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Market opportunity model

helping Vodafone see and act on their periphery

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I   Abstract

The mobile telecommunications market is under much pressure, the market is saturated and margins are under pressure due to a number of reasons. Therefore, Vodafone is looking for opportunities outside of its direct focus area. The question is how? This graduation assignment investigates current market orientation and peripheral vision capabilities of Vodafone and designs a model combining the two theories in order to timely identify and act on off-radar market opportunities.

II Preface

This thesis is written to report my final graduation project for the completion of my Masters course in Industrial Engineering and Management Science at the Eindhoven University of Technology. My period at Vodafone has been a very interesting and inspiring period for me. Not only did it provide me with a practical and theoretical experience, I also got to work first hand on the integration of the two.

I would like to begin thanking my company mentors Melika and Willem who besides having invested much time into myself and my graduation project have helped me greatly with their practical and theoretical experience. Furthermore, I would like to thank all the members of the Strategy Team for the unforgettable experience at Vodafone.

I would also like to thank my University mentors: Ad, who has helped me greatly write this report and has suggested many improvements regarding theoretical aspects, practical aspects as well pushing me to write as good as possible, and Joost, who has given me good critique during the few times we spoke which proved to be of great use to further improve my report.

Last but not least thanking I would like to thank Esther for her patience and advice which has helped greatly improve the quality of the report. And I want to thank you for reading this report and in doing so ensuring the continuity of my work.

Mark Verdegaal, Maastricht 2007

III   Executive summary

This study has been executed for Vodafone Libertel N.V. Vodafone is one of The Netherlands' largest mobile telecommunication companies and is part of the worldwide Vodafone Group: the world's largest mobile community with more than 200 million proportionate customers in five continents, equity interests in 26 countries and Partner Networks in a further 34 countries.

Vodafone is faced with market saturation, there are more mobile phones circulating than there are people living in the Netherlands. Furthermore, Vodafone is faced with increasingly lower margins due to fierce competition, little differentiation, and strict regulation. Because of the lack of growth perspective in mobile telecom, Vodafone is shifting its strategy from a focus on mobile telecommunications to telecommunications in general. The main challenge Vodafone faces now is to identify and act on market opportunities outside its direct focus area.

Anticipating (latent) customer needs can be achieved by adopting a market orientation. Market orientation is conceptualised in marketing literature as a set of cultural values and three nonlinear processes (information generation, dissemination, and responsiveness) within an organisation focussed on maximising customer value, through careful investigation of (latent) customer needs and competitors (Kohli, Jaworski 1990 Narver, Slater 1990). However, market orientation theory lacks the broad scope beyond customer needs, and current competitors needed by Vodafone to ensure profitable growth *outside* of its focus area.

Day and Schoemaker (2005) have introduced a new theory with a broader scope relative to market orientation called peripheral vision. The theory of peripheral vision

differs from market orientation in that it focuses on spotting and understanding information from outside a company's direct focus area called the periphery.

Vodafone should therefore adopt a market orientation with a peripheral focus, and in doing so become a vigilant organisation capable of discovering (latent) customer needs outside its direct focus area. Being vigilant as an organisation is defined as following closely what happens in the market, so trends can be discovered and understood early on when there is still time to react (Day, Schoemaker 2005). The combination of the theories of market orientation and peripheral vision could provide the means to identify and act on strategic market opportunities. However, since the theory of peripheral vision is still very new, not much is yet known about it.

Therefore, the objective of this thesis is to construct a design for Vodafone to discover and capitalise on (latent) market needs outside Vodafone's direct focus area, taking into consideration the characteristics of Vodafone not only as a large Dutch enterprise but also as a part of Vodafone Group. This thesis expands current marketing literature by integrating market orientation with peripheral vision for the first time. The research question of this thesis can be expressed as follows:

"***How can peripheral vision be used to design a market orientation model for Vodafone that takes optimal advantage of market opportunities outside its direct focus area.***"

Both current market orientation and peripheral vision at Vodafone were investigated. Market orientation scored 4.3 out of 7, which is not a high score for an organisation trying to be market oriented. Especially responsiveness scored really low with 3.8. Peripheral vision was concluded to have a need for peripheral vision of 4.40 (out of 7) with a current capability for peripheral vision of 2.75. Therefore, it can be concluded that

Vodafone lacks the peripheral vision skills it needs. With regard to peripheral vision, especially leadership orientation (2.8), strategy making (2.5) and organisational configuration (2.3) need improvement. Top management must emphasize the importance of peripheral vision and enable and support the development of the much needed improvements in strategy making and organisational configuration, which received the lowest scores.

The final design is a process and tool, programmed in Microsoft Excel, where managers throughout the organisation are stimulated to collect peripheral opportunities from whatever source they have access to, but especially from innovative employees, using the developed assessment tool. These opportunities are then discussed on a quarterly basis by the participating managers. Opportunities which receive a go decision are presented to the board which decides how to proceed.

The market opportunity model addresses the weak points, identified through the investigations as it stimulates responsiveness and shows leadership commitment to peripheral opportunities which on turn enables the process to fit in the organisation and widens the focus of strategy making.

Finally, the most important recommendations can be summarised as follows:
Use the momentum of the upcoming re-organisation of Vodafone to start a cultural change programme in which team work (information dissemination, internal and external customer delight, removing silos), accountability and empowerment (responsiveness) play a central role. The top management plays a crucial role in being a role model for the rest of the organisation. Vodafone needs to change into a challenger which is willing to

take risks to reach its objective to become the number one mobile operator in the Netherlands and expand into new, currently peripheral, areas.

Make the change in strategy more explicit in the organisation. Currently there is still too much focus on fixing the basics in mobile telecommunications rather than funding the future in telecommunications in general. Focus must shift from fixing the basics to funding the future, viewing one euro cost savings as a better result on EBITDA than one euro extra revenue is true only for the short term, in the long term the extra revenue streams may grow and cost reductions may finally lead to less revenue and therefore less EBITDA. Top management must eliminate barriers inhibiting ideas from outside Vodafone its focal area to come to the attention of the organisation.

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Chapter 1   Profile of Vodafone Libertel N.V.

This chapter begins with a brief introduction of the company Vodafone. Then the telecom market will be discussed briefly. Furthermore, the product portfolio, current strategy and Vodafone's customer segmentation will be discussed.

1.1   Vodafone Group

Vodafone is one of The Netherlands largest mobile telecommunication companies and is part of the worldwide Vodafone Group: the world's largest mobile community with more than 187 million proportionate[1] customers in five continents, equity interests in 27 countries and Partner Networks in a further 33 countries.

The name Vodafone comes from **Vo**ice **da**ta **phone** [fone], chosen by the company to reflect the provision of voice and data services over mobile phones. Vodafone was a division of Racal Electronics plc in the early eighties in the U.K. Then known as Racal Telecom, in 1982 the company won a tender to build and run the second U.K. cellular telephone network. This was launched as Vodafone on 1 January 1985. By the early nineties Vodafone Group was taking over other telecom operators all over the world. This project has been executed for Vodafone Netherlands: Vodafone Libertel N.V.

1.2   Vodafone Libertel N.V.

Libertel was launched in 1995 as the first competitor of PTT telecom, nowadays known as KPN. Vodafone Group has been the largest shareholder of Libertel N.V. ever since it was listed on the stock market in 1999. Vodafone Group has been increasing its share in Libertel from that moment on. In January 2002 the brand name Libertel was

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[1] Vodafone owns 3% of China mobile and therefore 3% of their customers are counted as Vodafone base.

officially changed into Vodafone, it was however not until the end of 2006 that Vodafone Group obtained 100% of the shares of Vodafone Libertel N.V.

Vodafone, based in Maastricht, has more than 3000 (2600 Full Time Employees) passionate and enthusiastic employees. Red, Rock Solid and Restless are the pillars of the internal culture of Vodafone, reflecting passion, reliability and ever challenging.

1.3 Market characteristics

Vodafone operates in a business-to-consumer and business-to-business market consisting of very diverse customers. The business-to-consumer market accounts for roughly 2/3 of the revenue of Vodafone and business-to-business for the remaining 1/3.

Vodafone can be categorised as a **Mobile Network Operator** (MNO). A MNO is a wireless service provider which owns both a licensed frequency spectrum and the accompanying wireless network. Historically Vodafone has two types of competitors: MNOs and **Mobile Virtual Network Operators** (MVNOs). As far as the customer is concerned, MVNOs seem identical to MNOs. The critical difference is that MVNOs do not own a licensed frequency spectrum or the wireless network, but resell wireless services under their own brand name, using the network of a MNO. Therefore, MVNOs are competitors of MNOs but also add value, especially when they target customers which the MNO cannot target itself. MNOs are typically large incumbents whereas MVNOs typically are lean marketing based enterprises.

Authors (e.g. Day, Schoemaker 2005) often refer to the telecommunications market as a good example of extremely dynamic and competitive markets. Following this expectation the mobile telecom market is extremely competitive. However, it has not yet become as dynamic as the older telecommunications industries such as for example

television and fixed telephony. This is reflected by the fact that Vodafone is a technology-driven company. The mobile telecom market did initially not require a "genuine" market orientation with a focus on identifying (latent) customer needs, as the increasing request for mobile phones and services could barely be fulfilled. In Chapter 2 the developments of the mobile telecom market will be discussed in more detail.

1.4   Product characteristics and portfolio

Vodafone's products can be categorised as services (Kotler, 2000), as the connectivity service Vodafone offers has the characteristics of being intangible, perishable, variable, and personal. As a direct result this service requires quality control, supplier credibility, and continuous availability (Kotler, 2000). In order to sell these services to customers Vodafone (as well as other telecom operators) subsidises (part of) the durable goods needed by customers to use this service (e.g. mobile phone). The durable goods are typically re-sold under their original brand name (e.g. Nokia, Siemens).

Vodafone's service can be split in two areas: voice and data. Voice stands for the "normal" live connection between two persons or a person and an automated answering machine. Data services include all connectivity services besides voice and can vary from text messages to mobile TV. Currently the relation of Voice versus Data services in terms of revenue is roughly 90% versus 10%. Data however is steadily rising every year.

1.5   Marketing strategy

Vodafone's current marketing strategy can be categorised according to the model provided by Porter (1985) who built a model to cluster strategic categories as shown in Figure 1:

1. **Overall cost leadership**: Maximising operational excellence in order to outperform your competitors and deliver at lower cost.

2. **Differentiation**: Maximising generic customer value, so large parts of the market can be served well.

3. **Focus**: Fine tuning products and services to create the most possible customer value for specific market segments, focus can be split to differentiation and cost.

Figure 1.1: Generic competitive strategies
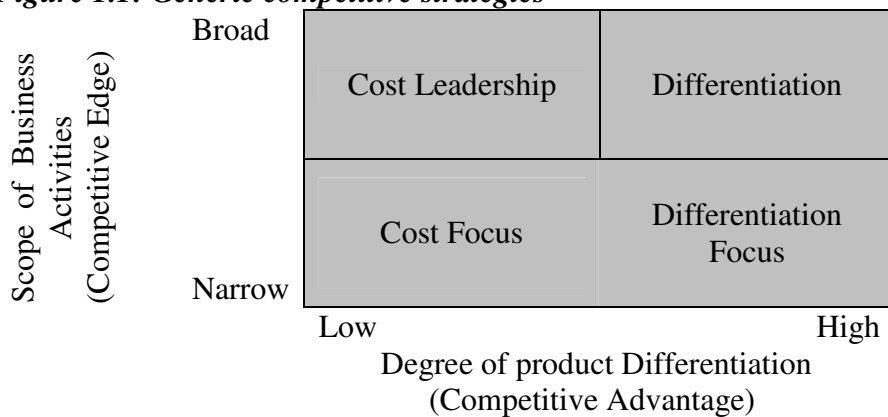
Source: Porter (1985)

In terms of Porter (1985) the current strategy fits best in the Differentiation quadrant. The strategy of Vodafone is to offer good value for money on commodity products, which does not mean cheap, and to differentiate itself through ease of use and high quality (extra) services. The strategy thus is to provide differentiated services which provide extra revenue. One if not the most important success factor of the differentiation strategy is that one must be able to provide a superior product, compared to the competitor, to the customer. However, Vodafone currently struggles greatly to differentiate from her competitors since mobile telephony has become somewhat of a commodity product offering little possibility for differentiation (Jupiter Research 2007).

To maintain a differentiated product portfolio and a good value for money perception of the customer Vodafone has to provide commodity products in a very efficient manner and has to be very effective in responding timely to market developments. If Vodafone is not able to respond timely to market changes they will not be able to maintain a differentiated product portfolio and thus loose their competitive edge. To be able to respond timely to the market Vodafone has to be market oriented to timely sniff out threats and opportunities in the form of market needs (Kotler, 2000).

Vodafone has started identifying customer niches in order to supply these with products that make sense for the segment, in accordance with the theory of Kotler (2000) of segmentation, targeting and positioning. Some segments already receive specific offers ranging from cost differences for bulk users to business-to-business specific products such as the blackberry, a mobile phone which is enabled to send and receive emails. Vodafone is internally structured into two business units: Consumer and Enterprise.

The most important segmentation between consumers is between pre- and post-paid consumers. Pre-paid customers are customers who purchase credit for their mobile phone. Post-paid customers have one or two year subscriptions and are billed after usage of services every month for the contracted sum plus extra usage. Within these two classes, customers can be further segmented into lifestyle groups, to customer value (High, Middle and Low) and calling behaviour.

Business customers are segmented to company size and type of industry. Company size has three main categories: large corporate accounts with more then 250 employees, Small and medium enterprise (SME) with between 10 and 250 employees and Small office/ Home office (SOHO) with less than 10 employees. Vodafone has identified four

major industry types (Government, Services, Retail/Tourism and Manufacturing/Trades) which can be further split up if the need occurs. This segmentation enables Vodafone to predict which services may be interesting for a customer which provides more value to the customer.

Chapter 2   Introduction to the research question

Vodafone Libertel NV (Vodafone) is a large enterprise which supplies millions of customers with mobile telecom services and resells the physical products, mostly mobile phones, needed to use these services. The mobile telecom market is characterised by a number of developments which threaten Vodafone's profitability, which can be summarised as:

- o Lack of market growth due to market saturation.
- o Lower margins due to (1) fierce competition, (2) little differentiation and (3) strict regulation.

To begin with, there is a lack of market growth caused by market saturation, there are more mobile phones circulating than there are people living in the Netherlands (Netsize 2007). In addition, MNOs are beset with excess capacity as they have invested too early into next generation networks and licenses which therefore remain largely unused (Telecompaper 2007a).

In addition, lower margins are caused by three developments which, in turn, contain multiple aspects. To begin with, there is enormous competitive rivalry among operators. Competition is fuelled by more than 40 mobile brands competing mostly on price (Telecompaper 2007b), the market is being swamped with new replacement technologies which threaten the current business model of both MNOs and MVNOs (Deloitte 2007, Jupiter Research 2006), and convergence of the mobile market with other telecom markets (Netsize 2007). To illustrate this, Television, Internet Access, Fixed and Mobile Telephony are being offered increasingly as one package. The bargaining power of the

sales channels has become very strong due to this fierce competition (Vodafone 2006). Especially three key retailers have a dominant market position, which they use in negotiating high commissions from the remaining MNOs. The Channels are only focused on volume and not on quality leading to a focus on price and not differentiation.

Secondly, from the customers' perspective the current mobile market has become a confusing jungle of different brands where competitors offer very similar commodity products with little differentiation (Jupiter Research 2007), resulting in little brand preference which leaves price as the only possible differentiator.

Thirdly, the telecom market is being regulated more and more (EU 2007, OPTA 2007), with the regulator *(Onafhankelijke Post en Telecommunicatie Autoriteit)* actively lowering mobile tariffs in a number of ways, both directly by lowering wholesale call termination costs between operators and indirectly by requiring operators to grant wholesale access to their networks, thereby stimulating competition.

In response to the many market developments threatening Vodafone's profitability and growth prospects Vodafone is broadening its market scope from mobile telecommunications only, to telecommunications in general, in order to ensure profitable growth. Vodafone's current marketing strategy is mainly based on differentiation from other competitors through high quality mobile services. The differentiation strategy as defined by Porter (1985) is based on maximising generic customer value to serve large parts of the market. Enterprises pursuing this strategy must be good at anticipating and acting on customers' (latent) needs in order to stay successful at maximising generic customer value (Porter, 1985 Kotler, 2000).

However, Vodafone has problems in effectively dealing with signals from *outside* its focus area of mobile telecommunication, as it uses a loosely structured ad-hoc method resulting in missed opportunities *outside* of its focus area. While competitors like KPN have been successful in capitalising on opportunities, such as actively pursuing business with MVNOs as resellers of network capacity and improving the efficiency and effectiveness of the Health care industry through additional telecom services (e.g. mobile sensors, electronic information exchange). In contrast, Vodafone is currently missing out on strategic opportunities because it is not sufficiently monitoring and acting on market developments *outside* of its direct focus area since it has no structured processes in order to do so. Therefore, Vodafone must still develop the capabilities needed for this strategy.

