

Using the Key Success Factor Concept in Competitor Intelligence and Benchmarking

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EXECUTIVE SUMMARY

A key success factor is regarded as a skill or a resource that a business can invest in, which explains a major part of the observable differences in perceived value of the offer and/or relative costs of bringing that offer to the marketplace. Key success factors are potentially useful in structuring the generation of market intelligence in competitor analysis and benchmarking. To this end, a method was developed based on a reverse laddering procedure, which elicits decision-makers' subjective causal maps regarding key success factors and their respective antecedents. When aggregated, these maps can be used as the guiding basis of competitor analysis systems. The article shows the application of the concept in an European-based company in the business of frozen seafood. ©1998 John Wiley & Sons, Inc.

The Concept of Key Success Factors

What makes one company more successful than another under apparently identical conditions is at the very core of most inquiry in the area of business administration. It is a central tenet in research on business strategy that the match between conditions in the business environment and company-specific factors is a major key to explaining differences in company performance. Creating this match can

be accomplished by monitoring both the business environment and intra-company factors, interpreting them on the basis of experience, and using the established knowledge to make decisions about which skills and resources to develop in the company. The concept of key success factors (also, critical success factors or drivers) is one way of framing the issue of match between business environmental conditions and intra-company factors and the way it relates to man-

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agement decision-making. According to Grunert and Ellegaard (1993) the term key success factors has been used in basically four different ways:

1. As a (necessary) ingredient in a management information system
2. As a unique characteristic of a company
3. As a heuristic tool for managers to sharpen their thinking
4. As a description of the major skills and resources required to perform successfully in a given market

In this article we adopt a combination of the first and the last use of key success factors. The last use basically equals key success factors and the notion of second-order determinants of competitive advantage: A company's skills and resources determine its positional advantage in terms of relative costs and customer perceived value, which in turn are related to company performance in terms of profitability or market share (Day & Wensley, 1988; Porter, 1980). Based on these considerations Grunert and Ellegaard (1993) define a key success factor as: "a skill or resource that a company can invest in, which, on the market the company is operating on, explains a major part of the observable differences in perceived value and/or costs." This definition implies the following characteristics of key success factors:

- A key success factor is a causal relationship. It expresses a relationship between the competitive advantage a company enjoys in a market, in terms of perceived value of the offer among customers and the costs relative to competitors of bringing that offer to the market, and the causes of that competitive advantage, in terms of certain skills and resources.
- Because a key success factor is a skill or resource of the company, it is always actionable.
- Key success factors are market-specific, but they transcend strategic groups in a market.
- Key success factors are small in number. By definition, only a small number of factors can explain "a major part" of the variance in perceived value and/or relative cost. This implies that there may be markets where there are no key success factors, but only many small contributors to success.
- Key success factors imply a causal relationship between a skill/resource and perceived value and/or relative cost. They are thus not directly related to performance measures like ROI

Knowledge about key success factors is of practical managerial relevance. If the key success factors in a par-

ticular market can be ascertained, this will give useful guidelines with regard to competence development. In this article we take the following view on causes of success (e.g., Grunert & Ellegaard, 1993; Sousa de Vasconcelos & Hambrick, 1989):

- Causes of success may be moderately stable within clearly defined markets over a medium-term time perspective;
- they are partly but not completely understood by decision-makers in these markets;
- they are amenable to empirical research; and
- a superior understanding of them can improve a company's competitive position, at least for a certain period, by leading the attention of decision-makers to areas where investing in skills and resources will have most impact on performance.

CAUSES OF SUCCESS WITHIN DEFINED MARKETS,
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Using Key Success Factors in Competitor Intelligence and Benchmarking

The idea that there are a few factors which are decisive for the success of the company has been elaborated on by Rockart in the context of designing management information systems (Bullen & Rockart, 1981; Rockart, 1979). Finding that top management rarely used management information systems, they argued that such systems must be structured according to the information needs of managers. In their efforts to assess managers' information needs and link them to the management information system, they suggested the concept of *critical success factors*.

Critical success factors are, according to Bullen and Rockart, "the limited number of areas in which satisfactory results will ensure successful competitive performance for the individual, department or organization. Critical success factors are the few key areas where 'things must be right' for the business to flourish and for the manager's goals to be attained." (Bullen & Rockart, 1981, p. 7).

Rockart's concept of critical success factors is clearly inspired by the mentioned issue of optimum match between environmental conditions and company characteristics. The surrounding environment is assumed to pose certain fundamental requirements and limitations, threats and opportunities to which companies must align their strategy, skills and resources, to achieve success. This pro-

vides a rationale for integrating such factors in a management information system.

Rockart distinguishes between five sources of critical success factors:

1. *The industry, e.g., demand characteristics, technology employed, product characteristics, etc. These can affect all competitors within an industry, but their influence will vary according to the characteristics and sensitivity of individual industry segments.*
2. *Competitive strategy and industry position of the company in question, which is determined by the history and competitive positioning in the industry.*
3. *Environmental factors are the macro-economic influences that affect all competitors within an industry, and over which the competitors have little or no influence, e.g., demographics, economic and government legislative policies etc.*
4. *Temporal factors, which are areas within a company causing a time-limited distress to the implementation of a chosen strategy, e.g., lack of managerial expertise or skilled workers.*
5. *Managerial position, i.e., the various functional managerial positions in a company each have their generic set of associated critical success factors.*

Critical success factors can be characterized by the extent to which they are internal or external to the company and, consequently, whether they refer to something which should be monitored or built [for more details on critical success factors in management information systems, see Boynton and Zmud (1984), Ferguson and Dickinson (1982), Munro and Wheeler (1980)].

