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Analysing supermarket performance with the high-performance organisation framework

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Analysing supermarket performance with the high-performance organisation framework

Analysing
supermarket
performance

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Abstract

Purpose – The Dutch supermarket industry is dominated by a small number of powerful companies which capture the majority of sales and which compete fiercely with each other. This competition is mainly quality based, in the sense of offering increasingly more products of higher quality and striving for better distribution mechanisms. Interestingly there does not seem to be much attention for the quality of the internal supermarket organisation, i.e. quality of people, internal processes, and performance reporting. Thus there seems to be a gap in both current literature and the quality improvement attention of supermarkets which needs to be addressed, to uncover new sources of improvement. The paper aims to discuss these issues.

Design/methodology/approach – In this paper, the authors introduce the high-performance organisation (HPO) framework, a validated technique for evaluating the strength of the internal organisation of companies and for proposing quality improvements. The aim of the research is to test whether the HPO Framework can be used to analyse the strength and performance of supermarkets and to come up with recommendations for improvement. A questionnaire into the drivers of success of supermarkets was constructed which was sent to 400 supermarket franchisers, and the received data were subsequently analysed.

Findings – On average the participating supermarkets are well-performing but they cannot yet be classified as high performing according to the HPO Framework. The supermarkets with the highest HPO scores indeed achieve better financial results (both in terms of revenue and margin achieved) than those of supermarkets with lower HPO scores. Finally, the authors find that larger supermarkets (in square metres floor area) outperform smaller supermarkets on all HPO factors.

Research limitations/implications – As the HPO Framework is shown to be useful for not only analysing the performance of the supermarkets but also to generate recommendations for improvement of those supermarkets, individual supermarkets should evaluate their performance and operations using the HPO Framework to come up with improvement recommendations tailored to their own situation.

Originality/value – The HPO Framework has been applied during the past years in many sectors but not yet in the supermarket industry. Thus this research provides a unique insight in this industry. In addition academic researchers can use the HPO Framework to further investigate specific areas and factors of the supermarkets, in order to add to the literature on the quality of supermarkets.

Keywords HPO, Performance, High-performance organisations, Supermarkets

Paper type Research paper

Introduction

The supermarket as retail concept is a fairly new phenomenon in the Dutch market. At the beginning of the twentieth century most groceries in the Netherlands were sold mainly through small grocery shops, bakers, butchers, greengrocers and milkmen. Around that time in the USA a revolutionary retail concept was invented: the supermarket. Chains such as Piggly Wiggly (1916) and Safeway (1926) are examples of pioneers from that time. The supermarket offered a large assortment for competitive prices in a shop where no longer the goods were sold over a counter but where self-service was the norm. Just after the Second World War the supermarket made its appearance in the Netherlands when the brothers Van Woerkom opened in the city of Nijmegen in 1946 the first self-service shop of the



country. They were followed quickly by Dirk van den Broek (1948), Albert Heijn (1952), Deen (1953) and Jan Linders (1958) (Supermarktcheck, 2015). Many of these early movers are still successful on the Dutch market; Albert Heijn, for example, has been a strong market leader in the Dutch food retail channel since the 1970s.

Nowadays the independent supermarket franchiser has a major role in the Dutch supermarket channel: approximately half of the supermarkets are run by independent business owners who together represent around one-third of the supermarket revenue (DistriFood Dynamics, 2014). A few of these business owners still operate under their own name but most of them are part – either as franchiser or as independent business owner – of one of the following formulas: Albert Heijn, Jumbo, C1000, PLUS, EMTÉ, Coop, Spar, Attent or MCD. For the franchise giver who operates the formula there are several advantages of using franchisers: less investment is needed as the franchiser co-invests; a better coverage of marketing costs, as these are spread over multiple parties; a denser logistical network of shops in the country; and a larger purchasing volume, which lowers purchasing costs.