Anticipating (latent) customer needs can be achieved by adopting a market orientation. Market orientation is conceptualised in marketing literature as a set of cultural values and three nonlinear processes (information generation, dissemination, and responsiveness) within an organisation focussed on maximising customer value, through careful investigation of (latent) customer needs and competitors (Kohli, Jaworski 1990 Narver, Slater 1990). Market orientation theory, however, lacks the broad scope beyond customer needs and current competitors needed by Vodafone to ensure profitable growth *outside* of its focus area.

Day and Schoemaker (2005) introduced a new theory with a broader scope relative to market orientation called peripheral vision. The theory of peripheral vision differs from market orientation in that it focuses on spotting and understanding information from outside a company's direct focus area called the periphery. The periphery has become important for Vodafone since no growth is expected in Vodafone's focus area, mobile

telecom and the periphery holds threats as well as opportunities for Vodafone which link to mobile telecom.

Vodafone should therefore adopt a market orientation with a peripheral focus, and in doing so become a vigilant organisation capable of discovering (latent) customer needs outside its direct focus area. Being vigilant as an organisation is defined as following closely what happens in the market so trends can be discovered and understood early on when there is still time to react (Day, Schoemaker 2005). The combination of the theories market orientation and peripheral vision could provide the means to identify and act on strategic market opportunities. However, since the theory of peripheral vision is still very new not much is yet known about it.

Therefore, the objective of this thesis is to construct a design for Vodafone to discover and capitalise on (latent) market needs outside Vodafone's direct focus area, something which Vodafone currently cannot. The design must take the characteristics of Vodafone not only as a large Dutch enterprise but also as part of Vodafone Group into consideration. This thesis expands current marketing literature by integrating market orientation with peripheral vision for the first time. The research question of this thesis can be expressed as follows:

"*How can peripheral vision be used to design a market orientation model for Vodafone that takes optimal advantage of market opportunities outside its direct focus area.*"
With the supporting sub questions:

1. What is market orientation and its related theories?

2. What is peripheral vision and how does it relate to market orientation?

3. How well does Vodafone currently scan the market from a market orientation and a peripheral vision perspective?

4. How well should Vodafone scan the market, given its new strategy and market environment?

5. What model, given the results of the research, integrating peripheral vision with market orientation, would be suitable for Vodafone?

6. How can this model be implemented, validated and improved?

The first 2 sub questions are of theoretical nature. These questions will be answered in general. This graduation assignment therefore has a theoretical point of departure. The last 4 questions are research and design oriented and will be answered for the specific situation of Vodafone.

In Chapter 3 market orientation theory will be described and commented on in combination with its underlying theories of organisational learning and opportunity identification which some authors such as Deshpande and Webster (1989) refer to as *entrepreneurial culture* as they approach market orientation from a cultural perspective. Chapter 4 explains in detail what peripheral vision is and how it adds value to market orientation. Chapter 5 analyses market orientation at Vodafone. In Chapter 6 the current need and capabilities for peripheral vision will be captured and discussed. These findings will be integrated into the most useful theoretical model in Chapter 7. After which implementation and validation will be discussed in Chapter 8. Finally, conclusions regarding Vodafone, and theoretical contribution and recommendations for further research can be found in Chapter 9.

Chapter 3   Market Orientation

To begin with, this chapter will describe market orientation. Secondly limitations of market orientation will be discussed. Finally theories supporting market orientation, organisational learning and opportunity identification, will be discussed in this chapter as they are all related and have already been linked together in existing literature.

3.1   To be or not to be market oriented

Getting closer to the market basically means getting closer to customers, gaining deeper insights into segments and breaking away from product orientation (Day 2006). The extent to which managers should attempt to transform their organisations toward customers depends on the force of the strategy and on the facilitating and countervailing pressures they need to balance. The strategic facilitating forces and countervailing pressures are listed in Figure 3.1. Many organisations cannot and should not aim for complete organisational alignment with their markets. Organisational alignment is defined as the extend to which an organisation is organised around customer groups (Day 2006).

Figure 3.1: The balance of facilitating and countervailing pressures in aligning an organisation with the market.

Facilitating Forces	Countervailing pressures
Strategic emphasis on relational value	Lack of segment sales/profit data
Need for clearer accountability for customers	Cost
Recognition of lack of sharing of market information	Tolerance for complexity
Dissatisfaction with marketing productivity	Legacy effects (inertia/organisational resistance)
Pressure from large customers	Homogeneity of customer base

Source: (Day 2006)

Wong and Ellis (2007) link market orientation to the product life cycle and conclude that having a market orientation is more appreciated in the growth and maturity phases than in the introduction and decline phase.

3.2 Market orientation

The foundations of market orientation as we know it now were laid by Kohli and Jaworski (1990) and Narver and Slater (1990) which have agreed on the following definition:

Market orientation is the organisation wide generation of market intelligence pertaining to current and future customer needs, dissemination of the intelligence across departments, and organisation wide responsiveness to it. (Kohli, Jaworski 1990, pg 331)

Narver and Slater (1990) have concluded that market orientation is viable in every market environment. They have stated that having a market orientation will always improve the company's performance and that it is not a question whether but rather to what extent a company should be market oriented to optimally take advantage of the company's current and expected market environment.

Being market oriented has three main components: Intelligence Generation, Dissemination and Responsiveness. Although being market oriented clearly consists of these three components it has been argued that to take maximum benefit, it is more important to consider market orientation as a set of

Figure 3.2: Market orientation values
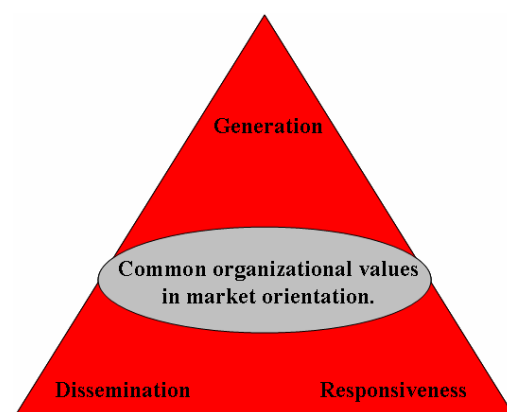
common values rather than a structured linear process (Slater, Narver 1995, Day 2005). With linear process is referred to different stages simply following each other rather than constantly reinforcing each other. Gebhardt, Carpenter, and Sherry (2006) confirm this conclusion by concluding that cultural values are the necessary foundation for the changes that are necessary to obtain market-oriented behaviours and a strong organisational culture.

3.2.1 Intelligence Generation

The first main component of market orientation concerns intelligence generation. Intelligence generation, as described here, is related to the gathering of information linked to customer needs, wants and preferences, both short- and long-term, and includes the monitoring and analysis of external factors impacting the firm. (Kohli, Jaworski 1990)

The essence of intelligence generation not only pertains to obtaining customer opinions but also to careful analysis and subsequent interpretation of the forces that impinge on customer needs and preferences (Kohli, Jaworski 1990).

Jaworski, Macinnis and Kohli (2002) have identified three stages of intelligence generation (shown in Figure 3.3) in organisations: (1) organising for competitive intelligence, (2) searching for information, and (3) sense-making.

Figure 3.3: Stages in generating competitive intelligence
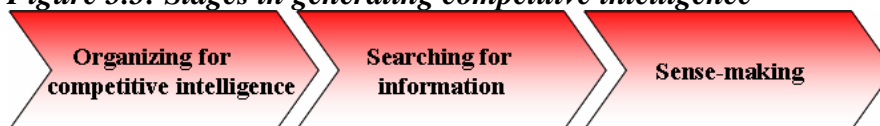
3.2.2 Intelligence Dissemination

The second aspect of market orientation concerns intelligence dissemination through the organisation. The goal of being market oriented is to provide value to your customers. In order to do so, an organisation must be able to spread its competitive intelligence through the organisation. However, market intelligence should not only be disseminated by the marketing department, responding effectively to a market need requires the participation of virtually all departments in an organisation. Intelligence must flow in different directions depending on where it has been generated. For an organisation to adapt to market needs, market intelligence must be communicated, disseminated, and even be sold to relevant departments and individuals in the organisation. (Kohli, Jaworski 1990)

Effective dissemination of market intelligence is crucial because it provides a shared basis from which resolute actions by different departments can be undertaken to the greater benefit of the company and its customers. A formal intelligence dissemination procedure is, therefore, obviously important, but informal "hall talk" is an extremely powerful way of communication as well (Kohli, Jaworski 1990).

3.2.3 Responsiveness

The final aspect of market orientation concerns responsiveness to market intelligence, responsiveness deals with the manner in which organisations act on the intelligence they have produced and disseminated through their organisation. In other words, how organisations create opportunities from their competitive intelligence. If the organisation is not able to do this very little is accomplished (Kohli, Jaworski 1990).

Responsiveness consists of (1) selecting target markets, (2) designing and offering products/services designed to match their current and anticipated needs, and (3) producing, distributing, and promoting the product/service in a matter which provokes the end customer to purchase the product/service. Virtually all departments, not just marketing, participate in responding to market trends in a market oriented company (Kohli, Jaworski 1990). In general, responsiveness should enhance growth and renewal opportunities by stimulating, capturing, and acting upon new ideas to fulfil (latent) customer needs. The process should be customised and standardised to fit the needs and other processes of the business. (Day, 2006)

3.3 Antecedents and Consequences of market orientation

The model of market orientation developed by Jaworski and Kohli (1993) (as shown in Figure 3.4) illustrates the inputs or antecedents needed for a market orientation and the outputs or consequences generated from a market orientation.

Figure 3.4: Antecedents and consequences of market orientation
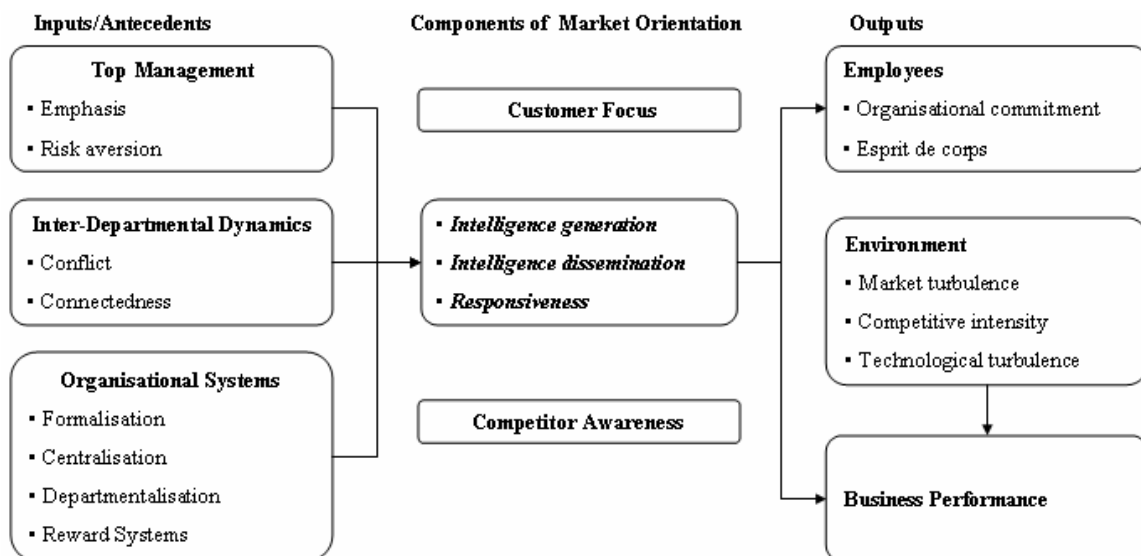
Source: Jaworski, Kohli (1993)

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Jaworski and Kohli (1993) identified three main areas of antecedents (as shown in Figure 3.4) which include Top Management, Inter-Departmental Dynamics and Organisational Systems. These antecedents can have either positive or negative effects on market orientation depending on the organisation. The authors, much like Narver and Slater (1990), also identified a positive effect of good market orientation on business performance and employees regardless of the environment in which the organisation operates. The authors therefore conclude that managers should strive to improve the market orientation of their businesses in their efforts to attain higher business performance. The model can be filled in for organisations in order to investigate if the necessary antecedents for market orientation are present.

3.4 Market orientation in service versus manufacturing firms

It is widely recognised that being market oriented has a very positive result on overall business performance. However, it has been shown (Kirca, Jayachandran and Bearden 2005) that the effect is more positive for manufacturing firms than for service firms. The reason for this difference is that market orientation focuses on meeting customer needs, which requires more effort for services than in products. Because the fulfilment of customer needs involves a higher degree of customisation in service firms than in manufacturing firms. The relatively higher levels of customisation that service firms must use to implement market orientation imply the need to target smaller customer segments with similar services, thereby constraining service firms' ability to increase sales and market share to the same extent as manufacturing firms.

3.5 Market orientation versus being customer led

A drawback of market orientation due to incorrect usage has been described by Hamel and Prahalad (1994), according to them a market orientation can limit a company's focus to only the expressed needs of customers, and therefore, only adaptive learning. This has as a consequence that organisations risk emphasising only product-line extensions for current customers, rather than preparing for future market developments (e.g. latent needs and opportunities in different markets)

It is very important not to confuse market orientation with being customer led. A customer-led philosophy as defined in literature (Narver and Slater 1998) is primarily concerned with satisfying customers' expressed wants, and is typically short term in focus and reactive in nature. A market-oriented philosophy goes beyond satisfying expressed wants to understanding and satisfying customers' latent needs and to developing innovative solutions that produce superior customer value. Therefore it is focused on a longer term and is proactive of nature. Thus, the most important difference is that being customer led focuses on what the customer says it needs now, and being market oriented focuses on what customers will need in the future. An overview of the differences is shown in Figure 3.5.

Figure 3.5: The key differences between market orientation and being customer led

	Customer-led	**Market-oriented**
Strategic orientation	Expressed wants	Latent needs
Adjustment style	Responsive	Proactive
Temporal focus	Short-term	Long-term
Objective	Customer satisfaction	Customer value
Learning type	Adaptive	Generative
Learning processes	Customer surveys Key account relationships Focus groups Concept testing	Customer observation Lead-user relationships Continuous experimenting Selective partnering

Source: Slater, Narver 1998

3.6   Limitations of market orientation

The last paragraphs have showed that having a market orientation is valuable for virtually every organisation because it focuses the organisation on continuously collecting information about target-customers' needs and competitors capabilities and using this information to create continuously superior customer value (Slater, Narver 1995). The theory of market orientation, like practically every theory, also has its limitations. This paragraph will describe the drawbacks of market orientation and its implications.

For an organisation to maximise its ability to learn about markets, creating a market orientation is only a start. A market oriented culture can achieve maximum effectiveness only if it is supported by a culture of entrepreneurship and an appropriate organisational climate, in the form of structures, processes, and incentives to stimulate these cultural values (Deshpande, Webster 1989). The challenge for any organisation thus is to create both the right culture and climate that best stimulates organisational learning on how to create superior customer value in dynamic and turbulent markets (Slater, Narver 1995).

Current market orientation literature is still far from developing a comprehensive theory of opportunity identification and development. Opportunity identification and development in this context refers to the process of structurally capturing and acting on (latent) market needs. Such a theory is critical if the gap between research and practice is to be bridged and should consist of: (1) a sound theory provides a means of identifying and defining applied problems, (2) it provides the means of prescribing or evaluating solutions to applied problems, and (3) of responding to new problems that have no previously identified solutions. (Ardichvili, Cardozo and Ray 2003)

However, the most important of market orientation lies in its intelligence sources. Primary knowledge sources to create superior customer value in market orientation are customer and competitor analyses (Day 1994a, Deshpande, Farley, and Webster 1993, Kohli, Jaworski 1990, Narver, Slater 1990, Shapiro 1988). Due to the fact that market orientation puts so much focus on customer and competitor analysis as *"the"* sources for information it underestimates the importance of other information sources such as: suppliers, other more advanced industries, universities, and government agencies (Achrol 1991, Webster 1992, Day 2005). A consequence of both the limited focus and the limited knowledge sources is that an organisation with market orientation may not see threats from non traditional competitors (Slater, Narver 1995).

Market orientation could lead to learning within traditional boundaries. Slater and Narver (1995) have concluded that the scope of market orientation should be extended to include all stakeholders and constituencies that posses or develope knowledge that have the potential to contribute to the creation of superior customer value or are threats to competitive advantage. This can be partly accomplished by organisational learning, which is the ability for frame breaking learning.

3.7   Organisational Learning

The first additional theory to complement market orientation is generative learning, which refers to frame breaking learning opposed to adaptive learning which refers to incremental learning (Hamel, Prahalad, 1994 Slater, Narver 1995). Without the addition of this theory market orientation runs the risk of leading to adaptive learning. A superior ability to learn compared to (potential) competitors is critical for two reasons. The first is

that the acceleration of market and technological changes, and the explosion of available market data have resulted in a higher importance of anticipatory action. The second is that it is a competency based source of competitive advantage because of its complexity, usefulness and difficulty to imitate (Slater, Narver 1995). The major improvement that generative learning offers to market orientation lays in a different mindset: the willingness to structurally question its mission, customers, capabilities and strategy (Senge 1990). To accomplish this mindset a fresh view of the world based on the systems and relationships that link key issues and events is required. It is therefore that generative learning, in contradiction to adaptive learning, as unwillingly stimulated by traditional market orientation, is frame-breaking and more likely to lead to sustainable competitive advantage (Slater, Narver 1995). This fact is also nicely demonstrated by the definition of organisational learning:

At its most basic level, organisational learning is the development of new knowledge or insights that have the potential to influence behaviour (e.g., Fiol and Lyles 1985, Huber 1991, Sinkula 1994).

