

**Organic Food Subscription Schemes
in Germany, Denmark, The Netherlands
and The United Kingdom.
Definitions and Patterns of Development in an
International Context[©].**

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iv List of Abbreviations

B2B	Business to business relationship
B2C	Business to consumer relationship
c+OFSS	Conventional and organic food subscription schemes
CLC	Consumer life cycle
CSA	Community Supported Agriculture
DK	Denmark
GER	Germany
GMO	Genetically Modified Organisms
MLC	Market life cycle
MS	Market share
NL	The Netherlands
OFM	Organic food market
OFSS	Organic food subscription schemes
PLC	Product life cycle
SME	Small-medium sized enterprise
UK	The United Kingdom

Executive Summary

This research investigates the phenomenon of organic food subscription schemes in four European countries. It aims to provide an international developmental framework for Organic Food Subscription Schemes (OFFS). It identifies driving forces of the organic food subscription markets and describes and defines different types of OFSS by their development and by their most important operational features.

Their importance for the organic food markets is expressed in the following table 0.1:

Table 0.1 “Market figures on Organic Food Subscription Schemes 2003”

	GER	DK	NL	UK
Number OFSS Companies	300	15	55	300
Orders per week in k orders	124	20	41	82
Turnover in mEUR	370	11	17	42
National Turnover in bnEUR (2002)	3	0,35	0,35	1,44
Estimated Market Share in 2004*	8%-12%	n.n.	4,8%	3%

Source: this research, see chapter 6.5. All figures are estimations.

*MS estimations are lower due to prudence

Based on a database of 800 OFSS companies, twenty in-depth, semi-structured interviews and company visits have been conducted during January and March 2004 in Germany, Denmark, The Netherlands and The United Kingdom. Market information from experts, strategic suppliers, consumers and consultants has been gathered through interviews.

The outcomes were analysed in four national case studies, arriving at important conclusions for the national markets and the development of the OFSS. Common patterns have been identified through an international cross-case analysis. The outcome has been threefold:

- Firstly, distinctive definitions of the organic food subscription schemes, distinguishing OFSS from shops, and the diversification of OFSS into box-schemes, bag-schemes and supportive-schemes
- Secondly, three clusters of OFSS with common features have been identified as
 - OFSS with up to 2.000 orders per week
 - OFSS with more than 10.000 orders weekly
 - OFSS, which operate a B2B system
- Thirdly, a Development Model for the first group, representing more than 80% of the OFSS companies has been suggested.

The Box-Scheme Development Model describes how companies will develop their movement towards individualisation of the subscription through five sequential stages indicated by issues of marketing and operations. The most important aspect is seen as the benefit to the customer. It has been identified and discussed from a consumer perspective by the added value concept, and was supplemented by an operational perspective. The product and service features were analysed according to their tangible and intangible parts, their importance for purchase (Order winner & Qualifier) and the perception of customers (Quality).

This paper enables practitioners to anticipate their company's position in the stage of market development by their operational features and their customer demands, and to predict likely future developments.

- Gaps of knowledge and have been found and further research is suggested in order to:
 - Understand the growth of OFSS companies with more than 10.000 orders weekly
 - Decide on the success factors of bag-schemes and new developments in an international context
 - Extend the Box-Scheme Development Model towards supportive OFSS in emerging markets
 - Collect basic quantitative data of the OFFS companies, customers and market figures.

1.0 Introduction

This paper describes and defines subscription schemes of organic food in an international and intercultural context. It researches the driving factors of success using semi-structured in-depth interviews. It provides an overview of the industry, followed by case and cross-case studies of Germany, Denmark, The Netherlands and the United Kingdom. Three groups of organic food subscription schemes with common patterns will be presented. This research concludes in an OFSS-development model based on the theoretical frameworks of the PLC/MLC concept and SME theory.

The following subchapters further on describe why this research topic is of interest, how it contributes to the body of knowledge and the personal background of the researcher.

1.1 Overview of Dissertation

This dissertation follows the general accepted academic structure.

- Chapter 1 gives an introduction to the subject, providing information about the function and importance of subscription schemes and the gaps of knowledge, which will be addressed through this research.
- Chapter 2 outlines pre-emptive research on organic food markets data and literature on the subject. Furthermore it presents and discusses the theoretical frameworks used in analysis.
- Chapter 3 shows which and how methodological decisions were made, the appropriate tools were chosen and the interviews were conducted. It concludes with an overview of the research sequences.
- Chapter 4 delivers the market background for the national case studies.
- Chapter 5 presents the findings of the national OFSS markets.
- Chapter 6 presents the aggregated findings of the research and the OFSS development model.
- Chapter 7 addresses the limitations of the outcomes, further research and theoretical and managerial implications.

1.2 Context of the Research Topic

The European organic food markets (later abbreviated as OFM) have evolved to fast growing niche markets, fuelled by consumer's concern about food quality and mistrust in the conventional food industry as well as personal health issues (HUTCHINS AND GREENHALGH 1997). Further annual growth rates of 10% till 2007 is assumed by PADEL et al (2003) and presented in table 1.1. If not differently stated all financial data is expressed in EUR, and calculated on the exchange rate of 1,40 EUR = 1 Pound Sterling¹.

Table 1.1 “Organic Sales on retail level in selected European Countries (bn EUR)”

	1999	2002	Change	Further growth till 2007	Growth for vegetable sales
Germany	2,00	3,00	150%	4,8%	7,1%
France	0,64	1,50	234%	n.n.	n.n.
UK	0,63	1,44	230%	11%	8,3%
Italy	0,72	1,38	191%	n.n.	n.n.
CH	0,41	0,70	171%	n.n.	n.n.
NL	0,19	0,35	180%	n.n.	n.n.
DK	0,34	0,35	0%	1,5%	4%

Source: FIBL (2003), WILLER et al (2004), PADEL et al (2003), RIPPKIN citing HAMM et al (2003)

Table 1.1 furthermore displays that the demand for fresh vegetables is still growing. In most of the listed countries supermarkets have the dominant position covering a market share (MS) of 40 to 85% (WILLER et al 2004 p 101). Ongoing consumer concern about the dominant role of supermarkets, and the freshness and availability of organic produce led to an increased interest in direct purchases from farms. Besides the traditional direct selling channels like farmer markets, or farm shops, organic food subscription schemes (further referred to as OFSS) have evolved rapidly during the mid-1990s. OFSS are commonly known in the UK as “box- schemes”, or “bag-schemes” according to their wrapping.

¹ Note that this can cause differences to figures expressed in other currencies from past literature before the introduction of the EUR in 2001. The trends and tendencies shown should not be affected by this.

This research defines OFSS as:

“A composition of dominantly fresh organic produce, designed and packed by a farm or trading company, subscribed by the end-customer on a regular basis, and delivered to a place the consumer has agreed on.”

A comprehensive definition of the OFSS and descriptions of the variations and patterns among the OFSS is given in Chapter 6.1.

A typical form of the OFSS is an assortment of fresh organic vegetables and fruits, which is subscribed on a weekly basis for a fixed price. It will be delivered in a box or bag to an agreed pick-up point (private or in shops) or directly to the consumer’s home, as shown in picture 1.1. The OFSS companies box portfolio consist of various box types² in different box sizes³. Thus the portfolio can be calculated, as:

Portfolio = types x sizes

A common OFSS portfolio consists of three sizes of vegetable boxes (S,M,L) two sizes of fruit (S,M), combinations of both and additional boxes tailored to special customer groups (Breast-feeding mothers or elderly people). The prices of the three standard vegetable boxes are around 5 –12–20 EUR. According to this research, the price of the produce within the boxes in German and Danish boxes is higher, in British and Dutch boxes about the same or even lower than in the supermarkets. The content of the box/bag is variable owing to season and owing to the level of how customers are allowed to influence it.

² Examples are:

Vegetable box, Fruit box, Mixed Box, salad Box, Special Seasonal Box, Special cuisine Box, Elder Box, Baby Box, Regional Box, Single Box, Family Box, Extra box (combining often sought of extras i.e. bread, eggs, potatoes)

³ mainly S,M,L according to the fresh produce consumption habits of the customer

Picture 1.1 “ Delivery of a OFSS BOX”



Source: www.oekolandbau.de

Some companies offer seasonal special boxes (e.g. Asparagus-Potatoes-Boxes, Salad-boxes) or full-meal boxes (e.g. Ratatouille-Boxes). Increasingly the companies offer the full range of fresh organic food produce like dairy (e.g. cheese and milk), meat & fish (frozen and fresh), bread, flowers and non-perishable food produce as well as cleaning products. These other produce can be ordered as an additional with the subscription, or as a subscription itself (e.g. cheese-box, bread-box).

Owing to size, the way of operation, and tax regulations, the farm based OFSS have the legal standing of a retailing or wholesale company. Because the OFSS stem from regional initiatives, their set-up differs regionally and country wise. The four biggest OFSS companies in Europe are based in the UK, DK, and NL serving from 10.000 to 17.000 weekly customers/orders each. Germany has an estimated 300 companies, of which about 145 use complex IT solutions for OFSS HALDY (2004a, 2004b). Those German

companies manage weekly orders (boxes) of an estimated average of 400 to 2000 per company.

An attempt to introduce a very successful large scale Dutch OFSS to Germany at the end of the nineties was largely a failure HALDY (2004). This failure raised several questions:

- Why was it successful in NL, but not in GER?
- What are the factors leading to successes and failures?
- Can features of the different OFSS be combined to offer a superior system?
- What are the links between market development and OFSS?
- What does a current OFSS customer require, and what does a potential customer expect in future?
- What is the future prospect of the European Organic Food Subscription Scheme industry?

Hence, this research aims to fill a gap of knowledge about the factors of success and the factors of development in the different organic food markets.

OFSS are described in most reports on the organic food market as a means of direct marketing of farm produce. In fact, the most successful companies have either never been farms, or production is not their core business anymore. The regional farmer based OFSS are seen as sustainable and have shown a steady growth in sales, the national distributing companies in NL, UK and DK faced growth rates of up to +200% a year (COMPANY h,k3,q,s). The turnover of the UK OFSS in 2003 is estimated to be 29m EUR according to the SOIL ASSOCIATION (2003). The overall market share of OFSS in Germany is estimated to be 5,5% of all organic consumption (ZMP 2004) resulting in 165m EUR. The findings of this research suggest higher figures, as shown in chapter 6.5. Their market share in the vegetable and fruit segment is considerably higher KUHNERT (1998). In certain speciality shops in NL the market share of OFSS can reach up to 30% of all fresh sales COMPANY (k3).

Explicit and up-to date market data is scarce. In initial interviews led by the author at the ANUGA fair 2003 in Cologne among leading market researchers and officials this fact has been proven (HALDY 2003). The market potential for niche-marketers, producers and its possibilities of a targeted consumer segment communication is not been fully recognised by market researchers. Reasons are the ongoing lack of transparency of the OFM and its low institutional and small business structures with highly differentiated environmental and philosophical backgrounds. Additionally, most of the market research organisations stem from the conventional food retailing business, whereas OFSS are nearly exclusively found in the OFM. Thus focus of market research and funding is laid on mass-market distribution channels (e.g. supermarkets) and its supply structures.

Thus, OFSS are dynamic distribution channels in an attractive market. This research investigates the present and future crucial factors of success by using the following research objectives:

1.3 Aims and Objectives of this Research

The overall aim is:

- To provide an international development framework of Organic Food Subscription Schemes

The framework gives answers as to how the OFSS have evolved and where the differences and similarities of the national OFSS system stem from. The concept is based on an understanding of relationships of relevant factors within the companies and the OFM and OFSS market.

Hence, the research objectives are:

- To provide an overview of the driving forces of the organic food subscription markets and their development.

- To investigate the different types of OFSS, their development and most important features.
- To derive crucial factors of success for OFSS in relation to their market environment

The outcome of this research, as shown in chapter 6 contributes to strategic decision making, by predicting further developments in the OFSS offerings.

1.4 Personal Background

The author has worked for 13 years in the organic food business in producing and retailing, managing an OFSS from 1996 to 1999. He now is a consultant in the organic food industry and related branches. In 2002 he conducted a marketing strategy study with a leading OFSS company. He is member of the organic industry's informal network with good links with relevant individuals and access to data and to market insights.

1.5 Summary

Market data predicts a further growth of the OFM all over Europe. OFSS serve a niche market within the OFM, and are of higher importance in the fresh vegetable and fresh fruit sector and in direct marketing of farm produce. Selected OFSS companies reveal a high potential for this distribution system by their rapid growth. Even though OFSS are mentioned in market reports, they are not comprehensively described or researched. Thus, this initial research fills a gap of knowledge by describing and categorising different OFSS in four European countries. It is developing a conceptual framework to explain and predict the performance of OFSS companies and the OFSS industry. The following critical literature review will outline the state of research on the subject and introduce main theoretical frameworks for analysis.

2.0 Critical Literature Review

This critical literature review is based on English and German publications, as the author is not fully capable of the Danish language and Dutch. In chapters 5.3 and 5.4 respectively the author has used translated original publications when the interviewee or experts have referred to these documents.

The review starts with two initial subjects “Literature on OFSS” and “Data of the Organic Food Market”, followed by subchapters on the explanatory frameworks of “the market/product life cycle” and theories on small and medium sized enterprises (SMEs).

2.1 Literature on OFSS

The reviewed English and German publications are for practitioners if not stated otherwise. Thus academic literature is scarce. They do not refer to Danish or Dutch publications on OFSS. It is assumed that in these countries there is grey literature in Universities but that it has either not been published or not been published in English.

In Germany, as in the UK, subscription schemes are described as a new additional direct selling channel for organic farmers that supplement farmer markets and farmer shops (POTTEBAUM 1994, WIRTHGEN 2000). Four consumer surveys and nine case studies were published between 1992 and 1997 by the ÖKORING (HELBERG 1992, STEGMANN 1994, 1996, 1997). The figures reveal that subscribers are more responsive to questionnaires (STEGMANN 1996 p.8 question 2) and that they have been more attracted by printed media and word of mouth than other customers of the farm. The latter indicates that the “newness” of this system backed by recommendations of the press or individuals can be a major factor in the promotion of subscription. This assumption was proven through this research (COMPANY h). In 1993 BUNGE et al conducted a survey of 380 customers of seven farms and provided seven case studies. Their socio-metric customer segmentation suggests that young families of above middle class income, in new housing areas are the main subscribers. KREUZER (1996) summarised the findings of BUNGE et al and added five further case studies in his book. He describes three

models of OFSS with respect to the grade of individualisation⁴ and two with respect to the point of delivery. According to KREUZER two OFSS networks (Munich and Stuttgart) have emerged around initial key-persons and along software users of the same programme. The case studies were used for purposes of benchmarking and to define best practises, displaying growth in sales by up to 60% of sales per year.

The main contributor in English OFSS literature is the SOIL ASSOCIATION. It has published a technical guide to set-up a box-scheme, and refers to box-schemes as means to support farms (SOIL ASSOCIATION 2001, 2001a). It promotes the subscription of boxes by consumers to reduce FoodMiles⁵ (SUSTAIN 1999), to avoid packing material and as a means of local sourcing of food. (SOIL ASSOCIATION 2001b). In the annual report on Organic Food and Farming by the SOIL ASSOCIATION figures on OFSS are published (see chapter 5.5.2)

The technical guide provides a good overview on how to run a box-scheme including case studies, and a comprehensive list of advantages and disadvantages for the producer and benefits for the customer.

The list contains arguments that are valid both for direct marketing in general (e.g. farmer markets) and OFSS. Thus, only selected factors of main relevance to OFSS are exhibited in table 2.1 below:

⁴ That is the level of customisation of the product towards the consumer wishes.

⁵ The concept of FoodMiles describes the usage of energy and pollution through transportation of food produce.

Table 2.1 “Producer Advantages and Disadvantages of Operating an OFSS, Customer Benefits”

Producer Advantages	Producer Disadvantages	Customer Benefits
<ul style="list-style-type: none"> ▪ Financial stability Owing to loyal and regular purchasing customers. Income projections possible. ▪ Not relevant to site Box-schemes have no need for specific opening times or accessibility to customers. ▪ Reduced Food Miles Travel time and transport distance per customer are appreciably lower than that of each customer travelling to the market or farm 	<ul style="list-style-type: none"> ▪ Complexity of Management According to the level of service provision, a box-scheme needs more accuracy in various management fields than other direct marketing activities. ▪ Complexity of Customer service According to the level of service provision increased need for communication. 	<ul style="list-style-type: none"> ▪ Different shopping experience ▪ Link to producer and farm ▪ Increased awareness of food according to season ▪ Reduced transportation time to point of purchase ▪ The surprise effect ▪ Getting introduced to uncommon vegetables ▪ Reasonable price

Source: SOILASSOCIATION (2001)

The feasibility study by PRETTY (SOIL ASSOCIATION 2001a) describes various farms with an OFSS as a tool of the Community Supported Agriculture approach. It gives insights into the varieties of OFSS set-ups, but with the emphasis firstly on the socio-economical framework and then on the OFSS themselves.

The reviewed German and English literature describes the state of OFSS in a point in time in their specific country situations, but does not give information about their

development. They differ in focus, as the German literature concentrates on costs and consumer analysis, whilst the English publications have a more promotional attitude by describing the implications for new beginners. Thus the issues of definition, factors of development and international comparisons have to be addressed in chapter 5.

The OFSS are a niche market within the Organic Food Markets. In the following chapter the sources of market data will be discussed.

2.2 The Organic Food Market

On the academic level, standardised and international comparable data on the organic food market are scarce due to a lack of official statistics. Initiatives to collect data and collate official statistics on the European level are currently under way, but can therefore not be used for the descriptions of recent years. Data collected since 1993 according to the Council Regulations (EEC) No. 2092/91 (organic certification standards) and No. 2078/92 (organic support schemes) are the most reliable sources. Other data are mainly based on expert interviews or practitioner surveys.

Practitioner information hubs of the decentralised network in the organic markets are the International Federation of Organic Agriculture Movements (IFOAM) and by government established websites. Together with the steady growth of the OFM, the corporate and government funding of complex and comprehensive market research has increased. The data available on the demand and on the distribution sector for purposes of this research is still very limited. Given this information, the figures on the organic food market have to be treated with cautious. In Chapter 4 figures on the OFM will be displayed.

The background of the OFSS and OFM literature has been discussed in the previous two subchapters. Two theoretical explanatory concepts will now be introduced and critically reviewed. The starting point will be the Life Cycle concept followed by the theory on small and medium sized enterprises.

2.3 The Market Life Cycle Concept

In this chapter the concept of the Life cycle of products and markets as a development model will be discussed.

As shown in the Introduction, significant differences of the OFSS in the researched countries have emerged. It is assumed that these differences stem from different stages of development of the OFM, and the development of the underlying customer benefits as described in chapter 6.2. To describe the development of the markets, products, conduct of companies and consumer behaviour, the Life Cycle concept is often used as an explanatory framework. Market intelligence reports on OFM and OFSS frequently use the underlying assumptions of this model. Thus this concept will be addressed to assess the market data, and to prove its appropriateness to analyse the data of this research.

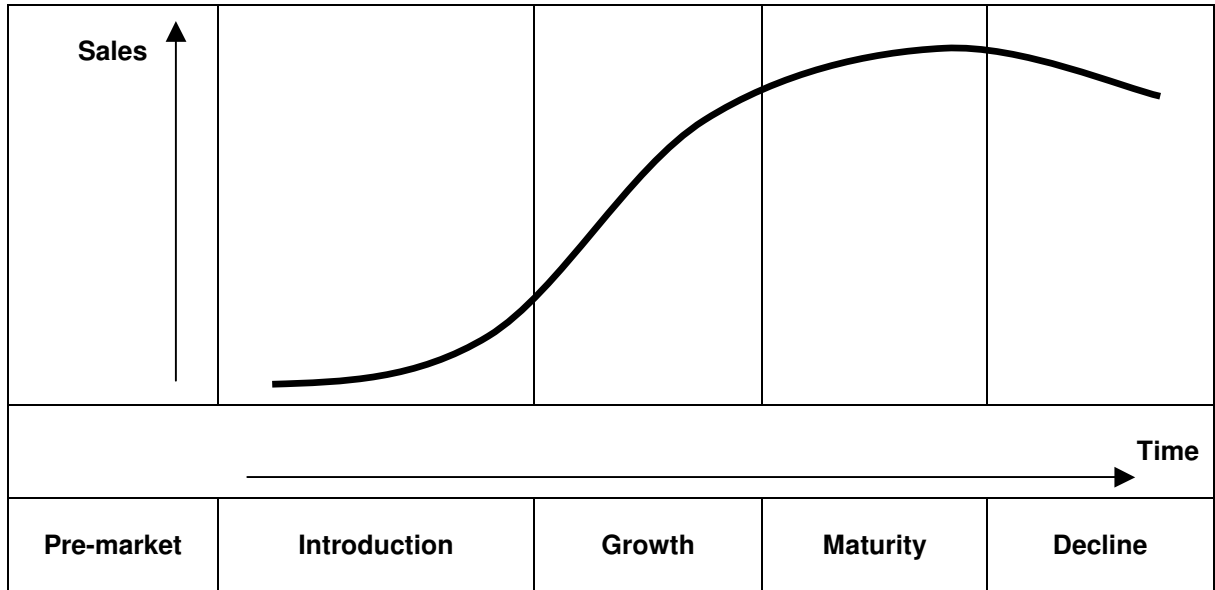
The Life Cycle Concept is a widely used biological metaphor in economics to describe stages of development of products (product life cycle or PLC) and markets (market life cycle or MLC) in terms of sales over times. The often-used consumer life cycle concept (CLC) is different from this, as it shows the socio-biological life stages of the average consumer, and his typical needs and behaviour in these stages. It is a means of customer segmentation, and not a theoretical framework to understand the sales performance of markets and products and the conduct of companies.

PLC and MLC are often used synonymously, as the MLC consists of the sales of the sold products. Furthermore, the development and innovation of new services and products is seen as one major driver of the market development. When the market consists of one dominating product/service design, like in niche markets, PLC and MLC become synonymous. The S-curve of technological innovation is often used by practitioners in the context of PLC, but shows different aspects and will be discussed later in this chapter.

According to KOTLER (1999) the concept of PLC distinguishes five stages of development, (four stages when the product is launched at market) characterised by typical patterns of consumer behaviour, level of competition, implying appropriate

strategic action in marketing and operation management. Figure 2.1 displays a standard curve of the MLC/PLC concept.

Figure 2.1 “Standard MLC/PLC Curve Based on Sales Over Time According to the Life Cycle Concept”



Source: KOTLER et al (1999 p.627)

The stages can be briefly described as follows:

1. Pre market phase

Generating ideas, developing a new product/service

2. Introduction phase

Slow growth of sales, first customers are characterised as “Innovators” and “early adopters”. Few or no competitors. No profits because of expensive investments.

3. Growth

Steep growth rates, fuelled by the customer groups of “early adopters” and “early majority”. Increasing number of competitors. Increasing profits.

4. Maturity

Declining growth and stagnation in sales. Main customer group is the “late majority”. Stable number of competitors. Declining profits due to high price competition and heavy marketing.

5. Decline

Decline of sales, Customer base declining replaced by the „Laggards“. Declining number of competitors. Dropping profits.

The shape of the standard curve alters when the market is dominated by styles, fashions and fads in the sense that after a decline there is a recovery and a new growth (style). The decline phase starts early after considerable growth (fashion). Then there is steep growth, with no maturing stage but a sharp and abrupt decline in sales (fad).

The four-stage model (one stage is off the market) of KOTLER (1999) focuses on the product and anticipates the consumer as the main driver. It is a demand driven model. According to PORTER (1980), who focus on the forces of competition the MLC develops in the same standard curve, but has five distinctive phases on the market: Development, Growth, Shakeout (of competitors) Maturity and Decline.

For purposes of distinction the problem of S-curves has to be addressed. The PLC concept is sometimes blurred with the s-shaped distribution curve of innovations, which has the same shape in the beginning, but displays different aspects. The s-curve displays the adoption rate of new products/services among a defined group of potential customers. The outcome is the penetration rate as expressed in percentage of the potential market by volume in contrast to value.

„The S-curve [...] follows the ‚number of buyers in the market‘ while the PLC represents ‚total market demand‘“ (HOOLEY et al 1998 p275)

Thus, even if technical innovations lead to a typical change in the PLC, especially when applied in Kai-Zen or permanent improving philosophy environment, the adoption rate displays something entirely different than the MLC/PLC concept. It displays an underlying variable factor, whilst the PLC curve is the depended outcome of the change of product/service features.