The above-mentioned advantages are sorely needed as the supermarket industry is highly competitive (Newsome *et al.*, 2013). The industry is characterised by the fact that it is dominated by a small number of powerful companies which capture the majority of sales. As the market grows, these companies need to expand their fixed investments which limits the number of other supermarket companies that can profitably enter the market. However, despite this entry barrier and the concentrated market, competition between the remaining companies stays fierce, which according to Ellickson (2013) reflects the inherently rivalrous nature of the supermarket industry. This competition is mainly quality based, in the sense of offering increasingly more products of a higher quality and striving for better distribution mechanisms, thus pushing the few entrants to low quality store segment (Ellickson, 2013; Matsa, 2011); and on costs (Ring *et al.*, 2002; Evans, 2005). Interestingly enough there does not seem to be much attention for the quality of the internal organisation of the supermarket itself, i.e. quality of managers and employees; internal processes such as communication, evaluation and rewarding; and performance management reporting. An overview of academic research into quality improvement of supermarkets reinforces this observation as most research focusses on the operational side of supermarkets. Thus there seems to be a gap in both the current literature and the quality improvement attention of supermarket owners which needs to be addressed, to uncover new, additional sources of improvement. These news sources can potentially help supermarket companies to increase its competitive capability, and in addition open new lines of academic research in the supermarket industry. In this paper we introduce the high-performance organisation (HPO) framework, a validated technique for evaluating the strength of the internal organisation of companies and proposing quality improvements (de Waal, 2012a, b). This framework has been applied during the past years in many sectors but not yet in the supermarket industry. The aim of our research is to apply the HPO Framework at supermarkets, specifically franchise-owned ones, to evaluate whether the framework: accurately reflects the performance of franchise-owned supermarkets, in the sense that the characteristics of better performing supermarkets match the characteristics of the HPO Framework more fully than those of less-well performing supermarkets; and is applicable in the supermarket sector, in the sense that applying it will yield practical suggestions for improvement which are experienced by supermarket franchisers to be useful in order to strengthen their supermarket and improve its performance. In this respect, performance of supermarkets is measured in turnover and margin per square metre of shop floor.

The remainder of this paper is structured as follows. In the next section, a literature overview is given of the current research into the quality and performance of supermarkets. This is followed by a description of the HPO Framework. Subsequently, the research approach and the research results are discussed, followed by the analysis of these results

and recommendations which can be made based on the analysis. The paper ends with a conclusion, the limitations of the study, and possibilities for further research.

High-performance research in supermarkets

Academic research into the quality, performance and improvement of supermarkets mainly focusses on the operational side of the supermarkets, i.e. processes, products, assortment, layout and the supermarket supply chain. An important research stream is on the service quality of supermarkets. For instance, Schneider *et al.* (2005) suggested that leaders who emphasised the importance of service quality would be likely to do the things necessary to create a climate for service, such as recognising and appreciating high-quality service, removing obstacles to service delivery and setting clear standards for service. They found that service climate indeed positively influenced the so-called customer-focussed organisational citizenship behaviour (defined as behaviour supporting organisational functioning beyond the call of duty), which in turn influenced customer satisfaction positively, which resulted in higher sales. Vella *et al.* (2009) looked at the impact of specific internal service factors (defined as the organisational competences and procedures that enable and influence employee attitudes as well as behaviours towards the delivery of service quality and effective customer-employee interactions) had on the quality of service as provided by supermarket employees to customers. They found that employees' service orientation attitude (defined as showing the behaviour that creates and delivers service excellence), service role flexibility (defined as the range of service work options and number of employees that are available regarding the operation and control of customer service employee service interactions in response to changes in demand), and non-standardized scripted behaviour (defined as not using standardized scripted behavioural policies and practices to control and manage what employees say or do) predicted service quality the best. Min (2010) measured the service performances of supermarket franchises and found that the service attribute that influenced the supermarket customers' impression of service quality the most was product quality, followed by cleanliness of the store, competitive prices, product variety and fast checkouts. Min also found a direct correlation between the service performance of the supermarket and its "word-of-mouth" reputation. Hansen *et al.* (2011) researched what influences consumers' satisfaction with supermarkets and discovered that, when shopping at discount stores and upscale stores, consumers who attached high weight to quality and price were likely to be more satisfied than consumers who attached only medium weight to both parameters; while for traditional supermarkets offering medium quality at medium prices satisfaction occurred equally for both groups of consumers. Kitapci *et al.* (2013) asked supermarket customers which factors positively affected their satisfaction, and found that empathy, tangibility, responsiveness and assurance as given by supermarket personnel were of main importance. In addition, they found that customer satisfaction was positively related to customer loyalty.