According to Sinkula (1994) organisational learning is a three stage process that includes information acquisition, information dissemination and shared interpretation. A condition for organisational learning is that there must be consensus on the meaning of information and its implication (Day 1994b). The higher the uncertainty of the implication of the information, the more desirable it is to have higher frequency and informality in communication patterns (Jaworski 1988).

Effective dissemination of the information increases the value of this information due to the fact that the information can be seen in its broader context by all members of an

organisation who might use or be affected by this information and who are able to ask feedback questions, amplify the information or modify the information in a way that provides new insights to the sender (Glazer 1991).

A market orientation, complemented by an entrepreneurial culture, the continuous search for new market opportunities based on market needs, provides the cultural foundations for organisational learning. This is the case because market orientation is the culture that places the highest priority on the profitable creation and maintenance of superior customer value while considering the interests of other key stakeholders, and provides norms for behaviour regarding the organisational development of and responsiveness to market information (Slater, Narver 1995). However as important market orientation and organisational learning are, they must be complemented by an appropriate climate of entrepreneurship to produce a "truly market oriented learning organisation." (Slater, Narver 1995). The process of opportunity identification underlying an entrepreneurial climate is described in the next paragraph.

3.8 Opportunity Identification

As described earlier market orientation can only be successful if applied in combination with the right entrepreneurial culture: the mindset of continuously identifying new opportunities. Marketing and New Product Development (NPD) literature have produced many definitions of opportunities, in this thesis the following definition will be used because it best matches with market orientation as it takes (latent) market needs as starting point.

"An opportunity may be the chance to meet a market need (or interest or want) through a creative combination of resources to deliver superior value (Schumpeter, 1934, Kirzner, 1973, Casson, 1982). In its most elemental form, what may later be called an ''opportunity'' may appear as an ''imprecisely-defined market need, or un- or under-employed resources or capabilities'' (Kirzner, 1997).

Organisations identify business opportunities to create and deliver value for stakeholders in prospective ventures. While elements of opportunities may be "recognised", opportunities are made, not found. Careful investigation of market needs and sensitivity to them, as well as a capability to spot suboptimal deployment of resources, may help to develop an opportunity which may or may not result in the formation of a new business. (Ardichvili, Cardozo and Ray 2003)

What most literature in entrepreneurship calls ''opportunity identification'' appears to include three distinct processes which are first described and then graphically depicted in Figure 3.6: (1) Sensing or perceiving market needs and/or underemployed resources, (2) Recognising or discovering a match between particular market needs and specified resources, and (3) Creating a new match between needs and resources in the form of a business concept (Hills, 1995, De Koning, 1999).

Figure 3.6: Opportunity Identification process

A Business concept is an abstract idea for a new business that denotes all of the objects in a given category or class of entities, interactions, phenomena, or relationships

between them. In practice this means that a business concept is a rough idea which includes the market needs, available resources and capabilities and how everything relates together.

These three processes represent, respectively: perception, discovery and creation, not simply ''identification'' (Conway and McGuinness, 1986, Singh et al., 1999). Rochford (1991) identifies an extensive list of idea generation techniques which can serve both in the opportunity identification and development processes. However, this will not even be necessary in most cases as it is more difficult to pick the right idea out of the lot than to generate even more.

Subsequent stages of opportunity identification, however not directly linked to market orientation, are crucial for any opportunity to make it past the idea phase: opportunity evaluation and opportunity development.

The most important problem which became apparent from the literature review regarding opportunity evaluation is that projects often are not terminated when they should (Cooper et al. 2004). If set criteria are not met by mediocre ideas for business opportunities, it is imperative that the process is able to terminate the project to create resources for high value opportunities. (Gaul, Morrison 2006)

Opportunities begin as simple concepts that become more elaborate as entrepreneurs develop them. This process involves proactive efforts much like that of new product development, but the identification and developmental process described in this literature review can give rise to an entire business, not just to new products. Opportunity development is considered as a continuous, proactive process essential to the translation

of new business concepts to actual business propositions which can be launched into the market (Pavia, 1991).

A quote which argues what market orientation can achieve if it is used in combination with its supplementing theories organisational learning and opportunity identification is: *A truly market oriented firm has capabilities in sensing the true character of markets and then creates the linkages between functions and market pieces to take advantage of the sensing. (Day 1994b, pg. 49)*

The ultimate limitation of these combined theories remains its narrow scope. Market orientation is not concerned with actively scanning for signals coming from outside's an enterprise's focus area, and a method of how to tackle this is therefore lacking. These signals, even from outside the focus area, may greatly impact one's core business (Day, Schoemaker 2005).

Chapter 4   Peripheral vision

In this chapter the theory of peripheral vision will be described. It will be shown that peripheral vision can be used as a strategic extension to market orientation because it makes use of many of the same underlying theories as market orientation and adds value due to its much larger more strategic scope.

4.1   What is peripheral vision?

The term peripheral vision in everyday live refers to the ability to see objects and movement outside of the direct line of vision. People have a sight of up to 180°, the last +/- 30° on either sight however is a blurry zone where some things may be spotted but more direct focus is needed to see and understand exactly what is happening. This is graphically depicted in Figure 4.1.

Figure 4.1: Limitations of the human eye
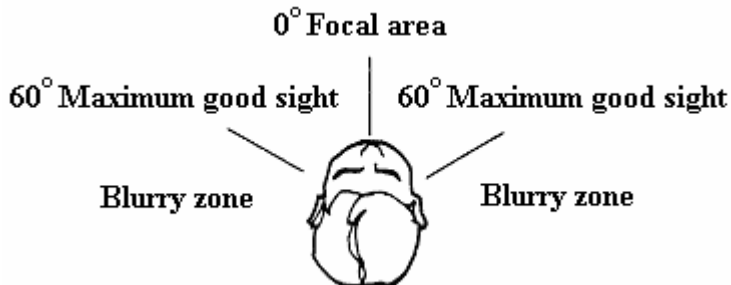
A second limitation of the human sight is that the brain automatically filters apparent noise from real signals. The brain does this to make sense of the almost infinite information streams coming in from the eyes. When people are more or less focused on a specific event, the brain equally filters out more or less noise from the signals. And thus misses out on more or less information which is played out right in front of the eye. (Simons, Chabris 1999)

The metaphor of peripheral vision in human sight functions well to explain the inability of organisations to capture, understand and act on certain apparently fuzzy but present information. However, it differs in the fact that the human eye and brain are naturally restricted in terms of hardware, whereas organisations have the option to invest more resources into improving their peripheral vision (Day, Schoemaker 2005).

For any organisation to survive in the increasingly unpredictable environment plagued by discontinuous change it is dependent on employees able to distinguish between apparent and real noise and translating these signals from the periphery into meaning. Therefore, business in the face of constant change requires a shift from a "make-and-sell" to a "sense-and-respond" framework. Adaptive systems such as people and organisations are able to make sense of these ambiguous signals through its sense making mechanism consisting of an object or event, a framework and an association between them (Haeckel, 2004). When dealing with unprecedented signals, the ability to make this association becomes critical for any organisation to survive. To successfully change to a sense-and-respond framework a number of changes are required (Haeckel, 2004). The scope of the business changes from products or services aimed at markets to a set of dynamically changing capabilities matched to customer preferences and values. Know-how is replaced with know-why and the organisational structure should become an efficient modular network which can be rapidly reconfigured in response to the market or as Prahalad (2004) states it: a move from value chain to value web.

Peripheral vision is essentially a learning and monitoring process that enables businesses to develop capabilities to recognise and capture key weak signals. Understanding these signals is necessary to make strategic decisions. An organisation's

peripheral vision needs are determined by its current strategy, the nature of the business and industry environment (Day, Schoemaker 2005).

Prahalad (2004) makes the comparison between blinders on a horse and the dominant logic or focus area of an enterprise. They allow performance at their current task in the short term. The logic enables operational excellence at the current task but greatly limits peripheral vision, where many opportunities can be found. Therefore, different logics must be applied to value creation and the organisation of enterprises.

Insights from multiple disciplines were used by Day and Schoemaker (2005) to come to a best practice for peripheral vision, as they concluded that no generally accepted model of peripheral vision existed. These authors used theories in the fields of decision making, marketing, strategy, organisation theory, and economics as well as from more applied areas such as scenario planning, competitive intelligence, market research, environmental scanning, and technology forecasting to come to a model of peripheral vision based on existing literature.

The conceptual model of Day and Schoemaker (2005) is grounded on a particular view of organisational learning as shown in Figure 4.2.

Figure 4.2: Peripheral vision as a learning process

Source: (Day, Schoemaker 2005)

39
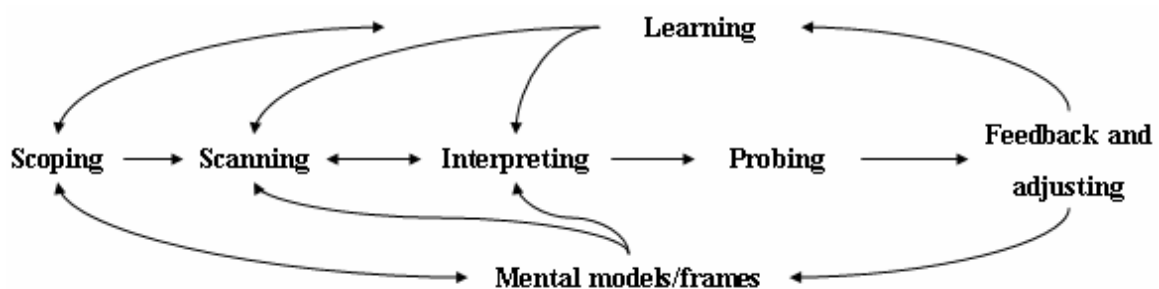
The structure of the model shown in Figure 4.2 is simple, it addresses the relation between individual employees who have insights into the market and processes which ultimately decide which signals receive attention. The challenge herein is to address the right signals at the right time. Besides organisational learning there is another *intellectual paradigm* that underlies this particular model of peripheral vision, information-processing. (Day, Schoemaker 2005) Information-processing refers both to individual and organisational decision making. Organisational learning examines how well or poorly complex enterprises adapt to an ever changing environment.

Both theories will be discussed in more detail in the following two paragraphs and linked back to the model in Figure 11, after which each stage of the model will be discussed in more detail.

4.2   Information-Processing

The information-processing paradigm suggests four key stages when applied to the problem of peripheral vision: perception, judgment, action and feedback. At the organisational level, the parallel stages of this process can be described as information acquisition, information dissemination, shared interpretation, coordinated action and collective learning. The different stages are shown in Figure 4.3.

Figure 4.3: Translating the information-processing stages to an organisational level.
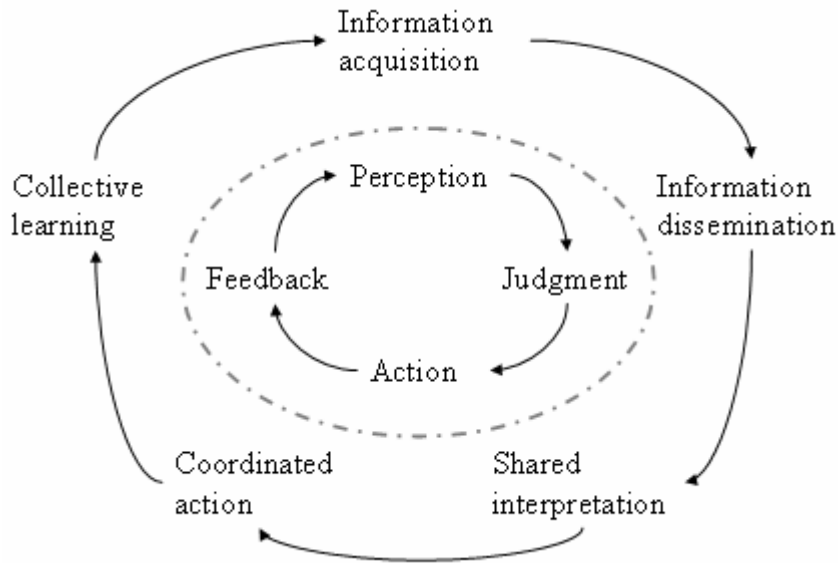
Many variations around this basic framework, differing by type of learning (is it adaptive or generative learning?), number of stages (is dissemination part of interpretation?) and the role of mental models (pattern recognition versus purposive construction?) can be formed (Day, Schoemaker 2005).

Because of the difference between learning from the periphery and learning within the focal area of the organisation, Day and Schoemaker (2005) have extended the basic organisational learning process to incorporate scoping (deciding where to look) as an explicit, rather than implicit, forerunner to the information acquisition or scanning stage, as shown in Figure 4.2. Scanning within the initial scope can be either passive or active depending on whether the organisation waits for information to come to it or launches a directed inquiry to have specific questions answered. Much like market orientation, the next step is disseminating, here however, it also includes interpreting the information to draw out useful insights. Finally, an evaluation must be made about whether the information should be used now, stored or ignored, followed by feedback if action was

taken. All stages of the process are supported by a set of mental models that are fixed within employees and the organisation (Day, Schoemaker 2005). A mental model is an explanation of how something works or must be done in "the real world" captured in someone's thought process (Robles-De-La-Torre, Sekuler 2004).

4.3   Organisational learning

The second major intellectual perspective that shaped the theory of peripheral vision is organisational learning. This is basically the same theory as discussed in Chapter 3. Day and Schoemaker (2005) however have taken the basic view of learning as a basis which they have applied to their specific challenge, the more dynamical and wide the environment is the more complex it is to learn. The drawback of "standard" organisational learning theories is that, while there have been extensive studies of individual and organisational learning, the advice developed in the core areas of these disciplines may not readily extend to the periphery where, by definition, conscious attention and inference are limited. Day and Schoemaker (2005) therefore view the advice from organisational learning as normative beacons that may provide only limited guidance.

Factors that plague organisations when figuring out what happened and why are: ambiguous feedback, delayed reactions, multiple partial causation, self-serving attributions, missing data, treatment effects, random noise, and illusions of control (Day, Schoemaker 2005). The low probability and ambiguous nature of peripheral signals further complexes the problem. At an organisational level rationality and predictability are expected and desired. Yet new opportunities often involve a high level of uncertainty and consequently demand a high tolerance for ambiguity. Cultures that can learn in

complex environments require different management principles and values than those needed to maximise the mainstream organisation. A conflict thus arises between the learning and performance cultures within organisations and senior management must find the right balance (Day, Schoemaker 2005).

The peripheral vision model (as shown in Figure 4.2) contains multiple feedback loops, these were implemented because of the crucial role of learning in improving peripheral vision. The model tries to capture the complex steps organisations and people within them go through from the initial stimulus to the final response, which involves much iterative learning (Day, Schoemaker 2005).

4.4 Stages of the Peripheral vision learning model

While research on information processing and organisational learning form the broad background for the model Day and Schoemaker (2005) also drew on other fields to address each stage of the learning process as shown in Figure 4.2.

4.4.1 Scoping

The most important step in creating good peripheral vision is defining how broad the field of view (scope) should be. Clearly, peripheral vision requires a broad scope, stretching beyond the focal area of the organisation. Therefore, areas that the organisation might typically ignore are included. A trade-off must be made between the extra cost and benefit created by this broader focus, the challenge is to expand the scope just enough to include all the relevant areas of the environment but no more than this. In general, the more uncertain the environment, the more likely there are to be threats as well as

opportunities at the periphery, and therefore, the broader the scope that is needed to capture these (Day, Schoemaker 2005).

An initial scoping decision must be made on the best available information about the distribution of relevant signals in the external environment. The organisation needs to conduct an initial assessment of the environment to determine where relevant threats and opportunities may come from. A scenario based strategic planning process can be a valuable tool in scoping as well as in making sense of and acting on weak signals from the periphery (Schoemaker 1995). This helps determine the broadest possible relevant scope in terms of time frame, market view, technology perspective, economic and political issues, legal and environmental concerns, and other factors.

The scope resulting from this decision is then used to scan within and to learn more about the actual signal to noise ratio base. This should, in turn lead to a revision of the scope when to high or to low signal to noise ratios are found. This process thus is iterative. For an optimal search, variable rules are needed rather than fixed rules.

