# University of Gloucestershire

Investigating the Potential Transfer of the Efficient-Consumer-Response-Model from the Fast-Moving-Consumer-Goods into Pharmaceutical Wholesale Business in Germany

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# <u>Abstract</u>

The aim of the research is to evaluate the possibility of transferring the Efficient Consumer Response (ECR) model developed in the Fast Moving Consumer Goods (FMCG) sector into the pharmaceutical sector and to propose an adapted model for the German market.

The German pharmaceutical market is consolidating distribution channels and demand power is shifting towards pharmacies (Hofmann, 2013a). The manufacturers` aim for differentiation requires being closer to patients and pharmacists. Therefore, they increasingly do business directly with pharmacies (Insight Health, 2013). Wholesalers are caught between the strong supply power of manufacturers and increasing demand power of pharmacies (Hofmann, 2013b).

Exploratory research was undertaken using the case study method to consider how the ECR model from FMCG can be adapted for the pharmaceutical wholesale business. A single case study was considered as different wholesalers would not participate due to their competitive market and because I am an employee of the case company (Celesio AG). The study was conducted in the German subsidiary (GEHE Pharma).

Semi structured interviews with key account managers from FMCG and pharmaceutical manufacturers, Celesio AG management board, GEHE Pharma management and retail pharmacists were conducted. Additional data were generated linked to participative observation during manufacturer meetings between GEHE Pharma and pharmaceutical manufacturers, as well as from secondary and internal documentary material.

Findings suggest that several similarities between the FMCG market and the pharmaceutical market exist. No aspect was found which would not allow implementing ECR principles into the pharmaceutical market in Germany. The model is adapted according to the research findings.

The adjusted model considers that the pharmaceutical market shows more complexity in terms of the market actors. In this market three main participants exist: pharmaceutical manufacturers, pharmaceutical wholesalers and retail pharmacists. Whereas in the FMCG market the ECR model incorporates the relationship directly between FMCG manufacturers and grocery retailers; no wholesaler is considered in that model. Therefore, the adapted model needs some adjustments for the pharmaceutical wholesale market, which are presented in the research. Furthermore, the research delivers evidence that the ECR model is not static and can be adjusted in terms of the number of participants, content and different dimensions in the relationship between different stakeholders and can, therefore, also be implemented in other industries.

# Author`s Declaration

I declare that the work in this thesis was carried out in accordance with the regulations of the University of Gloucestershire and is original except where indicated by specific reference in the text. No part of the thesis has been submitted as part of any other academic award. The thesis has not been presented to any other education institution in the United Kingdome or overseas.

Any views expressed in the thesis are those of the author and in no way represent those of the University.



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# 1.0 INTRODUCTION

# 1.1 Market Environment in the Pharmaceutical Business in Germany

The pharmaceutical business is the largest sector of the German economy. It represents 10.5% of the gross German domestic product (Schögel & Herhausen, 2012).

The pharmaceutical market is consolidating distribution channels and channel power is increasingly moving from wholesalers to retail pharmacies (Hofmann, 2013a). As a result wholesalers within this business sector are now faced with intense competition between the strong supply power of manufacturers and the increasing demand power of retail pharmacists (Umbach, 2013).

The manufacturers` aim for differentiation requires an improved relationship between end consumers and pharmacists (Hofmann, 2013b). Therefore, manufacturers are trading much more directly with pharmacies. In recent years, direct deliveries from manufacturers to retail pharmacies steadily increased (IMS, 2013), threatening the survival of the wholesale business. This shift in supply chain is what has prompted the need for a new sustainable business model.

The new wholesale model has to consider the requirements of both the manufacturers and customers, which in this context comprises of the business-tobusiness (b2b) market, and in addition, the end consumer. Key issues when developing this new model will include an appreciation of the different types of customers, their expectations which exist within the supply chain and key prerequisites for driving customers' relationships and satisfaction between the wholesaler, retailer pharmacists and end consumer.

In Germany, there were 20,662 retail pharmacies at the end of 2013 (ABDA, 2014) with numbers declining year by year since 2008. Pharmacists are either operating as independent businesses or as cooperation partners of wholesalers. In Germany, due to the ban of ownership of multiple pharmacies (Simon, 2013) each pharmacist can own a maximum of three further stores in addition to the main pharmacy. This means that retail chains do not exist. Assortments are primarily

delivered several times per day by five leading wholesalers: Phönix, Noweda, GEHE Pharma, Anzag and Sanacorp.

Pharmaceutical wholesalers have a delivery commitment to all customers and they are also required to have all available products in their assortment. In essence this means that wholesalers are restricted in their decisions about whom they purchase products from, whilst also not having a free choice about whom they deliver their products to - they are not totally free in their trading decisions.

The broad range of assortment wholesalers have to carry includes the different types of drugs, which are separated into three categories (Schöffski, Fricke & Guminski, 2008): prescription drugs (RX; GX), over-the-counter (OTC) and para pharmaceuticals (beauty, cosmetics, hygiene products). The share which bypassed the wholesalers i.e. was directly delivered to pharmacies, amounted to 9.3% for prescription drugs, 30.5% for OTCs and 38.8% for para pharmaceuticals (IMS, 2013). This indicates that prescription business is less affected by the bypass effect because these products are covered by patents and subject to governmental supervision. Hence, manufacturers have less influence on sales strategy in the regulated market than they do for non-prescription business.

Therefore, this investigation does not cover the total business of pharmaceutical wholesalers and retail pharmacies. Rather, it will concentrate on the so called "free choice" assortment of para pharmaceuticals and the "visible choice" range of OTC products. This comprises products which can be bought without a prescription and those products which are sold in the self service area in the retail pharmacy. In Germany, those product groups cover approximately 15% of the retail pharmacy turnover (ABDA, 2013). This provides the opportunity to have a fair comparison between the FMCG and the pharmaceutical markets given that the macro and micro environmental issues are similar under these circumstances for both.

For the consumer the shopping experience and the decision in front of the shelf is the same for the para pharmaceuticals because those products are placed in the "free choice" zone in the pharmacy, similar to the grocery retail store or drugstore. However, this does not fully apply to OTC products because only some of them can be sold in the so called mass market (e.g. grocery retail store or drugstores). In a pharmacy the others are usually placed behind the service counter and handed out by the pharmacy employee, which may lead to different customer purchasing behaviour. Both these product categories (para pharmaceuticals and OTC) can be seen by the customer: they are not in the "dispensary room" as the prescription drugs are. Prescription drugs always have to be dispensed by the pharmacists or an employee in the pharmacy. Therefore, the shopping decision is only fully comparable for the para pharmaceuticals, and partially for the OTC products, between a retail pharmacy and a grocery retail store or a drugstore.

Hence, the FMCG sector and its business model were considered as a comparison for the investigation within the pharmaceutical market in Germany.

# 1.2 Efficient Consumer Response (ECR)

In the 1980's the Fast Moving Consumer Goods (FMCG) market faced similar environmental factors as the pharmaceutical market does today. Manufacturers faced strong competition between each other and the demand power increased due to consolidation on the retail side (Walters & White, 1989; Reinhartz et al., 2011; Metro 2012). This was the time when the ECR initiative started in the FMCG market. The literature review which is conducted under chapter 3 has shown that a majority of the literature on ECR is from the 1990s. This is obviously due to the fact that this was just after the ECR initiative had started.

ECR is a collaboration model between manufacturers and retailers in the FMCG market. It is a strategy in which grocery retailers and manufacturers work closely together with the aim of delivering better value to the consumer (The Food Marketing Institute, 1994, as cited in von der Heydt, 1998).

In the USA, the "Efficient Consumer Response Working Group" was established in 1992 and tasked with finding new ways in terms of better communication, increasing consumer benefit and looking into the entire distribution channel (Kilimann & von Schlenk, 1998). They defined some core processes which served as the basis for further examinations: product introduction, end-to-end order, procurement, distribution and promotion. Under the heading of ECR, there are two collaboration sectors which have been established. One is efficient Supply Chain Management (SCM), and the second is Category Management (CM). Both elements were considered for the research.

SCM focuses on optimising the whole delivery process (Schröder, Feller & Großweischede, 2000). The main focus in CM is on the needs of the end consumer. To date, the ECR model is only fully established in the FMCG business (Dupre & Gruen, 2004; Godwani, 2008).

This research investigates the extent to which pharmaceutical wholesalers are considering a change in their current business model and the extent to which key environmental factors are driving this change. Additionally, the research investigates to what extent the existing ECR model used in the FMCG business is suitable for the pharmaceutical business and also, the extent to which a newly adapted version of the model may be necessary. The results of this research will be to demonstrate, by way of a newly adapted model, important prerequisites and drivers deemed important for the survival of the pharmaceutical wholesale business in Germany.

## 1.3 Aim of the Research

The aim of the research was to investigate whether the ECR model, either in its current or in an adapted form, can be utilized by the pharmaceutical wholesale sector.

As a first step, it was necessary to understand the status quo, i.e. how pharmaceutical manufacturers and wholesalers, as well as wholesalers and retail pharmacies, are currently operating and collaborating with each other. As the ECR model originates from the FMCG market, this sector's micro and macro environmental factors, as well as the ECR success rates, also needed to be identified in order to assess the desirability and transferability of the model to a different setting. Finally, as the ECR model deals with the dyadic relationship between manufacturers and retailers, to the exclusion of wholesalers, an appreciation of how far the model would accommodate a third party was crucial. In order to recommend an adapted ECR model for the pharmaceutical wholesale business in Germany, the following objectives had to be addressed:

- 1. To investigate the key environmental issues impacting on the pharmaceutical wholesale business in Germany
- To assess how the ECR model developed for the FMCG sector works in Germany
- To investigate the potential to adapt the ECR model in order to transfer it to the pharmaceutical manufacturer / wholesale / pharmacy retail relationship
- 4. To develop an adapted ECR model for the pharmaceutical market that incorporates the role of the wholesale sector

# 1.4 <u>Research Questions</u>

- 1. What are the environmental factors that make pharmaceutical wholesalers consider changing their business model in Germany?
- 2. How established is the ECR model in the FMCG business in Germany?
- 3. How could the ECR model from the FMCG business be transferred into the pharmaceutical wholesale business in Germany?

# 1.5 Structure of the Thesis

The structure of the thesis considers that two different macro economical environments have to be understood. Firstly, the German pharmaceutical market with its particular legal framework and especially the pharmaceutical wholesale business. Secondly, the FMCG market in Germany, the principles and methodology of the ECR model and the micro environmental issues in the German grocery retail market.

The first chapter gives an overview of the aim and the context of the research. It delivers an initial introduction to the current situation in the pharmaceutical wholesale market in Germany and a short introduction of the ECR model as well as the limitation of this work. It formulates the research questions and objectives and gives a perspective on the contribution to knowledge and its implications.

The second chapter delivers the necessary background information of the pharmaceutical market in Germany. It gives an overview of the market participants, categorization of the product groups in that market and shows some actual market trends. This chapter gives an overview of the macro environmental framework, as well as the political and legal limitations in that market. This is followed by an in-depth examination into the German pharmaceutical wholesale business environment and their customers, the retail pharmacies.

In the third chapter the subject matter is a literature review about the ECR model in the FMCG market. This chapter describes the systematic literature review and the data bank search and the results. Additionally, consideration was given to whether a collaboration model like the ECR approach already exists in the German pharmaceutical wholesale business. The chapter concludes with a discussion of the knowledge gap and the contribution to research of this current work. Within this literature review the history and the structure of the ECR approach has been investigated and the two areas of the model (SCM and CM) are described in detail. Success factors, as well as challenges, are addressed, and micro environmental issues within the retail grocery market in Germany are utilized to aid this description. This literature review together with the pharmaceutical market analysis in chapter 2 gives the basis for the case study.

Chapter 4 critically reviews the different research philosophies and my own personal philosophy. It provides an overview of research paradigms and philosophy, in addition to the various research approaches and the chosen case

study method. It describes the time horizons, techniques and procedures of the research, as well as the data collection and analysis.

Chapter 5 provides a profile of the case company, their holdings structure and company strategy. Due to on-going discussions regarding a change in the owner structure during the research period, it was not possible to include any transcription material of the interviews. Therefore, this chapter gives a descriptive analysis of the research findings, without the use of any direct quotations from the interview partners.

Chapter 6 categorizes the findings from chapter 5 by taking a multiple level approach from the findings of the interviews, observations and internal material. Firstly, to discuss in the context of extant debates the differences between FMCG and the pharmaceutical market, and secondly to identify similarities between both markets. Finally, new business opportunities which support an implementation of an adapted ECR model are discussed.

Chapter 7 proposes a recommended adapted ECR business model and suggests a further research proposal.

# 1.6 <u>Contribution to Knowledge</u>

The contribution to knowledge would be to demonstrate that the existing ECR model in the FMCG market is potentially transferable into the pharmaceutical wholesale business. In addition, the investigation aimed to answer the question of how such a collaborative model would appear by considering the micro and macro environmental factors of the pharmaceutical market in Germany and especially the specifications of the wholesale business model. The result of the research will be to depict, by way of the current ECR model, what factors are deemed important for ensuring the survival of the pharmaceutical wholesale business. Based on exploratory research, a newly adapted version of the model is likely to be necessary.

# 1.7 Limitation of the Research

The main limitation for this research was the restriction put on me by the case company. This limitation was imposed as the holding company (to which the case company belonged) began a selling process for the whole company during the research period. Therefore, I was very restricted in the methodology adopted for the interviews, as well as in the documentation and publication of their results.

Furthermore, German pharmaceutical wholesale companies are of different company types, such as associations or independent of any particular pharma group (see section 2.7.2). The case study focused on a public listed company structure. Therefore, the recommended business model for the pharmaceutical wholesaler in Germany focused on this wholesale type. The model would need to be adjusted for the different pharmaceutical wholesale company types, as well as for wholesale businesses in other sectors.

# 2.0 BACKGROUND OF THE PHARMACEUTICAL MARKET

# 2.1 Objectives of Chapter 2

The aim of this chapter is to generate an understanding of the pharmaceutical industry in Germany, to identify and analyse how environmental issues, particularly the legal framework, impact on the pharmaceutical wholesale sector. This is an important investigation to assess the extent to which the ECR model from the FMCG market is applicable to the pharmaceutical market.

A comparison between the OTC and para pharmaceutical sector and the FMCG market is provided. This section therefore provides an overview of the German public healthcare system, the first and second healthcare markets and the distribution network of pharmaceuticals in Germany. It will provide clarification on the product areas which are included in the scope of the research, in order to provide an initial insight into the differences and similarities of the pharmaceutical market and the FMCG market.

Additionally, it will demonstrate which market participants are relevant for the focus of the research. Furthermore, the current market situation and especially the market structure of the pharmaceutical wholesale business is explored as well as the correlation between the different market players such as pharmaceutical manufacturers, wholesalers, doctors, patients and pharmacists. Hence, this section will investigate the current business model of pharmaceutical wholesalers and consider what constitutes "the customer" and their demands.

The market analysis provided aims to answer the question of whether, in the pharmaceutical wholesale business in Germany, a similar business model to that of the FMCG ECR model exists, or indeed whether any comparable business model is currently available. Furthermore, a preliminary assessment is given of the ECR model from the consumer goods market and considers if it is potentially transferable to the pharmaceutical wholesale business in Germany.

# 2.2 The German Pharmaceutical Industry

The pharmaceutical industry is defined "as the collection of companies that discover, develop, manufacture, and market medicines for human use" (Spilker, 1989, p.7). They differ between those manufacturers which produce patented products and generics manufacturers (Schröder, 2010). Generics are pharmaceuticals which are copies of the original, patented products and can be produced after patent expiry. These prescription products are subdivided into different product categories and only available on prescription (RX: patented products; GX: off patent products).

The key product groups of the dispensary category are antineoplastic and immunomodulating agents, nervous system, alimentary tract and metabol, systemic anti-infectives and cardiovascular system (IMS, 2014). In 2013 these five product groups, which are only available on prescription and exclusively dispensed in pharmacies covered more than 70% of the total German sales turnover (see figure 2.1).

# **KEY PRODUCT CATEGORIES**

Sales (ex manufacturers) 2013

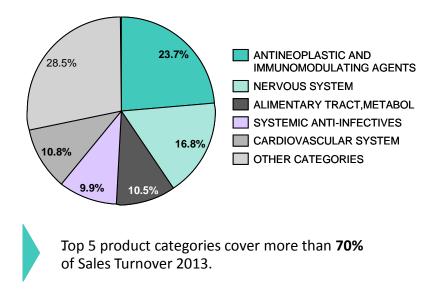


Figure 2.1: Market Data Germany – dispensary categories: RX and GX (IMS, 2014)

Apart from prescription products, over the counter products (OTC) are also available in the German pharmaceutical market. OTC products are mainly in the categories of cough and cold remedies, analgesics, digestive remedies, skin treatment, vitamins and minerals. OTC products can be sold without prescription and are clustered into two categories: products which are only available in pharmacies or those which could also be sold in the FMCG retail sector. This product group will be investigated in more detail in section 2.5.1.1.

Therefore, manufacturers of OTC products are business partners for the FMCG retail business (hyper-, supermarket, discounters and drugstores) as well as for retail pharmacies. Hence the focus of this research will be on these manufacturers from the pharmaceutical industry and their supply chain. This will allow me to make a direct comparison between the FMCG and the pharmaceutical market. Figure 2.2 shows the mix of the OTC distribution channel.

# **OTC DISTRIBUTION CHANNEL MIX**

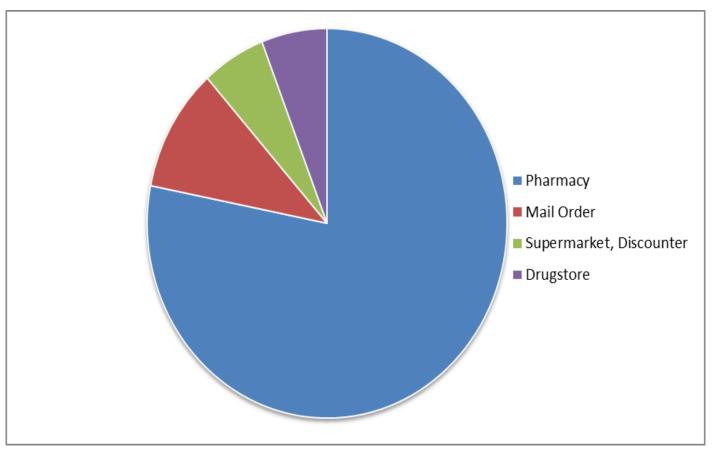
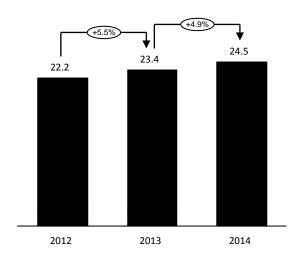


Figure 2.2: Distribution channel mix for OTC products (IMS, 2014)

The total size of the pharmaceutical market in retail and hospital in Germany in 2014 is 36.5bn Euro (IMS, 2015), thereof 24.5bn Euro retail sales turnover dispensary products (figure 2.3) and 7.4bn Euro retail sales turnover OTC in 2014 (figure 2.4). Figure 2.3 shows the market size and growth for dispensary and figure 2.4 the market size and growth for OTC. Figures 2.3 and 2.4 consider only the pharmaceutical retail market.

# MARKET SIZE AND GROWTH DISPENSARY

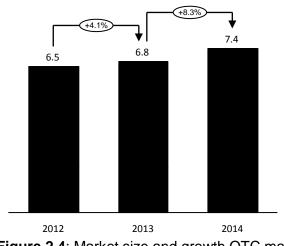


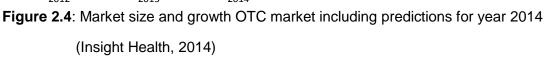
RX+GX Sales (ex manufacturers) per year [EUR bn]

Figure 2.3: Market size and growth dispensary (IMS, 2015)

## MARKET SIZE AND GROWTH OTC

OTC Sales (ex manufacturers) per year [EUR bn]





Recently (see figures 2.3 and 2.4), the sales of healthcare products have increased in Germany, as well as worldwide. Whereas this is due to a growth in

birth and a fall in mortality rates in some parts of the world (IGD, 2014), in Germany, longevity and a concomitant change in the population age structure is responsible for the rise in demand (Apo Bank study 2004 cited in Fricke & Schöffski, 2008). IMS has forecast an average healthcare cost increase of 3.6% in the German market in the next years (IMS, 2014).

# 2.2.1 Development of the German pharmaceutical industry

The pharmaceutical industry is of strategic importance to the German economy because it is the largest sector in Germany and the fourth largest in the world (Schröder, 2010) despite the fact that during the course of the 20<sup>th</sup> century its importance has been reduced (Fricke & Schöffski, 2008). It correlates to approximately 10.5% of the gross German domestic product (Schögel & Herhausen, 2012). In the last 15 years, the growth in that area was higher than that of the total economy in Germany. The German pharmaceutical manufacturers are mainly small or medium sized companies with less than 500 employees (Hahn, 2006).

At the end of the 19<sup>th</sup> century, worldwide, Germany was one of the most important countries for the pharmaceutical industry. During the Second World War, the US pharmaceutical industry increased their market power due to substantial government aid. The 1970s saw a consolidation of the pharmaceutical industry in both the United States and Europe and by 2007 the US pharmaceutical industry had increased to 51% of the world market share (Fricke & Schöffski, 2008). Whilst the German pharmaceutical industry is the largest sector within the German pharmaceutical manufacturers was less than just that of one of the global, leading US pharmaceutical manufacturers. In view of the fact that such global players are so important, they are included in this current research.

# 2.3 The German Public Health Care System

The German healthcare system has a long standing tradition. It has its foundation in the social-political core belief which developed from the culture and history of the country. The healthiness of the individual person is the highest asset. Protection and aid is a social political priority. Therefore a system of social security in case of illness was created almost one hundred and twenty years ago (Lampe, 2009). Over the last centuries, the German healthcare system has undergone many reforms. Until the 1990s the focus of the legislative authority was on reducing the healthcare cost in the system (Lampe, 2009). After the turn of the millennium, the focus was concerned with qualitative amendments and cost effectiveness.

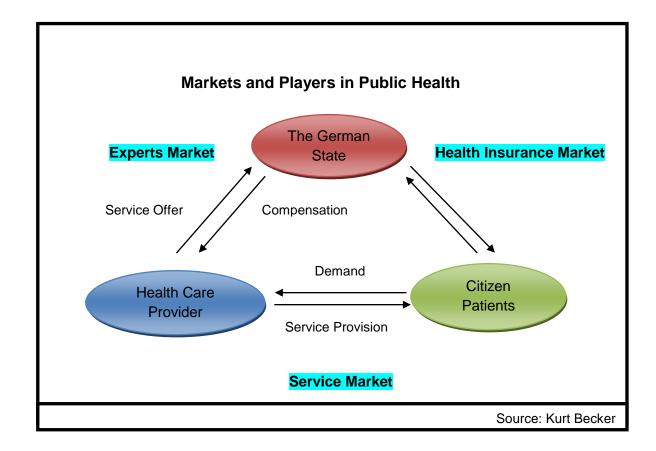
The public healthcare service in Germany is regulated in the body of law of the SGB ("Sozialgesetzbuch") which is the code of social law. The German code of social law is divided into twelve different law codes. SGB V: statutory health insurance ("Gesetzliche Krankenversichung") from 20.12.1988 regulates the public healthcare service (Sozialgesetzbuch-bundessozialhilfegesetz, 1988).

The factoring of the public healthcare service is done by different funding agencies. The statutory healthcare service, or the "social health insurance" (SHI) called GKV ("Gesetzliche Krankenversicherung") is one of the most important agencies. It will be referred to in the following text as SHI. The main costs of the health insurance services, defined in the German code of social law (SGB V), are paid by the social health insurance (SHI).

# 2.4 The First Health Care Market (Regulated Market)

The German healthcare market distinguishes between the regulated and the nonregulated sector. The difference involves the regulation of the availability of pharmaceuticals. In the regulated market, called the "first healthcare market" (Becker, 2012) pharmaceuticals are only available on prescription and reimbursement of the price of the pharmaceuticals are regulated by law as described above. The SGB V law names the participants of the public healthcare system and it describes the targets, rights and duties of the health insurance companies and their members. Beside the SGB V, there are several other regulations in place which will not be explained in detail within this study as they have no effect on the research topic.

The first healthcare market consists of three sub segments: experts; health insurance; and the service market (figure 2.5). Whilst these sub-segments have an individual relationship one to the other, in practice they only work as a single entity. Figure 2.5 shows segments of the first health care market and players in public health.





In this public healthcare market the German state has an important role because the patient has a provision promise from the German state. They pay tax and national insurance contributions for it. Therefore the patient can demand services from the healthcare provider, who in turn has a service agreement with the German state and is compensated by the State for the services which they deliver to the patient.

However, in this regulated market the patient has no, or only limited influence, on the goods and services within the healthcare system and Becker (2012) argued that customer orientation is not applicable in the healthcare system. This is the opposite of the FMCG market where, with the ECR initiative in the 1990s, customer orientation became the main driver for the market. Thus, it can be stated that customer orientation in the legally regulated first German healthcare market, is not applicable.

In this market the service provision and demand takes place between healthcare providers and patients as figure 2.5 shows, but issues related to costs occur in the expert market between the German State and the healthcare provider, thus there is no direct relationship between the demand of the patient, i.e. the consumer, and the costs associated with meeting those demands Therefore, a comparison of business models with an open and competitive market such as the FMCG market cannot be made directly. For these reasons the German first healthcare market is out of the scope of this research and will only be considered in terms of interlinks between both markets. A short overview of the prescription drug sector is provided in the next section only to better appreciate the market as a whole.

## 2.4.1 The prescription drugs sector

Prescription drugs represent a high proportion of the total assortment in the retail pharmacies (IMS, 2014). Circa 85% of the total dispensary turnover is dispensed via retail pharmacies and the remainder in hospitals (figure 2.6).

# 14.70% Pharmacy Hospital

85.30%

## DISPENSARY DRISTRIBUTION CHANNEL MIX

Figure 2.6: Distribution channel mix for dispensary (IMS, 2014)

As mentioned above, in Germany pharmaceutical products belong to different market segments or medicine categories, the prescription-only and the non-prescription medicines (AESGP, 2013). "By statutory regulation, this classification depends on the substances used and may be limited to particular dosages, strengths, presentation forms or applications of the medicinal products" (AESGP, 2013, p.151). It is regulated in the "German Medicines Act" (Arzneimittelgesetz or AMG). The pharmaceutical products are categorized into three areas:

- Prescription drugs available only in pharmacies
- Non-prescription drugs available only in pharmacies
- Non-prescription drugs, freely available

The non-prescription drugs will be investigated in more detail in section 2.5.1.

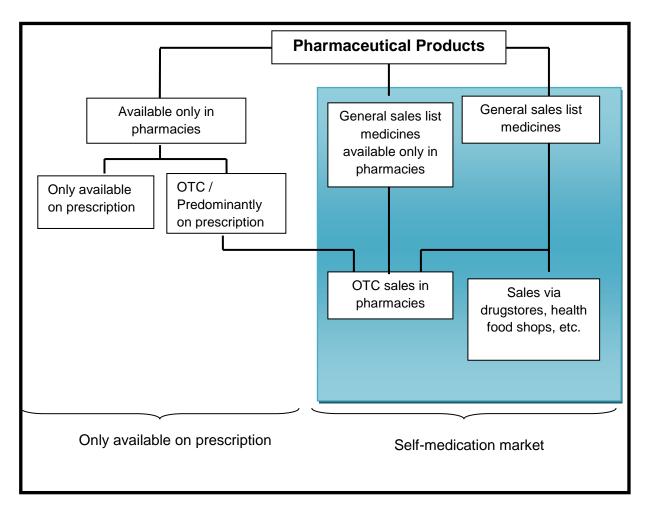
Prescription drugs can only be obtained with a doctor's prescription and are also named as ethical medicines (Hahn, 2006). The pricing for prescription drugs is regulated by law. The patient often has to contribute to the cost of prescription drugs. This is defined by the health insurance companies. Since 2011, in the "German Medicines Market Reform Act" ("Arzneimittelmarktneuordnungsgesetz"; AMNOG) the ex-factory price is regulated by law (Simon, 2013). The "drug price regulation" ("Arzneimittelpreisverordnung") ensures that Germany has nationwide standardized pharmacy selling prices (Specke, 2005). This applies to proprietary medicinal products as well as those prescription drugs which are prepared according to individual recipes.

The prescription market turnover which is related to RX and GX products was about 24.5bn Euro in 2014 and thereof 85.3% were generated via retail pharmacies and 14.7% via hospitals (see figure 2.6). RX products are patented items which have market exclusivity. The total duration of the exclusivity phase is about twenty years from the patent application and includes the time for R & D (Schröder, 2010); the expected useful commercial life is approximately ten years.

Normally, after the off-patent period, the RX product becomes a GX product. Due to intense competition between the different producers, the prices of the GX products decline by more than 50% during the first weeks following the off-patent (Umbach, 2013). It is estimated that over the next few years there will be many RX products going off patent (Balzter, Frankfurter Allgemeine Zeitung, 09.01.2014). This could offer some potential for the OTC market, as another option, after the loss of patent, can be to establish the product in the OTC category, a trend which has grown over the last few years (figure 2.4). Alternatively, the pharmaceutical manufacturer could make some changes to the RX product, for example, expand the indication of the drug or make some line extensions of the medicine, which could offer the manufacturer the opportunity to request an extension of the patent (Umbach, 2013).

# 2.5 The Second Health Care Market (non-Regulated Market)

The second healthcare market is concerned with all those services and products which have to be paid for by the patient directly. Figure 2.7 shows the classification of pharmaceutical products (Hahn, 2006).



# **Classification of pharmaceutical products**

Figure 2.7: Classification of pharmaceutical products, adapted from Hahn (2006, p.14).

Hahn (2006) distinguishes between the prescription market and the selfmedication market. Figure 2.7 gives an overview of the pharmaceutical product types, their classifications and, furthermore, depicts the two different market areas. For the purposes of this research the focus is on the self-medication market. The second healthcare market includes, for example, preventative measures, wellness products or OTC products. A study of the consultancy company Roland Berger suggested that this market had been growing for years and delivered added value for the overall healthcare market (Becker, 2012). It follows therefore that this sector would be of great interest to all market participants due to the increasing interest of consumers in those products and services. For this market, the term "customer" can be used because products and services which increase well-being are discussed, whereas, in the first healthcare market, the focus is curative measures and thus the term "patient" should be used. Therefore, the next sections give on overview of the non-prescription drugs and para pharmaceutical sector.

#### 2.5.1 The non-prescription drugs and para pharmaceutical sector

Non-prescription drugs are OTC products which are sub-divided into those only available in pharmacies, or those freely available (see section 2.5.1.1) and para pharmaceuticals (see section 2.5.1.2).

As seen in figure 2.7, the self-medication market is listed under the headline of non-prescription OTC products in pharmacies and sales in retail stores. This product segment is the focus of this research because a direct comparison between the two sales channels, retail pharmacies and FMCG retail stores (grocery retail and drugstores), is possible. This direct comparison therefore implies that market participants such as doctors, health insurance funds and the government do not need to be considered in detail in the following sections for this research.

In addition to the self-medication market, para pharmaceuticals are also considered as they are subject to the same market regulations as the selfmedication products. In the same way as some OTC products, they are also sold in FMCG retail stores and retail pharmacies and products include, amongst others, skin care, vitamins, oral care, sun care, weight management, dermatology.

With the SHI modernisation law ("GKV-Modernisierungsgesetz"; GMG) it was also determined that there should no longer be price control for non-prescription drugs

(Specke, 2005). This allows for an increase in competition within the market and, as a consequence a lowering of prices. This aspect is an additional argument for placing the focus of the research on non-prescription/freely available products as the pharmacist stands in direct competition with grocery retail and drugstore chains. For this assortment comparability between the pharmaceutical and FMCG market exists as retail pharmacists can build their assortment freely and they have influence over their pricing strategy.

#### 2.5.1.1 OTC

As mentioned above, OTC products are clustered into two categories, products legally only available in pharmacies and products which are not limited to being sold at pharmacies (Schröder, 2010). For these products, the law does not provide clear guidance (Specke, 2005). This indicates that they could also be sold in retail stores such as drug stores. The only prerequisite is that one employee must have an external proof of expertise certification. This authorization implies that the retailer has knowledge about the medicines and knows how to store them.

There is evidence to suggest that the OTC market is very much dependent on seasonal effects. Whilst there was little development of the category over a number of years, the development in 2013 showed a different picture. The strongest product group in the OTC category are cough & cold remedies. In 2013, the market experienced an exceptional year. IMS market research showed an increase of 17% until September 2013 compared to the previous year for OTC cough & cold products in retail pharmacies (cited in Lebensmittel Zeitung, 13.12.2013). By comparison grocery retailing, drugstores and discounters could only mark an increase in their turnover for those products of about 7.7% thereby indicating that the main turnover growth came from the retail pharmacy sector.

This development trend would suggest that the retail pharmacy is an important point of purchase for the consumer as it seems the consumer has a particular trust in the pharmacist when purchasing health products. The consumer relies on the consultation service provided by the pharmacy, as opposed to grocery retailing, e.g. a drugstore or discount stores where the consumer usually makes purchase decisions without seeking advice, this despite the fact that there has to be one employee in the retail store with an external proof of expertise certification. Currently, there is no data that explains consumer preferences for purchasing OTC products in pharmacies.

Apart from these market trends for cough & cold products, the category for dietary supplements, mineral nutrients and vitamins, the second largest product group after cough & cold in the OTC segment, only slightly increased by 1.5% up to September 2013 (Lebensmittel Zeitung, 13.12.2013). The market share for weight loss supplements showed a significant decrease, although no details were provided regarding the different sales channels, (Lebensmittel Zeitung, 13.12.1013).

## 2.5.1.2 Para pharmaceuticals

Para pharmaceuticals include beauty, cosmetics and hygiene goods and are sold in the pharmacy as free and available ("free choice") with some of these products also available in other retail channels.

For the category of beauty and cosmetics, the industrial association of personal hygiene and cleaning agent (IKW's; Industrieverband Körperpflege- und Waschmittel) predicted that the total turnover in Germany for 2013 would be about 12.9bn Euro. This would imply an increase of 0.6% in comparison to the 2012 turnover (Lebensmittel Zeitung, 06.12.2013). The chairman of the association assumed that with the closure of one of the biggest drugstore chains ("Schlecker") in Germany, the turnover for that category would move to other sales channels, such as pharmacies. He saw this trend especially for rural areas where Schlecker was seen as an important local provider. Thus, it is an interesting aspect for the case study to investigate to what extent pharmacies can take over this role and what this could mean for the assortment structure and a collaboration model.

This section has provided an overall impression of the general trends in the different pharmaceutical categories. It will guide the selection of the interview

partners and be a topic in the interviews in order to understand whether the market characteristics and trends have an influence on a collaboration model.

#### 2.6 Customer Differentiation in the Pharmaceutical Market

In the pharmaceutical market, the term "customers" has different meanings depending on the different market participants. For the wholesalers the pharmacies are the customers and for the pharmaceutical manufactures their customers are mainly the health insurance funds, hospitals and doctors (Wilkes, 2012). They view the pharmaceutical wholesalers more as logistic providers rather than as customers. Over a number of years a trend has emerged whereby pharmaceutical manufacturers have attempted to deal directly with retail pharmacies (Umbach, 2013). This indicates that there is not just one customer available in the pharmaceutical business, which leads to a complex market structure and to an inconsistent definition of customer demands.

The final market participant in this market is the patient, the "end consumer". Patients' behaviour and demands in the changing market environment needs to be considered. The pharmaceutical literature is not clear about which terminology to use for this group, whether it is to be referred to as the patient or as the consumer. In general, I have followed the definition of Hahn (2006), who used the wording patient in the context of the prescription market and the terminology of consumer in relation with the self-medication market. Therefore, for the purposes of this research the term "consumers" will be used as the focus will be on the self-medication market with the product categories of OTC and para pharmaceuticals.

The consumer is moving from a passive market participant to an informed and active one. 79% of the internet users have informed themselves about health topics via the internet (Schögel & Herhausen, 2012). This leads to the question, is this "new consumer" recognized by the other pharmaceutical market participants? Schögel and Herhausen (2012) argued that in the future customer orientation would continually become more important due to the fact that the healthcare market would become increasingly competitive. To date, there has been no focus on customer orientation within the pharmaceutical market. The pharmaceutical

market participants still engage with traditional business models and they neglect to think about new models with a greater focus on "customer centricity", despite the fact that the management of individual companies are responsible for developing and implementing new business models (Schögel & Herhausen, 2012).

The idea of customer orientation in principle is not new and already exists in other markets. It has been a topic since the 1960s. Drucker for example stated in 1954: "it is the customer who determines what a business is, what it produces, and whether it will prosper" (Drucker cited in Schögel & Herhausen, 2012, p.2). Others, for example, Stange (2012) argued in the same way, in that he claimed it is necessary to move within a customer orientated direction. But it is much more difficult in the healthcare market to discuss customer orientation than it is in other markets due to the different relationships, as for example between a doctor and a patient (Stange, 2012; Wilkes, 2012). From the traditional perspective, it could be misleading to consider the patient as a customer but the discussion has been engaged in for some years and even the terminology of "well-informed patient" could be seen as a synonym for the term "customer". In essence therefore, it can be seen that there are already discussions taking place which involve customer focus but due to the complex market structure the discussion about the patient as a consumer has not been satisfactorily concluded, but it needs to be considered in the future because, as they become better informed, patients increasingly demand certain drugs.

# 2.6.1 Comparison of the consumer orientation in the pharmaceutical market with the FMCG market

There are fundamental differences between the pharmaceutical and the FMCG market. The latter is driven by the financial power of the individual consumer and is dependent on the quality and the price of the product, whereas in the pharmaceutical market, the price of the product, i.e. prescription drugs, is covered by health insurance and is only partly paid by the patient/consumer (Hahn, 2006). There is no market mechanism with which to inform manufacturers of demand by final consumers, i.e. patients, within the regulated prescription market. As a

consequence there is a change in traditional buying behaviour of the consumer due to the regulation within the pharmaceutical sector, thus, the pharmaceutical and pharma markets are seen differently from other markets (Steliha, 2008).

On the other hand, due to the fact that the patient, who in the past was a very passive market participant, is nowadays seeking more information about their medication, now becomes an active market player (Hahn, 2006). Hence, pharmaceutical manufacturers are starting to think of how to integrate the patient's new role into their marketing strategy. As previously stated, this research focuses on the non-prescriptions area of the pharmaceutical market; however this trend is important because it underlines the view that the pharmaceutical market has started to think of new business models.

In essence therefore, the pharmaceutical market can learn from the FMCG market. In the FMCG market, with the ECR initiative, manufacturers and retailers focus on the final consumer and are working on models to best serve the consumer (Seifert, 2006). In the previous section the discussion was about customer centricity which leads into the topic of pharma marketing. The publications about pharma marketing are mainly related to prescription drugs (Umbach, 2013). But in general, the marketing methodology about customer centricity in the pharmaceutical market and in the FMCG market is similar. The principles and mechanism are the same. The only differentiations come from the differences in the market structures and products i.e. price competition is not possible. The specific characteristics of the pharmaceutical market are as follows (Umbach, 2013, p.106):

- It is a highly regulated market in which laws and guidelines suspend the free interplay of market forces.
- Since drugs have a different risk-benefit balance than consumer goods, safety and tolerability of the product play a very important role.
- The turnover is determined by a mix of various market players with differing interests, such as doctors, pharmacies, wholesalers as well as groups who influence which products are eligible for reimbursement, e.g. the Federal Joint Committee, which is the highest decision-making body of the joint self-

government of physicians, dentists, hospitals and health insurance funds in Germany, and the SHI.

• Product managers have to have detailed knowledge of all product specifications.

These specific characteristics of the pharmaceutical market are more related to the prescription sector. This indicates that for the self-medication sector these hurdles for using marketing tools in analogy to the FMCG market do not exist or only to a certain extent.

Transferring the marketing tools and customer orientation from the FMCG market into the pharmaceutical market is overdue and it is important that complete patient orientation is in the centre of any action (Riegl, 2012). However, the objective should not be limited to increasing demand. Critical voices argue that the patient status is very unique and therefore healthcare professionals are obliged to protect patients and not sell healthcare products in unlimited quantities (Riegl, 2012). In contrast to Umbach (2013), Riegl considers the worries of healthcare professionals in the market rather than the challenges of the market structure. Nevertheless, he distinguishes between the regulated versus non regulated market. He argued that a patient with serious health problems should not just be seen as a customer.

In terms of the market environmental factors there is a difference between the pharmaceutical and the FMCG market in the way of the demand quantities. In the FMCG market the aim is to sell as much as possible and in the healthcare market, for example, the pharmacist is obligated not to sell in unlimited quantities. As pro arguments for moving towards more customer orientation in the market Riegl (2012) mentioned the improved information level of the patients, for example through internet resources, and the increase in health services which have to be paid for by the patient directly. Secondly, the self-medication market becomes more important if SHI reduce the refund for certain goods and services, then the patient would be obliged to obtain the drugs from the self-medication market.

Furthermore, patent drugs could become OTCs after patent expiry. Therefore, it becomes important to start early to build a certain brand awareness of the product in the self-medication market, which can take some years (Umbach , 2013).

This argument indicates that there is already a certain demand for using marketing tools, like the ones used in the FMCG market, to move to a more customer focused business mentality in the pharmaceutical market. But it shows in the same way the specific characteristics which have to be considered in building a customer focused business model.

It should not be neglected that there may be some opportunities for areas of collaboration between non-prescription manufacturers and wholesalers. In view of the low delivery volume per pharmacy, manufactures could have an interest in setting up some additional supply chain services from the wholesalers to save costs. This could be applied to the regulated prescription area as well.

### 2.7 Distribution of Pharmaceuticals in Germany

In Germany the distribution of pharmaceuticals is mainly handled via pharmaceutical wholesalers as illustrated in figure 2.8. The number of wholesalers has been considerably reduced over the last eight years (IMS, 2013; see also figure 2.8). Currently, there are five wholesalers leading the German market: Phönix, Noweda, GEHE Pharma, Anzag and Sanacorp (IMS, 2013). Together they cover more than 90% of the total German wholesale market, with the remainder being small regional wholesalers.

There are more than 20,000 retail pharmacies (Confederation of German pharmacists unions; ABDA-Bundesvereinigung Deutscher Apothekerverbände, 2014) who receive their assortment primarily via wholesalers several times per day. See the following supply chain model of pharmaceuticals as adapted and updated from Specke (2005) in figure 2.8.

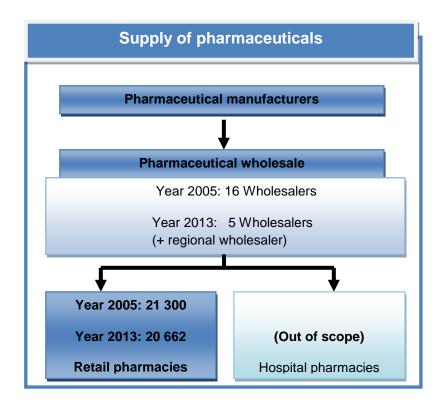


Figure 2.8: Supply of pharmaceuticals in Germany adapted and updated from Specke (2005, p.56)

The pharmacy market distinguishes between retail and hospital pharmacies. The number of retail pharmacies has been reduced over the course of a few years as has the number of wholesalers (see figure 2.8). For this research, only the retail pharmacies are considered as they have a similar business model to retail chains (for example supermarkets or drugstores) in the FMCG business, as described in section 2.5. They are shops with walk-in customers.

The illustration of the supply chain of pharmaceuticals in Germany which Specke showed in 2005 is still valid in principle, but an important addition to Specke's model (2005) are direct deliveries from pharmaceutical manufacturers to retail pharmacies.

The number of direct deliveries (from manufacturer to retailer) has increased over a number of years (IMS, 2013), which is one element of the strong competition faced by the wholesalers in the market and is indicative of the reduction in the number of pharmaceutical wholesalers in the German market. The turnover share which bypassed the wholesalers amounted to 9.3% for prescription drugs, 30.5% for OTCs and 38.8% for para pharmaceuticals (IMS, 2013). It shows the dilemma for the pharmaceutical wholesalers in Germany, who in the past were more or less automatically involved in the pharmaceutical supply chain, but today are only one of several supply chain options in the market.

# 2.7.1 The role of the pharmaceutical wholesaler in the distribution chain

Despite the above discussion, the pharmaceutical wholesaler still plays an important role in the pharmaceutical market in Germany. It guarantees product availability in the market by buying products on its own account and keeping the stock available. Therefore it has a buffering function in the supply chain process. The wholesaler can regulate certain regional delivery or quality issues in the market (Mähr & Rossmy, 2008).

In this classical supply chain model the process is as follows: the manufacturer delivers to the wholesaler, the wholesaler keeps the stock and delivers the goods to the pharmacies on their demand (Simon, 2013). This could happen more than once per day, an event which differs from other markets, but sometimes necessary due to the fact that the products are mainly drugs. The compensation is regulated by law, as already explained in section 2.4.1. If the wholesaler did not function as the interface between the pharmaceutical industry and the pharmacies, manufacturers would have to deliver to all pharmacies directly leading to an unsustainable number of deliveries. It would also have disadvantages for the pharmacy as each pharmacy would receive an enormous number of single deliveries from the different manufacturers, their administrative workload would increase and it is unlikely they would be able to reach minimum order limits.

#### 2.7.2 Classical pharmaceutical wholesale business model

In Germany, apart from the pharmaceutical trade, the distribution is also regulated by law (Simon, 2013) and the wholesaler needs a licence from the regional government authority. There are two different business models for pharmaceutical wholesale available. One is the so called "full line" wholesale. This wholesaler has the complete assortment listed which can be requested by a pharmacy.

In the other wholesale model, only a partial assortment is listed. This group is called "short line" wholesalers. According to Simon (2013), these wholesalers focus on some specific therapy areas or on certain manufactures. In addition to that, some of these wholesalers focus on so called fast moving items, although I found no detailed discussion on this topic in the literature.

In Germany the pharmaceutical wholesaler has a "public service obligation" stipulated by law (Umbach, 2013). It has been regulated by the 15<sup>th</sup> AMG Novella from 2009. This law states that the pharmaceutical wholesaler has to have all products available in the product list which could be ordered by the pharmacies. In principle, if a pharmacy orders a drug which is not listed in the assortment, the wholesaler would still be obliged to deliver it. The scope of this research is the "full line" wholesale model in view of the fact that the investigation is about the self-medication market as well as the para pharmaceutical assortment. Therefore, only a "full line" wholesaler could be considered and the case study was conducted for such a wholesale model in Germany.

In Germany, the above mentioned (section 2.7) five leading wholesalers in the market are full line pharmaceutical wholesalers. The "full line" wholesalers are organized in the PHARGO which is the Federation of German pharmaceutical (Bundesverband des pharmazeutischen Großhandels). wholesalers This organisation ensures that all members operate in keeping with principles such as manufacturer neutrality and readiness for delivery (Specke, 2005). These wholesalers have to cover considerable demand with regard to organizational and logistical structures involving a great number of employees because they have to handle the full assortment of a pharmacy, which is about 90,000 items, from 1,500 manufacturers. They also have to deliver, sometimes several times per day, to individual pharmacies (Dambacher & Schöffski, 2008). Their aim is to guarantee the deliveries for approximately 20,600 pharmacies in Germany. Due to their commitment of manufacture neutrality and the "full line" guarantee they have to keep an enormous number of articles in stock. To put this into context, in Germany there are overall approximately 120,000 pharmaceutical dosage and administration forms registered (Mähr & Rossmy, 2008).

Beside the full line and short line differentiation another classification can be used. Dambacher and Schöffski (2008) distinguish between different characteristics of company types. The totality of German wholesalers can be clustered into four groups, as shown in table 2.1 below. The first one includes those wholesalers in which pharmacists hold shares. Sanacorp, Noweda and, partially, Anzag<sup>1</sup> fall into this category.

The second group is centred around Phönix which belongs to the Merckle company group, which also controls Ratiopharm (one of the leading GX and OTC manufacturers in the German market). The third group (which GEHE Pharma falls under) includes wholesale companies which are independent of any particular pharma group and in which pharmacists have no share. GEHE Pharma belongs to the Celesio AG where Franz Haniel and Cie GmbH are majority shareholders (this was until November 2014 and more details about this are given in chapter 5). The fourth group is characterized by family owned wholesale companies that mainly operate regionally in Germany and have a less valuable market share.

<sup>&</sup>lt;sup>1</sup> In 2010 Alliance Boots bought 80% of Anzag shares (today it owns approx. 96% of the shares). In 2013 it changed the company name into Alliance Healthcare Germany AG (Alliance Healthcare, 2016).

Туре	Wholesalers	Characteristics
Associations	Sanacorp Noweda Anzag (partically)	Pharmacists have a voice in company decisions
Merkle group (includes pharma manufacturer)	Phönix	Relationship with pharmaceutical manufacturing
No particular pharma group	GEHE Pharma	Controlled by supervisory board
Family owned	Regional operating	Owner decisions

#### Characteristics of wholesale types in Germany

Table 2.1: Characteristics of wholesale types in Germany

These differing characteristics of German wholesalers could have an influence in terms of the decision making processes in the organization when it comes to changing the current business model. In an association a large number of pharmacists have a voice, whereas in a family owned company the owner decides. This research was completed as a single case study in a wholesale company which does not belong to a particular pharma group and no pharmacists have shares. As previously mentioned the investigation is concerned with the self-medication market in addition to the para pharmaceutical assortment. Therefore, only a "full line" wholesaler (in this case GEHE Pharma) could be considered.

To complete the illustration of the wholesale market, and despite the current difficult market environment, a new wholesaler commenced trading at the end of 2013. The business model was classed as an "innovative discount model" (Hofmann, 2013a). However, due to the fact that the business model resembles that of a short line wholesaler it was not considered for the case study. The point should be made that the changing market environment of the German

pharmaceutical wholesale market has already created innovative approaches and new business models. Therefore, the next section gives an overview of some of the new business models.

#### 2.7.3 New pharmaceutical wholesale business model

In addition to the classical wholesale model, there is still the possibility for manufacturers to deliver directly to the pharmacy. In the pharmaceutical market, this model is called "Direct-To-Pharmacy", DTP (Umbach, 2013). For this supply chain process, the manufacturer either assigns a logistic provider for the deliveries or, even, one of the pharmaceutical wholesalers. The difference is that the manufacturer remains the owner of the goods and pays a "fee for service" to the dedicated logistic provider. In this case the role of the pharmaceutical wholesaler is reduced to that of a logistics provider for the pharmaceutical industry. For the manufacturer it has the advantage that it only has to pay the "fee for service" and no further wholesale rebates.

Mähr and Rossmy (2008) reflected on a case in the United Kingdom where, in 2007, one of the biggest pharmaceutical manufacturers assigned one wholesaler as its service provider. This meant that only this logistic provider had the right to deliver the goods of this manufacturer. It delivered all items to all pharmacies in a DTP model. They argued further that over and above this so called "solos deal", a "reduced wholesale" model is also possible, whereby the manufacturer selects, for example, two or three wholesalers who deliver the assortment. Mähr and Rossmy (2008) saw this as an upcoming trend at that time and is an interesting concept for a collaboration model between manufactures and wholesalers in the pharmaceutical market.

However, a major aspect which needs to be considered for Germany is that pharmaceutical wholesalers have a "public service obligation". Initially, this could lead to the impression that DTP or a "reduced wholesale" logistic model would not work. The only solution would be that the selected service provider would deliver to a wholesaler once an order had been placed. That could also mean that if a pharmaceutical wholesaler is selected by the pharmaceutical manufacturer this wholesaler has to deliver to another pharmaceutical wholesaler in the market even if they are competitors. Despite Mähr and Rossmy (2008) identifying "a reduced wholesale model" as an upcoming trend in 2008, I found no further evidence in the literature to support such a business model for the German market.

This discussion highlights the importance of the role the wholesaler in the supply chain process within the pharmaceutical market. Whilst, in the main, the classical supply chain role of a wholesaler is in place, the structure of the supply chain processes between manufacturers, wholesalers and retail pharmacies are changing. New supply chain models like DTP or reduced wholesale are under evaluation by the different market players. This more complex market structure needs to be considered in the comparison of the FMCG market, where the relationship is mainly between manufacturers and retailers directly with different delivery structures and legal regulations. In FMCG manufacturers deliver directly to a central warehouse of the grocery retailer. In that business model, in general, there are no wholesalers involved and by comparison the numbers of items per delivery are higher. Products are delivered on palettes and as a consequence of stock optimisation much less frequently (Kilimann et al., 1998). This will be investigated in more detail in chapter 3.

#### 2.7.4 Challenges in the pharmaceutical wholesale business

This illustration of the new supply chain models in the pharmaceutical market and the comparison with the FMCG market shows that from the manufacturer side the trend in the pharmaceutical sector is moving in the direction of the supply chain model which exists in FMCG market. The manufacturers want to work directly with the retail pharmacies or use a wholesaler as partner of choice within a reduced wholesale model. This has obliged wholesalers to start thinking of new value added services to keep their position in the pharmaceutical supply chain or even to strengthen it and to become a preferred partner for the manufacturers.

Another challenge occurred in the German pharmaceutical market at the end of 2011, a "rebate war" started (Hofmann, 2013b). German pharmaceutical wholesalers provided more and more rebates to the retail pharmacies. As a

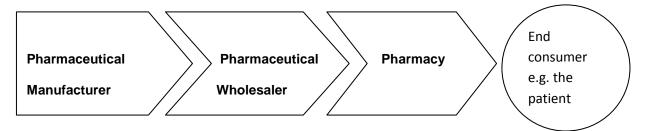
consequence, the market shares of the different market players changed. In January 2012, the market share of the market leader Phönix dropped down to 23.29% and GEHE Pharma lost market share down to 15.5%. Noweda gained up to 18.79%. Sanacorp stayed more or less stable. Since that time, Phönix has been working towards regaining its former market share which, during the year 2010, had been stable at around 27%. Since May 2013, it has been back at its former level and even increased its share (27.82%).

Appendix 2.1 gives an overview of the market share development of the leading German wholesalers from January 2010 to May 2013. This graphic shows the more or less stable market situation in the years 2010 and 2011 and the trends from January 2012 onwards. Hofmann (2013b) speculated that opinions in the market differ about the reasons for the "rebate war", but are mainly seen as a consequence of the market share loss of the market leader. The important thing that can be seen in this trend illustration of the development of the market shares is that the market reacts to certain activities immediately. The pharmacists, who are the customers of the wholesalers, quickly switch to another wholesaler as soon as a better offer is available. This suggests that the loyalty factor is not very high in that market, an issue which is investigated in the case study.

These challenges show that the pharmaceutical wholesaler comes under pressure from the upstream as well as downstream market. They have to offer the right supply chain services and additional trade services to both market participants.