As to be expected there is also a stream of research into the efficiency, productivity and profitability of supermarkets. For example, Sergio Ceretta and Scherer (2003) investigated which factors mainly increased the efficiency (defined as how well an organisational unit utilises its resources in generating its products) of supermarkets, and found that technological modernisation and "Efficient Consumer Response" (defined as the constant search for greater efficiency in all steps in the chain of production and distribution including producers, retailers and consumers) main factors for improvement were. Sellers-Rubio and Mas-Ruiz (2006) and Pestana Barros and Sellers-Rubio (2008) looked at the cost efficiency of Spanish supermarket chains and found high levels of cost inefficiency, mainly caused by supermarket owners not paying enough structured attention to managing their cost structures to improve their performance. Hernant *et al.* (2007) looked at profitability in terms of the Du Pont model and found that this is mainly determined by local competitive

conditions and not so much by physical characteristics (such as store formats) which traditionally are used as control criteria. Yu and Ramanathan (2008) examined the efficiency of retail companies in the UK (including supermarkets) in terms of the outputs turnover and profit before taxation vs the inputs total assets, shareholders' funds and number of employees. They concluded that only those retail companies that had adopted advanced retailing technologies were efficient, and that certain environmental variables (the type of ownership, legal form and retail characteristic) significantly influenced this efficiency. Saucède *et al.* (2014) looked specifically at the management and resulting efficiency of fresh fruit and vegetables departments in supermarkets, and identified as key drivers of the performance of these departments upkeep and shrinkage control which can be positively influenced by marketing, in-store logistics and procurement.

The efficiency of the distribution channel, consisting of external and internal processes, and its effect on supermarket customers is also an important research topic. For instance, Beamer and Preston (1993) developed a conceptual framework to describe the organisation of produce marketing within retail supermarket chains, and applied this framework to several supermarket chains. They found that a relationship between the type of management structure used by the supermarket and the distribution of strategic management authority between levels of management; they, however, did not attempt to measure the success of each type of structure. Kumar (2008) analysed commonalities and differences between the supermarket industry and its logistics capabilities in North America, the European Union, Japan, and India, and found that the supermarket industry was customising operating strategies. Examples of these strategies were introducing efficient consumer response standards, dealing with expanded service requirements, creating mass customization, focussing on customer loyalty and private labelling, increasing delivery options, and experimenting with reverse logistics, electronic point of sale data collection and management of supply chain by third- and fourth-party logistics providers. Peng *et al.* (2012) looked at the effects of cooptation in a supermarket network, by looking at the competition – cooperation relationship and cooptation performance over a 15-year period in the network consisting of a focal company and its competitors. Performance was analysed before and after launching the cooptation strategy, and the researchers concluded that competition and cooperation were reciprocally rooted in and mutually promoted by each other, thus leading to better performance. Newsome *et al.* (2013) looked at to what extent and in what ways supermarkets influenced the work, employment and labour strategies of their suppliers. They found that these suppliers all were under intense pressure to deliver better performance to the supermarkets in the areas of price, quality, delivery, flexibility and reliability of supply. This created what the researchers called “a performance management regime” in which suppliers achieved better results by closely monitoring and micro-managing their employees.

Finally, there is also attention for the human side of the supermarket operation. Koene *et al.* (2002) examined the effect of different leadership styles on the financial results and the organisational climate of supermarkets and found a clear positive relationship. Specifically, charismatic leadership (defined as guiding, sense-making, motivating, committing, having a direct emotional impact, being personal involved) had a substantial effect on climate and financial performance in especially small supermarkets. Park and Davis (2011) used data from an annual survey of US supermarkets to develop an index of human resource (HR) practices for food retailers. This HR index consisted of three measures related to training and workforce characteristics and two measures of the benefits and incentives offered to employees. Their analysis demonstrates that HR policies have a positive impact on value added in supermarkets while efficiency is not adversely influenced by these practices.

When looking at the above-mentioned studies it is conspicuous that research of a more holistic nature, i.e. which looks at the quality of the internal organisation of a supermarket, is far less prevalent or seems to be almost non-existent. We therefore turn to a holistic

evaluation framework which has been developed on the basis of data from other industries than the supermarkets, the so-called HPO Framework (de Waal, 2012a) to evaluate the quality and performance of supermarkets. This concept is thus new to the supermarket industry, but it has been around for several years and has been applied in various industries, including the manufacturing (de Waal, 2016), diamond (de Waal *et al.*, 2014c), education (de Waal and Sultan, 2012), banking (de Waal and Frijns, 2011), food (de Waal and de Haas, 2013), governmental (de Waal *et al.*, 2014b), insurance (Honyenuga *et al.*, 2014), media (de Waal *et al.*, 2015), training (de Waal *et al.*, 2014a) and transport (de Waal and Frijns, 2014) industries. The HPO Framework can be used to analyse an organisation on the areas it needs to pay attention to in order to become an HPO, and it can be used to analyse an HPO on its strong areas in order to identify best ideas that potentially could be used by other organisations in their transformation to HPO. In this paper the HPO Framework is used in the former way, i.e. to analyse the current status of franchise supermarkets. In the next section, the HPO Framework is described.