It can even be argued that a firm should sample beyond its optimal scope, to validate its scoping boundary. It should find a low signal-to-noise ration beyond the boundary, and if it does not, it should reset the boundary. All scoping decisions should be tentative, subject to revision as new information is acquired. The low signal-to noise ratio makes this continuous updating extremely difficult. This challenge can be clarified through a metaphor, insurance companies that specialise in truly low-probability events (such as the one-hundred-year flood, an extreme earthquake, or a meltdown of a nuclear power plant) trying to update their underwriting models based on the very rare occurrence of a

catastrophic loss. Ultimately, it all depends on the judgments of the senior managers. (Day, Schoemaker 2005)

4.4.2 Scanning

Scanning the periphery can be focused either on exploitation or exploration (March, 1991). Exploratory scanning covers more ground but with less detail, making it efficient for broad-brush, big-picture views of the world. In contrast, exploitation requires greater depth and related resources to mine deeply. Exploitation can lead to directed searches within an organisations focal area. Explorative scanning is more useful for the periphery as it is driven by a passionate curiosity characterising true learning organisations (Senge, 1990). The challenge here is to have an open mind and a broad view. What is the right balance between scanning for exploration and exploitation? One possible approach is to pay attention to both the detail and the big picture, using a strong top-down vision to identify areas that need more attention. This strategy requires resources for learning at greater distances from the focal vision, while also having a mechanism for triggering more focused attention if needed. (Day, Schoemaker 2005)

There are two ways to perform exploratory scans, active and passive. In the passive mode, as the name suggests, an organisation does nothing more than wait for signals to reach them. Organisations following this course may think to be aligned with the periphery but not really be. Because most data comes from familiar or traditional sources, which filter out unexpected weak signals or even fail to receive them, this method tends to reinforce rather than challenge prevailing beliefs, and therefore, prevent organisational learning. Active scanners are more likely to set the right scope, as they actively search for information and therefore receive more and in all likelihood better information. They do

so through specific questions about the periphery, often formalised by the board, which need answers. (Day, Schoemaker 2005) Therefore, active scanning is hypothesis driven, and if complex issues are involved, multiple hypotheses should be tested (Utterback, Brown 1971).

In the theory of peripheral vision, scanning starts with asking the right questions. Within one's focus area or core business it often is possible to ask very precise questions with likewise answers. To scan the periphery for unknown opportunities or threats it is necessary to ask the right questions. Due to the investigating nature these questions must have they will often be open ended. Learning from past blind spots is one way to identify questions which need answering. Looking at high impact events that took the enterprise by surprise may be a good starting point to identify these blind spots. Trying to learn from other similar industries or markets which are in a later stage of the development process may also prove useful (Day, Schoemaker 2005). This is one of the reasons all large European telecom operators are positioned in the Dutch market, it is a couple of years ahead compared to other European markets, and although many operators struggle heavily on the Dutch market they are willing to pay the price. Competitors who performed better in the past spotting and acting on developments may also form an interesting base to ask the right questions. Gaule and Morrison (2006, pg. 27) state that every CEO should continually ask the question:

"Are my markets changing to the point where I should shift resources into new lines of business?"

Although this one question covers many potential opportunities (as well as threats), it also has the risk of being to general and thus without meaning for employees who also have their daily duties. Prahalad (2004, pg. 178) on his turn suggests the following

questions: "*Challenge yourself: What are the key dimensions of your dominant logic or focus area and how does this logic limit opportunities? What are you not seeing? Are there other companies in your industry or outside that are applying a different logic? How can a different logic allow you to recognise new opportunities on the periphery?*"

Most organisations have maverick employees which may or may not have been identified. For some reason these employees have insights about the periphery that most other employees do not. The reasons can vary from intensive technology usage, customer or market contact to employees which are simply unhappy by nature with the present (lack off) strategy (Day, Schoemaker 2005).

Peripheral vision focuses not just on current customers but also tries to identify potential new customers and tries to learn from complainers and defectors. Understanding the people who are dissatisfied is crucial to the prevention of huge churn rates (Day, Schoemaker 2005).

Environmental scanning intelligence can be grouped in seven categories which are: Competitive Factors, Market Factors, Technology Factors, Regulatory Factors, Resource Factors, Broad Issues and Other Factors (Aguilar 1967, Yunggar 2005). In order for the adaptable framework of Yunggar (2005) to function well the different categories must remain exhaustive and mutually exclusive and the whole must be functional and related to actual scanning practices (Keegan 1967). In order to fit everyday practice the framework should be modified to fit the specific purposes and needs of the user (Yunggar 2005). Day and Schoemaker (2005) split the periphery into three parts which each need different approaches: (1) Customers and Channels, (2) Competitors and complementors, and (3) Technologies. Firms that are actively seeking new product opportunities at the

periphery of their market scope may employ lead-user analysis, metaphor elicitation and other techniques for surfacing latent needs (Narver, Slater 1990, Deshpande, Farley 1998).

4.4.3 Interpreting

Organisations should, in principle, be more effective than individuals at developing multiple hypotheses about the meaning of weak signals. Unfortunately organisations much like people drive sense making toward one single meaning. Interpreting signals is deeply affected through mental models which, in turn, influence hypotheses and inquiries going forward. To complicate matters even further, signals from the periphery are generally scarce and ambiguous leaving more room for bias and distortion leading to confusion (Simons, Chabris 1999, Day, Shoemaker 2005). Therefore, to be able to understand and appreciate the potential or threat from the periphery a shift in our mental models is required. Organisations must, in order to achieve this, make creative leaps and engage in prior brainstorming about possibilities. This requires a less rigid and formalised approach to filtering than is applied to focal areas (Day, Schoemaker 2005).

Ironically, one of the biggest impediments to achieve this shift in mental models to enable a more creative interpretation of the periphery is the trademark of people to pose too much order on apparently ambiguous signals in order to make sense out of them. As the human brain struggles with ambiguity, people tend to quickly lock in on a view of the world. Once this lock takes place, as when one interpretation of an optical illusion snaps into focus, it is very difficult to reverse the process and not see the image we have interpreted and even more difficult to find the other meaning. An example of this is shown in Figure 4.4. The ability to switch off this focus or judgment and discover and

switch among different views is key to interpreting and truly understanding the periphery, this however is more easily said than done. Organisations often try to make too much sense of an inherently noisy environment, which simply cannot be put into one single box. They would be better off developing multiple views, much like in scenario planning (Day, Schoemaker 2005).

Figure 4.4: Fixed view of the world
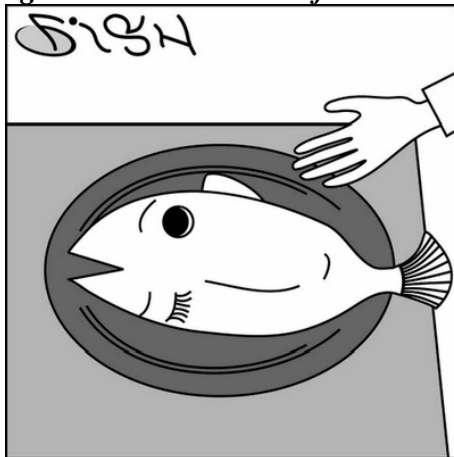
Source: opticalillusions.org

In general the first thing people see in the left picture is a fish on a plate, right? These images are a good example of how difficult it is to see the multiple meanings of a signal. Even in this fabricated situation where readers know that the images have ambiguous meanings, it remains difficult to discover them. Moreover how can anyone be sure there are just two ambiguous meanings?

Distinguishing between important signals and background noise is an important and time consuming process. A good way to differentiate between signals is to take one and fast forward its development using for example scenario planning to predict how trends and uncertainties may evolve over time (Day, Schoemaker 2005).

4.4.4 Probing and Acting

To survive in today's fast changing environment, organisations must apply theories such as peripheral vision to scan and interpret the periphery broadly. However, organisations must also be extremely cautious when acting outside one's focus area in order to avoid total catastrophe like for example Sony Ericsson who spotted the popularity of apple's Ipod and tired to integrate mp3 players into their mobile phones, but are now heavily struggling. There are three primary approaches to responding to weak signals from the periphery (Day, Schoemaker 2005): Watch and wait, Probe and learn, and Believe and lead.

To believe and lead is only warranted when the opportunity is very promising or the threat is imminent, and the organisation is sufficiently persuaded by the available evidence. To justify this risky move multiple signals forming a trend, support for the underlying assumptions, and an assessment of the risks of acting (and not acting) based on the available information are all required.

For all three approaches, the organisation needs to develop capabilities for flexible response. Methods that can help in acting fast and flexible are: (1) creating a sense-and-respond management style, (2) de-risking through fast prototyping, small experiments and networking, (3) developing a portfolio of options rather than placing one big bet, and practicing organisational alertness (Day, Schoemaker 2005).

4.4.5 Learning and Adjusting

Once an organisation starts to act and obtain feedback, opportunities for learning and adjustment will arise. The interaction among organisational actions, perceptions, and reactions will refine the organisation's understanding of its environment. Depending on

the type of feedback it receives, an organisation's deeper image of the world may need to be adjusted and the organisation may need to shift its focal vision.

Much like interpreting signals, to truly learn from and adjust to the periphery a shift is needed in organisational mental models as well. As the periphery does not supply organisations with well- defined problems, standard linear analysis of signals is not the preferred solution. Instead, peripheral learning requires (1) lateral thinking, (2) asking disconfirming questions, (3) relying on intuition, and (4) looking at data through multiple lenses (Day, Schoemaker 2005). This requires an ongoing, iterative process of scoping, scanning, interpreting, acting, learning, and adjusting by which individuals and organisation define and shift their vision. The process of peripheral vision contains many necessary feedback loops and is completely nonlinear. The eventual results of good peripheral vision are a better understanding of the current periphery and a process for shifting the periphery toward the centre of vision if needed (Day, Schoemaker 2005).

4.5   Impact of Peripheral Vision

The focus differs from most market scanning frameworks in that the focus lays on opportunities and threats that may change your business completely opposed to standard business opportunities which are dealt with on a daily basis. (A good example of a standard opportunity for a mobile network operator is the introduction of a new mobile phone by Nokia.) The theory of peripheral vision therefore not only entails the capability of identifying new business opportunities but structurally helps developing the strategy *(Day, Schoemaker 2005)*. This is also argued by the following quote:

"Peripheral Vision focuses on the biggest danger facing any business, the threat of a breakdown of its business model…" Jean-Pierre Garnier, CEO, GlaxoSmithKline

Rather than the *amount* of information gathered, it is more critical to idea generation *how* information is collected. Furthermore, it is *how* information is filtered to a workable amount, and if it is interpreted and translated through creative thinking and exploration opposed to analytical thinking which will determine the eventual value (Day, Schoemaker 2005). Peripheral vision in combination with a market orientation may be the only way to create truly sustainable competitive advantage.

"An organisation has a foundation for sustained competitive advantage when it possesses skills or resources that (1) provide superior value to customers, (2) are difficult to imitate, and (3) are capable of multiple applications" (Day 1994b, pg. 39).

Peripheral capabilities are a bundle of closely integrated skill, technologies, and cumulative learning that are so deeply embedded in the organisation that they cannot be traded or imitated. (Day, Schoemaker 2005)

There are trade-offs in different types of organisational cultures, and each organisation has different mechanisms for processing and acting on information about the changing market environment (Deshpande, Farley and Webster, 1993).

Organisations with good peripheral vision can gain tremendous advantages over rivals. They can recognise and act on opportunities more quickly. They can avoid being blindsided. It takes skill to do this well, but as the environment changes more quickly and becomes more uncertain, the payoffs from peripheral vision may be greater than ever (Day, Schoemaker 2005). As also argued by the famous quote of Charles Darwin (1872):

"It's not the strongest of the species who survive, nor the most intelligent, but the ones most responsive to change." (pg. 111)

When we traduce this to an organisational level it becomes even clearer, it is not the organisation with the highest market share which survives, nor with the best technologies, but the ones most responsive to changing markets.

4.6   Deriving an appropriate market orientation model

This paragraph will integrate the two theories market orientation and peripheral vision along with opportunity identification into a strategic market opportunity model.

4.6.1   Linking market orientation and peripheral vision

A direct derivative from the theory of sense making (object, framework and association) (Haeckel, 2004), is that there is no such thing as thinking outside the box. People are only able to think from within a framework. A good example may be the colour yellow, if no further framework were provided the information would be utterly incomprehensible. If however the *"tour de France"* would be mentioned people could immediately make the association between bicycling and the yellow leader jersey.

Integration of two theories can be very much alike. Peripheral vision will be placed in the box or framework of market orientation and the associations between the two theories will be discussed. Market orientation will provide the framework as it is most valuable as a set of cultural values (Narver and Slater 1995, Day 2005), whereas peripheral vision although also strongly dependant on cultural values, mainly thrives on a set of hard to develop capabilities and processes (Day, Schoemaker 2005). Although the value of the combination lays in what these two theories add to each other, the integrated model will be constructed around the similarities of the two theories.

4.6.2 Collecting the pieces and putting them together

Since market orientation will function as a framework of cultural values rather than a linear process, the components (intelligence generation, dissemination and responsiveness) can be either split or grouped together in order to achieve the best possible fit with peripheral vision. The first split is made between information generation and dissemination and on the other hand responsiveness, which is shown in Figure 4.5.

Figure 4.5: Market orientation split

Market Orientation

Information Generation and Dissemination

Responsiveness

The strongest relation between these two theories is that they both rely on market intelligence to come to organisational change using comparable views of organisational learning. Peripheral vision is essentially a learning process, or in other words, an information generation and interpretation process with a strategic (wider than focus area) view. The model of Peripheral vision consists of the stages: Scoping, Scanning, Interpreting, Probing and Acting, Feedback and Adjusting. The processes of peripheral vision are almost entirely focused on information generation and dissemination except for the second part of the second last phase, Probing and Acting.

The association between the processes Intelligence Generation and Dissemination and Scoping, Scanning and Interpreting consists of information acquisition and understanding. Probing is a way to obtain more information about a particular signal and can therefore be seen as information generation. However, acting on a signal is clearly

related to responsiveness. Peripheral vision, with the exception of acting, can therefore be grouped under information generation and dissemination, as shown in Figure 4.6.

Figure 4.6: Integrating peripheral vision with market orientation
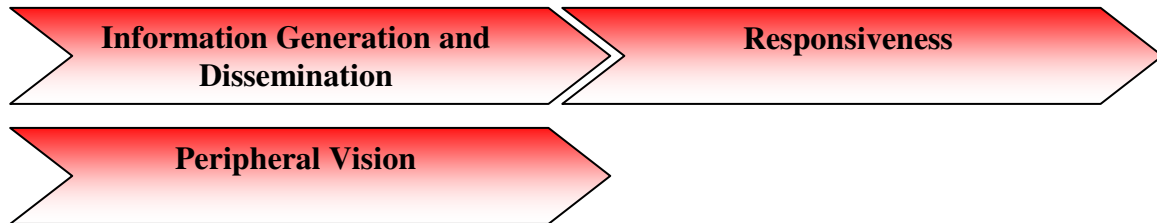
The theory of peripheral vision only warrants full scale responsiveness, whatever this may be, to market intelligence when its consequences are truly understood. Market orientation on the other hand, thrives on identifying (latent) customer needs and responds to this intelligence by providing solutions for these needs supported by the theory of opportunity identification as discussed in Paragraph 3.7. The theory of opportunity identification is chosen as subsequent stage of peripheral vision because it is based on the same marketing values as market orientation. Customers (latent) needs are crucial, and it provides a practical process to make the most of the collected intelligence. This is shown in Figure 4.7.

Figure 4.7: Adding Opportunity Identification
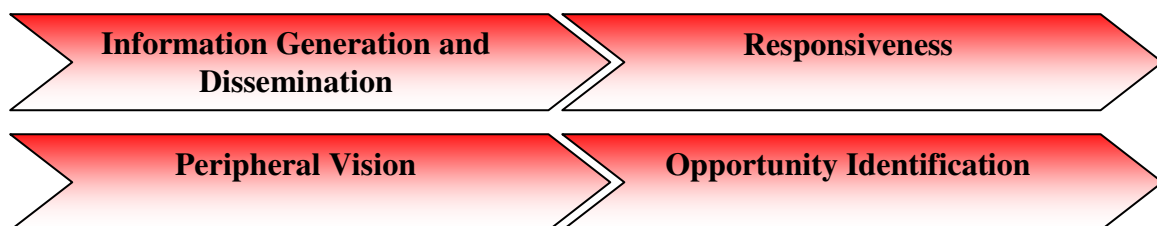
Peripheral vision is mainly focussed on obtaining and understanding market information whereas opportunity identification is concentrated around acting on market information in order to retrieve the maximum benefit from the information by translating them into business opportunities. However, opportunity identification is only the first

phase of responsiveness. Opportunity identification must be followed by evaluation and development in order for an enterprise to capitalise on an opportunity.

As the model is still too high level, peripheral vision and opportunity identification must be modelled in greater detail. Opportunity identification is best described using the existing model shown in Figure 3.6. Peripheral vision consists of the stages: Scoping, Scanning, Interpreting and Probing. Probing is optional as it is not always necessary to gain additional insight, and therefore cursive depicted in Figure 4.8, in which the integrated model is shown.