## 2.7.5 Business opportunities for the pharmaceutical wholesale business

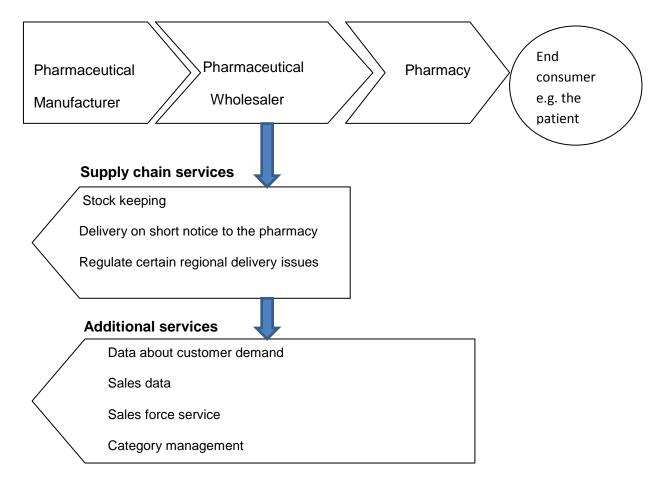
In summary, for pharmaceutical products wholesalers still play an important role in the German healthcare market because they are the link between the pharmaceutical manufactures and the pharmacy shops. As mentioned in section 2.7 despite approximately 9% of prescription drugs (IMS, 2013) being delivered directly from the pharmaceutical manufactures to the pharmacy stores, this still leaves some 91% of products being delivered by the pharmaceutical wholesalers in Germany. This indicates that for pharmaceuticals the supply chain works mainly via wholesalers due to the fact that the number of available products is high and a pharmacist could not keep all of them on stock. In addition, especially for some prescription drugs, the demand is so low that an immediate delivery from the manufacturer to the individual pharmacy would be impossible. But immediate delivery of low volume items is often crucial for the pharmacist to be able to provide the patient with the drugs they require. As shown in figure 2.9 this service from wholesalers was described as a value added service within the supply chain (Mähr and Rossmy, 2008).



#### Pharmaceutical value chain for pharmaceutical products

Figure 2.9: Pharmaceutical value chain based on Mähr and Rossmy (2008, p.331).

But this need is different for OTC or para pharmaceuticals. Normally, it would make sense that wholesalers provide these products when they deliver prescription drugs to the pharmacy. However, as discussed above and based on my professional experience, it is argued that the market is changing. At one level, manufacturers want to deliver those products directly to the pharmacy (see also section 2.7), (30.5% OTC and 38.8% para pharmaceutical turnover share bypassed wholesalers in 2013, IMS, 2013) to gain better market access. Therefore, the pharmaceutical wholesaler has to add value to the upstream supply chain to keep and to get OTC and para pharmaceuticals back into the wholesale supply chain. Therefore, figure 2.9 has been extended with additional possible services (see figure 2.10).



### Pharmaceutical value chain for OTC and para pharmaceuticals

Figure 2.10: Extended pharmaceutical value chain adapted from Mähr and Rossmy (2008, p.331)

The described supply chain services are the classical wholesale services (see section 2.7.1) which reduce the administrative work for the manufacturer as well as for the pharmacists. Nevertheless, the manufacturer uses direct deliveries to enable better access to the customer. Therefore, the wholesaler should offer additional services to the manufacturer as described in figure 2.10. Those services provide an additional benefit for the manufacturers and generate market knowledge and access which the manufacturer attempts to generate with the direct deliveries.

Hence, the wholesalers have to work closely with the pharmacies to generate these upstream services for the manufacturers and to offer the right trade services downstream. Today, the wholesalers have so called "commitment models" (Mähr & Rossmy, 2008) for the pharmacists in place. A "commitment model" is about a partnering and service agreement between the wholesaler and the pharmacists. For this topic no detailed literature discussion could be identified. Therefore it is investigated during the case study in more detail. But up to this stage of the investigation it appears that those "commitment models" need to be revised, otherwise the market would not react so much and manufacturers would not consider the direct deliveries. Therefore, it is important to investigate the retail pharmacy sector in more detail and to understand the structure, regulations and distribution model.

#### 2.8 <u>Retail Pharmacies</u>

This section focuses on the retail pharmacies, their structure and role in the German market and their demands towards the wholesaler and manufacturer.

In the past, the main task of the pharmacist was to produce the medicine. Today, it is more about handing out pharmaceutical products and providing an advisory service (Hahn, 2006). The advisory service is very limited for prescription drugs. On the prescription form, the doctor can mark "aut idem" which means "or the same" (Simon, 2013), which means that only the agent is prescribed. With this indicator, the doctor allows the substitution of the drug by leaving it up to the pharmacist to sell a cheaper product (for example a GX product). This gives the pharmacist a certain leeway. That is the reason why pharmaceutical manufacturers are trying to involve pharmacists more and more in their marketing activities (Hahn, 2006).

In the non-prescription area and especially in para pharmaceuticals the pharmacist can act more like a retailer. Those products are either placed in the "visible choice" or in the "free choice" area of the retail pharmacy. The "visible choice" area is behind the counter where the OTC products are placed which the pharmacist has to hand out to the customer. The "free choice" assortment is placed in the front (i.e. public area) of the pharmacy where the customer has direct access to the products. In Germany in 2008 there were 21,602 pharmacies, a number which had declined to 20,662 in 2013. The highest number of closures happened in 2012, with 501 closed pharmacies (ABDA, 2014). Sempora Consulting (2013) conducted a survey of 192 pharmacists and 50 manufacturers. The result was that the pharmacists estimated the number of pharmacies would reduce to 18,867 by the end of 2017, and the manufactures forecasted a number of 17,940 (Sempora, 2013). Overall in Germany there are 3,900 inhabitants per pharmacy. With this average Germany takes a middle place in the European ranking. In comparison, in Denmark the residence number per pharmacy is about 17,700 and the lowest number is in Greece with 1,000 (ABDA, 2014).

#### 2.8.1 Assortment structure

ABDA discloses a turnover (sell out of the pharmacies) for the German pharmacies for 2012 as follows:

Total pharmacy turnover (without VAT):	42.6bn Euro
thereof:	
Prescription drugs:	34.1bn Euro
Non-prescription drugs but available only in pharmacies:	4.2bn Euro
Non-prescription drugs:	0.3bn Euro
Para pharmaceuticals:	2.3bn Euro
Patient care and medical devices:	1.7bn Euro

As can be seen above approximately 80% of the turnover in pharmacies is for prescription drugs and beyond the scope of this research. This could lead to the conclusion that the remainder would be too small at only 20% of the retail pharmacy turnover. On the other hand, this figure is put in perspective when the

number of packages is considered. Then the share in the pharmacies is only about 53% for prescription drugs, due to much higher average prices (Bauer, 2008). This leads to the assumption that there is enough room for investigation for the non-prescription and para pharmaceuticals in terms of, for example, category management programmes which are one aspect of the ECR model in the FMCG market. This is the area where the pharmacists and the wholesaler can leverage advantages of a market economy which is less the case for regulated prescription products. In terms of the supply chain aspect of the ECR model the whole turnover is still of interest because it is about optimized supply chain solutions and further logistical cooperation concepts.

#### 2.8.2 Regulations

In Germany, there are also regulations in place in terms of how to run a pharmacy business. Firstly, a licence issued by the regional government authority is necessary. For this purpose approbation as a pharmacist is a prerequisite (Simon, 2013). The pharmacist is then obliged to be always present in the pharmacy. Until 2003, the so called "Mehrbesitzverbot" was in place, which banned the ownership of multiple pharmacies. A pharmacist was only allowed to own one pharmacy. In with the introduction of the SHI modernisation ("GKV 2004. law Modernisierungsgesetz"), pharmacists were allowed to have up to three additional branches beside the main pharmacy. However, they could only be located within a certain distance of the main pharmacy. One of them must continue to be led by the owner. This regulation is in place so that the pharmacist holds responsibility and influence by third parties is avoided (Specke, 2005). This is why, in Germany, no pharmacy chains exist, unlike in other countries, such as Norway or the UK.

Until 2004, mail order selling of pharmaceutical products was also banned. Now, with the "SHI modernisation law", it is partially possible. The details are regulated in the "Pharmacy Act" ("Apothekengesetz"). Mail order selling is a growing trend in the market and is an area which could be considered for future research. At this stage, this topic does not require a detailed investigation as it is still restricted in

Germany. However, of most importance for this research, the focus is on the direct business relationship between the market participants (manufacturer, wholesaler and pharmacist) who are comparable to the FMCG market structure.

### 2.8.3 Compensation regulations

With the "SHI modernisation law", the compensation for the pharmacist changed (section 2.4.1). For the non-prescription drugs available only in pharmacies there are two concepts in place. For those products which are compensated by the SHI a reimbursement scheme is fixed. It is a graded surcharge scale which is calculated based on the pharmacy purchasing price. For the other products, the pharmacist is free in the sales price definition (Bauer, 2008).

The same rule pertains to the other non-prescription drugs and para pharmaceuticals. It is further regulated that the pharmacist has to pay 2.30 Euro per package for prescription drugs and 5% on non-prescription drugs to the SHI on all products which are totally or partly paid for by the SHI. Of importance for this research regarding the reimbursement scheme is the aspect that the SHI can be seen as the biggest customer of the pharmacies because 40% of all packages are totally or partly reimbursed by the SHI (Bauer, 2008). Bauer argued that the reason for the reimbursement is seen as a rebate for a major customer. But this could be questioned because the SHI does not have a central purchasing department.

This illustration should demonstrate the strongly regulated environment of the pharmacy business in Germany. It has focused on some key aspects which are important for the research. On the other hand it also leaves room for exploring how the collaboration with the wholesaler can be intensified.

#### 2.8.4 Distribution model

On average, a pharmacy has between 4,000 and 8,000 products in stock. The full line wholesaler, as mentioned above, has approximately 90,000 items in stock of which approximately 30,000 are marginal and side assortment articles (mainly para pharmaceuticals) (Dambacher and Schöffski, 2008). These 30,000 articles could be considered for different collaboration models, such as the ECR approach.

On average, the pharmacy places orders three times a day from two different wholesalers (Dambacher & Schöffski, 2008). It is in the best interests of the wholesaler to gain the support of the customer and keep them loyal, due to the fact that in Germany the number of pharmacies is limited. For this reason the "full line" wholesalers are offering additional services. For example the pharmacist can join a so called "commitment model" (Mähr and Rossmy, 2008). As stated in section 2.7.5 this model will be investigated further for this current research.

By adding the manufacturers to this picture, the following aspects are added as well. They have an interest in delivering directly to the pharmacy as stated earlier, especially regarding high price pharmaceuticals as well as non-prescription products. For high price pharmaceuticals they want to achieve the high margin which the wholesaler gets based on the "drug price regulation" ("Arzneimittelpreisverordnung").

For the non-prescription area they want to be in direct contact with the point of sale. Thus, they have the chance to share their promotional activities (Dambacher & Schöffski, 2008). Authors like Riegl (2012) talk about the supplementary and profiling assortment which gives the pharmacist an opportunity to build a comparable assortment to grocery retailers or drugstores. This area should be considered when discussing how a collaboration model could work between the pharmacist as a retailer, the wholesaler as a middleman and the manufacturers in terms of assortment building, promotional activities etc. in comparison to the FMCG market.

#### 2.9 Chapter Conclusion

The background study of the pharmaceutical industry was conducted to understand the macro and micro environmental issues in the pharmaceutical wholesale business in Germany. As the investigation of the pharmaceutical market has shown, there is no business model available like ECR for FMCG within the pharmaceutical sector. By considering the two main areas of the ECR principles, category management and supply chain management, the following aspects are important for the investigation.

The pharmaceutical industry is a much regulated one and this has to be taken into account when considering the implementation of such a business model. For the CM approach, the pharmacist, who can be viewed in the role of the retailer, has only a very limited chance to build product assortment, drive promotions or even to exclude manufacturers from the assortment. Pharmacists have more freedom in the area of the para pharmaceutics and those OTC products which can also be sold through other sales channels. For purchasing para pharmaceuticals and OTC products in pharmacies, no data could be found that explains consumer preferences for purchasing behaviour, but it does appear that consumers trust the consulting service of a pharmacist as opposed to choosing from a grocery retail store or drugstore for certain products.

For OTC and para pharmaceuticals the pharmacist can act as a retailer. It needs to be investigated to what extent the pharmacies can take over the role of the biggest drugstore chain ("Schlecker") as the chairman of the association of personal hygiene and cleaning agent assumed, and what impact that has on the assortment and a collaboration model.

For this assortment the pharmacist has limited market power, due to only being able to own a maximum of four pharmacy shops. Purchasing power for this sector, in terms of negotiating better prices or certain terms and conditions, is therefore limited as well. Furthermore legal limitations exist in terms of the assortment structure. The pharmacist could not, for example, place a kiosk assortment (e.g. ice-cream or soft drinks) into the shop. For the SCM aspect, the pharmaceutical wholesaler still has an important role in the pharmaceutical supply chain. Legally the wholesaler has to guarantee product availability in the market. But there are challenges within the classical pharmaceutical wholesale model. There are new supply chain models available in that market which relate to different roles for the wholesaler. In Germany, DTP is a preferred supply model for non-prescription products. This model has a consequence whereby the wholesaler could lose the role as middleman. Therefore, wholesalers should provide attractive services for manufacturers and pharmacies alike, to avoid being bypassed within the supply chain.

The aim should be to generate value added services in the supply chain to the upstream market. On the other hand to offer trade services to the downstream market to keep the pharmacists in their "commitment model". Figure 2.10 presented some ideas about upstream services.

## 3.0 SYSTEMATIC LITERATURE REVIEW

## 3.1 Objectives of Chapter 3

A systematic literature review is conducted to generate evidence and to determine the extent to which an ECR model or another cooperation model, has already been adapted for the pharmaceutical wholesale business in Germany. Evidence suggests that unlike the FMCG market, there is no similar model used within the pharmaceutical industry.

The systematic literature review also investigates how an ECR model works in the FMCG market in order to gain a deeper understanding of how the model operates and to what extent it can be applied within the pharmaceutical industry.

It has been identified that the ECR model was first established in the FMCG market. Therefore it is also necessary to understand the market environmental issues for the FMCG market, where this model is used to understand what makes the model work, and what are the differences to the pharmaceutical market. It should also be investigated where some challenges or conflict areas may be so that these could be considered in the recommended business model for the pharmaceutical wholesale business.

## 3.2 Review Search Strategy

A systematic literature review was selected as the method for this research. It is one of the recommended tools to improve the quality of a literature review for management research (Tranfield, Denyer, & Smart, 2003). The method of the systematic review allows for generating an in-depth analysis of published and unpublished studies. It does not limit me to quantitative or qualitative studies (Pawson, Trisha, Harvey, & Walshe, 2004).

The advantage of a systematic rather than a narrative review is that I can generate more thoroughness within the data collection (Tranfield et al., 2003). A narrative review could result in a more biased selection of sources. Bryman and Bell (2007), Tranfield et al. (2003) criticized the narrative method as too fragmented and

divergent. In contrast Tranfield et al. (2003) suggested that a systematic review could be done by another researcher with the same result. Greenhalgh et al. (2004) disagreed and considered the possibility that another researcher investigating the same topic with the same method, would get the same search results, i.e. the list of references, but would probably not come to exactly the same literature evaluation results and judgment (Greenhalgh et al., 2004).

For this systematic review different search steps were taken. The first aim was to identify whether in the pharmaceutical market a specific business model between manufacturers, wholesalers and pharmacists is described and already in place in any country (see section 3.3.1). Therefore, for this first part of the search no inclusion or exclusion criteria were defined (Bryman & Bell, 2007), because for this first step of the literature review the importance lies in understanding whether (or not) there is any business model or ECR available in the pharmaceutical wholesale business.

For the second part of the literature search about the existing ECR model in the FMCG market, inclusion and exclusion criteria were defined (appendix 3.1). With those criteria a textbook search (see section 3.2.2) and a database search (see section 3.2.3) were conducted. The inclusion and exclusion criteria were the basis for defining the search keywords / search terms for the literature review (Bryman & Bell, 2007).

#### 3.2.1 First search: pharmaceutical market

The aim of using these keywords / search terms is to identify whether in the pharmaceutical market a specific business model between the industry, the wholesaler and the pharmacist is described and already in place anywhere and particularly in Germany. Therefore, no inclusion and exclusion criteria were used.

#### Identified keywords and search terms:

- 1. Pharmaceutical wholesale
- 2. ECR and Efficient Consumer Response
- 3. Pharmaceutical industry
- 4. Collaboration model
- 5. Pharmaceutical and collaboration model
- 6. Pharmaceutical and collaboration model and Germany

#### Table 3.1: Keywords and search terms

This first search was conducted at the local University Library Heinrich Heine in Düsseldorf, Germany. Given that the search is about the German market, the search terms were used in German, as well as in English, and without any timeframe. The search took place 12.07. 2012.

Library search – Heinrich Heine University	12.07.2012
Search term	Result
1. Pharmaceutical wholesaler and ECR	0
2. Pharmaceutical wholesaler and ECR and Germany	0
3. Pharmaceutical wholesaler and pharmaceutical industry	0
4. Pharmaceutical wholesaler and pharmaceutical industry and German	0
5. Pharmaceutical and collaboration model	0
6. Pharmaceutical and collaboration model and Germany	0

 Table 3.2: Textbook search / Heinrich Heine University Library 12.07.2012

As the library search delivered no result the same keywords were used for the database search. For this search too, all search terms (English and German) were used without any timeframe for the same reasons as mentioned above.

Database search – Business Source Premier	12.07.2012	
Search term	Result	
1. Pharmaceutical wholesaler and ECR	0	
2. Pharmaceutical wholesaler and ECR and Germany	0	
3. Pharmaceutical wholesaler and pharmaceutical industry	0	
4. Pharmaceutical wholesaler and pharmaceutical industry and Germany	0	
5. Pharmaceutical and collaboration model	1	
6. Pharmaceutical and collaboration model and Germany	0	

Table 3.3: Database search 12.07.2012

Overall, the literature delivered no results. Only the database search delivered one article. Here, the result was that some first steps of collaboration are taken, in the US market, but only in terms of the direct business relation between the pharmaceutical manufacturers and retailers such as drugstores. For the German market and especially for the pharmaceutical wholesale business, no literature could be found.

Therefore the second part of the literature search (English and German) was conducted in regards to the existing ECR model in the FMCG market.

## 3.2.2 Second search: Textbook search / FMCG market

## <u>Step 1.</u>

The first step was to search for marketing text books in the context of retailing. In this stage it was not necessary that the literature only focused on the German FMCG market. It was also important to get a feeling for other market segments and to gain a first general idea about retailing and retail marketing strategies whilst gaining a better understanding of the history and development of this retail market segment because the ECR model is established in the retail business in FMCG.

This search was conducted at the local University Library Heinrich Heine in Düsseldorf. 22 textbooks (inclusive ebooks) were found (appendix 3.2: Textbook

search / Heinrich-Heine University Library). After evaluating these books, the first result was that those older than the 1980s could be utilized for understanding the history of retailing and their retail marketing strategy, but did not give any background about the ECR initiative. Therefore, they were not used for further evaluations. The others provided a good basis for understanding the changing times during the 1980s and how retail marketing started and in which areas the collaboration between retailers and manufacturers began. The literature concerning the introduction of the ECR initiative was used to investigate the model. Later (after year 2000) published literature does not touch the topic of ECR in detail anymore.

## <u>Step 2.</u>

The second step was to look for books in the library which explain in greater detail the supply side strategy in terms of product management with a focus on consumer goods. Twelve books were selected (appendix 3. 2: Textbook search / Heinrich-Heine University Library).

### <u>Step 3.</u>

An additional step was to look for literature which covered the interfaces between retailers and suppliers especially in the consumer goods area. Seven books were found (appendix 3.2: Textbook search / Heinrich-Heine University Library). This search step and evaluation of the literature gave a first overview about the "demand side" (relationship between the retailers and their consumers) and the "supply side" (relationship between the retailers and their suppliers).

During these three steps of the research, available books at the University Library Heinrich Heine and, through remote access catalogues of other university libraries in Germany were evaluated in terms of retailing, retail marketing, supply side strategy, supply chain management, category management as well as interfaces between retail and the supply side in the fast moving consumer goods industry.

The overall result of the library literature review is 55 identified relevant books (textbooks, e-books, edited collections and published dissertations). Since the 1980s there have already been a high number of cooperative projects running

between grocery retailers and producers. Projects such as ECR (Efficient Consumer Response), supply chain management and category management were identified. This literature summary shows that category management is one of the main areas of collaboration between retailers and suppliers. This topic is also included in the literature of retailing and retail marketing.

The library search was repeated at the end of the years 2013, 2014 and 2015. These searches delivered no further results.

#### 3.2.3 Second search: Database searches / FMCG market

After this manual research method, additional tools have to be considered in a systematic review. Therefore, the literature search was expanded to relevant databases. This section introduces those databases and the search results.

Business Source Premier via Ebsco Host was identified as one of the most important databases for this research topic because it includes international economics, industry as well as company information. Since the topic is related to the German market, two German databases for economics (WISO and OLC/SSG Wirtschaftswissenschaften) were selected. There are numerous journals concerning trade, grocery and fast moving consumer goods available. In addition, I used LexisNexis. LexisNexis database is updated daily with thousands of newspapers, magazines and periodicals. Within LexisNexis one can access the full Hoppenstedt company database. To be updated on international journals, the Oxford Journals complete database has been used. When the full text was not available in the above mentioned database, Econis in Net database and Google scholar served as additional free potential search mediums. ETHOS database, Deutsche National Bibliothek (<u>www.d-nb.de</u>) and Dissonline (<u>www.dissonline.de</u>) were used for cross-referencing the research topic and to investigate if a dissertation about the topic is already available. An overview of the used databases is included at appendix 3.3.

The process of defining the keywords was approached from different directions. First was the academic stage. During the evaluation of the textbooks about retailing and subsequently within the study of the supplier side and collaboration area literature, the main keywords were noted. This was done by comparing the table of content of the different textbooks. The second step was to evaluate the management side. A "hand search" as defined by McDermott, Graham and Hamilton (2004, p. 14) was applied to generate some practitioner knowledge. Some stakeholders from the FMCG business, and managers from my professional network, were asked to spontaneously share keywords which came to their mind when hearing about the research topic. Two managers from the retailing side and two managers from the supplier side were approached. And last, but not least, the participants of the action learning set from the University of Gloucestershire were asked during module 503 about their ideas on this topic. The action learning set is a small group in which important topics can be discussed and the participants can learn from each other (Pedler, Burgoyne & Brooks, 2003).

The following words were added to the ones resulting from the textbook check and the "hand search": pricing, advertising policy, promotion, family business, non-family business, speciality markets, out of stock, bio products, assortment trends, logistics, and supply chain. The selected keywords from the textbooks check and hand search are the following: category management, retail, retail marketing, trade marketing, ECR (Efficient Consumer Response), buying groups, procurement or purchasing, relationship, category captainship, RFID, competition commission, competition legislation, own brands or private labels.

Prior to the start of the scoping search in the relevant database, ETHOS was checked utilising the main keywords to find out whether a dissertation about this topic already existed and whether there was data which could be used for this research topic as well.

#### Database searches - Business Source Premier 23.12.2012

Firstly, all search terms have been used during the timeframe from January 1980 up to December 2012 due to the fact that by the 1980s, the collaboration had started as explained in section 3.2.2. That delivered an incredibly high number of results. To limit the results, the timeframe was reduced to 2000 up to 2012, because for this research, the starting elements are important for the history of the model which was covered with the textbook study. To investigate current running

projects a timeframe of twelve years is considered. That limited, for example, the result of 2802 hits general results for category management to 13 related to Germany and finally to 2 important ones which also concern the grocery market.

	Search term	<b>Result</b>
1.	Category Management	2,802
2.	Category Management and German?	13
3.	Category Management and Groceries	168
4.	Category Management and Groceries and German?	2
5.	Category Captainship	4
6.	Retail and Germany	no result
7.	Retail? and German?	2,127
8.	Retail? and German? and Consumer Goods	58
9.	Retail Marketing	3,769
10	Retail Marketing and Grocer? and German?	1
11	Trade Marketing	2,445
12	Trade Marketing and Grocer?	39
13	ECR or Efficient Consumer Response	746
14	ECR or Efficient Consumer Response and German?	746
15	ECR or Efficient Consumer Response and German?	26
16	Procurement or Purchasing and Grocer? and Retail? and German?	28,487
17	Buying Groups and German?	17
18	RFID and German?	116
19	RFID and German? and Grocer?	4
20	Competition Commission and German?	39
21	Competition Legislation and German?	9
22	Own Brand? or Private Label? and German?	18
23	Relationship and Retailer? And Manufactures	71

Table 3.4: Database search 23.12.2012

#### Interim result database search (Business Source Premier)

The final selected documents had to fulfil the inclusion / exclusion criteria as defined in appendix 3.1. Under these conditions, the total result for this research

was 44 documents which are mainly academic journals. Only peer reviewed publications were selected. The detailed list is enclosed in appendix 3.4: Database search results.

## Database searches - WISO Wirtschaftswissenschaften (economics and social sciences) 23.12.2012

## Search terms

- 1. Category Management
- 2. Retail?
- 3. Retail Marketing
- 4. ECR or Efficient Consumer Response
- 5. Supply Chain

The first approach for this database was to identify the most important journals/periodicals, magazines and newspapers which should be used during the whole research period. Therefore, the keywords were used on a highly aggregated level (English and German). The following journals/periodicals could be identified as important for the grocery retailing and fast moving consumer goods industry. Those journals/periodicals were checked quarterly since 23.12.2012 and any relevant information used to remain as up-to-date as possible.

- 1. Lebensmittel Zeitung (Food Newsletter)
- 2. Lebensmittelpraxis (Food praxis)
- 3. Logistik Heute (Logistics today)
- 4. Handelsjournal (Trade Journal)
- 5. IT Business
- 6. Regal Fachjournal für Markenartikel in dem modernen Einzelhandel (Trade journal for branded products in the modern retail chain)
- 7. Absatzwirtschaft (Marketing)
- 8. Horizont

## Database search OLC/SSG Wirtschaftswissenschaften (economics)

This database has been checked with the most important keyword of the research topic category management to see whether a completely different document to Business Source Premier could be found. As a result it can be stated that most of the documents were the same as in Business Source Premier. Therefore, documents from Business Source Premier have been selected as primary documents source. OLC/SSG Wirtschaftswissenschaften (economics) has been used as complementary source.

## Database Lexis Nexis Wirtschaftswissenschaften (economics)

Lexis Nexis main focus is daily updated newspapers, magazines and journals. This database was checked monthly to keep the topic up to date.

## **Database Oxford Journals**

Oxford Journals was used for international journals search. This database was used to investigate if the ECR model or a similar model exists in other countries or businesses.

## Additional material

The above identified journals/periodicals, magazines and newspapers are related to the FMCG market in Germany. Hence, to generate updates on the German pharmaceutical market the following pharmaceutical press materials which are used in business praxis in the case company were investigated frequently and have been collected since December 2012.

- 1. Deutsche Apothekerzeitung (German pharmacists newspaper)
- 2. Pharmazeutische Zeitung (pharmaceutical newspaper)
- 3. Pharma Rundschau (Pharma review)
- 4. Apotheke Adhoc (Pharmacy adhoc)

### 3.2.4 Conclusion of the systematic review

The first step of the research was to identify whether in the pharmaceutical market a specific business model between manufacturer, wholesaler and pharmacist is in place. The search delivered no result. Conversely, a very high number of publications are available for the ECR model in the FMCG market. Therefore, the literature was selected in a systematic and independently verifiable way.

The overall result of the library literature search was 55 relevant publications (appendix 3.2). Additionally, Business Source Premier database delivered 44 documents; mainly academic journals (appendix 3.4). The databases about journals/periodicals, magazines and newspapers were searched frequently as described above under the related headlines. Mainly the Food Newspaper (Lebensmittel Zeitung) and the daily newspaper (Frankfurter Allgemeine) delivered further information for the FMCG market. For the pharmaceutical market (see additional material) Pharmacy adhoc (Apotheke Adhoc) delivered results.

In addition to this systematic search approach I considered publications which were identified during the research because they were either mentioned as a reference in one of the publications, as recommended by my supervisors or during discussions about the research topic with experts. Those publications are listed in the reference list.

## 3.3 Introduction to the FMCG Market

This section will provide an introduction into the FMCG market, the environmental forces within the market and its historical development, to achieve an understanding of the macro environmental factors that support change in the collaboration between manufacturers and retailers. The micro environment analyses will demonstrate how the manufactures established trade marketing and the retailers adapted their retail marketing strategy. This will be important before looking into the history of the ECR model because those changes in the market on the retail and on the manufacturer side were the consequences of the development of the ECR model in 1980s in the FMCG market.

#### 3.3.1 Historical development of the FMCG market

The 1980s were characterized by strong competition in the global FMCG market (Kaynak, 1988; Treadgold & Davies, 1988; West, 1988; Pellegrini & Reddy, 1989; Samli, 1989; Howe, Jurgens & Werwy, 1998; Seifert, 2006; Talaulicar, 2009). Multiple retailers have continuously grown and by the 1980s, the consumer markets were retail dominated (Walters & White, 1989).

Likewise in Germany, big retail groups like Edeka, Rewe or Metro dominated the market. In Germany, the top five retailers represented 80% and the top ten 85% of the market share of the total market (Anders, 2008). This is still the case today (Metro, 2012; Reinartz et al., 2011).

The European market situation as described by Dawson and Shaw (1989) between the 1970s and 1980s brings forth a need for retailers to differentiate themselves from other market players, Walters and White (1989) drew the same conclusion. Retailers became stronger and stronger in the consumer market (Messinger & Narasimhan,1995; Agrawal et al. 1996; Bell, 2001). The increase of demand affects retailing sales due to demographic factors (May, Ress & Salmon, 1988) such as the changing structure and age profile of the population. Retailers started to look into product development. Due to the purchasing volume of these multiple retailers they were able to start creating their own private labels (Tenbusch, 2002; Moreau, 2006). Up to that point, marketing was predominantly conducted by the fast moving consumer goods industry.

At the same time, manufacturers faced strong competition between each other as strong brands could be copied very quickly due to improved technology. The profit of the producers came under pressure. The companies included customers as well as competitors in their marketing strategies. Those strategies focused on differentiation in the market, an approach which led to a high number of brand types and products (Corstjens & Corstjens, 1999; Grewal & Levy, 2012; Levy & Weitz, 2012). The strategy of the manufacturers changed from a selling strategy to a marketing and customer orientated strategy (Vranesevic, Vignali & Vrontis, 2006). At the same time, retailers entered the market with their own retailing

brands. For the fast moving consumer goods industry, strategic marketing evolved into matrix marketing.

Corstjens and Corstjens (1999, p.10) distinguished between strategic marketing and matrix marketing as follows: "Traditional strategic marketing asked why the consumer should choose this manufacturer's brand. Matrix Marketing asks, in addition, why the distribution should stock it".

The perspective of Corstjens and Corstjens (1999) is that FMCG marketing was the most sophisticated practised by any industry. Marketing was the instrument to identify customer needs, segment them into customer groups and produce the demanded products (Collins, 1992; Gilbert, 2003). Producers maintained direct contact with the consumer. The retailing stores were only the distribution place for the goods. With advertising campaigns for their branded products, the big consumer goods producers could dictate to the retailers what they had to have on the shelves. The retail assortment was more or less dictated by the manufacturers and retailing was about distribution activity.

Internationalization of retailers was another aspect of the changing environment of the retail market (Treadgold & Davies, 1988; Swoboda & Anderer, 2008; Reinartz et al., 2011). It influences the assortments and the store layouts. Walters and White evaluated what all these factors meant for the marketing side, which up to that point had been dominated by the manufacturers. "Marketing became translated into retailing terms, the retail marketing mix was defined to include trading style and the creation of an exchange environment" (Walters & White, 1989, p.27). The retailers started to think about customer needs. Retailing moved from only offering products at a sales point to a complex product and service proposition (McGoldrick, 2002; Dawson, 2006). They started to include retail marketing strategy into their overall company strategy.

#### 3.3.2 Retail strategy

For this research it is not important to evaluate the different retail marketing models in detail because this section of the literature review should deliver an overview of the macro environmental factors of the FMCG market and the retail marketing frame. This was done as a preparation for the interviews to compare the FMCG market with the pharmaceutical market and to understand if the same marketing aspects could be considered in the pharmaceutical market.

In general, strategic decisions within the company are not made in a vacuum. The essence of competitive strategy assumes that a company operates effectively against other industry players, when it responds in a manner which is relevant for the business environment at any particular point in time. The time reference is significant because environmental trends are not static, but rather dynamic in nature, which emphasizes the importance of continual research and the company's ability to effectively manage ongoing market information (Ranchhod & Gurau, 2007; Vignali, Vrancesevic & Vrontis, 2008).

The debate does not clearly differentiate between the overall retail strategy and the marketing strategy (Dawson & Shaw, 1989; Cropper, 2008; Meffert, Burmann & Becker, 2010). It can be stated that at a functional level, the marketing strategy is embedded into the overall corporate strategy of a grocery retailer. The marketing strategy is infiltrated through the corporate strategy and the main strategic questions regarding the market place are:

- Who are my competitors?
- Who are my customers?

The overall retail marketing strategy involves creating a competitive advantage through differentiation by way of offering assortments of products and services carefully tailored for the target group. Here the 5 force model defined by Porter (1980, cited in Sullivan and Adcock, 2011) can be considered as shown in figure 3.1. It is used by Sullivan and Adcock (2011) to assert that level of competition between rival retailers and to draw the structure of retailing.

#### Porter`s 5 forces model

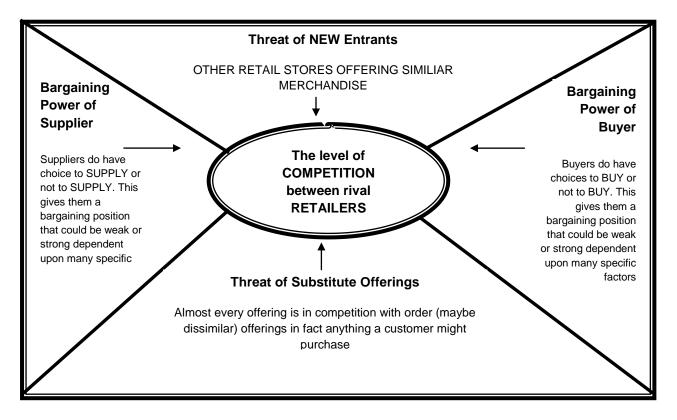


Figure 3.1: Porter's 5 forces model (1980) in Sullivan & Adcock (2011, p.31)

Porter (1985) developed the five forces model which assumes that the profitability of an industry player relies first on its ability to develop competitive approaches to business and manoeuvre for market leadership against other competitors with similar strategies. Furthermore, profitability is determined by counteracting the threat of new entrants into the market, responding to substitute provisions which present a potential threat and developing good relationships with both the buyers and suppliers within that industry. Porter (1985) also developed three generic strategies (cost leadership, differentiation and focus strategy) which describe how a company can pursue competitive advantage across a chosen market scope by adopting either a low cost or a differentiated marketing strategy (Vranesevic et al., 2006).

Depending upon the generic approach, a company should consider the implementation of a marketing mix; namely product, place, price and promotion, although other elements have been added for service industries, which together

are carefully tailored to the needs of the target group. The needs of the target group and their decision making process are more often than not affected by environmental trends (Johnson & Scholes, 2008).

There are a number of different management models, also often termed matrix marketing models, which provide organizations with the tools to develop optimized marketing programmes (Vranesevic et al., 2006). These models allow companies to determine where the emphasis in importance should be placed, based on market research, in regard to decisions involving the marketing mix elements and variables.

As a prerequisite for setting up a retail strategy, the retailer has to understand the macro environmental factors of the market. The classical descriptions of the external environmental aspects are the so called PEST analysis (Sullivan & Adcock, 2011) which investigates the political and legal, economic, social and cultural as well as technological factors.

For this research the concept of Grewal and Levy (2012) is considered (see figure 3.2) because an important difference is that in the centre of those factors is the consumer. It uses a slightly different terminology with culture, demographics, social, political/legal, economic and technology.

#### **Macro environment**

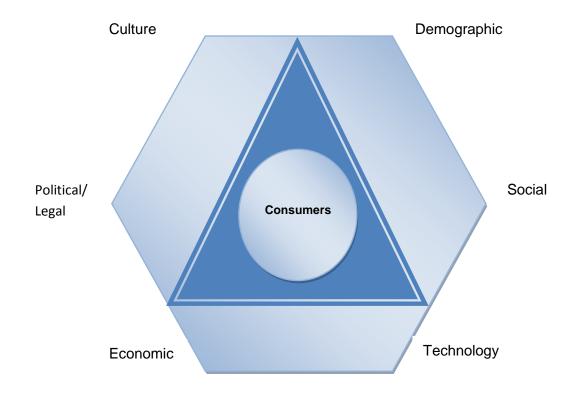


Figure 3.2: The macro environment adapted from Grewal and Levy (2012, p.120)

The examination focuses on the central figure – the consumer, because the consumer is the core element in the ECR approach. Levy and Weitz (2012) distinguish between the macro environment and the micro environment as critical elements of retailing.

For retailing, the micro environment concentrates on the competitors and the customers. This is constituted by other authors like Sullivan and Adcock (2011). They see the main task for the retailer as serving its customers. The retail strategy has to respond to the changing demographic of the population and lifestyle trends of the consumer, the customer. This aspect is comparable to the pharmaceutical wholesale business because there wholesalers also have to respond to the changing market environment and to the needs of the customers (see sections 2.2.1; 2.6 and 2.7.4).

In the retail market, it is necessary to identify who the main competitors are. It is not necessarily true that competitors are pursuing the same type of store formats (e.g. supermarkets). Competition can also be between supermarkets and discounters as far as they are targeting the same customer group. This competition of different formats makes it difficult for retailers to identify and to monitor their competitors. Retailers see the location of the shop as one main competitive advantage (Levy & Weitz, 2012).

Retailers translated their stores into brands. The stores were no longer anonymous distribution places; they were visible for the customers as brands with a certain concept (Kulke, 1996). Retail marketing was established. The retail marketing mix is affecting different areas in the retailing sector. To establish a store type to a brand, it is important to have the right locations and store layouts providing the atmosphere consumers expect. Moreover, top retailers started to offer different services like store cards or financial services.

As mentioned above, the retailer should consider the implementation of a marketing mix (Vranesevic et al., 2006; Johnson & Scholes, 2008). There are three options for retailers to reach long-term profitability (Corstjens & Corstjens, 1999). Three possible strategies are location, low cost, or quality in own label and fresh products. That could lead to the conclusion that in the future consumer goods market, only three store formats were going to be successful market players: convenience stores, hard discounters and large value-quality retailers. This proposition considers only an increase of profitability. But in order to achieve long-term profitability, customer satisfaction also needs to be taken into account in addition to location, price and quality. Different studies also show that value for money supports customer satisfaction (McGoldrick, 2009; Ryding, Campaniolo and Carey, 2014).

A value based strategy which goes beyond the location strategy is the consequent next step. The four core elements as defined by Grewal and Levy (2012, p.36) in their model are considered.

- **Customer excellence**: Focuses on retaining loyal customers and excellent customer service.
- **Operational excellence**: Achieved through efficient operations and excellent supply chain and human resource management.
- **Product excellence**: Having products with high perceived value and effective branding and positioning.
- Locational excellence: Having a good physical location and internet presence.

In this definition of operational excellence, supply chain management only refers to one part of the supply chain in the ECR model (from the central warehouse of the retailer to the retail store) and does not consider the other part from the manufacturer to the retailer. But that is no contradiction for the case study due to the fact that in ECR the supply chain covers the whole process from the supplier via the retailer to the consumer. Therefore, wholesale could be part of the whole supply chain process, which is not currently considered within the ECR model. Customer services as described by Grewal and Levy (2012) are about interaction between sales employees in stores with the customers. This will be investigated in two directions. Firstly, in terms of which services wholesalers can offer to manufacturers (upstream market) and to their customers, the retail pharmacies (downstream market) as discussed in section 2.7.5 and secondly, in the relationship between the retail pharmacists and their customers (the consumer).

Customer loyalty is also a significant part of a retailer's customer service strategy and it is an important element of an effective Category Management programme. Therefore, it is of relevance to investigate which characteristics of customer loyalty, exists in the pharmaceutical market.

Despite this, customer loyalty may also lead into a progressive complexity in terms of the mode of behaviour of the consumer, and retailers need to understand the "hybrid consumer" (Seifert, 2006), a term which is used in other literature sources. This term describes the behaviour of a consumer who has a need to be unique and seeks to obtain as much information as possible about products they require. The available, transparent information about products, prices and availability makes the consumer independent from any individual retailer. Consumers make their purchases in different shops or via the internet. This significant level of transparent information was also identified in the background study for the pharmaceutical market and is therefore an important consideration for an adapted business model in the pharmaceutical market.

A further aspect which has been observed is the so called smart shopping behaviour of the customer (Seifert, 2006). This relates to products which have a "low involvement" factor, such as toilet paper, garbage bags etc. where the consumer may have no loyalty to a branded product or to a particular retail store. For the pharmaceutical market this aspect should be considered in terms of to what extent pharmacies took over the role of the drugstore "Schlecker", (see section 2.5.1.2) bearing in mind that legal limitations exist in terms of the assortment structure (see section 2.8.2). There is also a need to make allowance for the fact that, in principle, the customer trusts the pharmacist. Therefore, it is important to investigate whether a "low involvement" assortment would have an effect on customer loyalty. It could be that due to the significant loyalty customers have towards a pharmacy they would buy these products there, but conversely it could also be possible that such products create a negative effect in that the customer would begin to see the pharmacy more as a drugstore and thereby lose some trust.

On the other hand the customers are looking more and more for event related trade. That could be, for example, sessional or special offers. Here retailers have a great opportunity to gain customer loyalty if they deliver the right assortment and services. This shows that consumer behaviour has changed over the years which has challenged the retailer to establish a retail marketing strategy.

These kinds of changes to shopper behaviour have an effect on the pharmaceutical retail market as well. The question needs to be answered how the retail pharmacists can profit from the "low involvement" products, and are there opportunities in those product categories to bring them into the pharmaceutical retail market and how can retail pharmacists learn from event related trade from the FMCG market.

Beside the right branded assortment and services, the retailers establish their own private label products. Own labels are "products that are created and trademarked by a retail company" (Metro Retail Compendium, 2010, p.150). Own labels differentiate between the retailer's own name as the brand or registered fantasy brand names. They could also be an exclusive brand which the manufacturers exclusively deliver to a certain retail chain. Thus, retailers can distinguish themselves from their competitors, thereby gaining customer loyalty. The retailer is also able to reach higher margins due to the fact that it develops the product specification and can search for a producer who is able to deliver the product in the requested quality and at a competitive price. For these products, the retailer is independent from the branded manufacturers (Corstjens & Corstjens, 1999; Tenbusch, 2002).

On the other hand, smaller suppliers with a small product range are dependent on retailers. Sometimes they feel obliged to produce own labels for them in order to keep the space on the shelf (Oubina, Rubio & Yagüe, 2006). However, retailers have to establish their own marketing strategy for their own label products and for gaining the respective customer loyalty by demonstrating the added value for the consumer. This is challenging for the retailer, because the branded products are very well known by the consumer. The consumer trusts the brand and believes in its competence (Meffert, Burmann & Koers, 2005) which leads to an advantage for the branded manufacturers in this respect.

This could be translated into a retail pharmacy strategy. The advantage of pharmacists is that customers trust them. Hence, own label or exclusive products should be easier to establish into the retail pharmacy sector. The challenge here, as opposed to FMCG retail, is that, in Germany, retail pharmacists can only own a maximum of four stores. This would have the effect that quantities of the products may be too small to enable those products to be produced exclusively. This could be an opportunity for the pharmaceutical wholesaler to create own label products and to sell them to independent pharmacies. This would reinforce a wholesaler's ability to keep the pharmacists loyal in the supply chain, because the pharmacists could not order that own label product from another wholesaler. This, of course, does not help the wholesaler in the relationship with the manufacturer as the

wholesaler, effectively, becomes a competitor for manufacturer brands by the creation of own labels. Additionally, the wholesaler has no direct communication with the final consumer, meaning that the wholesaler has limited control of sales volume.

In comparison, FMCG retailers have the advantage (Stahl, 1982; den Hertog & Thurik, 1992; Corstjens & Corstjens, 1999) that they have the possibility to communicate directly with the consumers and they have full control of all parameters which are related to product sales such as price, promotion, shelf space. They can use customer data to further analyse and evaluate performance. This could be similar for the retail pharmacists and the adapted business model would need to better connect the wholesaler with the retail pharmacists to translate the advantages which the FMCG retail supply chain can generate, into the pharmaceutical supply chain (see also section 2.7.5 and figure 2.10).

This section has highlighted that for FMCG and for the pharmaceutical market retail strategy is not always in line with the interests of manufacturers. Therefore, a focus in the interviews would need to investigate not only the relationship between manufacturers and retailers, but also what role wholesalers could take in that model. Hence, it is also important to look into the marketing tools which were established on the manufacturer side. Manufactures utilized trade marketing to overcome the challenges in the changing market environment (Walters & White, 1989) and to better serve the retailers as their customers. I found no publication which considered wholesalers in the trade marketing concept.

#### 3.3.3 Trade marketing

Different definitions of trade marketing are discussed (McGoldrick, 2002). There are those that concentrate on the supplier's point of view and those that stress the cooperative element "A methodical procedure carried out jointly by suppliers and retailers, whose objective is to better serve customers' needs and expectations, increase profitability and competitive position, while taking into account each others constraints and specificity" (Dupuis & Tissier-Desbordes, 1996, cited in McGoldrick, 2002, p. 290).

Indeed, manufacturers are not completely under the influence of the retailers. They still have the advantage that normally they are dealing with just a few category areas, and they have an in-depth knowledge of those categories. They are experts for the products in terms of quality and packaging. Therefore, a balanced market environment is still in place. Trade marketing was the starting point for a different working environment between manufacturers and retailers. Suppliers began looking into the market from the retailers' point of view. The question was how a product could help develop category sales (Corstjens & Corstjens, 1999; Cropper, 2008; Fowler & Goh, 2012).

Trade marketing itself was not capable of reducing the potential conflict between industry partners and retailers (von der Heydt, 1998) because in the fast moving consumer goods market the turnover went down and the costs increased. Normally, in such a market environment, the branded suppliers introduce new brands or new products into the market to increase the turnover (Gussek, 1992; Schröder, 1996; Luethje, 2000). A new innovative product delivers high prices and a high margin in the beginning of the life cycle. But no innovation was brought into the market which could stop this trend. Therefore the market participants saw only one chance to increase the turnover. They started an aggressive price policy regarding the existing product range which had an effect on the margin (Kilimann & von Schlenk, 1998).

The retailers tried to stop the trend from their side by establishing private label products, which delivered a higher margin in comparison to the branded products (McGoldrick, 2009). They also worked on new trade models to become more attractive for the consumer and they established new shop layouts. Both these effects supported the conflict potential between manufacturers and retailers because due to the private label assortment the retailer became a competitor of the manufacturer and the shelf space for the branded products was reduced and limited which increased the competition between the branded manufacturers to be present on the shelf (Westphal, 1991; Olbrich & Braun, 2001; Oubina et al., 2006).

This was the time when the manufacturers as well as the retailers recognized that a closer cooperation could bring benefits for both sides. Thus, it was time for a new collaboration model in the market.

## 3.3.4 Section conclusion

This section has demonstrated that the development of the German FMCG market supported changes within the strategies of the manufacturers and retailers.

Retailers became stronger in the consumer market and established a retail marketing strategy. Therefore, marketing was no longer only conducted by the consumer goods industry. In parallel, manufacturers faced strong competition between each other and they included customers as well as competitors into their marketing strategy.

Manufacturer and retailer marketing strategies did not always have the same targets and direction. Therefore, suppliers introduced trade marketing to start looking into the market from a retailer point of view with the aim of how to develop category sales (Corstjens & Corstjens, 1999; Cropper, 2008; Fowler & Goh, 2012). But that was not the overall answer to stop the declining trend in turnover and the cost increase in the FMCG market in Germany. That was the starting point for the ECR initiative.

Currently, a similar market trend is recognized in the German pharmaceutical market as described in chapter 2. Competition has increased between the wholesalers and a destructive competition between them has started. Manufacturer and wholesaler marketing strategies are also not focusing on the same targets. Manufacturers prefer to deliver directly to the retail pharmacy, conversely wholesalers work on value added strategies to become a preferred supply chain partner for the manufacturers and service partners for the retail pharmacists. But in general, all market participants focus their marketing strategies on the consumer which is the fundamental element of the ECR approach.

But it needs to be considered that consumer centricity in FMCG is simpler because the supply chain works mainly with two market participants (manufacturer and retailer). In the pharmaceutical sector three market participants focus on the consumer (manufacturer, wholesaler and pharmacist). That aspect leads into a fundamental difference when it comes to the definition of the customer, because the pharmaceutical wholesaler sees pharmacies mainly as their customers, whereas the FMCG market players, in the main, do not distinguish between customer and consumer. The other difference between both markets is that since 1990 the FMCG market started to think about collaborative business models between manufacturers and retailers, whereas the pharmaceutical market is at the beginning of changes in the market.

# 3.4 Origin of ECR

In the FMCG market, manufacturers and retailers identified that both sides share the same interests. On the one hand they want to increase the turnover and at the same time they want to gain the highest margin possible (Kilimann & von Schlenk, 1998). The term "partnering" was used, which already implied a stronger relationship between the parties involved (Mentzer, Min & Zacharia, 2000). In 1992, the "Efficient Consumer Response Working Group" was established.

The leading players for this project were the following associations: American Meat Institute, Food Marketing Institute and Grocery Manufacturers of America. They identified the four main processes as a basis for further studies (Kilimann & von Schlenk, 1998, p.6).

- Product introduction process
- Order processing process
- Procurement and distribution process
- Promotion process

These processes were named as the first ECR principles. They served as the basis for the first pilot projects. The best known project was running between P&G (Procter & Gamble; a leading FMCG manufacturer) and the grocery retailer Wal-Mart (Seifert, 2006). A team of P&G even had their office at the Wal-Mart headquarters. The P&G and Wal-Mart teams worked as one group. This was met with scepticism in Europe and especially in Germany, where buyers still viewed the supplier as predators. This changing environment of collaboration also had an effect on the employees on both sides (Engelhardt, 1984; Gegenmantel, 1996; Rudek, 2008). The job profile of a buyer on the retailer side and the key account manager on the other side had to change (Corstjens & Corstjens, 1999). They had

to learn to not only view the market from their point of view but had to adjust to understanding the whole supply chain process. Therefore, this was the fundamental start for ECR.

In the USA, these changes began in the grocery market with over 100 leading companies like Coca-Cola, P&G and Kraft Foods. The results of the first projects were evaluated by the consulting company Kurt Salmon Associates. They estimated a synergy potential of 10.8% (gross sales price) and 41% of stock reduction (Kilimann & von Schlenk, 1998; Fowler & Goh, 2012). This potential assessment and the similarly difficult market situation in Europe was the catalyst to initiate the process in Europe. Two years after its start in the USA, ECR came to Europe in 1994.

Since 1997, the GS1 (Global Standards One) organization in Germany has led several ECR projects. There was intense interest in the European markets. The ECR conference counted more than 1200 participants and participation has risen over the following years. The second conference was held one year later. CEOs from top retailers as well as from multinational suppliers participated. They promoted the idea of ECR and demanded an introduction of the model across all branches (Seifert, 2006).

## 3.5 Structure of the ECR Model

Efficient consumer response lies in an efficient reaction to customer demand. It is "a grocery industry strategy in which grocery retailers, wholesalers, brokers and suppliers work more closely together to bring better value to the consumer" (The Food Marketing Institute, 1994, p.1, as cited in von der Heydt, 1998, p.52). Within this definition the wholesaler is already a subject of the ECR approach. This gives some evidence that the model can work in a wholesale environment, although wholesale involvement is not indicated in the literature discussion for the FMCG market.

In the USA, the "Efficient Consumer Response Working Group" was tasked with finding new ways in terms of better communication, increasing consumer benefit and looking into the entire distribution line. Under the heading of efficient consumer response, there are two collaboration sectors which have been established. One is the efficient replenishment side with supply chain management and logistics management, and the second is category management with efficient store assortment, efficient promotion and efficient product introduction (Schröder & Großweischede, 2000).

# 3.5.1 Supply Chain Management (SCM)

The supply chain in retailing is described by Levy and Weitz (2012) as the pool of companies which produce and deliver goods and services to the consumer and the flow of the goods from manufacturing, wholesaling and retailing to the customers. The supply chain side was always the first starting point in the projects, because here savings could be realised quickly without drastically changing the organization (Schröder et al., 2000). It focuses on optimising the whole delivery process. Therefore, this is an important aspect to be considered in the interviews for the current research, which could help to identify if that would be the same in the pharmaceutical market.

To measure the savings for the optimization in the supply chain, Thonemann et al. (2003) have defined Key Performance Indicators (KPI's). Those indicators measure, on the supplier side, service level, delivery times, logistic costs and stock. On the retailer side, the KPIs relate to shelf availability of goods, internal lead-time, stock and costs. Thonemann et al. (2003) have evaluated this in a study with 40 consumer goods producers and 18 retailers. The first investigation on the synergy potential on the supply chain side was done by the Coca-Cola Retailing Research Group Europe (1993). They discovered a potential of about 2.3 - 3.4% margin of retail sales in Europe. That is an outstanding result when one considers that during that time, the average turnover profit for grocery retailers was approximately 1% (Kilimann & von Schlenk, 1998).

Both analyses for the US market and the European market were also considered by Corstjens and Corstjens (1999), but they had their doubts, whether this more technical and logistic driven part of ECR was kept alive in the cooperation and whether it would really deliver a "sustainable competitive advantage in the long term" (p. 285). They believed that interest in the long run would be more in category management, which drives the assortment. This part of ECR is more the strategic element of the approach (Schröder et al., 2000). Beside the supply chain aspect as mentioned above this aspect is also covered within the interviews.

Likewise, some critical discussions about supply chain projects arose when retailers asked for a certain bonus for starting such a project with suppliers. Some suppliers also argued that the market power of big retailers was too strong and they were forced to join those projects (Thonemann et al., 2003). They saw themselves obliged to join those projects in order to maintain the relationship with their important business partners. They felt there was a risk that otherwise the retailers could move some of their volume to other manufactures. Apart from Thonemann et al. (2003), other authors do not discuss this point in regards to ECR in detail and do not argue that the unbalanced size of the different market players hinder the transformation of the ECR model generally. But they confirm the market dominance of retailers not only for the German market. Also countries like Switzerland and UK are named (FIW, 1983; Kühne, 1984; Bergmann, 1988; Gröner, 1989; Weiss & Wittkopp, 2005; Steiner, 2007).

The above literature discussion shows that the aspect of company size can be discounted in the research but it is important to consider the whole supply chain between manufacturers and retailers and not only to investigate the supply chain in one isolated company. The following section will express this difference and discuss the different levels of supply chain collaborations and describe one of the very first projects in the German FMCG market.

#### 3.5.1.1 Strategic framework

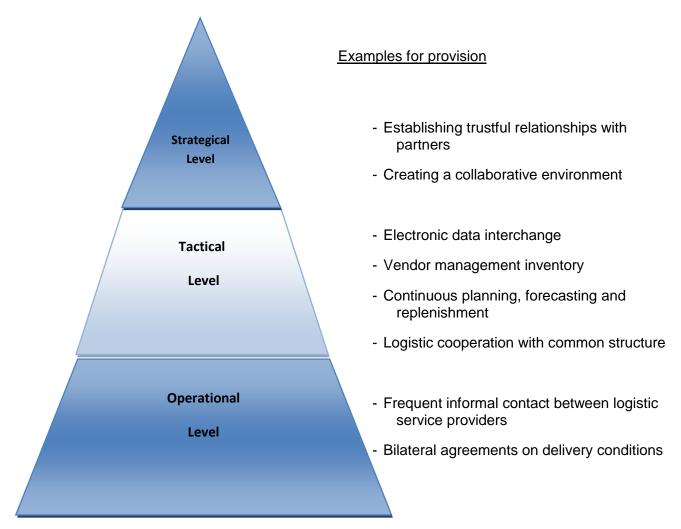
There is a distinction made between internal and external supply chain management (Melzer-Ridinger, 2004). This research focuses beyond company borders projects. Certainly, the optimization of the internal supply chain processes in the company itself is a prerequisite for generating synergy effects between manufacturers and retailers. In collaborative projects, a holistic view is necessary.