Concerning this research topic, selected issues of the PLC/MLC concept are taken from KOTLER (1997) for issues of marketing management and from SLACK et al (2001) with respect to product and service design in operation management as exhibited in tables 2.3 and 2.4 below. Both tables are listing managerial suggestions drawn from mass-market experience.

Table 2.3 “Marketing Issues According to the Stage of the Life Cycle”

Saturation	Product/Service first introduced to market	Product/Service gains market acceptance	Market needs start to be fulfilled	Market needs largely met
Sales	Low Sales	Rapidly rising Sales	Peak Sales	Declining Sales
Advertising	Build awareness among early adopters	Build awareness and interest in the mass market	Stress brand differences and benefits	Reduce to level needed to retain hard-core loyals
Pricing	Use cost plus for premium	Price to penetrate market	Price to match competitors	Cut price
Distribution	Build selective distribution	Build intensive distribution	Build more intensive distribution	Go selective: phase out unprofitable outlets
Product	Offer a basic product	Offer product extensions, services	Diversify brand and models	Phase out weak items

Source: Selection of Issues taken from KOTLER (1997)

The marketing issues display HOW the company is offering its product/service. In contrast, the table 2.4 centres in WHAT kind of product and/or service features are offered, and how this relates to the shift in demand and focus of consumer benefit.

Table 2.4 “Operation Management Issues According to the Stage of the Life Cycle”

Variety of product/service designs	Possible high customisation or frequent design changes	Increasingly standardised	Emerging of dominant types	Possible move to commodity standardisation
Likely Order winners⁶	- Product/Service characteristics, performance or novelty	- Availability of quality product/services	- Low price - Dependable supply	- Low price
Likely Qualifiers⁷	- Technical Quality - Range of different offerings	- Price - Range of different offering	- Range of different offering - Technical Quality	- Dependable Supply

Source: SLACK et al (2001)

SLACK’s et al (2001) findings are based on two assumptions: Firstly the emerging of a dominant type of product/service design which will be discussed in the following paragraph, and secondly, the concept of “order winners” and “qualifiers” and their underlying customer benefits which is addressed in chapter 6.2.

WINDRUM AND BIRCHENHALL (1998) argue that the main thesis of the PLC concept by ABERNATHY AND UTTERBACK (1978) - the emerging of one dominant market leading product/service design during the growth and maturing stage - might be a special case rather than the norm. Companies rather target various niche markets and differentiate into different product groups, following a related consumer/producer learning process. As PALMER (2004a) puts it:

“Mass markets move towards “mass-niche markets” - masses of niche markets rather than stay mass markets.”

There are several criticisms and limitations of the standard PLC/MLC model:

⁶ Order winners are those product/service features which will lead to a purchase. See chapter 6.2

⁷ Qualifiers are those features which are expected by the customer as a pre-emptive to purchase. See chapter 6.2

- The overall MLC consists out of market segments as represented in different customer groups or product groups which interact with one another. Thus there is a need to differentiate on a more detailed level to derive appropriate conclusions. (DAVIS 1970)
- The MLC concept implies that there is a „natural“ development of the market independent of company's actions. In reality, the conduct of the companies will change the performance of the MLC and visa versa. (KOTLER et al 1999)
- It is difficult to locate the current state of the market, as there are no mathematical means. As long as there is no stable downturn, the shape of the cycle cannot be calculated and future developments forecasted (DAVIS 1970).
- Some authors argue that the comparison between a living organism and economic performance is invalid, as the life of an organism is genetically fixed, whereas economic performance is a variable of economic actions, and the „death“ a cause of lack of managerial support (CLANCY AND KRIEG 2004).
- If the focus of the PLC or MLC is based on small markets, performance can be easily affected by situational factors (e.g. weather, scandals, change in management).

In summary, according to the PLC/MLC theoretical framework, sales figures, managerial actions and consumer behaviour based on consumer benefits can indicate the stage of development, and visa versa. The PLC/MLC concept assumes a typical standard performance derived from mass markets, which suggest managerial actions in HOW (marketing) and in WHAT feature offerings (operations management) the company can compete to attract customer's purchases. The standard model was compared and contrasted to the CLC, S-curve of Innovation and to the paradigm of the dominant product/service type. Critics of the model stress the emerging of niche markets and customised product/service offerings rather than uniformity in mass markets. It will be proved that this model is suitable to explain the performance of the interviewed OFSS companies in Chapter 5. As these companies are small and medium sized enterprises (SMEs) and are operating in niche markets, additional explanatory concepts will be investigated in the following section.

2.4 Marketing and Management of SMEs

Business theory, models and practise recommendations are often developed on research of mass-market activities of larger companies. These findings do not necessarily match SME reality due to their size, which implies according to CARSON et al (2000) characteristics like:

- Resource constraints mainly in time and finance (McKINNON 1972)
- A personal management approach (in opposition to a formal approach) (BIRLEY et al 1991)
- Lack of strategic planning combined with “survival mentality” (FULLER 1994, HANKINSON et al 1997)

Additionally SMEs have a different organisational structure, operate in smaller (niche) markets, differentiate themselves through flexibility and emphasise a more personal customer relationship approach. Most of the interviewed OFSS companies have less than 20 employees, are founded by the owner/manager who plays a dominant role in organisation and have evolved from a farming background. Thus, to analyse the specific circumstances of these SMEs theoretical frameworks of SME marketing and management will be investigated in the next three subchapters.

Three main aspects of SMEs theory and the means by which SMEs conduct their marketing will be discussed: Marketing through Added value, Process of Marketing Decision making and Network-Marketing.

2.4.1 Added-Value Marketing

PORTER (1985) introduced the concept of Added value on the basis of his value chain analysis. Added value means that a core product (or service) can become more valuable along the flow of processing when adding new tangible or intangible features⁸ to it, and when the customer is willing to pay a higher price for these additional features.

Consequently, when the cost per stage of process exceeds the gain through the charged price, value will be destroyed rather than added.

The value chain reaches from the producer to the end-customer, exceeding the boundaries of the firm and can be expressed in terms of cost and profits. At each procession stage costs occur and higher prices have to be anticipated. Thus, the physical flow of produce or service delivery in time is expressed by a chain of supply across companies, whilst the levels of costing and pricing are expressed by the value chain concept.

An example within the OFSS context is as follows:

A carrot from the field will be harvested, washed, packed into 1kg bags, combined with other produce and packed into a subscription box and finally delivered to the end-customer. The farmer adds to the core produce tangible (cleaner) and intangible (transportation) features. If the carrot is sold at the level of 1kg bags to the supermarket, the price is significantly lower for the farmer than if the farmer sold it directly to the end-customer. The difference between farm-gate prices paid by the supermarket to the retail price paid by the end-customer expresses the value added by the supermarkets.

The added value concept leads to two theoretical implications, one for the product features and one for the development of OFSS in general. Firstly OFSS companies are stimulated to add value through processing and service to the core produce. Thus its offerings tend to become more complex and it gives more benefits to the customer. Secondly, OFSS companies will shift their operations and managerial focus towards those stages within the value chain, where the highest value can be added (e.g. profit margins are highest). In practise, farmers tend to shift their focus from production towards retailing, which is direct marketing. In chapter 6 these assumptions will be proven.

HANKINSON et al (1997) argues that whilst the added value concept is valid for large as well as small organisations, the unique characteristics of SME give them a competitive advantage. According to GILMORE et al (1999) marketing activities of SMEs can gain a

⁸ The tangible and intangible aspects will be explained in chapter 6.2

competitive advantage when firstly adding value to the customer through their product offerings, secondly to their delivery system and thirdly to their customer service. This is highlighted in the following table 2.5.

Table 2.5 “Relevant Activities in SME Marketing for OFSS”

Field of Activity	Activity
Product offerings	Widening their product/service range around a core product/service faster and more flexible.
Delivery system	SME can differentiate themselves by keeping their delivery promises, and by enhancing customer expectations
Customer service	Through a more personal contact with customers, SME gain better insights into their expectations and can therefore serve them better. As MARTIN (1992) put it “...an opportunity to demonstrate added value [service] beyond the product.”

Source: taken from GILMORE et al (1999)

Additionally, SME customers tend to look more for “value for money” instead of the cheapest price and hence are more likely to pay for added value features (KARGER 1987). The listed activities correspondent with suggestions of SLACK et al (2001) as mentioned in chapter 2.3 as they evolve around operation management objectives of “speed, flexibility, dependability and quality⁹”

A general criticism by the author includes the notion that larger companies diversify into smaller units, and change their organisation and management culture towards flexibility and “one face to the customer” service encounters. Hence the competitive advantage may not be sustainable and therefore not a unique characteristic of SMEs per se. Even though

⁹ Quality is defined for purposes of this research as the level of fulfillment of customer expectations. see chapter 6.2.

this critic re-enforces the argument of GILMORE that SMEs have a natural structural competitive stronghold against larger organisations.

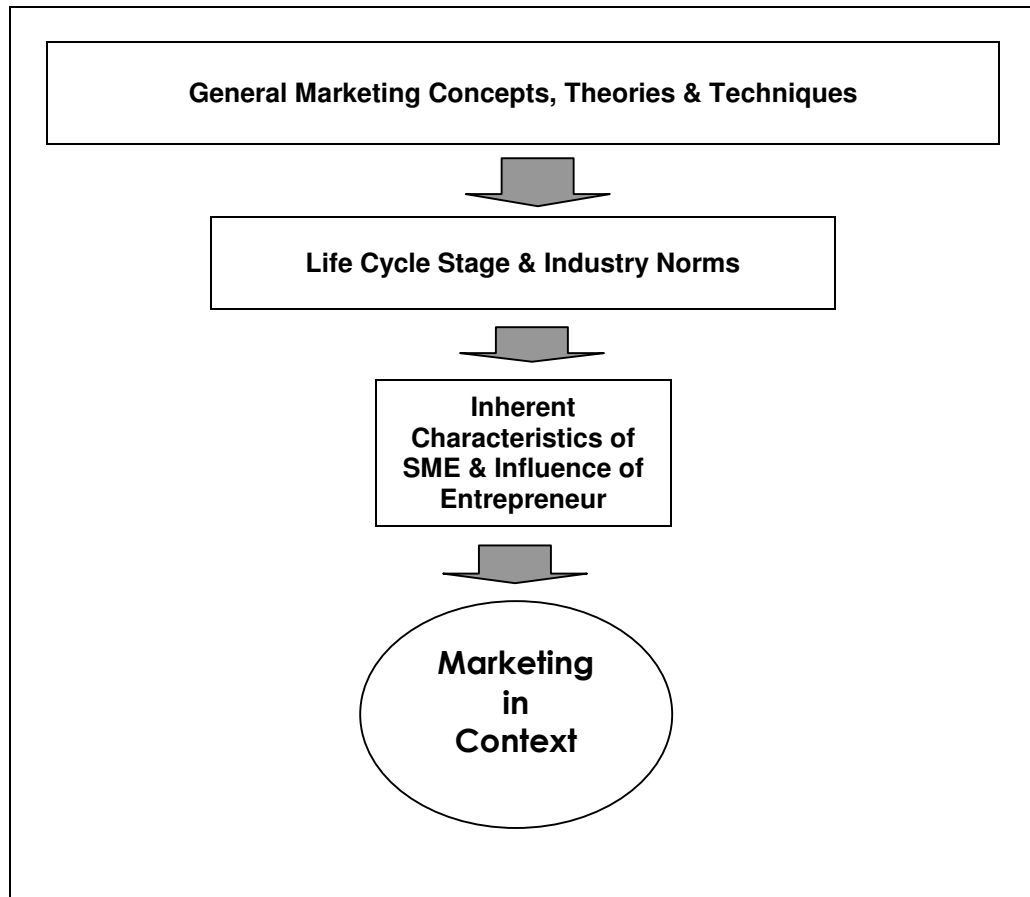
The concept of added value has been briefly described. According to GILMORE et al (1999) SMEs have a competitive advantage due to their inherent characteristics when adding value to the customer. Thus a relevant pre-emptive process within the company beginning from the first managerial action will be discussed in the following chapter.

2.4.2 Decision Making in SME Marketing

CARSON et al (2000) characterises SME marketing as “*done in an unique context*” and therefore as a situational and specific marketing approach. He places the owner/manager of the SME at the centre of his concept. His ability of understanding and acting according to his findings will determine the conduct of the company. Four issues have been identified to contribute to the decision making process of the SME entrepreneur/owner/manager.

- First, the theoretical arguments are derived by adapting standard textbook marketing frameworks to the specific situation on a selective (choosing relevant issues), informal and intuitive process.
- Second, the owner/manager assesses the abilities of himself and the company according to their interlinked competencies with respect to experience, knowledge, communication and judgement. CARSON names two pre-requisites: the stage of the SME company in the PLC/MLC process and the conformity to dominant industry norms of conduct and understanding within the market.
- Third, as SME have a close relationship to customers and competitors, and networking is an embedded task of daily business, network marketing is an essential part of SMEs.
- Finally, owing to the limited funds, comprehensive and expensive marketing programmes are unlikely to start. Hence, SMEs have to be innovative to overcome these constraints and to differentiate themselves from competitors.

Figure 2.2 “Three Stage Decision Making Model of SMEs by CARSON”



Source: adopted from CARSON (2000)

The model of figure 2.2. identifies two crucial sources of the SMEs expertise, firstly, the life cycle stage of the company, and secondly the conformity to industry norms.

CARSON et al (2000) describes the progression of the SME through the various stages as a sequential change from uncertainty to certainty as it gains experience, and from controllable marketing circumstances into unexplored new ventures when entering a new market situation.

As BECKER (1982) shows the SMEs will try to adapt to confirming behaviour of the industry when passing out of the known market environment into a new situation, to gain certainty.

These findings imply that in niche markets of the SMEs abrupt changes and the need for rapid adaptation, learning and innovation can occur. This contrasts the smooth curves of the standard PLC/MLC model, which suggest moderate reaction rates of the mass markets CROMIE et al (1989).

On the other hand it highlights the dominant role of the owner/managers personality, as it has to transform uncertainty to a sustainable company action. Thus this led to the assumption, that a high grade of flexibility is necessary for SME to manage abrupt changes. Limited funding, the second characteristic of SME will enforce the need for a rapid adaptation rate. This will be discussed in more detail in the following chapter.

2.4.3 Network Marketing

SCASE AND GOFEE (1980) describe the management structures as centred around the owner-managers, who make decisions on their own, respond rapidly to current opportunities and circumstances according to personal and business priorities at any given time. For the purpose of marketing by networking, networks of personal contact, social, business and industry level are utilised. They are “*informal, loose, unstructured, spontaneous, reactive and structured around or conform to industry norm*”.

Networking to establish and nurture relevant contacts and to generate information exchange is seen as a central competency of SME marketing.

GRANT et al (2001) researched the characteristics of network marketing by SMEs by the observation of 45 companies, employing 10 to 240 staff, located in Northern Ireland and Australia. His findings claim that network marketing is the appropriate and most commonly employed approach for SMEs, due to limitations of SMEs discussed in the previous chapters as well as lack of specialist expertise and limited impact on the marketplace.

GRANT et al (2001) describes two sectors of activity as follows:

- Network relationships to competitors are intense and heavily used for all aspects of marketing in the context of competitor activity. There are high levels of co-operation

in order to serve a common client or market, when there is the constant threat of losing the client permanently. Joint arrangements are bound to certain projects and occur when the SME resources are too limited to serve the customer. Maintaining good relations, and the sharing of information on general developments is seen as a pre-emptive to a good business climate. On the other hand, the sharing of information is restricted when it concerns substantial changes in the company or when the information could be of benefit to the whole industry.

- Customer networks differ when they are based on B2B or B2C relationships.

In the B2B context key persons of the customer organisations function as bridge builders. Business relationships tend to dissolve after this person leaves the company. Potential new key-persons will be integrated into the network.

B2C customers tend to want personal contact with the owner-manager of the SME, and younger customers approach the younger communication partners.

In general, the SMEs invest time and effort in servicing regular clients, as they are perceived as vital to the company's success. Experience, age and personality have a high influence on the intensity and duration of the relationships.

2.5 Summary of Literature Review

In the first two subchapters descriptive literature on the OFSS and the OFM have been assessed, followed by a critical appraisal of explanatory theoretical frameworks of the PLC/MLC and of the SME marketing and management model.

The German and British literature on OFSS has a practical background, describing OFSS companies and their offerings either from a costing point of view, or according to the level of customer support for the farm. The literature supports the producer and promotes OFSS as an additional channel for organic farmers to sell directly to the end customer.

This review will contribute to the case studies in each country and to the OFSS development model in chapter 5.

Literature on OFM was assessed according to comparability of statistical data and the sources of information. Comparable data is only to be found on figures of areas under organic production, as there are no standardised data collecting methods. Market research is mostly conducted by organic food production promoting organisations and supportive government funding. International comparisons are difficult and limited. Due to regional structures of the OFM nationally, generalisations are not appropriate. The data on OFM will be summarised in chapter 4 and when of relevance to a certain OFSS, displayed in the country case studies in chapter 5.

The PLC/MLC has been discussed as an analytical framework to derive managerial suggestions in marketing management and operation management in respect to a shift of customer demand and/or competition. It assumes to predict typical patterns of behaviour of companies and customers according to time and product features. Limitations for in respect to niche markets and SMEs have been highlighted.

Finally, an explanatory framework of SME management and SME marketing management has been investigated. Three aspects: SME value added marketing, SME marketing decision making and SME network marketing have been discussed. Relevant linkages to the PLC/MLC standard curve, its managerial suggestion and especially by filling its gaps have been identified. The value added concept in combination with SME marketing will be of importance for the development model in chapter 5.

The theoretical explanatory frameworks of this chapter will be compared and contrasted with the findings as displayed in chapter 5. The derived implications of this research on theory and practise are presented in Chapter 6.4.3 and 7.4.

3.0 Materials and Methods

This chapter describes how the research was conducted. It displays the flow of actions taken and the materials and conceptual methods used. Research depends on a collection of data - secondary data that is already collected by others and primary data that is originated by the researcher himself. Both can be quantitative or qualitative. According to the subject, the researcher has to decide which research philosophy he will utilise.

3.1 The Research Philosophy

According to ALVESSON et al (2000) quantitative data research based on Positivism is the predominant method used in business research over the last three decades. As discussed in GILL, J. AND JOHNSON, P. (2002) the Positivist approach is based on the philosophy and methods developed in natural sciences. According to this, the findings have to be able to be reproduced and have to be able to be generalised in order to be valid. Thus, emphasis is laid on highly structured methodology and statistics resulting in descriptive findings. The main arguments in favour of Positivism are that the outcome is free of biases caused by the researcher's personality. On the contrary, DONNELLAN (1995) argues that qualitative research based on the Phenomenology approach, i.e. observations and interviews, is more suitable to gain holistic insight into socio-economical topics. These topics are by nature more complex, difficult to assess through quantitative measurement, and hardly reducible to a limited range and set of variables. In order to understand organisations and their conduct SAUNDERS et al (2000) cites REMENYI et al (1998 p. 35):

"[It]... is the necessity to discover 'the details of the situation to understand the reality or perhaps a reality behind them' "

In the phenomenology approach the researcher is actively involved in what he investigates. Furthermore, according to GUMMESSON (2000) the qualitative research approach has its strengths in the accessibility of data, its budget and time-effectiveness. It derives applicable concepts and knowledge for further action and tends to be more

exploratory and explanatory than descriptive. He advocates the role of a consultant should be to have a good pre-understanding and access to data and executives.

Thus, the qualitative approach is appropriate for this research. Wherever possible, quantitative data will be used to enhance validity and reliability of the research (GILL, J. AND JOHNSON, P. 2002 p200), which is displayed in more detail in 3.4.1, the chapter on methodology.

3.2 The structure of the research

The research was conducted during the period of September 2003 until the 30th April 2004. Following the suggestions of SAUNDERS et al (2000 p43) and GILL et al (2002) the research was structured using both sequential and iterative methods, in three stages. Firstly, the main research decisions and the collection of data had to be conducted following a time line in sequential steps. Secondly, new findings and insights during the process of investigation led to adjustment of tools and models during the research. Interview questions had to be adapted to the new situation based on new knowledge GUMMESSON (2000) that is an iterative and condensing process. Thirdly, the analysis of the data moved sequentially from comparing companies, to a cross-company analysis within each market to an international cross case analysis as shown in chapter 5.

In summary, the conduct and the analysis of the interviews follows a 4-step approach, which was adapted from the suggestions of PALMER (2004) as shown in table 3.1.

Table 3.1 “Sequential and Iterative Four-Step Research Approach”

Phase 1 Defining the interview set-up

- Deriving likely issues of importance out of theory and pre-understanding for interview questions.
- Identify possible crucial issues to explain the company’s performance
- Define a semi-structured interview schedule with a set of likely questions
- Suggest groups of companies for Interviews (e.g. according to country, size, age of organisation, market).
- In this research there is a grouping of companies using countries and size

Phase 2 Start the interview and adapt according to new findings

- Start interviews based on your pre-understanding.
- Adapt questions and questioning according to new findings.
- Compare and contrast findings with theory and pre-understanding
- Search for the common denominator of issues within one group of companies (i.e. management style, customer segmentation, operational management). Search for similarities and differences.
- Repeat this analysis within each group (e.g. country) in order to find patterns, which could lead to common important factors.

Phase 3 Compare findings, pre-understanding and theory

- Compare the identified patterns of each group with each other.
- Look for links and gaps between each group (e.g. country)
- Compare and contrast with reviewed theory

Phase 4 Discussion

- Define key issues on company level, group level and industry level
- Search for explanatory models and suggest own explanations by discussing theory and its limitations

Source: this research, adaptation of (PALMER 2004)

The findings will be presented in Chapter 5 combining descriptive and explanatory case study designs in order to show specific or more general conclusions following GUMMESSON (2000, p85).

3.3 Literature Review

The collection of secondary data is based on a critical literature review. It provides an overview of current knowledge on the subject, explanatory frameworks and how this contributes to the conduct and analysis of this research. As JANKOWICZ (1995, p 128-9) puts it:

“Knowledge does not exist in a vacuum, and your work only has value in relation to other people. Your work and your findings will be significant only to the extent that they are the same as, or different from, other people’s work and findings.”

The literature review screened the appropriateness of the research philosophy, figures about the OFM and publications on OFSS in the target countries, potential analytical tools and frameworks, and defined appropriate key words in four languages. Electronic databases and references given by experts contacted prior to and during the research was the main source used to locate appropriate published literature. At the University of Kassel, (Fachbereich Agrarwissenschaft Witzenhausen) - historically the main centre of research on organic farming and organic marketing in Germany - the library was searched for relevant periodicals, PhD. dissertations and unpublished studies and graduation dissertations of students. The literature was classified according to practitioner and academic research, owing to the fact that a practitioner’s work is prone to a personal bias because of the personal intentions and possible influences through funding of the research. Only a limited number of references stem from a university background, and thus can be classified as academic. Most publications on market data and case studies were written for the use of practitioners and the interested public by organisations promoting organic farming (e.g. SOEL, SOILASSOCIATION, BÖLW, PLATFORM BIOLOGICA) and have therefore be used with caution. Nevertheless they are of importance to indicate tendencies, trends and driving factors in the markets with respect to the companies researched.

3.4 Methodology of Field Research

In contrast to already published data, this field research uses a set of research tools to derive new information on the subject, which are primary data. In this chapter the methodology will be discussed according to the issues of the interview structure, the selection of the interview sample and the schedule of the interviews. The limitations and means to overcome these will be shown in the last subchapter.

3.4.1. Company Interviews

The layout of the company interviews consisted of three parts: an interview of the executive, observations of operations and a questionnaire on development of orders per week. If not differently stated the term “interview or company interview” will be used in this paper synonymously for “company visit” thus combining the three tools of field research as stated above.

Following the suggestions of SAUNDERS et al (2000, tab. 9.1) the executive interviews were semi structured as the research objectives laid down in chapter 1 were both exploratory “...to find out what is happening ” (ROBSON 1993 p42) and explanatory “...to understand the relationships between variables” (SAUNDERS et al 2000, p245). A set of open questions evolving around the development of the company and the organic food market were derived (ATTACHMENT A).