Figure: 4.8 Strategic market opportunity model
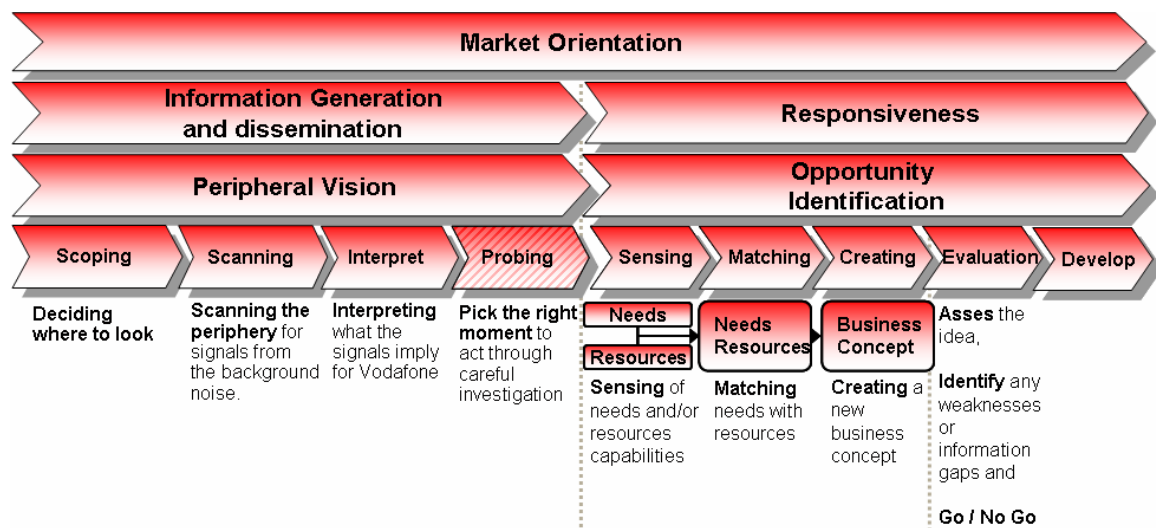
As the different stages were extensively discussed in Chapter 3 &4 only a brief recap of peripheral vision and opportunity identification will be given. Asking the right questions is the starting point of scanning the environment. A general understanding of what to scan for heightens the chance of a signal actually being spotted and understood in the second and third step, scanning and interpreting. The most important and difficult part in spotting signals is to distinguish between background noise and potentially important

information. The final step of peripheral vision is to really interpret signals and trends so implications can be drawn from the gathered information.

Opportunity identification starts with the gathered intelligence, in whatever form this may be and then senses the beginning of an opportunity. This can either take place in the form of a market need or an underutilised capability or resource of the company. The next step is, although extremely crucial, often forgotten in practice, creating a match between market needs and what the company can offer. The bypass of this step causes many new products, especially in technology driven organisations to flop. In general the problem lies not in opportunities for which the company does not hold the capabilities, but it does lie in new technologies which have no useful application for customers. Useful in this context means that consumers have the need to purchase the new product.

The last step is to fill in exactly how the company's capabilities or resources should be used to fulfil the market need in the form of a product proposition.

In the initial evaluation phase it is essential to be able to make a brief but reliable assessment of the potential business opportunity. As came forward from the literature review it is crucial to make a Go / No Go decision based on criteria suitable to the situation of Vodafone (Cooper 2004). And in order to enable the development of the opportunity from a concept to a more concise proposition which can be evaluated more thoroughly it is crucial to identify any weaknesses or information gaps which need further investigation. The development of the opportunity from this very initial concept often requires the aid of multiple departments within a company.

In the next two chapters both current market orientation and peripheral vision capabilities and needs will be investigated and analysed.

Chapter 5   Market Orientation at Vodafone

To position itself in the highly competitive mobile telecom market, Vodafone is differentiating by delivering superior quality products and services to customers. Because customer needs and expectations continually evolve over time, delivering consistently high quality products and services requires ongoing tracking and responsiveness to changing marketplace needs, i.e. being market-oriented.

5.1   Research setting

This chapter will investigate current market orientation, as defined by Kohli and Jaworski (1990), at Vodafone. Market orientation will be investigated and analysed using the renowned tool developed by Kohli, Jaworski and Kumar (1993) and Caruana and Pitt (1996). Who were responsible for developing an instrument, called MARKOR, for measuring market orientation amongst practising managers. All that is required is that a number of managers and employees within the same company assess their organisation on each of the statements, and indicate the extent of their agreement by circling the most appropriate point on the scale. The scores are then collated and averaged in order to get an overall picture of the market orientation of the organisation.

The lowest possible score which can be obtained on any dimension is 1, and the highest is 7 However, it is unlikely that many organisations will be at these extremes. Obviously the nearer the score on the dimension to 7, the better the organisation is perceived to be performing on that dimension of market orientation, and vice versa.

As not all managers and employees have a general overview of all market orientation processes, respondents had to be selected. In order to avoid selection bias, Jaworski and

Kohli (1993) argued that managers from 5 specific areas should be surveyed: marketing, sales, customer services, technology and support functions. Therefore, the research was conducted by sending-out MARKOR questionnaires to twenty employees of Vodafone from five different disciplines: Marketing (4), Sales (4), Customer Services (4), Network & IT (4), and Support Functions (4). The analysis has been carried out on total Vodafone level and department/segment level. Each segment consists of three employees and one senior manager creating the possibility to analyse a sixth segment consisting of five senior managers.

As instructions were followed, the research is expected to be a good representation of the current situation. However, as the total sample (n=20) and the segment samples (n=5) are small, the results of the analysis are an indication and should not be read as statistically representative for the total Vodafone population. Since all chosen participants were contacted personally, they all were willing to participate. Non response therefore equals zero.

In the next paragraph the results of the Market Orientation questionnaire (MARKOR), focussing on the level of intelligence generation, dissemination and responsiveness within Vodafone, will be analysed and discussed.

5.2   MARKOR questionnaire

In this paragraph the components of Market Orientation will be explored through the results of the MARKOR questionnaire, focussing on the level of intelligence generation, dissemination and responsiveness within Vodafone. The MARKOR questionnaire itself can be found in Appendix 2. Firstly all departments will be analysed separately per component of market orientation after which an overall picture of the results will be

generated and discussed. Detailed results of the questionnaire can be found in Appendix 3 and 4.

5.2.1 Intelligence Generation

Intelligence Generation not only exists of collecting customer information, but also includes the generation of Market Intelligence. Two departments within Vodafone are responsible for Intelligence Generation: Marketing Insights & CRM (MCI) and Strategy.

MCI generates information from primary data like the Vodafone customer base and from secondary sources like market panels (GFK), mystery shopping research, Customer Delight research and ad hoc qualitative and quantitative research.

There is a tendency to use the database for all customer related insights and secondary sources for all market related insights. The risk of this tendency is that the database will give an answer on "what has happened" with the customer, but not "why has the customer done this?" The "why" often is filled in by using gut feeling rather than asking the customer in research. The Strategy department is the link to Vodafone Group where best practices and global market and customer developments are shared.

In Figure 5.1 the results of the MARKOR questionnaire on Intelligence Generation are presented per interviewed segment. The blue line represents the average scores of the combined segments, to avoid double counting the Senior Manager segment is excluded from this average, hence the dotted line. The results on the first segment, marketing, are relatively low, it would be expected that the marketing department would generate more market intelligence than any other department. This score is caused by the low score on customer contact (2.5), which unfortunately is not striking for the marketing department, as interviewing customers to find out what products and services they need in the future,

is carried out by Vodafone Group and not by local marketers. The high score for Sales (6.5) is understandable as the Sales team is at the front-end of the organisation and meets customers frequently. The Network & IT department is the only department that scores above average on all questions, even on customer contact as probably their perception is that customers are interviewed about their future needs at least once a year. Customer Services and Support Functions have the lowest scores on average, with respectively 3.9 and 4.

The lowest average score in intelligence generation is for detecting changes in customers' product preference and this is on average the case for all segments, even Senior Management. This means that the overall opinion is that Vodafone does not excel in detecting rapidly changes in customer's product preference. This can be linked to the relatively low customer contact of the marketing department and the role of Vodafone Group.

Figure 5.1: Intelligence generation results per department/segment
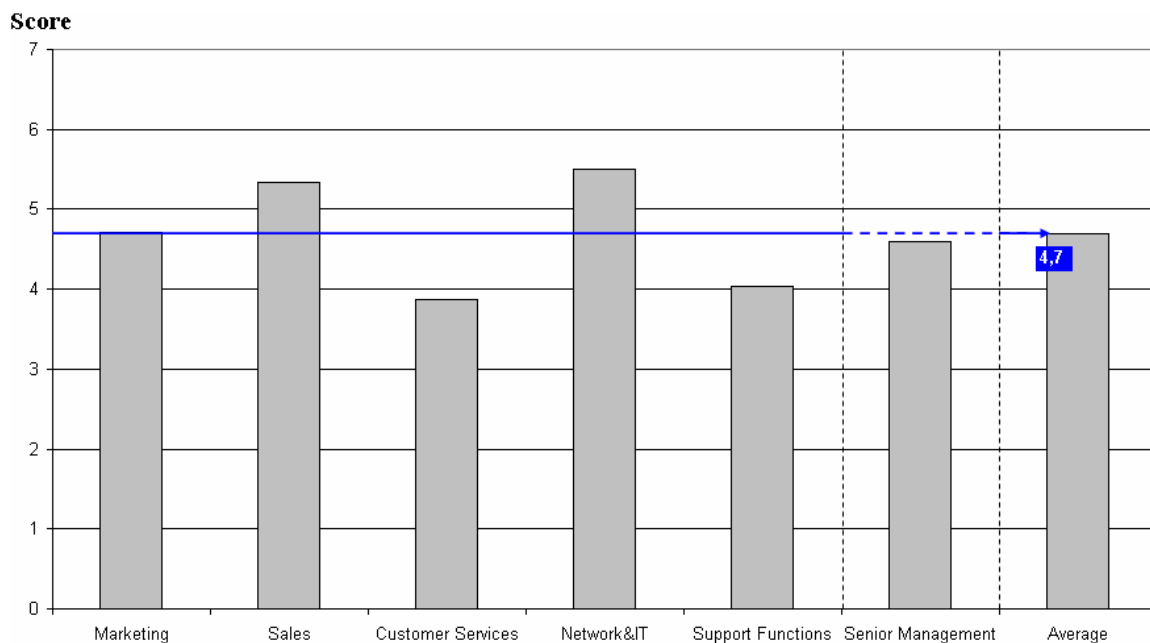
All segments believe that Vodafone surveys end users at least once a year to assess the quality of products and services which therefore results in the highest average score on any question. This is linked to the fact that all employees have customers delight in their personal objectives, which will be discussed in more detail in Chapter 7, and therefore results on this index are shared frequently.

5.2.2 Intelligence Dissemination

Intelligence Dissemination needs to take place within and between departments. Everyone regardless of the department needs to understand customer needs and his/her own role in satisfying those needs. In Figure 5.2 presents the results of the MARKOR questionnaire on Intelligence Dissemination per interviewed segment.

Figure 5.2: Intelligence Dissemination results per department/segment
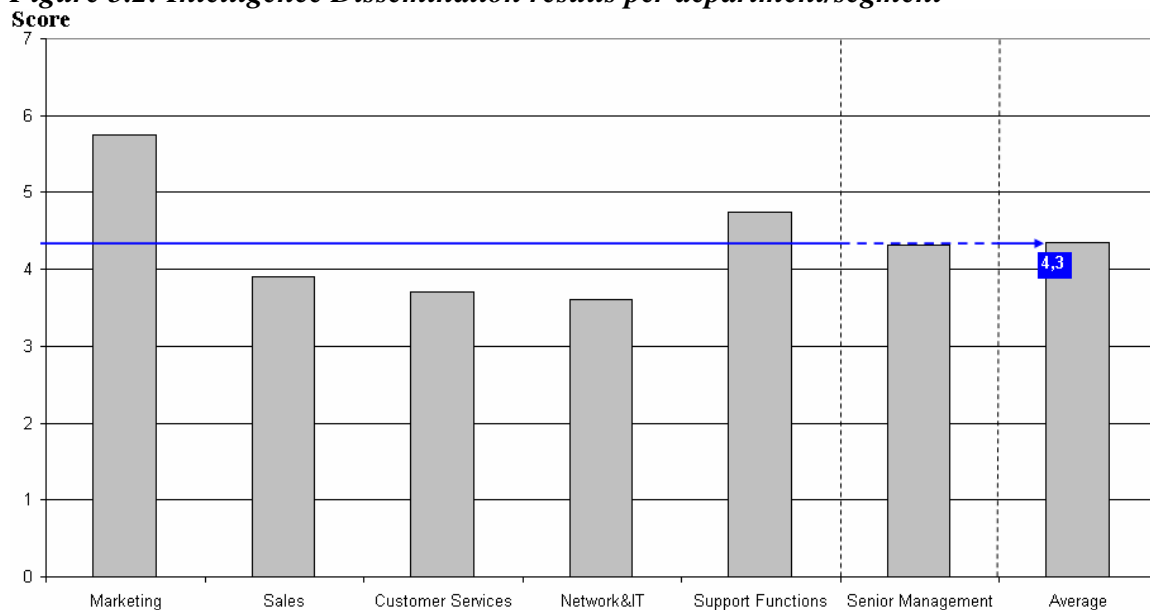
Marketing has by far the highest average and even scores above average on all questions. This indicates that information is well disseminated within the department. However as almost all departments score lower than average it can be concluded that information is not well shared between Marketing and other departments. Especially

Sales, Customer Services, and Network & IT score low with scores of 3.9, 3.7, and 3.6 respectively.

The highest score (6.5) is from Marketing on the question "When one department finds out something important about competitors, it is quick to alert other departments". Almost all departments score low on this question except Support Functions (6). This shows a dissent between Marketing and Support Functions, where most intelligence comes which will be illustrated in detail in Chapter 7, on one hand and the other segments on the other hand.

The highest average score (5.6) is on disseminating data on customer's satisfaction at all levels in the business unit on a regular basis. As highlighted earlier customer delight is shared regularly in the organisation and is part of every employee's personal objectives.

The lowest average score (3.3) is on the question, "Marketing personnel in our company spend time discussing customers' future needs with other functional departments". Even the marketing department has their lowest score (5), regarding intelligence dissemination, on this question. The question is why does this not happen? Again the functional organisation and silo-thinking play an important role in this.

5.2.3   Responsiveness

Responsiveness is about all departments building on market intelligence to develop, implement and execute plans to meet the needs of customers. In Figure 5.3 the results of the MARKOR questionnaire on Responsiveness are presented per interviewed segment.

Overall the Sales department scores low given the fact that Sales plays a role at the front-end of the organisation and in general is focused on the short term where responsiveness is crucial.

Within Vodafone decision making is slow and Senior Management tends to be risk aversive which will be illustrated in Chapter 7. Therefore, responsiveness is one of the key weaknesses showing rather low average scores on all questions. With the lowest average score of 3.8 it is currently the most troubled part of market orientation at Vodafone.

The lowest overall score (3.5) is on the question "If we came up with a great marketing plan, we probably would be able to implement it in a timely fashion". The sales department shows the lowest score (2) on this question, but also remarkably the Senior Management gives this the lowest (3) ranking. This links back to the overall low score for responsiveness due to risk aversive behaviour.

Figure 5.3: Responsiveness results per department/segment
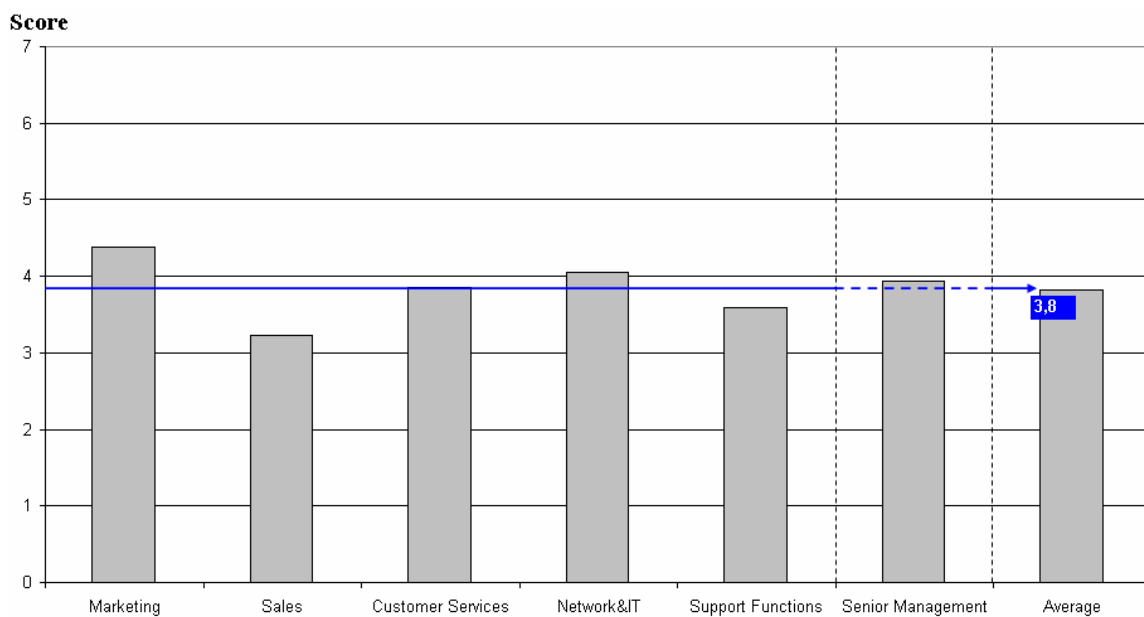
Although marketing achieves the highest average, the highest scores can be found in the Network & IT department. As Network & IT is at the back-end of the organisation regarding customer complaints their general perception is that customer complaints never fall on deaf ears. However often the answer from Network & IT regarding customer

complaints is that there is no short term solution. This leads to the perception in other departments that customer complaints fall on deaf ears.

5.2.4   Interdepartmental dissent for Market Orientation

After analysing the individual department's scores on the questionnaire, this paragraph focuses on the interdepartmental dissent for Market Orientation, which is analysed per question and per segment in Appendix 5.