The HPO Framework

The HPO Framework was developed based on a descriptive literature review (Phase 1) and empirical study in the form of a worldwide questionnaire (Phase 2) (de Waal, 2006/2010, 2012a, b). The first phase of the study consisted of collecting the studies on high performance and excellence that were to be included in the empirical study. Criteria for including studies in the research were that the study: was aimed specifically at identifying HPO factors or best practices; consisted of either a survey with a sufficient large number of respondents, so that its results could be assumed to be (fairly) generic, or of in-depth case studies of several companies so the results were at least valid for more than one organisation; employed triangulation by using more than one research method; and included written documentation containing an account and justification of the research method, research approach and selection of the research population, a well-described analysis, and retraceable results and conclusions allowing assessment of the quality of the research method. The literature search yielded 290 studies which satisfied all or some of the four criteria. The identification process of the HPO characteristics consisted of a succession of steps. First, elements were extracted from each of the publications that the authors themselves regarded as essential for high performance. These elements were then entered in a matrix which listed all the factors included in the framework. Because different authors used different terminologies in their publications, similar elements were placed in groups under a factor and each group – later to be named “characteristic” – was given an appropriate description. Subsequently, a matrix was constructed for each factor listing a number of characteristics. A total of 189 characteristics were identified. After that, the “weighted importance”, i.e. the number of times a characteristic occurred in the individual study categories, was calculated for each of the characteristics. Finally, the characteristics with a weighted importance of at least 6 per cent were chosen as the HPO characteristics that potentially make up a HPO, this were 35 characteristics.

In Phase 2, the 35 potential HPO characteristics were included in a questionnaire which was administered during lectures and workshops given to managers by the author and his colleagues all over the world. The respondents of the questionnaire were asked to indicate how well their organisation performed on the various HPO characteristics on a scale of 1 (very poor) to 10 (excellent) and also how its organisational results compared with its peer group. Two types of competitive performance were established (Matear *et al.*, 2004): relative performance (RP) vs competitors: $RP = 1 - ((RPT - RPW)/(RPT))$, in which RPT is the total number of competitors and RPW the number of competitors with worse performance; historic performance of the past five years (possible answers: worse, the same, or better).

These subjective measures of organisational performance are accepted indicators of real performance (Dawes, 1999; Heap and Bolton, 2004; Jing and Avery, 2008). The questionnaire yielded 2015 responses of 1,470 organisations. With a non-parametric Mann-Whitney test 35 characteristics, categorised in five factors, with both a significant and a strong correlation with organisational performance were extracted and identified. The factor scales showed acceptable reliability (Hair *et al.*, 1998) with Cronbach's α values close to or above 0.60.

The research yielded the following five HPO factors (in the Table AI the 35 HPO characteristics are given):

- (1) Management quality: belief and trust in others and fair treatment are encouraged in an HPO. Managers are trustworthy, live with integrity, show commitment, enthusiasm, and respect, and have a decisive, action-focussed decision-making style. Management holds people accountable for their results by maintaining clear accountability for performance. Values and strategy are communicated throughout the organisation, so everyone knows and embraces these.
- (2) Openness and action orientation: an HPO has an open culture, which means that management values the opinions of employees and involves them in important organisational processes. Making mistakes is allowed and is regarded as an opportunity to learn. Employees spend a lot of time on dialogue, knowledge exchange and learning, to develop new ideas aimed at increasing their performance and make the organisation performance driven. Managers are personally involved in experimenting thereby fostering an environment of change in the organisation.
- (3) Long-term orientation: an HPO grows through partnerships with suppliers and customers, so long-term commitment is extended to all stakeholders. Vacancies are filled by high-potential internal candidates first, and people are encouraged to become leaders. An HPO creates a safe and secure workplace (both physical and mental), and dismisses employees only as a last resort.
- (4) Continuous improvement and renewal: an HPO compensates for dying strategies by renewing them and making them unique. The organisation continuously improves, simplifies and aligns its processes and innovates its products and services, creating new sources of competitive advantage to respond to market developments. Furthermore, the HPO manages its core competences efficiently, and sources out non-core competences.
- (5) Employee quality: an HPO assembles and recruits a diverse and complementary management team and workforce with maximum work flexibility. The workforce is trained to be resilient and flexible. They are encouraged to develop their skills to accomplish extraordinary results and are held responsible for their performance, as a result of which creativity is increased, leading to better results.