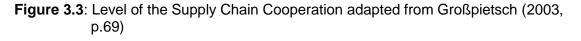
The supply chain expressed by Melzer-Ridinger (2004) explains the way from the supplier order to the preliminary supplier, to the producer and finally to the customer. This example shows not only the picture between the manufacturer and retailer in the supply chain process, it shows that there is a much longer supply chain line with different participants. Thus, it indicates that the principle always applies the same logic and that the number of participants is not crucial. This gives the first indication that the model could also be adapted into a different market environment with differing numbers of supply chain participants; for example, in the pharmaceutical market where a manufacturer, wholesaler and retailer are involved.

According to Großpietsch (2003) there are three levels of collaboration as illustrated in figure 3.3.

The strategic level is about trust and partnership. It is one of the main challenges in such a collaboration programme. It does not mean only creating mutual trust between the business partners, it also requires understanding of the different company cultures and accepting them. Furthermore, the job profiles of the key account managers from the manufacturers and the buyers of the retailers changed. Both parties have to think about and get a feel for the whole workflow process, they are no longer limited to just their own area of responsibility.

# Level of the Supply Chain cooperation





Considering Großpietsch's (2003) model above it can be stated that the first steps in such collaboration mainly start with the strategic level and the operative level. This is confirmed in one of the first examples in the German market which was the project between the manufacturer Bahlsen Snack and the grocery retailer Konsumgenossenschaft KG Dortmund.

This project was about optimizing the delivery process. The first target was to reduce the number of deliveries with low quantities which produced a lot of delivery slips. The second target was to use a higher pallet factor. They delivered with a height of 1.05 m (CCG1 norm) and the central warehouse of KG Dortmund was able to receive CCG2 pallets with a height of 1.60 m up to 1.95 m. This provided an opportunity to optimize space in the truck because snack articles are

high volume products without too much weight. Therefore the transport costs of those products were very high. This first assessment of process inefficiency was the starting point about further collaboration steps. In that case, the most important lesson learned was to understand the processes and requirements of the respective business partners and to build an environment of mutual trust where the key account managers of Bahlsen and the buying team of KG Dortmund understood each other as partners with the same target instead of seeing each other as competitors.

Hebler (1998), Managing Director Bahlsen Snack, described the first experiences with the pilot project with the Konsumgenossenschaft KG Dortmund. He summarized that the ECR project demanded totally new requirements from both participants. It required a common thought process about how to optimize the process.

This descriptive example of the very first steps in the ECR initiative shows on one hand that one of the success factors is to involve employees and on the other hand that, even without any IT system installation, some synergies could already be identified and gained. This supports the possibility of a transfer into the pharmaceutical market because retail pharmacies are small companies with a maximum of four stores and have therefore limited possibilities to install special IT systems. Here the wholesaler could assists and provide IT services to the retail pharmacies. The other success factors mentioned are not related to the product group, and therefore could also be transferred to a sector like the pharmaceutical business.

The overall conclusion of a reappraisal of the ECR performance shows that the profitability in the companies could be nearly doubled if ECR processes are established (Martens & Dooley, 2010).

# 3.5.1.2 ECR technologies

As described in the example the project was run without any additional technology evolved. But in order to begin exploring a collaborative supply chain project further, ECR technologies are required.

EDI (Efficient Data Interchange) is the basis for the electronic data exchange between suppliers and retailers. It can be used for the ordering procedure, invoices and shipping notices as well for mass data exchange which is important for further projects such as category management, which covers the demand side of ECR (Seifert, 2006; Martens & Dooley, 2010).

CRP, which stands for "Continuous Replenishment Programme", is about the optimization of the supply channel from the manufacturer to the retailer and about reducing the inventory (Strüber, 1998; Hebler, 1998). In CRP the manufacturer receives the sell-out data from the central warehouse to the retail stores. It manages the stock in the central warehouse. The supplier activates the order. It defines the quantities as well as the delivery time. The aim is to optimize the supply chain process under consideration of the retailer to the supplier (von der Heydt, 1997; Strüber, 1998). This leads to different advantages for the manufacturers as well as for the retailers deriving from the utilization of CRP. To summarize those findings the following key points can be noted for the supply and trade side (Strüber, 1998):

- Supplier side
- More steady sales levels
- Higher sales numbers
- Higher service level for the trade
- Improved utilisation of transportation capacities
- Decrease in administrative costs

- Trade side
- Lower warehouse stock
- Higher turnover as a consequence of an improved service level
- Decrease in administrative costs

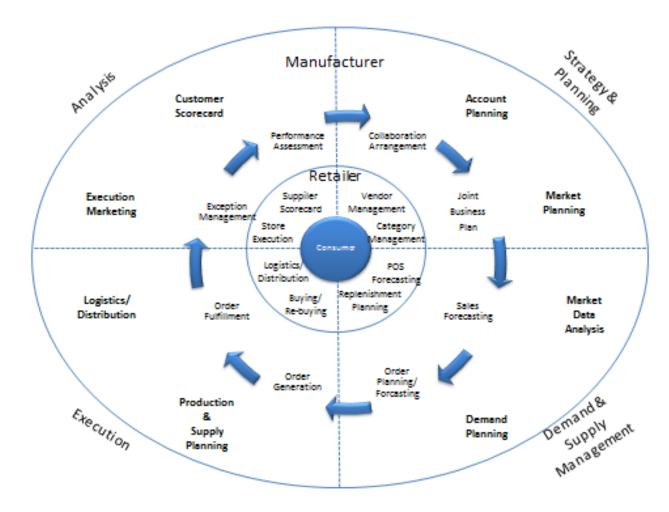
Criticism of CRP has put forward the view that it only evaluates the processes between the supplier and the central warehouse of the retailer, but ignores the selling strategy and the stock within the retail store. Food Marketing Institute (1993) stated: "... provide the right product, to the right place, at the right time, in the right quantity, and in the most efficient manner possible" (Food Marketing Institute, 1993, cited in von der Heydt, 1998, p.100). This is a valid critical point which has to be explored when assessing the viability of establishing a similar or same model in the pharmaceutical market which will include the wholesaler as the "middleman" in the supply chain process.

Further projects and technologies on the supply side were VMI (Vendor Managed Inventory) whereby the supplier is responsible for the stock management of the retailer in an advanced manner. Manufacturers obtain the sell-out data directly from the retail store (von der Heydt, 1998; Thonemann et al., 2003). It started in the USA and was introduced in Germany, without much success. A study from Thonemann et al. (2003) showed that only eighteen from fifty-eight interviewed manufacturers and retailers used VMI. According to the study the reason for its lack of success is that VMI only delivers advantages through significant increases of the relevant turnover.

In principle, VMI can also be undertaken between manufacturers and wholesalers. In this case the manufacturer obtains the sell-out data from the wholesaler; sells quantities which the wholesaler then sells to the retail pharmacy. A more sophisticated business idea would be that the wholesaler could create a value added service to the manufacturer as well as to the retail pharmacy by connecting the replenishment process between the manufacturer and the retail pharmacy. That would overcome the identified obstacle of the need for a significant increase of turnover as discussed above. In FMCG, CPFR replaced Vendor Managed Inventory (VMI). In the CPFR (Collaborative Planning, Forecasting and Replenishment) process, the demand forecast between industry and retail are exchanged. The advantage of CPFR when compared to VMI is that the data utilized here is collected on a current basis; it does not use historical data. The factors of success for the supply chain management in the FMCG industry is by involving the retailer in the planning process (Großpietsch, 2003; Thonemann et al., 2003, Seifert, 2006). There are different CPFR models described in the literature. One is defined by Großpietch (2003) which reflects on the nine steps process for CPFR. Others like Huchzermeier and Iyer (2006) used the same model but drew a clearer picture (see figure 3.4). They also separated the steps into different areas: strategy and planning, demand and supply management, execution and analysis.

The model shown in figure 3.4 is normally used for collaborative planning of the regular sales forecast. The first phase - strategy and planning - concerns an agreement of joint business planning. The second phase - demand and supply management - deals with the exchange of sales and order data. The third phase - execution - considers proving the accuracy of the orders and their execution. The last phase - analysis - oversees the reassessment of the performance.

In addition to that, the model could be used for promotional planning. Metro AG, one of the biggest retailers in the world (with different sales channels), has used it for that purpose in a pilot project with P&G (Huchzermeier & Iyer, 2006). This gives an indication that the CPFR model works not only as a whole but it could be used for special areas of the assortment e.g. only promotional planning. Thus, it could be discussed for the purpose of the pharmaceutical market.



**Collaborative Planning, Forecasting and Replenishment** 

Figure 3.4: Collaborative Planning, Forecasting and Replenishment (CPFR), adapted from Huchzermeier and Iyer (2006, p.337)

Giving consideration to the time frame of the pilot supply chain collaboration programme between Metro and P&G, from 1993 to 2004 (Huchzermeier & Iyer, 2006), and that it was still discussed as a pilot project in 2003 (Thonemann et al., 2003), would indicate that the development for all those supply chain projects runs for more than ten years, as is further underlined by the earlier explanation that the ECR initiative started in 1990. The study by Thonemann et al. (2003) highlighted the fact that CPFR faces the same issues as VMI in that investment only pays off through a significant increase of turnover. This could explain why those programmes have not been more quickly rolled out into other business areas.

## 3.5.1.3 Challenges in the supply chain model

After investigating the publications about the supply chain model, different challenges were identified.

- One challenge is to invest in technology and to establish the right systems. This may be a hurdle especially for small companies. Indeed the technical knowledge may not be available. The literature review delivered no further details. So far, mainly multinational companies of FMCG and grocery retail have been considered in the literature discussion.
- 2. Further, so far the supply chain model has only been evaluated in the relationship between a manufacturer and a retailer. Within the literature review no publication was identified where a wholesaler has been considered in the model. Therefore, no indication could be found as to whether the model could work in wholesale businesses.
- 3. The third challenge lies with the employees, as previously mentioned in this chapter. Supply chain as defined by Melzer-Ridinger (2004) necessitates a change of attitude by employees otherwise supply chain management is impossible. This is related to a willingness to cooperate, the level and understanding of teamwork, knowledge and understanding of how people may be thinking.
- 4. In addition to that, the companies have to think about how to change their bonus scheme. Normally, employees are paid for their results, i.e. can/may receive a certain bonus by reaching their targets. Now, those targets have to consider the whole process chain and are no longer defined as individual targets. This requires a significant change in the mind-set of the company's staff with regard to how those targets are defined, as well as how the affected employees identify themselves with targets which have a broader frame than in the past (Melzer-Ridinger, 2004). This is a necessary consideration for pharmaceutical wholesalers, and indeed is even more challenging, as their employees do not have full control of the supply chain. The wholesaler's business stops with the delivery to the pharmacies with limited control of the sales strategy in the store, whereas, FMCG retail employees have full control of their assortment in the stores.

5. The overall target of a collaborative supply chain model is to establish an efficient and optimized supply chain. That means that the advantages should be clearly identified for both parties. But that delivers an additional challenge: how the win-win situation should look, especially by considering the imbalance of the company sizes on the manufacturer and retailer side. The win-win situation is the subject of a controversial discussed in the literature. Großpietsch (2003) questioned the statement of Christopher "better, faster, closer" (Christopher, 1998, p.273, as cited in Großpietsch, 2003, p.71) and asked if that was not more of an ideal instead of a reality. The result of this discussion is that partners need to align their ideas of a synergy shared model.

# 3.5.2 Section conclusion

Thinking about transferring the ECR model into the pharmaceutical market, these identified challenges of the supply side of the ECR model especially need to be considered.

For the pharmaceutical market wholesalers have to be considered in the model and as discussed in chapter 2 there are approximately 21,000 independent pharmacies in Germany. One pharmacist can own a maximum of four pharmacy shops. That means that the companies operating as retailers are very small. That turns around the imbalance in the market from retail to manufacturer power but the publication investigation delivered no indication that the market power has an influence on the principles of ECR. But it will have an influence on the investments of ECR technologies due to the fact that retail pharmacies are small companies. The pharmaceutical wholesaler could offer ECR technologies to retail pharmacists to secure a long term relationship.

The topic about how a win-win situation would look in a supply chain project is still a controversial discussion (see above 3.5.1.3). In view of the fact that the research is focussing on whether the ECR model is, in principle, transferable into the pharmaceutical market, the question of how to share the synergies can be disregarded at this stage, but should be the subject of further research.

# 3.5.3 Category Management (CM)

Category Management (CM) is the demand driven collaboration area in the ECR initiative. Overall, CM cannot be seen in isolation. It repeatedly interlinks with the optimization of logistic management and procurement.

"Category Management emerged in the early 1990s as a method of turning marketing basics into an organized process" (Nielsen, Karolefski & Heller, 2006, p.6). The main focus in category management is on the needs of the consumer. It is an eight step process as defined by Nielsen et al. (2006) which serves as the basis for all projects up to the present day. Appendix 3.5 gives an overview of the different steps and a summarized explanation about each step according to the CM model defined by Nielsen et al. (2006).

Without category management, the retailer structured the products on the shelf logically, e.g. by producer or material. This approach was also identified in the retail pharmacies. With CM, the assortment should be clustered in the way a consumer sees the categories and how the consumer looks for products during the shopping trip. The four key elements of category management: 1. category definition with respect to the customer need; 2. leading categories as a strategic business unit; 3. merging buying and sales functions in retailing; and 4. cooperation between industry and retail to better satisfy customer needs (Schröder et at., 2000).

There are some differences in the publications discussed about the first key element of category management. Some (McGoldrick, 2002) focus more on defining the right title of the category group, whereas others focus more into defining which articles should be in the related category (Schröder et al., 2000). But overall the descriptions about the elements of CM are similar.

In terms of the strategic business unit, there has to be clear category planning and a follow up of the implementation. Previously retailers had already focused on "customer-need based classification" but the important and new part is "the focus upon the category as a strategic business unit, and the extent of supplier involvement in category planning" (McGoldrick, 2002, p. 298). That perspective is similarly applied in different publications (Nielsen, 1992; Seifert, 2006). No difference could be found.

In the third element, the organizational differences in the structure are identified. In the retailing organization, there has to be a change in the buying / sales cooperation internally. Both departments should work together as one unit. In this view the manufacturer side is not considered (Schröder et al., 2000). Another view is that retail and supplier organizations have to change simultaneously. The "old world" concept of the buyer and the key account manager as the interface between both parties is no longer practical. A cross-functional category management structure is appropriate in which the retailer side as well as the supplier side have the same functions in place. With this approach, the functional experts are talking to each other and creating a team (McGoldrick, 2002; Nielsen, 1992).

In general the different standpoints in the literature go in the same direction. Some like Dupre and Gruen (2004) focus more on the retail organization whereas others (Nielsen, 1992) include the manufacturer directly. The second perspective makes more sense due to the fact that it looks into CM holistically. Only with a simultaneous change in structures and processes, can a successful CM programme be established. Different retail stakeholders such as procurement, marketing and sales people talked to the manufacturers about different topics, e.g. pricing, promotions, space management in the same way (Nielsen, 1992). Therefore an interactive approach between retailers and manufacturers is considered in the model of Nielsen (1992) as shown in figure 3.5.

#### Interactive model between retailers and manufactures

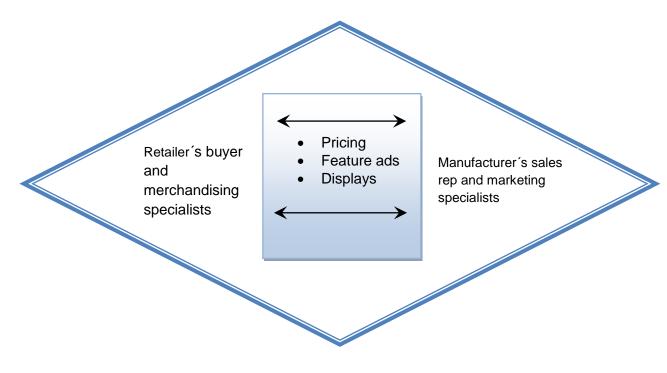


Figure 3.5: Interactive model between retailers and manufacturers adapted from AC Nielsen (1992, p. 37)

With this new structure in the CM collaboration the retail buyer becomes more of a specialist; a category manager. The buying function has to change from a centralized to a decentralized function with cross functional teams in place (Dupre & Gruen, 2004). This argumentation could be rather misleading due to the fact that the buying organization itself could still be centralized e.g. if the related retailer is a multinational company and has subsidiaries in different countries. However, the key point is that the retail buyer and the manufacturer's sales representative align on all related topics and work as a cross functional team. This has the advantage that the lack of communication between the different departments can be stopped and that one person would be in charge of the total category performance.

This viewpoint focuses on the CM process and organizational structure. Others like Corstjens and Corstjens (1999); Steiner (2007) regard CM more as "category understanding". They looked into the different objectives of retailers and consumer goods producers and distinguished between those areas of interest. A category understanding is also an approach which a retail pharmacist needs to consider. As chapter 2 (see section 2.6) showed the pharmaceutical market is also moving in

the direction of customer orientation. Therefore, an understanding of the category is a prerequisite.

The category understanding is not formulated as one common goal. Authors like Corstjens and Corstjens (1999) or Steiner (2007) argued that suppliers have to "see the market from the retail point of view, and thus to offer brands which retailers will wish to stock" (Corstjens & Corstjens, 1999, p. 286). CM described by Corstjens and Corstjens (1999) for the retailers, identified three objectives. Retailers want to provide a satisfactory shopping experience, maximize satisfaction, revenue and profits from each category and to maximize efficiency by limiting and simplifying the range of products they handle.

For the supplier side, manufacturers have the insight of different store types as well as of international markets on their specific product categories; they play an important role in category planning. The same expert knowledge of the specific products is available for pharmaceutical manufacturers (see section 2.2). Moreover, FMCG manufacturers create an enhanced knowledge from customer research and scanner data from the retailers. Out of this data analyses, a possible type of collaboration in utilizing this data jointly for retailers and suppliers can be concluded (Corstjens & Corstjens, 1999; Verhoef et al., 2010).

The literature discussion gives no clear answer about the balance of synergies by using category management. Some see most advantages of CM on the retailers' side (Kotzap, 1999; Dupre & Gruen, 2004; Holweg, Schnedlitz & Teller, 2009) whilst others talk about a more balanced advantage (Corstjens & Corstjens, 1999).

## 3.5.3.1 Category captain

The retail marketing strategy of the grocery retailer serves as the basis for the category management approach. Thus it is important for manufacturers despite the above argument that the structure and processes of a FMCG manufacturer can be discounted in the examination of the CM approach. It is important to underline that manufacturers need to understand the retail marketing strategy of the grocery retailer and adapt their strategies to it.

Manufacturers need to understand what the retailers' objectives are and explain their own defined company strategy to the retailers (AC Nielsen et al., 2006). This is where the collaboration process starts and the key account manager of the manufacturer and the buyer of the retailer should evaluate both strategies to ensure they are following the same target or where they could be adjusted. Without this, the common ground of a partnership is missing.

In the CM approach, the retailer normally selects one partner for a category who undertakes an evaluation of their own assortment and the brands of their competitors (Gooner, Morgan & Perreault Jr., 2011). This is the so called category captain. Normally the category leader is selected. As mentioned in section 3.4 this was tested in the first pilot project between P&G and Wal-Mart in the USA.

A category captain reviews the category and gives a recommendation for the assortment, promotional structure and the shelf lay-out (Gooner, Morgan & Perreault Jr., 2011). There could be one category captain for the whole category or different ones per subcategory. There is no strict rule for the selection process; the retailer nominates the category captain. This could be possible for the pharmaceutical market as well. In principle the retail pharmacists could select the category captain, although the challenge for that market is the size of one pharmacy and its ability to set up a CM approach and consider the wholesaler in the supply chain process.

A major part of the success of the CM project derives from the work of the category captain (Fowler & Goh, 2012). The category captain is responsible for the whole development of the category and its growth. The performance of the category captain needs to be reviewed periodically to ensure that the category review is done in an objective manner (Godwani, 2008). Generally, there are also some critical aspects in using a category captain has a lot of weight in defining the retail strategy in the specific category. On the other hand, mainly the leaders / the big multinational companies in the category are nominated by the retailer which provides less chances for the middle size or small companies (Kurtulus & Toktay, 2011). This unbalanced situation is the main concern of the Competition Commission regarding the category captain approach (McGoldrick, 2002). The

same unbalanced situation applies for the pharmaceutical market where multinational manufacturers are leading the market (see section 2.2).

As seen in section 3.5.1 in the FMCG market an unbalanced market situation between retailers and manufacturers was recognized. Here, in the category captain approach only the balance between the manufacturers is considered. Multination manufacturers are leading the process on the sales side. Therefore, the assumption can be made that in the CM approach in the FMCG market the balance between retail and manufacturer is mainly equal due to the fact that on both sides leading market players are involved (see section 3.3.1). This cannot apply for the pharmaceutical market because the retail pharmacies are small companies with a maximum of four retail pharmacies. Therefore as a difference to the FMCG market, the wholesaler as a third party needs to be considered in the model to keep the balance between the parties, especially in view of the fact that the five leading wholesalers cover more than 90% of the total wholesale market in Germany (see section 2.7). But due to the fact that wholesalers do not own pharmacy stores, they could offer that as a service to the retail pharmacies, for example the wholesaler selects the category captain for the category and offers a CM programme to the individual pharmacies. This approach can only be applied for the non-prescription drugs and para pharmaceuticals because they make up the self-medication market which is comparable to the FMCG market as discussed in section 2.5.

CM programmes follow category management strategies. Those strategies need to be identified before offering this kind of service from a wholesaler to pharmacies. In the FMCG market different basic strategies for CM are available which are discussed in the next section.

#### 3.5.3.2 Basic strategies of category management

The individual market participants aim for the same target. The manufactures want to increase their market shares and compete with each other. On the retailer side, the same situation is prevalent (Draganska & Klapper, 2007). This is not so obvious on the retail pharmacy side. Pharmacists have more focus on the regulated prescription assortment. The non-prescription assortment and para pharmaceuticals are a secondary priority for them but certainly of interest to increase margin and market share in that category.

The common aim of the manufacturers and the retailers in a CM programme is to optimize the profit of the categories. The manufacturer wants to show competency in the category to obtain the preferred supplier status from the retailer. Thus, manufacturers gain a prominent shelf place and can influence the activities at the point of sale (POS). For the manufacturer this means that the approach has to change from a brand orientated strategy to a category driven strategy of the article portfolio. The retailer wants to benefit from the marketing knowledge and market competency of the supplier (Seifert, 2006).

In the publications, three basic strategies for category management are discussed. Different literature sources such as Seifert (2006), Rehbach (2010) or Fowler and Goh (2012) use the same strategy elements.

# Efficient assortment

The assortment structure should no longer be determined by the additional listing fees paid by the suppliers. Listing fees are payments from the suppliers to the retailers for adding a certain article to the assortment (Rehbach, 2010). Normally, a retail buyer would be interested in getting those payments, as on one hand they increase the profitability in the category, which is a key performance indicator (KPI) for buyers' salary payments, whilst on the other hand, in my professional experience, a retail buyer would enjoy the experience of negotiating with the manufacturers to gain lower prices, bonuses or other marketing fees. This circumstance has the highest impact on the change of the mind-set regarding the collaboration and the identification of a common efficient assortment strategy (Steiner, 2007).

# <u>Efficient promotion</u>

The efficient promotion strategy focused on an efficient planning and implementation of a time limited marketing phase of a certain product. Normally it is assisted by a reduced sales price and a second placement of the product at the POS. There could be a risk of the retailer ordering more stock due to the manufacturer giving a special discount for that product (Rehbach, 2010). This could lead to an overstock situation for the retailer which increases the inventory cost and the cost of employed capital. For the manufacturer, the disadvantage is that the margin decreases. The aim for both partners is to increase the sales numbers at the POS and customer loyalty at the same time.

## • Efficient product introduction

The efficient product introduction is the most difficult strategy in the CM process. The prerequisite is an innovative new product launch of the manufacturer (Rehbach, 2010). The product has to fit in the assortment and another product has to be delisted which in turn goes along with the efficient assortment strategy. In terms of a product innovation, the retailer is normally not involved in the R & D process of the manufacturer (Steiner, 2007). The only exception would occur when the supplier is creating a private label product for the retail chain. The benefits for both partners lie in gaining market knowledge due to the sales data of the retail stores. The manufacturer can learn to change something or if the product fits the customer's needs. The retailer can benefit from the competitive advantage of being the first one to have the product on the shelf, which could increase customer loyalty.

Fowler and Goh (2012) add one more basic strategy; efficient replenishment. This can be neglected at this stage of the examination. Efficient replenishment is certainly an important element of the ECR approach but linked to the supply chain management, the supply side of ECR, instead of the CM process, the demand side of ECR.

The CM focus is on building the sales of the assortment. There is a link between the basic strategies and the eight steps planning process as defined by AC Nielsen et al. (2006). The basic strategies and the eight steps planning process is the fundamental basis for the CM collaboration between manufacturers and retailers (Seifert, 2006).

In comparison to the eight steps planning process, Seifert (2006) added one more step at the beginning, "Strategy Analysis". This is not in contradiction to AC

Nielsen et al. (2006) because they generally start with the definition of the retail strategy which is comparable to the first step intended by Seifert (2006) whilst working on a model of the consultant company Roland Berger. The other steps are comparable as far as the content is concerned.

Others, like Holweg et al. (2009) also reflect on this eight steps approach but in some projects, a shortened model of four steps is used to make it more practicable in daily business. But the key elements are still considered. For this examination of the CM planning process, the eight steps model of AC Nielsen et al. (2006) is considered as a principle of the CM process. Table 3.5 gives a brief overview of the eight steps whereas appendix 3.5 describes the eight steps in more detail..

Step 1	Category definition
Step 2	Category role
Step 3	Category assessment
Step 4	Category scorecard
Step 5	Category strategy
Step 6	Category tactics
Step 7	Category plan implementation
Step 8	Category review

## Key elements of the eight steps CM approach

**Table 3.5**: The eight step category management model adjusted from AC Nielsen et al.(2006)

The following discussion focuses on the key elements of the eight steps and therefore not all steps are mentioned again. The key elements were identified during the "hand search" process with stakeholders from FMCG business (see section 3.2.2).

With the definitions of the different role models of a category it becomes obvious that the second step in the process is one of the most important ones for the retailer. It emphasizes the retail strategy itself. In this process the retailer mainly benefits from the market knowledge of the category captain. The manufacturers normally have conducted much deeper analyses per product segment due to the fact that they are the specialists for a special product group. The retail assortment which the retail buyer has to handle is much broader. Nowadays, the retail chains have understood this dilemma and have changed their organizational structure either into smaller product category responsibilities per buyer or they invested in additional departments which are focused on the market analyses as well. This trend could not be identified in the literature study, but was mentioned in the discussion with the related grocery retail stakeholders as discussed in section 3.2.3. A ranking of the category roles could not be found either. Overall it can be stated that the destination category is by definition the most important category in the retail assortment. This is not as clearly defined by AC Nielsen et al. (2006). With the destination category, the retailer wants to profile the company and gain customer loyalty. It is the retailers' key category and supports the definition of the value proposition (Godwany, 2008).

The cross category buying effect also should not be disregarded in the category assessment strategy (step three). The purchase of one category may depend on the purchase in another one. A shopper bundles certain articles in one shopping act (Boztug & Hildebrandt, 2008).

In the publications, no standard scorecard is available as defined in step four. The KPI's may differ from category to category. They depend on the agreed targets.

The perspective of AC Nielsen et al. (2006) about the category strategy (step five) could not be found in literature discussion. Others like Rebach (2010); Steinert (2007) mainly talk about a defined strategy per category.

It could be argued that from a business point of view, CM starts only at number six because it is related to the product mix and shelf layout. But there were no debates found which neglected step one to five. From a business point of view the category tactics (step six) are the most tangible part which is also how it is addressed in the publications (Steinert, 2007). Within this step the retailer has to define the product mix of the assortment and what the assortment presentation looks like. For the shelf space presentation of the products, retailers prepare a planogram. This is normally prepared by the category captain. Often an appliance tool like "space man" is used. Beside the allocation of the products on the shelf it is also important for the retailer to define the store layout. This is driven by the definition of the role of the category as discussed above. The allocation of the merchandize defines how the customer is navigated through the store (Levy & Weitz, 2012). This is what guides customers through the whole store which means that they have to pass categories which they were not looking for. Thus, the chances for an additional buying effect and a focus on the destination categories can be reached.

Pricing and promotion are also crucial issues. Retailers have to decide if they want to run an everyday low price (EDLP) strategy or if they run a high-low pricing strategy which would mean that from time to time the products would have a promotional lower price than the normal shelf price (Herrmann, Moeser & Weber, 2005).

The marketing literature (Meffert et al., 2005) mainly focuses on the pricing strategy for manufacturers of branded items and their positioning in the market. Nevertheless, the five C's mentioned by Grewal and Levy (2012, p.390) can be easily adopted to the retail pricing strategy. The five C's are as follows: competition, costs, company objectives, customers and channel members.

Further, there is a link between the implication of the pricing strategy and the objectives of the company. This is also how retailers have to define their pricing strategy. They have to decide, for example, if they always want to compete with the competitors, which will have an impact on the margin. The retail marketing literature i.e. Sullivan and Adcock (2011) argue in the same direction. They recommend identifying the pricing objectives and to build the pricing strategy further. The focus should be more on the long- and short-term profitability which is not in contradiction to the general marketing approach. It is focused more on the business point of view instead of the selling strategy but the overall objective of maximizing the margin is the same.

Thus, the selling strategy is of great importance, because the price of a product has a huge influence on the buying decision of the customer, especially for the FMCG. They are normally purchased daily like coffee, milk etc. therefore customers have those prices in mind and can easily compare them (Eberhardt, Kenning & Schneider, 2009). This is different in the pharmaceutical market where there are normally no daily buying acts. Thus, retail pharmacists attempt to use consulting services to build customer retention.

The supply chain management in this context is a "behind the scenes" activity as AC Nielsen et al. (2006) calls it. Others like Godwani (2008), O`Brien (2009), do not mention it under the category tactics topic. But it is important to underline that the logistics have to move from a pushed process to a pulled one. The demand of the consumer should be in the centre of the demand planning process. The supply chain management topic has previously been discussed under section 3.5.1.

Step seven describes the category plan implementation process. For the category manager of the retailer it may not be easy to execute the agreed implementation on a fast track. To establish the agreed planogram in all stores at the same time could be challenging. It takes some time as well for the execution of the pricing and promotion set up even if there is a centralized IT system in place. The communication to the sales force and store management is crucial for a successful and fast roll-out. The same is true for the manufacturer side. The key account manager has to communicate the agreed action plan to the sales force which visits the retail stores frequently. They should support the execution process in the stores.

#### Interim result

Section 3.5.3 provides an overview about category management, the interactive business model between retailers and manufacturers as well as the basic strategies for this approach. The publications focus on the FMCG manufacturers and grocery retailers due to the fact that the ECR initiative had started in that sector.

The described three basic strategies (Seifert, 2006; Rebach, 2010, Fowler and Goh, 2012) could also be applied in the "free choice" and to some extent for the

"visible choice" assortment of a retail pharmacy because for this part of the assortment retail pharmacists can behave as retailers as described in section 2.8. The pharmaceutical manufacturer and the retail pharmacist also have a common aim to optimize the profit in the categories.

The identified key elements of the eight steps CM approach could also be considered for the non-prescription retail pharmacy assortment. The difference which needs to be investigated is which role the pharmaceutical wholesaler should take in this approach because the main supply chain in the pharmaceutical market goes via pharmaceutical wholesalers (see section 2.7). The eight CM steps as well as the interactive model of AC Nielsen (1992) respect only the relationship between manufacturers and retailers. No wholesaler is considered so far.

The wholesaler could take an important role within an adapted model for the pharmaceutical sector. The wholesaler can bundle the volume and interests of the independent pharmacies to create a strong position in the conversation with the manufacturers. The wholesaler would be the representative of a number of pharmacies. In this case the pharmaceutical wholesaler would take the role as service provider for the retail pharmacists in the CM approach. Retail pharmacies are small companies and use mainly wholesalers for the supply chain. They do not have a complete category overview and limited direct contact with the market leaders on the pharmaceutical manufacturer side. Therefore, the wholesaler can take the selection role for the category captain (as discussed in section 3.5.3.1) and support the whole CM process.

## 3.5.3.3 Challenges in the CM model

After investigating the literature about the category management model, different challenges were identified.

 Participants in the supply chain process, manufacturers and retailers, have one, although differing interest. Producers seek to generate the highest price possible, whereas the retailer wants to buy at the lowest price (Grewal & Levy, 2012).

- 2. The category planning and shelf layout plan will be done for all stores in the same way. They may distinguish between different format types of the retailer, but they cannot consider all regional aspects which are important in the retailer marketing mix at the same time (AC Nielsen et al., 2006).
- 3. The selling price is still one of the most competitive aspects. The sales prices would have to adjust individually for each local market (McGoldrick, 1988). However, the retailer has to compare the advantage to the related administrative cost and pricing decision which are inseparable (Broniarczyk & Hoyer, 2006). Retailers define their sales prices under the circumstances of their competitors' price frame. Thereafter they calculate their margin and if it does not meet their expectations they begin negotiating with the suppliers for better buying prices, thus moving the situation from a cross functional category management team back to a traditional retailer / supplier relationship context: the buyer and key account manager only negotiate prices and trading terms which withdraws the CM approach (Großpietsch, 2003; Rehbach, 2010).
- 4. In terms of promotions, advertising and communications, retailers have a keen interest in promoting their private labels and their store brand. The suppliers want to push their brands in advertising and promotions (Olbrich & Grewe, 2009; Meffet et al., 2010).
- 5. This conflict arises in the shelf space as well. The share of own brands in the retailing assortment are increasing more and more which leaves less shelf space for the branded manufacturers. It is hard to bring branded innovations directly into the shelf, because the shelf space for brands has reduced to 80% of the total shelf, according to a study by Rehbach (2010). More or less 20% of the total shelf space in groceries is related to the own brand of most of the retail grocery stores.
- 6. On top of this dilemma, retailers are still asking listing fees from the suppliers which is contrary to the category management idea. Additional conflicts arise with the establishment of their private labels; retailers know more about the calculation of the single product (Rehbach, 2010). They have the knowledge about raw materials, packaging and production cost. They are capable of comparing those costs with the branded articles, which

normally have a higher margin included, due to research and development (R&D) and certain marketing costs. Retail buyers are using this information for further price negotiations with the consumer goods producers.

- 7. Therefore, one recommendation from Corstjens & Corstjens (1999) is that the fast moving consumer goods industry should be separated from the own brand department in the organization. From their view it should be an independent profit centre. That could be helpful for a smooth workflow in the industry organization, but it should be investigated whether that would avoid the price conflict and the negotiation potential with the retailers.
- 8. The eight step approach is the common roadmap in the CM collaboration between retailers and manufacturers. But it also needs to be addressed that there are some critical voices expressed in the literature. Some, like AC Nielsen et al. (2006), argue that the manufacturers are presenting the same category structure to all retailers. This would indicate that the assortment looks the same for the different retail chains. The respective retailers cannot differentiate themselves from other competitors in the market. This argument could be valid if all retailers were using the same category captain. But on the other side, due to the fact that the evaluation of the category should be fact based, it should not matter who the category captain is. The results have to be the same in principle. The retailer has to distinguish the assortment by defining different core areas. The category manager of the retailer should still be the driver of the assortment. The category manager has to make the link to the overall retail strategy of the company. The final assortment decision still falls under the responsibility of the category manager.

These identified challenges in the CM approach need to be translated into a market with three market participants (manufacturer, wholesaler, retail pharmacist) and have different importance and characteristics for the pharmaceutical market.

The identified challenge to consider regional differences in the product assortment in a common shelf layout exist only to a certain extent for pharmaceutical retail in Germany because only four pharmacies located within a certain distance can be owned by one pharmacist. Thus, in principle regional product differences should not appear.

Conversely, if a wholesaler offers CM and category structures to the customers (pharmacists) than the critical voices as mentioned under challenge seven could apply. In the pharmaceutical market customers are independent pharmacists and do not belong to a retail chain. Hence, they do not want to obtain the same assortment recommendation as their competitors. This is more important for urban than for rural areas. For the latter, the assortment differentiator aspect is less important because there is less competition.

An own brand assortment could not be established by one retail pharmacist due to the small number of single units per pharmacy, as discussed in section 3.3.2. Wholesalers can create and offer an own brand assortment to their customers (retail pharmacists). This would create a conflict within the relationship to the manufacturer as discussed in section 3.3.2 because wholesalers would start to compete with the assortment of manufacturers. But wholesalers have no assortment control and in general no influence of the shelf space for own brands in a pharmacy because they do not own them. The wholesaler acts only as a service provider for the pharmacists. Therefore, the conflict potential for establishing own brand assortment is higher in the FMCG market between retailer and manufacturer (see section 3.3.2) than between pharmaceutical wholesaler and manufacturer.

#### 3.6 Factors of Success of the ECR Model

The ECR principles and the process chain have been identified. However, before starting to assess whether this principle can be transferred into other business areas, such as this current research into the pharmaceutical wholesale model, the benefits of using such a model should be named in addition to the success factors which lead to them. Those factors were identified during the literature research mainly as theoretical aspects. There were only limited numbers of examples mentioned in the publications and according to the study of Holweg et al. (2009)

only quite limited rigorous empirical studies have been done. Therefore, no evidence of execution in practice can be provided at this stage.

From my point of view, it is not necessary to investigate the details of the synergy results. The literature review has shown that authors such as Martens and Dooley (2010), Holweg et al. (2009), present results. The study by Holweg et al. (2009) showed that the highest number of projects was in CM, and was mainly executed in hypermarkets and in drugstore chains in Germany. In addition the study compared the synergy potential effects for the supply as well as the demand side between the US and the European markets. Those reappraisals of ECR performance came to the conclusion that ECR strategy is effective. There are no studies about potential analyses in terms of customer satisfaction (Holweg, 2009).

In the publications, results could be found for some projects in the FMCG category of cleaning and household (Dupre & Gruen, 2004; Godwani, 2008). Beside those results it can be stated that in the main measurable results are seen in the collaboration in the supply chain process. They are described as first quick wins in the collaboration (Thonemann et al., 2008).

Others see a value proposition more on the demand side of ECR. They argue that it is important to have the right products on the shelf to fulfil the demand of the consumers because otherwise they would make their purchase in another retail store (Mentzer, Myers & Stank, 2007). But there are also some critical comments found that consumer value is difficult to measure (Kotzab, 1999).

This statement is debatable, firstly because the definition of consumer value could also be translated into customer loyalty. Secondly, retailers want to improve their results and create a better performance, certainly with a direct effect on the customer (Verhoef et al., 2010). Thirdly, the question is who should gain from the synergies? In principle the ECR model is built to deliver "hard" savings for the manufacturers and the retailer. But nevertheless consumers also profit from it because they will find the right assortment, price, promotion and customer programmes, such as bonus cards etc. which fit their demand. That could be seen more as a "soft" synergy but still an important result which should not be underestimated even if it cannot be documented in KPI results or money. By investigating the results gained so far from different projects and studies one success factor should be addressed as the main one: that human behaviour is the main driver in all projects (Schröder et al., 2000; Schröder & Großweischede, 2000; McGoldrick, 2002; Dupre & Gruen, 2004; ACNielsen et al., 2006). The process involves moving from a business partner model with diverse targets to a partnership-focused collaboration with common targets. Success is very much dependent on the people involved. It is also important that the project has the support of management and there is a willingness to invest in successful change management (Holweg, 2009) as the example of the very first project between Bahlsen Snack and Konsumgenossenschaft Dortmund KG has shown (see section 3.5.1.1).

The supply chain process in a company affects different departments, for example, procurement, sales etc., therefore it is important that the process is steered by the top management of a company (Thonemann et al., 2008). The success of an improvement is in the complete process in the coordination and control ratio of the management. This aspect for one company can also be used for the collaborative project between the market players. Manufactures and retailers have to behave like this internally but they should also include the top management in the target alignment in the project, because ECR projects normally involve different departments, e.g. procurement / CM, supply chain, sales and marketing.

One other aspect which should not be neglected is that several authors address the point of involving independent market research data in the process (Rehbach, 2010, Steiner, 2007; Corstjens & Corstjens, 1999). They saw an advantage and a better understanding of the consumer and category with this approach. So far, in the described CM process the publications mention only the data from the retailer and manufacturer, stating that the suppliers have a lot of market data which could be used. In general, it is important to use data which supports the process to make the right decision in terms of the category strategy. It could be a possibility to engage an independent market research company or to buy additional figures. This should be aligned between the project team members.

Furthermore, a smooth product delisting and listing process is important as an additional success factor (Homburg, Fürst & Prigge, 2009). There could be a

sensitive reaction from the consumer to changes in the assortment. The sales staff in the store should give explanations to the consumer and the retailer should offer an alternative product when delisting one. This should be considered in principle. The category manager should establish a smooth change in the assortment, so that the consumer still finds requested products. But overall, some of the results from CM projects have shown that even a reduction of 25% of the assortment leads to a sales increase of 10% (Dupre & Gruen, 2004). The success factor is to manage the shelf with respect of the customer demand as well as with a cost efficient shelf supply chain (Hübner, 2011).

The category manager has to define the assortment size and shelf layout, pricing strategy and the replenishment process. Last but not least, if the ECR project does not lead to a win-win situation for both parties, it may be very difficult to maintain the enthusiasm of all involved partners.

As stated earlier the publications discern an unbalanced synergy effect. Some authors see a higher advantage on the retailer side. The targets have to be clearly defined and agreed upon and all stakeholders have to work on these common goals. The results have to be seen as common savings and independent of who is gaining which part of it. In theory this is obvious but in practice it may pose the highest hurdle in the collaboration because each company and the management are responsible for the results attained.

#### 3.7 Chapter Conclusion

With this literature review the supply side and the demand side of the ECR model in the FMCG business has been assessed. It has been identified that the model is mainly used in the collaboration between FMCG manufactures and grocery retailers. In other business areas it is not yet established in its entirety.

In the starting years of ECR there were mainly projects on the supply side established in Germany (Kotzab, 1999). Despite that, for those projects a critical mass is necessary to justify the investments for ECR technologies which would not be required for CM projects (Seifert, 2006).

Firstly, CM projects should not be undertaken with only one manufacturer or within one category. As explained above the whole retailer strategy is connected to it. Synergy results can only be attained within an overall marketing strategy in the CM process. Secondly, for proper CM projects a certain data exchange between the partners is necessary and therefore investments would be needed as well. Overall the most important topic in the ECR approach either on the supply side or the demand side is the trust building process in the collaboration. The ECR approach only seems to be successful if both partners change mind sets in their companies and overcome the hurdle of seeing each other as predators. As Hebler (1998), Schröder et al. (2000) and Großpietsch (2003) suggested the essence of ECR is for manufacturers and retailers to agree common targets and work across companies according to the same rules with the aim to achieve results beneficial to both.

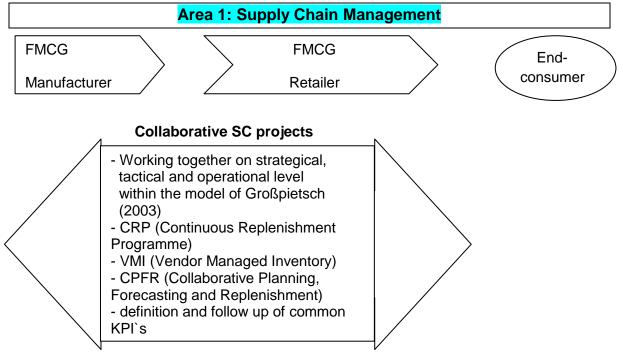
On the supply side the common targets are more related to common KPI's to reduce the supply chain and inventory cost. On the demand side in the CM projects are also driven by KPI's but the main focus is on the enhancement of the value proposition for the customers.

The customer is at the centre of the strategy. The relationship between manufacturers and retailers has to move from a short term business driven perspective to a long term partnership. They have to understand each other as partners in the market and manage the conflict potentials. The research found no publications which discussed how the conflict hurdles could be overcome. This could be assessed in a separate research project.

For this literature review, it was important to understand the model itself and to identify the success factors which are necessary for investigating the transfer of the model. And, with the knowledge of the conflict areas, to identify whether those conflict hurdles could also be prevalent in the pharmaceutical business and hinder an implementation.

Figure 3.6 illustrates the existing ECR model in FMCG and shows that in this model manufacturers and retailers work as a collaborative team to together serve the end-consumer. There is no intermediary, such as a wholesaler, involved. I

have divided Figure 3.6 into two parts (figure 3.6.1 SCM and figure 3.6.2 CM) in order to demonstrate that the model works as a holistic end-to-end solution, but could also be used within the two separate elements of SCM or CM. I will follow the same logic for the presentation of the recommended model for the pharmaceutical market in chapter 7.1.



#### Current ECR model between retailers and manufacturers

Figure 3.6.1: Area 1: Supply Chain Management

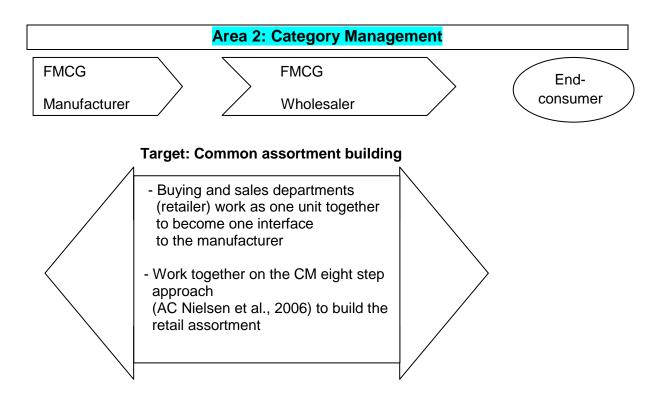


Figure 3.6.2: Area 2: Category Management

There are also some critical voices in the literature which are asking for an amendment of the CM process. The study of Holweg et al. (2009) requested an adaptation to a more personnel and point-of sale driven process. These elements would increase consumer value significantly. But until the end of 2015, there was no additional literature that describes an adapted CM model. In February 2016 work by Corstjens (2016) was published. He argued that the CM process has to change and that local assortments need to be considered, with shop managers having more freedom to define their assortment. This aspect of a deeper engagement with the retailer and a focus on local assortments will be considered in the adapted ECR model for the pharmaceutical market (see chapter 7.2 and section 7.2.2). For the pharmaceutical market it is even more important because retail pharmacists own a maximum of four stores, all located within a certain distance of the main pharmacy.

#### 3.8 Knowledge Gap and Contribution of the Research

This literature review has shown that there are large numbers of textbooks, journals, trade press and articles, available in relation to the research topic. The highest numbers were released in the first years of ECR consideration, but up to the time of writing it remains a contemporary a topic in the literature as Corstjens new publication of (2016) indicates (see section 3.7). It can be further stated that the focus is still on the FMCG industry and the retail grocery business. New publications about a recommended DTP model that suggests pharmacists take over the logistical service for manufacturers in a "fee for service model" (Apotheke adhoc, 08.03.2016) and about the demand to increase OTC products in drugstores and supermarkets (Celesio Medianet, 18.03. 2016) underline the current distribution channel discussion in the pharmaceutical market.

There was no example found for a process description of an ECR approach in another business section. Some authors did comment on this lack of implementation into other areas (Dupre & Gruen, 2004; Godwani, 2008).

In general the relationship described is that between the manufacturers and the retail companies directly. Some authors mentioned the involvement of a wholesaler, but no one used an applied example or gave an indication of what that model could look like, thereby ignoring the number of possible multi stages in the supply chain. This is apparent for the German FMCG business because 80% of the market is controlled by the multinational companies on both the supply as well as on the demand side (Walters & White, 1989; Reinhartz et al., 2011; Metro 2012).

Those companies (manufacturers and retailers) mainly handle their business directly without any wholesaler involvement due to their high volume on the demand as well as on the supply side. In general, it is not impossible to use the ECR model for wholesale businesses; it just means that it has not been considered so far. Figure 3.7 shows the supply chain flow in the FMCG market.

# Supply chain flow in FMCG

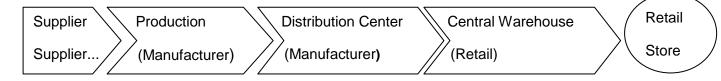
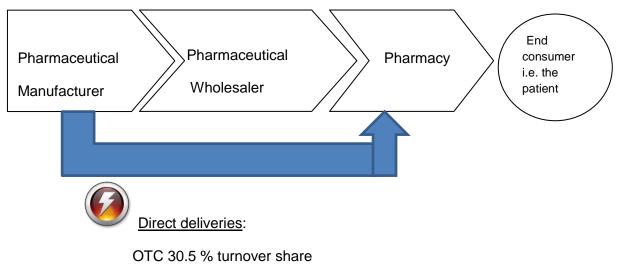


Figure 3.7: Supply chain model in the FMCG market

As the background study in chapter 2 shows, in the pharmaceutical market wholesalers are in principle involved into the supply chain process (see section 2.7 and figure 2.8). But there was a trend recognized mainly for OTC and para pharmaceuticals that manufacturers deliver directly to retail pharmacies (section 2.7). Figure 3.8 shows the current supply chain flow and its critical situation for wholesalers due to direct deliveries (depicted by the blue arrow) from manufacturers to retail pharmacies.





Para pharmaceuticals 38.8 % turnover share (IMS, 2014)

Figure 3.8: Current supply chain flow in the pharmaceutical sector

In summary, the first identified gap in the literature review was that until the present day the literature has investigated the ECR model in the FMCG market without considering a wholesale supply chain (Engelhardt, 1984; Gegenmantel,

1996; Kilimann & von Schlenk, 1998; von der Heydt, 1998; Corstjens & Corstjens, 1999; Mentzer et al., 2000; Schröder et al., 2000; Schröder & Großweischede, 2000; Thonemann et al. 2003; Seifert, 2006; Rudek, 2008; Fowler & Goh, 2012; Levy & Weitz, 2012). Secondly, the background study shows that the pharmaceutical wholesaler has a need to expand the supply chain services to get OTC and para pharmaceuticals back into the supply chain (IMS, 2013; Hofmann, 2013b; Insight Health, 2013). It should be investigated what kind of services the wholesaler can offer to the manufacturer as well as to the pharmacist to be considered as a value adding partner in the pharmaceutical supply chain model. Some initial ideas have been explored in figure 2.10.

The contribution to knowledge for this research is to investigate the potential of transferring the ECR model from FMCG into pharmaceutical businesses and to recommend a newly adjusted model for wholesale business in the pharmaceutical sector. This will be discussed in section 7.1 and 7.2.

Due to the fact that the ECR model consists of two areas, the supply chain and category management, it was also important, alongside the supply chain flow, to investigate the product categories of OTC and para pharmaceuticals. The literature discussion gives no indication that in terms of the product ranges the ECR model is limited to the FMCG area. The study by Holweg et al. (2009) shows that the largest number of projects in CM are predominantly executed in hypermarkets and in drugstore chains in Germany.

Hypermarkets and drugstores chains also sell products of the OTC and para pharmaceutical category ranges. Therefore, at this stage the assumption can be made that there should be a possibility to transfer the ECR principles into the German pharmaceutical market, because as described in section 2.5.1 the nonprescription drugs of retail pharmacies in Germany consist of OTC and para pharmaceutical products. For the freely available drugs there is no limitation to a certain product category or retail chain. The fact that OTC and para pharmaceutical products are part of a retail pharmacy assortment, already gives an indication for the possibility of investigating an implementation of such a model in the pharmaceutical business area. As discussed in chapter 2, the pharmaceutical market is a highly regulated market but in terms of some OTC and para pharmaceuticals products the retail pharmacist can operate as a retailer in the same way as any other non-regulated retailers.

The findings in chapters 2 and 3 underpin the aim of the research to investigate the possibility of transferring the ECR model into a pharmaceutical wholesale business in Germany. The investigation is undertaken using a case study approach. This is the most viable approach because it will enable me to conduct one to one interviews with stakeholders within the case company, pharmaceutical manufacturers and retail pharmacists to either underpin or to rebut the potential aspects and obstacles which were identified within the findings of chapters 2 and 3. Table 3.6 shows the identified pros and cons of the possibility of transferring the ECR approach into the pharmaceutical wholesale business.

# Pros and cons of the possibility of transferring the ECR approach

	Pros	Cons
Market environment	-Current market environmental factors in pharmaceutical sector are similar to those which were the consequence of development of the ECR model in 1980's in FMCG market -All market participants (manufacturers, wholesalers and pharmacists) focus on the consumer which is the fundamental aspect of the ECR approach	-Three market participants (manufacturer, wholesaler, pharmacist) instead of two in FMCG (manufacturer, retailer) -Pharmaceutical sector consists of regulated and non – regulated market -Strong supply power of manufacturers -Increase demand power of pharmacies -Current ECR model does not consider wholesale
Supply Chain Management	-Wholesalers are experts in supply chain -Supply chain projects were starting points in the collaboration between FMCG retail and manufacturers	-Manufacturers see wholesalers only as supply chain provider -Manufacturers improve relationship directly with retail pharmacies
Category Management	-Customer shopping decisions in the pharmacy is comparable for para pharmaceuticals and practically for OTC products as in FMCG -Customer of wholesalers are pharmacies and consumers trust pharmacists -Wholesalers have broad range of assortment -"Commitment models" support a closer collaboration between wholesaler and pharmacist -Wholesalers build own brand assortments which keep the pharmacies loyal	-Only wholesale associations have a closer relationship with pharmacists than other company types -Own brands do not support relationship with manufactures (wholesaler become competitor)

Table 3.6: Pros and cons of the possibility of transferring the ECR approach

Furthermore, with the case study additional potential aspects and new themes were identified which did not appeared in the background study or literature review. For the case study the identified success factors and conflict areas were considered. As mentioned above, there was no literature found which indicated ways to overcome the different obstacles. Authors either merely alluded to those conflict potentials or focused more on the theoretical process itself. The aim of this research is not to prepare solutions for the named conflict potentials, as this lies beyond the scope of this research; it should be investigated in a different work. The target is more about taking those areas into consideration for the transition recommendation of the ECR model and, if possible, avoiding them from the very beginning.

# 4.0 RESEARCH METHODOLOGY, STRATEGY AND DESIGN

# 4.1 Objectives of Chapter 4

The aim of chapter 4 is to demonstrate which overall research philosophy, strategy and technique have been adopted for this research. It elaborates my philosophical position on the continuum of opposite beliefs, from a positivist to a constructivist stance. It clarifies the difference between a qualitative approach and a quantitative one and considers the various possible research methods for this research topic.

This research adopts an overall exploratory approach, making use of the case study method to explore how the ECR model can be adapted for the pharmaceutical wholesale business. This method facilitates the exploratory process because an in-depth analysis is needed to address the research objectives.

As a case study is the selected approach, it will be examined in greater detail. In adopting a qualitative research method the role of the researcher is described, along with difficulties in terms of data credibility and risks that could arise from this research method. Furthermore, the transferability of the results into other business areas is considered.

# 4.2 Business Management Research

The key question is whether management research leads to the development of academic theory or to solutions of practical problems.

For the term "management", several definitions can be found in scholarly literature. The general one splits this term into two parts. One is about the people who work as managers in an organization and the other one for management as an activity (Easterby-Smith, Thorpe & Jackson, 2008). The same is true for the term "research". In routine business, `research' is used in a very broad spectrum where information is collected, but not necessarily in a systematic way (Walliman, 2005).