Overall, the largest dissent is in Intelligence Dissemination with the highest differences between Marketing and the other departments. Furthermore, two individual questions, the first from intelligence generation and the second from intelligence dissemination, stand out.

The difference in the first question, (2.5 - 6.5) regarding the frequency of customer meetings, has been created due to different interpretation by Sales and Marketing departments about what "meeting customers" means. Marketers refer to market research, while Sales employees refer to customer visits and talks.

The second question, questions nine, with answers varying from (2 – 6) regards the dissemination of major customer or market developments in a timely fashion. The high score is from Marketing and the low score from Customer Services. At Customer Services it is generally felt that they are the only department which takes care for customer complaints.

5.2.5   Overall results on market orientation

The last question in the questionnaire, the question whether the organisation is market oriented, scores an average of 4.1. No major deviations can be seen, although the

marketing department scores higher and Senior Management and Support Functions score lower than the average.

The overall average score for Market Orientation is 4.3 out of 7. This is not a high score for an organisation which intends to be market oriented.

There are differences between the three different stages. It tends to start positive regarding Intelligence Generation. Intelligence Dissemination scores a lower average and shows the most dissent, which can be related to accessibility of Intelligence and lack of team work between departments.

Responsiveness shows the lowest score with limited dissent and Senior Management showing an average and on some questions an even below average score, which is related to the risk aversiveness of the organisation. This indicates that the goal of the design must be to primarily address the issues relating responsiveness with regard to market orientation, this off course in good balance with the other two areas which also need improvement.

In the next chapter current peripheral vision capabilities within Vodafone will be investigated. In Chapter 7 the results of both investigations will be further analysed through a series of interviews in order to come to a full understanding of the current situation and a final design.

Chapter 6   Peripheral Vision at Vodafone

Vodafone is currently looking for new revenue streams outside its current focus area of mobile telecommunications. Besides being market oriented, Vodafone must be able to spot opportunities outside its direct focus area i.e. peripheral vision, in order to position itself in the broader area of general telecommunications.

6.1   Research settings

This chapter evaluates the current peripheral vision capabilities of Vodafone and indicates whether the peripheral vision of Vodafone should be improved given the need for peripheral vision which will be measured as well. This is investigated to determine whether Vodafone really lacks peripheral vision capabilities or that the opportunities have been missed by a (semi) conscious choice not to pursue these opportunities outside its focus area. In short, how well does Vodafone currently monitor and respond to the market and does it really has the need to do so better?

To answer this question, Day and Schoemaker (2005) have developed a tool (See Appendix 6) called strategic eye exam, to measure the need and capability for peripheral vision of a firm.

The survey was based on the suggestions Day and Schoemaker (2005) have made, shown as well in appendix 6. They have used the survey to study the need and capability for peripheral vision in 150 firms and have, in doing so, created more than enough support and bench marking material to validate the survey.

As suggested by Day and Schoemaker (2005) the survey was conducted among the board members. However, the board is a relatively small group (n=10) and not necessarily representative on itself for all employees dealing with peripheral signals.

Therefore, employees from different departments were surveyed as well to ensure a reliable and representative result. The questionnaire has been filled in by members of the board (n=10), the strategy (n=5), marketing (n=2), R&D (n=1) and market intelligence departments (n=2), in total n=20.

Representative in this context does not mean that respondents must be representative for all Vodafone employees, as many employees simply do not know whether e.g. scenario planning and other peripheral scanning activities take place. Respondents have to be representative for the real current circumstances. Therefore, the respondents were chosen on the basis of their daily experience with market intelligence, their key functions in their departments and the broad function of their departments. Besides the board, all five strategy managers were surveyed, as peripheral vision is a strategic theory and the insights of the strategy department are therefore very valuable. Managers of both the Enterprise and Consumer side of the marketing, market insights and R&D departments were chosen to reflect the supporting "peripheral" departments.

Due to a personal letter directed to all participants signed by the head of strategy which was personally delivered, the relatively short time (+/- 15 min) needed for the survey, and the necessary friendly reminders, all participants were surveyed. Non response therefore equals zero which is a favourable result given the still relative small number of selected respondents (n=20).

As Day and Schoemaker (2005) only surveyed the board in their research, a small group of respondents which makes any statistical conclusions on the basis of the results for a single firm unreliable, they suggested that the findings should be simply averaged and discussed to reach a common view of were the company is currently positioned.

However, as a larger number of participants was surveyed at Vodafone (n=20) the data will be analysed briefly. Nevertheless, in the end the importance of the tool is to create an urge to change through a common understanding of the (insufficient) current situation rather than a discussion whether the peripheral vision is 25 or 26 % under the required level.

The tool consists of a questionnaire of 44 questions which can be rated 1 to 7, and a scoring tool with which participants can calculate and graphically demonstrate the company's need and capability for peripheral vision. The need for peripheral vision is measured through examining the nature of the strategy, the complexity of the environment and the volatility of the environment. The current capabilities for peripheral vision are determined by analysing leadership orientation, knowledge management systems, strategy making, organisational configuration, and company culture. Sub-areas have different impact on peripheral vision which is quantified through the number of questions per sub-area, shown in Appendix 7. The graphical demonstration is a graph split into four quadrants, which are split to high or low need for peripheral vision and high or low capability for peripheral vision. These four quadrants will be discussed briefly.

The first quadrant is (1) Focused, the market situation, as well as the current strategy do not require a high peripheral vision and the company also has not developed these skills. This is one of the two "positive" outcomes since the current capabilities are sufficient. In the second situation, called (2) Neurotic, the market situation as well as the current strategy do not require a high peripheral vision, just as in Focused. The company however has developed and is maintaining these skills and is therefore wasting resources,

the firm should try to increase its focus to its core focal area. The best possible result is to be (3) Vigilant, the market situation as well as the current strategy do require a high peripheral vision and the company has developed these skills. This result indicates the enterprise has become a learning organisation. The most risky outcome is (4) Vulnerable, the market situation together with the current strategy do require a high peripheral vision. However, the company has not developed these skills. The company risks being swiped of the map by a (new) competitor better acting on market signals. In this case the tool, furthermore, results in a firm's vigilance gap. A vigilance gap is the difference between the need and capability of peripheral vision. In the next two paragraphs this tool is applied to Vodafone.

6.2   Research results and analysis

As discussed in paragraph 6.1, Day and Schoemaker (2005), use three areas in their tool to measure the need for peripheral vision and five areas for the capability of peripheral vision. The scores on peripheral vision shown in Figure 6.1 are on a scale of 1 to 7, 1 being an extremely low need or capability and 7 extremely high. The results of the need for peripheral vision areas leading to their weighted average are shown on the left and the five current areas of capabilities for peripheral vision areas leading to their weighted average are shown on the right of Figure 6.1.

The need for peripheral vision, 4.40, sets the standard for the required capabilities for peripheral vision, everything under the need results in a vigilance gap. Besides the average scores of the different areas Figure 6.1 also demonstrates the vigilance gap. The vigilance gap is the difference between the average need and capability for peripheral vision. This is demonstrated through the red areas in Figure 6.1. From the detailed results

of the survey shown in Figure 6.1 it can be seen that all areas indicating the capability score well below the average need and therefore result in a vigilance gap. For an organisation to score vigilant it needs to score at least a 4 on both average capability and need, Vodafone currently fails to reach this score on all capability sub categories of peripheral vision. On the other hand, the nature of strategy, is the only need category that is well below the average need and the threshold of 4, which is strange given the broadened scope from mobile telecom to telecom in general. This is caused by the fact that Vodafone is currently still in a transition phase between strategies, causing the overall lower score. Therefore, the nature of strategy is expected to increase over time.

Figure 6.1: Detailed peripheral vision results
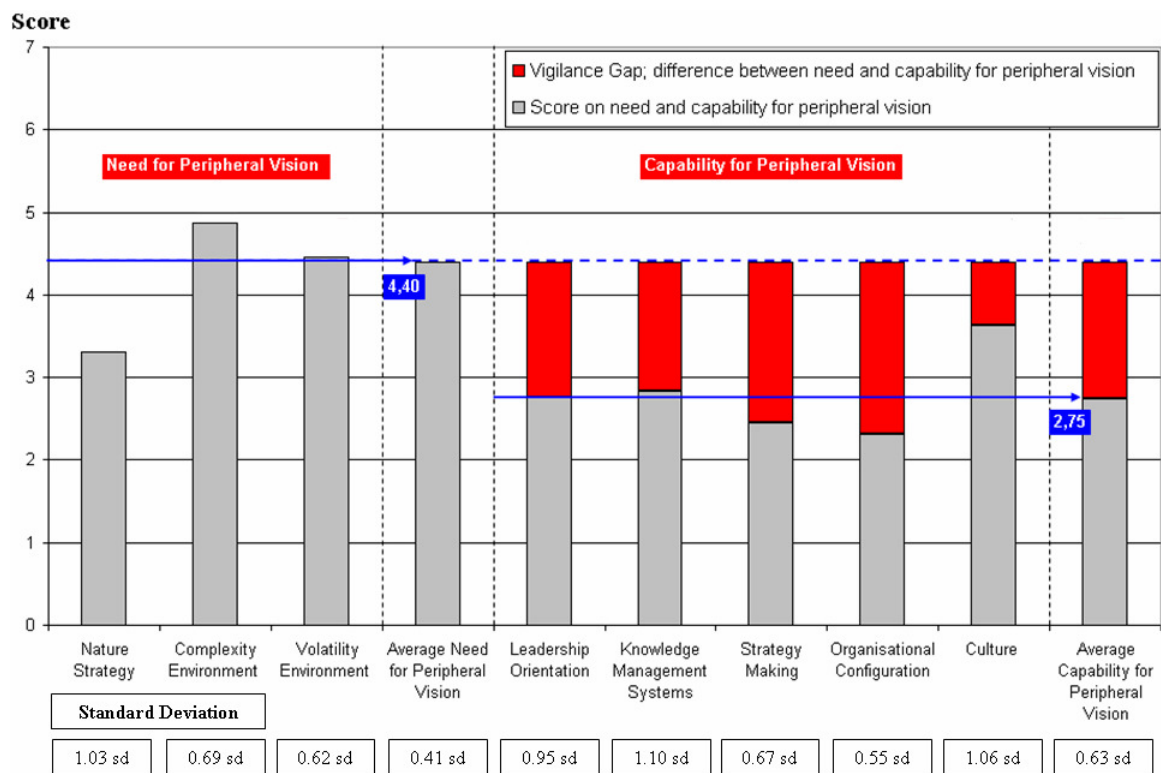
Figure 6.1 also shows the standard deviation of each category at the bottom of the graph. In probability and statistics, the standard deviation of a population of values is a measure of the spread of its values. It is also used to check the accuracy of the data,

although it is not a strictly definitive way to do so. In general, the closer to the mean the data is, the more accurate is the mean and visa-versa. In this case, the standard deviation never exceeds 1.1, which is acceptable for the hypothesised normal distribution. The standard Deviation is calculated trough the following formula:

$$S = \sqrt{\frac{1}{N-1} \sum_{i=1}^{N} (x_i - \bar{x})^2}, N = 20$$

Furthermore, Figure 6.1 also shows how the sub areas of need and capability result to the average values of need and capability for peripheral vision, through the blue arrows. As Vodafone fails to reach the needed level of peripheral vision on all capability sub categories the average capability for peripheral vision comes short to the average need for peripheral vision. Detailed results of the questionnaire can be found in Appendix 7.

6.3   Conclusions

So how good does the peripheral vision of a firm actually has to be? Or in other words, how bad is it with current peripheral vision capabilities? Day and Schoemaker (2005) have concluded from their research, based on the strategic eye exam, that 81% of senior managers perceived their need for peripheral vision to be greater than their current capacity. Almost two third of the respondents had been caught by up to 3 high impact surprises they did not see coming. A good example for Vodafone of a high impact surprise is Voice over IP, this new internet technology destroyed the business model of fixed operators almost over night and continues to plague mobile operators (Deloitte 2007). Furthermore an astonishing 97% of the respondents claimed there was no early warning system which could have helped with damage control or even capitalising on the event.

To create a clear overview of the results of Vodafone, the averages and the range of the results were combined and are shown in Figure 6.2. Figure 6.2 demonstrates the current need, capability and gap between the two in Vodafone. The results are furthermore plotted using the four quadrants described in paragraph 6.1. The results clearly demonstrate that Vodafone is not monitoring the market as well as it should. This notion is amplified by the fact that within the respondents overall range of results only relatively minor deviations from the vulnerable quadrant exist. Therefore Vodafone is currently positioned in the vulnerable quadrant and is faced with the challenge to overcome the vigilance gap. If the gap between the need and capability is expressed as a percentage of the need, the gap results in a value of 37.5%.

Figure 6.2: The Peripheral Vision scoring tool
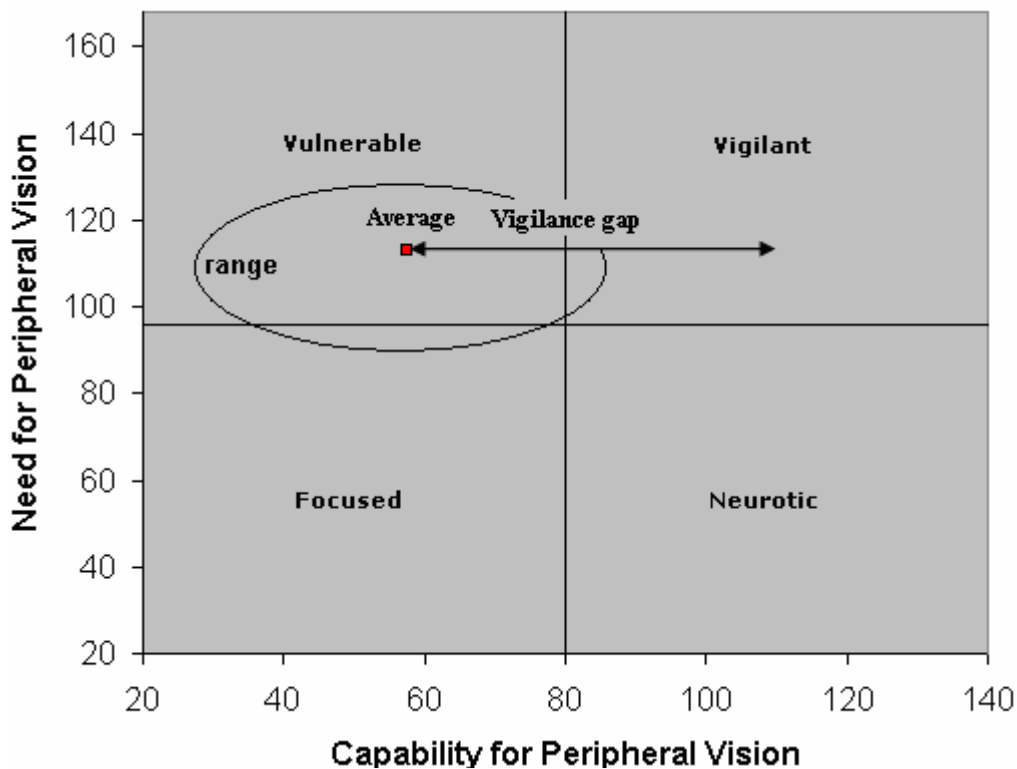
Source: *(Day, Schoemaker 2005)*

As all capabilities are linked together, it can be concluded that the overall peripheral vision capabilities have to be improved. This can be accomplished by constructing and implementing a market orientation model which contains both the drive to fulfil (latent) market needs as defined in market orientation literature and the broad strategic scope as defined by peripheral vision.

Chapter 7   From theory to practice

The results of the previous two chapters demonstrate that both market orientation and peripheral vision need improvement in order to identify and capitalise on market opportunities outside Vodafone's focus area. To do so, both market orientation and peripheral vision will be explored further through a number of open interviews to generate a clear and complete picture of the current situation. Finally, the theoretical market opportunity model, shown in Figure 4.8, will be translated to a structured practical process and tool, addressing the key areas needing improvement, which fits within the current organisational structure and culture of Vodafone.

7.1   Research setting

This chapter will further research current market orientation and peripheral vision at Vodafone. Both the antecedents and consequences of market orientation, as defined and modelled by Jaworski and Kohli (1993), shown in Figure 3.4, and the five components leading to peripheral vision as defined by Day and Schoemaker (2005) will be investigated.

Both topics are investigated through a series of open interviews with the same senior mangers used for the MARKOR questionnaire (n=5), in order to add to the results of the questionnaires discussed in the previous chapters. Throughout the questionnaire analysed in Chapter 5, Senior Management scores quite average on all questions. This implies that senior management is representative, which in turn, strengthens the results of the interviews discussed in this chapter. The goal of this exercise is to fill the antecedents and consequences model, shown in Figure 3.4, of Jaworski and Kohli (1993) for the specific

situation of Vodafone, and to perform a similar analysis on peripheral vision. Besides this model, Mckinzey's 7S (Peters, Waterman 1982), Porter's (1985) Five Forces, and the PESTEL analysis were used to get a complete picture, these models were completed through back ground research (mostly desk research) as well as the interviews in collaboration with two Vodafone strategy managers. The collaboration of the two strategy mangers was imperative since no matter how much research has been performed these models always remain open for discussion and perspectives.