The executive interview had the following objectives:

- To provide an overview of the company’s activities, and service offering from the owner’s perspective, and
- To assess attitudes towards customer needs and customer orientation

The interviews were recorded and transcribed. When it was technically feasible and the interviewee agreed, the interviews were summarised (see ATTACHMENTS D 1.1 – 1.23).

The aim of the observations is to crosscheck the information given in the executive interview and to gain insight into the performance of operations of the company. Pictures were taken, and samples are included in this paper to visualise presentation and examples of operational features (ATTACHMENT H).

The questionnaire supplements the qualitative research with quantitative data, based on average orders weekly per company over the last 6 years. This measurement was chosen, because it is an openly communicated figure within the OFSS industry and it indicates the level of formal organisation. The questionnaire was handed out directly after the executive interview, or sent within 7 days to the companies. Further company figures on costing and turnover have not been able to be included due to confidentiality.

3.4.2 Selection of Interview Sample.

It was decided to interview five OFSS companies per country till the end of March 2004 to level out time and financial constraints with an optimal crosscheck of information. Firstly a database of relevant OFSS organisations and of relevant issues had to be created, followed by a pre-selection of OFSS companies to contact and finally the OFSS company sample to interview.

To create a basis of selection a database of relevant organisations and companies were developed. Experts and strategic suppliers were contacted to identify the largest and most “cutting edge companies”. Practitioner and consumer information hubs from the different national organic food networks were approached to derive a list of medium and smaller sized “average” OFSS companies. Additionally the Internet was researched to identify OFSS companies, which are actively using Internet and IT for their marketing, communication and operations (e.g. Internet shop, tracing of boxes) randomly. The database consists of approximately 800 listed OFSS companies (50% UK, 45% GER and 5% NL, DK and others). Additionally a database of strategic suppliers including banks, software houses, research organisations (supply of information) and wholesalers has been built consisting of 50 entries. Finally, data on organisations of related issues like CSA, FoodMiles, Consumer-Producer-Co-ops and local sourcing have been collected.

About 70 organisations have been approached by phone during the field research to gain initial information and/or to schedule interviews. In general, there was a positive and open-minded response. The interest in the findings of this research and the willingness to participate and to share information was high.

Out of these 70 contacts an interview sample of 20 OFSS companies has been selected and interviewed using the following criteria of declining importance: reference of experts and OFSS companies, accessibility, size, region, operational features and time on market.

Additionally, the companies of the final sample should differ in their operational set-up and background to cover a wide range of variety, and also to be representative according to the four last stated criteria above. The sample is shown in table 3.2.

Table 3.2 “Research Interviews per Country”

	GER	DK	NL	UK	Sum
OFSS companies	7	2	6	5	20
Expert Interviews	8	3	1	1	13
Sum	15	5	7	6	33

Source: this research

In Denmark only two of the seven contacted companies could be interviewed, owing to holiday seasons and lack of interest of the executives. Alternatively one company was sent a brief questionnaire and was interviewed by phone later on. The data has been included as an expert statement in Chapter 4.

3.4.3 Schedule of Interviews

The OFSS companies have been interviewed in five phases, covering two shared regional German OFSS markets (Berlin and Munich) and the four researched countries accounting for 6.000 km covered by car till the end of March 2004

Table 3.3 “Phases of Interviews“

Berlin	January 2004
South Germany	February 2004 (first half)
Denmark and North and West Germany	February 2004 (second half)
The Netherlands	March 2004 (first half)
The United Kingdom	March 2004 (second half)

Source: this research

Prior to and during the field research four international events have been attended to identify key persons of expertise and representative OFSS companies as show in table 3.4 below.

Table 3.4 “Relevant International Events of the Organic Food Industry for OFSS”

Event	Date	Focus
ANUGA FAIR, COLOGNE, GERMANY	10/2003	World’s leading fair on conventional food and beverages. Main platform of presentation of government actions and OFM market research in 2003. Assessment of the research on OFSS by interviewing experts.
GRÜNE WOCHE, BERLIN, GERMANY	01/2004	Main event for German agricultural organisations to hold their annual conferences. Contacting experts of the certifying bodies of the OFM. Source of assessment of the regional OFSS market (Region Berlin and Brandenburg).
LANDWIRTSCHAFTLICHE TAGUNG, DORNACH, SWITZERLAND	02/2004	International conference of the biodynamic movement, which is seen as to member the first operators of OFSS. Finding key-persons and experts of the target countries, especially on issues of development.
BioFach, NUREMBERG, GERMANY	02/2004	World’s leading international fair of the organic industry and promoting organisations. Deriving key organisations and persons from the target countries.

Source: this research

3.5 Limitations and Credibility of Methodology

The fundamental critics on qualitative research and the process of data collection (e.g. interviews) were addressed in chapter 3.1 and focus on the subjectivity of the researcher and the threat of being biased. There are two main methodological tools in this research to reduce the risk of subjectivity:

- Employing different data collection methods:
In this research semi-structured executive interview, questionnaires and observation are used to level out unique strengths and weaknesses, thus methodological biases are minimised through the multi-method approach. (SAUNDER et al 2000, p98)

- Comparing and contrasting data on the same issue of different sources:
To assess the regional markets of Berlin and Munich, at least three companies and/or experts have been interviewed to rectify the findings. In turn the rectification or distortion can pinpoint flaws and creditability of the source. This tool is often referred to as triangulation or crosschecking the data. PATZER (1996) states:

“Where data from two or more independent sources suggest similar conclusions, you can have more confidence that the data on which they are based are distorted”

Besides these inherent threats to the credibility of the sources and the data collection, further issues will be discussed in chapter 7.6.

3.6 Summary of Material and Methods

Finally 20 Interviews of OFSS companies in the four target countries have been conducted between January and April 2004. In addition 13 experts including strategic suppliers like wholesalers, software companies, investment companies and consultants have been approached to gain more market insight and to crosscheck the derived information from the interviews.

4.0 Background of the OFFS Industry

This chapter highlights general issues background data of the OFFS and OFM, and delivers a structural overview of the supply side of the OFFS and OFM.

In Europe, data collected according to the EWG regulations No. 2092/91 and 2078/92 displays an overall growth of the organic production sector (FOSTER, C. AND LAMPKIN 2000) in terms of organic production area and participating farms. However, according to HAMM, U *et al* (2002), the higher the share of organic production the higher the share of organic consumption. The Organic and in/conversion land area as expressed % 1998 utilisable agricultural area is shown below in table 4.1:

Table 4.1 „Area of Arable Land Under Organic Production, Expressed in % of all Arable Area in Selected European Countries 1993-2002“

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
GER	1,44	1,59	1,80	2,06	2,27	2,43				4,50
DK	0,75	0,79	1,52	1,72	2,39	3,69				7,10
NL	0,55	0,56	0,64	0,72	0,84	0,96	1,10	1,30	2,00	2,20
UK	0,19	0,20	0,30	0,31	0,60	1,70				4,50

Source: FOSTER and LAMPKIN (2000), VIESTER, M AND DANIELS, L. (2004),
PLATFORM BIOLOGICA (2003)

According to these figures, the average area in 1998 of the researched countries (2,20%) has more than doubled to an average of 4,57% in 2002. Further issues addressed by HAMM *et al* (2002) display the production and consumption levels of different product groups. To level out the imports and exports the figures have been related to the country's level of self-sufficiency. The research was limited in its access to company data of the distribution and processing industry. HAMM *et al* (2002) could prove that there was a statistical correlation between the level of consumption (sales) and the growth of production area as expressed in table 4.2. below.

Table 4.2 „Comparison of Change in Sales and of Production“

	Change in sales 1999-2002	Change in Production Area 1998-2002
GER	+150%	+185
DK	n.n.	+192
NL	+180%	+229
UK	+230%	+265

Source: FIBL (2003), taken from IFOAM 2004

FOSTER et al (2001 p.4) clustered the researched countries according to their market development (based on 2000) in three categories as expressed in table 4.3.

Table 4.3 „Clustering of Selected European Countries according to FOSTER “

Emerging market	Growth market	Mature market
-	NL	DK, GER, UK

Source: FOSTER et al (2001 p.4) cited by HAMM et al (2002)

FOSTER’s considers different aspects of the OFM industry, based on a qualitative research, whilst HAMM (2002) introduced a four cluster grid based on market share of total food consumption (in year 2000) as shown in table 4.4 below in his quantitative analysis.

Table 4.4 „Clustering of Selected European Countries by Market Share of Organic Produce“

MS 0,0 – 0,1%	MS 0,4 – 0,9%	MS 1,4 – 2,1%	MS 3,1 – 5,4%
-	UK, NL (0,9%)	DE (1,4%)	DK (5.4%)

Source: HAMM et al (2002)

HAMM reinforces the findings of FOSTER in general, but goes into more detail. In respect to this research, this has two methodological issues:

First, both research papers compare the countries with each other to define a greater or lesser stage of development within the OFM. Thus the terms “Growth market” and “Mature market” can not be seen as an indication of the countries point on the standard MLC, as long as the most developed country will be generalised as the peak point of possible sales.

Second, the general stage of the OFM cannot be used as an explanatory factor of the different types of OFSS, as these countries do not differ much according to the findings of FOSTER et al and HAMM et al.

Hence, research on OFSS has to consider other factors, which is assumed to be found on the structural level. The comparative background data of table 4.5 introduces some information about the researched countries.

Table 4.5 “Selected International Economical Data “

	GER	DK	NL	UK
Data on size and population				
Square km in k	357	43	42	243
Population in m inhabitants	83	5,4	16	60
Density (population/square km)	231	126	473	250
Population living in cities	88%	85%	90%	90%
Agricultural and Economic data				
Area for agriculture	34%	54%	28%	25%
From that have irrigation	4%	19%	60%	2%
 GDP per capita	 23.700 US\$	 31.090 US\$	 24.040 US\$	 24.230 US\$

Source: SPIEGEL (2003)

Data on size and population may implicate a certain distribution system, as the time and distance per customer is one crucial factor in costing. It can be stated that NL has a significant higher density, whilst GER and the UK are comparable and show about half of the population per square km. DK has the lowest density of all researched companies.

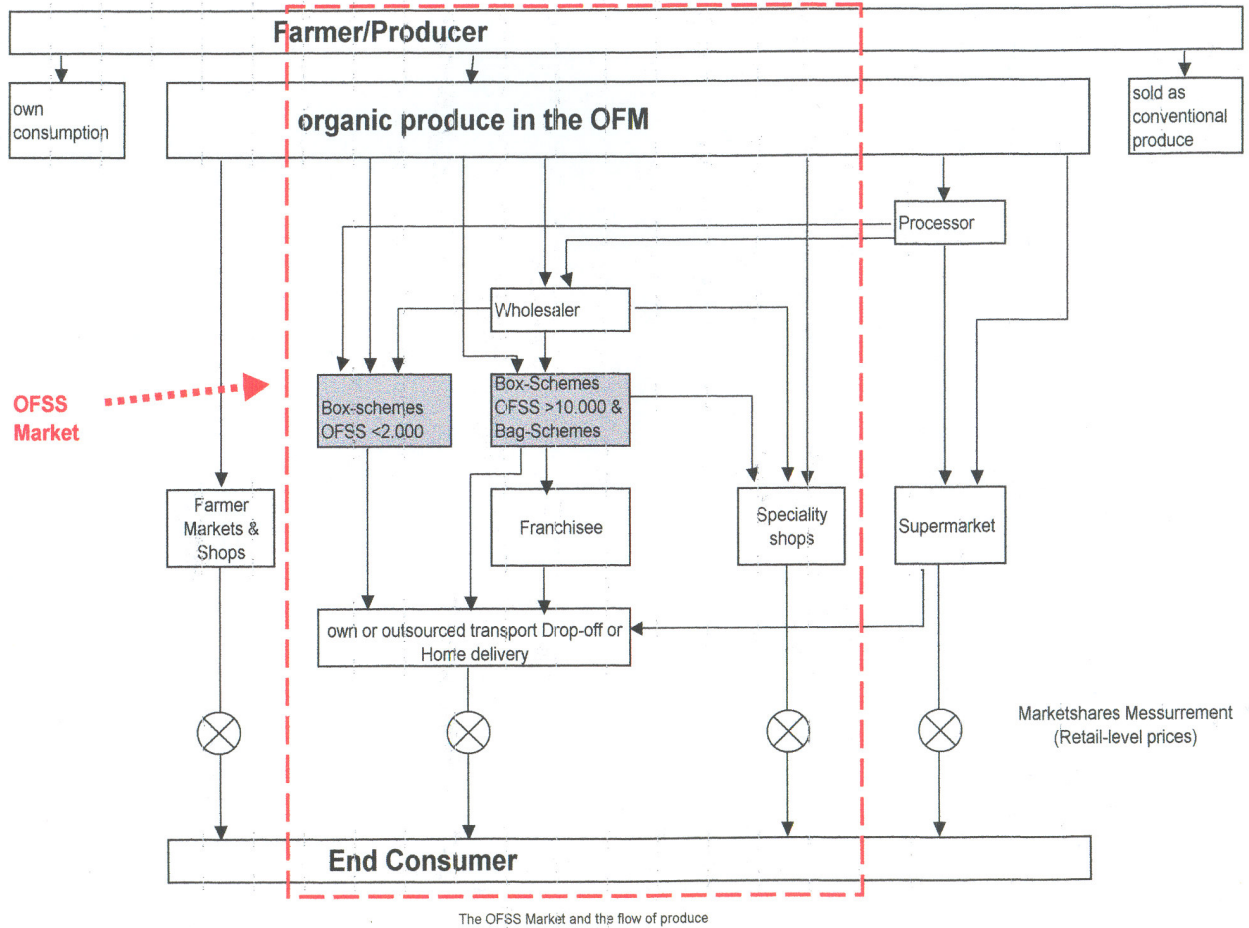
As OFSS stem from a farming background, and are mainly operated by vegetable producers as (KUHNER 1998), the area under horticultural production was assessed. It revealed that NL and DK have a significant higher percentage of irrigate able area.

Figures on the GDP have to be adjusted to the purchase power in each country as they stem from four separate markets and are derived from three currencies. As the OFSS serve a niche market, and thus a selected customer group, it is assumed that the differences in GDP on purchase power between the countries of scope are of no significance for the OFSS.

In summary, these data could not reveal correlations between OFM and OFSS for the present situation as indicted in chapter 5, but were used as background information during the interviews and to assess the markets.

The markets of the OFSS are not transparent on the demand side, whilst the supply side can be described according to the findings of this research in each country as shown in figure 4.6.

Figure 4.6 “Supply Structure of the OFFS Industry”



Source: This research

Figure 4.6. shows the flow of produce from the producer to the customer. The vertical placement does also indicate the organisations’ place within the value chain. The horizontal placement list the four main distribution channels from direct selling of farms to supermarkets. The OFSS are represented by two boxes, which will be explained in chapter 6.3.

Each country’s OFM and special data on OFSS will be briefly described in the following case studies.

5.0 Case Study Findings

Each country, with its separate market, will be investigated in four subchapters according to its OFSS history, the main issues and market drivers.

5.1 Introduction

The case studies investigate each country separately based on the two main theoretical frameworks of PLC/MLC and SME Theory. They start with an introduction into the research background, followed by an historical overview, which displays the linkages of development. Furthermore, OFSS market information will be presented and patterns of the interviewed OFSS will be shown based on important marketing and operational issues. Important factors are derived with the employment of PLEST and SWOT analysis tools.

The statistical data in the case studies stem from the provided questionnaire (ATTACHMENT C) and from interviews. The quantitative base data for chapter is given in table 5.1 below:

Table 5.1 “Yearly Average Orders per Week of all Interviewed OFSS Companies 1997 – 2003”

OFSS company	1997	1998	1999	2000	2001	2002	2003
a	700	800	880	1.200	1.500	1.440	1.590
b	100	<i>140</i>	<i>180</i>	<i>240</i>	<i>350</i>	<i>420</i>	500
c	350	350	<i>400</i>	550	550	530	500
d	<i>450</i>	500	550	550	600	566	523
e	-	-	-	-	100	250	355
f¹⁰	<i>n.n.</i>	<i>n.n.</i>	<i>n.n.</i>	<i>n.n.</i>	<i>n.n.</i>	<i>n.n.</i>	<i>n.n.</i>
g	500	900	1.200	1.650	1.750	2.000	2.200
h	<i>450</i>	<i>550</i>	<i>2.000</i>	<i>3.900</i>	<i>7.900</i>	<i>11.800</i>	<i>15.600</i>
i	-	100	300	600	600	600	600
j	100	3.000	1.000	220	220	220	220
k	<i>10.000</i>	<i>14.500</i>	<i>19.000</i>	<i>25.000</i>	29.000	<i>23.000</i>	17.000
l	<i>n.n.</i>	<i>n.n.</i>	<i>n.n.</i>	<i>n.n.</i>	5.000	<i>4.250</i>	3.500
m	200	200	200	200	200	200	200
n	200	200	200	200	200	200	200
o	700	700	700	700	700	650	600
p	180	200	200	250	300	350	320
q	705	1.175	1.763	2.350	3.525	<i>4.700</i>	6.500
r	-	-	250	300	300	325	350
s	<i>400</i>	<i>500</i>	1.000	2.000	3.000	4.000	5.500
t	-	-	100	<i>160</i>	<i>220</i>	<i>280</i>	330
u	-	-	-	-	-	-	40

Source: this research

The interviewed companies names are symbolised by letters from “a” to “u” to display the data anonymously. Estimations made by the author are shown in italics and follow indicated trends.

They table gives figures on weekly served customers/orders to indicate the development of the customer base, the size of the company and its operations during the years 1997-2003. The author has considered that some companies provide more than one box per order, when they run a modular system (e.g. vegetable boxes, cheese box). Therefore the “number of orders” or “customer served” per week were used to describe the level of operations and can be used synonymously. There are several precautions with respect to the creditability of this data and limitations of the conclusions to be considered.

¹⁰ Company „f“ would not agree to having its figures published.

The companies use different measurements namely: weekly packed boxes, received orders or active customers and they tend to communicate more optimistic figures by overstating the figures or by choosing the most favourable measurement, as the following dialogue and example calculation shows:

“QUESTIONER: What are the sales figures of your boxes?”

INTERVIEWEE: Each week we sell 450 small vegetable boxes [6,45 EUR], 100 large vegetable boxes [9 EUR], 91 boxes of vegetables for one person [5,10 EUR] and 281 small fruit boxes [5,10 EUR] every 2nd week. We have a modular system: Only if you have subscribed to a vegetable box, can you receive fruits and potatoes. Then you have a vegetable and a fruit box, which means that one customer, can have two boxes. [One and a half per week, because the fruit box is delivered every second week].” (COMPANY o)

The owner has said that he has 600 boxes/customers per week. The figures of the interview indicate an 8,56 EUR average sale per customer each week. This adds up to 641 customers, with 5.500 EUR/week, thus giving a 264k EUR / year sales figure. In fact the turnover is 230k EUR according to the owner. Given that potatoes are offered as additional produce, which has not been quantified yet, the difference of 34k EUR implies that there is a great variance in sales per month throughout the year. The reverse calculation starting with 230k EUR, and 8,56 EUR as a weighted average per customer, comes to 27k orders a year resulting in a year average of 516 customers/orders per week. Thus the figure given by the owner seems to be too optimistic.

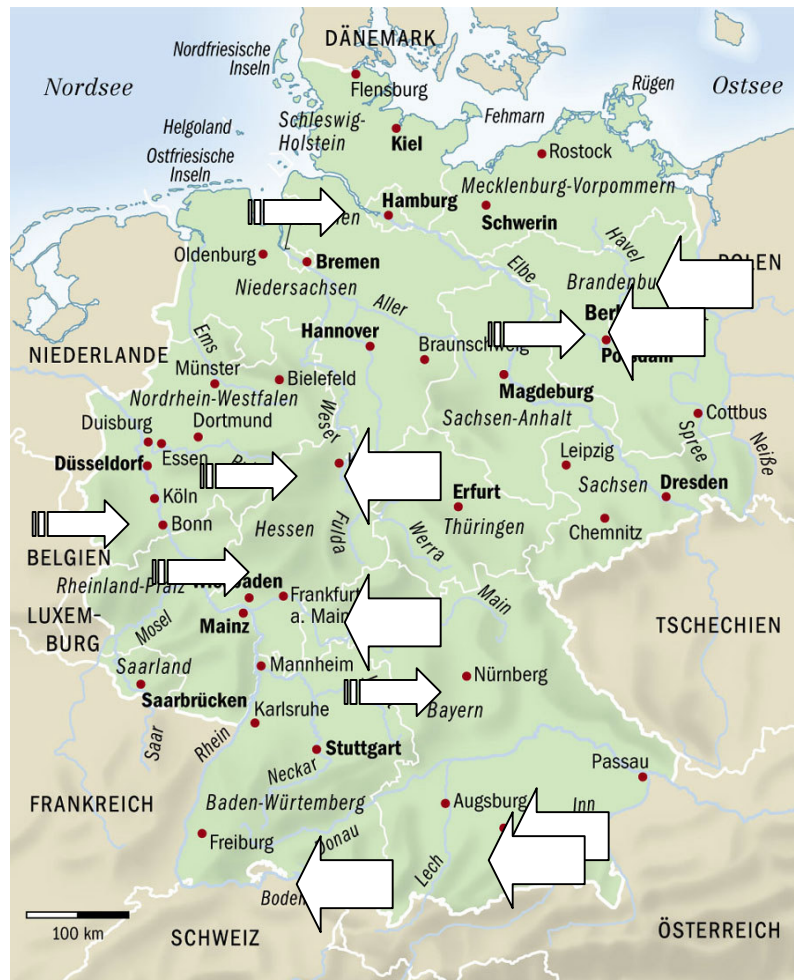
Furthermore the level of operational effort and thus cost structure can vary according to the level of service provided (e.g. home delivery or pick-point delivery, standard box or individualised packing), thus there is no straight relationship to profits and profitability.

Hence, the statistical data in this research is only used to indicate trends of order processing.

5.2 Case Study of Germany

Seven OFSS companies, eight experts and one customer have been interviewed during January and February 2004. To crosscheck the regional market perception of the executives the two regional markets of Berlin and Munich have been selected. All other OFSS companies do not compete with each other in a region.

Picture 5.1 “Location of Interviewed OFSS Companies and Interviewed Experts -Germany”



OFSS companies (big arrows), interviewed experts (small arrows).

Source of map: Spiegel (2003)

5.2.1 History

BUNGE et al (1993) mentioned in his case studies that farms started OFSS in the mid-eighties northwest of Germany. This has been proven by the interviews. The initiative seems to come from Switzerland originally (INTERVIEW c). The Gärtnerei Berg¹¹, in Germany near Basel started an OFSS in 1986, but with the emphasis on supporting the farm. At the same time the Gärtnerei Grüne Kraft¹², at Kassel developed an OFSS based on own IT, which was cutting edge and advanced in terms of customer service, until the end of the 1990's. The number of OFSS increased during the mid1990's, along with the rising number of farms producing organic food, fuelled by the emerging of regional OFSS networks (Nuremberg-Munich, Stuttgart and surrounding areas) and networks of users of the same IT-systems.

5.2.2 Market information

There is no explicit market data on OFSS available in Germany. Thus figures have to be inferred from the following identified sources:

KUHNERT (1998) firstly published figures on food (conventional and organic) subscription schemes in Germany (abbreviated as c+OFSS) based on surveys amongst 199 farmers in 1995/1996 when she investigated the direct selling that was practised by farmers. This research was continued in 2000/2001 by RECKE, ZENNER, WIRTHGEN (2004 - will be published in 06/04).

Table 5.2 “Organic Producing Farms Operating an OFSS”

Only organic farms	1995/1996	2000/2001	Change
Organic farms with an OFSS (West)	10,40%	24,60%	237%
Organic farms with an OFSS (East)	31,60%	11,80%	-37%

Source: KUHNERT (1998), RECKE et al (2004)

¹¹ See www.gaertnerberg.de

¹² see www.dergruenebote.de

Table 5.2. reveals that one third of the direct selling organic farms have employed an OFSS till 2001, and this figure has more than doubled during 5 years. According to this research, it is assumed that the OFSS companies adopted the development stage as expressed in “Type 4” in the Box-scheme Development Model of chapter 6.3. These companies generate their sales from 70-95% by bought-in produce, by selling only 30-5% of own produce. These farm-based OFSS tend to behave as retailers. In table 5.3. the increase of sales through retailing is highlighted. It is not plausible that these farms have developed their production resources or altered their production plans within 5 years. A dropout of small companies of the market can also be anticipated.