In support of the above discussion about knowledge contribution of management research, Tranfield and Starkey's (1998) article set out a perspective for further discussions and in a later article, Tranfield and Denyer (2004) referred to that piece of work which underlined the significance of the so-called 'mode 2' approach. It is about knowledge production in management research (Gibbons et al., 1994).

The work of Gibbons et al. (1994) was related to the discussion about the nature of management research who defined 'mode 1` and 'mode 2`. Mode 1 focuses on academic interests and answers theoretical questions; mode 2 creates knowledge in a broader, trans-disciplinary social and economic context. It is important to understand that mode 2 is not a methodological technique (Tranfield, 2002) but is characterized by deriving knowledge by directly engaging with social practice and problems (Easterby-Smith et al., 2008). These definitions lead to the assumption that with this mode 2 approach, a connection between academic knowledge and business interests could be accomplished (Starkey & Madan, 2001). This is the aim of this research.

The set-up of a business management research very much depends on the philosophical standpoint of the researcher (Johnson & Clark, 2006). The philosophy will influence the research strategy and methods. The structure of this management research is presented in the following sections and the research onion model is used as a guideline for the structure of this chapter (Saunders, Lewis & Thornhill, 2009).

## 4.3 <u>Research Philosophy</u>

In general the researcher/manager recognizes an unanswered question in the business environment and attempts to close this gap with the research questions (Pettigrew, 2001).

For this research:

- 1. What are the environmental factors that make pharmaceutical wholesalers consider changing their business model in Germany?
- 2. How established is the efficient consumer response (ECR) model in the fast moving consumer goods (FMCG) business in Germany?
- 3. How could the Efficient Consumer Response (ECR) model from the Fast Moving Consumer Goods (FMCG) business be transferred into pharmaceutical wholesale business in Germany?

When considering how to answer these questions, the ontological position together with the epistemological consideration has to be clarified. Here Guba and Lincoln (1994) take the position that the method definition comes in a second step after the definition of ontology and epistemology.

Overall, one of the important issues is the conceptual framework. The researcher is free to combine different paradigms and traditions as long as they are compatible (Maxwell, 2005).

A paradigm is a basic belief system. "A paradigm may be viewed as a set of basic beliefs (or metaphysics) that deals with ultimates or first principles" (Guba & Lincoln, 1994, p.107). For those believers their worldview defines the nature of the "world". As a researcher, to answer that you have to answer three fundamental questions (Guba & Lincoln, 1994).

The first one is the ontological one which concerns the nature of reality. The second one deals with the epistemological point of view referring to the nature of knowledge. The third one is the methodological question about how knowledge is attained. The given answers cannot be proved and all belief systems or paradigms are the product of human thought processes (Guba, 1990).

The two most contrasting philosophies are positivism and social constructivism with varieties of others in between. The positivist believes in the world which exists externally and in gaining knowledge through objective methods. The social constructionist's aim is to increase general understanding of a particular situation. The inquirer is part of the observation and human behaviour is the main driver of science (Easterby-Smith et al., 2008). Knowledge is created through interaction between people (Thomas & Linstead, 2002), and the research mainly focuses on practical topics and processes (Holstein & Gubrium, 2008).

Both philosophies could be used for quantitative or qualitative data analysis, even if primarily the quantitative approach is used by a positivist and a qualitative one by a social constructivist (Alvesson & Sköldberg, 2010).

Philosophies can combine different methods as long as their compatibility is assessed (Maxwell, 2005). Constructionist research has successfully combined a wide range of different methodologies such as action research, case study or grounded theory (Holstein & Gubrium, 2008) which supports the constructivist researcher in generating rich results and shows the diversity of this philosophy. Additionally, it supports theory building for exploratory studies (Yin, 2009).

For myself I can state that, after studying the different philosophies, I feel most comfortable with pragmatism; a philosophy formulated by C. S. Peirce (Rescher, 2014). There could be no common definition found in the literature for this position (Pihlström, 2010). I feel very much linked to the view of Creswell (2009) who stated that there is no absolute truth and the world exists independently. That is true for a pragmatist but also for other philosophical stances such as critical realism. But the predominant stance for pragmatism is that the researcher makes no commitment to a particular understanding of reality, hence has the freedom to choose any method that supports to answer the research question. Therefore the researcher has the opportunity to choose between different research methods independently but has to justify the choice (Creswell, 2009).

The term pragmatism comes from the Greek language and has the meaning of action and means practice or practical (Pihlström, 2010). Pragmatists focus on real-world practice which supports management research (Creswell, 2009, Pihlström, 2010) which I also considered and this has determined my focus. The issue I have identified is in regards to practice therefore I am looking into it as a pragmatist.

By having this stance as a researcher I would also argue that I feel it is acceptable to put forward the argument that there is no contradiction in following a research approach which falls mainly under a constructivist position if it supports answering the research question, which is also one important criteria for choosing the research approach of a pragmatist (Creswell, 2009). The pragmatist is free to choose between different methods thereby allowing the researcher to choose methods that are mainly related to a constructivist position as those methods support the key element of pragmatism as understanding and solving a problem. Pragmatists do not search for universal generalization (Rescher, 2014) and do not think that they can generate absolute truth (Creswell, 2009).

Hence, in following the research I will focus on methods that are often related to constructivist ontology because as a pragmatist I have seen that this will help me answer my research questions. Generally, scholarly literature describes the constructionist research in detail which should have the following features (Easterby-Smith et al., 2008):

- Believable
- Transparent in terms of the methods
- Explanatory about the gained access
- Identify which process led to the selection of the information
- Transparent in how data was created and recorded
- Explain which process was used to summarize the result
- State how data was transformed into tentative ideas and explanations

The above mentioned constructionist research features have been considered in the preparation of the research as a result of a pragmatist stance. They are discussed in section 4.5 in more detail.

#### 4.4 <u>Research Approaches</u>

The research approaches of management research depend on the philosophical position of the researcher. The inquirer has to set up the research strategy on how to generate the necessary data and information (Tranfield et al., 2003).

## 4.4.1 Deductive versus inductive approach

The question is whether to follow a deductive or an inductive approach. With the deductive approach, the research aim is to test hypotheses or a set of propositions. It is mainly about quantitative methods, for example experiments or surveys. This type of deductive method is mainly used in the daily "research" of managers (Skinner, Tagg & Holloway, 2000). That is not the case for this research question because the aim is to build a theory and not to test it. The theory is following data rather than the other way around as would be the case in the deductive approach (Saunders et al., 2009).

The opposite is the inductive approach which is related to qualitative methods. Management researchers, at least in Britain, are increasingly using this method (Skinner et al., 2000). Practising managers prefer the quantitative approach, as the Skinner et al. (2000) study on the pros and cons of qualitative research in management showed. The choice of which methods - either quantitative or qualitative - are appropriate cannot be decided in an abstract way. It has to be made in connection with the research objectives (Alvesson & Sköldberg, 2010). As a pragmatist it is important to identify the appropriate methods which support answering the research question. It is often misleading that some textbooks only differentiate between qualitative and quantitative methods to provide an understanding of the research strategy (Easterby-Smith et al., 2008) as both methods can support the constructionist or positivist epistemology.

A combination of a deductive and inductive approach in one piece of research is possible, which can be viewed as an advantage (Saunders et al., 2009), because induction is a study which generates data; in contrast, a deduction's subject is

about a theory which is tested with data (Seale, 2007). The deductive approach could be considered as a further step after the theory building in terms of reaching further validation of the findings, which is out of the scope for this research.

The inductive approach is about collecting data and developing a theory based on qualitative methods. The researcher concludes from the observation of connection from a number of facts to a general validity (Alvesson & Sköldbeg, 2010). For this research, the intention is to generate data mainly through interviews and observation in one German pharmaceutical wholesale company (GEHE Pharma) and with their customers and suppliers.

I am a member of the holding organization of GEHE Pharma. This has the advantage of being able to contribute knowledge gained in the fast moving consumer goods industry (from my previous professional business assignments) which makes the theory building more powerful (Eisenhardt 1989). Eisenhardt also stated that theory building arises from past data but becomes more powerful if a researcher can add actual practical insights. I have access to the stakeholders and experts of currently running initiatives and I have direct access to one of the leading pharmaceutical wholesalers in Germany (GEHE Pharma).

A core function in organization research is to develop a theory which does not mean, by definition, that the researcher has to be part of the organization (Eisenhardt, 1989). It could be done by an external person who would have the advantage of not being as engaged as an employee, but would lack inside knowledge of the organization.

Alternatively the risks have to be considered. The scientific world has doubts about the validity of data which are generated in organization research, and for a researcher to be deeply involved in the case could have the disadvantage of losing the focus of theory building. The practical interest of solving a problem in the company could somehow dominate. There could also be a risk if the practical researcher remains in the company after the conclusion of the research (Coghlan & Brannick, 2010). That could affect the interest in the research process and findings. To overcome these doubts within the scientific world, I decided to set the research within one of the affiliates of Celesio AG where I am an employee. In this way I am not directly involved in the business of the German affiliate (GEHE Pharma) but in fact I work within the holding organization. This enables me to keep some distance between the practical interest and the theoretical part of the research.

Furthermore, the existing ECR model of the FMCG market is used as a starting point for this research. With an inductive approach, the following areas can be covered (Saunders et al., 2009):

- To get a feeling for what is going on
- To understand the nature of the problem
- To collect data utilising a variety of methods in order to establish different views (e.g. observation, interviews)
- The result of this analysis would be the basis for formulating the theory

This approach implies a close relationship between the researcher and the interviewed or observed people for a given period of time. This is typical in the social science and for qualitative approaches (Kirk & Miller, 1986), but could lead to more unstructured data (Hammersley & Traianou, 2012). Therefore, the documentation of activities and analysis procedures are important matters of concern to ensure and demonstrate the quality of the research results (Flick, 2009). This is explored in more detail in section 4.5.

The research objective requires an investigation into the current areas of collaboration between pharmaceutical manufacturers and wholesalers and formulating new ways of working together. Despite the fact that there is a wealth of literature on ECR principles, and about the German pharmaceutical market, I could not identify a link between both. As pragmatist I want to understand the situation and solve the problem. Therefore, the research leads to an inductive approach.

#### 4.5 Research Strategy and Methods

As a next step after identifying my position and defining the research objectives and purpose, the methodology has to be selected to enable the research questions to be answered. "Methodology is best understood as the overall strategy for resolving the complete set of choices or options available to the inquirer" (Guba & Lincoln, 1989, p.181).

There are differing views within the literature. For example, Yin (2009) argues that all methods can be used either for exploratory, descriptive or explanatory research. Others, for example Kleining (1982, cited in Flick, 2009), stated that either qualitative or quantitative data collection methods should be attained, and for a qualitative strategy the researcher does not need an additional quantitative one. The question should be which methodology produces the most valuable output. Conversely, for example Flick (2009) recommends using a mix of qualitative and quantitative methods to generate more reliable results. All these differing viewpoints support the pragmatist stance (Creswell, 2009) because it is important that the methods support an answer to the research question.

Research reliability and validity is an area of controversy in the literature (Saunders et al., 2009; Bryman & Bell, 2011). In principle, most authors use the term reliability if it is possible to replicate the result of the research by using the same methods and deliver the same results (Gummesson, 2000; LeCompte & Preissle Goetz in Bryman, 2007; Saunders et al., 2009; Bryman & Bell, 2011). The term validity is also used by various authors. Research validity is achieved if the findings provide appropriate answers to the research questions (Gummesson, 2000; LeCompte & Preissle Goetz in Bryman, 2007; Saunders et al., 2007; Saunders et al., 2009; Bryman & Bell, 2011). Some like Bryman and Bell (2011) view validity as the most important criterion to judge research results. They view it as "integrity of the conclusions" (Bryman & Bell, 2011, p.41).

Research findings need to consider these aspects to demonstrate that the data collection techniques and analysis will deliver reliable and consistent findings (Saunders et al., 2009). LeCompte and Preissle Goetz (in Bryman, 2007) stated that from their view absolute validity and reliability is not possible for any research

method and Bryman and Bell (2011) also stated that replication is normally not considered in management research and that they also see validation mainly in relation to *quantitative* approaches. Gummesson (2000) further comments that management research is not exposed to the unambiguous testing of validity. Others, like Stake (1995), do not consider this discussion at all. In summary, it can be stated that authors who are related to quantitative approaches focus more on reliability and validity than those writers working with qualitative approaches (Bryman & Bell, 2007). This does not mean that the issue, as such, does not apply for qualitative research.

Whilst Silverman (2013), for example, refers to the terms reliability and validity in his discussion of qualitative research to assess the quality of findings, others, like Kirk and Miller (1986) or Lincoln and Guba (1985) have worked on concepts to translate reliability and validity into qualitative terms. The latter recommend using alternative terms for assessing qualitative research such as 'trustworthiness'. They use trustworthiness as umbrella term for credibility, transferability, dependability and confirmability of qualitative research (Bryman & Bell, 2011).

Credibility of the research comprises that the findings were investigated within good research practice and that they are what they seem to be. The researcher understands the social world that has been examined. Transferability of results demonstrates that the findings can be translated into other contexts. Dependability corresponds to reliability within quantitative research. It asks for the documenting of the methods applied, such as the usage of transcriptions for interviews or description of data analysis. Additionally, confirmability requires confirmation of this documentation (Saunders et al., 2009; Bryman & Bell, 2011).

This discussion demonstrates that, in principle, quantitative and qualitative researchers seek to ensure the quality of their research by applying defined criteria. Therefore, I am following the view of Lincoln and Guba (1985) by using their criteria of trustworthiness for qualitative research.

Within the definition of the procedure in terms of the inductive approach, and the exploratory direction of the study, the shape of the research strategy to enable the

research questions to be answered is, in principle, framed. Therefore, methodologies which are mainly linked in the literature to the constructionist methodology could be used for this research.

Those methods are designed as observational, use personal contacts, set up interviews, and take place within a single organization, involve sampling with numbers of individuals and data collection over a certain period of time (see also section 4.4.1). They assume that no absolute truth is possible which is also true for a pragmatist position (Creswell, 2009).

For constructionists the task of the researcher should be to determine how different statements for truth and reality become constructed in the epistemology (Easterby-Smith et al., 2008). Their methodologies differ very much from the positivist one. Conventional inquiries are more linear and closed. Therefore literature, for example Guba and Lincoln (1989) see that the methodology of the constructivist is the most difficult one, due to the fact that it is more open and interactive. But here I would like to use the statement of Denyer and Tranfield (2006) which cited Noblit and Hare (1988) in their work: "all synthesis, whether quantitative or qualitative involves interpretation as the reviewer gives meaning to the sets of studies under consideration" (Denyer & Tranfield, 2006, p. 221). This is valid for synthesis in reviews but also for analysing in interpreting data. Therefore, I would argue that quantitative methods which are more related to positivists' methods do not deliver more evidence than qualitative ones which are often related to constructivist methods. In view of this, as a pragmatist I do not perceive an advantage of one or the other method. For me the approaches are associated with different ontological positions and depend on what best answers my questions. As pragmatist considering the related research questions, the action research strategy or a case study are the most appropriate research strategies. Or even both by considering use of action research through the case study approach.

After understanding the current business model in the pharmaceutical wholesale business and clarifying the hurdles in the current collaboration between manufacturers, wholesalers and retail pharmacies in the pharmaceutical market, some new ideas of a possible collaboration model and projects should be worked out and discussed with the participants of the interviews on the manufacturer, wholesale and retail pharmacy sides. Interviews and participant observation were the considered methods.

Methods like questionnaires or surveys were considered but deemed not effective for this research. As the literature review has shown, this topic is still highly sensitive in the FMCG market and untouched in the pharmaceutical business. Therefore, a written survey or questionnaire would not deliver the same results because the participants would not have any idea about the ECR initiative. Interviews - without having built a certain trustful relationship in the interview would not bring sufficient insight about the obstacles in the collaboration either because manufacturers, wholesalers and retail pharmacists are in a business relationship. They do not speak openly about difficulties in the relationship. Therefore, it is necessary to build trust during the interviews in order to gain some deep insight about the current relationships and obstacles in the collaboration. The tacit knowledge of the management on both sides (wholesaler and manufacturer) should not be underestimated for this topic. In order to generate credibility within the interviews, it is important that the researcher encourage participants to talk openly, and that requires the need to create a trustful relationship during the interviews (Silverman, 2011).

#### 4.5.1 The case study

As described above, the research strategy could lead to action research. Literature describing action research mainly reflects on the work of Kurt Lewin who developed the action research method (Herr & Anderson, 2005). Gummesson (2000, p. 83) defines action research as "Participation with active intervention". He argued that there is no difference between a case study and action research. Thus, action research can be a subset of case study research.

Action research is a way of researching "in action" rather than "about" action (Coghlan & Brannick, 2005) with the advantage that the inquirer is part of the organization. Therefore, the related practitioners and experts are involved in the process.

Hence the research would have needed to be an interactive process which implies considerable trust on both sides. It would have also meant that I became part of the German wholesale organization (GEHE Pharma) which would have created conflict because I am part of the holding organization of GEHE (Celesio AG). Therefore, I could not, and did not, want to be part of GEHE Pharma. I also considered, as discussed in section 4.4.1, the doubts of the academic world about the validity of data that are generated in organization research if the researcher is too deeply involved in the case. For this reason, action research was beyond the scope of this research. Therefore, I decided to use case study method. The details and the background of the organization are covered in chapter 5.

For a case study, the focus lies on a detailed and intensive analysis of a single or multiple cases (Bryman & Bell, 2011) which could initially be considered through an examination of the inductive approach. I chose just one company to handle the in-depth analysis necessary for this complex topic and the extensive amount of data which supports the approach of a single case study with multiple data sources.

A case study is a common strategy in business research, and there are some examples for management research in single organizations which work well (Bryman & Bell, 2011). For the pharmaceutical market in relation to an ECR model, I could find no evidence of a case study, nor in fact any other research approach, as demonstrated in the literature review.

A study of other related textbooks on the case study strategy revealed many controversial discussions. The main criticism launched against case research in academic studies is the lack of generalizability of data. Gummesson (2000, p.88) summarizes the criticism as follows:

- Case studies lack statistical reliability and validity.
- Case studies can be used to generate hypotheses but not to test them.
- Generalizations cannot be made on the basis of case studies.

Despite this critique, case research is seen by its proponents as a useful tool for exploring, understanding and conducting an in-depth analysis of a complex issue (Zainal, 2007). There are many practical examples available in terms of the characteristics of a case study (Verschuren, 2003). The main characteristics of a case study are (Verschuren & Doorewaard, 1999, p.164):

- 1. a small number of research units
- 2. labour-intensive data generation
- 3. more depth than breadth
- 4. a selective, i.e. a strategic sample
- 5. qualitative data and research methods
- 6. an open observation on site

The same characteristics are followed by other authors. Some reflect on the description of Yin on what a case study is about "... an empirical inquiry that investigates a contemporary phenomenon within its real-life contexts..." (Yin, 2003 cited in Dul & Hak, 2008).

There are different types of case studies available in the literature and the choice of the right one must focus on the research question. For this research, the question is related to whether the ECR model is transferable into a completely different business environment and whether pharmaceutical wholesalers should consider changing their business model? This requires an investigation of the environmental factors that might push pharmaceutical wholesalers towards considering changing their business model in Germany.

For this purpose, the strengths of the case study can be used, taking advantage of these four benefits: "high conceptual validity, strong procedures for fostering new hypothesis, value as a useful means to closely examine the hypothesized role of causal mechanisms in the context of individual cases and their capacity for addressing causal complexity" (George & Bennett, 2004, p.19). In general, a case study is not limited to a qualitative approach (Yin, 1989, cited in Verschuren, 2001) can also be used for quantitative approaches (Verschuren, 2003; Yin, 2009).

Whilst the aim of a case study to develop hypotheses is supported by Eisenhardt (1989, cited in Easterby-Smith et al., 2008) this author did express some doubts regarding the building of a theory from case study research; a concern which was indicated by Seale (2007) and Yin (1989, cited in Verschuren, 2003). However, despite these concerns, Yin argued against the criticism from positivist researchers who have articulated concerns about generalization to the overall population based on case studies.

A case study is especially suitable for highly complex phenomena. It could also be termed as case research instead of case study (Verschuren, 2003). According to the definition of Thomas (2011) it goes one step further, in that a case study can be viewed as an umbrella, for example it is more a focus rather than an approach.

Taking all these ideas and arguments and especially the characteristics, explained by Verschuren and Doorewaard (1999) as well as all pros and cons about a case study or case research under consideration, the decision can be made that this is the right strategy or focus for this current defined research topic.

The target for this single GEHE Pharma case is to understand this case in detail instead of creating generalizations (Stake, 2005). Research based on observations in one or few cases cannot allow generalization. The statement of Gummesson (2000, p. 89): "This study should be seen as an exploratory search for hypotheses" supports the idea of the case study in GEHE Pharma.

The contribution to knowledge should be to understand GEHE Pharma case in depth and to assess whether existing ECR principles are potentially transferable into pharmaceutical wholesale business in Germany and what a recommended model could look like. This would create a hypothesis which would need to be tested afterwards because it is beyond the scope of this current research.

## 4.6 Time Horizons

The time horizons of a study indicate the deadline. This time limit describes the timeframe which is needed for data collection, data analyses and completion of the research. Based on the research onion of Saunders et al., (2009) there are two time horizons. They distinguish between cross-sectional and longitudinal. For a cross-sectional study the time is pre-defined for completion. For a longitudinal study no limit is defined. For this research a schedule has been prepared (appendix 4.1).

# 4.7 Techniques and Procedures

For this research, as a pragmatist the decision was made to follow those authors who consider a case study as a choice of what has to be studied, rather than seeing it as a methodological choice (Stake, 2005). The design of a case study is important (Zainal, 2007). Evidence should address the initial research question (Yin, 2009).

Yin (2009, p. 27) recommends five components: "study question, propositions (if any), the unit of analysis, logical linking of data to the propositions and the criteria for interpreting the findings". According to the definition of Flick (2009) the research design should comprise a plan for collecting, analysing and interpreting data which allows answering the research question. This will be articulated in the following sections.

Thus, following the above mentioned concept of a research plan, different steps for data sourcing and analysis were taken. Part of the preparation of the research was to identify available data sources and, more importantly, to identify the related data sources which support the assessment of the questions and objectives of the research. The following data sources have been identified for the related objective. Table 4.1 shows the relation of the research questions / objectives and the identified data sources for the case GEHE Pharma which is a subsidiary of Celesio AG.

As stated here it was important to identify the data sources that support answering the research questions and to reach the objectives of the research. But it was also important to select the data sources in relation to issues of trustworthiness as recommended by Lincoln and Guba (1985).

Therefore, I decided to conduct interviews with different stakeholders who had different backgrounds, levels of engagement and views of the topic to generate credibility within the data. Furthermore, I used observation methods to validate the findings from the interviews, as the problems that could arise with interviews, as mentioned above, do not apply to observation (Silverman, 2011). This was important to generate credibility within the findings. To generate research dependability, I prepared notes during the interviews and for the observations I took field notes (Flick, 2009). Secondary data were used to investigate the environmental factors and to support, or challenge, the findings. To generate confirmability of the findings I have added material (see appendix 4.2 Interview preparation / question list; appendix 4.5 Interviewee comments and 4.6 Example of cognitive mapping) support the transparency of the research processes.

#### Data sources

Study questions	Objectives	Data sources
What are the environmental factors that make pharmaceutical wholesalers consider changing their business model?	To investigate the key environmental issues impacting on the pharmaceutical wholesale business in Germany	-Literature review -Pharmaceutical press -IMS market data -Insight Health databank (internal data bank excess of Celesio) -Internal meeting protocols -Interviews with customers of GEHE Pharma -Interviews with GEHE Pharma stakeholders -Interviews with pharmaceutical manufacturers -Interviews with selected management board members of Celesio -participant observation
How established is the ECR model in the FMCG business in Germany?	To assess how the ECR model developed for the FMCG is working in Germany	-Literature review -Interview with FMCG manufacturers -FMCG press -participant observation
How could the ECR model from FMCG business be transferred into pharmaceutical wholesale business in Germany?	To investigate the potential of transferring the ECR model to the pharmaceutical wholesale business in Germany and to recommend an adapted model	-Interviews with GEHE Pharma stakeholders -Interviews with selected management board members of Celesio -Interviews with customers of GEHE Pharma -Interviews with pharmaceutical manufacturers -literature review -participant observation

# **Table 4.1:**Data sources: overview of the correlation between the research objectives<br/>and the appropriate data sources

#### 4.7.1 Sampling

The same trustworthiness aspects for the data sources, described above, are also applicable to the sampling process as such. Hence, I first describe the sampling process followed by details concerning the interviews and observations.

In research, a sample is a smaller number of representatives in relation to a higher number of representatives. Saunders et al. (2009) distinguish between probability sampling and non-probability sampling. For exploratory studies a non-probability or non-random sampling is considered (Saunders et al., 2009). The opposite, in a quantitative approach, it is a set of instances selected from a population (Dul & Hak, 2008). There are different sampling models described in publications, for example for qualitative methods in management research theoretical sampling (Gummesson, 2000). Different cases are chosen which "represent different aspects of reality" (Gummesson, 2000, p.95). This is an ongoing process which collects, codes and analyses data simultaneously. This is, from my point of view, more of a process which is very similar to the chosen Miles and Huberman (1994, cited in Ghauri & Gǿnhaug, 2010) model for analysing data (discussed below) rather than a model to identify the sampling size.

The literature shows that qualitative research often lacks transparency in terms of selected samples (Bryman & Bell, 2011). It is often not clear about the process and how the interviewees were selected. This clarity is also not expected by the reader (Bryman & Bell, 2011), but they want to know on what basis the respondents were chosen. For qualitative data sources the researcher uses a self-selection sampling. The researcher has a clear understanding of what sample units are needed to enable the research question to be answered.

In the first step the researcher approaches potential sample members. The second step is to ascertain whether they meet the defined criteria (Easterby-Smith et al., 2008). For this research the knowledge about ECR was generated through the literature review and my personal experience in some collaboration projects in the FMCG business. Hence the first interview partners were stakeholders from running ECR projects to better understand the obstacles and the room for improvement. This approach has the advantage that I am already familiar with

those projects therefore it is a good training opportunity for getting used to the interview technique.

Out of those interviews, a so called snowball sampling (Saunders et al., 2009) was generated because there are several manufacturers who work in the FMCG market as well as in the pharmaceutical market. Therefore I asked the interviewees from FMCG about potential contact persons for the pharmaceutical category. That was a good gateway into that topic for the GEHE Pharma case as there was nothing available so far. For all other interviews I selected the participants.

I selected from the different areas a minimum two people. This was also important to ensure, as stated above (see 4.5.1), that if one interviewee did not seem to express thoughts openly, I could generate additional findings through the second interview and have the opportunity to compare the findings within one stakeholder group.

## 4.8 Data Collection and Data Analysis

As a starting point, the focus was placed on a secondary data study (see section 3.2). Secondary data could be books, journals, newspapers, or internal reports like statistics etc. (Bryman & Bell, 2011). As the literature review has shown, there is a considerable amount of literature available for the ECR model in the FMCG market. In addition to that, the interviews with the stakeholders of the FMCG market (FMCG manufacturer key account managers) were conducted in terms of understanding the business model from a practical standpoint and to use those findings for a better formulation of a new business model in the pharmaceutical market (see section 5.4).

As a second step, the interviews at Celesio AG, GEHE Pharma and with their suppliers and customers were conducted. Therefore the focus lies on the interviews. But in addition to that, participant observation was used to a certain extent.

These data sources were selected to generate credibility and transferability of the research findings. The interviews with the stakeholders of FMCG delivered credibility from a practical standpoint in addition to the data from the literature review. The interviews with the stakeholders of GEHE Pharma and with their suppliers and customers supported the generation of transferability, i.e. to understand if the current ECR model from FMCG can be transferred into the pharmaceutical market. The interviews with stakeholder at Celesio AG and the participant observation were used to generate an understanding of the current business model within pharmaceutical wholesale in Germany and to support the credibility of the findings of the background study as well as the transferability of a newly adjusted ECR model into the pharmaceutical wholesale business in Germany. The transferability of the findings can then also be considered beyond the pharmaceutical industry.

Thus, the data collection are done by conducting interviews, observing and taking field notes which are the instruments of an exploratory case study (Thomas, 2011). Additionally internal data, for example meeting protocols, are used. The use of different data collection techniques is described in the literature as triangulation (Saunders, 2009). For a qualitative approach data triangulation is an important element to avoid bias and ensure that omissions are minimized. Data triangulation supports as well the overall trustworthiness and especially credibility and dependability of the research result. It demonstrates that the researcher has understood the social world (Saunders et al., 2009; Lincoln, 1985).

Table 4.2 provides an overview of the data sources in more detail, the manner of the data collection and the analysis technique.

Data sources	Data collection	Data analysis technique
Secondary data	Desk research	Thematic analyses/ open coding Model of Miles & Huberman (1994, cited in Ghauri & Génhaug, 2010)
Internal data material (meeting protocols)	Desk research	Thematic analyses/open coding
		Model of Miles & Huberman (1994, cited in Ghauri & Gǿnhaug, 2010)
Participant observations	Participation in meetings between pharmaceutical manufacturers and GEHE Pharma stakeholders	Thematic analyses/open coding Model of Miles &
		Huberman (1994, cited in Ghauri & Gǿnhaug, 2010)
Interviews:	Semi-structured	Thematic analyses /
2 with FMCG key account managers	Interview notes	open coding Model of Miles &
2 with pharmaceutical key account managers		Huberman (1994, cited in Ghauri & Gǿnhaug, 2010)
2 with members of Celesio management board		
4 with GEHE Pharma management members		
2 with customers of GEHE Pharma		

# Data source, collection and analyses technique

Table 4.2: Data source, collection and analysis technique

By looking into the different data sources some additional comments should be made. The literature review has been explained in detail in chapter 3. In addition to that, chapter 2 gives an overview about the macro environment of the pharmaceutical market (see section 2.2) and the pharmaceutical wholesale market in Germany (see section 2.7).

Press materials for the FMCG market were mainly the grocery newspaper "Lebensmittel Zeitung" and daily press. For the FMCG market as well the data bank for economics "OLC/SSG Wirtschaftswissenschaften" of the University Heinrich Heine in Düsseldorf has been used for the actual press releases as explained during the literature review in chapter 3 (see section 3.2.3). In addition, for the pharmaceutical press material, the described newspapers in section 3.2.3 have been used and collected since December 2012. Mainly pharmacy adhoc "Apotheke adhoc" delivered additional input.

With the management board of Celesio AG it was agreed that during all interviews I only took hand written notes and that I did not collect audio recordings. This was decided for the internal interviews due to an ongoing sales process of the company. For the external interviews with the manufacturers it was more about respect and relationship. Manufacturers could have feared that Celesio AG might use the recordings for other purposes. The documented findings are anonymized in this research. The complete documentation of those interview notes, observation field notes as well as the subsequent research findings data are stored in the legal department of Celesio AG. For confidentiality reasons they could not be included in the thesis.

Overall, I was only able to set up twelve interviews because due to the selling process some of the potential interview partners left the company and the new managers were not familiar with the company processes and structures at that point in time. The coding matrix of the interview partners is stored on a C drive on a separate laptop. For confidentiality reasons the notes and the coding matrix cannot be attached to the research but have been scrutinized by supervisors.

#### 4.8.1 Interviews

The literature mainly distinguishes between highly-, semi- or unstructured types (Easterby-Smith et al., 2008). Others, for example King (2004), use slightly different terminology as it is often complex to find the right terminology within qualitative methods literature as the qualitative literature is more differentiated than the quantitative methods literature.

For this case study I conducted semi-structured interviews. An in-depth interview style ensures that the researcher can probe more thoroughly to discover new clues and uncover new realms of a problem (King, 2004). The guideline / checklist for successful interviews described by Bryman and Bell (2011) were used for preparation.

Furthermore, I considered the point of view of Easterby-Smith et al. (2008) that without any guidance there may be difficulties attaining a clear picture of the interviewee's viewpoint and the gained data could be of poor quality. As further preparation, I used the objectives of my research to generate questions that would elicit data to answer the objectives. Therefore, the interview questions partly reflect the themes in the literature (e.g. supply chain management, category management) but were also identified during the "hand search" (section 3.2.3). The "hand search" was done to identify the search terms for the data bank search but during that discussion with the FMCG experts I also identified the questions which are related to their experience with current running projects. The other questions were more to get the background of the person. I prepared a question list for each objective. Those questions were used as a guideline. I did not follow them strictly because the nature of qualitative research is to keep a flexible approach. In a second step, I identified the internal and external stakeholders who could answer those questions. Appendix 4.2 shows the selected respondents and a set of questions for each of them. This list of questions helped to identify the appropriate stakeholders for the interviews and to maintain focus during those interviews.

The timeframe for the internal interviews was only approximately half an hour because the interview partners knew each other and I only had to explain the purpose and the confidentiality of the data. For the external interview partners the timeframe was much longer, almost one hour. For those interview partners who did not know me personally, it was important to take the time to build trust and explain the aim of the research, my background as well as confidentiality aspects. For the other interview partners, with whom I had a business relationship in my former responsibility in the FMCG market, I first had to explain my new role and responsibility and the pharmaceutical market. Those interviews took almost two hours.

An advantage of semi- or unstructured interviews is that they give more room for the interviewees to express themselves (King, 2004). In addition to that, the researcher has the chance to gain impressions in terms of the behaviour, the tone of the voice and may thus find out some more details about the tacit knowledge of the interviewee.

In an unstructured interview, the interviewer has the chance to have an open discussion about a certain topic of interest (Robson, 2011). The style could be totally informal. Therefore, the conclusion can be made that the style of qualitative interviews, as generally described in literature, can support the case study approach (King, 2004). The researcher will understand the viewpoint and the background of the interviewees.

There are other types, such as focus groups interviews etc. discussed in the literature, but for this research topic, it is an important point to build trust and a relationship with the interview partner as discussed earlier. Therefore the aim was to talk to the stakeholders face to face or via telephone in one-on-one sessions. As the topic deals with very sensitive information, the researcher has to maintain the ethical rules, has to build a certain amount of trust and maintain common sense during those interviews.

In general all interviews conducted should be recorded either in a written format or electronically (Silverman, 2013). This should be mandatory according to Bryman and Bell (2011) especially for semi- or unstructured interviews. For this research hand written records were prepared due to the above mentioned reasons.

For the hand written interview record, transcription symbols are a helpful tool (Silverman, 2013). I used the overview of Silverman (2013) as a thought-provoking

impulse, but then I created my own transcription symbol guideline for my interview notes. These transcription symbols are documented in appendix 4.3.

The written documentation of the interviews was important because the model of Miles and Huberman (1994, cited in Ghauri & Génhaug, 2010) and later on the method of cognitive mapping (Bryman & Bell, 2011) are used for the analyses. Those models are described in section 4.9.4.1 and 4.9.4.2.

For this research all interviews were hold in German language because the interview partners were German. Therefore, the hand written interview records were done in German as well as later on the interactive data analyses via the model of Miles & Huberman (1994, cited in Ghauri & Génhaug, 2010) and the cognitive mapping (Bryman & Bell, 2011). The translation into English was done during the writing process of the thesis.

## 4.8.1.1 Interview partners: FMCG key account managers

For the interview partners of the FMCG market I selected my industry contacts from my former business environment. I contacted five key account managers from different FMCG manufacturers. I considered OTC and para pharmaceutical manufacturers and the ones who have experience in the ECR approach. Three of them were not willing to attend an interview. One of the selected interview partners was no longer available, so an alternative contact was chosen. This person belongs to the FMCG market but is not directly involved in the OTC or para category. This is not an obstacle for the research due to the fact that the content for this interview was mainly understanding of running projects in the FMCG market.

They (two) were my first point of contact. Those interviews took place via telephone. I took notes during those interviews and sent them to the relevant interview partners for confirmation.

One target of the outcome from those interviews was to learn more about the obstacles in those projects and to elicit some ideas where the managers see some room for improvement and development of the initiative. As mentioned earlier, the principles of ECR can be studied during secondary data study in detail, no further interviews were required.

## 4.8.1.2 Interview partners: pharmaceutical key account managers

To identify the right interview partners from the pharmaceutical manufacturers, I used the snowball sampling method. The interviewees for the FMCG market were asked at the end of the interview if they could recommend someone in the organization who deals with the para pharmaceuticals or OTC category in the pharmaceutical market and preferably has some experience with the ECR approach.

In multi-national industry companies, key accounts are separated between the FMCG and the pharmaceutical market. Therefore, even for one manufacturer there are different contact persons for the retail grocery chains like supermarkets, hypermarkets or drugstores and the pharmaceutical wholesale business in Germany.

Due to the fact that already one interviewee was not from the OTC or para business and only related to FMCG the snowball sampling could not be used throughout the entire process. Therefore I used the MarketLine Industry Profile (2012) to identify the main OTC manufacturers for the German pharmaceutical market. Those manufactures are also suppliers of GEHE Pharma and international partners of Celesio AG.

These interviews (two) were initially planned as face to face interviews in order to be able to provide some insight about the research and to build a more personal atmosphere. However, due to time constraints, these interviews also took place via telephone. For these interview partners the intention was to get an idea about the point of view, the feelings and ideas of the stakeholder in the pharmaceutical business because the ECR process is unknown in that market thus far. The aim for those interviews was to understand and discuss the possibilities to develop such an approach in that market.

One challenge in these interviews was getting open answers due to the fact that I work for a customer of those manufacturers. The key account managers somehow expected that their answers could be used for negotiations between them and GEHE Pharma.

One practical challenge was to use only hand written notes and not to record the interviews. Therefore I had no chance to listen to the answers one more time to double check if my notes were correct. I also did not send them a written summary of the interview due to their concerns about how their answers could be used afterwards. I did not want to give them the impression that a detailed written summary of their answers exists.

# 4.8.1.3 Interview partners: GEHE Pharma stakeholders and management board Celesio AG

The interview partners of GEHE Pharma and Celesio AG related to the objective were obvious choices. Due to personnel changes in the management board of Celesio AG as well as in the management of GEHE Pharma I chose respondents who:

- Belong to the GEHE Pharma management or management of Celesio AG
- Have expertise and experience in one of the related areas: procurement, sales, marketing or supply chain management

For me it was a prerequisite to talk at a minimum to one manager of each area of responsibility.

For these interviews (four) it was not an obstacle not to record them. Because the advantages, for example that the research can better concentrate on the dialogue

or derive additional interpretation at a later stage (Robson, 2011), can be disregarded because they apply more to interviews which could just be done once.

Due to the fact that I am part of the Celesio AG organization I had the chance to double check my notes with the interviewees as well as to set up a second interview. With one interview partner of the management board I had to do a second interview due to the lack of time in the first one.

The only advantage from the recorded interviews that I could not use is the pitch of the voice. By listening a second time (and alone), the tone of the voice in recorded interviews could also provide some insight. On the other hand, the interviews took place face to face. Therefore, the body language could be evaluated. I prepared some transcription symbols to make some notes about the body language during the interviews (appendix 4.3). And finally, due to the circumstances that I am known by the interviewees in the company of Celesio AG and GEHE Pharma the aspect of pitch of the voice could not deliver too much additional information because the atmosphere during the interviews was more informal. Hence, it was difficult to evaluate the pitch of the voice in relation to the statements.

The objective of the interviews with different stakeholders of GEHE Pharma (two) was to understand the current relationship with their manufacturers and their customers and to obtain their views on establishing a new business model in the pharmaceutical wholesale market.

In the interviews with the Celesio AG stakeholders (two) the aim was to understand the company structure and the strategic direction, in addition to understanding how they perceive the current German wholesale market environment and what could be possible ideas to change the business model.

#### 4.8.1.4 Interview partners: Customers of GEHE Pharma

The third group for interviews were the customers of GEHE Pharma. The intention was to talk to three customers of GEHE Pharma who had joined the collaboration

model of GEHE Pharma for varying lengths of time. Three pharmacists were to have been selected: pharmacists from stores that had a cooperation agreement for more than ten years; up to five years; and for less than one year. This would generate knowledge about the development of the relationship and provide insights into different market experiences and expectations.

To obtain such a selection it would have been necessary to ask the management of GEHE Pharma to provide such information about their customers. This process would have compromised the selection in terms of neutrality as I would have to use the pre-selected GEHE Pharma contacts for the interviews, with a possible consequence of jeopardizing the result of the interviews. To overcome this possible bias, the customer respondents were selected by me.

The focus of the interviews was not only the collaboration between the pharmacists and GEHE Pharma, but to gain an understanding of the expectations of collaboration models in general. Hence, I only selected pharmacists who have an experience within a collaboration model because otherwise it would be difficult to discuss experience and expectations. I was not able to interview cooperation partners of other wholesalers because these were viewed as competitors.

I utilized the GEHE Pharma internet page (<u>www.gehe.de</u>) where end consumers can find a cooperation partner (healthy life-pharmacies/"gesund leben Apotheken") of GEHE via post code search. Here I used my home town and my secondary residence as search criteria to save some time and costs for visiting those pharmacies. This also provided the opportunity to visit these pharmacies one more time if any questions were left unanswered or required clarification.

The identified cooperation pharmacies (two) were visited and the pharmacist (owner of the pharmacy) was interviewed. They were informed about the purpose of the interviews as well as my business background. The screenshots of the selection search are attached (appendix 4.4). Through the post code search more than one pharmacy address was identified and the final selected interview partners are not marked on appendix 4.4 for reasons of confidentiality. GEHE

Pharma was informed about the interviews at a later stage. By talking to the customers (two) of GEHE Pharma I could validate the findings from the background investigation of the pharmaceutical market in Germany and investigate the role of the pharmacist in that market as well as the correlation between the pharmacy and the FMCG retail. In addition it would enable me to identify how the current collaboration between GEHE Pharma and the customers was working and assess what the expectations and the demands of the retail pharmacists are. In this way I was able to generate a picture of the demand side of the pharmaceutical market in Germany.

## 4.8.2 Observations

In comparison to the interviews, an observation is seen as a direct technique which is one main advantage of this instrument (Robson, 2011). The researcher gains direct information watching and listening to people. The literature describes two types of observation.

One is the structured observation which gains quantitative data. It is related to the question "how often things happen rather than why" (Saunders et al., 2009, p.300). This method would not fit this current research question.

Therefore an ethnographic approach should be considered which would mean a close involvement in an organization (Watson, cited in Easterby-Smith et al., 2008). This would be the issue for the case research in GEHE Pharma. Therefore, "participant observation" was selected. A "participant" is a constituent of ethnography (Gummesson, 2000).

Some, for example Bryman and Bell (2007) see a difference between the ethnographic approach and a "participating observation", but this discussion can be discounted at this point, because as long as it is clear that the observational method which has been chosen will complement the method of interviews and collection of available documents. Therefore the wording "participating

observation" is used the same way Bryman and Bell (2011) used it in the ethnography method.

For the "participating observation", different types are mentioned in the literature. The same terminology is used by Robson (2011) as well as Saunders et al. (2009). The issue in common is that the researcher becomes part of the group being observed. The differentiation is: the intensity of the participation; and whether the research objective will be known to the rest of the group.

In relation to the current case, since December 2012, I have been part of the holding organization, Celesio AG, which owns GEHE Pharma. During the observational phase, not all employees were aware of my role, however, management was informed in all instances. This has the advantage that the participants involved behaved in a "normal" manner. As these observations were of daily business issues to which I would have potentially been privy, I do not perceive specific ethical issues in conducting this observation. The observation was firstly about understanding what topics are discussed in the daily business between GEHE Pharma representatives and manufacturers, and secondly to observe if those conversations are enacted in a trustful and collaborative atmosphere or more in a negotiation style.

In terms of the GEHE Pharma case I observed the employees of GEHE Pharma and the key account managers of pharmaceutical manufacturers in their daily behaviour, for example during an annual negotiation between the employee of GEHE Pharma (the buyer) and an OTC manufacturer (key account). I took part in that negotiation in my role as the person responsible for global procurement of the holding organization (Celesio AG).

The discussion and negotiation took place between the representatives of GEHE Pharma and the manufacturer. My general role in those meetings was to focus on the international aspects as well as the holding strategy. Here the covert observation was about how the current relationship between both parties was performing and about the meeting atmosphere. With regard to the content of the meetings it was to observe what kind of projects both parties are talking about, and whether those projects relate to serving the end consumer in the best way, as is intended in the ECR model. Furthermore, supply chain topics were discussed and KPI's identified and aligned.

A further observation situation took place during the internal category strategy meeting between the international procurement team (Celesio AG) and the German (GEHE Pharma) procurement team. Here the observation was about how the employees of GEHE Pharma described the currently running projects with their manufacturers and how they saw them running.

In my role with global procurement responsibility I have discussions with the international key account managers of the global manufacturers as well the different country approaches and performance. This provides another source of field notes and covert observations about the German market.

The observational approach for this research is about field notes in the daily business in the relationship between GEHE Pharma, the Celesio holding and their manufacturers to generate some additional data from a practical point of view. These notes are stored in a separate diary with date, meeting purpose and participants. The diary is kept securely. No collected observation data were audio recorded.

## 4.8.3 Role and skills of the researcher

In the literature, different case researcher roles are explained, such as the researcher as a teacher, an advocate, an evaluator etc. (Stake, 1995). In this research the researcher needs on one hand practical insider knowledge of the business and analytical skills, but on the other hand social skills to handle the experts and the management in the right way (Stake, 1995). Therefore, I took the role as evaluator who had insider access, but I was not fully part of the business unit (GEHE Pharma) under investigation.

The role should be interactive instead of distantly acting (Verschuren, 2003). It must also be remembered that for this case, it is about management research which means that in the interactive discussion of the researcher with the participants, the researcher has to handle practical experts who expect discussion partners to be on their level of knowledge. Additionally, those people possess tacit

knowledge which the researcher needs to find out as well because it may be important information which affects the result of the research.

With respect to the discussion whether there is more interpretation done in a qualitative or quantitative approach, I would support Stake's (1995) point of view: "I am ready to argue when someone claims there is more interpretation in qualitative research than in quantitative" (Stake, 1995, p.9). Procedure for generating quantitative data and the initial data interpretation could be clearer, but the interpretation and making sense out of data are the same for quantitative and qualitative data (Bryman & Bell, 2007).

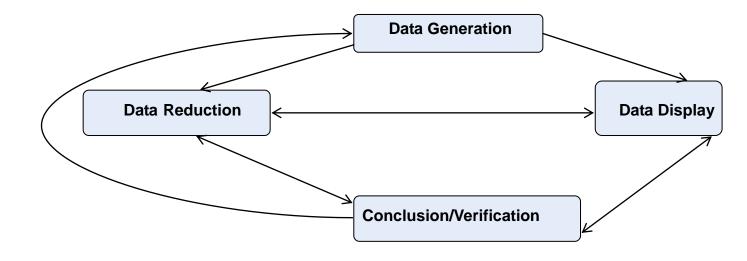
#### 4.8.4 Analyses and interpretation

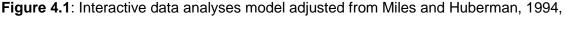
The main aspects of a case study are analyses and interpretation (Simons, 2009). This underlines the requirement of good interpretative skills for a researcher. Those researchers see the main aim as "to generate an intensive examination of a single case, in relation to which they then engage in a theoretical analysis" (Bryman & Bell, 2011, p.62).

#### 4.8.4.1 Model of Miles and Huberman

The literature does not agree on a single approach for qualitative data analyses (Ghauri & Grǿnhaug, 2010). There is a pool of different approaches available. I considered the interactive model of Miles and Huberman which is shown in figure 4.1 (Miles & Huberman, 1994, cited in Ghauri & Gǿnhaug, 2010, p.199) because they used components of data reduction, data display and analyses to come to conclusions. The advantage of this model is that it allows permanent data analysis. It is not a static approach.

#### Interactive data analyses model





cited in Ghauri and Gǿnhaug, (2010, p.199)

All data, which were collected during the interviews and observations were displayed and reduced. For displaying the data I used a thematic analysis (Bryman & Bell, 2011) because this method goes beyond counting words or phrases which is the aim of a content analysis. Thematic analysis is more about identifying topics or ideas within the data. In the coding process I searched for themes in the interview notes and field notes which were related to the research objectives and study questions. Table 4.3 provides an overview of the related themes. In a second step I looked into things which could deliver additional business potential for the pharmaceutical market. I displayed them under "additional new potentials".

As a next step it was important to reduce the generated data (table 4.3). The reduction process is not limited to selecting data but includes simplifying and abstracting it. The data reduction and data display is a parallel work stream from which the first conclusions can be drawn. After drawing a conclusion, new data can be collected. Thus, this procedure is constructed as a circular flow. The most challenging part is to achieve validity in the interpretation by handling the massive volume of qualitative data appropriately (Ghauri & Génhaug, 2010). In the reduction process I selected those topics which showed similarities or differences

in the FMCG and pharmaceutical market and delivered the possibility to compare both markets with each other. Additionally I selected topics which showed potential or obstacles to be transferred from the FMCG market into the pharmaceutical market.

As stated in section 4.9, it was agreed with the management board of Celesio AG that during the interviews I only took hand written notes and that I did not collect audio recordings. I was also asked not to include those papers in the thesis' appendices.

To demonstrate how I undertook the thematic analysis and in a second step data reduction, I have added selected interview extracts in appendix 4.5. These snapshots from the interviews, serve as examples, are not a literal translation, but capture the 'gist' of the conversations. I also do not name or further identify the interview partners. To demonstrate the analysis method I use the first search theme: market environment (see table 4.3). Under this heading, I collated answers from interview partners together that relate to the topic market environment (appendix 4.5). In a second step I reduced this data by searching for similarities and differences between FMCG and pharmaceutical markets. Firstly, I identified from the FMCG interviews the key statements/conclusion (such as market differentiation/consolidation). Secondly, I compared them with the pharmaceutical interviews to identify similarities or differences and connected them with the identified key statements/conclusions of FMCG interviews. I colour coded the comparable statements and identified if it is a similarity or a difference to FMCG (appendix 4.5). The findings are presented in section 5.4.1.

The model of Miles and Huberman (1994, cited in Ghauri & Génhaug, 2010) is very helpful to generate meaning out of the data. Due to the fact that it is an ongoing process, I could identify, after summarising the gained data, what kind of additional data and information I would need.

## Data display themes

Study questions	Objectives	Search for themes
What are the environmental factors that make pharmaceutical wholesalers consider changing their business model?	To investigate the key environmental issues impacting on the pharmaceutical wholesale business in Germany	<ul> <li>All topics belonging to the market environments of FMCG or pharmaceutical market</li> <li>2-step data reduction:</li> <li>1) Similarities between FMCG and pharmaceutical market</li> <li>2) Differences between FMCG</li> </ul>
How established is the ECR model in the FMCG business in Germany?	To assess how the ECR model developed for the FMCG is working in Germany	and pharmaceutical market see literature review (chapter 3)
How could the ECR model from FMCG business be transferred into pharmaceutical wholesale business in Germany?	Germany To investigate the potential of transferring the ECR model to the pharmaceutical wholesale business in Germany	All aspects correlating to collaboration elements between different market participants 2-step data reduction: 1) Potential elements of transferring ECR principles into pharmaceutical wholesale business: -from a manufacturers (FMCG and pharmaceutical) perspective -from case company management perspective -from retail pharmacists perspective 2) Obstacles of transferring ECR principles into pharmaceutical wholesale business -from a manufacturers (FMCG and pharmaceutical)
		perspective -from case company management perspective -from retail pharmacists perspective
Table 4.2: Data diaplay than		Additional business potential for the pharmaceutical market

 Table 4.3: Data display themes

By following this model I interviewed the key account managers from the FMCG market first, to generate some background data from that market and to use their experience to obtain a first data set. In the second step I held the conversations with the key account managers from the pharmaceutical manufacturers and generated additional data. In the last step I conducted the interviews with GEHE Pharma, Celesio AG management and the retail pharmacists to generate data for the demand side of the market. Here I started with Celesio AG / GEHE Pharma, followed by the retail pharmacists. I chose this order because I wanted to use the ECR idea by looking into the end to end approach from the supply side to the demand side and to facilitate deeper discussions and generate some conclusions by using the findings from one interview with others. I used cognitive mapping (Bryman & Bell, 2011) to help in understanding the relationship between some findings. One cognitive map is enclosed at appendix 4.6 as example.

## 4.8.4.2 Cognitive mapping

Cognitive mapping is mainly described in terms of action research. But that is not a contradiction for using it for a case study due to the definition of Gummesson (2000) of action research versus case study as stated earlier. For this research, it can be considered as a useful tool due to the fact that the methods are participant observation and interviews. The aim of cognitive mapping is to explore why things are important and how they are related to other topics (Bryman & Bell, 2011).

Cognitive mapping is further described as a reflective thinking instrument which from my point of view supports the understanding of the parallel lines and conflict areas for one subject. It is also about drawing a diagram which should reflect the relationship between the different thoughts and put the main body of the topic into the centre of the diagram. For business and management research, the method of cognitive mapping is recommended (Bryman & Bell, 2011).

For this research, this mapping model is used by to help gain clarity between the different findings of the interviews between the FMCG market and the pharmaceutical wholesale market. It supports the identification of parallel operations between both markets.

I used this tool for the above mentioned purpose as a working instrument. Therefore, the documentation is done in a hand written format. Those written notes are stored in the Celesio AG legal department for confidentiality reasons and cannot be attached to the thesis.

The enclosed cognitive map (appendix 4.6) shows (in reference to table 4.3) the summary of the conflict potentials as coded under: identified obstacles - aspects from manufacturers, GEHE Pharma, Celesio AG management and retail pharmacists. Those findings are presented in section 5.4.3 and summarized in table 5.4. Furthermore, I considered the identified differences between FMCG and pharmaceutical market as presented in appendix 4.5 and in section 4.5.1 and summarized in table 5.1. This cognitive map was created to understand the differences between both markets and identified obstacles to investigate the potential hurdles for an implementation of ECR in the pharmaceutical wholesale business.

## 4.9 Chapter Conclusion

There is a wealth of literature on the ECR model and its principles for the FMCG market available, as well as literature in general for the pharmaceutical market in Germany, but the research could find no link between them in the literature. A case study can help in building a theory. In this research the link between both markets is made and the opportunity to transfer the ECR model from the FMCG market into the pharmaceutical market was investigated.

As a pragmatist, I investigated the disparate research methodologies and came to the conclusion that an inductive approach with qualitative and observational data would support me in building a model that could be tested in further research.

As there is much debate in qualitative research about the usefulness of the terms validity and reliability, seen most often as key concepts in quantitative research, I have ensured the quality of the findings by applying alternative terms from Lincoln & Guba (1985). They use the term trustworthiness with underlying elements of

credibility, transferability, dependability and confirmability – it is these aspects that I have considered within my research.

The current research is not looking for generalization but aims to generate an indepth analysis whether the model could also work in other industries.

The qualitative data sampling was executed through a researcher selected process. Interviews with different stakeholders were conducted in one on one session. Additional data was collected through covert observations and a secondary data study.

The one on one conversation was important due to the fact that during the research Celesio AG was in a selling process. Therefore, the interview partners, especially the manufacturers, expressed their fears about the use of the data. Internally, the challenge was more about the fact that the whole organization was incorporated in the merger and acquisition process. Therefore, the willingness of talking about a new business model was limited.

The GEHE Pharma case study supports the intention of finding a new way of collaborating with the manufacturers on one side and on the other side being more of a 'service provider' and 'problem solver' for the retail pharmacies in the German pharmaceutical wholesale market. Establishing a new ECR model in GEHE Pharma would provide some strategic guidance for Celesio AG as the holding organization.