The HPO research shows that there is a direct and positive relationship between the five HPO factors and competitive performance: the higher the scores on the HPO factors (HPO scores), the better the results of the organisation, and the lower the HPO scores the lower the competitive performance. The research also shows that all HPO factors need to have equal scores and that when the organisation achieves an average score of 8.5 or higher on all factors it can be considered to be an HPO. An organisation can evaluate its HPO status by conducting an HPO diagnosis. During this diagnosis management and employees fill in the HPO questionnaire, consisting of questions based on the 35 HPO characteristics with possible answers on an absolute scale of 1 (very poor) to 10 (excellent). The individual scores are averaged to scores on the HPO factors for the complete organisation. These average scores indicate for which HPO factors and HPO characteristics the organisation has to take improvement action in order to become an HPO.

Research approach

The study described in this paper was part of a larger study into the drivers of success of a franchise supermarket. A questionnaire was constructed in which the following was asked: general information on the supermarket, its surroundings and the franchiser; the results of the franchise; drivers of success according to the franchiser; role and time spending of the franchiser in supermarket operations; and the HPO questions. The questionnaire was sent to 400 supermarket franchisers who were all relations of Marshoek, an administrative and consultancy organisation specialized in the supermarket industry. In total, 122 completely filled in questionnaires were received back, which gave a response rate of 30.5 per cent. The average store size of the sample was 993 m² compared to 900 m² for all supermarkets in the Netherlands (DistriFood Dynamics, 2014). The distribution of the sample among the supermarket chains was also quit representative, as the main franchise supermarket chains were also dominant in the sample (see Table I).

The questionnaire scores for the participating franchisers was coupled with objective financial data about their supermarket (such as revenue, gross and net margins, share of fresh products) and store and store environment characteristics (such as floor space, socio-demographics profile of neighbourhood, parking lots), provided by Marshoek and the Dutch Central Bureau for Statistics. For each supermarket two years of recent financial data were available.

Research results

Figure 1 gives the average HPO scores for the participating supermarkets on the five HPO factors.

Figure 1 shows that on average the participating franchisers are well-performing supermarkets, but cannot yet be classified as high performing according to the HPO Framework, as an HPO scores 8.5 or higher (de Waal, 2012b). When looking in more detail at the scores, it turns out that 12 per cent of the participating supermarkets see themselves as being an HPO, with another 16 per cent scoring between 8.0 and 8.4 meaning that they are close to becoming an HPO. At the same time, 68 per cent of the participating supermarkets indicate that they perform on a satisfactory level (between 6.0 and 7.9) while 3 per cent performs unsatisfactory (< 6.0). The large number of satisfactory performing supermarkets might be explained from the fact that in the current competitive climate of the supermarket industry all supermarkets that still exist do from necessity perform at least on that satisfactory level. There is also a clear, small number of “winners” that indicate they have a strong internal organisation. In the next section, it will be shown that these are the supermarkets that do perform the best financially. It is interesting to note that there is not a clear winner among the supermarket formulas, it is the individual supermarket that achieves the “winner status”.

Correlation with performance

In the questionnaire the franchisers were also asked to indicate how they performed financially compared to their competitors, in terms of achieved sales volume and profit,

Supermarket chain	Percentage of franchise stores in the Netherlands (DistriFood Dynamics, 2014)	Percentage of stores in sample (<i>n</i> = 122)
Jumbo and C1000	31	22
Albert Heijn	19	24
Plus	19	21
Spar	18	17
Other	13	16

