Global Journal of Science Frontier Research: D
Agriculture and Veterinary
Volume 17 Issue 4 Version 1.0 Year 2017
Type : Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4626 & Print ISSN: 0975-5896

Requirements for the German Retail Horticulture from an Economic Perspective. A Qualitative Approach in the Context of Service Controlling

By Christian Engelke
University of Applied Sciences

Abstract- The present paper is the first part of a study on value creation with regard to customer integration in retail horticulture. It deals with the determination of the requirements for German retail horticulture (GRH) from a business perspective in the context of applied service controlling. To this end, seven entrepreneurs of selected GRHs were interviewed in guided interviews. Previous investigations in horticulture have ignored this topic, so the current paper performs the necessary investigation of the factors influencing operational controlling in the balancing act between final sale and horticultural services. For the evaluation, Mayring's qualitative content analysis is used, supplemented by a quantitative intensity analysis (scaling structuring) and a contingency analysis. This approach serves to concretize the transcribed text passages to paint a clear and comprehensive picture of individual aspects of GRH controlling. The requirements for operational controlling are displayed in a detailed category framework. It turns out that the companies offer a consistently broad range of services to varying degrees.

Keywords: *retail horticulture, horticultural services, service controlling, value added, process organization, customer involvement, customer orientation.*

GJSFR-D Classification : *FOR Code: 300399*

Strictly as per the compliance and regulations of :

Requirements for the German Retail Horticulture from an Economic Perspective. A Qualitative Approach in the Context of Service Controlling

Christian Engelke

Abstract- The present paper is the first part of a study on value creation with regard to customer integration in retail horticulture. It deals with the determination of the requirements for German retail horticulture (GRH) from a business perspective in the context of applied service controlling. To this end, seven entrepreneurs of selected GRHs were interviewed in guided interviews. Previous investigations in horticulture have ignored this topic, so the current paper performs the necessary investigation of the factors influencing operational controlling in the balancing act between final sale and horticultural services. For the evaluation, Mayring's qualitative content analysis is used, supplemented by a quantitative intensity analysis (scaling structuring) and a contingency analysis. This approach serves to concretize the transcribed text passages to paint a clear and comprehensive picture of individual aspects of GRH controlling. The requirements for operational controlling are displayed in a detailed category framework. It turns out that the companies offer a consistently broad range of services to varying degrees. A causal link between the categories "Service Range" and "Degree of Specialization" could not be established, since specialized companies also had a broad, generalized service-spectrum, and inverted broad-based companies spun the services into separate service divisions. Whether GRH should be "more retail-oriented" or "more service-oriented" depends on operational factors (e.g., chronicle and company management) and the competitive environment that determines the individual case. A delineation of the departments is visible in some companies when using the central category "self-contained service departments (SD)". In addition, influencing variables were disclosed that indicate a higher level of organization of individual enterprises. The overwhelming majority of companies surveyed show a homogeneous structure within the category framework, so structured controlling can be concluded.

Keywords: retail horticulture, horticultural services, service controlling, value added, process organization, customer involvement, customer orientation.

Author: Dipl.-Eng. (FH) Horticulture, Dipl.-Econ.Eng. (FH), Friedrich-Bach-Str. 29, 31675 Bückeburg.
e-mail: c.engelke@engel-engelke.de
Dipl.- Wirtsch.Eng. (FH) Business Management / Industrial Engineering, University of Applied Sciences, Koblenz, Germany, 2004.
Dipl.- Eng. (FH) Horticulture, University of Applied Sciences, Osnabrück, Germany, 1997.

I. Introduction, Problem Definition, and Objective

The German retail horticulture (GRH) is characterized by great versatility in both products and services. Despite these obvious strengths, there is an insufficient economic understanding, with a partial, inferior economic orientation on the part of the entrepreneurs (BMELV, 2013).

While up-to-date structural data for classification (ZBG, 2013) on the market situation and the economic importance of the gardening sector along the value chain are available for horticulture (Dirksmeyer and Fluck, 2013), only a few studies are to be found that deal with the background of operational controlling and the services offered by GRH. Schwarz (2009) investigates the success of the service programme with a mix of methods from expert surveys and key figure evaluation. Von Allwörden (2006) describes changes in the market and challenges for horticultural companies and identifies successive sources of livelihood. Schöps (2013) is concerned with connections between customer satisfaction and the performance criteria of GRH. Bitsch (2006) is concerned with the factor that is very important for services.

According to the results of the Centre for Horticulture's business comparison (2013), sales in GRH rose in the period 2010–2012, but its profit and net profit development were significantly less favourable than those of other horticultural projects. This indicates higher personnel costs, which account for a large part of total costs. Service providers have a much higher wage rate (including the calculation of wage costs for family workers), accounting for 33.8% of their operating incomes, compared with 29.1% for retailers (ZBG, 2013).

Against this background, GRH must further optimize its performance processes in order to continue to generate sufficient income in the future. This also requires good controlling, which in turn requires management skills.

The present work is intended to reveal deeper insights into the influencing factors of GRH's operational

controlling. As the first part of a study on "value creation, taking into account customer integration", the focus is on the horticultural services.

II. Theoretical Preliminary Considerations

The research question should be approached qualitatively in order to (a) work with small numbers of cases (Becher, 2007) and (b) achieve a deep, complete understanding of the GRH. In qualitative research, a distinction is made between two fundamental analyses: deduction is used to test an individual case against a general theory, whereas in the case of induction, a general statement is generated from individual cases. A deductive derivation *"allows the identification of significant (not coincidental) connections between social phenomena and the area in which these relationships occur"* (Gläser AND Laudel, 2010). In contrast, inductive research looks for *"causal mechanisms that produce certain effects under certain conditions"*(Gläser AND Laudel, 2010). Since the present study was initiated by means of basic assumptions, but these are not statistically confirmed, the aim of this study is to define new theoretical approaches from individual cases.

In contrast to quantitative research, qualitative hypotheses are not tested. These are only formed during the research process and are therefore preceded by quantitative research (Becher, 2007).

