic training concept which is developed in close cooperation with and active contribution by companies regarding practical requirements of the day-to-day operations. Currently, the working title of the initiative is "Career-integrated Executive MBA Programme for Innovations and Network Management in Retail, Sales and Services". The companies and in particular also the participants are continuously being presented with the opportunity to constructively shape the involved activities. This training concept not only emphasizes the theoretical knowledge transfer but also focusses especially on the practicing of skills through the active involvement of participants as well as the cross-discipline and -sectors exchange of ideas and experiences between participants. It aspires to become the 'elite programme for innovative network management' with national and international approach whose target group is not limited to participants from the retail sector but also includes (young) executives from the industrial and services sectors as well as from the field of consulting.

Interactive components of the career-integrated, academic program for further education:

In addition to the general marketing and management courses, the academic Executive MBA Program encompasses a number of components which emphasise the learning by doing principle:

- Participant involvement in benchmarking processes in corporate practice – not only at the national but also at the international level with the context of a so-called international module

- Participant cooperation in creating/designing excellent business models in selected companies and networks based on an interactive innovations management with suppliers, partners, employees, customers and external experts, possibly participation in innovation labs
- Establishing and implementing technological innovations, e.g. the combination of bricks-and-mortar retailing and e-commerce to create hybrid business practices for mass customization and solution selling
- Generating the organizational requirements for the implementation of innovative business models, e.g. the constitution of corporate co-operations or rather virtual networks as well as value-oriented regulation of value-added chains
- Establishment and implementation of adequate marketing concepts, e.g. the integrated brand management as well as innovative sales and communication concepts in the value-added networks
- Continuous response research for current consumers and new target advisory, possibly complemented by processes from consumer neuroscience
- Economic foundation of innovative business models by creating business plans and strategic controlling (amongst others also dynamic capital budgeting, relevant costing & pricing)
- Practised marketing and legal management: legal protection management, management of anti-trust issues of cross-network brand management and pricing adjustment, configuration and steering of contractual distribution systems, etc.
- Practised project management: diffusing of innovative business models within the corporate network as well as coordinating the continuous experimental optimization of new (and established) business models through network-internal consulting, experience exchange programme and integrated partner, employee and customer survey's.

Pilot testing at the Westphalian University of Münster:

The University of Münster offers the opportunity to implement the planned program of further education at short notice. The modules can be completed as so-called certificate courses or optionally (and with relevant prior qualifications) also as a complete MBA program, i.e. as a consecutive master program.

The pilot testing of the program at the University of Münster can already start this year, if necessary already in spring of 2015 by docking it onto the “MEP – Marketing Executive Program” which has been formally established for over 15 years. This is an AACSB and ZEvA accredited MBA program of the Marketing Centre Münster which is aimed at (young) executives with a university degree (e.g. bachelor, master, degree) and at least three years professional experience (e.g. marketing manager in retail, industry or services, managerial employee in the fields strategic planning, marketing or sales). The ‘docking’ of the new training program would mean that particularly modules tailored to the “interactive innovation management in retail and industry” (see above for listed components) would be added as an optional part of the extensive elective range of the MEP degree running at the time.

The proposed concept for further education seeks to combine the tried and tested approaches with new and promising methods in a practical training for the fields of innovation, network management and brand management. In doing so, we can in part use the excellent MEP lecturers but it is absolutely necessary to acquire specific and renowned service offers of third parties (company experts, agencies and institutions, external contributors).

Following the successful pilot testing it is crucial to decide whether a stand-alone MBA program for the specific target group (prospective innovation and network managers) should be created or whether the link to the MEP should remain. In the latter case, it would be advantageous to shift the event cycle from the current 18 month to an annual rhythm, e.g. starting in October.

Options for European internationalization:

As outlined above, the innovative programme for further education is designed to include international aspects. In particular the benchmarking is not limited to the German-speaking regions but also covers all EU member states and if needed also further countries.

In order to guarantee a short-term implementation of the initiative, it could be helpful to initially run the pilot testing at the University of Münster in German. However, as a second step - and depending on demand - an English version could be implemented immediately afterwards, either as alternative or in addition to the core version.

In any case, the cooperation should be sought with corresponding programmes for further education in other EU member state (e.g. student/lecturer exchange, joint international modules, etc.). It can be expected that the High Level Group on Retail Competitiveness and/or the EU Commission would provide the necessary support for such a pan-European cooperation project.

Conclusions on initial impetus:

The implementation of this initiative for further education crucially is dependent on a sufficiently large number of participants from the practical side of retailing, industry, services and networking. For example, if every member of the High Level Group were to commit one to two participants, the pilot testing phase would be secured. Companies could directly benefit from the interactive innovation management projects which are carried out in their operations. Ultimately, it is the companies' responsibility to establish this concept with their proactive cooperation.