The results of the interviews are only complementary to the previous investigations since the number of interviewed managers does not justify radically different outcomes compared to the previous two investigations. Although method and model do not provide hard data to support all insights, the insights regarding antecedents of market orientation and peripheral vision are very valuable to understand and possibly improve the current situation at Vodafone.

7.2   Market orientation model, antecedents and consequences

In order to develop a market orientation Kohli and Jaworski (1990) maintain that it is necessary to build a culture that encourages the organisation-wide generation, dissemination of market intelligence and the responsiveness to it. From Chapter 3 it can be concluded that there is a general need for Senior Management's full understanding and support, interdepartmental co-operation and structures and systems to be compatible with developing a market orientation and facilitating responsiveness. The results of the interviews are summarised and described one by one according to the structure of the model of Jaworski and Kohli (1993). Each area of the model is described in a separate

sub-paragraph in order to keep the link to the model, which is shown in Sub-Paragraph 7.2.9, explicit.

7.2.1 Top Management

The Senior Management of Vodafone has a strong focus on the customer, personal business objectives for all employees, including Senior Management, are based on Customer Delight. However, as can be concluded from the 7S analysis in Appendix 8, Senior Management tends to be risk aversive which has a negative effect on responding quickly to changes in customers needs.

7.2.2 Interdepartmental dynamics

The traditional functional organisation structure in combination with a rather bureaucratic culture is not aligned with the new business strategy and has led to silo-thinking[2] according to interviewed managers. As a consequence not all customer information is shared. Having acknowledged the need to change the structure and culture of the organisation following the new strategy a re-organisation will take place within the next year. A new structure with focus on the customer is likely to have a positive effect on Intelligence Dissemination and Responsiveness, in the end having a positive effect on market orientation.

7.2.3 Organisational structure and systems

As investigated through the 7S model of McKinsey (Peters, Waterman 1982) (see Appendix 8) in general the Systems in the organisation are control focused and causing

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[2] This is a metaphor drawn from the large grain silos that one sees throughout the US Midwest. It is a term of derision that suggests that each department on an organisation chart is a silo and that it stands alone, not interacting with any of the other departmental silos. (Kotler, 2000)

management to stay away from risk taking. Advanced systems have been built to support the finance function and to cut costs at HR. Market information is being shared via an intranet application called "Team Room", but access is limited and not user friendly.

Measurement and reward systems are based on both short term profits (EBITDA) and long term Customer Delight potentially having a positive effect on market orientation. However, as both elements are measured on top level and not on individual level the personal impact is minimal.

Structures could be divided into formalisation, centralisation and departmentalisation. Within Vodafone a lot of business activities have been formalised and are centralised leading to bureaucratic procedures and related behaviour and a lack of delegation and empowerment. End 2006 the bureaucracy became so bad that the CEO of Vodafone created an anti bureaucratic department with the sole task of removing unnecessary procedures. Within the functional organisation a lot of departments have been created leading to barriers for communication, and hence, to market Intelligence Dissemination.

7.2.4 Employees

According to the Vodafone employee satisfaction survey (2007), employees within Vodafone are proud to work for a multi-national company and support strongly the company values. Customer satisfaction is part of all employees' personal objectives leading to an increased level of market orientation. However, offering technological products and services sometimes leads to employees being more focused on the product than on the customer (product orientation).

7.2.5 Vodafone Environment

As discussed in Chapter 2 external factors have an enormous impact on Vodafone, there are economical, technological, competitive, social and legal developments impacting the organisation. These developments are analysed further and then linked to the model of Jaworski and Kohli (1993), through the Five Forces and PESTEL analysis shown in Appendix 9 and 10.

7.2.5.1 Market turbulence

Customers express their opinion more easily than in the past, have higher expectations about service and faster access to information due to internet. For Vodafone being a premium brand it remains crucial to justify the premium through offering the customer extra value. So far Vodafone has not been very successful in delivering relevant differentiation and therefore is still too much dependent on the strong Vodafone brand (Jupiter Research 2007). As a consequence market turbulence highly affects the need for market orientation.

7.2.5.2 Competitive rival

Vodafone needs to *pull* customers to the stores, preferably its own retail outlets or online shop. So far it has not been very successful due to limited marketing communication (marcom) budgets (Telecompaper, 2007a) compared to competitors and retailers and due to limited differentiation. High competition leads to an increased need for market orientation (Wong, Ellis 2007).

7.2.5.3 Technological turbulence

Rapid changes in technology could be both an opportunity and a threat for Vodafone; lifecycles of mobile platforms are becoming shorter (Deloitte, 2007) and

substitute/alternative wireless access technologies are entering the market resulting in potentially increased investment/fixed costs, first mover disadvantages (followers can easily wait and choose the latest technology) and potentially strategic drift. Technological turbulence tends to lead to product orientation rather than market orientation *(Jaworski, Kohli 1993).*

7.2.6 Business Performance

Providers of mobile telephony, which are highly impacted by technology and competitive rivalry, could only increase their business performance through differentiating their service based on customer needs and therefore market orientation is crucial for improving business performance. As described earlier however the competitive rivalry currently leads to price erosion and not to added value for the customer. As a consequence the business performance suffers.

7.2.7 Customer Focus

As described earlier there is a high customer focus, mainly accomplished by making customer satisfaction a personal target for every employee. However, according to interviewed managers there is only Customer focus regarding external customers, internal customer focus (i.e. towards other departments) is hard to find. Furthermore, Vodafone is focussed on what the customer wants now which results in a short time horizon (Narver, Slater 1998). While Vodafone has been very successful in the young and growing mobile market by being product, technology and sales driven, it has never been forced to develop capabilities to anticipate (latent) needs, as it could barely fulfil the growing demand.

7.2.8 Competitor Awareness

As a consequence of the fact that Vodafone's management is risk aversive, the current strategy is rather defensive and reactive. To illustrate, Vodafone has become renowned in following price lowering by competitors such as KPN within a 24 hour timeslot. Monitoring the competitor, waiting and then reacting is therefore the common practice. This is not in line with the strategy to grow EBITDA share in a highly competitive market and look for opportunities outside its focus area and does not suit a company which is second in the market and has a vision to become number one.

7.2.9 Results antecedents and consequences of market orientation

Figure 7.1 shows the integrated results from all antecedents discussed in the previous paragraphs. As can be seen in Figure 7.1, only two sub-areas appear to have a positive effect on market orientation. Furthermore, only two areas weakly support market orientation and not less than four sub areas do not support market orientation at all.

Figure 7.1: Antecedents and consequences of market orientation, adapted for Vodafone
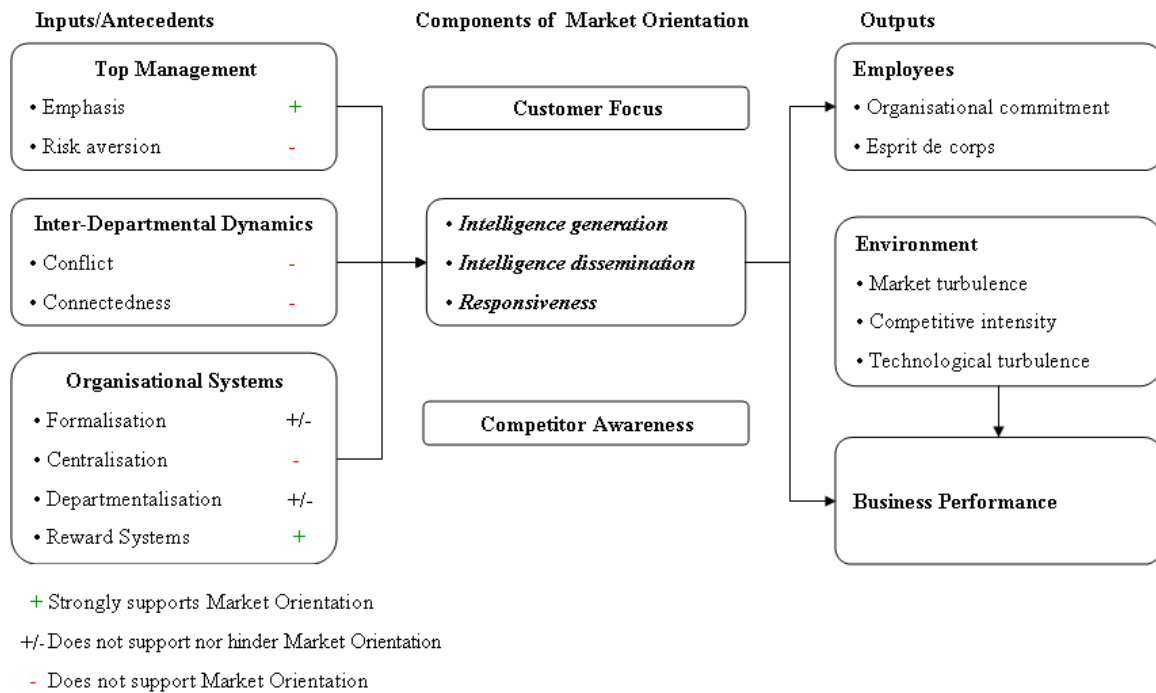
Source: Adapted from Jaworski, Kohli (1993)

When the total picture is analysed it becomes clear that Inter Departmental Dynamics score worst, with only negative scores. Overall, Top Management and Organisational systems have slightly more balanced results with both positive and negative results. The antecedents leading to market orientation can therefore be rated negative to neutral at best, not the best possible score, to say the least. This is also illustrated by the less than ideal output, in the form of suffering business performance and product oriented employees.

7.3 Peripheral Vision

The previous investigation of peripheral vision has shown that all five components (leadership, strategy making, knowledge sharing, organisational configuration, and

culture) leading to good peripheral vision need improvement. However, organisational culture scores better than the remaining four components. From Chapter 4 it can be concluded that, much like market orientation, there is a general need for Senior Management's full understanding and support, interdepartmental co-operation, an entrepreneurial and curious culture, and structures and systems to be compatible with developing good peripheral vision.

The results of the interviews are summarised and described one by one according to the components of peripheral vision (Day, Schoemaker 2005). Each component is described in a separate sub-paragraph in order to keep the link with the overall picture, which is shown in the last Sub-Paragraph, 7.3.6, explicit.

7.3.1 Culture

The culture of Vodafone is perceived to be relatively flexible and inquisitive which rewards exploring the edge of Vodafone's focus area. Especially the online service unit is perceived to have a strong flexible and inquisitive culture with people able to break conventional barriers. The culture in this service unit is reinforced by the fact that the unit is relatively new and has not (yet) experienced cost cutting cycles. It can therefore be concluded that the general culture does support peripheral vision although it must be noticed that the extent to which it supports peripheral vision, varies throughout the organisation.

7.3.2 Leadership orientation

The lack of vigilant leadership which would encourage a broad focus on the periphery can be explained by the focus on operational excellence and cost reduction which have

been very strong in recent years. Project exploring possibilities at the edge of Vodafone's focus area were often the first to be cancelled and progress was slow due to lack of focus and therefore funding. Furthermore, Vodafone has historically always been narrowly focused on current performance and competitors instead of on the both the periphery and core business. An organisation with leaders which have a limited scope will have less effective peripheral vision than an organisation with a broad scope. Managers and leaders must make a conscious effort to develop and encourage these important capabilities from within.

7.3.3   Strategy development

An organisation with strong peripheral vision tends to have a more flexible strategy planning process, with longer time horizons, incorporating diverse inputs and employing tools such as scenario planning, real-options thinking, and dynamic monitoring (Day, Schoemaker 2005). However, Vodafone is perceived by interviewed managers to be closer to budget-oriented planning. Managers of the functional business units are focussed on the current period, market, and business. Currently, managers are not encouraged to rethink assumptions captured in plans and goals. As described in Chapter 4 scenario planning can be a powerful tool in peripheral vision, Vodafone's top management however has not acknowledged the need for scenario planning (yet). Investments are considered to be rigid and static, opposed to inquisitive and option oriented, building a strong focussed organisation but not adding to good peripheral vision.

7.3.4 Knowledge management systems

As described earlier in Sub-Paragraph 7.2.3, and investigated through the 7S model (Peters, Waterman 1982) shown in Appendix 8, organisational systems to share signals are limited and user unfriendly. Market and Competitor analyses, if available somewhere, are available only on request and for the selected view who know where to look. Therefore, adequate knowledge management systems for detecting and sharing weak signals are currently not present. Furthermore, Vodafone is very much focussed on tracking pre-selected business data rather than on gathering and sharing weak signals from the periphery.

7.3.5 Organisational configuration

Much of Vodafone's innovation processes are conducted within Vodafone group, which has both a negative and positive impact on peripheral vision. The negative impact is caused by the fact that the periphery may differ from one country to another and the addition of an additional silo. On the other hand, Vodafone could benefit from other countries in more advanced markets or in different competitive or regulatory situations. Unfortunately for Vodafone, the Dutch market is one of the most advanced markets in the world with regard to mobile telephony. Vodafone's current organisation is focussed to look in (navel gazing) opposed to look out (stargazing) which encourages the exploration of the periphery (Day, Schoemaker 2005).

7.3.6 Results peripheral vision

The components that make up an organisation's capability for peripheral vision are highly interlinked. Figure 7.2 illustrates a peripheral vision model comparable to the

antecedents and consequences model of Jaworski and Kohli (1993). The components leading to good peripheral vision and the processes itself have been taken directly from the investigation and literature review on peripheral vision as described by Day and Schoemaker (2005). The results from peripheral vision however are adopted from the model of Jaworski and Kohli (1993) and the conclusions of Day and Schoemaker (2005) that peripheral vision has a positive impact on long term business performance.

Figure 7.2: Antecedents and consequences of peripheral vision, adapted for Vodafone
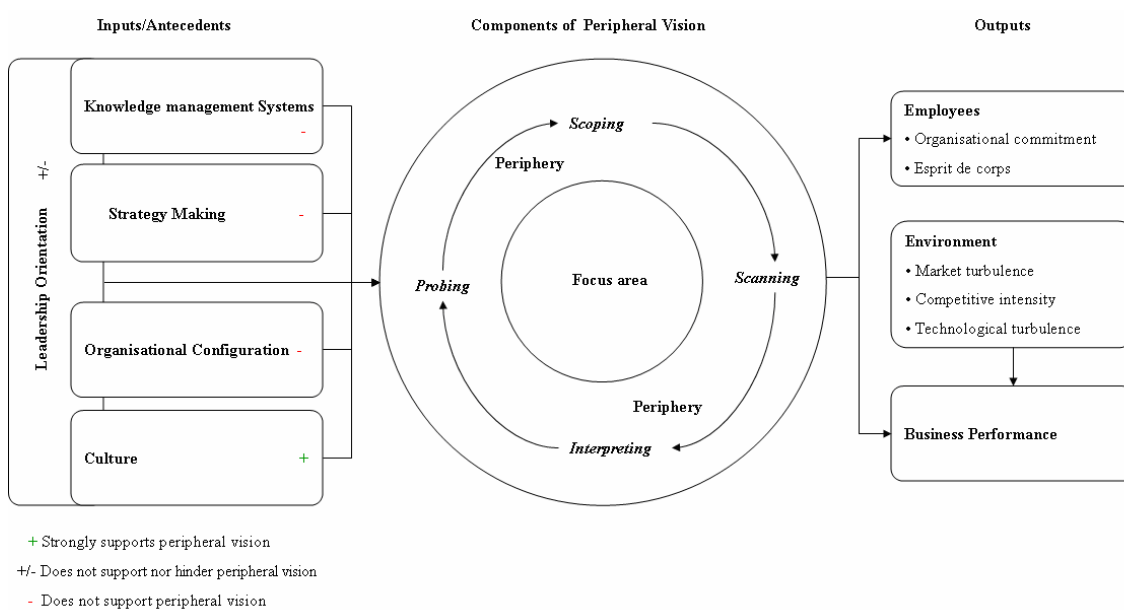
Source: adapted from Day and Shoemaker (2005), Kohli and Jaworski (1993)

All components leading to peripheral vision should reinforce one another, with leadership as the overarching theme. Strong leadership can do a lot to make the periphery real throughout the organisation. Vodafone's top management is changing towards the periphery but must make this change more explicit throughout the organisation so the other components can follow.

Whereas improving each of the weak points described in this chapter by itself can improve peripheral vision, an integrated approach will provide far more power. When

designing for good peripheral vision it is therefore wiser to adopt a systems view in which the total is more than the sum of its parts.

The danger for an organisation such as Vodafone seeking to mind a broad periphery is that this attention may become to diffuse. Especially in a market with such a dynamic environment, which limits the possible periphery, Vodafone must "mind" a broad periphery and act to understand and capitalise on relevant changes, particularly in converging markets. This requires divergent attention and actions across many areas. In contrast, when dealing with a well-defined part of the periphery, such as the constant treat of price regulation, leaders can encourage the organisation to "mine" in a specific area. Mining requires a more convergent focus on a specific part of the periphery and requires rapidly developing the capacity to respond to it (Day, Schoemaker 2005).

The next chapter will built on the attaint insights to come to a practical model for Vodafone.

Chapter 8   Development, Implementation and Validation of the market opportunity model

This chapter will describe the practical market opportunity model given all the insights of previous chapters and practical requirements of Vodafone. Furthermore, this chapter will describe how the market opportunity model was implemented, tested and improved at Vodafone.