**Table 5.3 “Change of Turnover of
Conventional and Organic producing Farms operating an OFSS”**

Conventional and organic farms	1995/1996	2000/2001*	Change
First quarter c+OFSS	179.000,00 €	450.000,00 €	251%
Last quarter c+OFSS	9.400,00 €	150.000,00 €	1596%

Source: KUHNERT (1998), RECKE et al (2004)

In table 5.4 the dynamics of growth is shown, without stating figures of growth above 10%, which is likely for a new distribution system.

**Table 5.4 “Growth of
Conventional and Organic producing Farm Groups operating an OFSS”**

Conventional and organic farms	1992-1995	1996-2001
Growth >10% per year	44%	31%
Growth 5%<10% per year	44%	62%

Source: KUHNERT (1998), RECKE et al (2004)

According to KUHNERT (1998 p124), 4% of all direct sales in 1995/96 stem from c+OFSS companies, of which all, except one, are organic farms, and nearly all are vegetable growers (1998 p149).

WIRTHGEN (2004a) estimates the total direct sales in 2001 at 1,5bn – 1,75bn EUR. Given a market share of 4% total direct sales are 60m EUR in 2001. On the contrary

these figures include conventional farms, and may exclude farm based OFSS with a legal status as a retailer. Furthermore the term “subscription scheme” and “farm based” are not clear defined.

Figures based on GfK research ZMP/CMA (2004) show an estimated 5-5,5% market share on all consumer expenses of 3bn EUR in 2002 resulting in 150m -165m EUR turnover when located in the category “others” i.e. home-delivery services as shown in table 5.5

Table 5.5 “Expenditures on Organic Food in Germany per Distribution Channel”

	Market Share
Organic Food Shops + Health Food Stores	38%
Retailers (i.e. supermarkets)	29%
Farmers (direct selling)	16%
Butchers and Bakeries	7%
Others (i.e. Delivery-Services)	6%
Chemist/Drugstores	4%

Source: ZMP/CMA (2004)

OFSS in this GfK survey are not clearly defined. Sales of OFSS can either be listed under “Farmers” (direct selling) or/and in “Others” (i.e. Delivery Services). It is therefore prudent to estimate a 5,5% MS.

Phases of subsequent annual growth rates of +40% can be anticipated for some of the OFSS companies as these figures are found in the case studies of STEGMANN 1994 and KREUZER (1996) as well as in this research (COMPANY h,k3,q,s)

In summary it can be estimated that the OFSS has a MS of at least 5,5% of all organic food sales on retail level prices in 2003, resulting in 165 mEUR yearly sales on retail price level. There are 300 OFSS companies serving an estimated 124.000 customers per week. Estimations of this research will be presented in chapter 6.5.

The OFM of Germany is the second largest after the US and before the UK (see table 1.1. There are no data on 2003 available.

5.2.3 Operational and Marketing Patterns of OFSS

There are two patterns amongst the researched companies, resulting in a dominant design and other patterns.

The dominant design of German OFSS emerged until 1998 along the above named networks, accounting for an estimated +80% of all OFSS sales. It can be described on the operational level as a:

- Farm based OFSS, with 300 to 2000 customers weekly.
- The standard portfolio consists of 5 to 20 boxes, with floating box prices +/- 5% of the agreed subscription price.
- Basic fresh organic produce is sold (vegetables, fruits, bread, dairy)
- The customer can customise his boxes by claiming likes and dislikes with respect to the produce supplied.
- Employment of OFSS-IT database to link the box to the individual order of the customer (i.e. likes and dislikes, additional produce, interruption of delivery).
- The content of the box will be weighted on a PC-linked scale, if the produce is not packed piece by piece. The weight x produce price will be added to the customers receipt.
- Using standard deposit boxes of the organic food industry (size NAPF 1,5 and 2)¹³
- Home delivery through own transport vehicles and own staff.

The packing of OFSS on a PC-scale is a unique development in Germany. It brings the producer an estimated 30% advantage in sales, due to reduced calibration losses, and an estimated 10% reduction in wastage costs of fresh produce when packing, as no harvested or bought-in produce will remain as an excess. The customer is always aware of the weight and prices of the box-contents. This can be seen as an information

service benefit. There are currently three dominant standard OFSS IT solutions and individual supply chain solutions employed in 250 OFSS companies. In contrast to farm based OFSS the same design is operated by a smaller number of companies without their own production coming into play.

The second pattern is characterised by OFSS companies having a minor share of sales and the free ordering of additional produce or produce from the catalogue which contributes more to revenues. The OFSS in these companies is seen to play an important role in communication and tends to be an order winner or a factor that brings in a stable number of frequent purchases. The companies tend to behave more like retailers and operate in a retailing background or home-delivery background.

Examples of this pattern are:

One company offers a variety of standard boxes via its Internet/Catalogue shop and distributes it by mail. This company has a strong farming background and has a high level of operation. Organic food production is seen to have a competitive advantage in two ways. It improves the shelf life of the product compared to other organic production methods, which is pre-emptive to use this distribution system (as the mail takes 1-2 days), and the fact that it is unique and superior to other certified organic production methods and this fact is communicated to the customer. On the other hand, one OFSS Company in the UK mails its boxes as well, by using the average organic production standards.

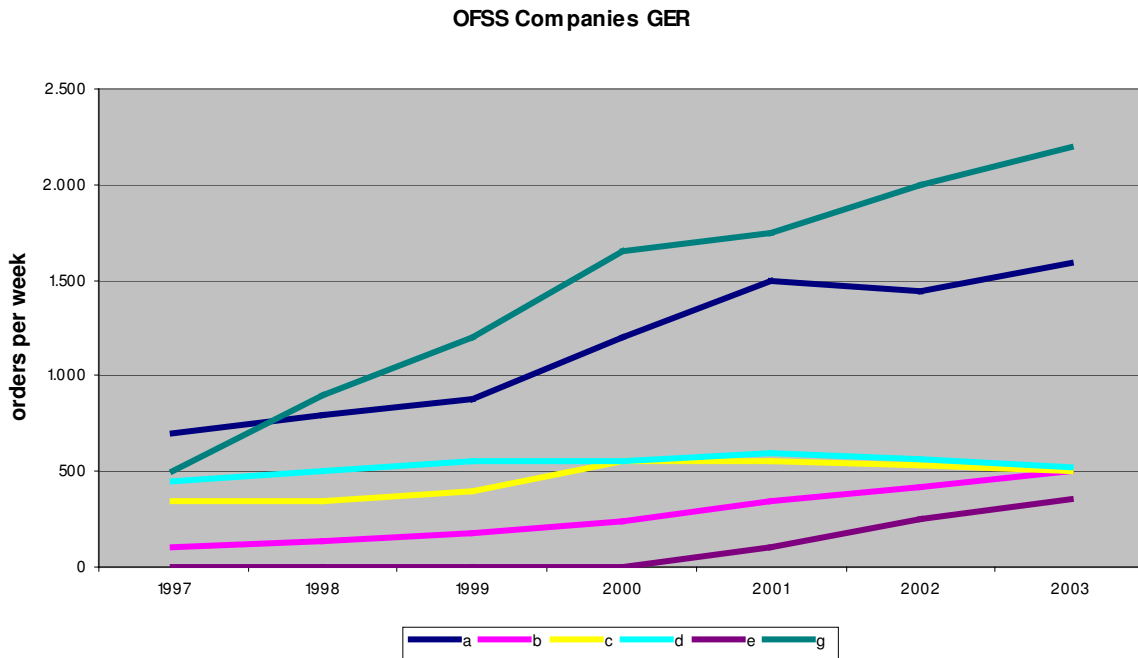
Another company produces its own meat, dairy produce and has its own bakery. Even though it sells mainly off the catalogue it has created minor varieties of standardised meat, cheese and breadboxes and supplements these offers with standardised vegetable and fruit boxes. It distributes its orders by home-delivery.

¹³ see www.ringo-plast.de

5.2.4 Customer Trends

All companies except “e” have been in the market for more than six years. Minor estimations had to be made for the following table. In the figure 5.6 below four issues are highlighted.

Figure 5.6 “Yearly Average Orders per Week of Interviewed OFSS Companies Germany 1997 – 2003”



Source. This research

Firstly, the data shows an overall growth with a slight slowing down in the years 2000 and 2002, presumably due to the NITROFEN scandal, which hit the OFM in summer 2002, except for two companies, which have a steady customer base or are declining in the last two years. Secondly, the biggest overall growth took place in 1999 and 2000 at the heights of the BSE crises. Thirdly, bigger companies grow faster and are more volatile, which can indicate a different customer structure than smaller companies. Finally, two companies show a steady curve whilst the others are growing.

5.2.5 Emerging Themes from In-depth Interviews

IT plays a leading role in operations in order to create virtual networks between OFSS companies and customers and suppliers and to customise the OFSS offering to meet the increasing expectations of the customers.

There is a culture of “buying at the farm” in Germany. Which supports the start-up of OFSS as a tool for direct selling.

The markets seem to be underdeveloped, due to lack of customer awareness in combination with OFSS companies targeting mainly the “young environmentally sensitive family” consumers, whilst on the other hand, service oriented single and elderly consumers are not explicitly targeted.

Farm based OFSS have the tendency towards a production based view, or are product oriented, instead of consumer oriented. This is found in all researched countries. These companies are likely to conduct a reactive policy, by improving their system only after a decline of sales.

The ability to provide information to create a feeling for the consumer of being close to and being supportive of the farm seems to be of increasing importance, and shows a consumer need for security and trust, which the OFSS manages to satisfy.

*“We are celebrating farm events, 10% to 15% more new customers are possible...[...]. Transparency is what we want to communicate. When someone buys our products does he know where they come from. This way of promoting has been proven as the best. Other ways of promotion are not as sustainable.”
(COMPANY a)*

Customer service in order to help the consumer to define his needs and to select the right subscription scheme:

“We offer the customer a vast variety of possibilities of ordering [boxes and free orders], but he is not able to use them. To communicate these possibilities is very difficult. That is the reason why we have established a dedicated telephone service for new customers.” (COMPANY d)

5.3 Case Study of Denmark

Two OFSS companies and two experts have been interviewed in March 2004. The OFSS companies do compete with each other in the region north of Copenhagen. About 8 companies have been approached. Owing to language problems, holidays and the reticence of the executives, only two companies could be interviewed.

Picture 5.2 “ Location of Interviewed OFSS Companies and Interviewed Experts - Denmark”



OFSS companies (big arrows) interviewed Experts (small arrows).

Source of map: Spiegel (2003)

5.3.1 History

The Farm Noerregard pioneered OFSS in DK twice, as they had been the first in 1994 with 50 customers and they imported the Dutch bag-scheme¹⁴ in 1996/97. The rapid growth of the operations to 4000 bags per week led to a collapse in the following year.

¹⁴ Bag-schemes in contrast to box-schemes will be defined in Chapter 6.1.3. and are described in detail in more chapter 5.4.3

The same year, 1998, both of the interviewed OFSS companies started their system. Further developments are indicated below.

5.3.2 Market Information

The OFSS market in Denmark is threefold. One dominating company is growing rapidly, whilst smaller companies are stagnating and the leading conventional supermarket chain (33% MS of all retail sales in DK according to FAO/ITC/CTA 2001) is trying to enter the market with a new subscription scheme. See ATTACHMENT G for pictures.

20 OFSS companies are estimated to operate in DK, of which experts estimate the MS within the OFSS market of the biggest OFSS Company of being up to +85%. The main supermarket chain responsible for +85% of MS of all organic sales started a conventional and an organic food subscription scheme. Additionally, a conventional fish-retailer has offered fish boxes on a large scale for several years. There are no additional OFSS market data on DK available. Among the companies that were approached organic food retailers on a low volume basis operated a significant number of OFSS.

There are no data available for 2003. According to WILLER et al (2004) Denmark has reached a mature stage and no growth was anticipated. Demand decreased, whilst area under production increased which indicates an out of balance of demand and supply market. Denmark has the highest per capita consumption in the world after Switzerland.

5.3.3 Operational and Marketing Patterns of OFSS

According to the number of interviews, observations of common patterns can be misleading. Both organisations are situated on an operating farm and compete against each other in a rural high-income area, using the system of home-delivery.

The main company is the largest in Europe and offers a variety of standardised vegetable and fruit boxes and in addition an assortment of high value organic produce like meat, fish, cheese and alcoholic beverages. Customers order via the Internet or telephone.

Subcontractors from the company distribution hubs near Copenhagen distribute the boxes. The company has built up an image of “being hip” and an alternative to supermarkets, whilst conducting organic production and natural conservation practices in its vast forest. The one-way wooden boxes are packed on two semi-automatic production lines. The weight of the produce will be estimated when packing and controlled by sample quality control. The time taken to pack the boxes is more costly than the surpluses of weight the customer might receive. Speed of packing and the workforces’ experience in estimation is thus the critical factor. There are about 100 personnel. The company is in contact with the other OFSS Company’s worldwide. According to the founders initiative the company pursues a full transparency policy. Any figures and business information will be disclosed.

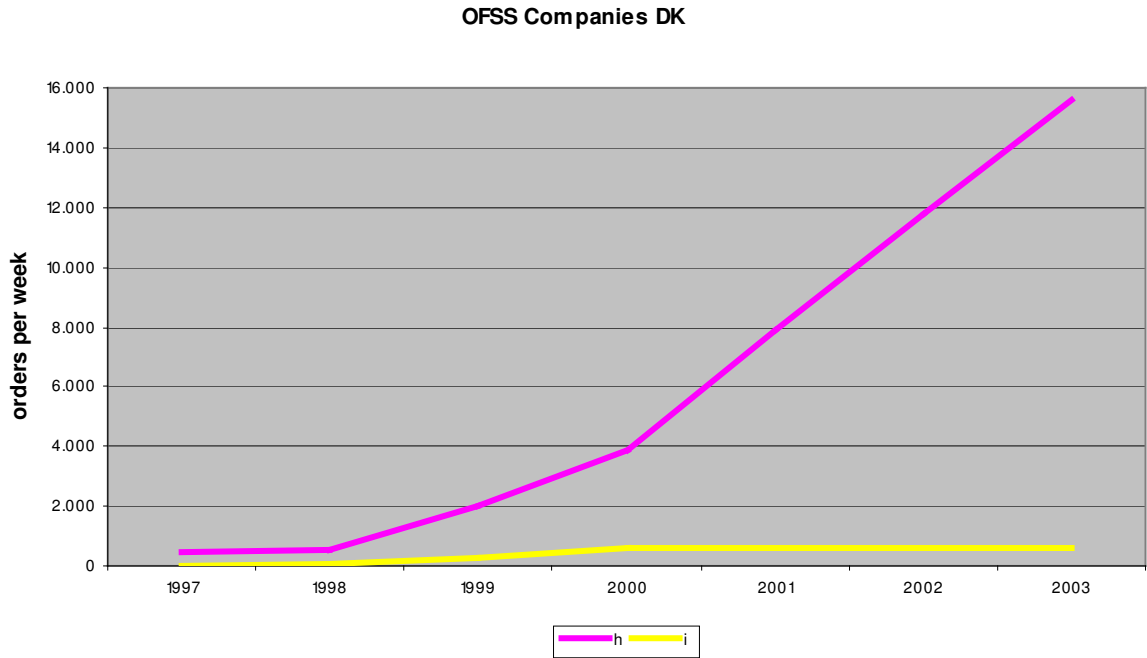
The second company interviewed is situated on a 40ha farm, producing meat and until 2003 it produced a vast variety of fresh vegetables for its box-schemes. It serves 600 customers with three standardised vegetable and fruit boxes through home-delivery. Once a week the 600 boxes are packed in a flow-line layout into deposit boxes. This takes 4 hours to complete. After the birth of the farmer’s son and production losses in 2003 he decided to stop production and stabilise the box-scheme at its current level.

5.3.4 Customer Trends

The figures of company “h” are based on estimations, as there were contradicting numbers of customers, boxes and weekly orders. According to the interview each customer has an average of 1,6 boxes, and about 40.000 customers will be served during 14 days in 2004. Some have ordered a 14-day subscription. The given estimations are therefore conservative.

Whilst company „i“ reached its permanent peak level after 4 years, as the figure 5.7 shows, the figures of company „h“ show steady growth. The development of “h” is anticipated as linear to the last given figure, as there were no other indicators.

Figure 5.7 “Yearly Average Orders per Week of Interviewed OFSS Companies Denmark 1997 – 2003”



Source. This research

The differences in the curves do not give insight into the market situation, but indicate a different attitude or strategy towards growth within the organisations.

5.3.5 Emerging Themes from In-depth Interviews

The themes that emerged are as follows: the dominant role of supermarkets, rising consumer concern about their monopolistic policies and the dependability of supply of local supermarkets. Low coverage, low variety and low freshness of organic food in local rural supermarkets are also of concern. These concerns in turn create a demand for something special and thus for alternatives:

“QUESTIONER: What are the benefits for the customer?

INTERVIEWEE: One benefit is, if you want to be trendy, or are used to being a bit ‘hip’ – you can buy a box. And when your friends see this box you can say: “ I bought it on the internet”. Another is: when you want to buy organic vegetables and food, you also want to buy other vegetables rather than only onions, potatoes and carrots. It is really hard to get varieties of vegetables because the supermarkets do not have them. Our box scheme offers all kinds of vegetables.” (COMPANY h)

The great purchasing power of supermarkets and pressure on producers increases their willingness to search for alternative customers and means of distribution.

Company policy of small organisations is volatile and prone to setbacks and changes affecting the personal situation of the owner due to time and financial constraints can also affect the policies adopted:

“QUESTIONER: Your box scheme is quite simple. Would you change the system?

INTERVIEWEE: No. I do not think I could manage it. [...] Well, I know that more and more customers ask for individual boxes.

QUESTIONER: Is that not a bit of a contradiction? You want growth of the system but you want to avoid putting in any more effort?

INTERVIEWEE: Yes. I still have a hunger and am quite idealistic about my work – but now I have family. Some day I will develop new things.” (COMPANY c)

5.4 Case Study of the Netherlands

The Netherlands OFSS market was researched in the beginning of March 2004 through six interviewed OFSS companies, one expert and one customer interview. 50-60 companies are anticipated. Most of the interviews could be scheduled and the interviewees were open and honest in their comments. The interviews of the two main companies could only be summarised, owing to the wishes of the interviewee or owing to technical problems.

Picture 5.3 “Location of Interviewed OFSS Companies and Interviewed Experts: The Netherlands”



OFSS companies (big arrows), interviewed experts (small arrows).

Source of map: Spiegel (2003)

5.4.1 History

The WARMONDERHOF¹⁵ pioneered the practice of organic farming since its inception as a biodynamic farm and agricultural school in 1948. It has been an information hub and crystallisation point where organic farming in the Netherlands and several of today's OFSS were inspired. Close linkages are revealed by the interviews to three OFSS organisations.

One of the first farms to make use of OFSS has been the HORSTERHOF in 1983. It used this system as a means to bring the scarce organic produce to the few customers living in the area. In the beginning of the 1990's this OFSS was adopted to support the farm according to a modified CSA system, called PERGOLA. The CSA system will be described in chapter 4.5.4. In the early nineties more farmers started an OFSS. In 1996 the organic food wholesaler ODIN invented the OFSS bag-scheme¹⁶ and became the leading OFSS Company in Europe. This led to a stagnation of farmer-based initiatives and established networks.

With the decline of the bag-schemes and the overall increasing government support of organic farming, new local food initiatives like VAN EIGNE ERF¹⁷ and the issue of direct selling through OFSS gained more momentum.

5.4.2 Market Information

The interviewees estimated the number of OFSS companies to be 50-60 in the Netherlands. Most of them are box-schemes OFSS up to a size of 300, a few up to 700, and two dominating and competing wholesalers operating bag-schemes. There are no market data on sales, but rough estimations on number of boxes and bags are available but need to be treated with caution. Since the year 2001 the overall number of OFSS bags has fallen whilst a slow growth of farm based box-schemes can be anticipated. A MS of 70% for bag-schemes is a reliable estimation.

¹⁵ see: www.warmonderhof.nl

¹⁶ Bag-schemes in contrast to box-schemes will be defined in chapter 6.1.3.

VIESTER (2003 pp 58-59) compares consumer behaviour of OFSS-subscribers (Tas) with shoppers in Organic Food Stores (Nvw) according to the Heavy-Medium-Light organic buyer segmentation¹⁸. The figures of table 5.6 show more “light users” among Tas-consumers than among the Nvw-segment.

Table 5.6 “Customer Segmentation of OFSS Subscribers in Comparison to Natural Food Store Shoppers”

	Light user	Medium user	Heavy user
Tas	61%	48%	29%
Nvw	39%	52%	71%
Sum	100%	100%	100%

Source: PLATFORM BIOLOGICA (2004)

Two assumptions can be made: First, Tas consumers have other reasons to subscribe besides buying “organic”, otherwise they would be as heavy buyers as the Nvw-segment. Secondly, Tas-consumers as “light users” are prone to switching from organic to conventional purchasing if there is an alternative and are not as willing to pay price premiums on organic foodstuffs. The definition of the Tas-subscriber could not be assessed. Tas-customers might be subscribers of one of the two bag-schemes or customers of any OFSS in NL. A third assumption can be made that if the Tas-consumers are “bag-scheme” customers (they have to fetch their bag in a shop) the shopkeeper who is selling the bags, will not serve the “light user” segment with as much enthusiasm as the “heavier user segment” and therefore might not be motivated to promote the bags.

The Netherlands OFM grows slower than the other researched countries till 2002, and shows less consumption of organic produce per capita. According to ZMP, cited by BIOFACH Newsletter (2004), the MS of organic produce of all food consumption rose to 1,6% in 2003, whilst the supermarkets hold a MS of 48% of all organic sales.

¹⁷ www.vaneigenerf.nl

¹⁸ The terms light-medium-heavy users refer to the frequency of purchase and amount of money spent.

5.4.3 Operational and Marketing Patterns of OFSS

The OFSS market is dominated by two organic wholesalers who operate the bag-scheme design developed by the wholesaler ODIN¹⁹ in 1996. Additionally two further patterns have been identified.

The first group consists of two bag-scheme OFSS operators. In a bag-scheme a wholesaler is the OFSS operator and designs, packs and delivers the bags, whilst providing the end consumer with weekly product information and recipes. The agreed points of delivery for the end consumers are the Natural Food Stores (the customers of the wholesaler). Thus, the wholesaler delivers a variety of fresh fruit and vegetable standardised bags to the shop, together with other produce ordered. It is therefore by operation a business-to-business relationship (B2B), whilst in communication the end consumer will be targeted by the OFSS operator (business-to-consumer relationship B2C). The shop had to manage the order of the standardised bags and to manage the payment of the customer in the shop as its sales. There was neither an explicit regular contract between the shop and the customer, nor between the shop and the wholesaler. In practise the customer paid for the bag one or more weeks in advance, which would urge the customers to buy the bag regularly. Because of that the bag-scheme is categorised as a subscriptions scheme even without the legal agreed regularity.