The five sources of critical success factors cover a wide range of very different factors. They include factors that affect all companies in an industry in the same way, as well as factors that can account for the differences in performance within an industry — here the latter have considerably more strategic importance than the former. They include, mirrored in the *build vs. monitor* distinction, factors which the company can influence, and factors which it cannot influence. From a strategic viewpoint, it may be more appropriate to distinguish more sharply between environmental forces and company competencies — where *building up* a company competence may be a reaction following the *monitoring* of a development in the environment.

This use of the key success factor concept is in accordance with the *planning school* in the strategic management area [for a distinction between these and other

schools of thought, see Grunert (1994) and Mintzberg (1990)]. In the planning school, it is assumed that by providing input which helps decision-makers structure their thoughts, the quality of decision-making can be improved. The encouragement of decision-makers to reflect on their own assumptions about the causes of success—i.e., key success factors as a planning tool—is one possible example. It is then assumed that decision-makers have their own subjective theories linking success to its causes (see, e.g., Ferguson & Dickinson (1982); Hofer & Schendel, (1978); Ohmae (1982).

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With regard to method in the planning school, an eclectic approach is preferred [e.g., Leidecker & Bruno, 1984)], with more emphasis on variety than validity. It is the *process* of building a consideration of key success factors into planning, which improves strategy formation. It is emphasized that key success factors are small in number. By forcing the decision-maker to identify and concentrate on a small number of factors, a process of reasoning is started which, by virtue of its systematic nature, actually may lead to improved strategy formation—even though this has never been demonstrated empirically.

The planning school puts emphasis on improving the skills of decision-makers. However, revealing managers' subjective theories on the causes of success is of interest also in a more general sense (Sørensen & Grunert, 1996). When we find ways to measure decision-makers' perceived success factors, we can try to understand how their perception of success is formed. Executives' perception of success factors may be wrong, due to a number of psychological mechanisms known to cause decision-makers to misattribute causes of success (Barnes, 1984; Chakravarti, Mitchell & Staelin, 1981; Hogarth & Makridakis, 1981; Stevenson, 1976). A better understanding of these processes may improve managerial decision-making in the long run.

The more concrete employment of key success factors in a management information system can be twofold: Key success factors can be used as a guiding principle in the generation of competitor intelligence, and key success factors can be used as a basis for benchmarking.

Key success factors guiding the generation of competitor intelligence. The potential problem of information over-

load is probably well known to most people working with the gathering, analysis, and use of market intelligence in management information systems. In the specific case of competitor intelligence one way of reducing the information influx is by focusing on information which characterizes competitors by those factors which are assumed to be key success factors in the market. This provides an effective screening tool for information generation, and also links the generation of competitor intelligence to the benchmarking process.

Key success factors in benchmarking. Benchmarking is a continuous process of measuring "best practices" to learn and thereby improve, one's own ways of manufacturing, distributing, and marketing products. The comparison between a company's toughest competitors and the company itself on key success factors must be considered a reasonable way to establish measures for what goals to achieve. The key-success-factor-guided competitor intelligence may provide alternatives or improvements to existing company practice and thereby input to reflections on how to achieve success.

In the following, we describe a study whose aim was to base the competitor intelligence and benchmarking in a company on the assessment of managers' perceived success factors. The case company is a large European producer of frozen seafood.

Design of the Study and Choice of Market

The study was comprised of three phases. In phase 1, reverse laddering interviews were conducted with individual decision-makers to uncover their perceived key success factors. Based on these interviews, individual causal maps were drawn and sent to the respondents for comments. In phase 2, the concepts in the whole set of individual causal maps were aggregated to derive a list of potential key success factors. In phase 3, respondents rated their own company and those of their main competitors with regard to how well they perform on the various potential key success factors. All three phases will be described in more detail below.

According to the above discussion, key success factors are market specific. Therefore, an important step in identifying key success factors is to define the market. As we are concerned with knowledge about skills and resources of companies and with views about how to allocate resources for investments in these factors, we considered a *top-down* approach appropriate for a market definition in this project. The top-down approach, in general, reflects the need for corporate management to understand the

company's capacity to compete and the ability to allocate resources to ensure a sustainable competitive advantage. In the top-down view, markets are typically defined according to *supply* criteria, e.g., similarity of manufacturing processes, raw materials, physical appearance of products, technology, or method of operation, including the identification of cost/investment discontinuities.

The company we worked with operates in the seafood business. To meet the company's requirements we conducted the study in relation to the German, the French and the UK retail markets for seafood-based frozen ready meals. The three markets are similar in terms of increasing power of distributors, more centralization of the purchase function, and increased demand for products with high degree of convenience. A few actors in the market sell their branded products in all three markets. Each of the three markets also has its respective national suppliers. Many processors supply private-label products to the large retail chains. Our company runs sales subsidiaries in all three markets.