Table I.
Overview of
supermarket chains in
the research sample

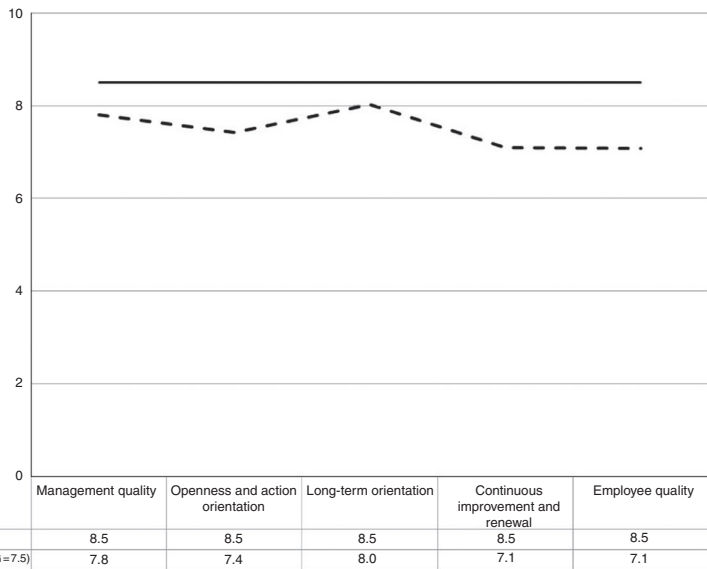


Figure 1.
Average HPO scores for the participating supermarket franchisers

having five answering options: I performed the past few years very badly (belonging to the worst 10 per cent), I belong to the group of less-performing supermarkets, I performed as an average supermarket, I belong to the group of fairly successful supermarket franchisers, and I performed the past few years very well (belonging to the best 10 per cent). To test if this perception actually is a good representation of actual performance, the perception scores were correlated with the net results as percentage of sales of the supermarkets, as obtained from the Marshoek database. The correlation turned out to be 0.55 with a significance $p < 0.001$, indicating there that the franchisers' perception is a good proxy for actual performance. Subsequently franchisers' perception was related to their HPO scores. For this, the franchisers were first categorised in five groups according to their HPO score, and then for each of the groups the average perception score was calculated for revenue and for margin. Table II lists the results.

Table II shows that the franchisers with the highest HPO scores (those in Groups 8 and 9-10) indeed perceive their financial results (both in terms of revenue and margin achieved) to be better than those of franchisers with lower HPO scores. This relation holds true until Groups 1-5, which seems to be scoring higher than Groups 6 and 7. This can be caused by the low number of really low-performing supermarkets which might distort the relational pattern.

As supermarket chains differ in terms of average square metres floor area we also analysed whether the HPO scores differ between small ($< 700 \text{ m}^2$), medium ($700\text{-}1,200 \text{ m}^2$) and large ($> 1,200 \text{ m}^2$) supermarkets. In general we find that larger supermarkets

Table II.
Relation between franchisers' performance perception scores and their HPO scores

HPO group	Average HPO score (1-10)	Average revenue perception score (5 = best 10%, 1 = worst 10%)	Average margin perception score (5 = best 10%, 1 = worst 10%)
Group 1-5 ($n = 4$)	5.3	3.5	3.7
Group 6 ($n = 28$)	6.6	3.3	3.2
Group 7 ($n = 55$)	7.5	3.3	3.5
Group 8 ($n = 29$)	8.3	3.7	3.8
Group 9-10 ($n = 6$)	9.2	4.0	4.0

outperform smaller supermarkets on all five HPO factors (see Figure 2), a result in line with the findings of Pestana Barros (2006) in his research of Portuguese supermarkets. A possible explanation might be that franchisers early in their career start with a comparatively small supermarket and in time those franchisers who are successful gradually start managing a larger store if the opportunity arises. This then means that more experienced franchiser are managing those larger supermarkets and thus these are managed more professionally (and possibly paying more attention to tight cost control, see Evans, 2005) than smaller supermarkets.

But even when analysing the relationship between net margin percentage and HPO score while controlling for average store size we find a positive correlation ($t = 1.72, p < 0.10$). This indicates that franchise supermarkets who score better on the HPO factors are also more successful in terms of net profit percentage, regardless of how big they are.

Factors influencing performance

The franchisers were also presented with several statements on factors which potentially determine the success of their supermarket. Five of these referred to the emphasis franchisers put on their management efforts to increase performance, and four looked at the emphasis franchisers put on the tasks they mainly perform day-to-day. The respondents had to indicate the degree to which they agreed with the statement, on a scale ranging from 1 (very much disagree) to 7 (very much agree). Their scores were correlated with their HPO scores to see which factors had a significant influence. Table III gives the results of the correlation.