The second group are two farm based OFSS companies, which offer standardised boxes as in the bag-schemes, but in addition deliver to shops and to privately managed drop-off points, where 8 to 15 customers arrive to pick up their boxes. Home delivery occurs very seldom. According to the interviews and observations it is quite normal in the Netherlands to pass service features to the customers who therefore gain a price incentive. The drop-off point system in contrast to home-delivery is the first service level –seen from the customer perspective upstream in the value chain as discussed in chapter 2 – which is passed on. A second is, when the OFSS Company does not pack a box, but hands out the customers a list of the box content and the ingredients in bulk. A box-subscriber will

¹⁹ www.odin.nl

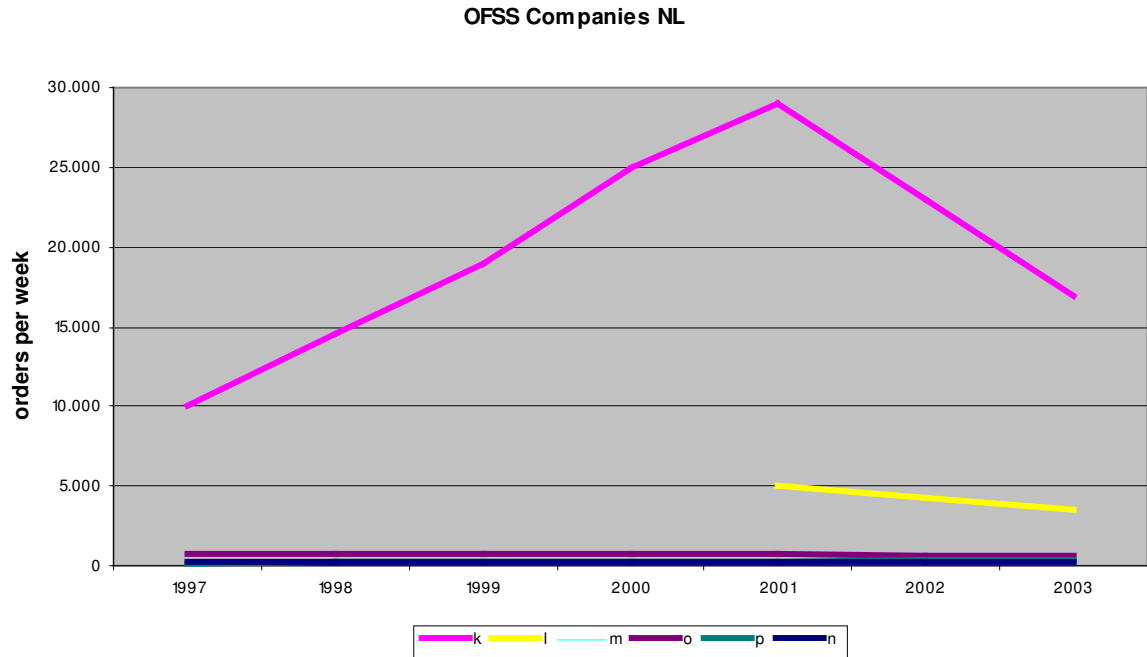
therefore pack its own box at the pick-up point according to the box-content list out of the trays of carrots, salads and so on where pre-packed produce are displayed.

The third pattern is found in companies, which use the box-scheme as a means to support the farm. The box and its content is not a tradable good, but becomes a “share” of the farms food production. The customer has to accept to pay for a certain part of the farms operating cost and gains the right to receive a weekly share of the harvest as described by the SOIL ASSOCIATION (2001a). CSA or supportive box-schemes will be further defined in chapter 6.1.2. There was only one interviewed farm of this group, but the other interviews indicate that patterns and attitudes of this philosophy influences the farm based view of other OFSS farm based companies significantly.

5.4.4 Customer Trends

It is anticipated that there is a direct relationship between the developments of company “k” and “l” as their bag schemes are substitutes. In the interviews both companies mentioned that they reached their peak orders in 2001. The development of company “k” before that peak was estimated as linear, due to lack of other information. As there was no information for the figures of “r” and “l” in the years 1997 to 2000 and to avoid misleading comparisons between “k” and “l”, no figures have been estimated. It is important to know that “l” was operating a bag-scheme, as was “k” in these years. The box-scheme company “o” had lost customers in the recent years.

Figure 5.8 “Yearly Average Orders per Week of Interviewed OFSS Companies The Netherlands 1997 – 2003”



Source: this research

There is a sharp contrast between the smaller and the bigger OFSS companies in terms of size, growth and volatility of sales. Bag-schemes companies are affected by different factors when compared to the box-scheme companies, which show a more steady level of sales.

5.4.5 Emerging Themes from In-depth Interviews

OFSS in NL tends to pass service features down the value chain to the customers, as following quotation displays:

*“We have 16 pick-up points where we deliver our vegetables. Some customers come to the farm to pick their boxes. [...] [The pick-up points] could be a carport, side entrance or at private houses. People arrive at these points and take their vegetables. The boxes are not packed. The products are pre-packed and sorted into boxes and everyone takes his produce according to a list which is attached.”
(COMPANY n)*

In this example one service aspect – the packing of the box, will be done by the customers themselves. Furthermore, the service of home-delivery is not a typical feature in The Netherlands. The dominant distribution system is drop-off points in shops (mainly bag-scheme) or at private holdings (mainly box-schemes). Only one of the interviewed OFSS Company offered this service. In another small OFSS company operations were highly divided and passed on to different people outside of the company. This observation of a culture of “division of work” is an issue in the Netherlands, which has been confirmed by an interviewee.

As found in the other researched countries, there is a predominantly production and produce-oriented view among smaller OFSS companies in contrast to a customer orientation approach:

“QUESTIONER: You do not want to change the abo-system²⁰?

I. No, I think we have a good formula. The system is good.

QUESTIONER: Why do you think so?

INTERVIEWEE: Because, the advantage of the abo is, that the customers cannot choose. They have no choice [...] that is very important.

QUESTIONER: But that is an advantage for you, not for the customer.

INTERVIEWEE: But that does not matter. For some customers it does, but they do not have to take the abo. But there are also a lot of customers that are glad that we choose what is in the box.

QUESTIONER: You mean the design of the box is a service?

*INTERVIEWEE: Yes. I have heard from a lot of customers who do not know what to buy when they are at the greengrocer. That is why they like our abo.”
(COMPANY o)*

This attitude will be further reinforced, as fresh organic produce is still limited in variety and availability in the dominant supermarkets. Some authors are arguing that a company-based view indicates a lack of marketing know-how and may be an obstacle to further market growth (PADEL et al 2003), which the author agrees on.

The main customer benefit is therefore the availability of organic produce and lower prices through the OFSS.

“QUESTIONER: What are the driving forces of the box-schemes?”

INTERVIEWEE: The customer’s gains trust and a fresh and large variety of vegetables.

QUESTIONER: The supermarkets do not offer this?

INTERVIEWEE: Yes. If the supermarkets would meet these requirements, there would be much fewer box-schemes” (COMPANY n)

Apparently there is a “Low price - low service” strategy in Dutch OFSS organisations, as they perceive the Dutch consumers as highly price sensitive. The interview revealed a hidden competition on price between the biggest companies. The notion that the OFSS customer would not be willing to pay more for a greater service by increasing the cost of the core produce could not be tested in this research. Only one company thought about such a strategy.

There is a steep decline in the number of bag-schemes OFSS owing to a change of structure in the organic food distribution channels and increased availability of organic fresh produce in supermarkets and bigger Natural Food Stores. Further Issues on bag-schemes are found in chapter 7.7.2

²⁰ The term „abo“ is frequently used in The Netherlands and has the same meaning as „box-scheme“ in the UK.

5.5 Case Study of the United Kingdom

Five OFSS companies mainly in the South have been interviewed during the second half of March 2004. One company is still in the embryonic state. Some 13 organisations were approached and provided insights based on longer telephone interviews. The accessibility was more difficult than in the other countries, due to traffic constraints, and more reticent attitudes and different priority setting of the owners. On the other hand databases and websites provided more informative than websites of companies of the other researched countries. There was the tendency to draw a more positive picture of the organisation when interviewed.

Picture 5.4 “Location of Interviewed OFSS Companies and Interviewed Experts in the United Kingdom”



OFSS companies (big arrows), Interviewed experts (small arrows).

Source of map: Spiegel (2003)

5.5.1 History

The historic paths of OFSS in the United Kingdom could not be traced back in the interviews. The two biggest OFFS companies started both in the early 1990's as a home-delivery service and an organic food producing OFSS. One company referred to the ORGANIC MARKETING COMPANY, which started an OFFS in 1995, and collapsed in 1998 due to operational and management difficulties.

5.5.2 Market Information

The annual Organic Food and Farming Report by the SOIL ASSOCIATION describes the development of the OFSS market as exhibit in table 5.7:

Table 5.7 “Number of OFSS Companies in the UK 1998-2003”

	1998	1999	2000	2001	2002	2003
No of OFSS companies	180	195	340	310	306	471

Source: SOIL ASSOCIATION (2000, 2002, 2003)

It is not clear on which criteria these data were collected. A crosscheck by the author of the listed box-schemes companies in London revealed, that 30% had been shops with home-delivery services or wholesalers offering boxes of assortments on a more or less regular basis. PRETTY (2001, p3) referred in his paper to estimations by the SOILASSOCIATION. It states that the OFSS market is supplied by 20 bigger OFSS serving up to 1200 customers and 280 smaller OFSS companies with each up to 200 customers weekly, resulting in 80.000 boxes a week. PRETTY cut these figures by 25% to 60.000 order/boxes for purposes of prudence

Based on the estimations of weekly orders and an average box price the following sales figures of table 5.8 can be anticipated:

Table 5.8 “Development of OFSS Sales in the UK in mEUR & Market Share in % of Total Organic Food Sales (Retail Level Price) 1998-2003”

	1998/1999	1999/2000	2000/2001	2001/2002	2002/2003
MS of box-schemes	6%	5%	4%	4%	4%
Sales in mEUR	32	43	49	50	60

Source: SOIL ASSOCIATION (2000, 2002, 2003)

This highlights the difficulty in assessing the OFSS market owing to a lack of quantitative research. The author disagrees with these estimations and refers to chapter 6.5.

The UK market has shown the highest growth rates in Europe and is now the third largest market slightly after Germany leading by the US. 65% of all sales stem from imported organic produce in 2002, whilst 80% of all organic sales are made by multiples.

5.5.3 Operational and Marketing Patterns of OFSS

In the UK OFSS market a large variety of schemes can be found. All of them use cardboard-boxes instead of deposit-boxes, but try to use them a least 3 times to reduce waste and promote recycling. A common feature is to sell the box as a whole for a fixed price. The level of delivery service is mixed; drop-off point systems are as common as home-delivery, which is a crucial service feature in London. The price level for farmer based systems is lower than for organic produce in supermarkets, whilst in the bigger OFSS companies the prices are the same or higher than organic produce in the multiples. The SOIL ASSOCIATION (2001 p8) advised box-scheme start-ups to sell their produce at around the price-level of the conventional fresh produce in the supermarkets, which might be a cause for lower prices of farm based OFSS.

Two different measurements have been used to derive common patterns of groupings according to the level of customisation and according to size. These measurements correspond with the PLC/MLC concept and SME theory as they indicate distinguishable criteria.

If we categorise the OFSS companies according to their level of customisation, e.g. the level of how the consumer can design and alter the content of the boxes, there are two groups.

There are three companies who allow customers to customise their box content by telling the packing company their “likes” and “dislikes”, e.g. vegetables or produce they prefer instead of produce they do not want in their delivery. This has major implications for operations, as we must be certain that the specific boxes reach the specific customer who requires that box. Home delivery becomes inevitable, and the cost of packing, distribution and administration soars. Interviews indicate that this service feature is increasingly important to the consumer.

The other group offers standardised boxes, where the customer has no influence on its content. In packing this offers the possibility of large scale, fast packing flow-line designs with advantages of businesses of scale. Drop-off points are easier to operate. On the other hand, the interviewed companies of this group sell additional produce, which causes the individualisation of the order and thus home-delivery.

The categorisation of the companies according to size reveals difficulties, as the two main companies have the described different levels of customisation and thus have less in common in their marketing features or product/service offerings as these figures suggest. On the other hand they share a more complex organisational structure and are able to manage growth whilst expanding their OFFS offerings to add value to the customer.

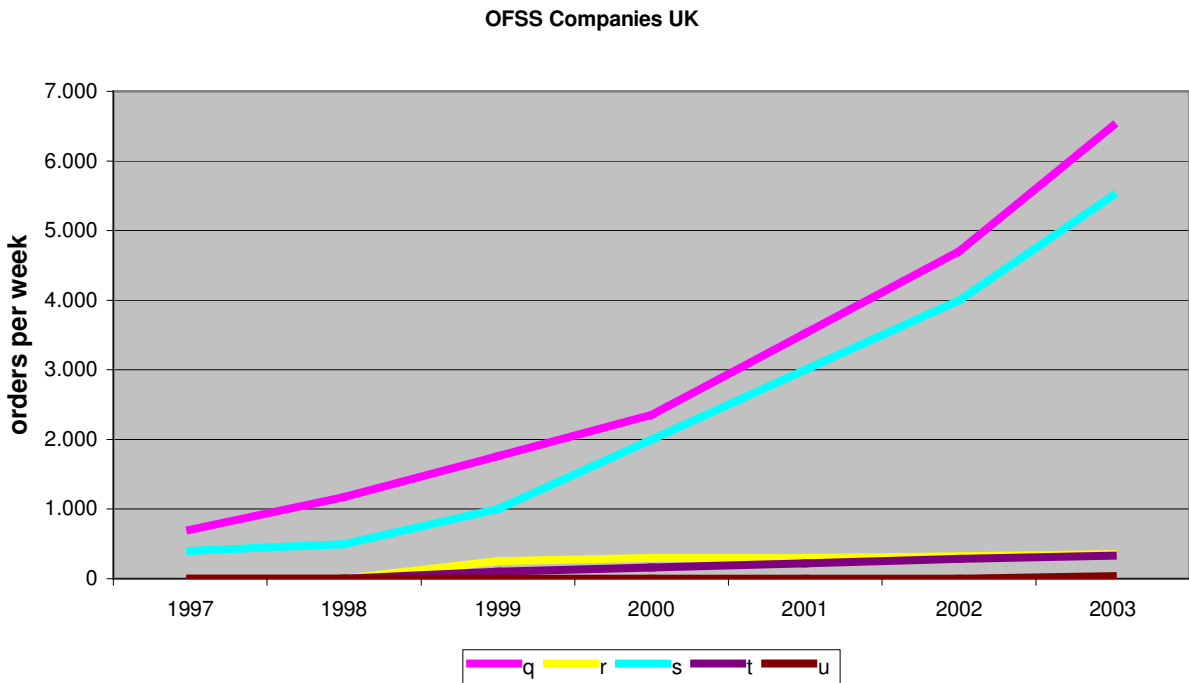
According to the interviews, smaller farm based OFSS companies are less proactive and less inclined to growth. Change in the operational set-up caused more disruption of the ongoing business and bears more risk of failure due to limited resources as implied by SME theory.

5.5.4 Customer Trends

The data of figure 5.9 is primarily provided by the companies, thus have to be treated with caution.

All OFSS faced growth in the last few years, but until 2003 none of the companies were competing on the same market with each other, thus interdependence between them is not likely. General market factors for the groups of big and the groups of small companies can therefore be anticipated.

Figure 5.9 “Yearly Average Orders per Week of Interviewed OFSS Companies The United Kingdom 1997 – 2003”



Source: this research

The two dominant companies have developed in the same way, even though they have different backgrounds and strategies, in contrary to small regional OFSS. The nearly linear growth based on the submitted data can also be interpreted as the beginning of a PLC curve in the introduction phase, as the interviews of both companies indicate.

5.5.5 Emerging Themes from In-depth Interviews

The OFFS market sees two big companies serving a regional market of South-England and London.

The supermarkets play a dominant role both in the OFM as in the home-delivery market. To gain MS they are expanding their channels into home delivery services in cities (whilst creating shortages of supply in the countryside and thus competing with those OFSS who offer home-delivery services.

“ They are always after their market share. They are moving away from out-of-town-supermarkets to more local shops. And they are very scared that the trend is to move away from out-of-town supermarkets to home delivery. So they have created a huge home-delivery service infrastructure. [...] It is a famously (rapidly) growing segment. TESCO is the market leader with 2% of its turnover gained from home-delivery/Internet shop service]” (COMPANY q)

There is consumer concern about price pressure on British farmers and lack of support for local supply, after the BSE and Foot and Mouth Disease in the recent years. There are further issues raised in the interviews and named as reasons for customers to buy a box-scheme. They revolve around waste and recycling, Food Miles, Food Deserts, fair trade policies and ethical business practises.

“Customers like the feeling when they get their food directly from the farmer, they like to feel the connection with where their food is coming from [...] and [are] supporting local produce and farms rather than big corporate supermarkets.” (COMPANY s)

“The supermarkets are not all that good at providing organic foods. If they do at all, it is packaged and a lot of people worry about the packaging” (COMPANY t)

“[The customers] are aware of the buying power [of supermarkets] and they way they treat growers. A lot of people buy in supermarkets because there is no choice.” (COMPANY t)

IT plays a dominant role in the bigger companies, to integrate their order and delivery processes whilst the farm-based companies are using adapted office-solutions and no specialised software.

“IT is a fully central feature of distribution. I mean, you are living in this delivery area, it is 3 AM and you can exclude bananas from your box [through the internet]. The 576th box that comes off the packing line won’t have bananas in it. You know, that the 14th box down the list will be delivered by the driver to this area – which will be organised on a computerised mapping system. Using IT you can ensure that he gets that specific box.” (COMPANY q)

This quotation can also be used to describe the importance of IT in the farm-based box-schemes in Germany, and some initiatives in The Netherlands.

A further theme is that product and production based views, are supplemented by tight costing plans and low strategic horizons in farmer based OFSS companies.

“I want to push the sales. I do not know if the company can stand on its own [when it has to pay rent for premises]. Really I am subsidising it – we are putting up a business, which pays no rent and offers, a very low profit when compared to my job.” (COMPANY t)

There is a lack of effective networks and local co-operation between OFSS companies and farms according to the interviews.

“QUESTIONER: How is your sourcing from other farms working?

INTERVIEWEE: It does not really work.

QUESTIONER: Why?

INTERVIEWEE: It would be nice, but our attempt to work with our neighbour farms failed. We are too fragmented, as British farmers anyway. Everyone tries to come along as an individual, that is a fact.” (COMPANY s)

This lack of communication and co-operation prevents the emerging of common quality and service standards in the OFSS market and in the mind of the customers. The SOIL ASSOCIATION (2001 p9) states in addition that:

“ The biggest threat to the growth of box-schemes is from schemes that do not offer a good service and lead to disillusioned customers, thus souring the potential market for box schemes in general”

6.0 Cross Case Analysis of International Findings

In the previous case studies national patterns have been derived, displayed and emerging themes highlighted. In this subchapter international patterns will be investigated. In 6.1 gaps of definition have been identified hence robust definitions of the OFSS will be suggested. 6.2 clarify the underlying concepts of the consumer benefits, and aspects of quality to apply to the PLC/MLC model for analysis. Furthermore in 6.3 three clusters of OFSS have been identified by comparing and contrasting the international case studies.

6.1 Definitions of the OFSS

There is no consistent international definition of OFSS in use. Practitioners use different terms in different countries and different meanings can be used in varied contexts. There is no academic definition found in literature as well. The SOILASSOCIATION (2001) identifies distinctive and commonly shared operational features of box-schemes by its:

- Regularity of packing distribution and purchasing
- Variety of products selected by the packer
- Limited choice for customers

The author supplements this definition by looking at the customer's perspective, and distinguishes the OFSS according to services and the backgrounds of these schemes. In the researched countries terms like "home delivery services" or "delivery services" are often used synonymously with "box-schemes". Furthermore box-schemes as a distribution channel get blurred with box-schemes used to establish a farm support relationship. The terms box-schemes and bag-schemes are also used synonymously on an international level, but stem from different historical and operational backgrounds and thus have a different meaning.

6.1.1 Delivery Services and the OFSS

In literature “delivery services” (e.g. of purchases in an organic food internet-shop) and subscription schemes “delivery services” are often used synonymously. Both are delivery services as they bring the ordered goods to an agreed place, but there are three distinctive issues to be discussed:

- Firstly, in a subscription scheme, there is an agreement between customer and provider. It is the main distinction in purchasing behaviour.
- Secondly, the customer is willing to receive a compiled set of produce (box, bag), which is an added service given by the provider.

Thus home delivery services can be distinguished between by the degree of flexibility of choice of produce and time of purchase. They can be divided into “organic food subscription schemes” and “shops” (in this context mainly internet shops).

- Thirdly, the customer expects the OFSS to be fair and supportive with respect to the producers. The customer receives from this perceived closeness to the farm a feeling of ethical and sustainable shopping and trust in the organic quality of the produce.

Hence, OFSS have a more dedicated customer-seller relationship, based on shared values, than other delivery services.

These three basic criteria of an OFSS are further analysed according to consumer benefits in chapter 6.2

6.1.2 Commercial and Supportive OFSS

Organic food subscription schemes can be operated from two economic philosophical backgrounds: On one hand as a means to generate sales and profit (commercial) and on

the other as a means to distribute the benefits to the “members” of the supporting farm’s community (supportive role).

The first group of farmer perceives himself as an independent entrepreneur who lives from the revenues of production and retailing. On the other hand, some organic farmers believe that organic food and their contribution to the environment are not tradable as are other goods. They argue, that the land, as well as water and air, can not belong to a private person or corporation, and healthy food is a human right which may not depend on the wealth of the buyer.

Especially in emerging organic markets, pioneers of organic agriculture start and run farms not because of economic benefits, but out of high ethical values. The interests of the early customers are often similar, as the public do not consider organic food as healthier way to life, but as a totally different lifestyle. Thus, purchasing is a means of support, because it is not only spent in order to obtain the produce.

The most well known systemised form of supporting farms is called Community Supported Agriculture (CSA), inaugurated in the United States in the early eighties. It has been widely adopted and been further developed amongst organic and even some conventional farmers in the USA and Japan (PRETTY 2001, SOILASSOCIATION 2001a). In The Netherlands it is known as PERGOLA.

One of the interviewed companies was using the OFSS as a means to support and operate the farm. In this supportive system the farmer estimates the annual food output of the farm (based on the natural resources) and how many families can receive a basic food supply from this output. The weekly costs of the farm will be divided through the participating families/members resulting in the price of the box (Interview M). Hence the subscriber is participating in the benefits (foods) of the farm and sharing the risks by paying the costs of operation. The motivation of the subscribers is different to that of ordinary customers. This leads to a different conduct of the OFSS operating company (farm).

In summary, the discriminating factor is the focus on sales generating by selling or cost sharing in exchange for food.

6.1.3 Box-schemes and Bag-schemes

Within the group of commercial OFSS operators there are companies operating OFSS in a business to consumer (B2C) and a business to business (B2B) context.

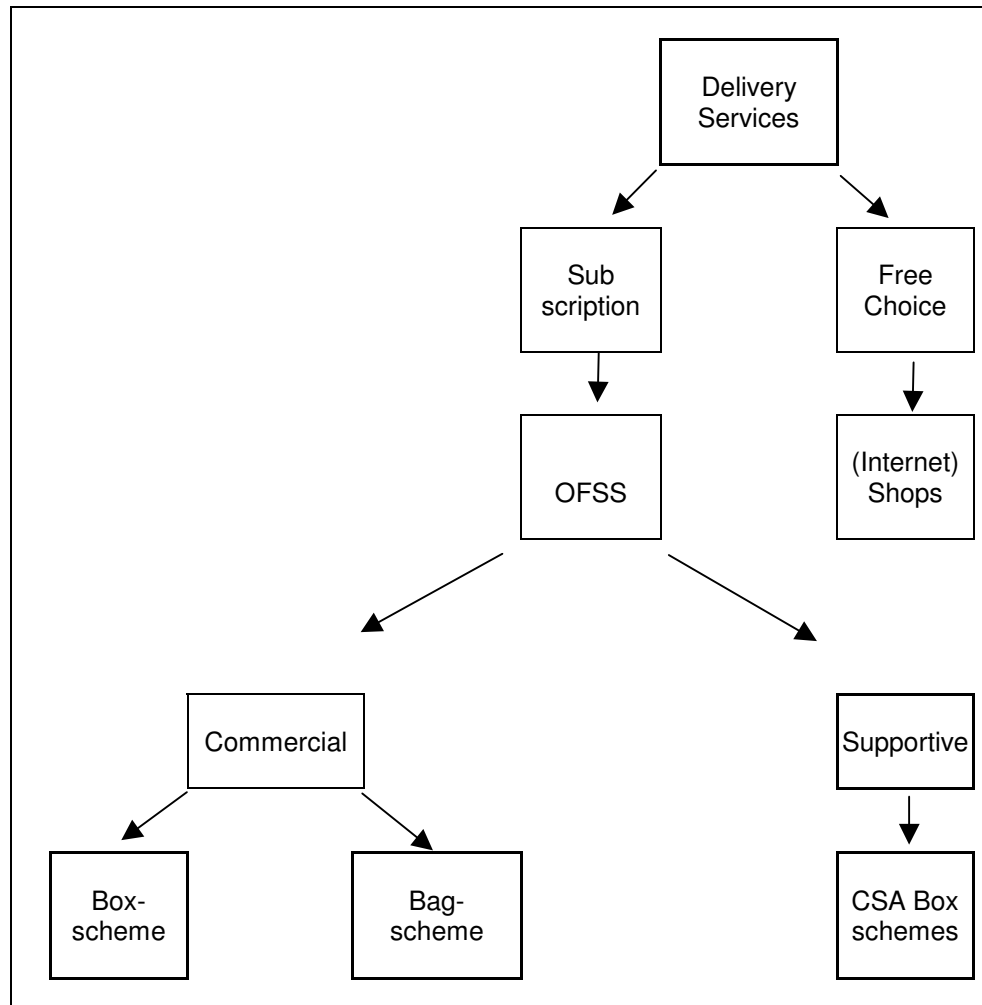
The pioneer in 1996 of the B2B OFSS business, the Dutch organic wholesaler ODIN has used bags to reduce costs when delivering its 29.000 vegetable and fruit subscriptions bags and other produce to the Natural Food Shop. Where until 1996 the term “box-scheme” was used for OFSS where the end-consumer was targeted and administered by the packing company, the success of ODIN introduced the term “bag-scheme”. Bag-schemes tend to be operated by wholesalers who were described in Chapter 4.1 and 4.3 in more detail. The discriminating factor is the operational focus on B2B or B2C.