Laddering-Type Interviews

We were interested in decision-makers' perceptions or hypotheses about how various factors in their business environment determine the success of a company. These perceptions had been formed based on decision-makers' own experiences, and the information and experiences they shared with their immediate professional surroundings. All this information is embedded in and becomes part of decision-makers' cognitive structures. We were interested in capturing the part of the decision-makers' cognitive structures which refer to *causal relationships between cognitive categories designating skills and resources a company may have, and cognitive categories designating indicators of a company's competitive position.*

Network models from cognitive psychology have been popular in research on organizational cognition (Fiol & Huff, 1992; Huff, 1990). In a network model, cognitive structure is modeled as a set of nodes and links, where the nodes represent fragments of knowledge, i.e., cognitive categories, and where the links represent associations between them. These associations may be of various kinds, causality being one of them. In this study we find it appropriate to adopt the network model, as we are interested in decision-makers' general perceptions of causes of success, which is a subset of semantic knowledge.

The question whether cognitive structures can be measured at all has been subject of debate, both in psychology and in the literature on managerial cognition.

One view is that a cognitive structure is unobservable, and that the results of, e.g., an interview with a decision-maker, are a combination of his/her cognitive structure and cognitive processes heavily influenced by the interviewer and by the situation. The result is a mirror of the specific situational transaction rather than the respondent's cognitive structure (see, e.g., Cossette & Audet, 1992). Another view is that, by trying to understand the cognitive processes occurring during an interview situation and by designing interview techniques which make these processes transparent, it is possible to estimate the respondents' cognitive structures (Grunert & Grunert, 1995).

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In this study, we assume that it is possible to uncover relevant parts of respondents' cognitive structures by an appropriate interview technique. The technique we have chosen is a laddering-type depth interview. Laddering is a qualitative interview technique designed to uncover causal cognitive structures. It was first developed in consumer research (Gutman, 1991; Reynolds & Gutman, 1988). The theory holds that products can be thought of as *means* for the achievement of values underlying consumer needs, i.e., *ends*. Laddering attempts to elicit *means-end chains* that show how a person's selection of a product or a service enables him/her to achieve a desired end-state.

Perceived key success factors and their associated causalities can be regarded as a type of means-end chain. A decision-maker may regard a certain skill or resource in the company as a means to reach an end, namely to create customer value or low costs. In addition, various skills may be causally related to each other. We therefore propose that decision-makers' cognitive structures concerning key success factors can be conceptualized by the means-end concept, and that a reversed laddering interview technique should be applicable for ascertaining them.

Laddering can be conducted in various ways. A rough distinction may be made between the "soft" way and the "hard" way (Grunert & Grunert, 1995). Hard laddering imposes a strict structure on the data collection and forces the respondent to follow the means-end model both in terms of content and of structure. The soft way allows the

respondent more freedom with regard to both structure and content, and the interviewer will use the means-end model to structure the information afterwards. The soft approach is potentially better when the respondent's cognitive structures within the area of interest are either particularly weak or particularly complex. With the soft approach it is, however, obvious that the extent of cognitive processing on the interviewer side will increase, because the interviewer/analyst has more latitude in structuring the data.

We employ the laddering technique to elicit decision-makers' cognitive structures regarding the causes of success within the chosen market. Because this topic is of some complexity and is very central for the decision-makers interviewed, we have adopted a "soft" version of laddering. The respondent begins by specifying some success criteria and how the main competitors differ with regard to these criteria. Then, the interviewer may ask "how does a company achieve . . ." or "what causes . . ." until the subjective causal chain seems exhausted. This variant of the laddering method starts with the "end", i.e., having business success, and then tries to identify the means necessary to reach this end (reversed laddering), whereas the typical use of laddering in consumer research goes in the opposite direction: product attributes are elicited as potential means, and the laddering interview tries to uncover related ends.

LADDERING IS A QUALITATIVE INTERVIEW
TECHNIQUE THAT CAN UNCOVER DECISION-
MAKERS' CAUSAL COGNITIVE STRUCTURES
REGARDING THE CAUSES OF SUCCESS WITHIN A
MARKET.

Selection of Respondents

In this study we only interviewed employees in the case company. Potential respondents within the company were initially defined as anybody in frequent contact with the market. The final group of respondents (18 persons) is a mix of staff involved in sales, marketing, top management, and product management/development. The product management/development people are included to counterbalance a potential bias from the sales and marketing people. The president and the vice president are believed to express themselves in more general terms than the rest of the group. Overall, we believe that these are the type of people in the company that have the best insight into prerequisites for business success. They were all

assumed to consider monitoring the market as a natural task in their respective occupations. Consequently, they were also expected to have cognitive categories and associations strong enough to allow for the derivation of causal chains.

Collection of Data

Each interview opened with a general presentation of the purpose of the interview, i.e., elicitation of the respondent's personal views on how to achieve success in the market for seafood-based frozen ready meals—in her/his own words. The mode of interviewing was also explained.

As the respondent had to do the talking, the interviewer's role in the interplay with the respondent was reduced to two tasks: (1) clarifying unclear or ambiguous statements, and (2) guiding the respondent in the translation of causes of success mentioned into terms of skills and resources. The interviewer's task was to probe the respondent's statements and tie loose ends to fully disclose the respondent's ideas about the topic. Anticipating that the fulfilling of these tasks could make the interviewer look immensely naive, the preferred role of the interviewer was explained in the introduction.