Interestingly we find that the overall HPO score is most strongly related to the focus of the franchise supermarket on obtaining the highest possible revenue ($r = 0.227$). This shows that HPOs tend to be also sales driven. Furthermore, we find a significant correlation between the HPO score of the supermarket and the focus of the franchise supermarket on obtaining a high level of employee satisfaction, indicating that high HPO scores might go hand in hand with satisfied employees. No or low correlations were found between HPO score and cost focus and HPO score and margin focus. When we analyse the relation between HPO score and the way franchisers allocate their time among several management tasks, we find interesting effects. First of all there is quite a strong negative correlation ($r = -0.343$) between HPO score and the percentage of time that the franchisers allocate to operational management tasks (quality control, control of logistics), while we find positive

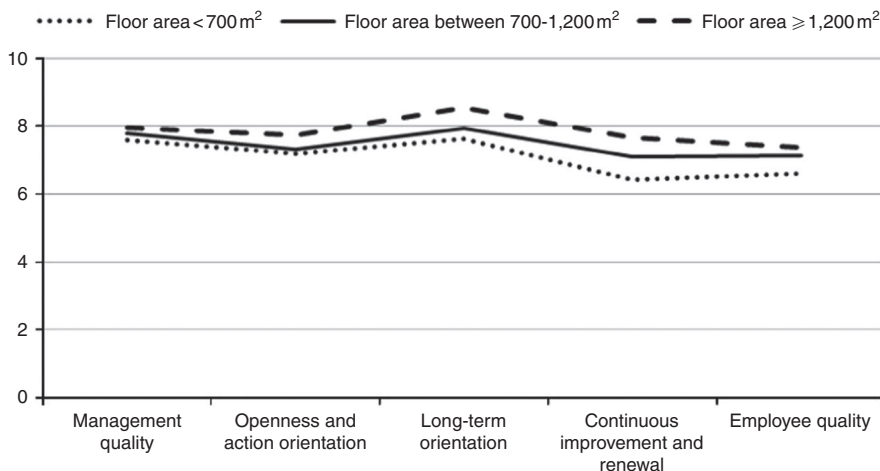


Figure 2.
HPO scores for
various supermarket
sizes (in square
metres)

Table III.
Correlation between
average HPO scores
and potential
success factors

Potential success factor	Correlation with HPO score
Management emphasis on obtaining the highest possible revenue	0.227***
Management emphasis on obtaining the highest possible margin	0.043
Management emphasis on obtaining the lowest possible cost	0.092
Management emphasis on obtaining the highest possible customer satisfaction	0.107*
Management emphasis on obtaining the highest possible employee satisfaction	0.195**
Percentage of time allocated to HRM (coaching and control of employees, drafting employee development plans, conducting evaluation meetings)	0.191**
Percentage of time allocated to commercial management (organising sales and local marketing activities, customer contacts, being a host in the store, contacts with local media and societies)	0.140*
Percentage of time allocated to financial management (preparing and monitoring budgets, analysing results and performance indicators, contacts with accountants and bookkeepers, contact with the tax office)	0.198**
Percentage of time allocated to operational management (control on logistics and goods handling, quality control, control on theft and losses, looking after product placement and representation, looking after personnel safety)	-0.343***

Note: *, **, ***Significant at the 0.1, 0.01 and 0.001 level, respectively

relations between HPO score and the time allocated to financial management ($r=0.198$), HRM ($r=0.191$) and commercial management ($r=0.14$). This indicates that franchisers with too much focus on the daily operation (operational management) at the expense of other important management tasks (e.g. HRM, financial management and commercial management) do not easily rank among the best performing organisations. It is probably therefore more about the franchisers finding the right balance between their tasks.

Summary, recommendations, limitations and future research

The first aim of our research was to test whether the HPO Framework can be used to analyse the strength and performance of supermarkets. Our study shows that the scores on the HPO factors are indeed associated with the performance of a supermarket. Therefore the HPO Framework can be used to improve future performance by identifying the total HPO score of a supermarket and how this supermarket scores on the underlying factors. In addition our research shows that bigger supermarkets on average perform better than smaller supermarkets. This seems to make sense as bigger supermarkets have more personnel and thus need more professional management. Further analysis of the scores on the five HPO factors show that supermarket franchisers score high on the factors "Management Quality" and "Long-Term Orientation" but only average on the factors "Openness and Action Orientation", "Continuous Improvement and Renewal" and "Employee Quality". Naturally other things also play a role, such as the quality of the formula and location, but these are factors which are (unfortunately) outside the control of the supermarket franchiser.

The second aim of our research was to come up with potential improvements which are experienced by supermarket owners to be useful. From the HPO research (de Waal, 2012a) we know that the higher the scores on the HPO factors the better the results of the organisation. Therefore, it seems obvious for the supermarkets, who want to strengthen their internal organisation, to start working on their lowest scoring HPO factors and characteristics:

- (1) Pay more attention to innovation (HPO factor continuous improvement and renewal): in particular the HPO characteristics "The supermarket has adopted a strategy that sets it clearly apart from other supermarkets", "The supermarket continuously innovates its core competencies" and "The supermarket continuously innovates its products, processes and services" deserve special attention.