## 5.0 THE CASE UNIT GEHE PHARMA

## 5.1 Objectives of Chapter 5

Investigating the potential transfer of the ECR model from the FMCG into the pharmaceutical sector in Germany could be best achieved within a case study for one of the leading pharmaceutical wholesalers in Germany (see section 4.6). Therefore, GEHE Pharma was selected and is used for the case study.

This chapter will provide an overview of the company, their holding structure and company strategy as well as a short explanation about current discussions regarding a change in the owner structure of the company. McKesson, one of the leading pharmaceutical wholesalers in the USA, has made a take-over offer for Celesio AG. McKesson is now (that is since 2015) the main shareholder of Celesio AG. It was important when investigating GEHE Pharma to have the company strategy of the holding organization (Celesio AG) in mind as well as a possible new owner structure because, due to the matrix organization, it could affect the company strategy of the GEHE Pharma management.

I have not included any transcription of the interviews, as explained in section 4.9, and no direct quotations from the interview partners are used as agreed with the management of the case company.

Additionally, this chapter gives an overview of the research findings as a result of thematic analysis (see also section 4.9.4.1). A more detailed analysis and discussion follows in chapter 6.

## 5.2 <u>Company profile</u>

Chapter 2 provided an understanding of the macro environmental factors in the pharmaceutical market in Germany and an overview of the German pharmaceutical wholesale business in general. In chapter 5 the focus is on the company GEHE Pharma which is the number three pharmaceutical wholesaler in terms of market share in Germany.

GEHE Pharma is owned by Celesio AG, which is the holding organization. Thus, Celesio AG is described in terms of company structure and mission statement, and the take-over intentions of one of the leading wholesalers in the US market. These two components are important in terms of not only the overall company strategy, but possible changes in the company structure and strategy. The latter consideration, that of the possible take-over, was not assessed as at the time of undertaking the research the take-over bid had not been accepted. Therefore, only a short description of the McKesson company is provided under section 5.2.2. It is important to reiterate at this point that in view of this take-over scenario, the data from the case study is strictly confidential.

#### 5.2.1 Celesio AG

The facts and figures which are mentioned in this section were taken from of the annual reports of Celesio AG 2012 and 2013.

Celesio AG is a leading international wholesale and retail company and provider of logistics and services to the pharmaceutical and healthcare sectors. They are represented in 13 European countries and in Brazil. Additionally, in Brazil, they operate the business with Oncopord for speciality pharmacy products. This segment includes oncology products and other medicines for the treatment of complex diseases, which is beyond the scope of this research (Celesio, 2013). Celesio AG describes its strategy as a proactive and preventive approach to ensure that patients receive their products and this ensures that they receive what they require for optimum care (Celesio, 2013). Celesio AG operates in 14 countries with 39,000 employees. Every day, they serve over two million customers at 2,200 of their own pharmacies and 4,100 as participants in brand partnership schemes. With 136 wholesale branches, they supply 65,000 pharmacies and hospitals every day with up to 130,000 pharmaceutical products (Celesio, 2014). Celesio's services benefit a patient pool of about 15.5 million per day (Celesio, 2014). Appendix 5.2 shows a map of the overall geographical European and worldwide landscape of Celesio AG.

In Europe, for example, they lead the markets in France, Norway and Austria (Celesio, 2014). In general, Celesio AG divides their business into two business

areas. One is called pharmacy solutions and under this umbrella, the wholesale business is bundled. This division's revenue amounted to 17.9 billion Euros in in 2013 (Celesio, 2014). GEHE Pharma is part of this division.

The other division is consumer solutions, the retail business of the company. The revenue represents 3.5 billion Euros in 2013 (Celesio, 2014). Celesio operate own retail pharmacies in some European countries (UK, Ireland, Norway, Sweden, Italy and Belgium) and maintain partnership schemes with independent, owner-run pharmacies in those countries where the company is not legally allowed to operate a retail pharmacy chain (Celesio, 2013; 2014). This is the case for the German business which is the focus of this research. A map at appendix 5.1 shows the geographical pharmacy network of own retail pharmacies and cooperation/franchise pharmacies of Celesio AG.

Before looking into the business model of the German subsidiary GEHE Pharma, it is also important to take a closer look at the vision, mission and strategy of the holding company Celesio AG because all of that affects the country strategy of the affiliates (Celesio, 2013; 2014). Another aspect to consider is the circumstance that the board changed completely in 2011 and again in 2014 and the company obtained a new business orientation in 2011. From 2014 onwards, a different direction could not be identified as the new board members only joined in July 2014. Therefore, the former company strategy from 2011 is considered for this research. This information was obtained from the interview with the former CEO of Celesio AG who established the strategy in 2011. He left the company in June 2013. The 2011 strategy was still in the implementation phase at the time of writing and this was observed in different interviews.

The former CEO of Celesio claimed that the company vision was "*a healthier world* where more people can live life to the fullest". He saw their mission "to effectively, efficiently and passionately deliver innovative healthcare services that equip and inspire more positive lives". This strategy was introduced to the affiliates at the end of October 2011. This mission and vision was used in the Celesio annual reports 2013 and 2014.

From the former CEO's point of view it encompassed five cornerstones with the aim of stabilising earnings and improving the company's competitive position in the short term. The strategy is illustrated in a picture of a "house" (see appendix 5.3) which also symbolises the idea of one common Celesio strategy.

It is important to mention this idea of 'One Celesio' because, before the formation of the new board in 2011 and the definition of the new strategy, the affiliates had worked and acted more or less independently. With the new management board, a new culture was introduced into the company. In the holding organization, functional lead departments were established which lead their local counterparts. A blue print organizational structure was created. According to the explanations of the former CEO, since that time the Celesio holding organization and the country affiliates have worked together in a matrix structure.

## 5.2.2 McKesson

McKesson was founded in 1833 and is a leading North American pharmaceutical wholesaler and provider of innovative technology and business services. As the oldest and largest healthcare services company in the US, McKesson holds an integral role in healthcare and claims to have a unique vision for its future.

Internal documents of Celesio AG (One Celesio, 16. December 2013, p.6) present McKesson as a company which consists of two business segments: distribution solutions and technology solutions. At the time of writing, McKesson ranks 14<sup>th</sup> on Fortune's list of the largest US companies, with over \$122 billion in annual revenues. McKesson serves more than 50% of American hospitals, 20% of physicians and 96% of health plans.

McKesson agreed to acquire the entire holding of Haniel, at time of writing the main shareholder and representing a 50.01% stake in Celesio AG. They launched a voluntary public take-over offer for the publicly traded shares and an offer for the outstanding convertible bonds of Celesio. Marion Helmes, Speaker of the Management Board and CFO stated, in the magazine for employees, "This is a significant milestone in our company's history. The combination of our two

companies will create a global leader in healthcare services with deep expertise in delivering solutions to pharmacies, manufactures, patients and other customers" (Helmes, 2013, p. 7).

The press (Apotheke adhoc, 28.02.2014) saw in this transition a general market trend and new strategy of the global pharmaceutical traders to bundle volume to generate higher negotiation power against the manufacturers. This view was also similarly stated in one interview with a pharmaceutical key account manager (code MC). Despite this, the manufacturers are sceptical about this as they see buying power increasing rapidly on the trade side as there are other US pharmaceutical traders who are building collaborations with European pharmaceutical traders (Apotheke adhoc, 28.02.2014). The increase of power on the demand side is then a comparable market trend in the European pharmaceutical business as it was in the FMCG market before the ECR initiative started.

#### 5.2.3 GEHE Pharma

Following the above discussion on Celesio AG and the merger with McKesson, the case unit GEHE Pharma, which is the German affiliate of Celesio AG, will be examined in greater detail.

The facts and figures which are mentioned in this section were taken from the GEHE Pharma sales brochure, GEHE Pharma homepage and interviews with the relevant operations department.

GEHE Pharma has a long tradition being founded by Ludwig Gehe in Dresden 1835. In 1981, the headquarters of GEHE moved to Stuttgart and in 1993 the company was stock listed as GEHE AG. In 2003 the holding name changed from GEHE AG to Celesio AG. GEHE Pharma remains unchanged for the German affiliate of Celesio AG (GEHE Pharma homepage, 2014). In 2013, the GEHE Pharma revenue was about 4.2 billion Euro with a market share of 15.9 % in the German pharmaceutical wholesale market (Celesio, 2014).

GEHE Pharma operates with nineteen branches and approximately 2,500 employees in Germany. They deliver to pharmacies nationwide up to four times per day. In emergency cases, deliveries can even be accomplished in two hours.

The assortment range is between 60,000 and 100,000 items depending on the size of the establishment (GEHE Pharma homepage, 2014).

Beside the traditional pharmaceutical wholesale services GEHE Pharma established a cooperation partner offer for independent retail pharmacies with the brand name `healthy life-pharmacies` ("gesund leben-Apotheken") ten years ago. In the following only the English translation: "healthy life-pharmacies" will be used.

According to the sales and marketing director of Celesio AG, in January 2014 the pharmacy cooperation had approximately 2,400 members. These retail pharmacies still use their own brand name but they also label their shop window with the logo of the healthy life-pharmacies. The cooperation agreement states that GEHE Pharma is the first choice wholesaler for the retail pharmacist, but the pharmacist can buy from another wholesaler if the goods are not in stock at GEHE Pharma (interview with sales and marketing director Celesio AG). As a member of this cooperation agreement the retail pharmacist has access to certain preferential terms and conditions, compared to those offered to purely wholesale customers, and the partners receive other services, for example a merchandize planning and control system tool, an own brand assortment, sales promotional offers and a special training programme.

The merchandize planning and control system is called WAWI top (Apotheke adhoc, 15.07.2013). It is the German abbreviation for German inventory management and it was established in 2009. The sales and marketing director of Celesio AG explained that in 2013, 640 retail pharmacies were using this tool. This system was established in cooperation with the University of Applied Sciences of Wismar. With scientific optimization logic it supports the algorithms for stock and demand planning. It considers the individual circumstances of each pharmacy. A revised system has been worked out with the University of Applied Sciences due to an internal presentation of the supply chain department (Celesio Group Supply Chain, 2013). It is called OPR (Optimised Pharmacy Replenishment). OPR will replace WAWI top in the future. A workflow chart and comparison of both tools are shown in appendices 5.4 and 5.5.

The own brand assortment consists of about 268 articles in total (Celesio spend cube, 2015), with16 being OTC and 252 para pharmaceuticals. For these own brands, the same definition is valid as described in section 3.3.2 for the FMCG market. In FMCG own labels are "products that are created and trademarked by a retail company" (Metro Retail Compendium, 2010, p.150). In the pharmaceutical wholesale section they are trademarked by the wholesaler, in this case by GEHE Pharma. The items have the advantage that they are unique in terms of the packaging.

The sales promotional offer includes additional terms and conditions for defined articles. With special health life-pharmacies advertising flyers the retail pharmacist can attract customers with a promotional offer. The pharmacists also obtain the print services from GEHE Pharma.

GEHE Pharma has its own training academy (GEHE Pharma homepage, 2014). The cooperation partners can use the service of the training programmes in the academy or use different on-line trainings. Additionally, GEHE Pharma offers special training directly in the pharmacy for the whole retail pharmacy team. For example, this could be training on the use of the OPR tool.

Up to this point in the discussion, a few GEHE Pharma cooperation offers have been briefly described. I chose those which are, in the main, linked to the research topic and mentioned in the interviews of the stakeholders of GEHE Pharma and the retail pharmacists. It should also be pointed out that these services can also be bought or booked by independent pharmacies (sales and marketing director Celesio AG). It is not a prerequisite to be a cooperation partner; however the advantage for the latter is the price for the services and sometimes a broader offer.

The following discussion describes the two business areas of GEHE Pharma as a wholesaler in the German pharmaceutical market. There is the downstream relationship to their customers; the cooperation partner or independent retail pharmacies (hospital pharmacies are beyond the scope of this research). Whilst the upstream part in the relationship relates to the manufacturers.

Up to this point the processes and activities concerned with customers of GEHE Pharma (downstream activities) and its business model have been described, with the sales and marketing director having overall responsibility. However, the supply chain director has responsibility for the merchandising tool itself, and the logistical part of the wholesale business.

The procurement director has responsibility for procurement processes (upstream activities) and for GEHE Pharma the procurement team deal with approximately 3000 suppliers. The team is organized into categories: a head of dispensary for the RX and GX products; a head of non-prescription for OTC and para pharmaceuticals. The terms and conditions agreements with the manufacturer and all activities which are related to the manufacturers are handled by the procurement team.

Overall the GEHE Pharma organization works closely with related functional leads in Celesio AG. This means that the Celesio AG leads provide the strategic direction for the whole organization per function in an international context. GEHE Pharma is organized in the same blue print organization structure as the holding company. An organization chart of the GEHE Pharma organization is shown at appendix 5.6.

GEHE Pharma is not the leading company in the German pharmaceutical wholesale market as they are positioned as number three. For this reason therefore it is important to search for new business opportunities to maintain their position in the market, especially due to strong competition between the wholesalers, as discussed in section 2.7.4. This is especially important as the Celesio AG strategy aims to become number two or one in the market. GEHE Pharma has already some customer services within the healthy life-pharmacies concept in place which could be a solid basis for transferring the ECR model into the pharmaceutical wholesale market in Germany.

## 5.3 Data analysis

The above company profiles have provided an overview of Celesio AG, to which GEHE Pharma belongs, and a short profile of the McKesson company. The following findings from the case study relate to GEHE Pharma.

Twelve interviews were conducted as the main element of this case study. In addition to the interviews, participant observation was undertaken to generate some additional knowledge. The observations took place during meetings between manufactures and the GEHE Pharma procurement team. This data triangulation was used to minimize bias and avoid missing important aspects. The combined research findings from interviews and observations are presented in section 5.4.

The interviews and participant observation within the company took place with stakeholder groups such as procurement, supply chain management and sales and marketing which are relevant to the research topic. To facilitate an investigation into whether a collaboration model was discussed elsewhere in the organization internal data sources were accessed. This procedure had the advantage that I could investigate data of additional stakeholders within the company without the need to set up additional interviews (Bryman & Bell, 2011).

## 5.4 **Qualitative Analysis**

This section presents the results of the interviews with the different stakeholders and observations in regard to the search themes. The search themes were introduced in section 4.9.4.1 (table 4.3: data display themes) and for ease of understanding this current section uses the same headlines as those in table 4.3. This section summarizes the key findings with the different experts. Due to the limitation in terms of presenting direct quotations (see also section 5.1), I have used the methodology discussed below to present the results from the interviews and observations and have applied these same rules in all remaining sections.

When reflecting upon the interviews or observations, I have either discussed stakeholders or experts in those instances where a comment was given by more than one person and from different expert groups; for example from key account managers from FMCG and from pharmaceutical manufacturers. Where I deemed

it necessary to be more precise, in terms of a special group, I have named that group; for example pharmacists or FMCG experts. However in those instances where a particular comment was given from one interview person I have used a code number. For confidentiality reasons the coding matrix cannot be attached to the research, but as discussed in section 4.9 this has been scrutinized by my supervisors.

It should be noted here that in presenting the results, I have used the term 'consumer', as discussed in section 2.6. For this study, this term refers to the customer as a patient who goes into a pharmacy and has a certain demand, thereby avoiding using the term 'patient' because, for this study, it is important to understand the context of the commercial aspects in the pharmaceutical market. Furthermore, in those instances where the term pharmacist is used, but it should be pointed out that this refers only to retail pharmacists.

#### 5.4.1 Similarities and differences: FMCG and pharmaceutical markets

The FMCG market was investigated due to the fact that the ECR model works in this market. Therefore it was important within the research to investigate the similarities and differences between the FMCG and pharmaceutical markets.

This section provides an overview of the similarities and differences which have been identified within the FMCG and pharmaceutical markets.

#### 5.4.1.1 Similarities

Five similar trends in the FMCG and pharmaceutical markets emerged from the primary data. They are market differentiation, market consolidation, market readiness for a new business model, top management involvement and relationship structure between business partners.

Celesio AG and GEHE Pharma management respondents as well as pharmacists agreed that for approximately one year the German wholesalers have been offering better terms and conditions to the pharmacists. All interviewees saw a challenge in the current market dynamic as different pharmaceutical wholesalers try to generate additional market share and strive to gain individual pharmacists as their customers. Different interviewees (from Celesio AG, GEHE Pharma management and pharmacists) used the term "price war". The wholesalers invest more or less the entire wholesale margin into these special price offers. The pharmacists consider the market situation as very positive because it allows them to obtain a higher margin for themselves. The FMCG experts stated that this trend in the German pharmaceutical market was similar to the situation in the FMCG market during the1980s when German retailers identified a need to differentiate themselves from other market players due to changes in the macro environmental factors and they endeavoured to increase their market shares. Thereafter, the FMCG market was consolidated and led by five top retailers (Metro, 2012; Reinartz et al., 2011) a situation which is similar to the German pharmaceutical wholesale business as discussed in section 2.7 and shown in figure 2.8. For those pharmacists who were interviewed it was not so important that this current market dynamic could lead to a certain market consolidation on the wholesale side, they were more concerned about a reduction in the number of retail pharmacies in Germany.

Celesio AG and GEHE Pharma stakeholders were also concerned about declining numbers of retail pharmacists and a new market entrant in the form of a short line wholesaler. This wholesaler has a business model with a limited assortment and fewer services which allows them to work more cost effectively and therefore the wholesaler can offer better terms and conditions to the pharmacists.

As stated by the FMCG experts, this market consolidation aspect is similar to the ECR starting point in the FMCG market, a trend which was also confirmed by the key account managers of the pharmaceutical manufacturers, as those interviewees also had a background in both markets. These two interviewees were aware of ECR initiatives in the FMCG market as both had worked in that market during their careers. They saw similarities in the trend for both markets – albeit thirty years later. This leads to my assumption that it is now the right time for changing the business model in the pharmaceutical wholesale business and that a demand for it exists.

This assumption is supported by the pharmaceutical key account managers, as from their point of view pharmaceutical companies want to learn from the FMCG market and they had been recruited to translate their experience from FMCG into the pharmaceutical companies. They stated that in their organizations the ECR initiative from FMCG is not discussed or known and that top management argue more in general about the FMCG know-how which could be transferred to the pharmaceutical market. Furthermore, both interviewees saw the involvement of the top management as a prerequisite if parts of ECR were to be established into their pharmaceutical company. In their opinions this would have a considerable impact on the company strategy, which was also an argument for the FMCG market (Thonemann et al., 2008; Porter, 1985, 2004; Hungenberg, 2012; Welge & Al-Laham, 2001).

The situation of the pharmaceutical wholesalers can be compared to the relationship between OTC or para pharmaceutical manufacturers and grocery retailers, as they are in a similar position to the FMCG manufacturers in the 1980s, that is, working in a highly consolidated market and squeezed by the market power of grocery retailers. Pharmaceutical wholesalers are squeezed between manufacturers and pharmacists because in the pharmaceutical market the relationship is not a one-to-one equivalent between manufacturer and retailer. It is a more complex structure with three involved participants. However in the judgement of one interview partner (code MB) the communication and negotiation processes are comparable as targets of the buyers for grocery retailers, pharmaceutical wholesalers and manufacturers.

## 5.4.1.2 Differences

Whilst the similarities between the FMCG and the pharmaceutical market were also confirmed by the pharmaceutical key account managers, they also saw some differences between both markets. Four differences in the FMCG and pharmaceutical market emerged from the primary data: retail store structure, wholesaler involvement, customer trust and active sales strategy. In Germany grocery retailers mainly operate their own retail stores. The opposite is the case in retail pharmacists' businesses. Due to legal restrictions, pharmacists can own only up to four pharmacies. They order their goods mainly via a pharmaceutical wholesaler, but can also order directly from a manufacturer. They are free to decide where they place their order and they are loyal to the pharmaceutical wholesaler only to a certain extent, as, if they are able to obtain better terms and conditions from another wholesaler, the pharmacists will order from that wholesaler.

Therefore, for pharmaceutical wholesalers, especially in view of the fact that they are not allowed to operate their own retail pharmacies, their influencing power on an independent pharmacy is very limited. Stakeholders stated that pharmaceutical wholesalers saw their main target in the supply mandate, a situation which is the opposite of that in the FMCG market where no wholesaler was considered.

One of pharmaceutical manufacturer interviewees (code MA) stated that he is searching for new distribution channels. He compared the FMCG with the pharmaceutical market and underlined the differences in terms of the trust that consumers have in the pharmacist in comparison to the relationship between consumers and grocery retailers. The relationship between the consumer and the pharmacist is much stronger than in the FMCG and therein lies an opportunity to work more closely with the pharmacists, perhaps by creating certain projects which would allow the manufacturer to increase market share. Despite this, during the interviews no argument was put forward to include a wholesaler in any projects.

The retail pharmacists see themselves as healthcare professionals with a close relationship with their consumers, who, in general, have a notable degree of trust in the pharmacist and do not perceive their role as being a trader with a sales strategy to generate additional turnover. At the start of the interviews with the pharmacist stakeholders there was no mention of a comparison to the FMCG market. When asked if they could envision adapting some elements from the FMCG market, one commented that the market mechanisms would be too different, in that the FMCG market is free to define the quantities which they want to sell, whilst the opposite is the case in the pharmaceutical market, especially in

relation to prescription drugs. Although for OTC and all products in the "free choice" area there is, in principle, no limitation. However, there was an argument to suggest that there are not as many innovations in the pharmaceutical market as there are in FMCG, and interestingly, one of the other respondents groups mentioned this. Despite this statement I could find no corroborative data. Table 5.1 summarizes the similarities and differences which have been identified in the market environment for FMCG and pharmaceuticals.

Similarities	Differences
market differentiation	retail store structure
market consolidation	wholesaler involvement
market readiness for a new business model	customer trust
top management involvement	no active sales strategy
relationship structure between business partners	

**Table 5.1:** Similarities and differences in the market environment for FMCG and pharmaceuticals

## 5.4.2 Transferring ECR principles into pharmaceutical wholesale business

This section provides an overview of the identified potential elements of transferring ECR principles into pharmaceutical wholesale business from the different stakeholders' perspectives.

## 5.4.2.1 Potential elements from manufacturers' perspective

From the manufacturers (FMCG and pharmaceutical) interviews and observations eight potential features emerged from the primary data: neighbourhood store concept; start to generate lessons learned (usage of ECR mechanism) from FMCG; cross selling opportunities which create loyalty; wholesaler as problem solver; wholesaler as creative director; supply chain service provider; searching for commercialization concepts; aim of sales and market share increase.

One FMCG expert (code MB) was confident that it should be possible for the para pharmaceuticals to take a similar approach to that of the FMCG market. For example, sun care or dermo cosmetics products are comparable to the FMCG market because the market mechanism is similar in terms of purchase behaviour of the customers.

Additionally, as stated by the other FMCG expert (code MA), one of the leading drugstores, Schlecker, closed down the business in Germany in 2012. Schlecker had the role as a neighbourhood store in rural areas and this role could be taken over by pharmacies. This aspect was also suggested in a German trade journal (Lebensmittel Zeitung 06.12.2013; see also section 2.5.1.2).

In both of the pharmaceutical experts' companies, a trend could be observed, in that for the pharmaceutical business in their company, managers with an FMCG background had been hired. Indeed one (code MC), had recognized this trend in competitors' companies suggesting that the pharmaceutical manufacturers want to assimilate lessons learned from the FMCG market and translate them into the pharmaceutical market.

In the opinion of the FMCG experts there could be opportunities for the pharmacists to generate cross selling effects between product categories. In FMCG, cross selling effects exist between categories where, for example, there is a category management project, self-layout or promotional activity. An example which was given in the interview (code MB) was about a travel promotion which included sun care, wound care and non-food articles, such as books or towels. This example was given to illustrate that such cross selling activities could work in a pharmacy. This type of activity could increase the number of consumers in the pharmacy and therefore could also affect the prescription drugs element of their service as consumers would consider the pharmacy as a preferred store and therefore use it for the redemption of a prescription as well. If the customer is loyal to a pharmacy the consumer would also accept having to wait for a prescription drug if it was not in stock and there was no immediate need for the drug. These kinds of activities are comparable with the loyalty programmes of FMCG retailers and the category management idea to generate cross selling between categories.

When challenging the idea of how the pharmaceutical wholesaler could have a role in this scenario, during the interviews with the FMCG and pharmaceutical experts, the answer was that the wholesaler could take the role as creative director and coordinate these types of activities. This would be an important role, especially in view of the fact that the pharmacist would not be familiar with thinking in this direction and therefore it could be an advantage for the wholesaler to organize such activities.

One FMCG expert (code MB) put forward the idea that for the supply side of the ECR model, there could be synergies identified by using a wholesaler as a supply chain and stock holder for products. When challenging this with the other stakeholders (pharmaceutical key account managers and GEHE Pharma management), so far no exact synergy figure could be validated and no concept of what such a project could look like has been developed. In Germany, the pharmaceutical wholesaler is legally obliged to have all products available as described in section 2.7.1 (Mähr & Rossmy, 2008). Therefore, the wholesaler could not create a special service to have the goods in stock.

For increasing market shares one argument (pharmaceutical expert; code MC) was to run category management projects and to become category captain in the related category. Here the wholesaler can be considered because, for the manufacturer, being category captain for only one independent pharmacy the operation expense would be too high. The wholesaler is considered to offer a category management programme to pharmacy cooperation partners. But it was also stated from both pharmaceutical interviewees that the wholesaler has normally no throughput because wholesalers do not own the pharmacies. They can only give recommendations but cannot make the assortment decision. That was seen as an obstacle to driving the category management programme with a pharmaceutical wholesaler in comparison to the FMCG retailer with own retail stores. This was viewed differently by the GEHE Pharma management because they argued about a close collaboration and interaction with their cooperation pharmacy partners. Additionally it was stated that pharmaceutical wholesalers ask for special bonus payments for this kind of service which would be a contradiction the idea of a collaborative approach. But both interview partners to (pharmaceutical experts) also confirmed that they had the same discussion in the FMCG market. FMCG retailers were asking for special bonuses as well. I could not validate that statement in regards to the wholesale business because pharmaceutical wholesalers are not even aware of this situation in the FMCG market. They are not informed about the ECR initiatives in that market. Therefore, I could not discuss this topic with the wholesaler stakeholders.

At a first glance, the arguments of the interview partners leads to the assumption that it does not make sense at all to discuss category management projects with pharmaceutical wholesalers. But conversely, the feedback from interviewees (pharmaceutical experts) was that the overall pharmaceutical market is becoming more competitive and that the health insurance companies are running more tenders for certain drugs, leading to a situation where the pharmaceutical manufacturers are striving to find some compensation in other categories, for example OTC or para pharmaceuticals. They try to find new business models to increase company returns. This was also supported by the fact, that these interviewees were open to thinking about commercialization concepts which could be supported by a pharmaceutical wholesaler to overcome the limitations in the market. They are very interested in any activity which could support the effort towards more product presence in the pharmacy. Both saw the "visible choice" and "free choice" in the pharmacy as an exemplar within the retail pharmacy sector. An estimated 5–10% market share increase was seen by a better collaboration between manufacturers, wholesalers and pharmacies. This figure was given as a personal assumption (code MC) without any claim of correctness.

Overall the most benefit was seen for product categories which are placed in the "free choice" area of the pharmacy. Here the comparison to the FMCG market was underlined. Furthermore, more opportunities are seen in this part of the pharmacy due to the fact that the pharmacist is normally more focused on the "visible choice" assortment. From the point of view of one interviewee (code MD) the "free choice" assortment is unattended. It was stated that from the interviewee's point of view cosmetic and beauty manufacturers are forcing too many pharmacists to offer a wide range of their products which sometimes leads to overstock and networking capital problems in the pharmacy. This does not encourage the pharmacist to think about increasing the "free choice" assortment. A clearly supportive role for a pharmaceutical wholesaler was also seen in the interviews. For example, the wholesaler could create a certain assortment guideline for the pharmacist.

The interviewees (pharmaceutical experts) believed there are opportunities to use the FMCG market mechanism and the ECR model in the pharmaceutical business to support sales increase and market share. Those are the most important arguments for them to consider for such a model in the pharmaceutical market. This is not contrary to the FMCG market where these are drivers for that model as well. The interviewees have not focused on the collaborative idea in that model as they are more result orientated. For them the collaborative aspect was more of a consequence to generate results and indeed one (code MD), was very surprised when I brought up the collaborative aspect. However, the FMCG experts did know about the model of Großpietsch (2003) and confirmed the importance of a strategic cooperation approach. The pharmaceutical experts saw a role for the pharmaceutical wholesaler in that model, arguing that for a manufacturer, it is becoming more and more costly to have their own sales force and they could consider using a wholesaler for that task.

When talking to the pharmaceutical key account managers about the supply side of the pharmaceutical market and their relationship to the wholesale business in Germany, it became obvious that in the relationship between the manufacturers and the wholesalers, the roles are clear. The wholesaler is seen as a service provider for the manufacturer. That means that the wholesaler assumes the supply role towards the manufacturer. The wholesaler is the interface in terms of distribution between the manufacturer and the pharmacy. No specific supply chain project was mentioned that is currently running between pharmaceutical manufacturers and wholesalers.

#### 5.4.2.2 Potential elements from case company management perspective

Two potential aspects from the case company management interviews and observations emerged from the primary data. They do CM projects with manufacturers (but without engagement of pharmacies; they only offer the shelf layout plans to the pharmacies) and a first example of a collaborative business case with one manufacturer.

During the interviews with the stakeholders of GEHE Pharma it was stated that in order to become more attractive for the manufacturers, they are offering category management programmes especially for the product categories of pain and skin. These two categories are part of the new partner model store concept. It was stated that within the expert categories the turnover could be significantly increased and that the manufacturers had shown a significant interest in collaborating with GEHE Pharma for those categories. However it was stated that for some categories which are also present in drugstores, as well as categories with seasonal impact (e.g. cough and cold category), CM is difficult to manage. It was also confirmed that GEHE Pharma procurement was asking for special bonuses for this service from the manufacturers, which leads primarily to a negotiation behaviour which is not the primary focus of CM. As a result of such

negotiation, the most suitable manufacturer for a category is not always chosen as category captain. The decision is very often linked to the negotiation result in terms of which manufacturer pays most. This could be seen as an obstacle because it is against the CM idea as normally the category leader is selected (Gooner et al., 2011). But interestingly, it was also confirmed by the FMCG experts that the same negotiation approach is taken in the FMCG market. Therefore, this aspect can be seen as business practice and therefore not as an obstacle for the CM approach. Hence, the interview result is considered as a potential element and not as an obstacle.

For this area no further assumption could be taken from the observation, as during the research period I participated in no meeting with manufacturers where the discussion concerned CM projects or other elements of the ECR model. Therefore no further aspect about the CM approach could be identified during the observations.

As a critical discussion against the above formulated assumption that CM also works within a negotiation environment, another example which was put forward during the interviews with some case company stakeholders should be elaborated upon. With one leading OTC manufacturer a collaborative project, with the involvement of a consulting company, was established. However even though the results, in terms of revenue and market share for the related products, increased significantly, the project failed. Both parties could not agree on the terms and conditions for the project and had a differing understanding of what a collaborative model should entail. Ultimately there was no trust on either side to continue with the project. This could also lead to the assumption that CM does not work if the ECR principles are not considered.

This aspect was underpinned in both directions during the interviews with the Celesio AG management board. One of the board members (code GB) saw this as evidence that this kind of collaboration does not work in the pharmaceutical wholesale business. The other one, coming from a FMCG background is a strong believer in such opportunities. He viewed the mistake more in the capability of the involved parties in that the organization on both sides, pharmaceutical manufacturers and wholesalers, were not yet ready to drive these kinds of

projects. On the other hand he sees great potential in working closer together with the manufacturers. Only this interview partner of the Celesio AG board knows the ECR concept of the FMCG market, but despite this he also had no business model in mind for transferring the ECR concept into the pharmaceutical market.

## 5.4.2.3 Potential elements from retail pharmacists` perspective

Three potential aspects from the interviews and observations with retail pharmacists emerged from the primary data. They are bundling of product information via the sales representatives of the case company, high quality and expertise of those sales representatives and potential of loyalty programmes.

It was not a clear result in terms of how the current direct collaboration with manufacturers runs. Partly it was seen as value adding to generate information for product launches for example. On the other side it was stated that the visits of the representatives of the manufacturers are time consuming and the pharmacists would rather invest that time in consultation with consumers. It was also stated that a lot of sales representatives of the manufacturers are not really healthcare professionals, so that the sales talk is of low quality and lacking in healthcare knowledge. Here the advantage of the sales representatives of GEHE Pharma are underlined because they do not talk about a product range of only one manufacturer, but they talk about the whole assortment with the pharmacists. This was very much appreciated and seen clearly as of high value in the cooperation with GEHE Pharma.

With regard to loyalty programmes no interviewed pharmacist has a loyalty card for their consumers in place. They could consider having a bonus card and agreed that this could be an additional service which they would consider obtaining from GEHE Pharma under the brand of "healthy life-pharmacies". Table 5.2 summarizes the potential elements identified from the perspective of the different stakeholders. It illustrates those elements which were deemed to be potential aspects and opportunities and those which are already in practice (e.g. CM programmes within the case company) but do not yet follow ECR principles but have the potential to be translated into an adjusted ECR model. In addition table 5.3 illustrates some contested areas where different stakeholders had differing opinions on a certain aspect.

Potential elements from different stakeholder perspectives	5
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Manufacturers (FMCG and pharmaceuticals)	Case company management	Retail pharmacists
Neighbourhood store concept	Does CM project with manufacturers (but without engagement of pharmacists; they only offer shelf layout plans to pharmacists)	Bundling of product information via the sales representative of the case company
Usage of ECR mechanism from FMCG	First example of a collaborative business case with one manufacturer	High quality and expertise of sales representatives of case company
Cross selling opportunities which create loyalty		Potential loyalty programmes
Wholesaler as problem solver		
Wholesaler as creative director		
Wholesaler as supply chain service provider		
Searching for commercialization concepts		
Aim to increase sales and market share		

 Table 5.2: Potential elements from different stakeholder perspectives

## Identified contested areas between different stakeholders

Contested areas	Manufacturers (FMCG and pharmaceuticals)	Case company management	Retail pharmacists
Market consolidation: similar between FMCG and pharmaceutical market (section 5.4.1.1)	Confirmed	Confirmed	Not confirmed: not an important aspect. More afraid about reduction of number of retail pharmacies
Successful implementation of CM programmes leading by wholesalers (section 5.4.2.1)	Pharmaceutical experts doubted the throughput of wholesalers because they do not own pharmacies	Confirmed the possibility of CM programmes due to their close collaboration with cooperation pharmacies	Not assessed
Collaborative projects between wholesalers and manufacturers (section 5.4.2.2)	Difficult to get an agreement on terms and conditions. Therefore, collaboration projects difficult.	Difficult to get an agreement on terms and conditions. Therefore, collaboration difficult. One board member saw potential.	Not assessed

 Table 5.3: Identified contested areas between different stakeholders

# 5.4.3 Obstacles of transferring ECR principles into pharmaceutical wholesale business

This section provides an overview of the obstacles, which have been identified from the perspective of the different stakeholders, to transferring ECR principles into the pharmaceutical wholesale business.

#### 5.4.3.1 Obstacles identified by manufacturers

Three obstacles from the manufacturers (FMCG and pharmaceutical) interviews and observations emerged from the primary data: status of current running SC projects in FMCG; direct relationship between manufacturers and pharmacists; different shelf-layout methods.

The two interviewees from FMCG are of the opinion that, in principle, there could be great opportunities within the ECR initiative. Both of them have been involved in several projects in the FMCG market. Those projects mainly started in the area of SCM. But these experts were concerned because the initiative has been running since the 1990s but the progress which has been made since that time is not significant. Both have no further insight, for example, whether the CPFR model (as described in section 3.5.1.2) has been brought forward in the meantime. From their perspective the projects seem to be in the same status as at the beginning of the initiative. No major further development was identified.

A further concern of the FMCG experts was that the FMCG retail is led by only a few players in the market and that their market share is so high that they are still dictating the framework of the collaboration with the manufacturers. This does not leave enough room for discussing partnership projects. The focus is still very much on the terms and conditions for single products instead of investigating the whole potential in a collaboration model. From their view, smaller FMCG retailers could not generate the high synergies from ECR projects which would justify investments, for example into IT systems. IT tools are a prerequisite to start projects like VMI or CPFR. Therefore, they were questioning how that could be translated into the pharmaceutical market where the retailers (i.e. retail pharmacies) are very small companies and do not have the same market power as the retailers in the FMCG.

From the discussion with the FMCG interviewees regarding the pharmaceutical market potential, it can be stated as a summary that they see more benefits for the pharmacist in a closer cooperation with the pharmaceutical manufacturers, without having a clear idea about the role of the wholesaler. But it was also underlined that due to the fact that the wholesaler has no role in running ECR projects in their businesses this statement is more an assumption without evidence.

Within the interviews with the experts from FMCG and pharmaceutical manufacturers, potentials for transferring the ECR principles into the pharmaceutical market were identified. In general - from the perspective of all manufacturer interviewees - the focus should be on the direct relationship between the manufacturers and the pharmacies. They share concerns about whether, in fact, the pharmaceutical market has a need for wholesalers as an intermediary in the supply chain and whether wholesalers really deliver added value. The ECR initiatives in the FMCG market are between manufacturers and retailers who operate their own shops. The interviewees had no knowledge of projects where a wholesaler was involved in FMCG projects and were sceptical due to the fact that the wholesaler has no control of the pharmacies. But one (code MC) did see a possibility if the wholesaler were to offer services for an ECR model where the manufacturer could save some costs. The interviewee was not sure what type of services that could be, as for him the important aspect was that the wholesaler delivers added value for the manufacturer and that those services generate hard synergies in terms of money. The emphasis was clearly on generating profit for the manufacturer.

One interviewee from a pharmaceutical manufacturer (code MD) was, in general even more sceptical. He confirmed the cross category selling potential in a CM approach but he saw differences in the shelf-layout method between FMCG and pharmaceutical retail. In the FMCG retail, the retailer generally has the decision power regarding the shelf space, whereas in the pharmacy it is common, for example, that skin care manufacturers ask for a so called depot contract, an agreement about a certain shelf space. The manufacturer decides which articles are available on this shelf space. The manufacturer handles the category management for these articles and the influence of the pharmacist is limited. In this scenario no wholesaler as an intermediary is needed. Their only role could be to recommend a selected manufacturer as depot owner.

One pharmaceutical manufacturer expert (code MC) is uncertain as to whether the pharmaceutical wholesale business is ready for supporting new sales channels. Hence, he is looking for opportunities in the direct relationships with the pharmacies.

One additional obstacle was given as an example during the interviews and was also observed in one meeting between an OTC manufacturer and GEHE Pharma with the procurement team (in this case an Omega 3 product). I joined that meeting as participant. That manufacturer doubted if wholesale (the case company) could support building a stronger relationship with consumers and increasing the effort in the pharmacy. Nowadays, OTC manufacturers start with a new product launch directly in all retail channels not only pharmacies, but also in drugstores or grocery retail channels, the so called mass market. This gives them the opportunity to reach more consumers. It was stated that in the past new OTC product launches were first conducted in the pharmaceutical market and the wholesaler was used as a distribution channel. That provided a commercial benefit and advantage to the pharmaceutical retail market as well as to pharmaceutical wholesalers. An exact number or percentage could not be identified during the interviews.

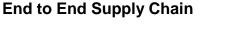
#### 5.4.3.2 Obstacles identified by case company management

Two obstacles from the case company management interviews and observations emerged from the primary data. They are competitive relationship between wholesale and retail pharmacy and unclear end to end supply chain strategy.

The circumstances that a pharmacist can act as a middleman in the pharmaceutical market, creates a potential conflict in the relationship between pharmacists and pharmaceutical wholesalers. In this event, the relationship moves from a wholesaler/customer relationship to a more competitive situation between both market participants. All stakeholders of GEHE Pharma, as well as the management board of Celesio AG, saw this as a contradiction to the traditional relationship model. On one side they know that the pharmacists play an important role in the relationship to the final consumer, whilst being themselves a customer of GEHE Pharma; on the other side GEHE Pharma need to accept that at any moment this customer can become a competitor in the market when a pharmacist has a wholesale licence and sells products to other market participants. This topic has not been evaluated more thoroughly due to the fact that this middleman role of

the pharmacist is mainly related to prescription products and exports to other countries. But for the overall evaluation of the relationship between wholesalers and pharmacists it is an important aspect. The overall assumption of all interview partners was that the pharmacist plays an important role in the pharmaceutical retail market. As was underlined by all interview partners, the consumer trusts the pharmacists and this is an important issue in the pharmaceutical market which needs to be considered and used for upcoming new business models.

Within the observation one chart was found as an internal document (see figure 5.1). Currently, this picture is only used within the Celesio AG and GEHE Pharma organization during meetings with key account managers of pharmaceutical manufacturers to explain the different wholesale services. The observation, and later on the interviews, did not deliver a clear understanding of this picture from the different interviewees from Celesio AG and GEHE Pharma, with no clear understanding about either the different roles and responsibilities of the participants in that model, nor an exact definition of possible projects. It was used more or less solely as a general entry point in the conversation with the manufacturers. Therefore, I mentioned this finding under the headline "obstacles" because a clear understanding was missing.



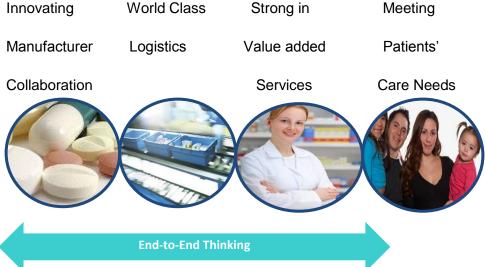


Figure 5.1: End to End supply chain model (Celesio AG, internal chart)

This picture illustrates that the pharmaceutical wholesaler connects the manufacturer with the final consumer which would be important in regard to the ECR principles and for the recommended newly adapted ECR model.

# 5.4.3.3 Obstacles identified by retail pharmacists

One further aspect from the pharmacist interviews and observations emerged from the primary data. The pharmacists see themselves as health consultants and not as retailers. Therefore, their selling behaviour is more reactive than proactive. When discussing what their sales process looks like, both responded with the answer that they stay behind the sales counter and that they do not very often approach a consumer in front of the "free choice" shelf; usually only if a consumer has a specific question or asks for support for that product group. This indication that the pharmacists lack proactive retailer behaviour could be an obstacle in implementing a CM approach into the pharmacy because the pharmacists would need to change their current trading behaviour. Table 5.4 summarizes the obstacles identified from the different stakeholders.

Stakeholders:	Manufacturers (FMCG and pharmaceuticals)	Case company management	Retail pharmacists
Obstacles aspects:	Status of current running SC projects in FMCG	Competitive relationship between wholesale and retail pharmacy	Lacking retailer behaviour
	Direct relationship between manufacturers and pharmacists	Unclear end to end SC strategy	
	Different shelf-layout methods		

# 5.4.4 New themes which support a newly adapted business model

During the interviews and observations some new topics emerged which showed potential for know-how transfer from FMCG into the pharmaceutical sector and others which have no direct link to the ECR principles but support the argument of adapting a business model for the pharmaceutical sector. Figure 5.2 shows those identified additional issues.

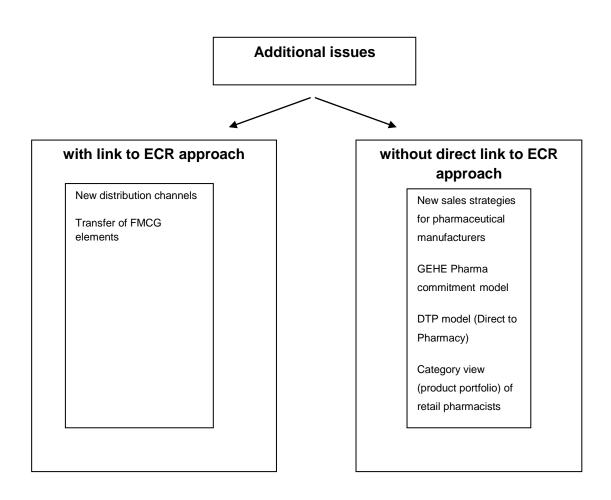


Figure 5.2: Identified additional issues

#### 5.4.4.1 Additional issues with links to ECR approach

Two further potential aspects from the interviews and observations emerged from the primary data. They are new distribution channels and to translate experience (e.g. transformation in the market environment) from FMCG.

The interviewees (FMCG, pharmaceutical manufacturers and Celesio management) did see opportunities by using the know-how and experience of the FMCG market for the pharmaceutical market. Customer orientation in the health market becomes more and more important. One key account manager (code MA) reflected on a press release which stated that 79% of consumers inform themselves via the internet and for this reason he is striving for new distribution channels within the company.

Overall the pharmacists saw the strength in their businesses in the availability of their pharmaceutical products. When challenged, during the interviews, to consider elements from FMCG, they both stated that so far they only saw FMCG retail as competition and had never considered transferring some elements from that into their own businesses. Neither interview partner had heard about the ECR model. At first both interview partners were very sceptical about possible know-how transfer, but following an explanation of the ECR approach, one (code PB) was more open minded to considering such an approach for the retail pharmacy business.

#### 5.4.4.2 Additional issues without direct links to ECR approach

The following section summarizes those findings which were not directly linked to the ECR principles. Whilst in the main they were seen as challenges by some interview partners (manufacturers, case company and retail pharmacists), they were also viewed as opportunities by some other interview partners from the different interview groups.

#### New sales strategies for pharmaceutical manufacturers

In the light of the discussion about a new sales strategy for pharmaceutical manufacturers, an example of a new sales concept for the OTC category was given. OTC products available only in pharmacies are placed in the "visible choice" section; behind the counter. This implies that the customer has no direct access to the product. The pharmacist has to serve the customer. In the new sales concept the OTC manufacturer wants to place dummies in the "free choice" area to create more visibility of the product for the customer. The aim is to increase sales. The customer sees the product, can take it and makes the buying decision without having a sales conversation with the pharmacist. The manufacturer offers the pharmacies a special discount for this additional placement of the product. This issue has been taken to court by the antitrust authority. In the first instance the court has prohibited this sales strategy because it violates the rule of "visible choice" in the pharmacy.

This example underlines the assertion that pharmaceutical manufacturers are searching for new sales concepts to increase market share and revenue. In the interviews it was stated that the aim is to generate higher distribution rates, higher presence on the shelf and higher brand awareness. The interviewees stated that this could only be reached by testing new sales strategies, such as the one described above, or to motivate the pharmacists to recommend the related product. From their perspective a close collaboration with the pharmacist is a key success factor.

During the discussion about sales strategy the topic of an umbrella brand strategy was mentioned by one interviewee (code MC) who saw a clear underdevelopment in the OTC category; a view which was confirmed by another interviewee (code MD). An umbrella brand would support the degree of brand awareness in the market. Here the interviewees (pharmaceutical manufacturers and GEHE Pharma management) saw a pent-up demand in comparison to the FMCG market. In the pharmaceutical market the manufacturers concentrate more on the active ingredient of a product rather than the brand name and brand strategy. One (code MC) gave an example of a competitor who tries to use an umbrella brand for different active ingredients. Here again the court decided that the manufacturer cannot use one brand name for different areas of application because that would confuse the customer. It was stated that this example further highlighted the fact that the complexity within the pharmaceutical market makes the building of sales strategies far more difficult than in the FMCG market. Both pharmaceutical experts confirmed that they had not considered this complexity before they started in that market.

#### GEHE Pharma commitment model

As one reaction to this market trend the GEHE Pharma management saw a potential in their commitment model "healthy life-pharmacies". Currently, compared to other wholesale cooperation, this has the most members. The interviewees stated that they are testing different new elements for commitment models. One concept is derived from the international concept of Celesio AG. It is a copy of the Celesio retail pharmacy concept "Lloyds Pharmacy" which is used in those countries where Celesio AG is present and is able to operate a pharmacy chain in accordance with local laws. This concept is about brand name, store fitting, store layout as well as a clear planogram of what the assortment should look like. This was not accepted by the German independent pharmacists. Firstly, the independent pharmacists want to keep their own name and not have a complete change in the store layout. Furthermore, they expect some service in terms of assortment building and category management but they still want to make the decisions. Therefore Celesio AG board and GEHE Pharma management decided to adjust this concept. The pharmacists keep their own brand name and use the cooperation logo "healthy life-pharmacies" as a small sign in the window. Different shop fitting modules are offered and the pharmacists can decide which fits their consumers' needs. In the interview it was stated that in the first couple of weeks 40 additional cooperation partners have been generated with this new concept. The result is seen by Celesio AG management and GEHE Pharma as very positive. Further concepts are in preparation.

All the pharmacists interviewed are cooperation partners of GEHE Pharma. The GEHE Pharma branding "healthy life-pharmacies" are seen by them as a

consequence of the cooperation not as additional value for the pharmacy. For the pharmacists, their own name as a brand is seen as more important.

In general the services offered are appreciated. The most important aspects are the delivery punctuality and accuracy as well as payment terms and product return agreements. The established OPR (Optimised Pharmacy Replenishment) tool was mentioned as a very supportive instrument to simplify the replenishment process and to generate time efficiency.

Other services which are offered, like category management, sales promotion offers and own brand assortment, were mentioned only as a second priority, or not even acknowledged until specifically being asked about them during the interviews.

This leads to the assumption that the pharmacists expect from GEHE Pharma mainly the classical wholesale services in the supply chain and not services which belong more to assortment management on the demand side. Those services are seen as additional "nice to have" services but they are not the basis for the buying decision.

In general the cooperation agreement defines GEHE Pharma as the first wholesaler. Only when a product is not available can the pharmacist buy from another wholesaler. The interviewed pharmacists all have a second wholesale contract in place. During the interviews it was identified that the rule to always order first from GEHE Pharma is not consistently complied with. If another wholesaler makes special offers and the pharmacists can buy for better margins the order is placed with that wholesaler.

# DTP model (Direct to Pharmacy)

Alongside the challenging market situation between the German pharmaceutical wholesalers another challenge was cited with regard to the collaboration with the pharmaceutical manufacturers. GEHE Pharma has recognized that OTC and para pharmaceutical manufacturers are increasingly delivering more directly to the pharmacies (see also section 2.7.3). The result of DTP is that the supply chain is

not operating through the wholesalers anymore. The manufacturer receives the order directly from the pharmacy and uses its own supply chain to deliver the products to the pharmacy. But it could be that the manufacturer is only delivering directly to a certain number of retail pharmacies. As a consequence, GEHE Pharma loses turnover with the related manufacturer. Due to their obligation to have all products available it could happen that they still have to buy the products from this manufacturer to serve those pharmacies which do not receive a direct delivery. But due to the reduced turnover in the relationship with this manufacturer the terms and conditions could be reduced as well. As a result, GEHE Pharma loses in terms of turnover and margin but still carries the handling and stock costs for these products.

Therefore, as stated by different stakeholders of the case company, GEHE Pharma needs to offer special services to manufacturers to bring about the return of volume back into their supply chain. From their view those services could be in relation to the cooperation model. It could be, for example, special offers to the pharmacists which ensure the manufacturer the stock in the pharmacies. In this case GEHE Pharma takes over the sales function of the manufacturer, a point which was also mentioned as an opportunity during the interviews (see section 5.4.2).

#### Category view (product portfolio) of retail pharmacists

As a result it could be stated that the pharmacist primarily has the prescription segment in mind and does not automatically reflect on the "free choice" assortment. By checking this observation the feedback was that the "free choice" products are only seen as a complementary product range. For the pharmacist the first priority is the RX assortment which is prescribed by a doctor and after that the "visible choice" assortment which is partially prescribed. Both assortments are only available in pharmacies. One comment (code PB) was to question whether beauty articles, which belong to the "free choice" sector, should be sold in a pharmacy at all. It could be seen as unethical. The pharmacist wants to differentiate the

pharmacy clearly from a drugstore or FMCG retail shop because they also produce, for example, their own ointments in their role as healthcare professionals.

Another concern that was shared (code PB) was that if "visible choice" products become completely exempt from reimbursement by the health insurance companies the trend could be that those consumers prefer a drugstore as the place to shop because they are free to choose and will search for the cheapest offer available. Contrary to this argument, this was seen by code PA as an opportunity as, if there is no preliminary fixed product by the health insurance company, the pharmacist would be free in their recommendations and could act more as a healthcare professional, thereby generating a competitive advantage due to their professional expertise which is not available in a drugstore.

More in-depth discussion on the topic of the "free choice" assortment and product ranges, quickly led to comparisons to drugstores, grocery retailers etc. The perception held by all was of a disadvantage for the pharmacies against the FMCG retailers in terms of range of products, price setting and promotional possibilities. As a consequence, if the prices are too high or a certain product is not available the consumer would just go to another pharmacy or even to a drugstore.

No consistent point of view was found regarding which product category motivates the consumer the most to first come to the pharmacy. One view (code PB) is that the prescription is the driver; the customer first chooses the pharmacy which is closest. If the prescribed drug is not available the customer goes to the next pharmacy. "Visible choice" products if not prescribed or "free choice" articles are only additional buying acts. The other view (code PA) is that the consumer chooses the pharmacy as a point of purchase if the "visible choice" or "free choice" assortment is convenient. This selected pharmacy is where the consumer would then also go with the prescription.

One example on the relationship between prescription drugs and "visible choice" and "free choice" products was given. The interviewee (code PB) stated that she is trying to avoid any out of stocks for the prescription products. That makes the consumer loyal to the pharmacy. The consumer may also buy some "visible

choice" or "free choice" products. By challenging this proposition during the interview discussion it became clear that there was, in fact, no sales strategy in place to foster this complementary buying act.

Both interviewed pharmacists have a target to be seen as a competence centre for healthcare topics in the neighbourhood. Therefore, the "visible choice" assortment has a higher priority than the "free choice" assortment for them.

### 5.5 Internal Secondary Data Sources

The aim of researching internal secondary data sources was to understand whether in other departments of Celesio AG the topic of a collaboration model between pharmaceutical wholesalers and manufacturers was apparent. In themselves, these departments have no direct relation to the research topic, and hence were not interviewed, although they have a certain supplier contact or internal communication flow. The minutes of monthly directors' meetings and internal communication letters to the employees were investigated. I did the search on the basis of the thematic analysis (Bryman & Bell, 2011) as described in section 4.9.4.1 and used the search themes as shown in table 4.3: Data display themes (chapter 4). I searched in particular for potential aspects, obstacles, potential know-how transfer and additional new potentials in regards to the objective "to investigate the potential of transferring the ECR model to the pharmaceutical wholesale business in Germany".

During directors' meetings functional directors were asked to provide an overview of their current projects. Therefore I considered the minutes of the meetings to identify topics related to my research. In the same manner, communication letters to the employees were also used. It is within those letters to employees that important projects are introduced. I started the investigation at the same time as the data search in the library. Unfortunately, with the organizational restructuring of Celesio AG, directors meetings and communication letters were discontinued. A period of almost two years (December 2012 until September 2014) was investigated (appendix 5.7).

The investigation of the internal data delivered no substantial findings. In the documentation of the investor relation department, the Celesio AG strategy house was found (see section 5.2.1 and appendix 5.3). It was used to explain to the investors the new Celesio AG strategy to work together in an end-to-end supply chain. But no example was mentioned.

In the documentation about supply chain, one project with an OTC manufacturer and GEHE Pharma was mentioned, but the project was stopped and never implemented. This was the same project which was mentioned in the interviews with GEHE Pharma stakeholders and Celesio AG management (see section 5.5.2). Therefore, the documentation was about some preparation work and 'kickoff' meeting protocols.