To start the interview, the respondent was given the question: "What do *you* think it takes for a seafood company to be successful in the market for seafood-based frozen ready meals?" Quite often it would happen that the respondent couldn't get started right away. We then turned to a second opening question: "Who are your closest competitors and on what factors are they superior?" From the initial question, the respondent was encouraged to talk about—in his/her own words—the *reasons* for success in the market, hence producing causal chains that explain the achievement of success. In this way, it would eventually be disclosed what kinds of skills and resources a company, according to the respondent's view, should possess to be successful in the market. Also subjective meaning structures on how these factors were connected with perceived value and relative costs—and with each other—would be revealed.

The interviews were conducted by one of the authors. Interviews were conducted in Danish or in English depending on whether the respondent was of Danish or British/French/German origin.

Derivation of Causal Maps

From repeated listening to the tape-recorded interviews, maps were drawn illustrating each respondent's perception of how success is best achieved in the market. Con-

cepts mentioned by each respondent and how they were causally related to other concepts were noted. In this way *causal maps* (cf. Huff, 1990) were created, i.e., maps that show how the perceived key success factors are interlinked. The purpose of drawing these maps was to derive a synthesis of the concepts constituting each respondent's perception of causes of success which would provide suitable material for the subsequent coding procedure. Secondly, the map was used as a validation device by sending it to the respondent for comments on our correct understanding of the interview.

FROM REPEATED LISTENING TO THE TAPE-RECORDED INTERVIEWS, MAPS WERE DRAWN ILLUSTRATING EACH RESPONDENT'S PERCEPTION OF HOW SUCCESS IS BEST ACHIEVED IN THE MARKET.

Based on our definition of key success factors, the drawing of each map took point of departure in the two target variables "perceived value" and "relative costs." It was assumed that these two variables mediate any relationship between skills and resources and business performance measures (Day & Wensley, 1988).

The causal maps clearly revealed that a lot of respondents had many concepts in common or mentioned concepts that were almost similar. This is not surprising, as it is assumed that a decision-maker's perception of determinants of success is influenced by—but not necessarily identical with—the actual determinants, so that different decision-makers' perceptions are likely to share common categories. Differences between the maps were particularly evident with regard to the number of concepts and to some extent the complexity of the structures. This is illustrated by the examples of causal maps in Figures 4 and 5. The maps are from three different respondents.

A general characteristic of the maps is that the number of concepts linked to *perceived value*—directly or indirectly—is higher than the number of concepts linked to *relative costs*. This may be a result of the fact that respondents' occupational tasks in a majority of the cases related to marketing functions rather than production, logistics or financial functions. This observation resembles the findings of Lines and Grønhaug (1993), who in a review of antecedents to managers' environmental orientation point to the importance of work experience and intensive exposure to specific tasks and activities as factors influencing decision-makers' thinking or cognitive processes about specific issues. Another plausible explanation

tion is that actors in this specific industry do not compete on cost efficiency any longer. They now all master the factors leading to cost efficiency, i.e., the factors have become basic or core skills and are no longer key success factors explaining a major part of the variance in relative costs.

To check the validity in the process of interpreting verbal data on cognition, it is common to employ multiple coders (see e.g., Boland et al., 1990; Narayanan & Fahey, 1990; Reger, 1990). In our study only one coder undertook the derivation of the causal maps. To check for measurement errors, the maps were sent to the respondents for comments. Only 2 out of the 18 respondents stated slight disagreement with the interpretation and added a few comments.

Aggregation of Causal Maps

The aim of the data collection and analysis is to derive an aggregate, quantitative estimate of the respondents' perceptions of key success factors in the market for seafood-based frozen ready meals.

The first step was to reduce the number of factors in the individual maps to a smaller, more manageable number by a coding procedure. In accordance with the procedures for coding of systematically collected data material as prescribed by Glaser and Strauss (1967), each concept of each map was considered one by one with regard to its similarity with concepts in the other maps. Concepts very similar to each other were grouped into categories, e.g., *efficient product development* was grouped with *systematic product development*, and *excellent in identifying consumer trends* was grouped with *ongoing consumer surveys*. The result of this procedure was approximately 40 homogeneous second-level categories, which still appeared rather fragmented and too differentiated. The coding procedure was therefore repeated four times until it was found that further coding would distort the homogeneity and the meaningfulness of the categories that eventually had emerged.

This procedure resulted in 11 coded *potential key success factors*, which were given names intended to be meaningful, unambiguous, and expressing the contents of the categories that they represent. These potential key success factors are a synthesis of the concepts stated by the respondents to be direct and indirect causes of success in the market. We therefore assume that the "actual" key success factors of the market are to be identified within these 11 factors. That is our reason for calling them *potential key success factors*.

The potential key success factors are presented in Figure 4 together with some second- and third-order causes for each factor that further explain the meaning of each factor. The order in which factors is presented is according to times mentioned.

The list of perceived key success factors is an aggregate of maps from both Germany, France, and the UK. It was hypothesized that there might be differences across the three markets. Not surprisingly, however, market structures, product market experience, and competitors are so similar on the three markets that no real differences could be identified in the causal maps.