Recapitulating, that internal factors, such as the product portfolio (Vahs, 2009), affect the structural organization, there is no safe ground, if and in which way the services do. We know, that servicing requires to consider specifics, particularly the uno-actu-principle, intangibility, influence of customer (Choi, Nazareth & Jain, 2010 e.g.), which differs to the manufacturing sector. Getting the fact, that there is an increasing relevance of the services in the companies, and the portfolio are changing, the strong heterogeneity on GRH is accordingly a consequence. Principally, the companies face the risk of complexity when overloading the number of services within the portfolio (Gann & Salter, 2000), especially when the structural organizational is not customized. Assuming, that the number of services in GRH is increasing in the past (Zentralverband Gartenbau, 2017), and the level of organization is low (Gabriel and Bitsch, 2014), we formulate:

1) GRHs have a broad range of services.
2) There is no clear demarcation of the departments at the individual company level.
3) Controlling has a subordinate role in GRH.

In some areas of the project, there was no published knowledge. For example, no results were found that identified at which point and to what extent the customer is integrated into the value-added process. This total lack of knowledge associated with limited research resources necessitates an explorative approach (Bitsch, 2000).The aim of the work is to obtain an in-depth knowledge of the operational controlling in GRHvia an exploratory survey of managers and, if necessary, to carry out further investigations at a later date in the same companies.

a) Selection of companies

In a qualitative survey, the content of the interview partners (IP) is the focus. In contrast to quantitative research, the sample selection is limited to smaller numbers (Becher, 2007). In Germany, there are about 10,000 GRH (Dirksmeyer and Fluck, 2013). The challenge was to identify companies that were willing to open themselves to the research project. After scouring the trade press and the internet, as well as having individual talks with industry representatives, eight owners or managing directors of traditional retail horticulture were selected as potential participants and addressed in person. Seven were willing to participate. The companies in question are well-known or have good reputations in the specialist sector, so it can be assumed that these are comparatively well-established and successful enterprises. It should be noted that the study does not pursue benchmarking (see Kotlerand Bliemel, 2001),since neither competition nor value added has been known to date. Table 1 below gives an overview of the companies.

Table1: Overview of the companies

Company	1	2	3	4	5	6	7
Legal form	PLC	PLC	IC	IC	IC	PLC and IC	PLC and IC
Owner / GF	CEO	CEO	Owner	Owner	Owner	CEO	CEO, Owner
Training	H, DH	H, DE	H, Master	H, DH	H, Master	H, Master	H, Master
Age	No. Rec.	No. Rec	No. Rec	51	59	49	No. Rec
Employee	50	26	10	14	19	14	18
Training places	7	8	1	1	5	0	5
History	1900	1938	1957	1952	1929	1938	1928/1950
Introduction to services	always	always	approx. 2008	approx. 1991	No. Rec	approx. 1972	approx. 20 years
Independent divisions	1	2	1	1	1	2	2

Legend: CEO = Managing Director, Dipl.-Economist = DE, Dipl.-Engineer Horticulture = DH, H = Horticulture, IC = Individual companies, Master = Training as Horticulture master, No. Rec. = No Records, PLC = Private limited company.
Source: Own presentation, based on organizational chart, interviews, and internet research.

III. Research Design and Method Selection

The present study deals with the first research section of a more comprehensive research project in the form of expert surveys and semi-standardized guidance interviews. It is part of multiple case studies and is to be continued in subsequent studies on the same companies, but on other topics (see Yin, 2009).

a) Research Design

The study uses a mixture of methods from qualitative content analysis as the core of the evaluations, supplemented by quantitative intensity and contingency analysis, as well as document analysis, internet research, and a simple competition analysis.

The surveys were carried out in March 2012 and February–March 2013 and followed a fixed schedule: first, an appointment was made; the questionnaire wassent in advance, and the actual survey followed. The interviews usually took place in a single meeting in the business premises in a quiet atmosphere over 1.5–2 hours. In a conversation, another participant came from the management. An attempt was made to take a neutral questionnaire in order to reduce the influence of the researcher.The researcher did not know the companies, except for participant 4, at the interview date. Before the interviews took place, the topic was introduced, the handed-out organizational chart was discussed, and approval was sought for an audio recording. The 16 questions of the survey were formulated in a general way and were read individually to the IP so that a free, narrative conversation could develop. In the case of unclear answers, questions were asked to get more information. At the end, a discussion took place.

Two pilot surveys were conducted and evaluated before the start of the investigations. The questionnaire and the course were adapted from these experiences. In addition, this gave the researchers the opportunity to familiarize themselves with the interview and to practice the interview techniques in order to create an informal atmosphere and promote the willingness to communicate. The data from the two pilot surveys are not included in the results.

b) Evaluation methods

The interviews were evaluated using May ring (2010)'s qualitative content analysis. The interview recordings were first transcribed and then shortened without loss of content in order to achieve better readability. The individual statements (text passages) were subsequently analysed and finally assigned (coded) to the main categories described below.

From the pre-formulated basic assumptions, five main categories (MK) were initially given, which are based on the interview guide thread. These are "operational organizational structure", "range of services", "status and priority of operational controlling", "customer involvement", and "value added/business processes". During coding, new contexts became visible, with the result that further ICTs and subcategories (UK) emerged: for example,"value of the personnel selection", "delegation degree", "work organization", and "statistics and handling of key figures". An analysis of intensity, embedded in the qualitative content analysis at this point, finally separated into further subcategories. The coding process was repeated until all the text passages from the previous UK were now at the lowest level, called scaling, for example, "unstructured", "structured", and "unclear" (see Table 4). These continuous feedback loops (spiral loops) lead to a refined category framework, which can be called the actual result (May ring, 2010). In order to increase the meaningfulness of the qualitative results, further measures have been taken, which are discussed below.

First, explicit rules for stable text coding (May ring, 2010) have been set and clearly defined. This included the regular creation of a coding guide with definitions, anchor examples, and coding rules for each individual category. The reliability shows the extent of the scatterings during repetitions (intractability). The encoding process was repeated once by Researcher 1. If the results are the same, this indicates a high degree of reliability. Using the test-retest method (Gremler, 2004), the correlation between the measurements can be demonstrated. In two different stages, the degree of consistency (reliability index) is calculated. To ensure objectivity, all encodings were carried out independently by a second researcher and checked for consistency (inter-coordination reliability). In the present study, several test retests were carried out. A value of >80% is regarded as a reliable and secure match (Becher, 2007). Categories with lower values are not taken into account in further research steps. In this study, however, all values are presented. Table 4 shows the procedure (excerpt).