- (2) Pay more attention to the employees (HPO factors management quality and openness and action orientation): in particular the HPO characteristics “Employees are always involved in important processes”, “Management is decisive with regard to non-performers”, “Employees want to be held responsible for their results”, “Employees are trained to be resilient and flexible” and “The supermarket has a diverse and complementary workforce” deserve here attention. Especially when a supermarket get more personnel it is essential for the franchiser to not only hire the right people but also to train these people in the right manner and to motivate them.
- (3) Pay more attention to generation and use of information and knowledge (HPO factors continuous improvement and renewal and openness and action orientation): in particular the HPO characteristics “In the supermarket everything that matters to performance is explicitly reported”, “In the supermarket both financial and non-financial information is reported to employees” and “Employees spend much time on communication, knowledge exchange and learning” need extra attention.

In particular the second and third recommendations are of the upmost importance to address as supermarkets will be increasing in size in the near future. Thus the HPO Framework has been shown to be useful for not only analysing the performance of the supermarkets but also to generate recommendations for improvement of those supermarkets. Therefore individual supermarkets should evaluate their performance and operations using the HPO Framework to come up with improvement recommendations tailored to their own situation. In addition, academic researchers can use the HPO Framework to further investigate specific areas and factors of the supermarkets, in order to add to the literature on the quality of supermarkets.

There are several limitations to be found in our research. First, only supermarket managers filled in the questionnaire, no employees were involved. Therefore a skewed image of the HPO scores of the supermarkets has probably be obtained as the opinion of lower-level staff, which can differ considerably from managers, has not been taken into account (de Waal, 2012b). The skewedness will probably be on the positive side because managers in general give higher scores to the HPO factors than employees (de Waal, 2012b). In addition, there might have been an upward bias because the respondents were all people who actually owned the supermarket. This undoubtedly increases their view on their company as ownership increases proudness, and therefore future research should aim to include the opinion from the employees, to get a more accurate picture of the actual HPO scores of the supermarkets.

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HPO factor	HPO score
<i>Continuous improvement and renewal</i>	
1. The supermarket has adopted a strategy that sets it clearly apart from other supermarkets	6.8
2. In the supermarket processes are continuously improved	7.5
3. In the supermarket processes are continuously simplified	7.0
4. In the supermarket processes are continuously aligned	7.3
5. In the supermarket everything that matters to performance is explicitly reported	6.9
6. In the supermarket both financial and non-financial information is reported to employees	7.1
7. The supermarket continuously innovates its core competencies	6.9
8. The supermarket continuously innovates its products, processes and services	7.2
<i>Openness and action orientation</i>	
9. Management frequently engages in a dialogue with employees	7.5
10. Employees spend much time on communication, knowledge exchange and learning	6.0
11. Employees are always involved in important processes	7.2
12. Management allows making mistakes	7.8
13. Management welcomes change	8.0
14. The supermarket is performance driven	8.0
<i>Management quality</i>	
15. Management is trusted by employees	8.0
16. Management has integrity	8.5
17. Management is a role model for employees	8.6
18. Management applies fast decision making	8.0
19. Management applies fast action taking	8.0
20. Management coaches employees to achieve better results	7.4
21. Management focusses on achieving results	8.0
22. Management is very effective	7.4
23. Management applies strong leadership	7.5
24. Management is confident	7.9
25. Management is decisive with regard to non-performers	7.1
<i>Employee quality</i>	
26. Employees want to be held responsible for their results	7.0
27. Employees want to be inspired to accomplish extraordinary results	7.7
28. Employees are trained to be resilient and flexible	6.3
29. The supermarket has a diverse and complementary workforce	7.1
<i>Long-term orientation</i>	
30. The supermarket maintains good and long-term relationships with all stakeholders	7.2
31. The supermarket is aimed at servicing the customers as best as possible	7.5
32. The supermarket grows through partnerships with suppliers and/or customers	8.8
33. Management has been with the company for a long time	8.0
34. The supermarket is a secure workplace for employees	7.3
35. New management is promoted from within the supermarket	8.5

Table AI.
The 35 characteristics
of the five HPO
factors and the scores
for the participating
supermarkets

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