The following section presents how we used these 11 key success factors in the company as guiding elements of a management information system. It should be noted that a given set of key success factors should be challenged on a regular basis. This suggests that a company should build up a procedure to revise the set of key success factors at regular intervals. Not many companies tend to allocate the resources necessary for regularly conducting such surveys including secondary external market experts, people in competing companies and others. Also it should be noted, that it will decrease the value of such knowledge if more actors in the market are aware of the key success factors. This points to the value of internally building up a competence in identifying key success factors.

Application of Key Success Factors

Our case company was about to develop market surveillance elements for a management information system. Basically the market surveillance elements were comprised of a consumer, a customer, and a competitor element. The key success factors were initially used in the competitor element.

The **first step** was to draw up a list of the closest competitors. The **second step** was to evaluate these competitors relative to the case company on the key success factors. The evaluation was made by staff from the company. The company was very much aware of the inherent risk of a strong bias, but they regarded the project as a pilot study on the applicability of various market surveillance methods. Competitors were evaluated on a 7-point scale ranging from -3 (much weaker than own company) to +3 (much stronger than own company). Zero signified that the competitor was equally strong (or weak) on that factor. In the example given in Figure 5, six persons from our company claimed sufficient knowledge of the competitor to make the evaluation. Considering other competitors, it was only possible to find two

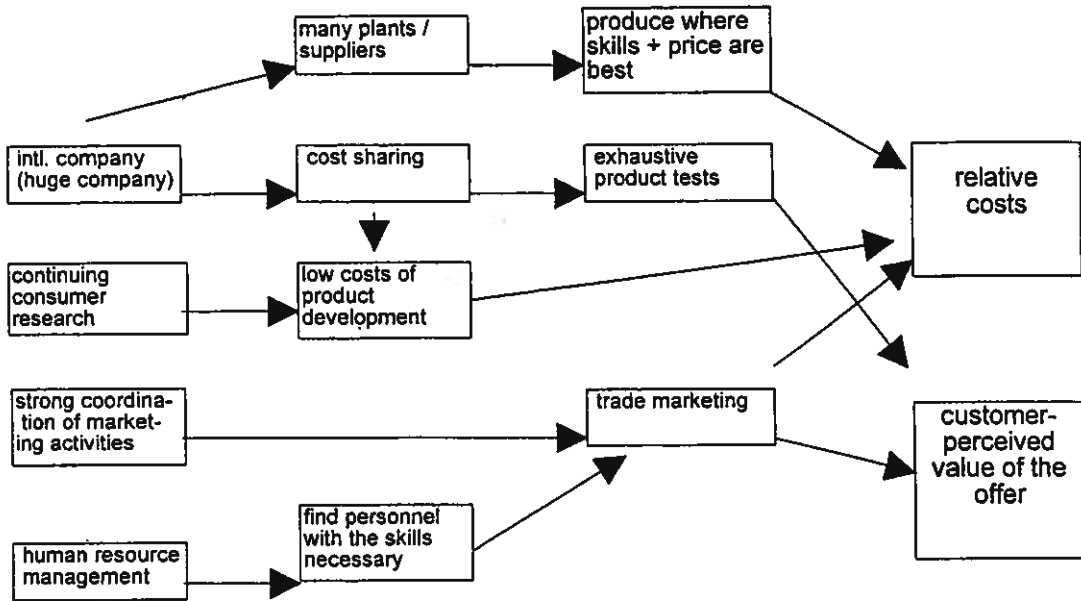


Figure 1.

Causal Map. Seafood-Based Frozen Ready Meals, the French Market. One Respondent.

or three people with adequate knowledge to properly evaluate the competitors in question. This suggests using experts external to the company in future revisions of the instrument.

The **third step** was to calculate simple means of the evaluations. To challenge individual evaluations and create a discussion maximum and minimum evaluations are

also displayed in Figure 5. An interesting outcome of such a discussion was that some of the competitors, at least based on this evaluation on key success factors, appeared not to be competitors worth monitoring at all. Other competitors, however, were perceived to be much stronger than our focus company in the product category of seafood-based frozen ready meals.