# 5.6 Summary of the Key Findings

In summary there were five similar trends and four trends of differences identified in the FMCG and pharmaceutical markets. The differences are related to the market structure and the involvement of wholesalers in the supply chain. The similarities support the readiness of the pharmaceutical market for an adapted business model.

Overall there were six issues identified as obstacles to the development of a newly adapted ECR model. They were identified during the interviews and observations with manufacturers (FMCG and pharmaceutical), stakeholders of the case company and retail pharmacists. Whilst being identified as obstacles, nevertheless none of these issues were considered to be absolutely prohibitive.

Encouragingly there were a much higher number of potential aspects identified to support a new business model and two additional issues as potential know-how transfer; four new themes which support the transfer of the ECR approach into the pharmaceutical market. The main themes are relationships, market environment, collaboration areas, opportunities and new potentials which are important to consider for the development of a newly adapted model. Table 5.5 summarizes the findings identified in the qualitative analysis of this section.

# Summary of qualitative analysis

Market environment	Similarities (between FMCG – pharmaceutical market) market differentiation	Differences (between FMCG – pharmaceutical market) retail store structure
Market environment		market)
Market environment	market differentiation	
	market consolidation	wholesaler involvement
	market readiness for a new business model	customer trust
	top management involvement	active sales strategy
	relationship structure between business partners	
	P	
	Potential aspects (of transferring the	Obstacles
	ECR model into pharmaceutical market)	
Manufacturers (FMCG	Neighbourhood store concept	Status of current running SC
and pharmaceutical)	Usage of ECR mechanism from FMCG	projects in FMCG
		Direct relationship between
	Cross selling opportunities which create loyalty	manufacturers and pharmacists
	Wholesaler as problem solver	
		Different shelf-layout methods
	Wholesaler as creative director	
	Wholesaler as supply chain service provider	
	Searching for commercialization concepts	
	Aim of sales and market share increase	
Case company	Already offered CM programmes	Competitive relationship
management		between wholesale and retail pharmacy
	First example of a collaboration model	Unclear end to end SC strategy
Retail pharmacists	Bundling of product information via the sales representative of the case company	Lacking retailer behaviour
	High quality and expertise of sales reps of case company	
	Potential loyalty programmes	
Additional issues	with link to ECR approach	without direct link to ECR approach
	New distribution channels	New sales strategies for
	Transfer of FMCG elements	pharmaceutical manufacturers
		GEHE Pharma commitment model
		DTP model (Direct to Pharmacy)
		Category view (product portfolio) of retail pharmacists

 Table 5.5:
 Summary of qualitative analysis

#### 5.6.1 Market environment

Pharmaceutical manufacturers see a need for change in the marketing concept. A market consolidation was recognized on both sides (wholesale and pharmacy). This affects the pharmaceutical wholesale business. Additionally, the case company stakeholders confirmed the need for a change in the business model. The case company and experts of pharmaceutical manufacturers confirmed that the involvement of the top management is needed to change the model because such a change would have a high impact on the company's strategies.

In meetings between case company representatives and manufacturer key account managers the discussion regarding terms and conditions was one of the key topics. Manufacturers see wholesalers as service providers and not as much as a marketing and sales supporter. Therefore, pharmaceutical manufacturers focus on an improved business model in the relationship with the pharmacists. The pharmaceutical wholesaler is not considered in their deliberations. The wholesaler is seen only as one supply chain option in the market.

# 5.6.2 Relationships and roles and responsibilities

Overall it can be stated that the potential aspects identified, as well as possible obstacles, are mainly related to the relationship and roles of the different stakeholders in the different market environments of FMCG and pharmaceuticals.

An important factor in the pharmaceutical market is the key role paid by pharmacists due to the personal relationship they enjoy with the consumer, based on the trust that consumers have in them.

Pharmacists consider their role to be a health consultant and not as a retailer. In this role the focus is not markedly on additional turnover, assortment and sales strategies. Their behaviour when serving a consumer is more a reactive than a proactive process. In the main the pharmacist stays behind the sales counter, seldom engaging in conversation with a consumer in front of the "free choice" shelf. The pharmacists are not aware of parallel elements between the FMCG retail and the "free choice" assortment in the pharmacy and therefore, they are not using the sales strategies of that market by proactively offering additional products to the consumer in front of the "free choice" shelf.

In terms of the relationship between pharmaceutical wholesalers and manufacturers it was identified that the communication and negotiation flow is very similar between the FMCG and the pharmaceutical market. The negotiation targets of both participants (wholesale buyer and manufacturer key account managers) are also comparable. The difference lies in the power of implementation.

Additionally, the case company (GEHE Pharma) see themselves mainly as a supply chain provider in the market, but recognized the main obstacle as being their lack of negotiation power against the manufacturer. One collaborative project with one leading OTC manufacturer failed due to the unsuccessful negotiation about the terms and conditions for that project.

On the demand side, GEHE Pharma offers category management solutions. Assortments and category captains are chosen during negotiations and not based on the idea of an ECR concept. Category management itself is seen, for many categories, as difficult due to very high seasonal impacts, for example for cough and cold products. Additionally, the competition with drugstores, for example the para pharmaceutical category, also affects the assortment building process.

The main focus for GEHE Pharma to improve the market share is to generate new customers (retail pharmacies) and to roll out the cooperation concept and generate higher margins on the buy side due to intensive negotiations with manufacturers. Downstream and upstream activities are managed independently. Two different managers in the board of GEHE Pharma are responsible (see appendix 5.6). The end to end Celesio AG holding strategy (see appendix 5.3) could not be identified as fully implemented. Both sides of the supply chain are separately managed and so far no common strategy with manufacturers is established to better serve both the pharmacist and the end consumer.

## 5.6.3 Additional issues

During the investigation different new themes were identified which could be translated into an ECR concept. They were in regards to new sales strategies wherein wholesalers could take a service provider role. This would enable the pharmaceutical wholesaler to become part of a collaboration model which currently only considers manufacturers and retailers.

Overall, the assumption can be made that there are lessons learned from FMCG which could be translated into the pharmaceutical market because the targets, in principle, are very similar in both markets. The overall aim of the market participants is to increase sales and market share. The wholesaler could be considered as a problem solver.

# 6.0 Discussion

Following the categorization of themes, I analysed the data collated from the primary interviews and observations. Those findings primarily address research question number 3: How could the ECR model from the FMCG business be transferred into the pharmaceutical wholesale business in Germany. Just as a reminder, research questions number 1 and 2 are investigated within the background study (see chapter 2) and literature review (see chapter 3). I will use the word findings more within this chapter, where the purpose is to combine the analysis from the primary data with the literature review to form a discussion. In the following chapter the findings are clustered and discussed in three sections with respective sub-sections.

The categorization is accomplished by taking a multiple level approach. First, the findings from the interviews, observations and internal data are discussed in the context of extant debates of the ECR model to identify the differences between the FMCG and pharmaceutical industries which could potentially present obstacles when transferring to the ECR model.

Secondly, match the similarities between the FMCG and the pharmaceutical market to ascertain whether elements of the ECR initiative are already available in the pharmaceutical market. Within this theme an assessment how the collaboration works between pharmaceutical manufacturers, wholesalers and retail pharmacists in the current business mode was considered with the aim of identifying those topics which support the implementation for the ECR or an adjusted model into the pharmaceutical industry.

The third step was to identify those aspects which would prohibit the implementation of an ECR model into the pharmaceutical industry.

These three main themes (obstacles, supportive aspects, and prohibitive elements in regard to implementation of an ECR model) are further sub classified in the areas of: environmental factors and relationship/roles and responsibilities; supply chain management; category management. The aim was to specify the market environment and the relationship aspect because it is the overall main driver for the ECR approach and furthermore the two areas of the ECR model itself (SCM and CM) in a comparison between the FMCG and pharmaceutical markets.

Finally, new themes and opportunities were identified which could support a business model similar to the ECR model between market participants in the pharmaceutical wholesale market. The following table (table 6.1) displays the categorization matrix:

Identified themes	<ol> <li>Environmental factors</li> <li>Relationship aspects / roles and responsibilities</li> </ol>	Supply Chain Management	Category Management
Obstacles for implementing an ECR model	-Differences between FMCG and pharmaceuticals	-Differences between FMCG and pharmaceuticals	-Differences between FMCG and pharmaceuticals
	-Different opinion from interview partners	-Different opinion from interview partners	-Different opinion from interview partners
	a) In comparison to current debates	a) In comparison to current debates	a) In comparison to current debates
	b) Between different interview partners	b) Between different interview partners	b) Between different interview partners
	-Additional aspects which are not identified in the literature debates but show dissimilarities between both industries	-Additional aspects which are not identified in the literature debates but show dissimilarities between both industries	-Additional aspects which are not identified in the literature debates but show dissimilarities between both industries
Aspects which support the potential transfer of the ECR model into	-Similarities between environmental factors and relationship aspects between both markets	-Already existing projects	-Already existing projects
the pharmaceutical industry	-Additional aspects which are not identified in the literature debates but show similarities between both industries	-Additional aspects which are not identified in the literature debates but show similarities between both industries	-Additional aspects which are not identified in the literature debates but show similarities between both industries
Prohibitive elements for potential transfer of the ECR model	Market aspects which would not allow an implementation	Aspects which would not allow an implementation	Aspects which would not allow an implementation
Additional research findings	New themes and opportunities for the pharmaceutical market	Themes from the pharmaceutical sector which were not directly linked to ECR approach but could be translated into an adapted ECR model	Themes from the pharmaceutical sector which were not directly linked to ECR approach but could be translated into an adapted ECR model

 Table 6.1: Categorization of the qualitative research data

At times it has been difficult to clearly allocate a finding to the named categories or sub categories as some topics could fall under more than one area. For easier understanding of this I have put the related chapter/section number either in brackets or mentioned it in the text when referring to a specific passage, either from the background study of the pharmaceutical market or the literature review. The findings are presented below.

As described above, I connected the primary research findings with the related areas from the background study and literature review to create a connection between existing debates from previous studies. This step was important to scrutinize whether the results support my research objectives and questions.

For each theme I have summarized under the headline "interim result" the key issues which are important for the potential evaluation of transferring the ECR model into the pharmaceutical wholesale business, and furthermore, have formulated out of the findings some recommendations which will support the implementation of the newly adapted ECR model for the pharmaceutical wholesale industry.

# 6.1 Environmental Factors

The assessment of the characteristics of the pharmaceutical market shows that whilst on one side it is a regulated market (Becker, 2012), on the other side, regarding the self-medication market which is the focus of this research, it is only regulated to a certain extent (Hahn, 2006). Existing publications in the academic and practitioner field have so far not dealt with a comparison between the FMCG and pharmaceutical industries (see search result section 3.2.1). However, the key account managers of the pharmaceutical industry compared both industries and saw some similarities, suggesting opportunities to adapt the business model from the FMCG to the pharmaceutical market.

FMCG manufacturers adopted their company strategy due to the changes in the market environment (Dawson & Shaw, 1989, Walters & White, 1989). The result was that they established matrix marketing (see section 3.3.2) which considered

the competitors, retailers and the final consumer in the strategy (Vranesevic et al., 2006). The main change in that strategy was to consider the retailer as well and to answer the question of why retailers should stock the product (Corstjens & Corstjens, 1999), although this aspect was not explicitly mentioned during the interviews from the FMCG experts as it has been absorbed into practice over the past twenty years.

The pharmaceutical manufacturers are also seeking for opportunities to get closer to the consumer. From the point of view of the pharmaceutical manufacturer the market players, in comparison to FMCG, are pharmacies as retailers and patients as consumers. In their market view wholesalers are not considered. The challenge for establishing ECR principles in the pharmaceutical market will be to identify the additional role which a wholesaler could assume in a marketing strategy. Nevertheless, some ideas were mentioned during the interviews which will be discussed further in this section (6.1).

Trade marketing (see section 3.3.3) had become an important aspect before ECR was established in FMCG. The starting point was that manufacturers began thinking about how products could increase category profitability (Corstjens & Corstjens, 1999; Cropper, 2008; Fowler & Goh, 2012). Interestingly, this facet of a new collaboration approach, which had been a relevant intermediary step in the development of the ECR model for FMCG industry, does not seem to be a relevant issue for the FMCG manufacturers nowadays as this was also not explicitly mentioned during the interviews. But for the pharmaceutical industry it could also be a starting point, as it was in FMCG, although trade marketing, according to von der Heydt (1998), was not a final solution because some conflict potential in FMCG still existed. At that time this was the reason why ECR was established (Kilimann & von Schlenk, 1998; Mentzer et al., 2000). Therefore, for the pharmaceutical wholesale business it will be important to accommodate these issues and consider them before establishing an ECR model.

By comparing the pharmaceutical and FMCG markets, and additionally considering one of the results of the interviews with those stakeholders who are familiar with both markets, it was obvious that whilst there are similarities between these two markets, the pharmaceutical market is subject to many more regulations

than the FMCG market and primarily involves a wholesaler in the supply chain process (Specke, 2005). These similarities are identified for the OTC and para pharmaceutical business, and in terms of the need for changing the business model a possible comparison of the current market situation in the pharmaceutical market with the macro environment of the FMCG market in the 1980s, when the ECR initiative was established, can be made, as discussed in section 2.6 (Hahn, 2006; Schögel & Herhausen 2012; Stange, 2012; Umbach, 2013; Wilkes, 2012).

During the early years of ECR, grocery retailers started to differentiate themselves from others, as discussed in section 3.3.1 (Corstjens & Corstjens, 1999; Grewal & Levy, 2012; Levy & Weitz, 2012). They began to look into product development and created their own brand products. This development was identified within the case company as GEHE Pharma also offers own brand products to the "healthy life-pharmacies" cooperation partners, in an effort to differentiate themselves from other wholesalers in the market.

#### Interim result

Due to the changing market environment in the FMCG market the aspects about matrix and trade marketing were highlighted, but as these are already part of normal practice they were not explicitly mentioned by the interviewees during the discussion with manufacturers. For an adjusted ECR approach the matrix and trade marketing strategy would need to consider the pharmaceutical wholesaler as one additional market participant, and the role of the wholesaler to increase the category profitability, as so far the wholesaler is not considered in the pharmaceutical manufacturers` strategy. Indeed trade marketing could be a starting point for an improved collaboration between pharmaceutical manufacturers and wholesalers to start thinking of how to increase the category profitability together before establishing the ECR approach.

The market environment of the pharmaceutical market is changing and therefore these aspects could also be a starting point in the pharmaceutical market. The aim is to become a preferred wholesaler. On one hand to become the preferred service and supply chain provider for the pharmaceutical manufacturer and to get volume back into the wholesale supply chain, whilst additionally becoming the preferred wholesaler for retail pharmacists in terms of supply chain and services. One service could be to offer an own brand assortment for the retail pharmacies, as the case company is already doing. This would support the idea of customer centricity in the ECR model. But, different to FMCG, it is recommended that the wholesaler considers manufacturers as well as the retail pharmacists as customers.

### Summary of recommendations

Recommendation	Aim
To offer special services to manufacturers	To get the volume back into the wholesale supply chain from the manufacturers
To offer special services to pharmacies (e.g. own brand assortment)	To become preferred wholesaler for the pharmacists

**Table 6.2:** Summary of recommendations with regard to environmental factors

# 6.2 <u>Relationship Aspects / Roles and Responsibilities</u>

The main difference between both industries is that in FMCG, the relationship is mainly between manufacturers and retailers. In the pharmaceutical industry a wholesaler is generally part of the supply chain. One reason is that retail pharmacists can only own a maximum of four stores (Simon, 2013) and have no central warehouse for those stores. Hence, the wholesaler has the role as stock keeper and delivers small quantities per order. The other difference is that pharmaceutical manufacturers consider the wholesaler only as a distribution provider and not as a trade partner (Specke, 2005; Mähr & Rossmy, 2008), whereas in the FMCG manufacturer and retailer consider each other more as business partners.

The pharmacy is the customer of the wholesaler, as explained in section 2.7 (Specke, 2005). The pharmacist normally works with one main and a secondary wholesaler. The latter is used if an item is not available through the main wholesaler, although retail pharmacists will quickly change their main supplier if they can get better terms and conditions from another wholesaler. In general, this circumstance is very similar to the FMCG industry where manufacturers are easily replaceable. FMCG stakeholders stated their concerns that the grocery retail market is dominated by only a few players (Walters & White, 1989; Anders, 2008) who still dictate the framework of the collaboration, which contradicts the idea of ECR. This same situation was mentioned in the literature review with regard to the market environment before ECR started, as discussed in section 3.5.1, because suppliers considered they were obliged to join certain projects otherwise the retailer could move the turnover to another manufacturer (Thonemann et al., 2003). This demonstrated that in the FMCG market ECR principles are not yet universally established, as those principles consist of a partnership idea with a balanced relationship.

In addition to that, in a DTP model manufacturers work more and more directly with the retail pharmacies which does not help in establishing a trustful relationship between wholesalers and manufacturers (Umbach, 2013). In this case manufacturers and wholesalers are acting as competitors within the market.

Market economy works in both industries (pharmaceutical and FMCG) in the same way. The aim of pharmaceutical manufacturers is to increase market share and profitability which was also the case in FMCG (Kilimann & von Schlenk, 1998). Therefore, in FMCG manufacturer and retailer were starting a strategic partnership within ECR. In comparison to the FMCG market, in the pharmaceutical market, a change of mind-set regarding the building of a trustful relationship in the collaboration could not be identified during the study. The pharmaceutical expert saw an increase in the collaboration more as a consequence if they were to start working closer together with a wholesaler, because their focus was more result orientated rather than aiming for a strategic partnership. For them the focus was on their results and the partnership was more or less the way to achieve it. The

opposite was the case in the FMCG where there was a common target formulated in the collaboration model between both partners, i.e. it was a common approach.

The project between GEHE Pharma and an OTC manufacturer had failed due to the missed opportunity of setting up a common strategy and building trust. The topic about missing trust was not specifically stated during the interviews but was recognized in the way some answers were given. At this point it should be pointed out that in the interviews the issue of missing trust was more alluded to on the manufacturer side. It was further noted in the observation that the GEHE Pharma employees were not ready to build a business case with defined KPI's as a common approach between wholesaler and manufacturer. The missing common strategy was not stated during the interviews because both parties thought that they had a clear strategy. This aspect supports the above argument that the manufacturer sees the wholesaler only as a distribution provider because the manufacturer did not expect a strategy discussion with the wholesaler. This was also identified in terms of the marketing strategy as discussed under section 6.1.

Mutual trust needs to be built between all participants. The literature investigation showed that lack of trust was a hurdle in the collaboration between FMCG manufacturers and grocery retailers (Großpietsch, 2003). In that example (see section 3.5.1.1), and one of the first ECR projects between Bahlsen KG and Konsumgenossenschaft Dortmund, trust building was a key factor of success (Hebler, 1998). An important factor in that project was to understand the processes and business requirements of both companies. An open form of communication was another key success factor which needs to be considered.

The debate in the literature about ECR documents more the scepticism on the retailer side but shows also that the changing environment of collaboration had an effect on employees on both sides (Engelhardt, 1984; Gegenmantel, 1996; Rudek, 2008). Through this the assumption can be made that the pharmaceutical market is in the same stage as the FMCG market was during the starting phase of the ECR approach. A model or a similar one which is described by Großpietsch (2003) and presented in section 3.5.1.1 was not found during the research into the pharmaceutical market. The FMCG experts confirmed the importance of this model idea.

Furthermore, debate in the literature shows that grocery retail buyers view the manufacturer as a rival (Engelhardt, 1984; Gegenmantel, 1996; Corstjens & Corstjens, 1999; Rudek, 2008) and that this hurdle could not completely be overcome with the ECR initiative (section 3.4). The comparison between the FMCG market (relationship between manufacturers and grocery retailers) and the pharmaceutical market (relationship between manufacturers and wholesalers) has shown that the relationships are very comparable.

In FMCG, it was necessary that job profiles of a buyer on the retailers' side and the key account manager on the other side had to change (Corstjens & Corstjens, 1999). This impression was also created during the observations and out of different interviews for the pharmaceutical market. All interview partners confirmed that the communication between manufacturers (FMCG or pharmaceutical) and the related procurement managers (FMCG or pharmaceutical) is mainly focused on a discussion about terms and conditions. But the interviews with FMCG experts also showed that the additional condition requests by the retailer moved the conversations from a pure negotiation to a more business plan orientated discussion. This was not confirmed for the pharmaceutical market by the pharmaceutical key account managers for the current relationship. This needs to be considered for a new way of collaboration.

#### Interim result

Due to the current use of DTP model between manufacturers and pharmacists it needs to be considered that for a new business model the most important point is to work out the strengths of a wholesaler and to identify additional services which the wholesaler can offer as a distribution provider. Those services should support the business of the manufacturer and thereby help to intensify the collaboration between manufacturer and wholesaler.

The example of GEHE Pharma supports the argument that the manufacturer sees the wholesaler only as a distribution provider. This was also already identified in terms of the marketing strategy as stated above. In general, this is the obvious role of a wholesaler but due to the environmental changes in the pharmaceutical market, wholesalers need to identify new roles and responsibilities to keep their market position. The example of GEHE Pharma shows that employees have not fully adapted into new roles and responsibilities and have also failed to create a business case for that project from a wholesaler perspective. That indicates that employees need to understand and train for the new roles. In the case of the GEHE Pharma project, it was an initial and innovative attempt in terms of a collaboration project. Therefore, the assumption can be made that as only one example was available, which in itself cannot deliver evidence that ECR does not work, does demonstrate that the attitude of involved parties needs to be changed and should be considered for the newly adjusted business model.

In addition to the above, a major element in a new a collaboration model is the trust building process. This could be done by using the model of Großpietsch (2003), which is used and known in the FMCG market, and could be translated into the pharmaceutical market where there is as yet no model in place. The Großpietsch (2003) model does not explicitly reflect only upon a relationship between manufacturer and retailer and therefore it could be adapted and used for the relationship between manufacturers and wholesalers and would give a certain guideline for setting up a collaboration which is so far missing in that business.

The investigation shows that there are similarities in the relationship in both markets. FMCG has already adapted the method of working together. Therefore it is recommended that pharmaceutical experts on both sides change their mind-set and learn from the experiences within FMCG. That should be possible due to the fact that FMCG experts are now working in pharmaceutical businesses. This supports the adaptation within the relationship.

### Summary of recommendations

Recommendation	Aim
Wholesaler to identify additional services beyond supply chain	To overcome the pure supply chain role
Employees have to re-train for the new roles	To adapt to new roles and responsibilities

 Table 6.3: Summary of recommendations with regard to relationship aspects / roles and responsibilities

# 6.3 Supply Chain Management (SCM) Aspects

During the literature review investigation no specific correlation between FMCG manufacturers and wholesalers was identified. The ECR discussion focused on the direct relationship between the FMCG manufacturers and grocery retailers. In the established ECR model, wholesale business is not considered, although in the ECR definition of The Food Marketing Institute (1994), as discussed in section 3.5, the wholesaler is mentioned.

However in the pharmaceutical market the wholesaler takes an important role in the supply chain process. Within the literature, Mähr and Rossmy (2008) and Specke (2005), talk about economic added value of wholesale in the supply chain process. This was underlined by the pharmaceutical experts from the case company as an important and increasing future trend. Conversely, Umbach (2013) presented new supply chain opportunities such as DTP for the pharmaceutical market, which is in contradiction to that finding as DTP excludes wholesale from the supply chain (see section 2.7.3).

This aspect of the importance of the wholesaler in the supply chain was not identified or confirmed during the discussions with the other interview partners. Again, as was the case for the FMCG market, this aspect was also not identified in the literature review. This was not surprising due to the fact that in the ECR model only the relationship between the manufacturer and the retailer is considered.

For the experts on the manufacturer side of the pharmaceutical business DTP is an important topic to increase volume to generate a closer collaboration and direct contact with the pharmacists. To the contrary, the stakeholders of GEHE Pharma and Celesio AG see this trend towards more DTP business as a risk for losing turnover and volume, but also consider it as an opportunity whereby service offers to the manufacturers could enable them to recoup this business. During the interviews with GEHE Pharma stakeholders, no examples of remarkable success or any specific project with a manufacturer could be identified.

Those services need still to be established and implemented because supply chain management is a key initiative in the ECR model (section 3.5.1). SCM projects were mainly the starting point of a closer cooperation between a retailer and a manufacturer in the FMCG market (Schröder et al., 2000). This was also underlined by the FMCG experts.

Pharmaceutical interview partners mentioned the important role of the wholesaler in the supply chain process in the pharmaceutical market as stated above. But no specific SCM project was mentioned but potential could be seen, for example in assuming the role of the sales force and managing the stock level in a better way.

As a result for the SCM area of the ECR initiative it can be stated that there are untouched opportunities in the pharmaceutical market. There were no arguments identified against the transfer of the SCM initiatives from FMCG into the pharmaceutical wholesale business. As the literature review had shown the starting point of ECR was on the SCM side, as discussed in section 3.5.1(Schröder et al., 2000) and as the study of the Coca Cola Research Group Europe (1993) showed there are possible synergy potentials (Kilimann & von Schlenk, 1998). The defined key performance indicators (KPIs) of Thonemann et al. (2003) which measure on the supplier side, service level, delivery times, and logistic costs, and on the retailer side, the KPI's relate to shelf availability of goods, internal lead-time, stock and costs, could be implement into the pharmaceutical business and used for a SCM project between pharmaceutical manufacturers and wholesalers. One challenge is faced for FMCG and pharmaceutical markets: The investment for the technology and establishment of the right systems to drive EDI (Efficient Data Interchange), CRP (Continuous Replenishment Programme), VMI (Vendor Managed Inventory) or CPFR (Collaborative Planning, Forecasting and Replenishment), especially for smaller companies, as discussed in section, 3.5.1.3 (Food Marketing Institute, 1993, cited in von der Heydt, 1998; von der Heydt, 1998; Strüber, 1998; Hebler, 1998; Thonemann et al., 2003; Großpietsch, 2003; Seifert 2006; Huchzermeier & Iyer, 2006) could prove prohibitive. Interviews with FMCG experts showed that CPFR has not been brought forward during the last few years.

Another aspect arose during the interviews and observation with the experts of Celesio AG. All of them mentioned the end-to-end strategy of Celesio AG which connects the manufacturer with the patient through the wholesaler (figure 5.1). Not all the interview partners were clear whether that reflects only a supply chain end-to-end solution or whether it also considers the services as discussed under CM. During the observation the pharmaceutical manufacturers gave very positive feedback about the idea of end-to-end strategy. They were very interested to understand this in more detail. This illustration supports the idea of the interactive model as described by AC Nielsen (1992). It is recommended that buying and sales departments work as one unit. There should be one interface for manufacturers, which, with different targets, is not the case today (see also appendix 5.6). This needs to be remodelled.

#### Interim result

In the pharmaceutical supply chain the wholesaler has an important role. This was not perceived by all interviewees in the same way. The pharmaceutical manufacturers especially prefer a DTP model which excludes the wholesaler from the supply chain. Therefore, the wholesaler should develop services to strengthen their overall market position and recoup volume back into the wholesale supply chain. This discussion about the role of a wholesaler in a collaborative model in the pharmaceutical market could also lead into a discussion of where a wholesaler could deliver added value to the ECR model in the FMCG market. This question was not asked during the interviews and was not evaluated.

The first projects in ECR were about supply chain management. During the interviews this topic was not discussed. One key finding was that the interview partners focused on CM or assortment aspects rather than on SCM. The reason for this lack of discussion could not be due to the questions asked because the semi structured questions where about ECR in general and about ECR projects for both SCM and CM. This would indicate that either the reality in FMCG is different to the literature discussion or that the interview partners saw more potential in CM for the pharmaceutical market.

In terms of the investment for technology and establishment of the right systems, wholesalers could take over some tasks, especially in view of the fact that in the German pharmaceutical market the five leading wholesalers together make approximately 23 billion Euro in turnover per annum; of which the GEHE Pharma share is 4.1 billion Euro. This shows that these companies are bigger in size in comparison to the retail pharmacists. Therefore investments in IT tools would be more likely for those market participants. They could take over a service role in this cooperation model.

This picture about the end-to-end strategy of Celesio AG can be further used as a basic illustration for a newly adapted ECR model. It is important to show the principles of the relationship in the new business model behind each step and this will be described in chapter 7.

#### Summary of recommendations

Recommendation	Aim
Investment into IT service solutions	To support small companies (pharmacists)
Buying and sales departments work as one unit	To become one interface for the manufacturer

Table 6.4: Summary of recommendations with regard to SCM aspects

#### 6.4 Category Management (CM) Aspects

In the area of CM the results are the same as those reported for SCM, in that CM projects are managed between FMCG manufactures and grocery retailers (Schröder et al., 2000). The literature review revealed no instances where a wholesaler was involved in the supply chain between manufacturers and grocery retailers, nor any projects between a wholesaler and manufacturer or grocery retailer. Likewise the research also delivered no findings about a CM project between a FMCG manufacturer and a wholesaler, but the research did present some aspects in terms of assortment strategy, customer orientation and loyalty. Those topics will be discussed in more details hereunder.

The main focus of category management is the need of the consumer (AC Nielsen et al., 2006) as described in section 3.5.3. Pharmaceutical manufacturers also need to get closer to the point of sales. They use the same arguments as the FMCG experts by saying that getting closer to the consumer, obtaining market data and aligning promotions etc. delivers more opportunities for their business and the interviewees from the pharmaceutical manufacturers described the same important elements to enable them to have closer contact with the consumer. These arguments underline the four key elements of CM: 1. category definition with respect to the customer need; 2. leading categories as a strategic business unit; 3. merging buying and sales function in retailing; and 4. cooperation between industry and retail to better satisfy customer needs (Schröder et al., 2000). Therefore, those arguments support the possibility of transferring the ECR principles into the pharmaceutical market by showing the need to use the four key elements of CM. Some basic considerations of the model are already available.

GEHE Pharma as well as Celesio AG management also saw the same opportunities to develop a closer relationship with their customers. They argued, in the same way as the manufacturers, to aim for increasing their market share as is also the case in FMCG market (Draganska & Klapper, 2007). Therefore the collaboration model "healthy life-pharmacies" was established in GEHE Pharma to enable this closer relationship to the pharmacists.

Within the interviews with GEHE Pharma some CM projects were mentioned, indicating that in the pharmaceutical market, CM is known in the wholesale

business. GEHE Pharma offers their cooperation pharmacies different assortment recommendations per category. These assortments are built on the basis of market data and trends etc. but without considering the individual retail strategy of the retail pharmacists as described in the eight step approach of AC Nielsen et al. (2006), (see section 3.5.3). They engage manufacturers into the assortment building but the retail pharmacists are not involved. This is different to the CM approach within the ECR model, as in that model it is a collaborative approach between manufacturer and retailer and category planning is a strategic business unit (McGoldrick, 2002).

The investigation indicated that the market environment does not offer the possibility to involve all independent pharmacies into the strategic business discussion. Therefore the model should consider how to overcome this specific market factor by, for example, only engaging a few customers (retail pharmacists). Therefore, the three basic strategies for CM which are presented in different literatures sources, such as Rehbach (2010), Fowler and Goh (2012) or Seifert (2006), need to be adjusted to suit the participants in the pharmaceutical market, whilst in principle remaining the same: efficient assortment structure; efficient promotion strategy; efficient product introduction.

#### Assortment strategy

The debate in the literature demonstrates that grocery retailers build the assortment in relation to the strategy and, with the help of CM, this defines the assortment. Contrary to that the pharmaceutical wholesaler has to guarantee product availability in the market (Umbach, 2013) thus limiting their choices regarding their assortment.

The FMCG market aims to sell as much as possible (Riegl, 2012), whilst the pharmacist is obligated to avoid sales in unlimited quantities. The FMCG experts confirmed this view stating that this aspect is of great interest to the grocery retailers in the market, but that this is only the case where the margin is acceptable and comparable with the category margin. The pharmaceutical experts, especially the pharmacists, also confirm the viewpoint of Riegl (2012).

However, the pharmacists neglected the fact that the self-medication market consists of products which are also sold in the FMCG market, and that their obligation to avoid sales in unlimited quantities is not relevant for those products. They did not perceive a competitive disadvantage deriving from this regulation. Hence, the assumption can be made that there is a need to create awareness and support pharmacists to establish a sales strategy.

Within the CM approach the main focus is to build the assortment and to develop the entire category by increasing sales and the margin. The common aim of the manufacturer and the grocery retailer is to optimize the profit of the categories (Draganska & Klapper, 2007). During the research this was also identified as a common aim within all stakeholder groups. The selection of a category captain was also mentioned by GEHE Pharma stakeholders, as described in the ECR approach (Gooner et al., 2011) and as discussed in section 3.5.3.1. But contrary to the ECR approach, the interviews revealed that GEHE Pharma stakeholders do not always select the most suitable manufacturer. The choice was sometimes the result of a negotiation. This situation of whether this might also be the case in the FMCG market could not be fully investigated and challenged during the interviews with the FMCG stakeholders as they had no knowledge about the selection process for a category captain within grocery retail companies. They only confirmed the principles as investigated during the literature review.

During the interviews with the pharmaceutical experts a category captainship was seen as potentially transferable from FMCG into pharmaceutical business. However it was also stated that this should be organized through a pharmaceutical wholesaler due to the fact that if a manufacturer became a category captain in the relationship with a retail pharmacist, the number of stores would be too small (four stores maximum) and such a project would be too costly and would not deliver the expected results.

Another challenge could be that consumer demand, customer structure, and size of the retail pharmacy could be completely different between the independent pharmacies. Therefore an assortment recommendation could be quite difficult. Whilst this topic was not directly discussed during the interviews those differences were mentioned by pharmaceutical experts in regard to new sales strategies. The literature also refers to this point for FMCG (AC Nielsen et al., 2006) an aspect which was discussed in section 3.5.3.3. In FMCG the challenge for grocery retailers is how to define one category layout for all stores, which suggests that this aspect, within retail pharmacies, should not be considered as an obstacle: the question is more about identifying a certain framework which considers this type of challenge. The results identified in section 5.4.2 for the potential of transferring ECR principles demonstrates that the pharmaceutical wholesaler could be considered as a problem solver and could provide an assortment guideline for the retail pharmacies.

As a prerequisite, a change of job profiles would be needed in the pharmaceutical business, as described in the ECR principles in section 3.4 (Seifert, 2006). The interview discussions indicated that the behaviour and the understanding of the roles of the stakeholders in the pharmaceutical market is similar to the traditional FMCG market, before the introduction of ECR, but an awareness of that situation is not yet apparent. This awareness needs to be stimulated to get the process started, and this would generate competitive advantage by being the first in the market to adopt this approach.

#### Customer orientation

Customer orientation is becoming more and more important (Schögel & Herhausen, 2012) due to the fact that the healthcare market is becoming increasingly competitive. Observations of Schögel and Herhausen (2012) suggests that pharmaceutical market participants are still thinking in traditional business models, where they ignor the need to develop new models with greater focus on "customer centricity" (as discussed in section 2.6), which is the key element in the ECR approach.

The definition of customer orientation is more difficult in the healthcare market as discussion about recognizing the patient as a consumer has not yet been finalized in the pharmaceutical market. Whereas in the FMCG market the needs of the consumer are the main focus and is embedded into organizational processes via CM (AC Nielsen et al., 2006). Here the opinions of the interviewees were different.

The pharmaceutical stakeholders saw themselves as very customer focused as was stated during different interviews. But the interviews and observations did not deliver real evidence on this topic, as, at times, it was not clear who the customers were.

Particularly for the wholesale stakeholders, the pharmacist was seen as a customer in addition to the end consumer, as they called the customer in the pharmacy. But during the observations in manufacturers' meetings it was also identified that the focus of the key account managers of the manufacturers was on the patient as a consumer and their questions were oriented more towards how to better reach those consumers. Here a potential conflict was recognized. The aim of the GEHE Pharma stakeholders was to find solutions to serve their customers, the pharmacists, more effectively. The pharmaceutical key account managers were focused more on the consumer within the pharmacy. This indicates that in this case the wholesaler and the manufacturer have different targets in mind, whereas in the ECR approach manufacturer and retailer focus together on the end consumer. The same result was obtained in the direct interviews with the pharmaceutical manufacturer stakeholders as they want to work directly with the pharmacists in order to better reach the end consumer instead of having a wholesaler in between.

The pharmacists see themselves as absolutely patient orientated a fact which was also borne out by Hahn (2006). However, in the healthcare market it is more difficult to talk about customer orientation because there are also other very specific relationships to be considered, such as those between doctor and patient (Stange, 2012). When it comes to the point of how to translate customer orientation into business practice for the "free choice" and "visible choice" assortment the interview partners had difficulty in describing that process. For these assortment categories the pharmacists could act more as traders, as discussed in section 2.8, and have more of a sales conversation with the consumer (Hahn, 2006).

This is an important aspect for establishing ECR principles in the pharmaceutical market. An awareness of the importance of customer focus exists but, especially

for the pharmacists, the question lies more in how to translate it into a business model in such a difficult trading environment, due to all the changes in the market.

#### Customer loyalty

In the pharmaceutical market, there is currently no significant customer loyalty in the relationship between wholesalers and retail pharmacists (Mähr & Rossmy, 2008). In Germany, there are five wholesalers leading the market (IMS 2013; see also figure 2.8) who deliver several times each day the pharmacies (see section 2.7). The interviewed pharmacists had not completely assessed this aspect of loyalty as, due to their collaboration agreement they have to buy a certain share of turnover from GEHE Pharma, but it was also recognized that the interpretation of loyalty was interpreted differently by the pharmacists. When confronting the stakeholders of GEHE Pharma and Celesio AG with this finding it became clear that to a certain extent they were aware of this circumstance, but they argued that they work constantly on the need to increase their services for the partner pharmacies in an attempt to solidify their loyalty. This was, in fact, confirmed by the retail pharmacists, who praised the services offered by GEHE Pharma, for example OPR, own brand assortment or sales promotions.

The services which GEHE Pharma offers to the "healthy life-pharmacies" concept are services which fall under the basic strategies of the category management concept within the literature discussion in section 3.5.3.2 (Seifert, 2006; Rehbach, 2010; Fowler & Goh, 2012). This conveys some indication for the potential of implementing the ECR initiative into the pharmaceutical market, as the review highlights that some elements are used but not yet established in a collaborative business model. They are used independently without a broader connection between manufacturers, wholesalers and pharmacies.

The GEHE Pharma and Celesio AG interview partners mentioned that since 2013 they have been testing a new concept which is called Lloyds Pharmacy. Due to the fact that the concept is quite new in Germany and in fact only two pilot pharmacies are currently being tested, this concept is not considered further for this current research. But it does underline the discussion during the interviews with the stakeholders that they are becoming more and more aware of the importance of creating new services which help to distinguish them from other competitors and the need to establish customer loyalty with the pharmacists. They understand that this needs to be further developed and improved as they also stated that competitors are offering similar concepts and that, especially wholesalers with a cooperative organizational structure, have the advantage that pharmacists own the wholesaler and, due to this circumstance, already have a strong bond with the wholesaler.

The literature gives no further input about loyalty programmes in the pharmaceutical market and indeed wholesale collaboration programmes in that market were only mentioned by Mähr and Rossmy (2008) but not in detail (see section 2.7.5). They merely mentioned that wholesalers have created "commitment models" and they used GEHE Pharma as an example.

When talking to the pharmaceutical manufacturers about these cooperation services a different view was acknowledged in that they saw this topic as critical. They stated that whilst such services are, in principle, very good tools they were obliged, during negotiations with the wholesalers, to pay for them. It was also stated that this is more or less the case for all wholesalers in the market. The negotiations are the selection process for identifying the manufacturers as partners for the cooperation services. This is in contradiction to the CM principles which underline the importance of a functional expert team who work closely together, as discussed in section 3.5.3 (Nielsen, 1992; McGoldrick, 2002). As a consequence the manufacturers consider that they could generate higher profits for themselves if they build a greater direct relationship with the pharmacists instead of considering how they could work more closely with the wholesaler to use a collaboration model to increase their profitability. This argument was rejected by the GEHE Pharma/Celesio AG experts because they stated that they could prove that there is a benefit for the manufacturer due to their close relationship with the pharmacy cooperation partners which would support their ability to increase the manufacturers' share of profitability.

The FMCG experts confirmed the point of view of the pharmaceutical manufacturers. They also saw no added value for those projects which result only

from a negotiation process and not established between them under ECR principles. For projects in regard to ECR principles they stated that, with the retailer, they define a business plan with clear key performance indicators which leads to a win-win partnership agreement. This underlines the importance of making the pharmaceutical stakeholders aware of ECR principles to avoid conflict areas.

In the literature there are also debates about customer loyalty in the light of the customer centric approach. Grewal and Levy (2012) discuss it under the aspect of customer excellence in a retail value based strategy. There are different definitions available, as shown in section 3.3.2 (Seifert, 2006; McGoldrick, 2009; Ryding et al., 2014), but the focus lies on the relationship between the grocery retailer and the consumer. It indicates the initiatives which a retailer needs to consider for attracting a consumer, but is different to the description of the GEHE Pharma stakeholders who consider the relationship between pharmaceutical wholesalers and pharmacies for a loyalty programmes. But on the other hand it is obvious due to the different market environment and role of a wholesaler in the pharmaceutical market.

In the interviews with the pharmacists it was stated that they have no customer loyalty card programmes in place but there could be interest and an opportunity to consider this, if GEHE Pharma could offer a service to facilitate it. This needs further investigation with other cooperation partners of GEHE Pharma because the interviews were conducted with only two of GEHE Pharma partners. There is no evidence of other GEHE Pharma cooperation partners having something already in place for their consumers.

These findings show that there is potential for thinking about loyalty programmes as a new service for the pharmacies, but additionally to consider how to involve the pharmaceutical manufacturer in this topic. In general, it needs to be kept in mind for a new business model that, in the pharmaceutical wholesale market, two dimensions of loyalty programmes need to be considered; one in the relationship between the wholesaler and the pharmacists and one between the pharmacists and their consumers. Additionally, it is important to reflect upon how the manufacturer can be involved in both programmes and what role the wholesaler could play in a loyalty programme between the pharmacist and the consumer.

#### Interim result

In general, CM is known in the pharmaceutical wholesale business but the market environment does not allow for using the same process as that in the FMCG market. Overall, it is possible to use the eight step CM approach of AC Nielsen et al. (2006) with an adaptation for the participants due to the fact that the trader does not belong to a retail chain (as in FMCG) with a large number of stores. Therefore, the model would need to be adjusted to consider individual retailers with a maximum of four stores.

The second adaptation which is needed is the definition of the customer. The manufacturer together with the wholesaler has to consider the retail pharmacists in addition to the "end consumer" as customers to respond to customer demand, as it is the case in the ECR model. This should be possible in view of the definition of efficient reaction to customer demand from the Food Marketing Institute (1994, cited in von der Heydt, 1998) and discussed in section 3.5, which indicates the participation of wholesalers into this approach.

The investigation of the CM approach between FMCG and pharmaceutical markets has shown that there are several aspects already available in the pharmaceutical market and that GEHE Pharma, with their collaboration model, follows those ideas. But as discussed in the literature, for the category captain approach no evidence was found that the principles are established in either FMCG or pharmaceutical business. Hence, for both markets there is room for improvement to follow the principles. Therefore, the pharmaceutical wholesaler could be considered to take the lead in such a project and bundle the demand of different independent pharmacies. An obstacle could be that the wholesaler has no direct access to the shelves of the retail pharmacies, meaning that the wholesaler could only give some recommendations, as it is done by GEHE Pharma today.

Furthermore, another option for the wholesaler would be to enhance their role as an intermediary between manufacturers and pharmacies through work on business plans to suggest how best to serve the end consumer. All three market participants need to focus together on the end consumer. Wholesalers can translate the needs of the pharmacists and the consumer to the pharmaceutical manufacturers and on the other hand support the pharmacists in translating consumer needs into a commercial offer and adopt the role of a retail trader. Here the pharmaceutical wholesaler could take an important leading role and give advice or training to the pharmacists.

The investigation has highlighted that there is a lack of sales strategy in the pharmacies and therefore, the wholesaler could support them by offering sales training. I would consider the wholesaler instead of the manufacturer in this scenario as it would also have the advantage that the wholesaler could support the pharmacist by bundling volume, obtaining better prices and offering a competitive assortment.

Customer loyalty is a more complex issue in the pharmaceutical market because it has more dimensions than in FMCG. In the FMCG market it is only about the relationship between the retailer and the end consumer. This is, of course, also one aspect in the pharmaceutical market but in addition to that, a loyalty programme between the wholesaler and retail pharmacists is important, as observed between GEHE Pharma and their customers (retail pharmacies) today. The case study showed that this is an important tool to keep the pharmacist loyal to the wholesaler. Despite this, one aspect is still missing and that is the relationship between the wholesaler and manufacturer; wholesalers need to consider manufacturers as customers and to create loyalty programmes to maintain the volume of business with the manufacturer in their wholesale supply chain.

The above discussion supports the idea of a successful partnership between manufacturers and wholesalers. Within the research it was not identified how such a partnership would appear and no common explanation given. Additionally no argument was identified which would support a standard definition. Despite this it could be an aspect which could be defined individually in any collaboration model between manufacturer and wholesaler.

#### **Summary of recommendations**

Recommendation	Aim
To offer sales training for pharmacists	To support establishing sales strategies in pharmacies
To lead a category captain approach and the selection of the manufacturer	To bundle volume of independent pharmacies
To take the role as intermediary between manufacturers and pharmacists	To translate needs of the pharmacists and the consumer to the manufacturers

Table 6.5: Summary of recommendations with regard to CM aspects

#### 6.5 New Themes and Opportunities for the Pharmaceutical Market

In the sections above I displayed and considered the obstacles and the supportive aspects in regard to ECR elements between the pharmaceutical and FMCG markets. Furthermore, I compared those findings with the relevant literature discussion. It is clear that some possible approaches can to be considered for a potential transfer of the ECR principles. But during the interviews and observation some new aspects were mentioned which show potential in the pharmaceutical market with a need for a changing business model. Those aspects are addressed below, whilst table 6.6 provides some recommendations for wholesalers to enable them to support the new themes and opportunities which have been identified.

In the interviews with the key account managers of FMCG and pharmaceutical manufacturers some potential category areas were identified. These aspects correspond with the category management approach in the ECR model and are therefore addressed in the following discussion as they could deliver some potential ideas for a newly adapted business model.

#### Neighbourhood store commissions

The investigation shows that there is a potential for retail pharmacies to adapt their business model to a specific location and to act as a neighbourhood store provider in more rural areas. This topic was mentioned during the interviews because the leading German drugstore closed down their business in 2012 and there are still rural areas where there is no neighbourhood store. This gap could be filled by a pharmacy, a circumstance which was also stated in a similar way in a press release as mentioned in section 2.5.1.2 (Lebensmittel Zeitung, 06.12.2013).

A prerequisite for taking on a role as a neighbourhood store would be that the pharmacist takes into the assortment additional "mass market products". This terminology was used by the interview partners to describe products which are sold in the FMCG retail grocery chains as well as drugstores, an example of products which have only a certain correlation to the healthcare market would be baby wet wipes or cotton buds. The legal limitations in terms of the assortment structure in a pharmacy have to be considered when adding additional "mass

market products" to the assortment (see section 2.9). Due to this restriction, the pharmacists could consider those products which are related to the healthcare market, but could not add products like kiosk items (e.g. ice-cream or soft drinks) to the assortment. Therefore the pharmacist could not fully replace a neighbourhood store but it could cover those products which are mainly sold in a drugstore.

This implies that the "free choice" assortment in the pharmacy would increase and the pharmacist takes on the role of a trader. But it also implies that the pharmacist also has to consider price competition with drugstores and grocery retailers for those products. However, due to the fact that this idea is to implement the concept in rural areas the price competition effect would not have such a prohibitive impact. In rural areas continuous replenishment would be more important than price.

A further aspect which needs to be taken into account is that so far the pharmacists consider themselves more as healthcare professionals and not as traders. They serve their consumers in a reactive rather than a proactive fashion. For them the focus is more on the prescription drugs than on the "free choice" assortment. This implies a change of mind-set by the retail pharmacist and the need to have additional products in stock by the wholesaler.

Overall, an increase of the "free choice" assortment in the pharmacy gives all stakeholders (manufacturers, wholesalers, pharmacists) the chance to consider the basic strategies of category management (see 3.5.3.2) and to increase CM programs in their collaboration because for those products the CM approach is used in FMCG.

#### Category: Beauty & cosmetics

The neighbourhood role for a pharmacy was especially emphasized within the category of beauty & cosmetics, although once again legal limitations for the assortment have to be considered. But it was further pointed out that increasingly manufacturers place too much stock on the shelves and that they handle the shelf layout by themselves, in a so-called depot contract with the pharmacists. This

creates stock and networking capital costs for the pharmacists and due to these depot contracts the wholesaler is not considered other than in an advisory role.

In the adapted business model this depot concept should be revised to support the pharmacists in a better way and to reshape the role of the wholesaler in that business concept. The wholesaler could take the advisory role as discussed during the interviews but with a stronger focus on selecting the product range and the stock control.

#### Cross selling

The topic of cross selling was mentioned as a way to support the expansion of the "free choice" and "visible choice" assortment with possible cross selling between different category groups. The FMCG experts focused on different categories within the "free choice" assortment in the FMCG market. The cross selling effect is also discussed in the ECR literature as an important topic for category assessment, as shown in section 3.5.3.2. Shoppers bundle certain articles in one shopping act (Boztug & Hildebrandt, 2008).

There is a need to investigate whether the principles of cross-buying or impulse buying would also work in pharmacies as it does for FMCG categories. The point of view between the interviewed pharmacists was not consistent as to whether a consumer comes into the pharmacy mainly for a prescription, or chooses the pharmacy for its "visible choice" or "free choice" assortment. No evidence could be found as to whether consumer behaviour has a bearing upon prescription, "visible choice" or "free choice" assortment. If the first choice of a pharmacy is about the "free choice" assortment then it is even more important to have the right product range and product mix in the front shop area.

#### Category: Cough & cold

The OTC market (especially the category of cough & cold) is showing stronger market growth for the retail pharmacies than for food retail, drugstores and discounters, as presented in section 2.5.1.1 (IMS cited in Lebensmittel Zeitung, 13.12.2013). This development trend gives an indication that the retail pharmacy is an important point of purchasing for the consumer. It seems that, especially for health products, the consumer trusts the pharmacists who can provide a consulting service which the food retail, drugstores or discounters do not. That was also acknowledged by the experts, but they stated that as this is not yet fully used as an advantage there is still room for improvement. However, the GEHE Pharma stakeholders pointed out the very seasonal aspect of cough & cold products and that the next season could not be planned so far in advance and therefore they did not see any great potential in this category.

The aspect of trust in a pharmacy, especially for OTC products, needs to become an important part of the focus in the model. Manufacturers and wholesalers need to address the point about how to improve services in product ranges for OTC and thereby increase the loyalty of pharmacists and consumers (Hahn, 2006). OTC products have the advantage that they are only partially available in a drugstore or grocery retail store giving pharmacists the advantage that such products are outside of strong competition between grocery retail and drugstores. Hence, the participants in the pharmaceutical market (manufacturers, wholesalers, retail pharmacists) have the opportunity to increase customer loyalty through this assortment and generate higher market share, as is the aim in the ECR approach.

#### Innovations & new products

In the background assessment of the pharmaceutical market, the topic of innovations and new products has only been mentioned by Schröder (2010) in the context of prescription drugs and their R & D for new molecules (see section 2.4.1). In the literature discussion there is no focus on the self-medication market. In the interviews with the pharmacists they mentioned that they do not see many new innovations in the "free choice" and "visible choice" assortment but this

statement could not be validated by evidence in the form of figures and also no concrete expectations were formulated by the interviewed pharmacists.

During the interviews with the experts of the pharmaceutical market they stated that articles from the categories of OTC and para pharmaceuticals are no longer exclusively for the pharmacy. More and more suppliers try to bring the products directly into all possible sales chains. Manufacturers argued that TV advertising was the reason why they have to offer the product to a wide range of sales points. This product introduction into all market channels at the same time creates a disadvantage for the pharmaceutical market, but it could be translated into a business opportunity if an OTC product were to be introduced only in the pharmaceutical market, or exclusively for a limited amount of time. This would underline the healthcare competence in the eyes of the consumer for that market.

Regarding this topic the manufacturers from FMCG as well as from the pharmaceutical market indicated the rising costs of R & D and marketing necessitating the need to obtain a wide product listing to generate the highest turnover from the outset. A wide listing could help cover the high marketing costs and reach more consumers. Therefore, it is important that wholesalers increase their sales strategy for new product launches to get a new product exclusively into the supply chain. That would save costs for the manufacturers (no own sales force would be needed) and would support the demand from the retail pharmacists for a sales service from one representative for different products.

The other potential new sales strategies for pharmaceutical manufacturers mentioned in section 5.4.4 are not considered further, because the first idea about "dummy placement" has been taken to court by the antitrust authority. Hence, the outcome and further steps are unclear at the moment. The second discussion about umbrella brand strategy is more related to an internal manufacturer discussion. In the definition of the strategy no involvement of a wholesaler is necessary. Here the wholesaler can support the implementation of the products into the market within the ECR approach.

#### Recommendations

Recommendation	Aim
To identify the possible products for a neighborhood store assortment and offer those items in the wholesale assortment	To keep the pharmacists as customers and in the wholesale supply chain
To take the advisory role for cosmetic depots and to select the product range and to control the stock management	To help the pharmacists to select the right product range (manufacturer) and to reduce the stock level and networking capital costs
To support the pharmacists with CM programs to identify the right "free choice" assortment	To increase cross selling effects between "free choice", "visible choice" and prescription drugs
Special focus on OTC products which are not available in drugstores or grocery retail stores	To avoid competition between pharmacies and drugstores or grocery retail stores
Wholesaler to offer sales strategies for new product launches	To get new products exclusive into the wholesale supply chain

Table 6.6: Recommendations with regard to new themes and opportunities

#### 6.6 Chapter Conclusion

The comparison between the research findings and the literature review shows that there are many similarities between the FMCG and the pharmaceutical markets. No aspect was found which would not allow for implementing ECR principles into the pharmaceutical market. Comparable demands were identified especially for the "free choice" the "visible choice" assortments.

The cooperation between pharmaceutical manufacturers and wholesalers is limited to a distribution agreement and manufacturers prefer to work directly with the pharmacies, which creates a certain conflict in the relationship between manufacturers and wholesalers. By considering the two areas of the ECR model the following assumptions can be made. Supply chain projects were mainly the starting point in the collaboration between FMCG and grocery retailers whilst in the pharmaceutical market no notable project was identified. Also the interview partners only rarely touched upon this topic.

On the demand side it was identified that some elements of CM are already established but without a broader connection between the market participants. The understanding of ECR principles was not recognized or implemented in the pharmaceutical market.

But encouragingly new themes and opportunities in the pharmaceutical market were identified which correspond with the CM approach in the ECR model. Those topics could deliver some potential aspects for the adapted model. Furthermore, the investigation delivered some ideas to help formulate some recommendations for the pharmaceutical wholesaler which would support the implementation of an adapted ECR model into the pharmaceutical market.

Table 6.7 summarizes the recommendations which were made in the different sections in chapter 6. Those recommendations should support the pharmaceutical wholesaler to become more engaged in the supply chain and category management approach in the pharmaceutical market. Those topics are linked to an adjusted business model in section 7.2 and therefore, the last column of table 6.7 shows in which sections the recommendation is considered in the final chapter 7.