The reliability index can be calculated in two stages, which differ in that the second includes the number of categories. Thus, the results become more accurate. The following results refer to Perrault and Leigh (1989)'s Reliability Index (2):

$$\textit{Reliability index (2)} = \sqrt{\left(\frac{a}{b} - \frac{1}{c}\right)\frac{c}{c-1}}$$

where *a* isthe number of content matches, *b* the total number of arguments to be encoded, and *c* the number of categories.

As a quantitative analysis step, an intensity and contingency analysis was performed using MAXQDA10. While the former refines the scaling (for example, high-medium-low-unclear), the contingency analysis shows the frequency of the encoded text segments. The weighting of the categories increases with the number of entries in an interview. Cross tables were used for the evaluation, in order to make it possible to compare several versions with each other. This multi-step approach has the advantage that the statements of the IP can be interpreted from different angles. Thus, a numerical evaluation could better define the scale points in order to achieve a more accurate overall picture of the individual GRHs.

The scaling, as well as the entire research, was subject to fixed rules so that traceability and verification of the quality criteria were possible (Titschler et al., 2009). It should be noted that the listed components do not claim to be representative. Not all criteria were analysed, but the competitors and company-related factors were limited. Due to the qualitative nature and the small number of cases, a statistical evaluation with representative statements is usually not possible. The criticism of a lack of generalization should be countered by the rules-based approach (Mayring, 2010).

For completeness, an analysis of company documents (organization chart, order sheets, hour notes, etc.) as well as photo recordings were carried out. Internet research was carried out for the preparation and subsequent evaluation of the surveys. This knowledge should facilitate conversation.

IV. Qualitative Results

An overview of the results of the first research section is shown in Tables 2 and 3. The MK was selected as "Stand and Priority of Operational Controlling". In the top line, the ciphered interview partners 1–7 are listed. Below are the categories "Organizational structure", "Process organization" with the respective UK, the "market situation" with individual components of a competition analysis, and "company and owner" with subjective assessments of the researcher. Due to the various questions, different scales are used, which are described in more detail in the legend.

Table 2: Overview of the category "Status and priority of company controlling" and the individual sub-categories as well as the market situation and the evaluation of the company and interview partners

Company	1	2	3	4	5	6	7
ORGANIZATIONAL STRUCTURE							
Accounting							
Commercial clerk	✓	✓		✓	✓	✓	✓
Own financial accounting	✓	✓		✓			
Own accounting	✓	✓	✓	✓			✓
Own payroll accounting	✓	✓		✓		✓	✓
Use of IT							
Own IMS system		✓	✓		✓		
Special software for services	✓	✓			✓	✓	
Computer Checkout	✓	✓	✓	✓	✓		✓
Interfaces Soft-/Hardware	✓	✓	✓	✓	✓		
Long-term target direction	✓	✓	✓		✓	✓	✓
Own service department	✓	✓				✓	✓
Succession regulation		✓			✓		✓
PROCESS ORGANIZATION							
Order processing	+	+	+	+	-	+	+
Accountancy	No. Rec	+	+	unclear	+	+	No. Rec
Documentation	-	+	No. Rec.	+	+	+	No. Rec
Value of the tax consultant	+	-	unclear	-	+	+	+
Preliminary calculation	+	+	+	+	-	+	+
Post-calculation	-	+	-	-	+	+	+

Statistics, handling of key figures	-	+	+	+	+	-	+
Use of the CCA	(+)	+	-	(+)	(+)	+	+
MARKET SITUATION							
Competition	3	4	3	3	2	2	2
Catchment area and potential	2	2	2	2	2	2	2
Availability, location	2	3	4	3	2	2	4
Image	3	1	2	2	1	2	2
COMPANY AND INTERVIEW PARTNERS							
Impression of Company	3	1	2	3	2	3	3
Impression of Owner	3	2	3	3	2	2	2
Impression of Office	2	1	No. Rec	3	2	2	3
Impression of Homepage	4	2	4	3	3	3	2

*Legend: ✓ = available, + = structured,- = unstructured, * + = tight, - = low, ** + = available, (+) = Partly available, -= unavailable, Numbers 1–6 = grades, No. Rec. = No Records, CCA = Cost Centre Accounting, IMS = Inventory management system, IP = Interview partner.*
Source: Own creation, based on interviews, internet research, and document analysis and own subjective evaluation based on established criteria.

a) Organizational structure

The first lines show the status of accounting. It can be seen that the companies mainly have their own accounting and their own payroll accounting. A separate financial accounting can be found in three companies, and commercial employees are employed in almost all companies.

Next, the status of the IT application is listed. The first row gives an initial clue to the focus of value creation: An inventory management system (IMS) displays the flow of goods to sales items from purchasing to dispatching and billing at the product level so that complete traceability is possible. Three companies run such a WW system, which points to the focus on retail trade. The third row shows the use of computer checkout, which is used in almost all companies. Although a IMS requires such a computer cash register, the use of a computer checkout system is also possible without IMS, since work is done on the product level, but only the goods acquisition (purchasing) is not taken into account, with the rest of the goods traffic being recorded.

The "long-term target" category is derived from the original "company objective" and includes statements on the operational development (operational/strategic), "vision", "targets", "corporate image" and "succession rules". There was a long-term focus in almost all companies. The category "own service department" ("self-contained service departments" = "SD") is derived, in addition to the handed-out organigrams, from the following UK: "documentation", "statistics and handling of key figures", and" use of the CCA". Since this category leads directly to the answer to the second assumption (see Assumption 2: "There is no clear demarcation of the departments at the individual company level"), it assumes a central position. It can be seen that companies 1, 2, 6, and 7 have their own service departments. In addition to the stationary retail, the rest also offer horticultural services (see Table 3), but without a clear demarcation in their own departments. For further discussion of the second assumption, please refer to the below section "Process organization/use of the CCA".

b) Text statements for the category "Own service department"

i. *Companies with their own service departments:*

*Company 2: "*We are set up on three legs [...] but in principle, the three departments are autonomous and also autonomously guided by a gardening master [...] of course the room cultivation [...], consulting in objects [...]. Second area flower business [...]."