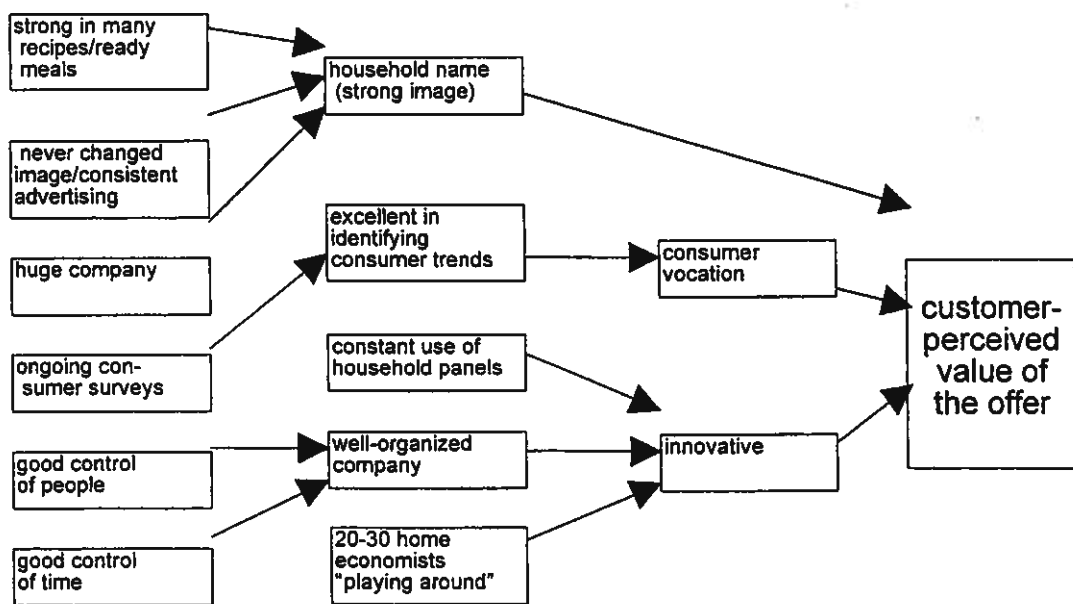


Figure 2.

Causal Map. Seafood-Based Frozen Ready Meals, the UK Market. One Respondent.

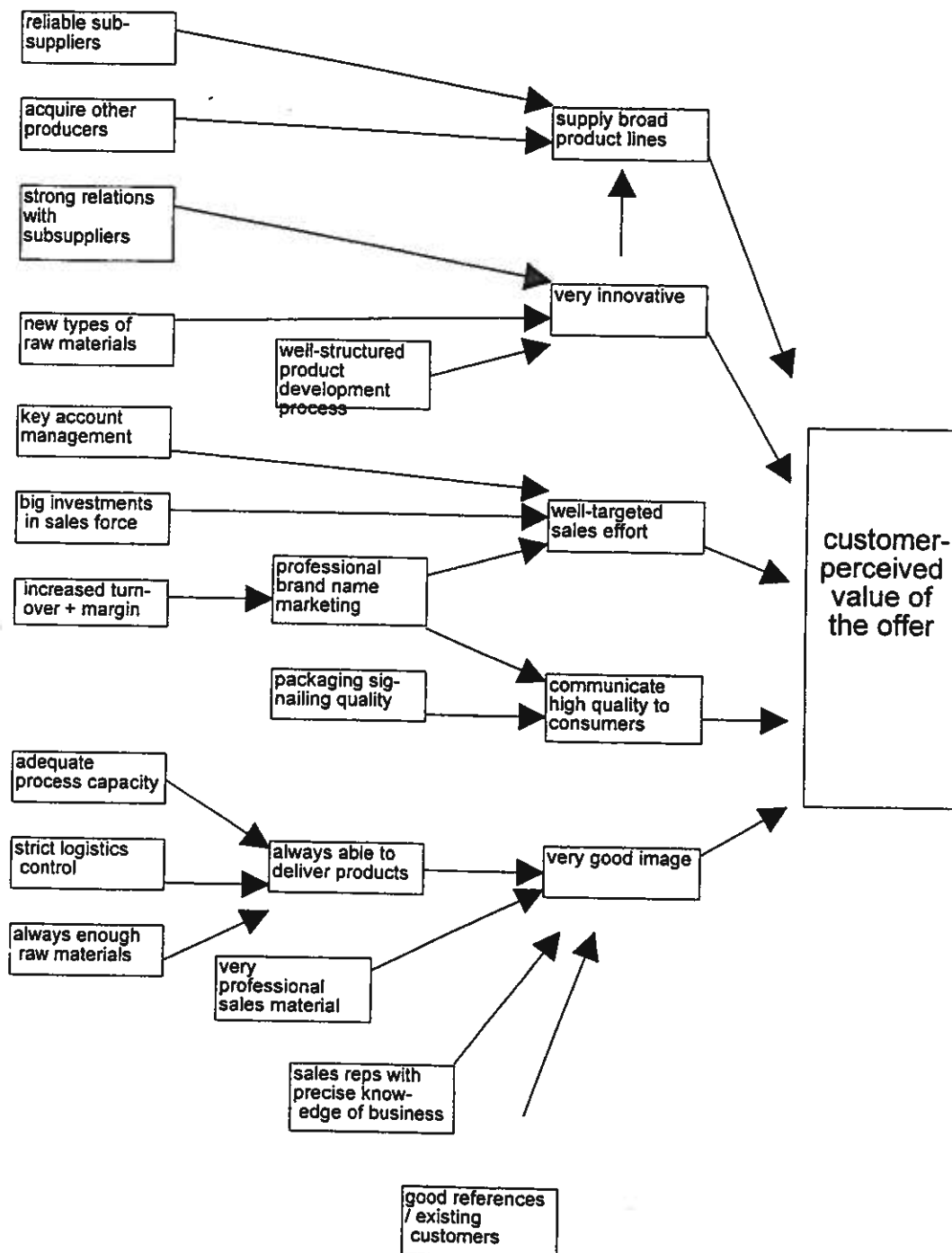


Figure 3.

Causal Map. Seafood-Based Frozen Ready Meals, the German Market. One Respondent.

Step four was to decide on a threshold so that a competitor score higher than the threshold on a key success factor would be used for benchmarking. In the current case we have arbitrarily decided a score of +1 relative to our case company to trigger that decision.