## Summary of recommendations

Recommendation	Aim	Considered in the recommended business model in section 7.2
To offer special services to manufacturers	To get the volume back into the wholesale supply chain from the manufacturers	Section: 7.2.1
To offer special services to pharmacies (e.g. own brand assortment)	To become preferred wholesaler for the pharmacists	Section: 7.2.1 ; 7.2.2
Wholesaler to identify additional services beside supply chain	To overcome the pure supply chain role	Section: 7.2.2 ; 7.2.5.2
Employees have to re-train for the new roles	To adapt to new roles and responsibilities	Section: 7.2.4
Investment into IT service solutions	To support small companies (pharmacists)	Section: 7.2.5.1
Buying and sales departments work as one unit	To become one interface for the manufacturer	Section: 7.2.1 ; 7.2.2
To offer sales training for pharmacists	To support establishing sales strategies in pharmacies	Section: 7.2.5
To lead category captain approach and the selection of the manufacturer	To bundle volume of independent pharmacies	Section: 7.2.1
To take the role as intermediary between manufacturers and pharmacists	To translate needs of the pharmacists and the consumer to the manufacturers	Section: 7.2.2 ; 7.2.5.1 ; 7.2.5.2
To help to identify the possible products for a neighborhood store assortment and offer those items in the wholesale assortment	To retain the pharmacists as customers and in the wholesale supply chain	Section: 7.2.5.2
To take the advisory role for cosmetic depots and to select the product range and to control the stock management	To help the pharmacists to select the right product range (manufacturer) and to reduce the stock level and networking capital costs	Section: 7.2.5.2
To support the pharmacists with CM programs to identify the right "free choice" assortment	To increase cross selling effects between "free choice", "visible choice" and prescription drugs	Section: 7.2.5.2
Special focus on OTC products which are not available in drugstores or grocery retail stores	To avoid competition between pharmacies and drugstores or grocery retail stores	Section: 7.2.5.2
Wholesaler to offer sales strategies for new product launches	To get new products exclusively into the wholesale supply chain	Section: 7.2.5.2

 Table 6.7: Summary of recommendations from chapter 6

### 7.0 CONCLUSIONS AND RECOMMENDATIONS

The aim of the research was to investigate whether the ECR model, either in its current or in an adapted form, could be utilized by the pharmaceutical wholesale sector in Germany. The occasion was the changing market environment within the pharmaceutical wholesale industry in Germany (as discussed in section 2.7). The result of the research is a normative model for the pharmaceutical wholesale sector in Germany which shows that the existing ECR principles from the FMCG market can be transferred into the German pharmaceutical wholesale sector in an adjusted format. Furthermore, at a principle level, the research shows that the potential exists to adapt the ECR model to other business sectors beyond pharmaceuticals.

Different objectives had to be addressed as outlined in table 7.1. Firstly, to investigate the key environmental issues impacting on pharmaceutical wholesale business in Germany and to assess how the ECR model developed for the FMCG sector is working in that sector. Secondly, to investigate the potential to adapt the ECR model in order to transfer it to the pharmaceutical manufacturer / wholesaler / pharmacy retail relationship and, finally, to develop an adapted ECR model for the pharmaceutical market that enhances the role of the wholesale sector. Table 7.1 gives an overview of the research objectives and how they were addressed within the research.

Overall, all objectives were answered within the research. The assessment of how the ECR model is currently working in the FMCG sector could not be fully answered within the literature review, as debate within the literature was about ECR development and the first ECR projects, but no discussion was identified which articulated the actual running of initiatives. However, within the quarterly check of journals/periodicals (see sector 3.2.3) in the database WISO Wirtschaftswissenschaften (economics and social sciences) some articles about ECR (especially about some conventions) were found but there were no detailed project descriptions and results. This did, however, give some evidence that the ECR initiative was being applied in the FMCG sector. Hence, the interviews with the FMCG experts were set up to generate understanding of running ECR projects in the FMCG market, to learn more about the obstacles in those projects and to elicit ideas where the managers see room for improvement and development of the initiative because, as stated above, the literature discussion was more about ECR principles.

Objectives		Were	
,		answered	
envir impa phar busir	nvestigate the key conmental issues acting on the maceutical wholesale ness in Germany	Yes	With the background study and with interviews of case company stakeholders
mod FMC	ssess how the ECR el developed for the CG sector is working ermany	Yes	The literature review gave an overview of the environmental forces within the market and the historical development as well as an understanding of the two elements (SC and CM) of the ECR model There was no literature discussion found which addresses current collaboration projects between manufacturers and retailers. Only in journals and periodicals some articles about ECR congresses etc. were found It was confirmed by interview partners with FMCG experience that the model is still used in the FMCG sector but potentials for
3. To ir	westigate the	Yes	improvement are recognised With the background study,
pote ECR trans phar man / pha relati	nvestigate the ntial to adapt the model in order to sfer it to the maceutical ufacturer / wholesale armacy retail ionship		interviews and observations
ECR phar that	evelop an adapted model for the maceutical market enhances the role of vholesale sector	Yes	The recommended model is presented in section 7.2

#### Table 7.1: Research objectives

Within the literature review (chapter 3) the identified discussion was, in the main, about the starting phase and the model itself. But this was not an obstacle as it was important for the research to understand the ECR model structure and the approach. Furthermore, there was no indication found that the model was not working within the FMCG market as it continued to be mentioned in journals/periodicals as stated above. It was also confirmed by the interview partners who had FMCG experience that the model is still used in the FMCG sector.

When comparing the FMCG and pharmaceutical markets during the case study analysis (see section 5.4.1) key similarities were identified, but equally there were a number of important differences which signified that it would not be possible to transfer the current ECR model from the FMCG industry to pharmaceuticals without making adaptations. In order to develop an adapted ECR model more suited to the pharmaceutical sector, both the similarities and the differences needed to be considered (see table 6.1) as these gave the first indications about which parts of the model needed to be adjusted. Importantly, the newly adapted model needs to consider the additional involvement of pharmaceutical wholesalers whilst also focussing on the "free choice" assortment of pharmacy retailers as the "free choice" assortment is placed in the walk-in area within a pharmacy (in a similar way to the FMCG retail store concept), but would also include the "visible choice" assortment which is placed behind the counter but still visible to the customer.

This research has provided ideas for how wholesalers can become more engaged within the supply chain in regard to pharmaceutical category management. These suggestions, which include special services to manufacturers and pharmacies, are presented more fully in chapter 6 and an overall summary of the recommendations is presented in table 6.7. The recommendations have led to the development of an adapted model for pharmaceutical wholesale businesses in Germany, based upon the original ECR principles used in FMCG markets.

#### 7.1 <u>Conclusions</u>

The starting basis of this research was the changing market environment in the pharmaceutical wholesale sector in Germany as the pharmaceutical market was consolidating distribution channels. The aim of manufacturers for differentiation requires an improved relationship between end consumers and pharmacists (Hofmann, 2013b). Therefore, manufacturers are trading much more directly with pharmacies which has led to a shift in the supply chain from deliveries via wholesalers to direct deliveries. Wholesalers are caught between the strong supply power of manufacturers and increasing demand power of pharmacies (Hofmann, 2013b) although the number of pharmacies has been declining since 2008 (ABDA, 2014).

These environmental factors were similar in the FMCG market in the 1980s and were the reason why a change in the business model was considered between manufacturers and grocery retailers within that market (see section 3.3.1). Hence, those factors were the consequence of the development of ECR. It is this environmental similarity that led to the ECR model being considered for this research.

Within the ECR model there are two collaboration areas: Supply Chain Management (SCM) and Category Management (CM) as discussed in section 3.5. Both areas are equal and could be used independently, but they also supplement each other because SCM focuses on optimizing the whole delivery process (Schröder, Feller & Großweischede, 2000) and CM is the demand driven area in the ECR model. CM focuses on the needs of the end consumer. Together they cover the whole supply chain from the manufacturer to the end consumer.

The case study analysis demonstrated that interview partners were more focused on the demand driven CM aspects within the ECR model (see section 5.6 and table 5.4) whereas in the FMCG market during the early years of ECR the first projects were established in the SCM supply side (Kotzab, 1999). This need not be viewed as a conflict as it adds weight to the findings by underlining the fact that pharmaceutical manufacturers already consider the wholesaler as a competent supply chain provider. Despite this they are now exploring a direct relationship with the pharmacists to generate more demand power and a better understanding of the end consumer, which is the focus in the CM approach. For this reason pharmaceutical manufacturers who were interviewed were interested in discussing whether there was potential for a CM approach with wholesalers. Interestingly the pharmacists who were interviewed were also mainly focused on the CM approach as they value receiving their deliveries several times a day from the wholesaler but do not perceive they have a huge demand in terms of replenishment. Some of the FMCG experts discussed both elements (SCM and CM) because they know the ECR model and could envisage a valuable proposition upstream (manufacturers) and downstream (pharmacists) for pharmaceutical wholesalers, a view which was reiterated by the stakeholders from the wholesale company.

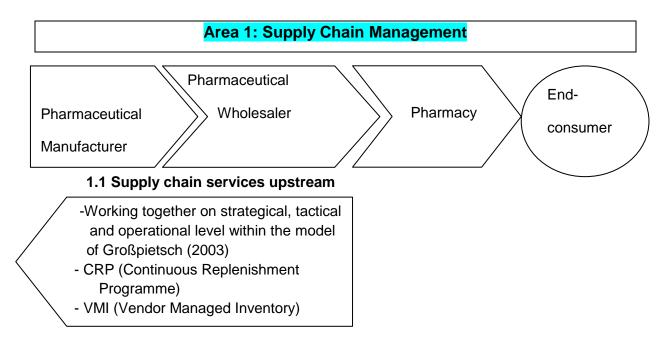
Considering the findings and the recommendations which were presented in chapter 6 (see table 6.7) as well as the additional possible services as shown in figure 2.11 the following newly adjusted model is the result of the research. As stated above the nature of this model is normative. I view it as a model because supply chain and category management work together as one end to end approach, although some of the services are more upstream whereas others are more downstream related. Nevertheless, these do have a connection because, for example, sales training for pharmacists are downstream but also deliver an upstream effect in terms of an increase in sales for the manufacturer. Hence, the model considers SCM and CM elements which taken together include manufacturers. wholesalers and pharmacists, supporting upstream and downstream services which enable a wholesaler to generate a closer collaboration with either manufacturers or pharmacists. Figure 7.1 presents the newly adjusted ECR model under consideration putting a pharmaceutical wholesaler within the supply chain. The model consists of two parts: Area 1: Supply Chain Management; Area 2: Category Management. I have divided Figure 7.1 into two parts (figure 7.1.1 SCM and figure 7.1.2 CM) in order to demonstrate that the model overall should be seen as a whole end to end solution, but has the additional advantage of also being used within the two separate parts of SCM or CM.

The main difference between the existing ECR model and this adjusted model is that it considers three participants (manufacturer, wholesaler and pharmacist) instead of two (manufacturer and grocery retailer). Furthermore, it considers the wholesaler in the centre of the supply chain within the ECR approach and in this way, the two parts of ECR (SCM and CM), offer more scope to the wholesaler than in the FMCG/ECR model. Firstly it works between the wholesaler and the manufacturer and secondly between the wholesaler and the pharmacist. In a third dimension it engages all stakeholders (manufacturers, wholesalers and pharmacists). Additionally, these different dimensions indicate adjusted relationships between the different stakeholders leading me to use the picture of the End to End supply chain (see figure 7.2) as a guideline in section 7.2 to illustrate and discuss the different areas of possible relationships between the stakeholders. These adapted relationships within the newly adjusted model also suggest modified job profiles for the stakeholders and these are discussed in section 7.2.4. A further broader necessary change is in the content of the model in regard to the eight steps CM approach (see table 7.2). In principle, the eight steps as defined by AC Nielsen et al. (2006) can remain but some steps and the involvement of all the stakeholders needs to be revised. Table 7.2 illustrates the comparison between the existing ECR model in the FMCG market (see figure 3.6) and the recommended newly adjusted model for the pharmaceutical industry which is presented in figure 7.1. The research shows that the ECR model is not static and can be adjusted in terms of the number of participants, content and different dimensions in the relationship between different stakeholders. The prerequisites for implementation are the same for both models. Therefore, I would argue that the model can also be implemented in other industries. The overall aim and prerequisites are the same, but the participants and the scope have to be adjusted.

	ECR Model	Newly adjusted model
Participants	2 (manufacturer and retailer)	3 (manufacturer, wholesaler and pharmacist)
Scope	One dimension Collaborative projects between manufacturer and retailer	Different dimensions Collaborative projects between different market participants possible:
		Manufacturer / Wholesaler (see 1.1 and 2.1 in figure 7.1) Wholesaler / pharmacists ( see 1.2 and 2.2 in figure 7.1) Manufacturer / wholesaler / pharmacists (see 1.3 and 2.3 in figure 7.1)
	Project areas SCM (start of collaboration mainly in this area) CM Usage of the 8 step CM approach	Project areas SCM CM (interviewees see most potential in this area) Adaptation of the 8 step CM approach (see table 7.3)
Prerequisites for implementation	<ul> <li>Trust and partnership building</li> <li>Win-win results for manufacturer / retailer</li> <li>Change of the job profiles of the key account managers (manufacturer) and buyers (retailer)</li> <li>to have common targets (KPI`s)</li> <li>Buying and sales departments (retailer) work as one unit together to become one interface to the manufacturer</li> </ul>	<ul> <li>Trust and partnership building</li> <li>Win-win results for the projects within the different dimensions</li> <li>Change of the job profiles of the key account managers (manufacturer) and buyers (wholesaler)</li> <li>to have common targets (KPI`s)</li> <li>Buying and sales departments (wholesaler) work as one unit together to become one interface to the manufacturer</li> </ul>
Aim	To put the customer is the center of the common strategy	To put the customer is the center of the common strategy but the model needs to consider different customers due to the different dimensions <u>Customer: manufacturer</u> 1.1 / 2.1 SC or CM services upstream (wholesaler services for manufacturer) <u>Customer: pharmacist</u> 1.2 / 2.2 SC or CM services downstream (wholesaler services for pharmacist) <u>Customer: end-consumer (as in ECR approach</u> 1.3 / 2.3 end to end SCM or combined CM approach (manufacturer / wholesaler and pharmacist focus together on the end- consumer)

## Table 7.2: Comparison between ECR and the newly adjusted model

#### Adjusted ECR model for the pharmaceutical wholesale business



#### 1.2 Supply chain services downstream

 offer an optimised pharmacy replenishment tool to the pharmacies (like OPR)

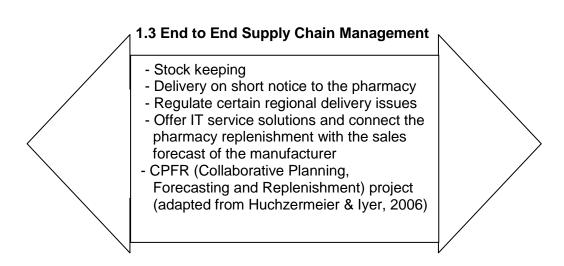
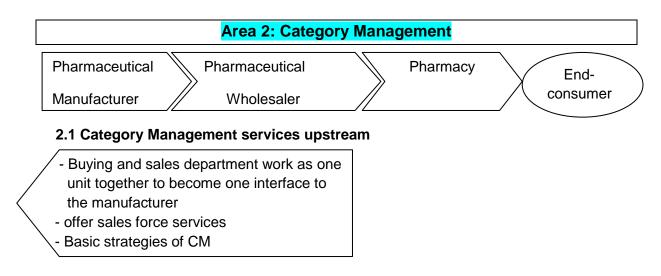


Figure 7.1.1: Area 1: Supply Chain Management



#### 2.2 Category Management services downstream

- offer sales trainings for pharmacists
- Special focus on OTC products which are not available in drugstores or grocery stores
- offer own brand assortment for the pharmacies
- support identifying the possible products for a
- neighbourhood store assortment and offer those items in the wholesale assortment
- take advisory role for cosmetic depots and select the product range and to control the stock management
- engage pharmacists into category strategy decisions
- offer a value base strategy: customer, operational,
- product and
- locational excellence (Grewal & Levy, 2012)

#### 2.3 Combined Category Management approach

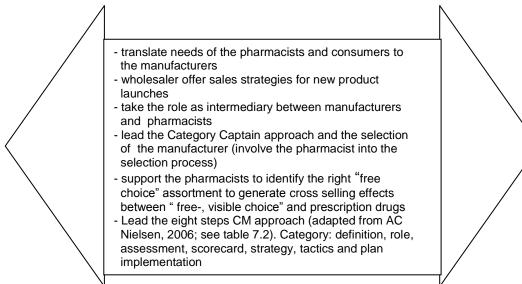


Figure 7.1.2: Area 2: Category Management

#### 7.2 <u>Recommended Business Model</u>

This section describes the newly adapted model in more detail. Firstly an evaluation of the different relationships between the stakeholders within the supply chain is given and as a consequence it provides the adjusted job profiles for the participants. Secondly, it describes the content of the business model according to the ECR principles and distinguishes between both areas of ECR (supply chain management and category management) as described in figure 7.1 (sub-divided into figure 7.1.1 and figure 7.1.2). These two areas will be discussed in section 7.2.5. A link to the different areas presented: 1.1 Supply chain services upstream; 1.2 Supply chain services downstream; 1.3 End to End Supply Chain Management; and 2.1 Category Management services upstream; 2.2 Category Management services downstream; 2.3 combined Category Management approach is provided in the text within figure 7.1.

There are a number of considerations which need to be taken into account when transferring the ECR approach into the newly adapted model for the pharmaceutical wholesale business in Germany. Section 5.4.1 (see also table 5.1) identified similarities and differences within the pharmaceutical sector. Further potential elements and obstacles were identified during the interviews with the different stakeholders (see sections 5.4.2 and 5.4.3) and there were additional issues arising from the case study (see section 5.4.4 and figure 5.2).

Firstly, the pharmacists play a key role in the pharmaceutical market, especially in view of the fact that consumers have trust in the pharmacist (see for example, 2.5.1; 3.3.2; 5.4.1.2). The wholesaler does not have a direct relationship with the end consumer and those pharmacists who are cooperation partners (retail pharmacists) are only contractually bound to a certain extent and do not feel obliged to work with only one wholesaler (see section 5.2.3).

Secondly, the negotiation procedure of terms and conditions between the manufacturer and the wholesaler does not need to change as, within the FMCG no changes regarding the terms and conditions and negotiations were implemented. However, it is important to consider how the negotiations are set up because within the literature review it was also identified as a challenge in the current ECR approach. The focus should be on discussing a win-win situation and on aligning a

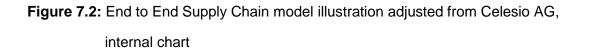
common business case with clear KPIs. The wholesaler needs to move away from purely negotiating conditions to also offering a clear enhanced proposition to the manufacturer (see sections 3.5.1.3; 3.5.2; 3.6; 6.4).

A prerequisite for the implementation of an adapted model would be the involvement of the top management, not only within the wholesale organization but for the manufacturer as well. This is important as implementing ECR principles would have an effect on the company strategy, on different job profiles and department structures within the organizations of the manufacturer and wholesaler (see section 6.3 and 6.4). This affects the strategic management of the company. It is also true to say that the pharmacists would also need to change their approach (see section 6.4).

As a visualization of engaging all stakeholders in the adjusted model, the following illustration can be used as a guideline to explain the relationships:

#### End to End Supply Chain





The original illustration was identified during the observation (see figure 5.1) but was characterized as an obstacle because it was only used as an overall description of the connection between manufacturer and patient (as discussed in section 5.4.3.2). It had no detailed message or purpose, but I will use this adjusted illustration as a guideline to describe the relationship between the stakeholders in the different stages.

The illustration shows all four stakeholders (manufacturer, wholesaler, pharmacist and end consumer) who are important for the adapted model. The following sections examine the different relationships and key areas of the FMCG / ECR model; supply chain management and category management. The principles are defined from the perspective of the wholesaler and for the "free choice" assortment.

# 7.2.1 Relationship between pharmaceutical manufacturers and pharmaceutical wholesalers



Figure 7.3: Relationship between manufacturer and wholesaler

As a first step and as discussed in the literature investigation, it is important to build a trustful collaboration (Großpietsch (2003). The three levels of collaboration illustrated in Figure 3.3 (strategical, tactical and operational level) can also be used for the collaboration between manufacturers and wholesalers in the pharmaceutical market. The Großpietsch (2003) model focused only on SC projects which would only be one part of the relationship (Figure 7.1.1 - 1.1 Supply chain services upstream). But the principles of the strategical level can also be

used for the CM part in the collaboration (Figure 7.1.2 - 2.1 Category Management services upstream).

It is recommended that the wholesaler selects collaboration partners carefully. In order to do so, it is important to understand the structure and the philosophy of the manufacturer and to examine whether both company strategies and philosophies fit each other.

Therefore, the current market situation of the manufacturer needs to be evaluated. The market share, new product launches and life cycles of the different products should give an indication towards choosing a partner who would fit the wholesale company strategy with a manufacturer who has a similar market interest. It is important to identify partners who have the same target otherwise it will be difficult to identify common ground and KPI s. Appendix 7.1 shows a chart which could be used as a template for data analyses of different manufacturers to make the current market situation of a manufacturer transparent and could therefore be used as a discussion and decision making document.

Secondly, it is important that the wholesaler defines a category strategy (figure 7.1.2 - 2.3 combined category management approach) which makes it possible to select the right manufacturer partner who has strengths in that category and can provide support in increasing profit in that category. As the ECR model indicates, normally the market leader is chosen as category captain but the case study showed that today in the pharmaceutical wholesale business, the selection is more a result of the negotiation with the manufacturers (see section 5.4.2.2).

For the category strategy, the wholesaler and the selected category captain (manufacturer) have to investigate whether an own brand strategy for that category is suitable and if so, the own brand strategy of the wholesaler also needs to be considered in order to identify the potential turnover share between branded manufacturer products and wholesaler own label products for different product categories. This is the basis for a common project definition between the wholesaler and the selected manufacturer and to identify the potential for the selected category (figure 7.1.2 - 2.3 combined category management approach).

In principle, in the FMCG market the grocery retailer defines the category strategy and selects the partner. As the case study showed, this is not the case in general in the German pharmaceutical wholesale sector today, and as described above this needs to change. Moreover, the wholesaler has to integrate the pharmacists into the category strategy definition because the wholesaler has only limited access to the assortment building process of the pharmacists, as discussed in section 5.4.3.1. This aspect will be addressed in the section. 7.2.2.

Following on from the need to develop a category strategy it is important to understand that the roles and responsibilities of various departments in wholesale organizations also need to be adapted (figure 7.1.2 - 2.1 Category Management services upstream). The roles of the procurement and sales and marketing departments within the wholesale organization need to be clear and differentiated. In principle, they have to work as one unit: procurement would serve as the contact with the manufacturer (buying) and sales and marketing would focus on demand (sales/retail pharmacists). There needs to be a clear differentiation between upstream and downstream activities in the organization as it is important that wholesalers have one point of contact for the manufacturers in order to build a trustful cooperation. Although it does not preclude that the individual experts from other departments, for example supply chain management, of the wholesaler and the manufacturer from being engaged in a project. It is important to involve the right stakeholders from both sides in defined projects to generate achievable goals and explore potential future collaboration. Ideally the contact person in the procurement department would be the project "owner" and coordinator within the wholesale organization who would take the role as category manager. This understanding of the roles of departments considers an interactive approach between retailers and manufacturer (A.C. Nielsen, 1992) as discussed in the literature review in section 3.5.3.

These recommended manufacturer selection steps for the newly adapted model bear many similarities to the current ECR process. On the supply side the Großpietsch (2003) model discussed above (figure 7.1.1 - 1.1 Supply chain services upstream), and on the demand side the basic strategies of CM (efficient assortment, promotion and product introduction) (Seifert, 2006; Rehbach, 2010;

Fowler and Goh, 2012) as described in section 3.5.3.2 (figure 7.1.2 - 2.1 Category Management services upstream).



## 7.2.2 Relationship between pharmaceutical wholesalers and retail pharmacists

Figure 7.4: Relationship between wholesaler and pharmacists

In addition to these manufacturer selection steps, the wholesaler has to involve the pharmacists in the definition of the category strategy and in the selection process of the category captain. The demands of pharmacists need to be considered to identify the right category strategy (figure 7.1.2 - 2.3 combined Category Management approach).

The case study showed that within collaboration agreements, a certain bond between the wholesaler and cooperation pharmacists exists. This needs to be strengthened in the relationship between the respective wholesaler and pharmacists to avoid pharmacists moving to another wholesaler (figure 7.1.2 - 1.2 Supply chain services downstream; 2.2 Category Management services downstream). A collaboration agreement is a prerequisite for establishing an ECR approach because a close collaboration is required for this model. Therefore, it is recommended that wholesalers establish a collaboration agreement with pharmacies to build a closer relationship with them. Today, the five leading wholesalers in the German market are either associations or have collaboration

models in place (see section 2.7). They control 90% of the pharmaceutical wholesale business in Germany. Given this pre-dominance of co-operation the following discussion considers a wholesaler/ pharmacy collaboration model.

The case study has shown that the services offered by the wholesaler to the manufacturers are created within the wholesale organization and pharmacists are not involved in the definition process. When following ECR principles, it is important to involve the pharmacists in building and defining the category strategy and in the selection process of potential manufacturers as they are the point of contact to the end consumer (figure 7.1.2 - 2.3 combined Category Management approach). Involving pharmacists in this way would underpin their commitment to the strategy and thereby feed this into the retail pharmacy; an important concern due to the fact that wholesalers do not operate their own pharmacy stores (figure 7.1.2 - 2.2 Category Management services downstream).

A selection process would be needed to identify suitable cooperation pharmacies to participate in the strategy definition process. Following the creation of expert groups for different topics, an individual pharmacist would be able to choose and select an area of particular interest or special expertise. These expert groups, consisting of retail pharmacists and stakeholders from the wholesaler (figure 7.1.2 - 2.2 Category Management services downstream), would then be in a position to define the strategy which would be used as the basis for the manufacturer selection process (figure 7.1.2 - 2.3 combined Category Management approach). The make-up of such a forum would need to include experts from the procurement department (who lead the relationship with the manufacturer), and representatives of the sales and marketing department (who maintain the relationship with the retail pharmacists). On the one hand, pharmacists are the key stakeholders in the relationship with the end consumer, and on the other hand, the pharmaceutical wholesaler stakeholders build a closer relationship with their customers, the pharmacists and the manufacturers.

This approach would support the wholesalers in their aim to increase the loyalty of their pharmacy cooperation partners and bring them closer to the cooperation concept. Moreover, the wholesaler would become a more attractive provider for other independent pharmacists who may then consider becoming a cooperation partner.



# 7.2.3 Relationship between retail pharmacists and end consumers

Figure 7.5: Relationship between pharmacists and end consumers

A special characteristic of the pharmaceutical market is that the consumer trusts the pharmacist. The wholesaler does not have a direct relationship with the end consumer and therefore the relationship between the pharmacist and the consumer is a key function in this adapted model, especially during the execution phase of the consumer orientation - which is the main focus of the ECR model. As a first step, pharmacists need to understand consumer demand and translate that into a category role definition and category strategy forming part of the expert forum (manufacturer, wholesaler, pharmacist) for identifying the common category strategy. The pharmacist would then be in a position translate the agreed category strategy into practice, thereby placing the pharmacist as a connector between manufacturer, wholesaler and consumer.

## 7.2.4 Job profiles

The important change in the job profiles of all stakeholders in this adapted ECR model does not revolve around their tasks and responsibilities. It is more about their behaviour, in that those involved need to act in a collaborative way. Resulting from the identification of demand between the retail pharmacists and their consumers, targets for both the manufacturer and the wholesaler need to be the same.

#### 7.2.4.1 Procurement managers in pharmaceutical wholesale organizations

Employees in the procurement department of a wholesaler need to move away from focusing only on the negotiation of terms and conditions and viewing the key account managers of the pharmaceutical manufacturer as competitors. It is recommended that they become more like category managers who analyse and define the category role as a whole and translate the outcome of expert forums into a category strategy. It is necessary to adopt an attitude whereby the aim should be to achieve a full commercial approach, and working in tandem with the key account manager of the manufacturer, they both work out the business case, which is to build a common target business plan which allows for an increase in turnover and margin for the whole category, whilst putting the needs of the retail pharmacists and their consumers in the centre.

#### 7.2.4.2 Key account managers of the pharmaceutical manufacturers

A major shift in behaviour is also required of the key account managers within pharmaceutical manufacturers who currently view the wholesaler as merely a logistics provider. Overall the same profile and change in behaviour as that required of the procurement experts in the wholesale business is needed; both have to work in a collaborative way as one team on the same targets, a prerequisite recommended for the FMCG market (McGoldrick, 2002). For an adapted ECR model in the pharmaceutical sector the creation of a category team with representatives from the procurement department in the wholesaler and key account managers from the manufacturer, who would focus together on the demand of the pharmacists and their customers, would enable them to achieve a common identified goal. Therefore, the view of Schröder et al. (2000) which only considers a change in the retail organization without involvement of the manufacturer can be discounted.

# 7.2.4.3 Sales and marketing managers in pharmaceutical wholesale organizations

Following on from the changes discussed above within both the wholesaler and manufacturer organizations, sales and marketing representatives within the wholesale organization would be responsible for executing the agreed joint cohesive strategy. They are the people who visit the pharmacists, talk about services of the pharmacy cooperation model, and the products and sales promotions which the wholesaler can offer: they generate new cooperation partners and translate the defined category strategies into practice. A further, and important, part of the function of sales and marketing would be the need to listen carefully to the pharmacists, understand their demands and bring these into the discussions in the expert forums, thereby creating a continuous cycle of improvements between procurement (category manager) of the wholesaler and the key account managers of the manufacturer.

Currently within the pharmaceutical wholesale market the roles and responsibilities of the procurement and sales and marketing departments differ from the FMCG model (see section 3.5.3.) as in the FMCG market a close cooperation between both departments is recommended (Schröder et al., 2000). Whilst this merging of both departments would seem to be ideal, in the pharmaceutical market the category manager function and the sales and marketing role cannot be done by one department but could be combined as one commercial entity. In the FMCG market, the category manager is responsible for both the buying and sales side of the business. For the pharmaceutical wholesaler a clear split of responsibilities and differentiation between the buying and sales side is needed in view of the fact that the wholesaler is a middleman between manufacturers and pharmacists and has to manage the end to end responsibility in the model, a fact which implies a clear split of the roles which could not be handled by one responsible party in that model.

#### 7.2.4.4 Retail pharmacists

The final change in role responsibilities to implement an adjusted ECR model is in the behaviour of the pharmacist who should become a more proactive retailer. The interviews highlighted the fact that the pharmacists, as healthcare professionals, focus more on the prescription part of their business. Currently the "free choice" assortment is seen more as an additional assortment and not an area of particular interest to the pharmacists who tend to stand exclusively behind the counter. It is recommended that pharmacists use their expertise as healthcare professionals and translate it into the "visible choice" and "free choice" assortment. It is recommended that a proactive sales conversation in front of the shelf, as is the case in retail stores, could create more interest in the products on display thereby generating some cross category buying acts based on professional consultancy. This supports the ECR principles to focus on the demand of the consumer, but could also support the role of the wholesaler, as by changing the current behaviour for the model, the wholesaler could offer sales training or the wholesale sales force could give recommendations during their pharmacy visits.

#### 7.2.5 Content of the adjusted model according to the ECR principles

This section will discuss the newly adjusted ECR model for the pharmaceutical wholesale business as presented in figure 7.1 and discussed in more detail above. It will underline some important considerations of the model, focussing on the structure and the methodology whilst not discussing each possible service in detail. Section 7.2.5.1 provides details about Area 1: Supply Chain Management (figure 7.1.1) whereas section 7.2.5.2 discusses Area 2: Category Management. It

is important at this point to underline the changes necessary within the eight steps CM approach (adapted from ACNielsen, 2006).

The general ECR principles can be adapted to the pharmaceutical wholesale business in Germany. As stated above the model needs to be adjusted, not least because there are three players in the market (manufacturer, wholesaler and pharmacists) instead of two (manufacturer and grocery retailer) who are required to focus on the customer demands.

Furthermore, as discussed above, the job profiles and the behaviour of the related stakeholders have to be adjusted to take into account the principles of ECR. Additionally, the wholesale organization needs to set up clear roles and responsibilities of the procurement and sales and marketing department (as one commercial entity) to drive the adapted business model approach. They have to work together as one unit. In principle, the wholesaler is the bond between the manufacturer and the pharmacist. The wholesale representatives have to drive the whole model and interact with both parties because the wholesaler connects the upstream and downstream demand.

The two collaboration sectors (SCM and CM) of the ECR initiative are considered for this adapted model. The case study has delivered additional business elements which should be considered for integration into these two areas.

#### 7.2.5.1 Area 1: Supply chain management

In supply chain management two different collaboration steps are possible. As a first step, a closer collaboration between the manufacturer and the wholesaler would support the optimization of the supply chain and reduce stock costs within wholesale logistics (figure 7.1.1 - 1.1 Supply Chain Management upstream). In a second step, involving the pharmacists would optimize the sales forecasting process.

The Großpietsch (2003) model, illustrated in section 3.5.1.1 (strategical, tactical and operational level), can be considered for the adjusted model (figure 7.1.1 - 1.1 Supply Chain Management upstream). As a first step for the pharmaceutical market, the manufacturer and the wholesaler should be viewed as business partners to enable the start of collaborative projects between them, as was the case in the FMCG market between manufacturers and retailers.

At a strategic level this model allows both parties to identify opportunities to optimize the supply chain between the manufacturer and the wholesale warehouse, (figure 7.1.1 - 1.1 Supply Chain services upstream). Additionally, ECR technologies (see section 3.5.1.2) such as CRP (Continuous Replenishment Programme) could be considered for the adjusted model, although CRP as described in the literature would need to reflect the fact that the relevant partners are the manufacturer and the wholesaler instead of the manufacturer and grocery retailer. The trade side advantages would relate to the manufacturer and wholesaler which would address the criticism of von der Heydt (1998) regarding missing the consideration of retail demand, in that in such an adjusted model the CRP considers the warehouses of the manufacturer and wholesaler and, in the pharmaceutical market, the wholesaler has a service obligation to have all products available.

In a second step, the CPFR (Collaborative Planning, Forecasting and Replenishment) model adapted from Huchzemeier and Iyer (2006) as described in section 3.5.1.2 could similarly be adjusted to a new ECR model (figure 7.1.1. - 1.3 End to End Supply Chain Management). For this forecasting model pharmacists need to be involved. Within this model all four steps, joint business planning, exchange of sales and order data, proving the accuracy of the orders and their execution, as well as the reassessment of performance, would be organized by the wholesaler who would take on a coordinating role between manufacturers and pharmacists. Furthermore, the model could be extended to include promotion planning, as advocated in a test undertaken between Metro AG and P&G (Huchzermeier & Iyer, 2006).

For the successful implementation of these supply chain projects it is important that, from the outset, the involved stakeholders define clearly how to measure and

share the benefits of the supply chain synergies (figure 7.1.1. - 1.3 End to End Supply Chain Management). This was a controversial aspect in the FMCG market, an issue discussed in section 3.5.1.3. (Großpietsch, 2003). My recommendation is to have an open and transparent plan on both sides (manufacturer and wholesaler) in the CRP model and to share the synergies 50/50. This will help in building trust and in working towards common targets. This same ethos is relevant for the second step, the CPFR model, where the synergies would be shared between the three parties (manufacturer, wholesaler and pharmacist). Implementing such an inclusive procedure could motivate the pharmacists to support this type of programme and enable them to see the benefit of working more closely with a wholesaler.

A further challenge identified (see section 3.5.1.3) is the bonus systems for employees of both the manufacturer and retailer. This would require further investigation for the pharmaceutical market, an aspect which has not been investigated within this research, but the key factor is that the manufacturer key account managers and the wholesaler procurement employees would have the same target definition for reaching their bonuses within the scope of the projects.

#### 7.2.5.2 Area 2: Category management

Supply chain management is a significant area in which wholesalers and manufacturers could strive for optimization as a first collaborative project although this will not increase collaboration between the wholesaler and the pharmacist as supply chain management is already the core role of wholesalers with the level of accurate deliveries being one key in the relationship between the wholesaler and the pharmacist (Specke, 2005). As described in section 2.7.1 category management is the demand driven area in the ECR initiative and is interlinked with the optimization of logistic management (Schröder et al., 2000; McGoldrick, 2002) see section 3.5.3.

The issue of selecting suitable manufacturers for collaborative projects in regard to CM principles, the roles and responsibilities of the stakeholders and how to

engage pharmacists into the category strategy decisions have been discussed above. In this section the focus is on other key areas of CM which are covered in the adjusted ECR model which mainly affect collaboration between the wholesaler and the pharmacists, where the wholesaler needs to take over the coordination role in the CM process (figure 7.1.2 - 2.3 combined Category Management approach).

As discussed in section 3.5.3 and 3.5.3.2 (Schröder et al., 2000; McGoldrick, 2002; Nielsen et al., 2006; Seifert, 2006; Draganska & Klapper,2007) in the original ECR concept, to set up a CM strategy the retailer had to understand the macro and micro environmental factors within their market. In this adapted model the wholesaler would assume a moderating role in the forum groups to provide the necessary market intelligence (figure 7.1.2 - 2.2 Category Management services downstream).

For the macro environmental factors the model of Grewal and Levy (2012), (see section 3.3.2) would provide a useful discussion device in the forum groups to analyse the relevant market factors. The wholesaler has, for example, access to market research data which could help the pharmacists to understand market factors in more detail (figure 7.1.2 - 2.2 Category Management services downstream).

This same process would also be relevant for the micro environmental factors where the wholesaler would support the pharmacists in analysing the market environment around their own pharmacy. This would need to be done on an individual basis as the data would need to be analysed for each pharmacy location (figure 7.1.2 - 2.2 Category Management services downstream).

As part of the service offer to pharmacists the pharmaceutical wholesaler could offer a value based strategy (figure 7.1.2 - 2.2 Category Management services downstream). This considers the four core elements of customer, operational, product and locational excellence (Grewal and Levy, 2012), locational excellence being covered in micro environmental analyses, and operational issues being covered as part of SCM projects (see section 7.2.5.1).

Customer loyalty is an important element of an effective CM programme (figure 7.1.2 - 2.3 combined Category Management approach) and is key in the ECR principles (Nielsen et al., 2006; Grewal & Levy, 2012). As discussed in section 2.6.1 customers in the FMCG market search for information on the internet and find transparency with regard to products and prices (Schögel & Herhausen, 2012), the background study confirmed that customers in the pharmaceutical market also seek information in this way. This information search is mainly driven by products and especially price, suggesting that customer loyalty could be generated through elements of the CM approach which cover the last element of the value based strategy of Grewal and Levy (2012), product excellence.

Another aspect is the CM strategy elements of efficient assortment, promotion and product introduction strategies described in section 3.5.3.2 (Seifert, 2006; Rehbach, 2010; Fowler & Goh, 2012) which could be utilized in the service offer from the wholesaler to the pharmacists (figure 7.1.2 - 2.2 Category Management services downstream). For this aim the eight steps CM approach defined by AC Nielsen et al. (2006) could also be used to identify the right assortment, promotion and product introduction strategy (figure 7.1.2 - 2.3 combined Category Management approach).

Table 7.3 shows the eight steps of the CM approach adapted from AC Nielsen et al. (2006) for the pharmaceutical market in regard to the different duties for each step and who needs to be involved in this step of the process (figure 7.1.2 - 2.3 combined Category Management approach). In FMCG this is always determined between the category captain and the grocery retailer. It is different in the pharmaceutical market because the wholesaler is an additional market participant and does not own stores. The wholesaler works together with independent pharmacies. For this reason not only do the participants change, in comparison to the existing eight step approach from AC Nielsen et al. (2006), but also some tasks within the different steps need to be changed.

Step	Category	Task	Involved Stakeholders (adjusted for the pharmaceutical market)
1	Definition	Category standard definition of the market (which has nothing to do with the role of the category in the pharmacy)	<ul> <li>Wholesaler</li> <li>Help of a market research company e.g. IMS</li> <li>Manufacturer could deliver additional</li> </ul>
2	Role	Definition of the strategy and role of the category	market insight Forum group:
			Wholesaler (Category Manager / Sales and Marketing) Retail pharmacists
3	Assessment	SWOT-analysis of the current role of the category:	Wholesaler (Category Manager / Sales and Marketing)
		Pharmacy category market share as a benchmark with the overall market share of the category in the pharmaceutical market	Retail pharmacists
		Consumer profile / purchasing behavior	
		Pharmacy market share	
		Manufacturers' market share in the category	
		Cross category effects analysis	
		Neighborhood store assortment analysis	
4	Scorecard	Definition of scorecard KPI's	Wholesaler (Category Manager / Sales and Marketing) Retail pharmacists
		e.g. Sales, profit, return on investment, market share	
5	Strategy	Definition of the category strategy in the retail pharmacies	Wholesaler (Category Manager / Sales & Marketing)
		e.g. Traffic building, profit generation, image enhancing	Retail pharmacists
6	Tactics	Definition of the assortment, merchandising, pricing, promotion and supply chain management	Wholesaler (Category Manager)
			Retail pharmacists
			Manufacturer (Category Captain)
7	Plan implementation	Implementation of the category strategy into the retail pharmacies	Wholesaler (Sales and Marketing) Retail pharmacists
8	Review	Frequent review of the category performance	Forum group:
		Check if the implementation has taken place	- Wholesaler (Category Manager / Sales and Marketing)
		Review of the KPIs	- Retail pharmacists
I	I		- Category captain

 Table 7.3: Eight step Category Management model adapted from AC Nielsen et al. (2006)

# Necessary changes and additional issues within the eight steps CM approach:

For the purposes of this analysis it is not necessary to reflect upon each step, but only to highlight those critical points which need to be managed differently or need to be focused upon specifically for the pharmaceutical market. The other steps remain, in principle, the same for the pharmaceutical market but, nevertheless, do have other stakeholders involved as articulated in table 7.3.

The category definition (step 1) would be prepared by the wholesaler with the help of market research companies, e.g. IMS, to build the right environment for the categories to have a common ground in the conversations in forum groups with pharmacists. In this preparatory work it is suggested that the wholesaler involve leading manufacturers for the different categories and use their market knowledge for defining the categories.

The cross category buying effect is considered in step 3 as it is an important topic for the pharmaceutical market. Within the case study, only the "free choice" and the "visible choice" assortment were considered for this new model. But interviews with pharmacists for the case study emphasized that there is a relationship between the prescription and the non-prescription assortment. For this reason the pharmacist has the opportunity to offer some additional products to a consumer who comes into the pharmacy with a prescription, in that within the "visible choice" or "free choice" assortment the pharmacists introduce some cross category products which complement each other.

In step 3 beside the classical SWOT analysis of the current role of the category, some specific aspects of the pharmaceutical sector need to be considered. As discussed in section 5.4.2.1, 6.5, (see also table 5.3 and table 6.7) products for a neighbourhood store assortment should also be validated as a focus on OTC products which are only available in pharmacies to avoid competition between pharmacies and drugstores or grocery retail stores.

Step 6 is an area which offers an opportunity for the wholesaler and the manufacturer (category captain) to support pharmacists in the identification of category tactics and define the right product mix of the assortment. This would be

useful as a starting point for the expert forum, although as explained earlier this needs to be done on an individual basis for each pharmacy as the micro environmental factors require consideration and can vary between the different locations. In grocery retail the equalization of all stores in terms of the assortment building, without consideration of the different locations, was identified as a critical element in the CM approach and should be avoided in the new pharmaceutical model.

Also as part of step 6 the issue of pricing and promotion tactics for the pharmaceutical retailer is important as a pharmacy would need to distinguish itself from the FMCG retailer (e.g. drugstores). Pharmacists need to keep their price range in a competitive environment, otherwise they will lose consumers. The same is true for promotional planning. Retail pharmacists have to think about promotional planning and the pricing strategy behind it in comparison to the FMCG market.

The aspect of depot contracts needs to be investigated (step 6) to avoid the influence of some manufacturers, particularly in the beauty category, requesting a special shelf space (a depot) for their products from the pharmacists. This sometimes leads to overstock and the wrong article range in the pharmacy. The depot concept needs to be evaluated within the CM principles.

Step 7 in the CM approach describes the category plan implementation process. In the FMCG market, it is about the implementation process for a retailer with a large number of stores. For the pharmaceutical approach this step is where the wholesaler supports the implementation of the category plan into the pharmacies that have a low number of own stores and therefore have limited potential for implementing a shelf planning IT system. In this way the wholesaler acts as a service provider, preparing the shelf planograms and, with the wholesale sales force, helps implement the shelf layout in the individual pharmacy.

Overall it can be stated that the principles of the eight steps CM approach of AC Nielsen et al. (2006) can be transferred into the pharmaceutical wholesale market in Germany, but as presented above, some adjustments in regard to both the tasks in the different steps and the stakeholders involved need to be modified.

The adapted CM approach which considers all stakeholders in the pharmaceutical sector in Germany delivers benefits for all parties. All participants (manufacturers, wholesalers, and pharmacists) generate more market intelligence due to the intensive interactions during the different CM steps and save some costs by, for example, using one market research company and using the same research reports. Furthermore, by using the wholesaler as a facilitator the manufacturer would make additional cost savings as their own sales force would not need to approach all pharmacies directly but would use the wholesaler's sales force. Furthermore, the manufacturer benefits from the collaboration agreement between the wholesaler and the pharmacies which have a certain content structure. The advantage for the retail pharmacists is that they are not approached directly by different manufacturers who follow their individual manufacturer sales strategy. The pharmacist receives support to build a category strategy and then has only one point of contact – the wholesaler. Finally, the wholesaler benefits upstream and downstream. Upstream, the wholesaler gets additional volume back into the supply chain and thus better terms and conditions from the manufacturer. Downstream the benefit is that the wholesaler builds a closer collaboration with the pharmacists and generates a more loyal relationship.

#### 7.3 Final Conclusions

The research has investigated the environmental factors of the pharmaceutical wholesale market in Germany and the current challenges in that market. Furthermore, it has described the existing ECR model and principles in the FMCG market and has assessed the potential for transferring this into pharmaceutical wholesale businesses.

All the research objectives were answered through a combination of literature review and case study findings.

The research in the case company was quite challenging because when the research started the company was in a due diligence phase of selling the company

to a competitor. Therefore, I was very restricted in the methodology adopted for the interviews, as well as in the documentation and publication of their results. The advantage for me as a researcher was that at the beginning of the research I had just started as an employee in the case company so I was not fully integrated into the organization and therefore was able to take a more a neutral positon.

As result of the research a newly adjusted model, which considers the supply side and the demand side of the ECR principles has been presented in chapter 7. The case study demonstrates that the principles of the ECR model can be transferred into the pharmaceutical wholesale market in Germany, but as a prerequisite the current understanding of the business model of the wholesaler, as well as roles and responsibilities in the organization, have to change. Furthermore, it was necessary to adapt the model in terms of three market participants being involved (manufacturer, wholesaler, pharmacist) instead of two (manufacturer, retailer) as is the case in the FMCG market.

The value of this research is a normative model for the pharmaceutical wholesale market in Germany which does not currently exist. The changing market environment in this sector requires a remodelling of the collaboration between manufacturers, wholesalers and pharmacists. The existing ECR principles were developed in the 1980s and since that time the ECR model has not been adapted for other industries. This research demonstrates that as an adjusted model the principles of ECR can, in general, be transferred into a different market, that of pharmaceutical wholesale businesses. Furthermore, this underlines that, at a principle level, the potential exists to adapt the ECR model to another business sector as the research demonstrates that the original model is not static and can be adjusted in terms of the number of participants, content and different dimensions in the relationship between different stakeholders. This newly adjusted ECR model can help to overcome the challenges for the market participants in the changing market environment in the pharmaceutical sector in Germany today.

In the light of business purpose, it offers new opportunities for manufacturers, wholesalers and pharmacies to remodel the current relationship behaviour between the stakeholders and to identify new business opportunities together. It supports the wholesale sector to get volume back into their supply chain and to

offer value propositions to their customers (manufacturers and pharmacists). Manufacturers profit from this model in terms of efficient supply chain solutions via pharmaceutical wholesalers, and pharmacists can benefit from better service offers from the wholesaler. Pharmacists can better focus on the end consumer demand by offering the right "free choice" and "visible choice" assortment and can therefore also increase the profitability of the pharmacy. Finally, end consumers can benefit from the model as they will find product categories and products in the pharmacy which fit their demand for that specific location. Furthermore, the pharmacist is better trained about the "free choice" and visible choice" assortment and can give better recommendations to the consumer.

Finally, it can be stated that the investigation has demonstrated that, in an adjusted format, there is potential for transferring the ECR model from the FMCG market into pharmaceutical wholesale businesses in Germany. The investigation contributes to knowledge with the description of a newly adjusted model by considering the environmental factors in the German pharmaceutical market. It furthermore contributes to business purposes because it describes in details how this model could work in the pharmaceutical sector in Germany and which changes, in terms of collaboration, relationship management and organizational structures, are required for the different stakeholders (manufacturers, wholesalers and pharmacists). The investigation also contributes to knowledge as it demonstrates that the original model is not static and could therefore also implement into other businesses within a similar context.

#### 7.4 Further Research Proposal

For this research study a small number of samples were considered in terms of the interview partners and the observations as it was a single case study in one wholesale company. The findings should be determined in a wider context to ascertain whether they are suitable for a greater number of market participants. For example, other pharmaceutical wholesalers could be asked whether they could imagine establishing this model. Another option would be to ask a number of retail pharmacy owners whether the idea of a new collaboration would bring added value for their daily business and their consumers and whether they could consider the ECR initiative as a valuable effort to serve their consumers better.

In a work of Eisenhardt and Bourgeois in 1988 (cited in Eisenhardt, 1989), they combine quantitative and qualitative data to generate evidence (Eisenhardt, 1989). Due to this work, theory-building researchers combine several data collections methods.

Consideration should be given to using a questionnaire to gain evidence on the qualitative findings from the interviews and observations. This current exploratory qualitative research can serve as a solid basis for a questionnaire approach (Seale, 2007). The aim of the questionnaire would be to investigate the findings from the observations and interviews within the case company, with their suppliers and cooperation partners and should also include additional customers, for example independent pharmacies who are not yet cooperation partners of the case company.

For the analysis and interpretation of the outcome of the questionnaire, a content analysis should be considered. Saunders et al. (2009) recommend it for finding secondary data. It is mainly described as a tool to test a hypothesis, which is the idea for further research (Easterby-Smith et al., 2008).

Therefore, a questionnaire for independent pharmacies and other wholesalers in Germany would be the logical next step to verify the findings of this case study. For this case study it was discarded due to the fact that those companies are competitors of the case company and the researcher is an employee of the case company.

In principle, to use it in the way described in this section would deliver additional substantial knowledge for the newly adapted model. It would bring the researcher to the point of better understanding the customers (retail pharmacies) and the end consumer and give confidence for making further changes in processes and services offered to meet the expectations of retail pharmacists as well as the end

consumers. Therefore, this approach should not be dismissed and possibly used at a later stage.

Furthermore, it is recommended to assess the possibility to transfer the model to other business sectors. As this case study shows, the model is not static and can be adjusted to different needs (in this study into the pharmaceutical market) of specific business environments.