Company 6: "Otherwise, a normal separation of all cost centres takes place. This starts in the vehicle fleet, to the employees, the operating costs, the energy costs, and all the material costs. These I try to detect, the sales themselves, I try again to separate them in-house. This means that the recording of the sales in the garden irrigation is to be separated, in contrast to the interior cultivation, where only the servicing sales are detected. So, I have about six or seven different key figures in the sales distribution. With these, I can determine how many new orders we had per month and how many of them were realized in the servicing or irrigation. In addition, I can then determine how many sales were generated by the end customer or the wholesale trade."

Company 7: So, the production, ok. The production, what runs into the production, is visible, ok.

Question:"Otherwise[...] staggered by product groups? Answer: "Yes."

Question:"And [...] the cemetery also runs separately?" Answer: "[...] cemetery is indeed a separate enterprise [...] is not covered at all."

ii. Companies without their own service departments:

Company 3: Question:"So the overwintering is in the big pot?"Answer:"Yes [...]"

Company 4: "[...] for cemetery and cultivation, I have nothing."

The "succession regulation" has been clarified or initiated in three companies.

c) Process organization

The categories listed below indicate the degree of structuring of business operations. The "order processing" is defined with structure, order, storage,and regulation of the further processing of customer requests, customer wishes, etc. It is to find out how orders and inquiries are further processed. In addition, the general procedures and responsibilities within the companies should be clarified. The questions in this context are whether there are recognizable structures, or how to deal with customer requirements.

In almost all companies, a structured work is recognizable.

"Accounting" should point out the organization of company accounts. Are initial statements and reminders made promptly? A good structure can be seen in four establishments, but not in companies 1 and 7. A statement could not be interpreted exactly.

The "documentation" of company processes is closely related to the "order processing" and shows the degree of information processing. Indicators are, for example, the maintenance of lists, tables, and statistics, or an adequate, appropriate, and pre-printed form management procedure, in order to achieve optimal workflows. There is a high level of structuring in four establishments; no data were found in two companies; and there was no proper documentation in one company.

The "cooperation with tax consultants" category shows that there is a close level of cooperation in four firms, but only a small one in the case of 2 and 4.

The following line answers the degree of structuring of the "pre-calculation". This also includes the question of price policy, and how this is done in the company. The criteria were the existence of fixed calculation factors, documentation (written or verbal), the way in which requests were calculated, and the ability to recognize fixed responsibilities. In six companies, a consistently structured approach can be identified.

The category "Post-calculation" shows a different result. The following questions were used as criteria: "Is there a regular recalculation of the orders?", "Are clear responsibilities in the value chain recognizable?", and "What is the degree of documentation and use of cost accounting systems?" A structured approach can only be identified here in four companies.

The category "statistics and management of operational key figures" is defined by statements such as "working with numbers", "interest in key figures", "regular statistical evaluations are made", and "bookkeeping". It is shown that five companies meet the requirements, and an assignment to "structured work" became clear.

Information on the spectrum of the offered services (see Table 3) is summarized in the category "use of the CCA". The cost types (here bookings) are created according to the cost and performance calculation (cpc) for individual cost centres (here departments) (Horváth, 2009).CCAis used to prepare the cost calculation, that is, to monitor costs in the individual operating departments and to control profitability. The UK are divided into "existing", "not existing", and "partly existing". The latter is of equal importance to the fact that a breakdown of individual business areas is only to be seen in the basic text.

A separate CCA can be seen in companies 2, 6, and 7; in three others, it is in its beginnings. This shows the context in which the CCA is applied in the companies that also have their own service departments (departmentalization). The second assumption is thus rejected, although it depends on the particular case. The assumption presupposes that (a) different activities are offered in addition to retail trade, (b) the company accounts can do this, and (c) the employees' business skills allow it. The following interview questions were used for the review: "What activities are offered in your company?", "How do you determine whether an order has been profitable?", and "You have prepared an overview of the employees for me. Can we assign these to theirareas of responsibility, possibly departments? (Organizational chart)".For more information on the use of the CCA and "own service department", see Figure 1. Until now, the coding of the text passages within the framework was carried out according to fixed, objective rules. In the course of the evaluations, further categories were developed, which were determined not by objective, but by subjective impressions of the researcher. The aim of this approach is to obtain further, deeper insights. Each of the following categories has been individually evaluated according to the principle of

free interpretation and has been given a school grades 1-6[1].

d) Results of the market situation

In order to analyse the market situation, individual parameters of a competition analysis according to Reymann (2009) were processed and represented in the form of ordinal scales (school grades 1-4[2]). The following competitor-related and company-related factors were used. A competitor-related factor was used: "number of competitors". In addition, a number of company-related factors were used: "catchment area", "potential" as measured by the "number of inhabitants" (city and county), "purchasing power index 2011", "population structure and employment structure", "purchasing power growth rate 2011–2012", "accessibility" and "location" with the approach and parking situation, as well as "image" (see MBR, 2010; Federal Statistical Offices, 2013; IHK Würzburg-Schweinfurt, 2013).The ratings of the companies are described below. The main strengths and weaknesses are given in Table 3.

Company 1 is in a major city. It is exposed to a major competitive environment in all departments of its range of services (Grade 3). The urban catchment area is very large, with about 3.3 million inhabitants (EW). The purchasing power index of 92.1% is rather low but experienced a rise of 4% in 2011–2012 (Grade 2). The company is in a good location, well-frequented, and accessible. Parking is available at a directly adjacent shopping market. This is classified as Grade 2. It is a traditional company, is very well-known, and has a good external presentation. The operating climate was somewhat cool and distant on the days of the evaluations, both among the employees and in their relationship with their supervisor (Grade 3).Due to the high number of employees (50-plus to be trained) and the broad range of services (see Table 3), sole management is a challenge, although this structure has been consciously built up in recent years. This is classified as an outstanding weakness. A systematic CCA is only available in basic features. The architecture is partly obsolete, does not correspond to the state of ergonomics, and limits the productivity of work. No succession has been made, but this is not yet up to date due to the age of the owner.