6.1.4 Summary of Definitions

In summary, organic food delivery services can be classified as those of free choice and those based on subscription agreement. The latter are called OFSS. The subscriptions can be brought to drop-off points or direct to the customer. Furthermore, OFSS can be distinguished as commercial (for profit or surplus generation) and non-commercial OFSS (called CSA Box-schemes). The commercial OFSS are either operated by wholesalers in a B2B context (Bag-scheme) or by farm/retailer (Box-schemes), which have direct contact with the consumer and focus solely on the end-consumer.

The introduced contrasting factors are extremes of a continuum scale. It is likely to find OFSS companies operating a box-scheme, but paying for people in charge at the drop-off points to manage the subscribers, whilst pricing the boxes through cost-sharing calculations. Hence, the definitions shown in the figure 6.1 below refer to clusters of companies, which have a few main features in common.

Figure 6.1 “Definitions of Organic Food Subscription Schemes”



Source: this research

6.2 Customer Benefits within the Life Cycle

The detailed analysis of customer benefits is out of the scope of this paper. The following subchapters highlight some concepts which can lead to a deeper understanding of the suggested development of the OFSS. In this research distinctive customer benefits were identified, which will be discussed according to their level of importance as an “order winner” or “qualifier” and how they change their focus on tangible and intangible aspects over time. The benefits have been crosschecked by analysing the product/service offerings.

6.2.1 Definition of Customer Benefits

Following HOOLEY (1998, p26) customer benefits are defined in this paper as features of the product or service, which are able to solve a customer's problem. An example would be how the home-delivery of a subscription box will solve the customer's problem of losing time when going shopping. But ordering in a free-choice Internet shop can also solve this problem. The customer benefit analysis has therefore has to focus on benefits which are predominant or inherent to this kind of distribution system.

One basic pattern of customer benefit has been identified through this research: "The direct link to the producer, mainly to gain trust benefit". It sub summarises different issues of personal health and environmental concerns. The benefits are:

- Trust in organic quality - less risk of purchasing conventional and "unhealthy" food for a premium price
- Supporting an organic farm (directly or via a fair trade policy)
- Fewer Food Miles, less energy used and less pollution
- Support of "local" farmers – where local is not clearly defined (it varies within regions and countries).

Trust and especially the issue of "mistrust" in supermarkets is a driving factor when trying to explain the emergence of bigger OFSS companies. Until now OFSS operate when organic production will benefit from it, either because the OFSS is based on a farm or through policies and communication which secure supportive elements of the producers.

Farmers have pioneered organic agriculture, and defined high standards of quality and trade ethics. The perception of "organic food" is based on this image, which is a "branding" asset of the producers. Supermarkets are using this high value image to charge premiums, whilst pressing producers to lower their production standards due to price cuts. Supermarkets are therefore under criticism by consumers, and the value of

“trust” associated with the producers can benefit from this policy. Thus, the factor “trust” can be seen as an entry barrier for supermarkets and multiples.

All OFSS companies interviewed stressed the point that they either produce by themselves and have direct sourcing from local farmers, or have established Fair Trade policies. OFSS companies who are only retailers, have to deliver higher overall quality to compete with farm based OFSS to level out this disadvantage. Trust in “organic production ethics” through perceived closeness to farms is one factor of success for OFSS. This implies that the effectiveness of how this issue is communicated becomes a crucial aspect in a mature market.

Hence, the trust-benefit can be anticipated as the basic, pre-emptive issue for a customer to subscribe to a farm-based OFSS.

6.2.2 Order Winners and Qualifiers

Aspects other than this basic customer benefit are changing in their importance for subscription schemes over time and in comparison to other competitors, owing to market development, situational factors (e.g. BSE crisis) and rising customer expectations during time in the product/market life cycle. Customer benefits/product features for subscription are defined in this context, following HILL (1993) from a threefold perspective:

- Customer benefits/product features of less or no importance
- Customer benefits/product features which are seen as pre-requisites to purchase are called a “Qualifier”
- Customer benefits/product which will trigger the subscription are called “Order Winners”

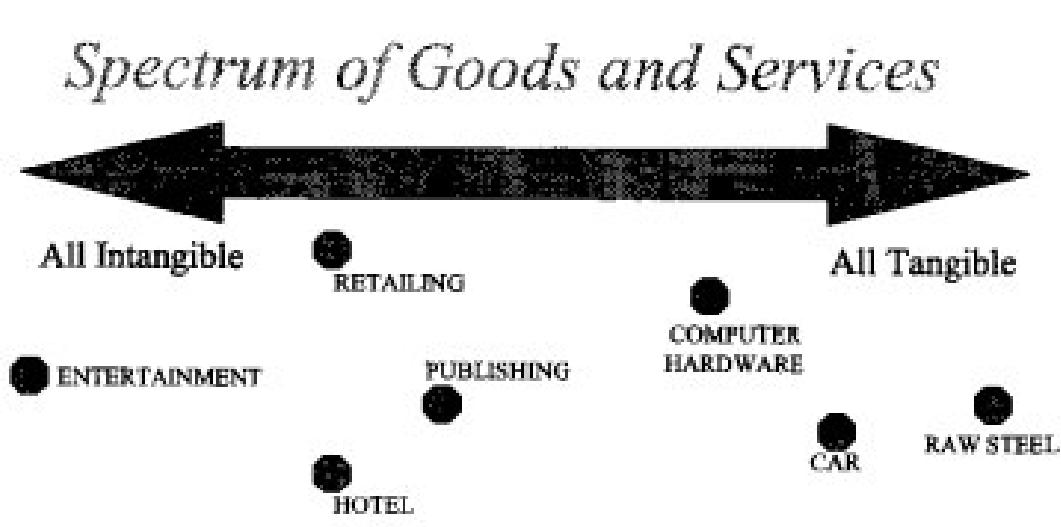
For example, the paramount benefit and “order winner” in the early stages of the OFM is the availability of the product. When the market matures and organic produce are more easily purchased the availability is taken for granted. It therefore becomes a “Qualifier” and other features like “Freshness” emerge as the main distinctive aspect and thus “Order

Winner”. Findings of this research indicate that service aspects are likely to become “order winners” and physical aspects tend to become “qualifiers” over time as displayed in chapter 6.4.4. Hence, the tangible and intangible aspects will be addressed in the next chapter.

6.2.3 Tangible Aspects and Service Features of the OFSS

According to LINGS (2003) each purchaser values tangible and intangible aspects of the purchased product or service. A product can be defined as a service offering, when the customer perceives the service aspect as being of more value than the good itself. This changing share can be displayed on the “Goods – Service Spectrum” of figure 6.2.

Figure 6.2 “Spectrum of Goods and Services”



Source: LINGS (2003)

Physical or tangible aspects of an OFFS are grouped around the organic produce itself (e.g. availability, freshness, taste, optical quality) whilst intangible aspects are service features like the composition of the box, assurance of promises given, provision of information and the level of distribution (pick-up point delivery or home-delivery). Hence, service quality is of importance in a maturing OFSS market, and will be briefly considered in the next chapter.

6.2.4 Issues of Quality of the Organic Food Subscription Schemes

In the interviews of the executives, their managerial focus of operations can be divided into two groups: One group of managers that tend to be product and company oriented, and the other group of managers who were striving towards customer orientation. OFSS companies with a high share of their own production in sales tend to perceive the quality of their OFSS according to physical features of the organic produce, whilst the other group focussed on service assurance and improvements of service to improve their quality perception by the customers. Concepts of product related quality aspects are discussed by GARVIN (1988). The author follows the 5-gap model of PARASURANAM et al (1985), as this model is appropriate to explain the impact of features of service features to the customer's quality perception. The product orientation of farm-based OFSS can be explained by the relative importance of physical aspects at the beginning of the PLC/MLC, for consumers and producers, when issues of production are seen as the paramount company task. Accordingly, OFSS companies who focus on retailing by selling more bought-in produce than own produce, tend to be more customer oriented e.g. try to raise the satisfaction of the customer actively.

For purposes of this research the quality definition follows the simplified gap-model of BERRY et al (1991). Quality displays the difference between the customer's expectation and what he perceives as being delivered. In other words, when a product or service meets the customer's expectations, he is satisfied and the appropriate quality has been achieved. This can be expressed in following formula:

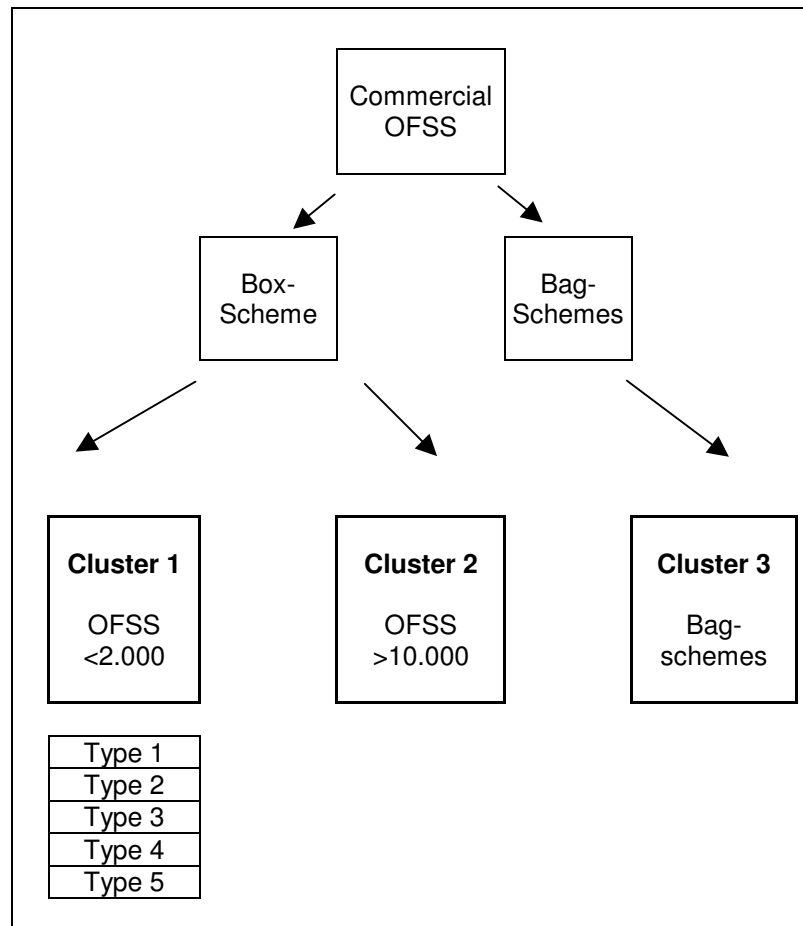
$$\text{Quality} = \text{Perception} - \text{Expectation}$$

In summary, the customer's focus of quality perception tends to shift from tangible aspects (product) to intangible aspects (service) of the OFSS during the MLC.

6.3 Clusters of Organic Food Subscription Schemes

The frameworks of PLC/MLC, SME theory and the underlying concepts of customer benefit/product/service features as introduced in chapter 6.2 have been used to find similarities and differences by comparing the company interviews. Three clusters will be presented, consisting of two box-scheme clusters and one bag-scheme as shown in figure 6.3:

Figure 6.3 “Clusters and Types of OFSS”



Source. This research

6.3.1 Cluster OFSS <2.000 Box-schemes

Nine of the interviewed OFSS companies are the bases of this cluster. They operate up to a size of 2.000 orders weekly. These companies stem from a farm or have their roots in organic agriculture, and do communicate this to their customers proactively. On average they have 5 to 20 personnel and are managed in a family-like management style. Social (e.g. family) and ethical objectives are as important as financial objectives. The companies' goals are not ambitious but tend to be moderate and rely mostly on networking with fellow OFSS companies, other farmers or conformity to industrial standards of conduct. This group represents 85% of all OFSS companies.

Two main sources of successful development have been identified:

- The owner/manger and his/her personal objectives
- The ability to respond to the development of customer expectations / benefits according to the maturity of the organic food and OFSS markets.

These issues can be best described through SME Theory and the Market Life Concept based on customer benefit analysis.

Further analysis of this group based on SME theory, issues of marketing, operations and consumer benefit in the context of PLC/MLC will be conducted in chapter 6.4. It gives way to a robust development model based on five stages of OFSS.

6.3.2 Cluster OFSS >10.000 Box-schemes

This cluster consists of three Box-scheme companies with 10.000 and more customers weekly. The companies grow very fast by exploiting market opportunities within a large region or the whole country. They have a retailing and wholesaling approach and between 40 to 120 employees. They have established fair trade ethics but tend towards a more complex team-organisational structure with low hierarchies. They present themselves as environmentally supportive, trendy retailers with trustworthy relationships with farmers.

These companies represent 2% of the OFSS companies but are responsible for up to 80% of all weekly orders in their national markets.

This group has several factors of success in common:

- Entering the market in an early stage with the perspective to grow beyond the regional market
- Presenting themselves as alternatives to supermarkets, in markets where supermarkets are dominant and have a bad reputation.
- Establishing an excellent image through public relations and networking
- Ability to manage growth by raising resources and operational management

The conduct of these companies cannot be completely described by the PLC/MLC and SME theory. An analysis of core competencies of the firms and Cultural factors of the national markets is indicated and will be addressed in chapter 7.7.

6.3.3 Cluster 3 Bag-Scheme companies

Three interviewed companies contribute to this cluster. They are similar in their management style to the OFSS >10.000 due to their size of 2.500 to 17.000 weekly orders and their wholesaler background, but differ from the other clusters in their B2B orientation. This implies less control over the value chain and especially the marketing and selling activity between the outlets and the end-consumer. Furthermore, sales depend heavily on the development of the independent outlets by number, and offerings of fresh produce.

Four factors of success have been identified:

- The variety and range of fresh produce offerings in their customer's shops on the B2B-level.
- The availability of organic fresh produce in the market place.
- The development of the market share of the outlets used as pick-up points.
- The level of service expectations of the end customers at the B2C-level

The development of this cluster can be best assessed through B2B Marketing in the retailing industry and by each company's customer structure. PLC/MLC and SME theory can only contribute background factors. Outline of further research is given in chapter 7.7.

6.3.4 Summary of Clustering

The cross case analysis of the international findings have defined three distinctive groups of OFSS companies. They have been characterised by patterns of management, organisation and size factors. They are distinguished by a set of crucial success factors derived from their market performance. The group of the major European OFSS companies, and the companies operating a bag-scheme are subject to further research as outlined in chapter 7.7. The development of the group of OFSS with less than 2000 orders per week follows the risen customer expectations through 5 operational stages (Type 1 to 5). This leads to an OFSS developmental model, which will be outlined in the next chapter.

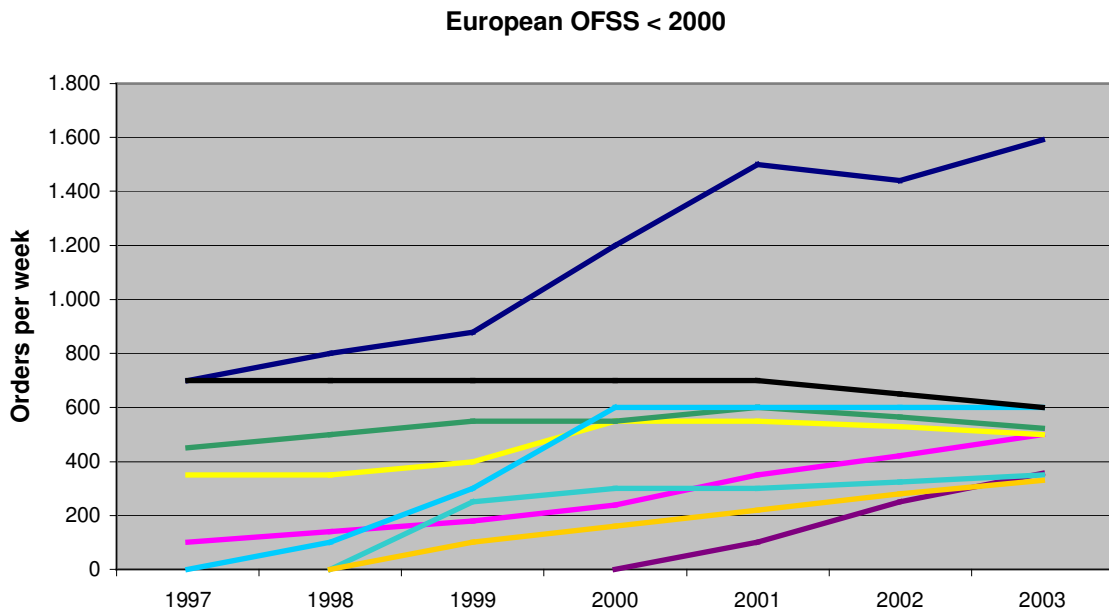
6.4 The Organic Food Subscription Schemes Development Model

This subchapter starts with an analysis of the customer trend data of the European companies of this group. The proceeding subchapter describe the development stages and how these findings are related to the used theoretical models. Finally crucial issues of development will be analysed and presented according to the PLC/MLC grid of KOTLER (1997) and SLACK et al (2001) as shown in chapter 2.3.

6.4.1 Customer Trends of European OFSS <2000

Figure 6.4 shows the development of the nine selected European companies of this group.

Figure 6.4 „European Box-Schemes OFSS < 2.000 Orders per Week“



Source: this research

The numbers of companies who are contributing to this figure are: Germany 5 companies, Denmark 1 company, The Netherlands 1 company, The United Kingdom 2 companies. The sample is therefore not statistical representative, but display overall trends.

Figure 6.4 reinforces the findings of the national case studies that bigger companies are more volatile in the development of their customer base. It is assumed that the smaller companies have a higher share of core loyal customers, whilst bigger companies attract additionally customer segments which are more prone of switching to other outlets for shopping (e.g. supermarkets).

To gain more comparable figures, the growth has been set on index in table 6.1.

Table 6.1 „European OFSS < 2.000 Average Growth on Index & Annual Change of Growth“

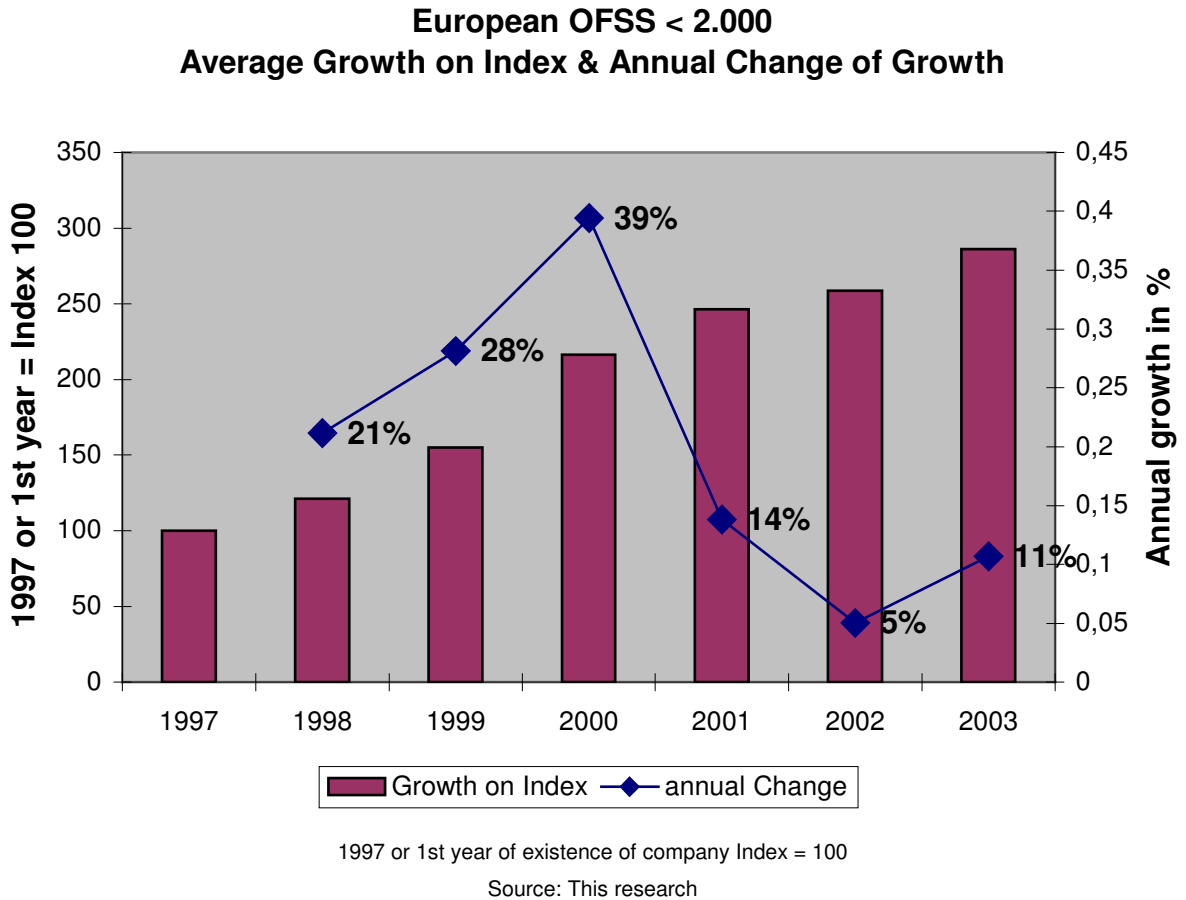
OFFS Companies	1997	1998	1999	2000	2001	2002	2003
a		155	170	232	290	279	308
b		140	180	240	350	420	500
c		100	114	157	157	151	143
d		111	122	122	133	126	116
e						250	355
i			300	600	600	600	600
o		100	100	100	100	93	86
r		-	100	120	120	130	140
t		-		160	220	280	330
	1997	1998	1999	2000	2001	2002	2003
Number of companies		5	7	8	8	9	9
Sum of Index		606	1.087	1.731	1.971	2.329	2.577
Average of Index		121,17	155,25	216,43	246,33	258,73	286,37
Change		21%	28%	39%	14%	5%	11%

1997 or 1st year of existence of company = Index 100

Source: This research

The year 1997 was set on Index = 100. Companies, which entered the market later, have been indexed according to their first year. The average index as well as the yearly change of the average index has been calculated. Figures 6.5 highlights the average rate of growth of 19,6% during the researched period.

Figure 6.5 „European OFSS < 2.000 Average Growth on Index & Annual Change of Growth“



Growth rate have been higher till 2000 presumably boosted by consumer concern about BSE. In Germany the NITROFEN crisis led to stagnation in growth of the organic food sector. Given that in this figure OFSS companies of Germany are dominating, this could be a plausible explanation.

This discussion here and in chapter 5.1 implicates that the collection of statistical data has to be addressed by further research, and figures given have to been seen in their outlined limitations for generalisation.

Hence, the following chapter takes a qualitative approach by systemising the international cross case findings according to the theoretical frameworks.

6.4.2 Stages of Development of Box-Schemes OFSS <2.000

In this chapter the stages of development will be described from four different perspectives. First the different stages represented by the five types of box-scheme OFSS will be outlined. Then various operational issues will follow a general market description. Finally the importance of tangible and intangible aspects of the OFSS during the MLC/PLC will be presented.

Table 6.2 shows the sequential development of box-scheme types.