The last step is action. In the example in Figure 5, the competitor in question is quite superior to our company

on several factors. The competitor is perceived especially superior in innovative product development and approved production facilities. In general, the competitor must be regarded a competitor that our company should benchmark itself against. This should now be done by directing more attention to the monitoring of that competitor with most focus on the key success factors in bold.

- 1 – Innovative product development
 - continuous and open-minded dialogue with the customer
 - systematic product development process
 - number of people employed in product development
- 2 – Systematic market analysis
 - surveillance of consumer trends/consumption patterns
 - surveillance of competing/substituting products
- 3 – Knowledge of consumers' quality/taste demands
 - store checks
 - staff of local origin
- 4 – Approved production facilities
 - documented quality control (HACCP)
 - high risk/low risk plants
 - plants equipped according to customer specifications
- 5 – Supply consistent quality (product and packaging)
- 6 – Fast response to changes in consumer/customer demands
 - efficient product development
 - close to the consumer/customer
 - flexible production
- 7 – Respond to changes in supply of raw materials
 - control of access to raw materials
 - long-term contracts with sub-suppliers
- 8 – Image (primarily among consumers)
 - household name
 - continuity in advertising
 - advertising/promotion budgets
 - consistent advertising
 - stick to the same agency
 - stick to the same image
- 9 – Supplier/customer relationship
 - perfect deliveries
 - personal relations
 - sales person
 - mutual exchange of board members
 - high service level
 - sales/marketing close to the customer
 - product development together with the customer
 - key account management
- 10 – Own production
 - own production instead of outsourcing/sub-supply
 - take over other producers
- 11 – Ability to offer competitive prices
 - costs of production
 - wage structure
 - costs of transportation
 - economies of scale
 - process technology
 - long-term contracts with customers/sub-supplier
 - stability in production
 - secure raw materials

Figure 4.

Perceived Key Success Factors in the Market for Seafood-Based Frozen Ready Meals.

Our company's competitor intelligence included special tasks, for instance, to detect how competitors develop new products. Some inspiration for where to look can be found in the key success factor list. We may already suspect that the competitor is in continuous and open-minded dialogue with their customers, to have a systematic product development process and to have a large product development department. Good competitor intelligence may gather more details as to how better practices can be developed in our company or how resources can be allocated more efficiently.

A very important part of the evaluation process is comments given by the respondents. As part of the evalu-

ation process, respondents are requested to briefly state why they consider a competitor to be superior. This is very valuable information, once it is decided to go ahead with further inquiries about that competitor. Comments to the evaluation presented in Figure 5 are presented below in Table 1.

Final Remarks and Implications

In this study, we have assessed which skills and resources decision-makers in a seafood processing company perceive as decisive for attaining high customer-perceived value and/or low relative costs in three of their geographic markets. In other words, we have attempted to assess their perceived key success factors.

Evaluated on a -3 to +3 scale		
	average	min/max
1) Innovative product development	+1.9	0 / +3
2) Systematic market analysis	+1.3	0 / +2
3) Knowledge of consumers' quality/taste demands	+1.4	0 / +2
4) Approved production facilities	+2.0	+1 / +3
5) Supply consistent quality	+1.4	-1 / +2
6) Fast response to changes in customer/consumer demands	+1.3	0 / +2
7) Respond to changes in supply of raw materials	+0.3	-1 / +1
8) Image (primarily among consumers)	+0.5	0 / +1
9) Supplier/customer relationship	+1.4	0 / +2
10) Own production	+1.2	0 / +2
11) Ability to offer competitive prices	+0.2	0 / +1

Figure 5.

One Competitor's Position Relative to Case Company.

As for researching perceived key success factors, our study confirms the experience from other studies on organizational and managerial cognition: that it is no problem for decision-makers to relate their perceptions about causal relations in detailed interviews. In addition, we have shown that a reverse laddering interview is well suited to uncover managers' perceptions of causes of success.

Table 1. *Possible Explanations for the Competitor's Superior Position*

1. Competitor has close relationship with Marks & Spencer (M & S): joint product development. Spillover from mother company.
2. Competitor uses AGB market data.
3. Competitor has many years' experience, support by Marks & Spencer.
4. Production facilities are developed according to customer (M & S) specifications.
5. Competitor has an excellent industry-wide reputation.
6. Competitor has UK production unit working with M & S plus others, experience
7. Competitor is private-label supplier to M & S/ Tesco. These labels are well-perceived by consumers.
8. Competitor seems to have lost some products/ customers (negative).

A REVERSE LADDERING INTERVIEW IS WELL SUITED TO UNCOVER MANAGERS' PERCEPTIONS OF CAUSES OF SUCCESS.

Finally, we have shown how key success factors are practically applicable in guiding competitor intelligence. This builds on an evaluation of competitors' positions relative to one's own company on the derived key success factors. In cases where a competitor is far superior to oneself, this should trigger a more focused competitor intelligence to reveal best practices. In that way the same competitor evaluation serves as the basis for benchmarking on the key success factors.

Due to limited resources in the study and the scope of it, we were prevented from consulting market experts external to the company. It is, of course, recommendable to let people both from inside and outside a company evaluate competitors relative to one's own company.