Company 2 is in a medium-sized city with about 313,000 inhabitants and is characterized by great competition in individual business segments. Thus, 51 florist shops and 10 GRHs were identified within a radius of 10 km. This is judged as an outstanding weakness (Grade 4). The purchasing power index is 97.1%, an increase of 3.7% (2011–2012). The catchment area is in the Rhine-Neckar metropolitan area and thus very favourable (Grade 2). In a mixed residential area on the main road, the accessibility and parking situation are satisfactory (Grade 3). The image is very good, and the management made an optimal impression. This is classified as an outstanding strength (Grade 1). The succession is initiated.

Company 3 is rurally located in the metropolitan region of Hamburg, which has about 5 million inhabitants. The purchasing power index is 121% in the Harburg district, with a growth rate in 2011–2012 of +3% (Grade 2). These favourable conditions mean that the environment has numerous competitors from the adjoining city (Grade 3). The approach is rather cumbersome and to be assessed as an outstanding weakness, though the parking situation is good (Grade 4). As a traditional family business, the person of the owner plays a decisive role in the external and internal presentation; the mood on the day of the review was very good. This is seen as an satisfactory strength (Grade 2). No succession has been made, but this is not yet up to date due to the low age of the owner.

Company 4 is in a medium-sized city with about 32,000 inhabitants and close to the metropolitan region of Hamburg, which has about 5 million inhabitants. The purchasing power index is very favourable at 117%, with growth of about 3% in 2011–2012 (Grade 2). The number of competitors is manageable, but there is a very strong and committed competitor in retail and floristics (Grade 3). The company is characterized by strong in-house production. The approach and parking situations are satisfactory due to the location in a mixed residential area (Grade 3). The positive image of the "producing nursery" and the personality of the owning family are at the forefront and are seen as satisfactory strengths (Grade 2). However, the operational structure, based on family changes, personnel shortages, and an increasing focus on the service sector, is difficult to see at present as a weakness. No succession has yet been initiated.

Company 5 is located on a main road in the rural area of Bavaria (Grade 2). Purchasing power in Landsberg am Lech has an index of 112% and a growth rate of 4% in 2011–2012 (Grade 2). With very few competitors, the competition situation is favourable for the company (Grade 2). Its focus is on retail and very strong self-production. Its image is seen as an outstanding strength due to the highly active involvement of the owner (Grade 1), while the low service spectrum is classified as a weakness. The succession has been initiated.

[1]The German school system categorizes 6 grades: 1 (= best), 6 (= worst)

[2]For this ordinal scale, we choose 4 grades: 1 (= outstanding strength), 2 (= satisfactory strength), 3 (= not satisfactory strength), 4 (= very low strength).

Company 6 is in a medium-sized city with 124,000 inhabitants, in a county with 160,000 inhabitants. The city's purchasing power index is 99.2%, with a growth rate of 3.2%. In the county, the purchase price index is 102.1%. The Main-Neckar metropolitan area offers favourable conditions (Grade 2). The company is divided into two separate entities and is run by two family members. A specialization of the retail and horticultural services took place. New niche products and innovations in the service sector are constantly being sought. The customer radius of the gardener service, therefore, extends far beyond the city limits. While the competition in the retail trade is very intense, with 34 vendors of flowers and plants, there are only four room cultivation start-ups in the large metropolitan area. Thus, the competition situation is classified as positive (Grade 2). The access possibilities are good, and the parking situation is satisfactory (Grade 2). The IP is characterized by a great commitment to customer service and an honorary office in the horticultural profession, so we can mention it as a "network" here (Grade 2). The construction of the buildings, on the other hand, is obsolete and can be seen as an outstanding weakness. No succession has been initiated.

A second company, which is managed by a family member, is also affiliated with *Company 7*. In total, several family members work in the two companies and create the atmosphere of a family business in which customer proximity is given and sought. The IP is also heavily involved in the professional honorary office (Grade 2). This company is in a city with about 43,000 inhabitants, in a district of about 156,000 inhabitants, in the metropolitan area of Rhein-Main, with about 5.8 million inhabitants. The purchasing power index of the metropolitan area is 98.6% (city 97.9%), with growth of approximately 2.8% in 2011–2012 (Grade 2). Only a manageable number of competitors in the retail and also services were identified, so the competition situation is favourable (Grade 2). The access possibilities are rather difficult due to the mixed residential area, and the parking situation is weak (Grade 4). For these reasons, it was decided to move the entire GRH to another location. This new building is planned for the year 2014 and is thus outside the research period. The prospects for the future are viewed as an outstanding strength, although the entrepreneurial risk is considered to be very high in this investment size. The succession has been initiated.

e) Results from companies and owners

As before, the factors that were used for the assessment of each respective category should also be shown for the categories "company", "interview partner", "impression of office", and "impression of homepage".

The following factors were used to characterize the "impression of company" category: "work organization", "delegation degree", "internal communication", "documentation", "order processing", "order and storage", "self-service", "mood and atmosphere in the company", and" dealing with the customers".

For the evaluation of the category "impression of interview partner", the following factors were used: "statistics and the handling of key figures", "company direction", "dealing with employees and customers", "own commitment/drive/involvement", and" honorary office".

For the category "impression of office", the factors "documentation", "order and filing ",and "customer availability" were used.

In the "impression of homepage" category, it was necessary to compare the interviews and documentation with the content of the homepage on the basis of the factors "actuality", "appearance", "range of services", and "chronicle".

The grading of the four categories is shown in Table 2.

Category "impression of Company": The result was predominantly satisfactory, with Company 2 providing an excellent impression. In almost all criteria, it is very structured and well organized.

Category "impression of IP": Again, a good to a satisfactory result of all companies can be seen.

Category "impression of office": Company 2 made a very good impression. Company 3 could not be evaluated, since no access to the office was possible.

Category "impression of homepage": Companies 2 and 7 show a high consistency and are rated 2; the other enterprises are rated 3 or 4.

To assess the interviewees' operational orientations, three different categories were formed. These are the "range of services", the "outstanding strength", and the "outstanding weakness". In the category "range of services", a total of 17 services were mentioned by all companies: lawn care, irrigation systems, other services, nursery planting service, balcony planting service, garden planting service, terrace planting service, on-site consulting/sales, delivery, hiring service/plant hiring, gardening, cemetery work, room cultivation/hydroculture, decorations on site, own demonstration plant, project work, and cross-selling.On the basis of this total population, the share of the services that the surveyed companies offer in each case was determined from the individual company-specific nominations. As an example, Company 1 offers n = 11 services, which gives an offer coverage of 65% with reference to the total number of all recorded services (n = 17) (Table 3).