Table 6.2 “Five Stages of Development”

	Type 1	Type 2	Type 3	Type 4	Type 5
	One- Type Box-System	Multiple Box-System	Adapted Box-System	Individualised Box-System	Internet shop & Box-System
Orders weekly	50-550	120-400	200-400	350-2000	350-2000
Operated by	Farmers	Farmers	Mainly farmers	Retailer, but farm based	Retailer, but farm based
Portfolio	Mainly one veg type of box in two sizes, in addition two types (veg.+ fruit.)	3 types of boxes (veg, fruit, mix) in 2-3 sizes.	3-6 box types (i.e. Extra box, Local Food box, mother-baby box) in 2-3 sizes.	10 to 15 box types (i.e. Cheese-Box, Bread Box), differentiated sizes.	Combination of box-scheme and home delivery service. Tendency to reduce box types, in favour of self-designed boxes or regular side orders

Source: This research

The five types are briefly described as follows:

1. Type 1 One-Type Box-System

In the early stages of the OFM when no distribution through retailers is established and thus organic produce is difficult to purchase, the few customers seek to buy organic produce from the nearest farm. The farm offers one standard type of box, usually vegetables in two sizes of own produce. Customers are enthusiastic about the newness of this system and accept low service/product features. The supportive aspect of the farm is an important issue. This system is to be found in DK.

2. Type 2 Multiple Box-System

In the marketplace the availability of organic produce in the OFM is rising, characterised as the **introduction** phase by KOTLER et al (1999), but fresh produce are scarce or high priced the farms. Supermarkets will not enter at that early stage, and specialised shops will not have the facilities to offer fresh vegetables and fruits daily. On the other hand, customers of the farm will have experienced the OFSS system and are demanding improvements, suggesting fruit-boxes and other produce. The OFSS company enters the stage of becoming a retailer by buying in produce from the wholesaler and investing in smaller cooling facilities. This system is to be found mainly in the NL.

3. Type 3 Adapted Box-System

Availability of fresh organic produce is still increasing. Likely entry of multiples at the marketplace, thus price competition. Refers to the **growth phase** of the MLC. Availability is not the pre-dominant benefit anymore. Issues of freshness, and intangible aspects become increasingly important. New customers, “the early adopter” will join and have higher expectations of the OFSS service and product features.

The farm reacts by inventing boxes, customised to different customer benefit, like “Local boxes” which does only sell produce from the area, or Mother-Baby boxes, which contain only vegetables, which are recommended for babies and their breastfeeding mothers.

This allows the farm to use its standard procedures of packing, ordering and distribution to grown without major investments or alternations. Profit margins will decline at that stage, due to increasing administration and packing costs. As the bought in value increases typically at that stage to 60% and more, the waste of not sold supply from the wholesaler becomes an important cost factor.

The last step of this stage is the introduction of “likes” and “dislikes”, which increases the flexibility of the purchase. This information will be attached to the standard boxes. After packing the “dislikes” vegetables will be removed and replaced through “like” products. This leads to individual label boxes and the need to administer this information. This stage of OFSS is to be found in the UK.

4. Type 4 Individualised Box System

The **growth phase** of the OFM is still ongoing, mainly determined by the policies of the supermarket and the national supportive programs, which are the driving force in most of the researched countries. Organic fresh produce is easy to buy either in supermarkets or specialised shops to lower prices than before. OFSS customers are more prices sensitive and demand more information about the pricing of the box-content and more information about the OFSS Company. German OFFS companies faced this problem in the second half of the nineties and responded by the invention of PC-linked scales, as described in chapter 5.2.3. The standard box, where the customer has only a limited possibly of influence will be replaced through individualised boxes.

The OFFS Company has to invest in cooling, handling and IT- logistics to secure reliability of fulfilment of the customer demanding orders. The types of boxes has not necessarily increased in comparison to type 3, but as each item of the box content will be traced by IT, the customer gains full transparency and full ability to exclude or include certain products from his subscription. At that stage OFSS companies increase their offerings of added products by catalogues, and start to sell fresh high value items like cheese and meat, as they can be weighted and operations speed up through IT. Each box will be traced individual, often via barcodes. This system is only to be found in Germany and is likely to emerge in The Netherlands based on a local development.

5. Type 5 Internet shop & Box-System

Sales are growing slower, which is seen as a sign of the **mature phase** (FOSTER et al 2001, chapter 4) The OFSS companies are likely to enter competition with each other, with internet/catalogue shops and home-delivery services on availability and service, and on price with the supermarkets. At that stage they have gained core competency in handling the whole range of fresh produce, which gives them a competitive advantage on internet/catalogue shops with home-delivery services. OFSS companies are likely to emphasise freshness, service and “closeness to the farmer” as the main features and customer benefits in competition to supermarkets.

The subscription scheme is losing its share on overall sales of the company, in favour for additional and bulk produce orderings of the customers. Leading companies supplement their subscriptions scheme with an Internet shop. As new Customer segments are attracted they tend to order more freely, spontaneous and are threatening the subscription system’s advantage for the OFSS Company.

As the subscription scheme is under threat to be replaced by free-choice orders, the following stage would be the **declining stage**.

Further issues of the five different types of box-schemes according to customer benefit and the stage of market development will be addressed in chapter 6.4.4. In the following chapter the Box-Scheme Development Model and its underlying theoretical frameworks will be presented.

6.4.3 The Box-Scheme Development Model and Discussion of Theory

The MLC/PLC model and its marketing and operational issues were used to assess the stage of the life cycle the interviewed companies were in. Introducing the customer benefit analysis in chapter 6.2 has augmented these issues.

There were three outcomes of this analysis, which are shown in figure 6.6.

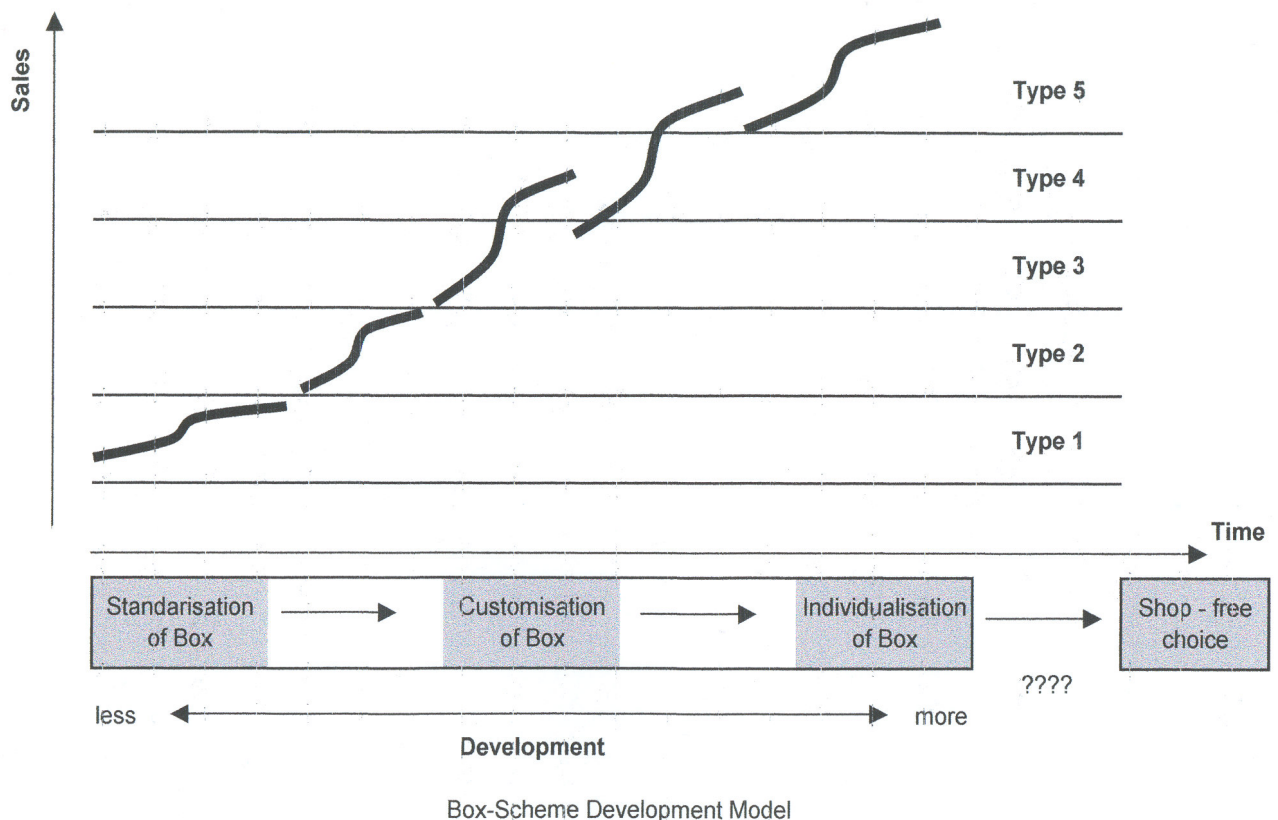
Firstly, according to this research the stage of the companies could only be defined in relation to other companies by a “more or less developed” classification, as we do not

know what the overall performance of the market and company will be. Hence the development is been shown as a linear x-axis of figure 6.6.

Secondly, in respect to the development of the product/service offerings, the research findings suggest that the firms have anticipated the limited life cycle of their offerings, as they try to improve their service and quality to keep customers and sales. The improvements are expressed in five small PLC standard curves valid for this period in time and responsible for that certain gain in sales.

Finally, a growth of sales is anticipated over time, as expressed in figures 6.6 of the indexed average growth of orders, whereas the shape of the curve is not known.

Figure 6.6 “The Box-Scheme Development Model”



Source: this research

The three factors mentioned above constitute the dimensions of figure 6.6 whilst the underlying conduct of the companies can be best expressed as:

“To increase the flexibility of purchase for the customer,
by sustaining regular, controllable and predictable
sales and customer relationship for the company.”

It can be stated that the PLC model was sufficient to explain the main findings related to this group of companies. Other Authors reinforce the assumption that MLC consist of various PLC (DOYLE 1976; KOTLER 1991)

The SME theory supplemented the chosen PLC/MLC model to explain when the company’s sales had levelled out and have not seemed to grow, or when the OFSS offerings have not been further developed. In these cases, both the personal objectives and ethics of the owner, or considerations of risk according to limited resources for investments have led to retarded development.

The company did pursue a status quo or slow organic growth strategy instead of expanding through investment. Thus SME theory was reinforced in three ways through these findings; Influence of owner, limited resources and limited strategic planning.

Further implications related to theory are addressed in chapter 7.4. The following chapter describes in more detail operational issues of the Box-Scheme Development Model based on the 5 stages of development.

6.4.4 Operational Issues of the Development Mode

In this chapter issues of the management of marketing, product and service operations will be displayed adapted from KOTTLER’s (1999) and SLACK’s et al (2001) grid of chapter 1. This chapter concludes with an order-winner/qualifier analysis.

Table 6.3 displays the anticipated situation on the market, and how it affects the price level of the OFSS

Table 6.3 “Issues of Marketing”

	Type 1	Type 2	Type 3	Type 4	Type 5
Stage of Market development	Beginning of the OFSS as a try-out or as additional work for farmers	When no competition, there is no need to adapt, light competition occurrence after 12-18 months after start-up	When customer pressure is increasing but the change in distribution and administration is too costly and risky	When need to raise quality of service and administration to reduce cost of purchased produce. IT-scale reduces waste of produce; increase information level for customers and OFSS company. Automation of administration, and database support of packing	After implementation of IT system to the core business (boxes), the sales of the extras become the main source of profit. Sales per customer become the main issue
Pricing	Fixed price per box, often lower than retail prices	Fixed price per box, often lower than retail prices	Fixed price per box, extra receipt for the extras, pricing on retail level due to handling costs	Pricing per box content and extras on one receipt, retail level pricing, delivering charge for minor orders	Retail level pricing, discount schemes for bulk and high purchases

Source: this research

In Table 6.3 issues of handling and designing the product will be highlighted. The product is the box with its content (the core product), thus the physical features of the companies’ offerings. Over time, dependent on the development of availability of produce and the changing customer expectations, the physical quality will be taken for granted.

Table 6.4 “Issues of Operation Management – Product Related”

	Type 1	Type 2	Type 3	Type 4	Type 5
Processing	Flow-line when more than 3 people can pack at one time (Product layout), otherwise packing of 30 boxes simultaneously (fixed position layout)	On Farms: Mainly packing of up to 30 boxes simultaneously (fixed position layout), but sometimes flow-line	Mainly packing of up to 30 boxes simultaneously (fixed position layout) in two rounds: first packing of the standard box, then replacing the dislike with other produce	Mainly fixed position layout around the database-linked scale. Combined flow-line and cell-layouts on 2 or 3 scales is to be found when more than 1000 customers	Combined flow-line and cell-layouts on 2 or 3 scales is to be found and becomes increasingly important to control complexity
Variety of Products	Little variety. Mainly own fresh produce (vegetables), little other sourcing, seasonal, 90% own produce	Higher variety, Own production declining. Sourcing from seasonal produce and fruits abroad, 50% own produce	Increasing variety of products, introducing of new product groups bread, storable produce as side orders to cover the higher costs of administration through increased sales per customer. 50% own produce	Introduction of main high-price fresh produce (dairy cheese, packed meat)	Tendency of offering the full range of organic fresh and storable produce, based on superior know-how in managing fresh produce logistics
Importance of extras	Bulk orders of own produce (Potatoes)	Declining importance of bulk, increasing importance of smaller extras (e.g. 6-pack eggs, 1kg Potatoes)	Higher variety of extras in smaller sizes. Source of profit as costs of administration are higher	Very important due to increased transportation (home delivery) and administration	Sales per customer increase by 30% when extras sold over Internet shop.

Source: this research

The service related aspect become more important. The more the OFSS service will be delivered through Internet and telephone, the more the ability to communicate the main benefit of “trust and closeness to the farm” will become an order winner. Thus, table 6.4 displays important service features of the OFFS offerings, followed by a service/product analysis.

Table 6.5 “Issues of Service in Operation Management”

	OFSS Type 1	OFSS Type 2	OFSS Type 3	OFSS Type 4	OFSS Type 5
Delivery	Delivered to drop points from where 7 to 10 boxes will be picked up with own vehicle	Farmer: Drop-off points and home delivery with own vehicles	Mainly home delivery to secure the handover of customized box and extras	Home delivery necessary, mainly own vehicles	Farmer: Home delivery with own vehicles Retailer: Home delivery via Freelancer, Postal service or Franchisee
Level of customisation	The customer has no choice.	The customer has the choice between different boxes (modular system)	Increasing influence of customer on the companies services and terms of trade	High choice of likes and dislikes, Freedom to alter the subscription in any way.	Limited only by range of transport and minimal orders
Level of Information	Mainly through personal contact, little written information. Information on Product, on Farm issues and Offers. Recipes	Newsletters quarterly. Invitation to farm feast	Newsletters with offerings and order list are standard, used to support sales of extras. At this stage the first old customers from the start-up phase are leaving. Rising interest of the farmer to keep the customers. Farm feasts.	Danger of written information overflow. Often 2 to 5 pages of information each delivery with his invoice.	Danger of written information overflow. Often 2 to 5 pages of information each delivery with his invoice. Web-based information.
Level of Support to use the system	Support necessary in the beginning, later through the pick-up point managers	Support necessary in the beginning, later through the pick-up point managers	Increasing need to inform the customers about their possibilities to order and to place their dislikes.	High level of support the first 6 boxes, and in change of season for new customers necessary	Design of WebPages as self-teaching tool to educate the customer. Initial help necessary to establish a subscription-relationship to prevent irregular shopping.
Customer relationship	Close-personal relationship, dedicated and loyal customers	Close personal relationship, dedicated and loyal customers	Close-personal relationship, new customers with higher demand	Relationship becomes more formal, new customers, higher turnover of customers	High share of customers who want a seller-buyer relationship with the plus of a farm in the background

Source: this research

The customer focus shifts during the stages of the market cycle from product related features towards service features as shown in table 6.6. The perception of the quality is described in chapter 6.2.4. Former experience and shopping alternatives on the market place will be the most important factors, which leads to ever rising expectations.

Table 6.6 “Analysis of Product/Service Features ”

	Type 1	Type 2	Type 3	Type 4	Type 5
Importance of Product Quality	Order winner	Order winner	Mainly Order winner	Qualifier	Qualifier
Importance of Service Quality	Qualifiers	Qualifiers	Mainly Qualifier	Order Winner	Order winner (e.g. ability of communication)

Source: this research

The OFSS company has therefore to analyse the appropriateness of its offerings frequently. SLACK et al (2001) suggest an importance / performance analysis of the product/service features through focus groups.

In this last chapter the Box-Scheme Development Model was introduced on the basis of five distinctive stages, represented by the five types of box-scheme offerings. The theoretical discussion led to an adopted MLC curve, resembled in sequential PLC curves. The introduced model represents all OFSS companies except the Box-scheme companies larger than 10.000 orders per week, and bag-scheme companies.

6.5 Estimations on OFFS market data

In chapters 4 and 5, various market data on the OFSS has been presented and discussed. In the following subchapter, estimations based on the definitions and findings of this research will be presented for each country. Furthermore, companies running an OFSS, which does contribute less than estimated 15% to their sales, are excluded.

6.5.1 Germany

The numbers of companies are deducted from the figures of the biggest producer organisations in Germany BIOLAND, DEMETER and NATURLAND (HALDY 2004b). OFSS companies have a longer tradition of OFSS in a market where direct selling and shopping at the farms are common, than the other researched countries. According to this research following figures have been estimated:

Number of OFSS companies:	250 –350
Structure by customers:	200 companies with 250 customers average 90 companies with 600 customers average 10 companies with 2000 customers average
Sum orders weekly:	124.000 orders
Structure by value per order:	60% 9 EUR = 6690k EUR weekly 30% 14 EUR = 521k EUR weekly 10% 18 EUR = 223 k EUR weekly
Turnover weekly/yearly:	7,4mEUR / 370mEUR

6.5.2 Denmark

The interviewed companies estimated a total of 20-25 OFFS companies in DK. According to of investigations ten of it can be categorised under home-delivery of shops according to chapter 6.2.

OFSS companies	15
Structure by customers	10 companies with 200 customers average 4 companies with 600 customers average 1 company with 16000 customers average
Sum orders weekly	20.400
Structure by value per order	60% x 8 EUR = 100k EUR weekly 30% x 13 EUR = 80K EUR weekly 10% x 19 EUR = 40k EUR weekly
Turnover weekly/yearly	220kEUR / 11mEUR

6.5.3 The Netherlands

The interviewed companies estimated a total of 50-60 OFFS companies in NL. The figure of PRETTY (2001, p34) of 100 companies could not be verified.

OFSS companies	55		
Structure by customers	30 companies with 250 customers average 23 companies with 500 customers average 1 company with 15000 customers average 1 company with 2900 customers average		
Sum orders weekly	40.900		
Structure by value per order	60% x 6 EUR = 30% x 11 EUR = 10% x 15 EUR =		145k EUR weekly 135k EUR weekly 60 k EUR weekly
Turnover weekly/yearly	340kEUR / 17mEUR		

6.5.4 The United Kingdom

The SOIL ASSOCIATION (2000,2002,2003) see chapter 5.5.2 estimated a total of 471 OFFS companies in the UK. A crosscheck of listed companies in London revealed, that 30% did not meet the specifications of the definitions of chapter 6.2. Given the precautions of PRETTY (2001) the author estimates 300 OFSS companies in the UK mainly of Type 1 and 2 of the Box-Scheme Development Model

OFSS companies	300		
Structure by customers	273 companies with 180 customers average 25 companies with 500 customers average 2 companies with 10000 customers average		
Sum orders weekly	81500		
Structure by value per order	60% x 8 EUR = 30% x 13 EUR = 10% x 17 EUR =		390 k EUR weekly 320 k EUR weekly 138 k EUR weekly
Turnover weekly/yearly	848kEUR / 42mEUR		

6.5.5 Summary

According to the Box-Scheme Development Model, and this research three key figures for each market have been derived. Based on an assessment of the overall number of OFSS companies, the structure of the industry, an anticipated customer structure (expressed in box-sizes) and the researched price-levels the turnover could be estimated. Given these figures, and the organic sales of 2002 as exhibit in table 1.1 they will result in a MS of OFSS in the researched countries of Germany, Denmark, The Netherlands and The United Kingdom. The MS is estimated lower than calculated due to issues of prudence.

The aggregated figures are shown in table 0.1 in the executive summary chapter. As outlined in chapter 7.7 further research on basic quantitative data is necessary.

In the last following and last chapter, the structure and the conduct of this research and its findings will be aggregated and presented.

7.0 Conclusion

In this chapter the findings and their implications to theory, management and future research will be presented. It will be introduced by a brief review of the research topic and structure.

7.1 The Research Topic

This paper investigates the driving forces for the success of organic food subscription schemes (OFFS) in Germany, Denmark, The Netherlands and the United Kingdom. It aims to derive patterns of development to predict future product features and service offerings by defining various types of OFSS and suggesting a developmental model. International and intercultural issues are addressed. OFSS are defined as:

“A bundled assortment of mainly fresh organic produce, designed and packed by a farm or trading company, subscribed to by the end-customer on a regular basis, and delivered to a place the consumer has agreed on.”

The research is theoretical and is grounded on the frameworks of the “product life cycle concept” and theories on small and medium sized enterprises (SMEs) as shown in chapter 2. Based on 33 in-depth, semi-structured OFSS company interviews, observations of operations, customer trend data and expert and customer interviews, four case studies for each country have been derived. The findings of the international cross case analysis in chapter 6 give way to robust definitions of the OFSS types and an developmental model driven by enhancing customer benefits through individualisation of the OFSS boxes.

During this research additional issues have been raised, due to developments within the OFSS markets. These themes are listed in the following chapter and it is suggested that they should be subject to further research, as outlined in chapter 7.7.

7.2 Reflections on OFSS

During the research the OFSS markets have evolved dynamically.

In Germany OFSS companies seek to create vertical and horizontal networks of co-operation in the marketplace and the use of informational exchange to gain the best practice experience. The IT industry is supporting this trend by opening their systems to multi-organisational Internet based platforms. The issue of additional selling through internet shops becomes more crucial in regions of saturating markets.

The OFSS market of Denmark will see a further growth of the dominating company, whilst the quasi-monopolist COOP responsible for 85% of the organic food sales, tries to enter the OFSS market with a conventional and organic food subscription scheme. As there are no networks of farm-based OFSS in Denmark, the smaller companies will not be able to enhance their service quality to the emerging market- standard level and thus to participate in the market development. The demand for OFSS will presumably rise due to increased customer awareness.

In the Netherlands the decline of the relatively “low-service” bag-scheme OFSS companies will give smaller companies the chance to increase their sales when they are able to add value to the customer. As in Denmark, the dominance of supermarkets and one OFSS Company led to stagnation and a lack of effective networks in smaller OFSS. It is likely that other forms of direct marketing based on Internet-shops and local branding will become more important than OFSS.

The most dynamic OFSS market in Europe is to be seen in the United Kingdom, as two large OFSS schemes will show a rise in growth and will compete in the south of England. The reasons for the stagnation or the moderate growth among smaller farm-based OFSS companies are the same as for the previous two countries discussed. Their common company and product centred perspective together with the lack of sufficient networks will prevent the establishment of distinctive quality standards to allow for a profit from the developing market in the mid-term.

7.3 Conclusions

In chapter 1, the aims and the objectives of this research have been outlined. In the following three subchapters the way in which these aims and objectives have been reached, will be discussed.

7.3.1 General Conclusions

The overall aim was to provide a conceptual developmental framework for OFSS within their specific organic food markets. This goal was achieved by defining a development model for smaller OFSS companies in chapter 6.4.

According to this research, box-scheme OFSS companies with less than 2000 customers per week develop their operations and organisation in order to enhance their ability to add value to the customer. Furthermore, the market standards as a whole will follow this development as indicated by rising customer expectations. These groups of companies progress through five distinctive stages. The stages are recognised by different produce/service offerings, targeting different customer benefits and levels of individualisation of produce and service. Other factors that are considered are the overall market situation, the implications to the company of the levels of resources and the general background on which the individual companies will conduct their operations. The underlying factors are described by the product/market life cycle concept and theories on Sees respectively.

This suggested model does not entirely explain the development of bigger OFSS companies and the performance of bag-scheme companies, as other factors are more important than those outlined by the model.

Bigger OFSS seem to have the organisational and cultural ability to exploit market opportunities and to gather resources for that purpose. This refers to distinguishable core

competencies in the competition with supermarkets that have to be gathered through further research on the company level.