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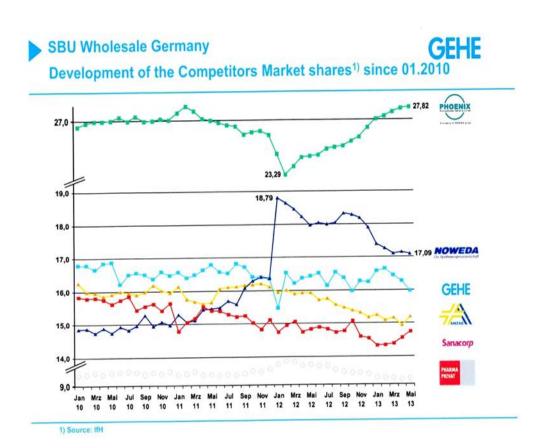
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## 9.0 Appendices



## Appendix 3.1: Inclusion / Exclusion criteria

	Inclusion / Exclusion criteri	ia
Parameters	Inclusion criteria	Exclusion criteria
1) Timeframe	not older than 1980	older than 1980
2) Study types	textbooks	unpublished studies
	journals	
	e-books	
	edited collection	
	published dissertations	
4) Search country	Germany	all other countries
5) Market area	retail grocery	all other markets
	FMCG	
6) Search topics:		
a) retail / retail marketing	history	all other topics
	development of market segment	
b) Supply side strategy	product management	all other categories
	consumer goods / FMCG	
	projects between 2000 - 2012	
c) Interfaces between	consumer goods / FMCG	all other categories
retailers and suppliers	projects between 2000 - 2012	
d) Supply chain management	consumer goods / FMCG	all other categories
· •	projects between 2000 - 2012	
e) Category management	consumer goods / FMCG	all other categories
· · · · · ·	projects between 2000 - 2012	¥

## Appendix 3.2: <u>Textbook search / Heinrich-Heine University Library</u> <u>12.07.2012</u>

## Search result: Retail / Retail marketing

No	.Title	Authors	Year	Relevant to
1.	Universen Germany	AC Nielsen Company	2011	History / Development of market segments
2.	Dynamisches Einzelhandels- Marketing (Dynamic retail marketing)	Collins	1992	Retail Marketing
3.	Store Wars	Corstjens & Corstjens	1999	Development of market segment / FMCG / Retail grocery /Product management / CM / SCM
4.	Retail Marketing	Cropper	2008	Retail
5.	Marketing Geography	Davies	1976	History
6.	Foundations of Marketing	Fahy & Jobber	2012	not available
7.	Retail Marketing Management	Gilbert	2003	Development of market segment / FMCG / Retail grocery /Product management / CM / SCM
8.	Marketing 3e	Grewal & Levy	2012	Development of market segment / FMCG / Retail grocery /Product management / CM / SCM
9.	Europas Einzelhandel (Europe´s retail)	Jefferys & Knee	1965	History

No.Title	Authors	Year	Relevant to
10. Transnational Retailing	Kaynak	1988	History
11.Retailing in the 21 <sup>st</sup> Century	Krafft & Mantrala	2006	Development of market segment / FMCG / Retail grocery /Product management / CM / SCM
12. Retailing Management	Levy & Weitz	2012	Development of market segment / FMCG / Retail grocery /Product management / CM / SCM
13.Retail Marketing	McGoldrick	2002	Development of market segment / FMCG / Retail grocery /Product management / CM / SCM
14. Internationales Marketing – Management (International marketing			
management)	Meffert,Burmann Becker	& 2010	Retail Marketing
15. Micro – Marketing	Nitsche	1998	Retail Marketing
16. Retail and Marketing Channels	Pellegrini & Redd	y 1989	History
17. Diversity in European marketing: Text and cases	Rudolph	2012	not available
18. Retailing Marketing Strategy	Samli	1989	History
19. Efficient consumer response: Supply-Chain-Management(SCM), Category-Management(CM), und Radiofrequenz-Identifikation(RFID) als neue Strategieansätze (Efficient consumer response: Supply-Chain-Management(SCM), Category-Management(CM), und Radio-Frequency-Identification(RFID)			
As new strategic approaches)	Seifert	2006	Retail Interfaces / CM / SCM
20. The Internationalisation of Retailing	Treadgold & Davie	es 1988	History

No.Title	Authors	Year	Relevant to
21. Retail Marketing Management	Walters & White	1989	History
22. Handbook of Retailing	West	1988	History

## Search Result: Supply side strategy

No.Title	Authors	Year	Relevant to
<ol> <li>Preismanagement von Konsum- Güterherstellern. Konzeption, Um- setzung und Erfolgsauswirkungen. (Price management of consumer goods manufacturers. Concept,</li> </ol>			
implementation and effect on profit)	Breitschwerdt	2011	Supply side strategy
24.Der Direktvertrieb im Konsum- güterbereich			
(Direct sales in consumer goods)	Engelhardt	1984	History / CM / SCM
25.Key - Account – Management in der Konsumgüterindustrie (Key – account – management in the consumer goods industry)	Gegenmantel	1996	History /
			Interfaces
26. Erfolg in der strategischen Markenführung (Success in strategic			
brand leadership)	Gussek	1992	History / CM / Product management
27. Determinanten der integrierten Kundenbindung (Determinants of integrated			
customer loyalty)	Kahler	2009	Supply side strategy

<u>No.Title</u>	Authors	Year	Relevant to
28. Kundenorientierung im Innovations- prozess, Eine Untersuchung der Kunden-Hersteller-Interaktion in Konsumgütermärkten (Consumer orientation during an innovation process. A study on customer-producer interaction in consumer goods markets)	Luethje	2000	Interfaces / Supply
29. Leistungsorientierte Gestaltung von Konditionensystemen in der Konsumgüterindustrie (The performance-oriented design of tradeterm systems in the consumer goods industry)	Oversohl	1999	Side strategy Product management / Supply side strategy
30. Grundlagen eines Informations- systems für die langfristige Absatzführung in mittelständischen Betrieben der Konsumgüterindustrie (Fundamentals of an information system for long-term sales planning in medium-sized companies of the consumer goods industry)	Paffhausen	1984	History / Interfaces
<ul> <li>31. Organisation der Verkaufsförderung bei Konsumgüterherstellern (Organisation of sales promotion for consumer goods producers)</li> <li>32. Gestaltung des internationalen Key Account Managements: Analyse vor Dem Hintergrund der Internationali- sierung des Konsumgütereinzel-</li> </ul>	Rudek	2008	Interfaces / CM
<ul> <li>handels</li> <li>(Shaping international key account management: Analysis in light of the internationalization of consumer goods retail)</li> <li>33. Globales Produktmanagement (Global product management)</li> </ul>	Schlüter Schröder	2012 1996	Interfaces / CM Product management

No.Title	Authors	Year	Relevant to
34. Vertikale Wettbewerbsstrategien in der Konsumgüterindustrie (Vertical competitive strategies in the consumer goods industry)	Westphal	1991	Interfaces / CM / Supply side strategy

## Search Result: Interfaces

No.Title	Authors	Year	Relevant to
35. Strategisches Absatzkanal- management in Märkten mit hoher Nachfragemacht des Handels (Strategic sales management in markets with high retailer buyer power)	Bergmann	1988	Collaboration models
36. Die vertikale Kooperation als Absatzwegestrategie für Hersteller- unternehmen dargestellt am Beispiel der Konsumgüterhersteller (Vertical cooperation as a distribution strategy for manufacturing companies, illustrated in the example of consumer goods manufacturers)	Brauer	1989	History
37. Nachfragemacht, Bericht des Wett- bewerbsausschusses d. OECD (Buyer power. Market power exertion through strong buyers. OECD)	FIW	1983	History / Retail strategy
<ul> <li>38. Wettbewerb, Konzentration und Nachfragemacht im Lebensmittel- handel (Competition, concentration and buying power in food trade)</li> <li>39. Nachfragemacht zwischen Einzel- handel und Konsumgüterindustrie in der Schweiz (Buyer power between retail and the consumer goods industry in</li> </ul>	Gröner	1989	Collaboration models
Switzerland)	Kühne	1984	Collaboration models

No.Title	Authors	Year	Relevant to
40. Wettbewerbsvorteile (Competitive advantages)	Porter	2010	FMCG / Retail strategy
<ul> <li>41. Die Beziehungen zwischen Industrie und Handel auf dem Prüfstand: Was leisten neue Kooperationens- konzepte tatsächlich? (An assessment of the relations between industry and trade: what can new cooperations concepts truly deliver)</li> </ul>	Schröder & Großweischede	2000	CM / SCM

## Search Result: Projects (ECR, SCM, CM)

No.Title	Authors	Year	Relevant to
42. Category Management	ACNielsen	1992	CM / History / Retail strategy
43. Category Management Consumer/Centric	AC Nielsen, Karolewski & Heller	2006	CM / Interfaces / Retail strategy
44. Kennzahlensysteme zur Erfolgs- kontrolle des Verkaufs und der Marketing/ Logistik (Key figures system to monitor the success of sales and			
marketing / logistics)	Bentz	1983	History / Supply si <i>de</i> strategy
45. Retail Category Management	Fowler & Goh	2012	CM / Retail strategy
46. Supply Chain Management in der Konsumgüterindustrie (Supply Chain Management			<b></b>
in the consumer goods industry)	Großpietsch	2003	FMCG / SCM
47.Efficient Consumer Response (ECR)	von der Heydt	1998	ECR / Interfaces
48. Consumer Value im Category Management-Modell nach ECR (Consumer value in the category management model according	Holwog	2000	СМ
to ECR)	Holweg	2009	CIVI

No.Title	Authors	Year	Relevant to
49. Retail category management: decision support systems for assortment, shelf space,			
inventory and price planning	Hübner	2011	CM / Retail strategy / Product management
50. Efficient Consumer Response	Kilimann, Schlenk von & Tienes	1998	ECR / Interfaces
51.Category management in Purchasing	O`Brien	2009	СМ
52. Category Management	Rehbach	2010	СМ
<ul> <li>53. Zum Status quo von Category Management und Supply Chain Management (On the status quo of Category Management and Supply Chain Management)</li> </ul>	Schröder, Feller &		
	Großweischede	2000	CM / SCM
54. Category Management	Steiner	2007	СМ
55. Supply Chain Champions	Thonemann et al	. 2003	SCM

## Appendix 3.3: Database overview

Data bases of the Heinrich-Heine University, Dussei	Joh, Gerhany
Data Base	Content
1.) Business Source Premier via Ebsco Host	Business study economics; international economics
	industry / company information
2.) Wiso	German business sciences
3.) OLC	German newspapers (German business sciences)
Wirtschaftswissenschaften	
4.) Lexis / Nexis	newspaper
	magazines
	Hoppenstedt companies data base
	(big, medium and small companies and associations)
5.) Oxford Journals	internaional journals
6.) Econics in Net data base	
7.) Google scholar	
8.) ETHOS data base	Dissertations
9.) Deutsche National Bibliothek ( German national Library)	Dissertations
10.) Dissonline	Dissertations

Data bases of the Heinrich-Heine University, Düsseldorf, Germany

## Appendix 3.4: Database searches results 23.12.2012

## Search result: Retail / Retail marketing

N	o.Title	Authors	Year	Relevant to
1.	General Merchandise Retailing McKinsey Quarterly	Agrawal et al.	1996	Retail strategy
2.	Imperfect Competition in Germa Food Retailing: Evidence from S Level Data			
	Atlantic Economic Journal	Anders	2008	Retail strategy
3.	Grocery Retailing in the Germanic Markets. European Retail Digest	Bell	2001	Retail strategy / Development of market segment
4.	Determinants of margins in the distribution channel: an empirical investigation	Draganska, Klapper & Villias- Boas	2007	Retail strategy
5.	On the validity of price and know Measurements via self-assessm scales.			
	Journal of Targeting, Measurem and Analysis for Marketing Journal of Targeting	ent Eberhardt, Kenning & Schneider	2009	Retail strategy
6.	Price Rigidity in the German Grocery-Retailing Sector.Scann Data Evidence on Magnitude an Causes.			
	Journal of Agricultural & Food Industry Organization	Herrmann, Moeser & Weber	2005	Retail strategy
7.	Expectations and retail profit ma The International Review of Reta	irgins. ail den Hertog & Thurik	1992	Retail strategy

<u>No</u>	o.Title	Authors	Year	Relevant to
8.	Comparative structure and develop- ment of retailing in the United Kingdor and Germany 1980-92. The International Review of Retail Distribution and Consumer Research	n Howe, Jurgens & Werwy	1998	Retail strategy /
9.	The influence of general trust and specific trust on buying behaviour. International Journal of Retail & Distribution Management	Kenning	2008	Retail strategy / History Retail strategy / Development of market segment
10.	Their Effects on the Structural and Locational Change in German Retailing	Kulke	1996	Retail strategy / History
11.	Has Power shifted in the Grocery Channel? Marketing Science	Messinger & Narasimhan	1995	Retail strategy / History
12.	Retailing in Germany, Austria, Switzerland. European Retail Digest	Moreau	2006	Retail strategy
	Competitive strategies in Retailing-an investigation of the applicability of Porters`s framework for food retailers. Journal of Retailing and Consumer Services	Morschett, Swoboda & Schrammklein	2006	Retail strategy
14.	Consumer loyalty to family vs. non-family business. Journal of Retailing and Consumer Services	Orth & Green	2009	Retail strategy / Product management
	Consumer acceptance and market success: Wal-Mart in the UK and Germany. International Journal of Retail & Distribution Management	Pioch, Gerhard, Fernie & Arnold	2009	Retail strategy / Product management

<u>N</u>	o.Title	Authors	Year	Relevant to
16.	Retailing Innovations in a Globalizing retail Market Environment. Journal of Retailing	Reinartz et al.	2011	Retail strategy
17.	Database Marketing and Consumer Loyalty: Examining The Evidence. European Retail	Reynolds	1995	Retail strategy
18.	Business strategy as a situational factor of sub- sidiary performance management. International Journal of Management cases	Schlegel & Britzelmaier	2011	Retail strategy
19.	Differentiated products, consumer search, and locational oligopoly. Journal of Industrial Economics	Stahl	1982	Retail strategy / Product management
20.	Coordinating the international Retailing firm; Exploratory models And evaluations of structural, Systemic, and cultural options. Journal of Retailing and Consumer Services	Swoboda & Andere	r 2008	Retail strategy
21.	Global retailers and their corporate codes of ethics: the case of Wal-Mart in Germany. The service Industries Journal	Talaulicar	2009	Retail strategy
22.	Retailing in Germany: Another year of success for discounters. European Retail Digest	Tenbusch	2002	Retail strategy
23.	Retail revolution. Frontline Solutions	Tierney	2003	Retail strategy

No.Title	Authors	Year	Relevant to
24. CRM in Data-Rich Multichannel Retailing Environment: A Review And Future Research Directions. Journal of Interactive Marketing	Verhoef et al.	2010	Retail strategy / CRM
25. Aldi and the German Model: Structural Change in German Grocery Retailing and the Success of Grocery Discounters. Competition and Change	Wortmann	2004	Retail strategy

## Search Result: Procurement

<u>No.Title</u>	Authors	Year	Relevant to
26. Modeling Joint Purchases with a Multivariante MNL Approach	Boztug & Hildebrandt	2008	Interfaces / retail strategy

## Search Result: Category Management (CM)

No.Title	Authors	Year	Relevant to
<ol> <li>The use of Category Management practices to obtain a sustainable in the fast-moving-consumer-goods industry. Journal of Business&amp;Industrial Marketing</li> </ol>	Dupre & Gruen	2004	СМ
28. A consumer perspective on product eliminations: how the removal of products affects customers and business relationships. Journal of the Academy of Marketing Science	Homburg, Fürst & Prigge	& 2009	СМ

## Search Result: Category captain

No.Title	Authors	Year	Relevant to
29. Is Retail Category Management Worth the Effort (and Does a Category Captain Help or Hinder)? Journal of Marketing	Gooner, Morgan & Perreault	2011	Category Captain / CM / Interfaces
30. Category Captainship vs. Retail Category Management under Limited Retail Shelf Space. Production & Operations Management	Kurtulus & Toktay	2011	CM / Interface / Product management

## Search Result: ECR

No.Title	Authors	Year	Relevant to
31. The drivers of consumer value in the ECR Category Management model. International Review of Retail, Distribution & Consumer Research	Holweg, Schned Teller,	dlitz & 2009	СМ
32. Food and grocery supply Chain: a reappraisal of ECR performance. International Journal of Physical Distribution & Logistics Management	Martens & Doole	ey 2010	ECR
<ol> <li>The nature of interfirm partnering In supply chain management. Journal of Retailing</li> </ol>	Mentzer, Min & Zacharia	2000	ECR / SCM

## Search Result: RFID

No.Title	Authors	Year	Relevant to
<ul> <li>34. A cross-national comparison of perceived strategic importance of RFID for CIOs in Germany and Italy.</li> <li>International Journal of In- Formation Management</li> </ul>	Leimeister, S., et	al. 2009	RFID
35. RFID in Retailing and Customer Relationship Management. Communications of AIS	Uhrich, et al.	2008	RFID

## Search Result: Trade marketing

No.Title	Authors	Year	Relevant to
<ol> <li>Stellenwert und Gegenstand des Markenmanagement. Markenführung (The significance and subject Of brand management)</li> </ol>	Meffert, Burm Koers	nann & 2005	Product management / Retail marketing

## Search Result: Own brands

No.Title	Authors	Year	Relevant to
<ul> <li>37. Consequences of competition between national brands and private labels.</li> <li>International Journal of Retail &amp; Distribution Management</li> </ul>	Olbrich & Grewe	2009	СМ

## Search Result: Purchasing

<u>No.Title</u>	Authors	Year	Relevant to
<ol> <li>Category Management in Purchasing. A strategic approach to maximize business profitability. Manager: British Journal of Administrative Management</li> </ol>	Turner	2010	СМ

## Search Result: Relationship

No	o.Title	Authors	Year	Relevant to
39.	The estimation of the degree of the oligopoly powe Journal of Economitrics	Appelbaum	1982	Retail strategy
40.	Retail environment and manu- facturer competitive intensity. Journal of Retailing	Draganska & Klapper	2007	Retail strategy
41.	Handelsmarkenführung und Category Management-Spezifische Konfliktpotenziale in der Hersteller- Händler Beziehung und Ansätze zu ihrer Lösung. (Trademark management and category management – Specific conflict potentials in the manufacture-retailer relationship and approaches for their resolution)	Olbrich & Braun	2001	Interfaces/ Relationship
42.	Relationship of retail brand Manufacturers with retailers. International Review of Retail, Distribution & Consumer Research	Oubina, Rubio & Jesus Yagüe	2006	Interfaces/ Relationship

No.Title	Authors	Year	Relevant to
<ol> <li>Category- Management- Kooperative Sortimentspolitik. Business and Economics Hand- buch Handel (Cooperative assortment policy)</li> </ol>	Schröder & Rödl	2006	Interfaces/ Relationship
44. Retailer concentration and product innovation in food manufacturing	Weiss & Wittkopp	0 2005	Interfaces / Product management

### Appendix 3.5: <u>The eight step category management model</u> (AC Nielsen et al., 2006)

#### 1. Step: Category definition

The category definition is the foundational step in the process. In principle the retailer uses the category code from market research companies like ACNielsen. This is the category standard definition as the industry standard which has nothing to do with the role definition of the category.

#### 2. Step: Category role

The role definition is the most crucial common step in the approach. Which the role definition retailers can distinguish themselves from their competitors. It reflects the company strategy and objectives. There are four different possible roles defined. AC Nielsen et al. (2006, p.78) use the definition of The Partnering Group:

Destination Category: To be the primary provider and help define the retailer as the store of choice by delivering consistent, superior target consumer value.

Routine: To be one of the preferred category providers and help develop the retailer as the store of choice by delivering consistent, competitive target consumer value.

Occasional / Seasonal: To be a major category provider, help reinforce the retailer as the store of choice by delivering frequent, competitive target consumer value.

Convenience: To be a category provider and help reinforce the retailer as the full-service store of choice by delivering good target consumer value.

3. Step: Category assessment

After the definition of the role of the category the current status of the category has to be assessed. A swot-analysis should be considered. Here, the Partnering Group model looks into four directions which are equal in terms of importance.. Firstly, the retailers' category market share as a benchmark with the overall market, secondly the consumer profile and their purchasing behaviour, thirdly the supplier market share and supplier efficiency and last but not least the retail contribution and productivity, e.g. how the category performs in the own organisation and how it contributes to the overall margin and store image. The recommendation is that the retailer reviews the outcome of the category assessment under consideration of their own label product. Manufacturers, as the Category Captain, may assess the situation much more from a branded product point of view. The AC Nielsen recommendation is to focus on one category in itself.

#### 4. Step: Category scorecard

The category scorecard should document the defined common targets of the retailer and the manufacturer and should help in following up on the results. They have to be in line with the defined category role. A destination category has a different target than an increase of the market share and turnover as a routine category which focuses on the stabilisation of the margin. "A scorecards measures may include entries such as sales, profit, return on investment, market share, turns, gross margin return on investment, penetration, purchase size, purchase frequency, conversion, service level, and more" (AC Nielsen et al. ,2006, p.112).

#### 5. Step: Category strategy

In this fifth step of the process the category strategy should be aligned between the cooperation partners. The strategies per category could be different but they always have to be aligned within the overall retail strategy. Here AC Nielsen name seven main strategies. They call them marketing strategies.

- 1. Traffic building
- 2. Transaction building
- 3. Profit generation
- 4. Cash generation
- 5. Excitement creating
- 6. Image enhancing
- 7. Turf defending

Those marketing strategies could differ even within one category. There could be a different approach for different subcategories or even on an article level.

6. Step: Category tactics

The category tactics define the assortment, merchandising, pricing, promotion and the supply chain management. The steps one up to five can be seen as a preparation phase. With this step the real category management process starts.

#### 7. Step: Category plan implementation

This step describes the final implementation of the agreed actions between the cooperation partners. The mile stones, timelines and the responsible persons are defined in that plan. The aim is to bundle the resources to guarantee a fast implementation of the

defined category strategy. The business partners have to align clear responsibilities and targets. Each party has to brief the internal teams.

#### 8. Step: Category review

The last step in the category planning approach is the review of the category performance. This has to be done regularly. Firstly, the implementation plan has to be checked to see if the agreed packages of measures are established in time. Secondly, it needs to be checked whether the agreed KPI's are still in line with the company financial goals. Thirdly, the market should be screened permanently to see if there are changes within the market place. Last but not least, the results of the promotions, the pricing and product space allocation should be controlled on a regular basis.

## Appendix 4.1: Time horizon / Research plan

Literature Review								_	-	<u>.</u>		1.0					_																				-
Research Methodology & Methods Research Action & Case Research Action Ac	2011	12	2012 1	2	3	4 5	6	7	8	9 10	) 11	12	2013	1	23	4	5	6 /	8	9	10	11 1	12	2014	1	2	3 4	1 5	6	7	8	9 1	) 11	12	2015	2016/Q1	
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Data gathering									_		_												_			_		_					_	_		L	_
a) Secondary data	Submit and approved R	D1		_						_													_			_							_				_
a) Secondary data									_		_												_			_		_					_	_		L	_
Market data reports   b) 2 interviews with key account managers:     b) 2 interviews with key account managers:     c) 1 interviews with key account managers:     c) 2 interviews with stateholders at Celesio AG / GEHE Pharma     c) 6 interviews with stateholders at Celesio AG / GEHE Pharma     c) 2 interviews with stateholders at Celesio AG / GEHE Pharma     c) 2 interviews with stateholders at Celesio AG / GEHE Pharma     c) 2 interviews with stateholders at Celesio AG / GEHE Pharma     c) 2 interviews with stateholders at Celesio AG / GEHE Pharma     c) 2 interviews with stateholders at Celesio AG / GEHE Pharma     c) 2 interviews with stateholders at Celesio AG / GEHE Pharma     c) 2 interviews with stateholders at Celesio AG / GEHE Pharma     c) 2 interviews with stateholders at Celesio AG / GEHE Pharma   c) 2 interviews with stateholders at Celesio AG / GEHE Pharma     c) 3 interviews with stateholders at Celesio AG / GEHE Pharma     c) 4 interviews with stateholders at Celesio AG / GEHE Pharma     c) 6 interviews with stateholders at Celesio AG / GEHE Pharma     c) 6 interviews with stateholders at Celesio AG / GEHE Pharma     c) 7 interviews with stateholders at Ce				_													_				_		_			_							_				_
b) 2 interviews with key account managers: DTC and Para suppliers / FMCG area scheduling the appointments c) 2 interviews with key account managers: DTC and Para suppliers / pharmaceutical area scheduling the appointments d) 6 interviews with stakeholders at Celesio AG / GEHE Pharma CEO COO General Manager Procurement Director Supply Chain Director Cooperation partner in Disseldorf Cooperation partner in Stuttgart scheduling the appointments Supply Chain Director Supply Chain Director Suply Chain Director Supply Chain Director Supply Chain Director				_							_																_						_	_		<u> </u>	
OTC and Para suppliers / FMCG area       Image: Image	Market data reports																						_														_
OTC and Para suppliers / FMCG area       Image: Image											_												_			_	_						_	_		<u> </u>	_
scheduling the appointments       Image: Image																																					
c) 2 interviews with key account managers: OTC and Para suppliers / pharmaceutical area scheduling the appointments d) 6 interviews with stakeholders at Celesio AG / GEHE Pharma CEO COO General Manager Procurement Director Sales & Marketing Director Supply Chain Director e) 2 interviews with retail pharmacists cooperation partner in Düsseldorf cooperation partner in Düsseldorf cooperation partner in Stuttgart scheduling the appointments Data reduction Data display Conclusion drawing / verification Preparation of the final thesis				area	<u> </u>	_	_	_															_														
OTC and Para suppliers / pharmaceutical area   scheduling the appointments   d) 6 interviews with stakeholders at Celesio AG / GEHE Pharma   CEO   CEO   COO   General Manager   Procurement Director   Sales & Marketing Director   Sales & Marketing Director   Supply Chain Director   S	<u> </u>																						_														
scheduling the appointments   a) 6 interviews with stakeholders at Celesio AG / GEHE Pharma   CEO   COO   General Manager   Procurement Director   Sales & Marketing Director   Supply Chain Director   0) 1 interviews with retail pharmacists   cooperation partner in Düsseldorf   cooperation partner in Stuttgart   scheduling the appointments   Procurement Director   9 2 interviews with retail pharmacists   cooperation partner in Stuttgart   scheduling the appointments   Permanent Data analyses   Data reduction   Procuremapping																							_														
d) 6 interviews with stakeholders at Celesio AG / GEHE Pharma   CEO   COO   General Manager   Procurement Director   Sales & Marketing Director   Supply Chain Director   9 2 interviews with retail pharmacists   cooperation partner in Düsseldorf   cooperation partner in Stuttgart   scheduling the appointments   Permanent Data analyses   Data reduction   Conclusion drawing / verification   Conclusion drawing / verification				ceut	tical	are	а																_														
CEO       COO       C																							_														
COO       General Manager       General Mana		kehol	ders at	Cele	esio	AG	/ G	EΗ	IE P	harr	na																										
General Manager       Image Constraints       Imag																																					
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#### Appendix 4.2: Interview preparation / question list

#### The aim is to answer Research Question 1.

What are the environmental factors that make pharmaceutical wholesalers consider changing their business model in Germany?

# Interviews with pharmaceutical manufacturers (key account managers), selected management board members of Celesio, GEHE Pharma stakeholders and customers of GEHE Pharma

- How do you describe the pharmaceutical market in Germany (challenges / opportunities)?
- Which trend do you see in the market?
- How is the current competition situation?

#### The aim is to answer Research Question 2.

How established is the Efficient Consumer Response (ECR) model in the Fast Moving Consumer Goods (FMCG) business in Germany?

#### Interviews with key account managers OTC and Para manufacturers / FMCG market

- How long have you been in the company?
- How long have you been in the OTC (Para) business?
- Please describe your experience with the ECR model
- Have you been "pro-active" in some projects?
- How many projects have you been involved with?
- What were the project areas (Supply chain, Category Management....)
- What are the pro's and con's from your point of view?
- What are the benefits for you, your company and for the retailer?
- How has your collaboration changed between you and your business partners (traders)?
- Where do you see some room for improvement in the model?
- Could you assume that this model could work as well in the pharmaceutical business?

#### The aim is to answer Research Question 3.

How could the Efficient Consumer Response (ECR) model from the Fast Moving Consumer Goods (FMCG) business be transferred into the pharmaceutical wholesale business in Germany?

## Interviews with key account managers OTC and Para manufacturers / pharmaceutical market

- How long have you been in the company?
- How long have you been in the OTC (Para) business?
- Do you have experience in other businesses (like FMCG)?

- Do you know the ECR model?
- What do you know about it?
- Could you imagine using this model in the pharmaceutical business?
- Do you see potentials or some risks?
- What would be the prerequisites for using this model?
- What has to change / what has to be adopted?

#### Internal interviews with stakeholders

#### 1. Management board of Celesio AG

- What is the Celesio overall strategy?
- How do you see the current market situation in Germany?
- What are the challenges for the wholesale market in Germany?
- Do you know the ECR model?
- Could you assume to establish such a model?
- Would you support it?
- What your experience in other business?

#### 2. <u>General Management</u>

- How long have you been in the company?
- How long have you been in wholesale business?
- Do you have experience in other businesses (like FMCG)?
- Do you know the ECR model?
- What do you know about it?
- Could you imagine using this model in the pharmaceutical business?
- Do you see potentials or some risk?
- What would be the prerequisites for using this model?
- What has to change / what has to be adopted?
- Would you support an implementation?

#### 3. <u>Procurement Director</u>

- How long have you been in the company?
- How long have you been in wholesale business?
- Do you have experience in other businesses (like FMCG)?
- Do you know the ECR model?
- What do you know about it?
- Could you imagine using this model in the pharmaceutical business?
- Do you see potentials or some risk?
- What would be the prerequisites for using this model?
- What has to change / what has to be adopted?
- Would you support an implementation?
- How is your current collaboration with the suppliers running?
- What kind of projects are you dealing with?

#### 4. Sales and Marketing Director

- How long have you been in the company?
- How long have you been in wholesale business?
- Do you have experience in other businesses (like FMCG)?
- Do you know the ECR model?
- What do you know about it?
- Could you imagine using this model in the pharmaceutical business?
- Do you see potentials or some risk?
- What would be the prerequisites for using this model?
- What has to change / what has to be adopted?
- Would you support an implementation?
- What are your customers (Pharmacists) expecting from you?
- Are you running Category Management projects with them already?

#### 5. <u>Supply Chain Director</u>

- How long have you been in the company?
- How long have you been in wholesale business?
- Do you have experience in other businesses (like FMCG)?
- Do you know the ECR model?
- What do you know about it?
- Could you imagine using this model in the pharmaceutical business?
- Do you see potentials or some risk?
- What would be the prerequisites for using this model?
- What has to change / what has to be adopted?
- Would you support an implementation?
- Are you running SC projects with suppliers at the moment?
- Please describe them

#### Interviews with retail pharmacists

- How is your current collaboration with GEHE running?
- What could be improved?
- Who is doing the self-layouts today?
- Do you know Category Management?
- Could you imagine that GEHE provides you a full CM program?
- Who is doing the ordering and the stock management today?
- Do you have systems for this?
- Do you know vendor management?
- Could you assume that GEHE is doing it for you?
- What would be the prerequisites for a closer collaboration?

#### Appendix 4.3: <u>Transcription symbols</u>

- ↑ Rise in pitch
- ↓ Fall in pitch
- (0.0) Timed pause: Silence measured in seconds
- Very straight forward answer (strong body language)
- ≈ Felt not comfortable during the answer
- ? Was not so sure about the topic
- Saw it as a conflict
- () Was talking around the topic / came not to the point
- ! Saw it as an opportunity
- ☺! Laughting
- ③ Smiling
- Bid not like the topic

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#### Appendix 4.5.: <u>Interviewee comments related to the theme of market</u> environments (pharmaceutical or FMCG market)

Hereafter I am presenting snapshots from the interviews, serving as examples for the analysis process. The quotes are not literal translations but correlate with the content and sentiments of the conversation. For this reason the transcription symbols (appendix 4.3) are not relevant and therefore not presented here. I also do not name or further identify the related interview partners for confidentiality reasons. For demonstration of the analysis method I use the first search theme: market environment (see table 4.3). Under this heading I put answers from interview partners together which belong to the topic market environment.

I reduced this data by searching for similarities and differences between the FMCG and pharmaceutical markets. Firstly, I identified from the FMCG- interviews the key statements / conclusion (like market differentiation / consolidation). Secondly, I compared them with the interviews with respondents from the pharmaceutical industry to identify similarities or differences. Finally, I connect the latter responses with the identified key statements / conclusions for FMCG interviews. I colour coded the comparable statements and identified the similarity or difference to the FMCG respondents. The findings are presented in section 5.4.1.

#### Answers of FMCG stakeholders (key account mangers)

"In 1980 s retailers identified a need to differentiate themselves from other market players due to the strong competition in the market. Same happened on our side (manufacturer side)."

Market differentiation / consolidation

Market readiness for a new business model

"The ECR initiative which we started with global retailers was the starting point of a different way of collaboration with the retailers but was the way to create competitive advantage within the baby care and food category."

Market differentiation / consolidation

Market readiness for a new business model

"We recognized that one of our competitors started to work in a different model with retailers in Europe. This manufacturer did it before with Walmart in the US. We tried to learn and to copy the model. We joined the first ECR congress to learn about that model."

Market readiness for a new business model

Relationship structure between business partners

"I would argue that you can compare the FMCG with the pharmaceutical market for OTC and para products. Communication and negotiation processes are the same. Wholesale buyers and grocery retail buyers have the same targets to get the best terms and conditions from the manufacturers."

Relationship structure between business partners

"You have to consider the different store structure. Grocery retailers have a high number of retail stores. They have direct access to the shelf and they drive their business centrally."

#### Retail store structure

"We never used wholesalers for our supply chain. We are delivering everything directly to the retail warehouse."

#### Wholesaler involvement

"Wholesalers were never considered in our ECR projects. I have more advantages to work directly with the retailer together."

#### Wholesaler involvement

"No retailer ever asked for a wholesale service. They have their own central warehouses, even better than ours."

#### Wholesaler involvement

"I am looking for new distribution opportunities. We have a great business in the mass market. There should be more opportunities within the pharma market. We prefer to work directly with pharmacists together because they have a close relationship with the customers. Customers listen to their advice. We need also more innovations for the pharma market – like we do for FMCG. That would push the turnover."

Relationship structure between business partners

New sales opportunities

Customer trust

Innovative sales strategy

#### Answers of pharmaceutical stakeholders

## (manufacturers, GEHE Pharma management, Celesio AG management, retail pharmacists)

"At the moment we are losing market share because mainly one of your main competitor tries to gain market share by offering better terms and conditions to the retail pharmacies. Other wholesales are following this model. Currently, it is like a price war in the market."

#### Similarity = market consolidation

"We have to identify new services and a new business model to stay competitive in the market. I would like to say that we need to become a preferred wholesaler and that the price is not the only the point as issue."

Similarity = market differentiation

"What we are seeing in German market is unique in comparison to other European markets. There is a price war between the pharmaceutical wholesales to generate market shares. This leads to a market consolidation over time. Especially, for the small and private owned wholesalers."

Similarity = market consolidation

"Currently, I have better opportunities to buy my products from wholesalers. There are different offers available. At the moment I buy from different wholesalers and not only from one wholesaler as in the past. I was able to increase by profit over the last months significantly."

Similarity = market consolidation / differentiation

"New wholesalers are entering the market."

Similarity = market consolidation / differentiation

Similarity = market readiness for a new business model

"The number of retail pharmacies is declining year by year. That means also less customers for the pharmaceutical wholesale business".

Similarity = market consolidation

Differences = retail store structure

"Short line wholesalers have a limited number of articles in the assortment. That allows them to work more cost efficient."

Similarity = market consolidation / differentiation

"I see similarities between the FMCG market and the pharmaceutical market which I was not aware of before I started in the pharmaceutical industry. The pharmaceutical market is there today were the FMCG was 30 years earlier. I was surprised when I got the job offer from my actual pharma company. In the interview they told me that they want to learn from FMCG. When I talked about ECR – they were not aware of. But I asked them if the top management is supporting that strategy because from my point of view it is key to chance the company strategy."

Similarity = top management involvement

Similarity = market readiness for a new business model

"Negotiation processes are the same for FMCG and pharma but there are different negotiation levels. One is between wholesaler and manufacturer, other one is between wholesale and pharmacist and the third one is between pharmacist and manufacturer."

Similarity = relationship structure between business partners

Difference = wholesaler involvement

"Yes, grocery retailers drive their business directly but the customers trust the pharmacist which is a big advantage in the pharma market. In the grocery store the shopping experience is more anonym. There is not a real sales conversation. The disadvantage is that pharmacists are only own a maximum of 4 stores. That limits an active sales strategy."

Difference = wholesaler involvement

Difference = customer trust

Difference = retail store structure

Difference = no active sales strategy

"I am mainly ordering from wholesalers and not directly from manufacturers. I choose the manufacturer with the best terms and conditions. I am also switching between wholesalers. The wholesaler is for me the supply chain provider. I can order several times per day. I cannot keep all products available in the store."

Difference = wholesaler involvement

Difference = retail store structure

"Some OTC products I am ordering directly from manufacturers. For para products I am ordering everything directly from manufacturers."

Difference = wholesaler involvement

Difference = retail store structure

"The supply chain is our main goal. We are the supply chain provider in the German market."

Differences = wholesaler involvement

Differences = retail store structure

"I do not understand my job as trader. I have to support the patent to get better. The patients trust me and listen to my advice. I do not sell products for margin reasons."

#### Difference = customer trust

Difference = no active sales strategy

"I thought about the mass market or a comparison. Both markets are completely different."

Difference = retail store structure

"Yes, I am mainly a healthcare provider. I am mainly focused on the prescription drugs. I guess that in the mass market are much more innovations and advertising available than in pharma. I never thought about a comparison."

Difference = retail store structure

Difference = customer trust

Difference = no active sales strategy

## Summary of the findings of similarities or differences between FMCG and pharmaceutical market (see also section 5.4.1)

In the following table I summaries the themes which are the same for the FMCG and pharmaceutical markets as presented above (like market differentiation / consolidation) and I matched those topics which show differences between both markets (like wholesaler involvement).

### Similarity: Market differentiation / consolidation

FMCC market	Dharmana tian markat
FMCG market	Pharmaceutical market
"In 1980 s retailers identified a need to differentiate themselves from other market players due to the strong competition in the market. Same happened on our side (manufacturer side)."	"At the moment we are losing market share because mainly one of your main competitor tries to gain market share by offering better terms and conditions to the retail pharmacies. Other wholesales are following this model. Currently, it is like a price war in the market."
"The ECR initiative which we started with global retailers was the starting point of a different way of collaboration with the retailers but was the way to create competitive advantage within the baby care and food category."	"What we are seeing in German market is unique in comparison to other European markets. There is a price war between the pharmaceutical wholesales to generate market shares. This leads to a market consolidation over time. Especially, for the small and private owned wholesalers."
	"We have to identify new services and a new business model to stay competitive in the market. I would like to say that we need to become a preferred wholesaler and that the price is not the only the point as issue."
	"Currently, I have better opportunities to buy my products from wholesalers. There are different offers available. At the moment I buy from different wholesalers and not only from one wholesaler as in the past. I was able to increase by profit over the last months significantly."
"Negotiation processes are the same for FMCG and pharma but there are different negotiation levels. One is between wholesaler and manufacturer, other one is between wholesale and pharmacist and the third one is between pharmacist and manufacturer."	"Negotiation processes are the same for FMCG and pharma but there are different negotiation levels. One is between wholesaler and manufacturer, other one is between wholesale and pharmacist and the third one is between pharmacist and manufacturer."
	"New wholesalers are entering the market."
	"Short line wholesalers have a limited number of articles in the assortment. That allows them to work more cost efficient."

## Similarity: Market readiness for a new business model

FMCG market	Pharmaceutical market
"In 1980 s retailers identified a need to differentiate themselves from other market players due to the strong competition in the market. Same happened on our side (manufacturer side)."	"New wholesalers are entering the market."
"We recognized that one of our competitors started to work in a different model with retailers in Europe. This manufacturer did it before with Walmart in the US. We tried to learn and to copy the model. We joined the first ECR congress to learn about that model."	
"Negotiation processes are the same for FMCG and pharma but there are different negotiation levels. One is between wholesaler and manufacturer, other one is between wholesale and pharmacist and the third one is between pharmacist and manufacturer."	"Negotiation processes are the same for FMCG and pharma but there are different negotiation levels. One is between wholesaler and manufacturer, other one is between wholesale and pharmacist and the third one is between pharmacist and manufacturer."
"The ECR initiative which we started with global retailers was the starting point of a different way of collaboration with the retailers but was the way to create competitive advantage within the baby care and food category."	
"I see similarities between the FMCG market and the pharmaceutical market which I was not aware of before I started in the pharmaceutical industry. The pharmaceutical market is there today were the FMCG was 30 years earlier. I was surprised when I got the job offer from my actual pharma company. In the interview they told me that they want to learn from FMCG. When I talked about ECR – they were not aware of. But I asked them if the top management is supporting that strategy because from my point of view it is key to chance the company strategy."	"I see similarities between the FMCG market and the pharmaceutical market which I was not aware of before I started in the pharmaceutical industry. The pharmaceutical market is there today were the FMCG was 30 years earlier. I was surprised when I got the job offer from my actual pharma company. In the interview they told me that they want to learn from FMCG. When I talked about ECR – they were not aware of. But I asked them if the top management is supporting that strategy because from my point of view it is key to chance the company strategy.

## Similarity: Relationship structure between business partners

FMCG market	Pharmaceutical market
"We recognized that one of our competitors started to work in a different model with retailers in Europe. This manufacturer did it before with Walmart in the US. We tried to learn and to copy the model. We joined the first ECR congress to learn about that model."	
"I would argue that you can compare the FMCG with the pharmaceutical market for OTC and para products. Communication and negotiation processes are the same. Wholesale buyers and grocery retail buyers have the same targets to get the best terms and conditions from the manufacturers."	"I would argue that you can compare the FMCG with the pharmaceutical market for OTC and para products. Communication and negotiation processes are the same. Wholesale buyers and grocery retail buyers have the same targets to get the best terms and conditions from the manufacturers."
"I am looking for new distribution opportunities. We have a great business in the mass market. There should be more opportunities within the pharma market. We prefer to work directly with pharmacists together because they have a close relationship with the customers. Customers listen to their advice. We need also more innovations for the pharma market – like we do for FMCG. That would push the turnover."	"I am looking for new distribution opportunities. We have a great business in the mass market. There should be more opportunities within the pharma market. We prefer to work directly with pharmacists together because they have a close relationship with the customers. Customers listen to their advice. We need also more innovations for the pharma market – like we do for FMCG. That would push the turnover."

# Difference: Retail store structure

FMCG market	Pharmaceutical market
"You have to consider the different store structure. Grocery retailers have a high number of retail stores. They have direct access to the shelf and they drive their business centrally."	"The number of retail pharmacies is declining year by year. That means also less customers for the pharmaceutical wholesale business".
	"Yes, grocery retailers drive their business directly but the customers trust the pharmacist which is a big advantage in the pharma market. In the grocery store the shopping experience is more anonym. There is not a real sales conversation. The disadvantage is that pharmacists are only own a maximum of 4 stores. That limits an active sales strategy."
	"Some OTC products I am ordering directly from manufacturers. For para products I am ordering everything directly from manufacturers."
	"The supply chain is our main goal. We are the supply chain provider in the German market."
	"I thought about the mass market or a comparison. Both markets are completely different."
	"Yes, I am mainly a healthcare provider. I am mainly focused on the prescription drugs. I guess that in the mass market are much more innovations and advertising available than in pharma. I never thought about a comparison."
	"I am mainly ordering from wholesalers and not directly from manufacturers. I choose the manufacturer with the best terms and conditions. I am also switching between wholesalers. The wholesaler is for me the supply chain provider. I can order several times per day. I cannot keep all products available in the store."

# Difference: Wholesaler involvement

FMCG market	Pharmaceutical market
"We never used wholesalers for our supply chain. We are delivering everything directly to the retail warehouse."	"Negotiation processes are the same for FMCG and pharma but there are different negotiation levels. One is between wholesaler and manufacturer, other one is between wholesale and pharmacist and the third one is between pharmacist and manufacturer."
"Wholesalers were never considered in our ECR projects. I have more advantages to work directly with the retailer together."	"Yes, grocery retailers drive their business directly but the customers trust the pharmacist which is a big advantage in the pharma market. In the grocery store the shopping experience is more anonym. There is not a real sales conversation. The disadvantage is that pharmacists are only own a maximum of 4 stores. That limits an active sales strategy."
"No retailer ever asked for a wholesale service. They have their own central warehouses, even better than ours."	"I am mainly ordering from wholesalers and not directly from manufacturers. I choose the manufacturer with the best terms and conditions. I am also switching between wholesalers. The wholesaler is for me the supply chain provider. I can order several times per day. I cannot keep all products available in the store." "Some OTC products I am ordering directly from manufacturers. For para products I am
	ordering everything directly from manufacturers."
	"The supply chain is our main goal. We are the supply chain provider in the German market."

# Similarity: New sales opportunities

FMCG market	Pharmaceutical market
"I am looking for new distribution opportunities. We have a great business in the mass market. There should be more opportunities within the pharma market. We prefer to work directly with pharmacists together because they have a close relationship with the customers. Customers listen to their advice. We need also more innovations for the pharma market – like we do for FMCG. That would push the turnover."	"I am looking for new distribution opportunities. We have a great business in the mass market. There should be more opportunities within the pharma market. We prefer to work directly with pharmacists together because they have a close relationship with the customers. Customers listen to their advice. We need also more innovations for the pharma market – like we do for FMCG. That would push the turnover."

#### Similarity: top management involement

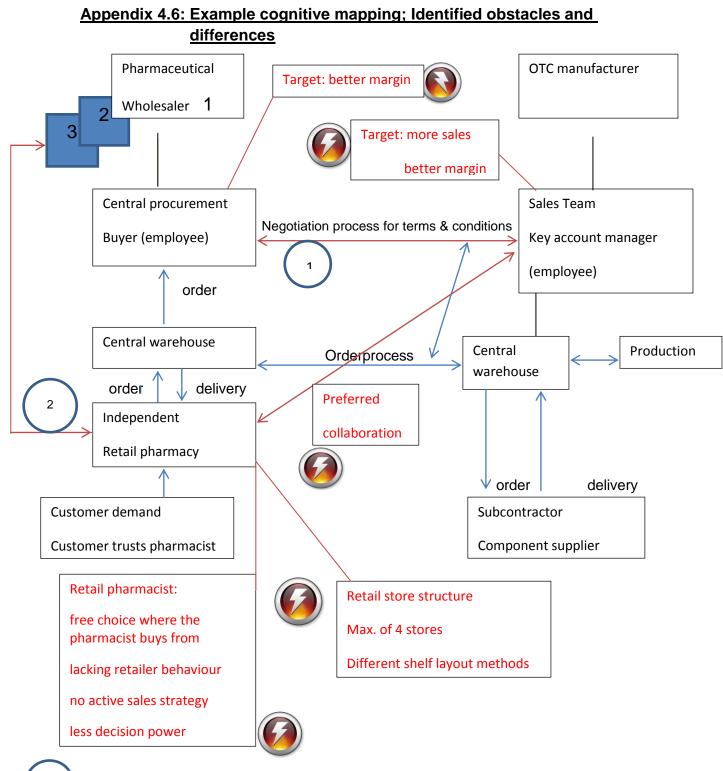
FMCG market	Pharmaceutical market
"I see similarities between the FMCG market	"I see similarities between the FMCG market
and the pharmaceutical market which I was	and the pharmaceutical market which I was
not aware of before I started in the	not aware of before I started in the
pharmaceutical industry. The pharmaceutical	pharmaceutical industry. The pharmaceutical
market is there today were the FMCG was 30	market is there today were the FMCG was 30
years earlier. I was surprised when I got the	years earlier. I was surprised when I got the
job offer from my actual pharma company. In	job offer from my actual pharma company. In
the interview they told me that they want to	the interview they told me that they want to
learn from FMCG. When I talked about ECR –	learn from FMCG. When I talked about ECR
they were not aware of. But I asked them if the	– they were not aware of. But I asked them if
top management is supporting that strategy	the top management is supporting that
because from my point of view it is key to	strategy because from my point of view it is
chance the company strategy."	key to chance the company strategy."

# Difference: Customer trust

FMCG market	Pharmaceutical market
"I am looking for new distribution opportunities. We have a great business in the mass market. There should be more opportunities within the pharma market. We prefer to work directly with pharmacists together because they have a close relationship with the customers. Customers listen to their advice. We need also more innovations for the pharma market – like we do for FMCG. That would push the turnover."	"I am looking for new distribution opportunities. We have a great business in the mass market. There should be more opportunities within the pharma market. We prefer to work directly with pharmacists together because they have a close relationship with the customers. Customers listen to their advice. We need also more innovations for the pharma market – like we do for FMCG. That would push the turnover."
	"Yes, grocery retailers drive their business directly but the customers trust the pharmacist which is a big advantage in the pharma market. In the grocery store the shopping experience is more anonym. There is not a real sales conversation. The disadvantage is that pharmacists are only own a maximum of 4 stores. That limits an active sales strategy."
	"I do not understand my job as trader. I have to support the patent to get better. The patients trust me and listen to my advice. I do not sell products for margin reasons."
	"Yes, I am mainly a healthcare provider. I am mainly focused on the prescription drugs. I guess that in the mass market are much more innovations and advertising available than in pharma. I never thought about a comparison."

# Difference: Innovative sales strategy

FMCG market	Pharmaceutical market
"I am looking for new distribution opportunities. We have a great business in the mass market. There should be more opportunities within the pharma market. We prefer to work directly with pharmacists together because they have a close relationship with the customers. Customers listen to their advice. We need also more innovations for the pharma market – like we do for FMCG. That would push the turnover."	"I am looking for new distribution opportunities. We have a great business in the mass market. There should be more opportunities within the pharma market. We prefer to work directly with pharmacists together because they have a close relationship with the customers. Customers listen to their advice. We need also more innovations for the pharma market – like we do for FMCG. That would push the turnover."
	"Yes, grocery retailers drive their business directly but the customers trust the pharmacist which is a big advantage in the pharma market. In the grocery store the shopping experience is more anonym. There is not a real sales conversation. The disadvantage is that pharmacists are only own a maximum of 4 stores. That limits an active sales strategy."
	"I do not understand my job as trader. I have to support the patent to get better. The patients trust me and listen to my advice. I do not sell products for margin reasons."
	"Yes, I am mainly a healthcare provider. I am mainly focused on the prescription drugs. I guess that in the mass market are much more innovations and advertising available than in pharma. I never thought about a comparison."



= same process as FMCG, but literature discussion shows conflict potential (section 3.5.3.1 / Steiner, 2007 and section 3.5.3.3 / Großpietsch, 2003; Rebach, 2010)

= conflict area, but mainly for prescription drugs, therefore out of scope



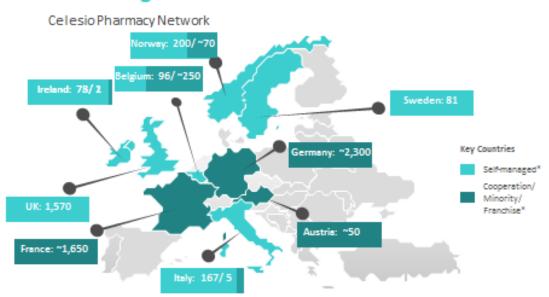
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2

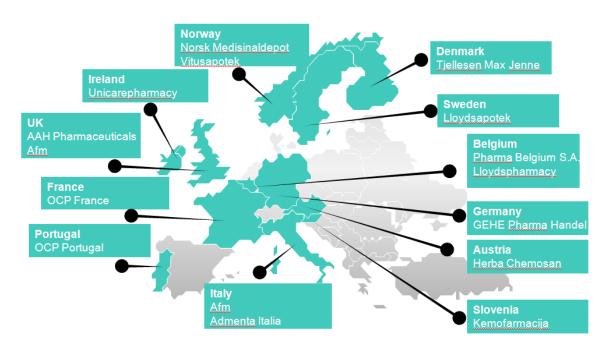
= identified conflict areas

#### Appendix 5.1: Celesio AG pharmacy network (internal document)

# The Pharmacy Network itself reaches about 6,500 Pharmacies in 9 markets, with 2,192 self-managed

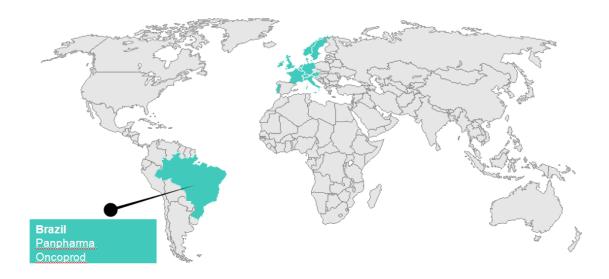


### Appendix 5.2: Geographical landscape of Celesio AG (internal document)



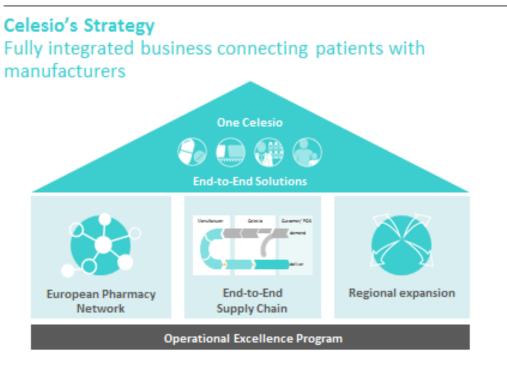
#### **Celesio Group Europe**

### Celesio Group worldwide



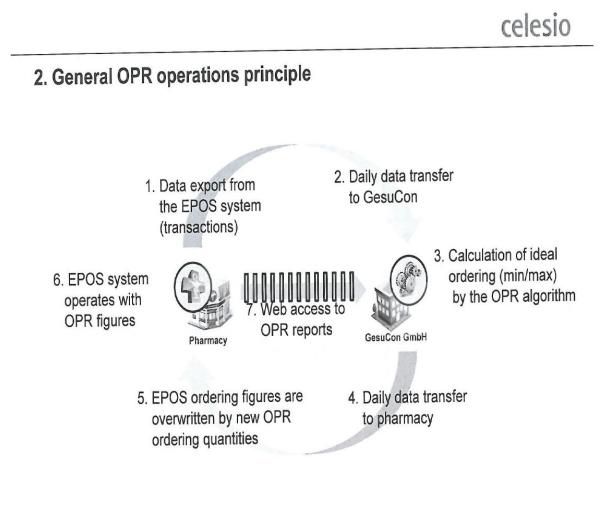
### Appendix 5.3: Celesio AG strategy (internal document)

1



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# Appendix 5.5: Distinction Wawi Top / OPR (internal document)

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#### 6. Distinction WawiTop / OPR

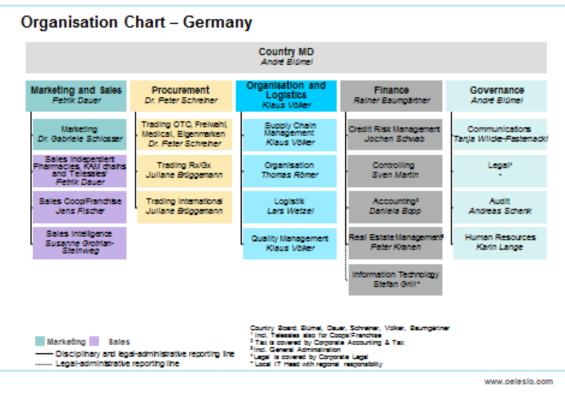
	WAWITOP	OPR
Maturity of the algorithm	Predecessor tool of OPR → Algorithm not as advanced	More advanced algorithm → more effective
Maturity of the algorithm	Highly dependent on the calculation method of the EPOS replenishment module (e.g. utilised forecasting model)	OPR operates independently of the EPOS replenishment module (uses own forecasting models and considers economic aspects)
Calculation coverage of articles	Replenishment settings are optimised for article clusters, not individually	The optimal replenishment settings are calculated for each article individually
Tool installation	Stand alone solution: Tool has to be embedded into EPOS system in each pharmacy	Remote server based solution: reduced development and implementation effort for both EPOS provider and GesuCon
Frequency of optimising parameters	On demand only: Parameter settings are calculated normally once for installation (afterwards only as required)	Daily
Access to reports	No accessible for pharmacies - they receive hard copies from WawiTop advisors	OPR report constantly available via web porta
Suitability for chains	Not suitable as no central management possible	Suitable for chains as central access possible to individual pharmacy settings, reports and detailed stock data

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# Appendix 5.6: Organisation chart GEHE Pharma (internal document)

# celesio



Meeting minutes: Direc	ctor's Meetings	
Date	Time	Room
18.12.2012	17.00 - 18.00	OCP
10.12.2012	17.00 10.00	881
25.01.2013	11.00 - 12.00	Celesio
23.01.2013	11.00 - 12.00	Celesio
22.02.2013	11.00 - 12.00	Celesio
22.02.2013	11.00 - 12.00	Celesio
00.00.0010	44.00 40.00	
22.03.2013	11.00 - 12.00	Celesio
00.01.0010	44.00 45.00	
26.04.2013	14.00 - 15.00	Celesio
24.05.2013	13.30 - 14.30	Celesio
28.06.2013	11.00 - 12.00	Stuttgart
26.07.2013	11.00 - 12.00	Vienna
30.08.2013	11.00 - 12.00	Stuttgart
		g
20.09.2013	11.00 - 12.00	Stuttgart
20.00.2010	11.00 12.00	Otatigan
25.10.2013	11.00 - 12.00	Stuttgart
23.10.2013	11.00 - 12.00	Stutigan
29.11.2013	11.00 - 12.00	Stuttgort
29.11.2013	11.00 - 12.00	Stuttgart
20.42.2042	11.00 10.00	Churthene at
20.12.2013	11.00 - 12.00	Stuttgart
00.01.001.1	40.00 44.00	
29.01.2014	10.00 - 11.00	Stuttgart
26.03.2014	11.00 - 12.00	Stuttgart
One Celesio - Magazir	ne for the employe	es of Celesio Group
Magazine	lssue	Date
One Celesio	6	19.12.2012
	-	
One Celesio	7	09.04.2013
	'	03.04.2010
One Celesio	8	28.06.2013
One Celesio	0	20.00.2013
	0	07 10 2012
One Celesio	9	07.10.2013
	40	10.10.0010
One Celesio	10	16.12.2013
One Celesio	11	03.04.2014
One Celesio	12	03.07.2014
One Celesio	13	18.09.2014
L	<b>!</b> !	

# Appendix 5.7: Internal secondary data sources

#### Appendix 7.1: Pharmaceuticals business developed

Place

Asia/ Pacific

Latin/ Africa/ Middle tat

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Appendix 7.1: Pharmaceuticals business developed

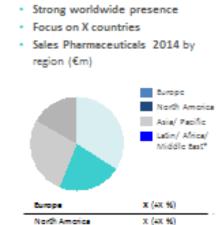
# Pharmaceuticals business developed

Headquartered in X, Germany

#### Company Overview

#### Positioning

- Over X years of experience
- 2014 Net Sales: X €bn thereof X €bn from HealthCare
- Growth rate 2014: X % (Group)
- HealthCare X % of sales:
  - Prescription products: X €m (X %)
  - Non-prescription products: X €m (X %)
- Sales: 2014 in Germany
  - Prescription products: X €m (X %)
  - Non-prescription products: X €m (X %)



x (+x %)

X (+X %)

# Products

- In Pharmaceuticals, the X most important late-stage product candidates have a combined Peak Sales potential of X Ebn.
- In 2014, good headway with market introduction of innovative X. Approvals for further indications in major countries.
- The pharmaceutical business is also strengthened by the launches of X
- Innovation through partnerships Partnerships from the initial idea through all stages of R&D to subsequent co-marketing