The companies provide 41% to 71% of all services, with companies 2 and 3 covering the lower

area with 41% and 47%, respectively, and companies 1, 6, and 7 the upper area, with 65% and 71% (Table 3). In principle, it can be assumed that other services are offered in the companies that did not participate in the interviews. Due to the frequency of these nominations, from which these 17 services are derived, the best procedure is to go out from regular, recurring services. First, a broad spectrum of services can be considered, which confirms the first assumption. However, the operating conditions must be taken into account. For example, Company 2 only performs seven different services, making it a specialized operation. However, this is a broadly-based company consisting of three self-sufficient profit centres and two independent divisions, which are specialized and target-oriented in the market. Company 6, on the other hand, is also subdivided into independent operating units, but as a specialist primarily in the field of cultivation. A total of 12 different services are managed, which are also offered as a hybrid power bundle (combination of product and service).

Table 3: Operational orientation

Company	1	2	3	4	5	6	7
Range of services*	65%	41%	47%	53%	59%	71%	65%
Outstanding strength	Location	M	Image	Image	EE	Network	CE
Outstanding weakness	SO	C	Location	SO	SO	Age	WI

*Legend: Age = Age of the company, CE = Corporate development, C = competition, EE = Engagement of the entrepreneur, LS = Low supply of services, M = Management, SO = Structural organization, WI = Willingness to take risks. * The figures refer to the ratio of the services listed on the operational level to the total population of the services (= 100%) mentioned in all establishments.*

Source: Own creation, based on interviews, internet research, document analysis, and own subjective evaluation based on established criteria.

V. Quantitative Results

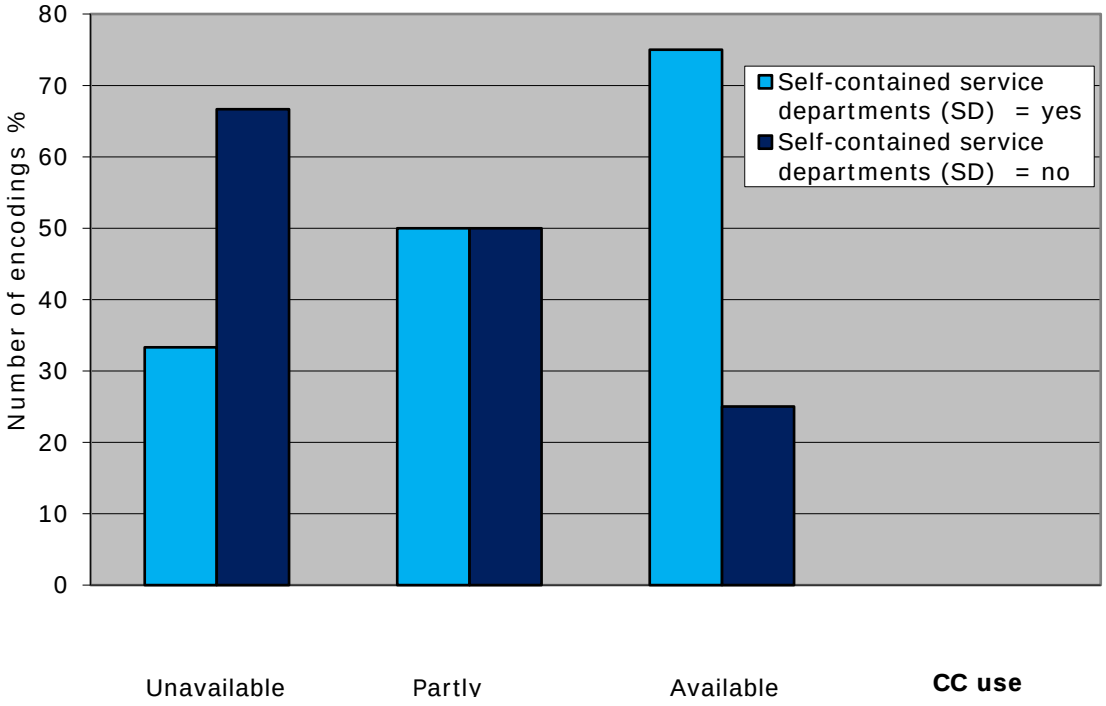
As described in Chapter 3, quantitative analysis steps were implemented with the aim of confirming the meaningfulness of the results obtained from the qualitative content analysis. A built-in frequency analysis is checked by the reliability index. All coding processes were carried out by both researchers. As a result, values above 80% were predominant. They can be called reliable. According to Becher (2007), values of 70% can be regarded as reliable for exploratory investigations when a new field of research is involved. If the quantitative evaluation is continued, categories with a consistency of less than 70% would have to be excluded from the evaluation. This is not done in the present work, since the focus is on the qualitative level. Table 4 shows an overview of the category framework for the MK "Standing and Priority of Operational Controlling" (section).

Table 4: Measure of consistency (Reliability Index 2) between Researchers 1 and 2 on the example of two subcategories of the main category "Status and Priority of Operational Controlling" *

Type		Number of content matches	Total number of arguments	Number of categories	Reliability index (2)
	Forms				
MC	Status and Priority of Operational Controlling				
SC	Cooperation with tax consultants				
V	low	3	3	3	100.00%
V	unclear	3	3	3	100.00%
V	closely	6	7	3	88.64%
SC	Order processing				
V	unstructured	6	7	3	88.64%
V	unclear	2	5	3	31.62%
V	structured	28	29	3	97.38%

*Legend: MC = Main category, SC = Subcategory, V = Variable. *: Formula calculation (see above).Source: Own calculations.*

The frequency of the nominations can be further processed by cross tables, as described in chapter 3. In the following example, the category "use of the CC accounting" is placed in a relationship with the companies "with and without their own service department".



Source: Own presentation, based on coded interviews. CC = Cost entre accounting

Figure 1: Ratio of the categories "use of the CC accounting" and "self-contained services departments (SD)" in the form of a cross table.