As bag-scheme OFSS companies are by definition organic food wholesalers, they have to be analysed on the ability of their customers (shops) to offer fresh organic produce, and the overall availability of organic fresh produce for the end-consumer in alternative outlets. The bag-scheme filled a gap as established natural health shops and supermarkets were not able to meet the customer's demands for fresh organic produce. The development of bag-scheme companies depends therefore on structural issues of the OFM market.

Even though, the trend towards individualisation of the service/product offerings as indicated by this research's Box-Scheme Development Model, is an underlying driver of the OFSS industry in Europe.

It can be stated that the overall aim has been achieved.

7.3.2 Conclusions to Research Objective 1

The first research objective was to provide an overview of the driving forces of the organic food subscription markets and its development.

Three driving forces have been identified:

- Customer's demand for fresh organic produce in markets with supply shortages.
- Customer concern and mistrust in markets where multiples play a dominant role.
- Customer demand for service, relationship to the farm, local sourcing, trust in the source and for greater freshness and taste in markets with a great availability of a wider range of organic produce.

OFSS have been developed in the 1980's by farmers in Germany and the Netherlands in order to organise distributions, to gain higher prices and to establish a close relationship to the end-consumers. OFSS numbers in the researched countries grew significantly in the mid-nineties. In 1996 the bag-scheme was introduced into NL. In the second half of the 1990's the OFSS saw steady growth. This was fuelled by consumer concern owing to BSE and Foot and Mouth disease. The growth of smaller OFSS companies stagnated from the beginning of 2000, whilst bigger OFSS companies started to grow as they aimed to cover the national markets. The development of the OFSS shows the ability to adapt to the different life stages of the organic food markets.

7.3.3 Conclusions to Research Objective 2

The second research objective was to investigate the different types of OFSS, which would include their development and their most important features.

OFSS have been differentiated from retailers with home-delivery services. Furthermore three classes of OFSS have been described and defined: Box-schemes with a B2C approach, Bag-schemes based on B2B distribution structures and OFSS as a means to support farms.

The development of OFSS and the most important features are presented in chapter 6.4 in four national case studies and in one international cross-case study.

7.3.4 Conclusions to Research Objective 3

The third research objective was to distinguish crucial factors, which would allow for the success of OFSS in dependence of their market environment.

The crucial factors of success for box-scheme OFSS companies with up to 2.000 orders per week is their competence in

- Ongoing augmentation of the core subscription scheme towards more flexibility and individualisation of service.
- Expanding the range of produce and the service offered.
- Maintaining the regularity and predictability of the purchases for the company.

The crucial factors for success for bigger box-schemes and bag-scheme OFSS companies were not investigated within this research. Suggestions have been made in chapter 6.3 and in chapter 7.7.

7.4 Implications for Theory

The findings of this research examine the appropriateness of the main theoretical frameworks used and will be discussed in the following two subchapters.

7.4.1 Implications for the MLC/PLC Concept

This research could not prove the validity of the standard curve of KOTTLER's (1985) 4-stage Market Life Cycle theory. On the other hand, the findings indicate that practitioners use the Product Life Cycle for the development of their OFSS features. Hence, the PLC concept can describe the performance of sales according to stages of development. It is assumed that the overall sales curve is a function of sequential PLC standard curves. Given these limitations, the PLC concept was confirmed. Besides the standard curve, the MLC/PLC assumption of sequential stages of development has been found valid for the development of the companies, as expressed in the Box-scheme Developmental Model.

7.4.2 Implications for the SME Theory

The main characteristics of the SME theory, based on the CARSON et al (2000) work, were reinforced. It was found that the owner plays a dominant role and that the performances of SMEs are hampered by the lack of resources and lack of strategic planning.

The assumptions of HANKINSON et al (1997) that SME have a structural competitive advantage in Added Value Marketing were not found within the OFSS industry, as only SMEs are competing with each other. On the other hand, the success of the SME operated OFSS in the organic food markets, can indicate that this theory is valid in competition to supermarkets and multiples. GRANT's et al (2001) theory of network marketing could not be proven in this research. Cultural factors have been found to determine the way SMEs conduct their networking. The researched sample of the interviewed companies was not suitable to derive definite conclusions to network marketing in an intercultural context.

7.5 Managerial implications

The findings of this research aim to contribute to strategic decision making of practitioners, as expressed in chapter 1. The main issues are highlighted below:

- Managers of OFSS that have fewer than 2000 customers can anticipate future developments of their markets, and likely crucial features of their OFSS for tomorrow's customer, based on the Box-scheme Development model.
- This paper shows the way forward in an international transfer of knowledge, as it highlights the differences and common patterns of OFSS of four different countries. Thus, best practices according to the stages of OFFS markets can be identified.

- This paper facilitates the OFSS Company's deeper understanding of its customers according to the analytical tools given in chapter 6.2 and their application in the Box-scheme Development model.
- "Trust" and "closeness to the farm" have been found to be a core benefit for OFSS customers, which are contrasted by "mistrust" and concern about trade and purchasing policies of supermarkets and multiples. This can be seen as an entry barrier for the latter into the organic food subscription market.

7.6 Limitations of the Research

This research aims to derive reliable and creditable findings, suitable for a given context. Nevertheless, limitations and possible sources of distortion, if not already mentioned at appropriate places in the text, are addressed in this subchapter.

Limiting factors of the conduct of the research are:

- In depth interviews were limited to one hour, and the observations of the service delivery were limited to 45 minutes which may exclude relevant data
- Lack of comparable statistical data
- Confidentiality of sources by collection of data and by presentation of findings
- Limited sample of 20 OFSS companies
- Limited to four European countries
- The limited relevance of the interviewed companies

Table 7.1 below shows the relevance of the interviewed companies for their domestic market. These figures shed light on the extent to which the sampling of data collected can be generalised. All figures are based on estimations.

Table 7.1 “Selection of OFSS and their Relevance for the Countries’ Market”

	GER	DK	NL	UK
Interviewed OFSS companies	7	2	6	5
OFSS companies total per country	300	25	55	300
% Of all companies	2,3%	8%	11%	1,7%
Sum weekly orders per country	124.000	20.400	40.900	81.500
Sum weekly orders of interviewed companies (figures 1.4.04)	7700	16400	21500	20720
% Of all customers	6,2%	80%	53%	25%

Source: This research, see chapter 6.5

It can be stated that in all markets, except of Germany, a significant share of the OFSS market has been assessed.

Possible sources of distortion could be:

- The collection of data could be biased by language, previous contacts, culture and situational factors as the author’s mother tongue is German, and as he was member of his country’s OFSS network.
- Methodological sources of distortion are already addressed in chapter 3.5

7.7 Implications for Future Research

This paper has indicated fields of further research, as pointed out in chapter 6.3. Furthermore, the flexibility of the OFSS and its emergence at an early stage of the organic food market development, suggests future research in countries with emerging organic markets and expertise of consumer-producer relationships. Finally the collection

of basic quantitative data and the monitoring of future developments in the market are suggested.

7.7.1 Further Research on OFSS >10.000

The emerging of OFSS on a national scale could not be further investigated. The development of core competencies and cultural factors has been found to be of major importance. The recent growth of these companies will have major impacts on their domestic OFSS market and will attract followers in other countries. Thus, further research on cultural factors and core competencies with respect to bigger OFFS companies is suggested.

7.7.2 International Research on Bag-Schemes Companies

As mentioned in chapter 6.3.3 only bag-scheme companies of the Netherlands were interviewed in this research. Thus an international cross case analysis could not be conducted. On the other hand, information gathered on bag-scheme companies in Germany could not be presented, as they do not stem out of the chosen methodical set-up. The information given below highlights that further research on this subject is of importance. Suggested research aims to understand crucial factors of success and the impact of structural issues in the OFM distribution channel for new developments of bag-schemes of OFSS in an international context.

In 1997, Inspired by the success of ODIN's²¹ bag-scheme in NL, the DEMETER FELDERZEUGNISSE²² launched a similar system near Frankfurt, which offered standardised vegetable bags of 2 different sizes, called DEMETER ABO-TÜTE. They were distributed through the local wholesaler PHOENIX²³ with Natural Food Shops as pick-up points for the end consumer. After 18 months it had 900 end-customers a week, far behind the experienced growth rates and sales of ODIN that was selling 25.000 bags at that time. The attempt to sell this system to franchisees failed, and it was given to

²¹ see: www.odin.nl, and Chapter 4.3.

²² see: www.demeterfelderzeugnisse.de

²³ see: www.phoenix.de

PHOENIX, which now has some +200 customers weekly. The wholesaler WEILING introduced his GREEN BAG in the late 1990's with similar product and service offerings but was much more successful and today has an estimated 5000 customers.

Though WEILING was not interviewed, experts assume the number of bags is in decline. Recently the biggest German wholesaler DENNREE²⁴ is believed to have started a new bag-scheme earlier this year.

7.7.3 Research on OFFS in the Context of Emerging Organic Markets

This research has shown that OFSS systems can serve customers from the very beginning of emerging organic food markets up to maturity by augmenting the core product. OFSS in an SME context are highly flexible and adaptable and are not bound to a specific geographic area or culture. Furthermore OFSS serve as a starting point for growing organic food markets as they link their first customers with their first farms, often in a supportive context.

Thus, the author suggests that more research needs to be carried out to examine the supportive and local OFSS in the US and Japan. These countries share expertise in CSA and producer-consumer networks and they have a low consumption of organic food but high potential for growth. According to PRETTY (2001) to USA host estimated 1.000 CSA farms, whilst in Japan the TEIKEI box-system and home deliveries have an MS of 55% (FAO/ITC/CTA 2001 p123) of the 1,5 bn\$ OFM.

²⁴ see: www.dennree.de

7.7.4 Basic Quantitative Research

The growing importance of OFSS systems in direct marketing for organic farmers needs to be addressed by basic quantitative research and market intelligence reports. As stated in chapter 1, the importance for direct selling and for the image of the “organic food brand” through this distribution channel is not fully recognised yet. Hence, the author suggests that the following fields of study need to be embarked upon:

- Basic quantitative research needs to be conducted to cover a country’s OFSS market. Its starting point would be to monitor developments in the market and the conduct of the OFSS companies.
- It is recommended that representative market intelligence reports should explicitly state figures on OFSS according to the definitions given in this paper.

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Attachments

List of Attachments

- ATTACHMENT A **“OFSS Research - Structure of OFSS company interview (visit)”**
- ATTACHMENT B **“Covering Letter”**
- ATTACHMENT C **“Questionnaire on orders weekly”**
- ATTACHMENT D **“Interviews” (not included)**
- ATTACHMENT E **“Structure of Industry”**
- ATTACHMENT F **“The Box-Scheme Development Model”**
- ATTACHMENT G **“Sample of Pictures of Facilities, Boxes and Bags”**

ATTACHMENT A “OFSS Research - Structure of OFSS company interview (visit)”

Part A	Semi-Structured Interview of Executive/Owner
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Interviewee: Owner, Head, Chief Executive, max two persons

Time: max 1 h

Aims:

1. To provide an overview of the company’s activities, and service offering from the owner’s perspective
2. To assess attitudes towards customer needs and customer orientation

Tools: Dictaphone

Questions: Open questions, to deceptions of own experiences

Sample for warming-up questions at the beginning of the Interview:

- How long are you in the company?
- What are your tasks and is your position?

Sample questions for 1:

- What kind of OFSS do you offer? (Direct or indirect delivery, range of products, level of customisation)
- How has your business evolved? (Issues of history)
- Why have you started it and what are your future targets? (What are the main drivers)
- Are there stages or patterns of development?
- What is unique about your company?
- What is unique about your company relationships to your suppliers and to your competitors? What is negative?
- How would you describe the service and the product offerings of your business?
- How is the influence of the organic food market in general on your business?
- What are the main drivers for your company and for the organic food subscription schemes in general?

Sample questions for 2:

- Why do customers buy your OFSS?
- What makes quality from your perspective?
- Describe how the customers and the company communicate with each other (Service encounters)
- What do you want to communicate and to whom?
- What shall your communication partner understand? (Why)

- What are your means to communicate? (How)
- How can you improve your service?
- How is the relationship to your customers been nourished, fostered?

Sample for summarising questions at the end of the interview:

- How can you best summarize your views of your OFSS?
- How can you best summarise the general developments in the OFSS landscape?
- Have we addressed all-important issues, or are there other you would mention?

Part B	Observation of service delivery
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Place/People: Company facilities

Units: Call centre: Ordering/Telephone customer contact
Office: Billing/administration
Facilities: Supply storage rooms, Packing stations, Delivery vehicles

Time: approx. 0,5-0,75 h

Aims:

1. Critical compare owner's view with observation
2. Assess state of operational level
3. Assess persons, processes and company culture

Tools: Camera

Criteria: Style of interior, Level and attitude of openness in communication, Level of customer care, Level of effectiveness, in terms of quality, speed and flexibility. Layouts, and designs of physical operations - Flow of work and goods along the value chain.

Samples: Observation of time to pack, handling of goods, level of automation, hierarchy, employment empowerment, behaviour within the workforce, behaviour when answering customer calls.

ATTACHMENT B “Covering Letter”

-KMC-

KLEIN MANAGEMENT CONSULTING
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KMC - ELISABETHENSTRASSE 68 - D-64283 DARMSTADT

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www.advice-organics.com

Dear Sirs,

Thank you for your participation on the international research of Organic Food Subscription Schemes (OFSS) in NL, UK, DK and GER. This research is part of a MBA Dissertation conducted at ASTON Business School/Birmingham (www.abs.aston.ac.uk) by Hanns-Michael Haldy under the scientific governance of Dr. Mark Palmer.

We would like to visit your company and interview you or the person responsible for the OFSS. The visit consists of two parts:

- Interview of the responsible person (approx. 60 minutes)
- Visiting and the operation facilities (approx. 30 min)

In the first part, I want to gain a broad understanding about how your OFSS has evolved, the market perception and future prospects of the company from the leading persons point of view.

In the second part I want to critical appraise these statements, by observing the facilities and how the product and services are provided.

The interview will be recorded and Transcribed. At the visit of the facilities, pictures will be taken. Copies of the pictures and the transcript will be send to the visited company during 6 weeks via CD-ROM. All participating companies will receive a copy of the dissertation for free till 1st of June 2004.

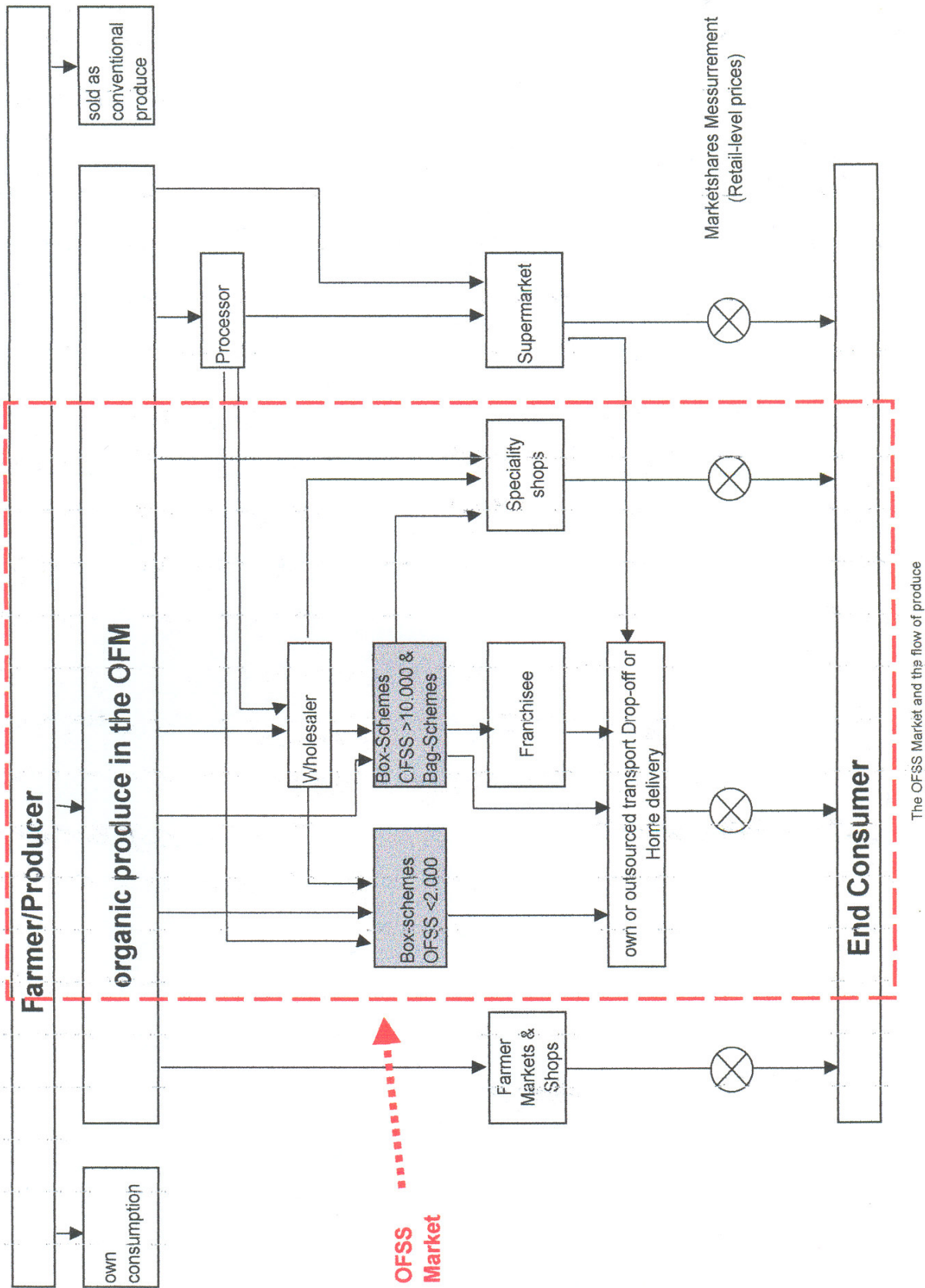
I hereby declare that I will treat all information given confidentially. Information given will be published anonyms so that the company cannot be traced back.

Please do not hesitate to contact me for further information.

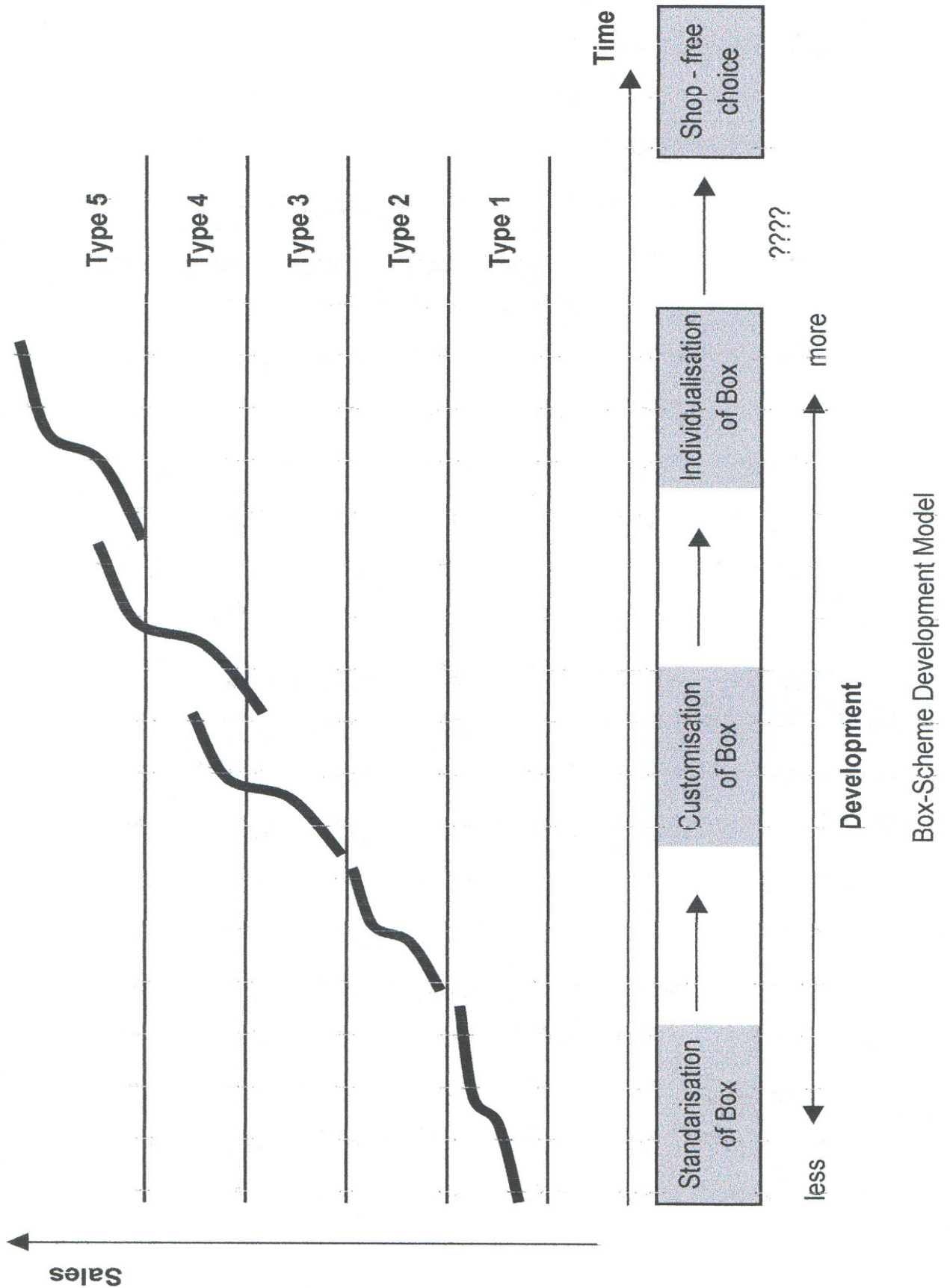
Yours Sincerely

Hanns-Michael Haldy

ATTACHMENT E "Structure of the OFSS Industry"



ATTACHMENT F "Box-Scheme Development Model"



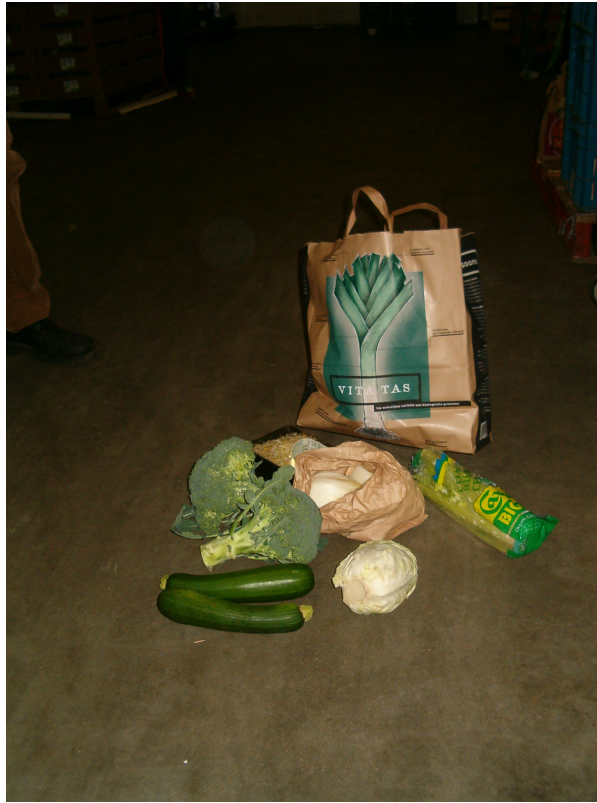
ATTACHMENTS G “Sample of pictures of Facilities, Boxes and Bags”



Picture 2: An example of a German OFSS mixed veg. and fruit box with additional orders



Picture 3: An example of a Danish fruit box



Picture 4: Typical Bag from NL



Picture 5: Example of an Dutch OFFS vegetable box

Attachments -



Picture 7: British OFSS mixed veg and fruit box



Picture 8: British OFSS mixed veg box

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Attachments -

-Confidential-

Picture 9: Operations of a OFSS <2000 company

-Confidential-

Picture 10: Operations facilities of a OFSS >10.000 company

Picture 10: Different OFSS bag types by ODIN NL

-Confidential-

Picture 11: Operation Facilities Box-Scheme / Mail Order Company in Germany

-Confidential-



Picture 12: OFFS BOX by Coop Denmark