Our experience with employing key success factors in the way presented is positive. The people that we worked with appreciated the approach and found that they got a much more precise and focused view on the market, on their competitors, and on themselves.

References

- Barnes, J.H., Jr. (1984) "Cognitive Biases and Their Impact on Strategic Planning,." *Strategic Management Journal*, 5:129-137.
- Boland, R.J., Greenberg, R.H., Park, S.H., & Han, I. (1990)

- "Mapping the Process of Problem Reformulation: Implications for Understanding Strategic Thought." In *Mapping Strategic Thought*, edited by A.S. Huff, 195-226. Chichester: Wiley.
- Boynton, A.C. and Zmud, R.W. (1984) "An Assessment of Critical Success Factors," *Sloan Management Review*, 25(3):17-27.
- Bullen, C.V. and Rockart, J.F. (1981) *A Primer on Critical Success Factors*. Cambridge, MA: Center for Information Systems Research, MIT.
- Chakravarti, D. and Staelin, R. (1981) "Judgement-Based Marketing Decision Models: Problems and Possible Solutions," *Journal of Marketing*, 45(4):13-23.
- Cossette, P. and Audet, M. (1992) "Mapping of an idiosyncratic schema," *Journal of Management Studies*, 29:325-347.
- Day, G.S. and Wensley, R. (1988) "Assessing Advantage: A Framework for Diagnosing Competitive Superiority," *Journal of Marketing*, 52(2):1-20.
- Ferguson, C.R. and Dickinson, R. (1982) "Critical Success Factors for Directors in the Eighties," *Business Horizons*, (3):14-20.
- Fiol, C.M. and Huff, A.S. (1992) "Maps for Managers: Where Are We? Where Do We Go From Here?," *Journal of Management Studies*, 29:267-285.
- Glaser, B.G. and Strauss, A.L. (1967) *The Discovery of Grounded Theory*, Chicago: Aldine.
- Grunert, K.G. (1994) "Cognition and Economic Psychology." In *Essays in Economic Psychology* edited by H. Brandstätter and W. Güth, 91-108. Berlin: Springer.
- Grunert, K.G. and Ellegaard, C. (1993) "The Concept of Key Success Factors: Theory and Method," In *Perspectives on Marketing Management*, vol. 3, edited by M. J. Baker, 245-274. Chichester: Wiley.
- Grunert, K.G. and Grunert, S.C. (1995) "Measuring Subjective Meaning Structures by the Laddering Method: Theoretical Considerations and Methodological Problems," *International Journal of Research in Marketing*, 12: 209-225.
- Gutman, J. (1991) "Exploring the Nature of Linkages Between Consequences and Values," *Journal of Business Research*, 22(2):143-149.
- Hofer, C.W. and Schendel, D. (1978) *Strategy Formulation: Analytical Concepts*. St. Paul, MI: West Publishing.
- Hogarth, R.M. and Makridakis, S. (1981) "Forecasting and Planning: An Evaluation." *Management Science*, 27:115-13, 8.
- Huff, A.S. (1990). "Mapping Strategic Thought." In *Mapping Strategic Thought*, edited by A.S. Huff, 11-50. Chichester: Wiley.
- Leidecker, J.K. and Bruno, A.V. (1984) "Identifying and Using Critical Success Factors," *Long Range Planning*, 17(1):23-32.
- Lines, R. and Grønhaug, K. (1993) "Environmental Orientation of Managers: The Construct, Its Antecedents and Consequences." Paper presented at the Workshop on Managerial and Organisational Cognition, Brussels, European Institute for Advanced Studies in Management.
- Mintzberg, H. (1990) "Strategy Formation: Schools of Thought." In *Perspectives on strategic management*, edited by J. V. Fredrickson, 105-236. Grand Rapids: Harper.
- Munro, M.C. and Wheeler, B.R. (1980) "Planning, Critical Success Factors, and Management's Information Requirements," *MIS Quarterly*, 4(4):27-38.
- Narayanan, V.K. and Fahey, L. (1990) "Evolution of Revealed Causal Maps During Decline: A Case Study of Admiral." In *Mapping strategic thought*, edited by A. S. Huff, 109-134. Chichester: Wiley.
- Ohmae, K. (1982) *The Mind of the Strategist*. New York: McGraw-Hill.
- Porter, M. (1980) *Competitive Strategy*. New York: Free Press.
- Reger, R. K. (1990) "Managerial Thought Structures and Competitive Positioning." In *Mapping Strategic Thought*, edited by A.S. Huff, 71-88. Chichester: Wiley.
- Reynolds, T.J. and Gutman, J. (1988) "Laddering Theory, Methods, Analysis, and Interpretation," *Journal of Advertising Research*, 29(2):11-31.
- Rockart, J.F. (March-April 1979) "Chief Executives Define Their Own Data Needs." *Harvard Business Review*.
- Sørensen, E. and Grunert, K.G. (1996) *Perceived and Actual Success Factors: A Study of the Yoghurt Market in Denmark, Germany and the United Kingdom*. The Aarhus School of Business Aarhus. MAPP Working Paper no. 40.
- Sousa de Vasconcellos e Sá, J. A. and Hambrick, D. C. (1997) "Key Success Factors: Test of a General Theory in the Industrial Product Sector," *Strategic Management Journal*, 10:367-382.

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