While Table 2 shows the use of a CA as an indicator, two categories are set up in relation to one another (x-axis) in Illustration 1: "companies with and without SD" and "use of CCA available/not available/partly available". The bar length (y-axis) indicates the frequency of the text encodings. It can be seen that enterprises with SD are more likely to have a CCA (75% of all text passages suggesting the existence of CCAs were made by companies that have an SD) and vice versa, so more entries for non-SD companies are "not available" (67%).The quantitative analysis thus allows the more differentiated statement that there is a different size ratio within the three categories and reaffirms the results of the second assumption. It is important to emphasize that the quantitative results do not correspond to the representative accuracy since the basic total of n = 7 is too small. It is only intended to support the qualitative findings.

Table 2 shows an overview of the components of operational controlling in the form of a category framework. The respective symbols in the organizational structure show that companies 1 and 2 use many of the acquired elements and thus are structured, while companies 3, 4, and 6 are less structured. When looking at processes, however, a different picture emerges. Companies 2, 6, and 7 are clearly structured, while companies 1, 3, and 4 are rather unstructured. The categories "market situation" and "enterprise and interview person" show a predominantly good to average evaluation, even if there are in each case two excursions in both directions. These are the "outstanding strengths and weaknesses". Overall, companies 2, 6, and 7 appear to be particularly positive and structured, while companies 3 and 4 are relatively unstructured. In the horizontal comparison of the individual categories and establishments, mostly confirmatory symbols can be seen. This suggests a structured nature as well as the flow of the processes in the companies.

VI. Discussion and Outlook

The aim of this study is to examine the requirements of GRH from an economic perspective in the field of controlling horticultural services. As a result, the qualitative study shows a category framework, in which the main category "status and priority of operational controlling" is examined in more detail. Further categories are not analysed in this article, since

they are intended to serve later investigations. The basis for the qualitative evaluations is the analysis of the IP's statements, which were coded independently by two researchers. Under stringent observance of the coding rules, a category framework was developed that was supplemented by appropriate scales and quantitative examination sections. The meaningfulness can only be guaranteed with precise rules-based coding by experienced researchers. This is the case in the present work, as is the check for reliable results by constantly repeating the measurements.

The interviews included a total of seventeen different horticultural services. Although there are certainly others who did not participate in the interviews, the often very frequent repetition of the nominations can be attributed to a regularly offered services that is offered in the GRH and belongs to the product portfolio.

The large number shows that the GRH has a broad range of services, which confirms the first basic assumption. In later investigations, more precise formulations can be developed for research hypotheses, for example, "Specialization of the GRH on the core competences leads to greater economic success." A deeper knowledge of the level of service in terms of "hybrid power bundles" is also of interest.

The second assumption is that there is no differentiation between individual departments in the companies. The results in Table 1 show that three establishments are based on the stationary retail, and four establishments own their own service departments, either as parts of their own company or as legally separate companies. The question "specialization or generalization?"is not new and needs to be assessed in each particular case. A high degree of specialization of companies suggests at least a higher level of organization in company structure and process organization than is the case with broad-based companies.There is, however, no connection between the number of services offered (Table 3) and a high degree of specialization, since the more retail-oriented companies offer a large number of services (e.g. Company 5), while others, more service-oriented enterprises (e.g.,Company 2, with 41%) have comparatively few services. The specialization depends on the environment and the chronicle of the company, as shown in the tables. It becomes clear that the four companies with SD have been working with services for a very long time and thus have a wealth of experience, which is reflected in a higher number of employees. It is also apparent that these GRHs also have a different legal form (corporation, private limited company, PLC).This may have been chosen for personal or other reasons, butit is probable that the legal form was selected for security reasons and risk minimization in view of the execution of services, which is associated with a higher risk in project orders. This also suggests strategic planning in the abovementioned companies, which was confirmed by the "long-term objective" category.

The delineation of the departments requires a clear allocation of the bookings within the framework of the KLR, which is made possible by a CCA. A separate CCA is available in three companies; in three others, it is recognizable in its beginnings. At the same time, a separate service department will be operating in four companies. Here, the relationship is recognizable: enterprises with SD also more often use a CCA. The quantitative analysis with cross-tables has strengthened this assumption (see Figure 1).In view of these relationships between SD and CCA, the second assumption is that there is no clear demarcation of divisions at the individual company level. In order to derive a relevant GRH from the large number of possible service definitions, the classification into "pure service providers" or "providers of product-accompanying services (PAS)" is appropriate (Meiset al., 2010).Depending on the intensity and focal point of the embodiment, it is possible to assign the 17 mentioned services to both groups of companies; for example, the installation of irrigation systems can be offered as part of garden maintenance (Company 1) or as a specialized service (Company 6). This question can be derived from other categories in Table 2 or from the market environment.

A CCA also provides information on the status of company accounting. Of the examined companies, Companies 2, 6, and 7 show high development in all categories, leading to business-oriented enterprises. This assumption is supported by the commercial training of the managing director and the personal impression of the researcher during operation, with a tight and well-organized company and a regular office organization.

Most of the categories show a homogeneous structuring (e.g. "order processing", "recalculation", "long-term goal") in the horizontal comparison of the enterprises. In others, however, differences between the companies are identified. Thus, there are only three companies that have their own financial accounting, which has the advantage that the bookings take place in house, and thus a timely tracking of the booking procedures is possible. This suggests a higher value of company controlling in general and accounting in particular. However, the category "cooperation with tax consultants" is to be assessed differently: although close cooperation is fundamentally positive, as a regular exchange of information takes place, this does not necessarily mean a better office organization: Company 4 does the accounting itself and hands over the data at the end of the year only for the purpose of preparing the accounts for the tax consultant. Here, too, it is important to consider the company's own strategy and thus each individual case.

It should be borne in mind that in almost all establishments, a pre-calculation is carried out, but in only three companies is a post-calculation. Based on the results described, it is concluded that a structured controlling system takes place in the companies. However, the individual characteristics of each company do not reveal a clear profile. Only Company 2 occupies a prominent position in almost all categories and is very well positioned in business.

Taking into account the above-mentioned in homogeneities of individual categories, the enterprises are basically structured and organized and have shown many similarities. The third basic assumption must, therefore, be rejected.

The subjective assessments of the researcher on the market situation, the company, and the interviewee were listed in Table 2. These have tended to be positive and have the advantage of obtaining a rounded look. Soft factors such as strengths and weaknesses became visible. Image is of particular importance here. The person of the owner or manager who shapes the company is seen as a key success factor. A culture of its own will be felt.

The qualitative content analysis is a good tool to combine objective evaluations with subjective ones. Also, the use of quantitative methods is useful when a more precise statement is required. However, this requires a higher population of data to meet representative requirements. Unfortunately, this is not possible in the present study with seven companies, so the results of this examination are mainly reflected in the qualitative surveys. For the exploratory first step, however, statements on the research questions are possible on the basis of the limited sample, which is to be extended in later steps.

In the next section of the research project in which this study is embedded, a balance sheet analysis is intended to assess the company's success and to classify it according to "best practice". A subsequent process value analysis (PWA) is to reveal the value-adding processes. Only then can a holistic picture of the GRH be possible, so that it is later possible to derive a list of requirements for GRH.

References Références Referencias

1. Allwörden, A.V.(2006). Untersuchung zur Situation existenzgefährdeter Betriebe in Landwirtschaft und Gartenbau. Paper presented at43. Garten bauwissenschaftliche Tagung„Gartenbau wissen schaft grüne Stadt", Potsdam, Germany.
2. Becher, M. (2007). Entwicklung eines Kennzahlensystems zur Vermarktung touristischer Destinationen. Wiesbaden: Deutscher Universitäts-Verlag, Germany.
3. BMELV, Bundesministerium für Ernährung, Landwirtschaftund Verbraucherschutz(2013). Bonn: Tagungsband, Bericht der Forschergruppe zum Zukunftskongress Gartenbau, Forschergruppe Zukunftsstrategie Gartenbau, 10–11.09.2013, Germany.
4. Bitsch, V.(2000). Agrarökonomie und qualitative Forschung. Forum: Qualitative Sozial forschung, 1, 1–6, Germany.
5. Bitsch, V. (2006). Job attitudes of Agricultural Middle Managers, Selected Paper prepared for presentation at the American Agricultural Economics Assoc. Annual Meeting, Long Beach, California,23–26.
6. Dirksmeyer, W. &Fluck K. (2013). Braunschweig: Wirtschaftliche Bedeutung des Gartenbausektors in Deutschland, Thünen Report 2: Johann Heinrich von Thünen-Institut, Germany.
7. Gabriel, A. & Bitsch, V. (2014). Konzeptentwicklung für eine Systemanalyse im gärtnerischen Einzelhandel auf Unternehmensebene, in: Schriften der Gesellschaft für Wirtschafts- und Sozialwissenschaften des Landbaues e.V., (Publ.), http://ageconsearch.umn.edu/bitstream/156245/2/Poster2-Gabriel-Konzeptentwicklung_c.pdf.
8. Gann, D.M. & Salter, A.J. (2000).Firms: The construction of complex products and systems. Research Policy, 29, 955-972.
9. Gläser, J. &Laudel, G. (2010). Experteninterviews und qualitative Inhaltsanalyse. Wiesbaden: VS Verlag, Germany.
10. Gremler, D. (2004): The Critical Incident Technique in Service Research. Journal of Service Research, 1, retrieved from:http://jsr.sagepub.com/content/7/1/65, 65–89.
11. Horváth, P. (2009). Controlling, München: Vahlen, Germany.
12. IHK Würzburg-Schweinfurt (2013). Kaufkraft und Umsatzkennziffern für Würzburg und Landkreis Würzburg http://www.wuerzburg.ihk.de/Kaufkra ft__und_Umsatzkennziffern.AxCMS. Retrieved on 18.12.2013.
13. Kotler, P. &Bliemel, F. (2001). Marketing Management- Stuttgart: Schäffer-Poeschel, Germany.
14. Mayring, P. (2010). Qualitative Inhaltsanalyse. Weinheim: Beltz, Germany.
15. Mayring, P. (2010). Qualitative Inhaltsanalyse. Handbuch Qualitative Forschung in der Psychologie. Hamburg: Springer, 602, Germany.
16. MBR,Michael Bauer Research (2010). Kaufkraft 2012 in Deutschland – Stadt- und Landkreise. http://www.mb-research.de/_download/MBR-Kaufkraft-2010-Kreise.pdf, Retrieved on 16.12.2013.
17. Meis, J., Menschner, P. &Leimeister, M. (2010). Modellierung von Dienstleistungen mittels Business Service Blueprinting Modeling. In:Dienstleistungs modellierung 2010, Interdisziplinäre Konzepte und

Anwendungsszenarien (p. 39). Hamburg: Springer, Germany.
18. Perrault, W.D. &Leigh, L.E. (1989).Reliability of nominal data based on qualitative judgements.Journal of marketing research, 26(2), 135–148).
19. Reymann,D. (2009). Wettbewerbsanalysen für kleine und mittlere Unternehmen (KMUs), Theoretische Grundlagen und praktische Anwendung am Beispiel gartenbaulicher Betriebe, Geisenheim: Reymann, Germany.
20. Schöps, J. (2013). Kundenzufriedenheit in direkt absetzenden Einzelhandelsgärtnereien.Unpublished doctoral dissertation, Technische Universität München, Germany.
21. Schwarz, U. (2009). Erfolgsfaktoren für den Dienstleistungssektor im Gartenbau – Eine theoretische und empirische Untersuchung-. Unpublished doctoral dissertation,Technische Universität München, Germany.
22. Statistische Ämter des Bundes und Länder (2013).Ergebnisse des Zensus 2011, http://ergebnisse.zensus2011.de/#StaticContent:09679,ROOT,ROOT, Retrieved on 17.12.2013, Germany.
23. Titscher, J.,Meyer, M. &Mayrhofer, W., (2009). Organisationsanalyse, Konzepte und Methoden. Wien: UTB.
24. Yin, R. (2009). Case Study Research, London: Sage Publ.,Thousand Oaks, England.
25. ZBG, Zentrum für Betriebswirtschaftim Gartenbaue.V. (2013). Kennzahlen für den Betriebsvergleich im Gartenbau, 56, Hannover, Germany.
26. ZVG, Zentralverband Gartenbau e.V. (2017), Jahresbericht 2016, Berlin, Germany.

This page is intentionally left blank