8.1   Practical requirements

The first requirement set by Vodafone originates from the fact that this research project, although in collaboration with virtually all departments, was executed for and from the Strategy department. Standard business opportunities (e.g. launch of new mobile phones, price offerings etc) do not fall within the scope of this project, this in order to avoid being swamped with ideas and to not cross lines with the marketing departments.

A design must be able to break away from current boundaries resulting from short term thinking and limited scope in order to identify off-radar opportunities.

An important requirement from Vodafone was that the process would be as standardised and light as possible. The standardisation refers to a standard way to collect and evaluate opportunities. Furthermore, this gathering and evaluation tool should contain a high level business case, a check for cultural, organisational and strategic fit and a way to capture the overall feasibility of the opportunity. These requirements have been set in order avoid losing high potential ideas by keeping the preparation work needed to a minimum and to still be able to create a complete overview of the potential

opportunity in order to come to a valid Go/No Go decision between mediocre and high potential opportunities.

8.2 Market Opportunity Model

When translating the theoretical market opportunity model to the practical, it is important to address the previously identified weak areas of market orientation and peripheral vision. Market orientation scored particularly low on responsiveness and inter departmental dynamics. With regard to peripheral vision it is extremely important to focus on leadership orientation, strategy making and organisational configuration. From the 7S analysis it came forward that especially style, structure and systems are currently less than ideal. The design should encourage a more entrepreneurial style and empower employees to identify and act on peripheral opportunities.

Ultimately, people are the central link in being market oriented and having good peripheral vision. However, the strategy department does not have the capacity to deal with all (empowered) employees holding potential opportunities. Therefore employees with key functions within Vodafone which have extensive contact with employees throughout their departments were selected by board members to function as coordinators for the market opportunity process. The role of these coordinators is to collect off-radar market opportunities from whatever other source they have access to. Their second task is to function as a first funnel in the process for opportunities they do not deem worthy enough to bring into the process.

As described in Chapter 4, most organisations have maverick employees which form an untapped treasure of market intelligence, a valuable and relatively easy accessible source of peripheral opportunities. Although, like most organisations Vodafone does not

have a list of identified maverick employees which have valuable insights and understanding of the environment, the selected coordinators generally do know were to find people within their departments with potentially valuable ideas.

There are many existing tools to capture and evaluate different opportunities from both literature and practice. The stage gate model of Cooper et all. (2004) and the evaluation framework of Human et all. (2004) were taken as a reliable and empirically tested basis to make sure no important areas were overlooked. These models have been tweaked around in combination with project management and finance, which developed the high level business case to fit its specific purpose of high level evaluation and Vodafone. The high level business case calculates the NPV, total revenue, payback period as well as an indication of the variation of the NPV based on the uncertainty of the input.

In order to make the process fit into the quarterly cycles of the strategy days, in which new opportunities will be presented by the head of strategy to the board, it has been agreed that the process will initially go through quarterly cycles. A longer cycle time would probably starve ideas to dead and shorter cycle times would consume too much time of the coordinators. If however, after the initial meeting this cycle time is not appropriate it can be adjusted. A graphical representation of the participation functions and quarterly meeting is shown in Figure 8.1.

Figure 8.1: Participation functions and quarterly meeting
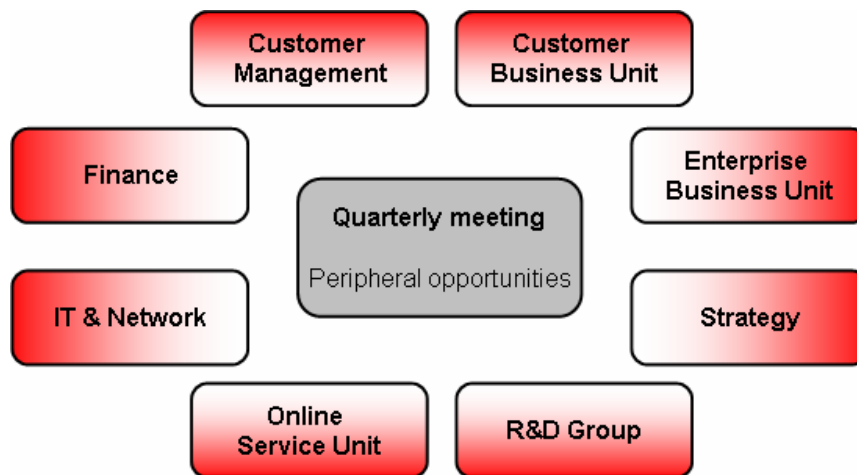
During this quarterly meeting with coordinators gathered opportunities will be evaluated, discussed and compared amongst each other on the basis of the standardised input format, programmed in Microsoft Excel. Opportunities which make it past this initial meeting will be presented to the board. For opportunities which then receive a Go decision, a multifunctional workgroup can be drawn up in order to develop the complete detailed business case and further develop the opportunity towards implementation. Figure 8.2 illustrates the several different phases of the process.

Figure 8.2: Practical stages in the market opportunity model
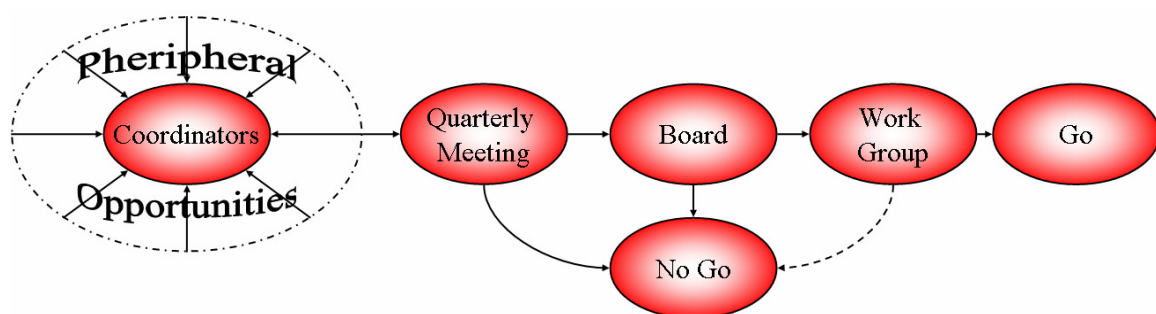
The next paragraphs will describe the implementation process, the validation and improvements made to the model on the basis of the first use and results of the process.

8.3 Implementation

As might be expected for the implementation of new cyclical processes which require relative much time and work of busy managers, support was initially lukewarm at best. Although all coordinators assigned by the board immediately recognised the potential and necessity, the fit with current processes and focus from the board were questioned. Supporting functions were generally more exited being offered the change to launch new ideas from a wide area, than were time pressured managers of line functions.

The strategy team however had a number of wildcards in order to convince sceptics and make the process a success. First of all the process was discussed by the Director of Legal, Regulation and Strategy (LRS), Head of Strategy and the CEO of Vodafone Netherlands who gave his ok, to try the process. Second, the Director of LRS, one of the ten board members, agreed to preside over the quarterly meetings to emphasise the importance the board has put on this process. And finally, this process now forms the only way for peripheral (or off-radar) opportunities to be presented to the board.

8.4 Validation

The process generated a total of *13 business opportunities* ranging from slightly off-radar segmentation opportunities to completely off-radar market opportunities. A problem which immediately became clear was the questionable quality and incompleteness of input of the high level business case. Coordinators found it extremely difficult to make estimates about operational costs and investments needed.

Furthermore, initially it had been agreed that only departmental coordinators would join the quarterly meeting in order to keep the meeting efficient and effective. Coordinators however were not always capable of properly presenting and "selling" the

opportunities, often thought up by mavericks, to the other coordinators, so certain mavericks were also included to present their opportunities.

During the initial meeting two opportunities received a no-go decision as the group decided these were not feasible in their current form. The remainder of the opportunities were presented to the board which eliminated a further two opportunities and decided how to proceed on the remainder. For a number of opportunities it was decided to immediately jump to implementation and for the rest multifunctional work groups were assembled with at least one board member as "sponsor". These work groups received assignments mostly focussed on retrieving more precise and complete data and using this data to interpret or and if so how Vodafone should fulfil these opportunities.

Estimates of opportunities vary from a couple million euro revenue per year to 150 million euro revenue per year. For example the opportunity which is most likely to make it to implementation has an estimated yearly revenue of 57 million euro, this opportunity was completely off-radar and lacking any form of attention, besides from two mavericks, before this process was initiated. However, these opportunities have now only been identified, to collect on these opportunities much work remains to be done.

8.5   Improvements

The combination of peripheral vision and market orientation proved to generate value and function as expected and therefore remains unchanged. However, the empirical experience did show that the developed input and evaluation scheme required more detailed input than coordinators were able to provide. Therefore, the high level business case was eliminated and replaced with simple market sizing estimates consisting of the estimate for the entire market and an estimate of how much Vodafone could grab of this.

All coordinators were able to provide this data and although not as informative as the high level business case the revenue estimates still provide a quantitative base on which opportunities can be evaluated and compared amongst each other to a certain extent.

Chapter 9   Conclusions

This chapter will conclude and make recommendations on market orientation, peripheral vision and the practical and theoretical combination of the two.

9.1   Market Orientation

As has been investigated and discussed extensively in Chapter 5 current market orientation scores 4.3 out of seven. This is not enough for an organisation which intends to be market oriented.

There are differences between the three different stages. It tends to start relatively positive regarding intelligence generation. Intelligence dissemination scores a lower average, which could be related to the accessibility of intelligence and lack of team work between departments. Responsiveness shows the lowest score (3.8), with limited dissent and Senior Management showing an average, and on some questions an even below average score, which is related to the risk aversiveness of the organisation. Therefore, responsiveness is currently the primary concern regarding market orientation. Any organisational changes however, must be taken in good balance with the other two areas which also need improvement.

9.2   Peripheral Vision

As has been investigated and discussed extensively in Chapter 6 Vodafone currently has a Vigilance Gap: a higher need for peripheral vision than capability. Vodafone scores 4.40 on the need for peripheral vision and 2.75 for capability. Vodafone therefore has the risk of a new competitor entering the market and seriously damaging Vodafone its current business model without seeing it coming.

As the survey was conducted in a transition period, the future need for peripheral vision is expected to be even higher, as the nature of strategy is changing from being focussed on mobile telephony to being broadly oriented in general telecommunications.

All five peripheral capability areas (leadership orientation, knowledge management systems, strategy making, organisational configuration, and culture) score well below the threshold set by the need for peripheral vision. Culture scored the highest with 3.6, however, still lower than the threshold of 4.4.

As all capabilities are all under the required level and are linked together, it can be concluded that the overall peripheral vision capabilities have to be improved. This can be partly accomplished through the market orientation model which contains both the drive to fulfil (latent) market needs as defined in market orientation literature and the broad strategic scope as defined by peripheral vision.

However, simultaneously developing all five peripheral vision capabilities is unrealistic. The area most important for an organisation to create good peripheral vision is absolute leadership commitment, which scored 2.8. Top management must emphasize the importance of peripheral vision and enable and support the development of the much needed improvements in strategy making and organisational configuration, which received the lowest scores, respectively 2.5 and 2.3.

9.3 Contribution to current literature

The goal of this thesis has been to combine the previously separate theories of market orientation and peripheral vision in order to come to an integrated view of how to identify new market opportunities from outside a company its focus area. As the theory of peripheral vision is still very new, this literature and empirical research builds on the

understanding of how valuable this theory has become in today's uncertain and rapidly changing environment.

Furthermore, this thesis has delivered some empirical evidence for the value of the combination of market orientation and peripheral vision.

9.4 Limitations and Recommendations for further research

The first limitation of the research follows from the way it has been set up, relatively low numbers but key respondents were chosen to retrieve a reliable outcome. Therefore, it may not be expected that the results are statistically representative for the entire Vodafone population.

Another limitation lies in the fact that the market opportunity model is entirely focussed on identifying opportunities. In order to create good peripheral vision the model should be extended to also include threats. The market opportunity model has proven to be a good first step in closing the vigilance gap and becoming more market oriented. However, a first step does not close the gap between required capabilities and current capabilities. Further improvements may lay in actively scanning the periphery, for example through scenario planning or venture capitalisation. After all Columbus did not discover America by staring at the periphery but by actively exploring it.

9.5 Managerial Implications

Based on the analysis in the previous chapters, the following recommendations are suggested to enable greater market orientation and better peripheral vision.

Use the momentum of the upcoming re-organising of Vodafone to start a culture change programme in which team work (information dissemination, internal and external

customer delight, removing silos), accountability and empowerment (responsiveness) play a central role. The Top Management plays a crucial role in being a role model for the rest of the organisation. Vodafone needs to change into a challenger which is willing to take risks to reach its objective to become the number one mobile operator in the Netherlands and expand into new, currently peripheral, areas.

Maintain the customer focus regarding Customer Delight objectives for the whole organisation. Expand the customer focus into personal objectives on individual employee level and bring the customer to life through 'meet the customer programmes' on all levels of the organisation (twice a year every employee should have participated in Vodafone retail outlets, customer services, etc.).

Bring systems in line with the new structure and culture focused on the customer. Remove unnecessary authorisation flows and control and build a Market Intelligence system which is accessible for all departments containing market, customer and competitor information summaries. Avoid information overload and send alerts for information updates.

All new products and services should be first tested among customers in the local market and only be introduced if acceptance and relevance in fulfilling customer needs is proven. The focus should be to continue investing in delivering value to the customer. Marketing Communication should be understandable and high-tech buzz words should therefore be avoided.

Leverage the strong company-wide re-active responsiveness on competitive actions to develop the same capabilities in pro-actively developing propositions to fulfil (latent) customer needs.

Make the change in strategy more explicit in the organisation. Currently, the focus is still too much on fixing the basics in mobile telecommunications rather than funding the future in telecommunications in general. Focus must shift from fixing the basics to funding the future, viewing one euro cost savings as a better result on EBITDA than one euro extra revenue is true only for the short term, in the long term the extra revenue streams may grow and cost reductions may lead to less revenue and therefore less EBITDA. Top Management must eliminate barriers inhibiting ideas from outside Vodafone its focal area to come to the attention of coordinators. As stated earlier the future need for peripheral vision and market orientation will increase significantly. The overall mindset will most likely start changing rapidly when the new more market oriented and wider focussed brand of Vodafone will be launched. A graphical representation of the new brand and its values can be found in Appendix 11.

Continue with the market orientation and peripheral vision process in order to identify new opportunities. The momentum has been created and now has to be exploited.

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Appendix 2   MARKOR questionnaire

Intelligence Generation	I disagree strongly				I agree strongly		
1. In this company, we meet with customers at least once a year to find out what products or services they will need in the future.	1	2	3	4	5	6	7
2. In this organisation, we do a lot of in-house market research.	1	2	3	4	5	6	7
3. We rapidly detect changes in our customers' product preference	1	2	3	4	5	6	7
4. We survey end users at least once a year to assess the quality of our products and services.	1	2	3	4	5	6	7
5. We are quick to detect fundamental shifts in our industry (e.g., competition, technology, regulation).	1	2	3	4	5	6	7
6. We periodically review the likely effect of the changes in our business environment (e.g., regulation) on customers	1	2	3	4	5	6	7
Intelligence Dissemination	I disagree strongly				I agree strongly		
7. We have interdepartmental meetings at least once a quarter to discuss market trends and developments.	1	2	3	4	5	6	7
8. Marketing personnel in our company spend time discussing customers' future needs with other *functional* departments.	1	2	3	4	5	6	7
9. When something important happens to a major customer or market, the whole company knows about it in a short period.	1	2	3	4	5	6	7
10. Data on customer satisfaction are disseminated at all levels in this business unit on a regular basis.	1	2	3	4	5	6	7
11. When one department finds out something important about competitors, it is quick to alert other departments.	1	2	3	4	5	6	7
Responsiveness	I disagree strongly				I agree strongly		
12. It only takes us a short time to decide how to respond to our competitors' price changes.	1	2	3	4	5	6	7
13. We hardly ever ignore changes in our customers' product or service needs.	1	2	3	4	5	6	7
14. We periodically review our product development efforts to ensure that they are in line with what customers want.	1	2	3	4	5	6	7
15. Several departments get together periodically to plan a response to changes taking place in our business environment.	1	2	3	4	5	6	7
16. If a major competitor were to launch an intensive campaign targeted at our customers, we would implement a response immediately.	1	2	3	4	5	6	7
17. The activities of the different departments in this company are well co-ordinated.	1	2	3	4	5	6	7
18. Customer complaints never fall on deaf ears in this company.	1	2	3	4	5	6	7
19. If we came up with a great marketing plan, we probably would be able to implement it in a timely fashion.	1	2	3	4	5	6	7
20. When we find that customers would like us to modify a service the departments involved make concerted efforts to do so.	1	2	3	4	5	6	7
Overall Market Orientation	I disagree strongly				I agree strongly		
21. Overall, our organisation is oriented to the market.	1	2	3	4	5	6	7

Source: Jaworski, Kohli and Kumar, Caruana and Pitt (1996)

How to use the MARKOR questionnaire

Specific steps for using MARKOR are:

Issue the MARKOR table to a group of ten managers within your organisation.

Collate the scores and then obtain the average rating for each of the 20 items on the scale.

MARKOR is divided into three parts:

1. The first part measures **intelligence generation** (how well the organisation generates intelligence about customer needs). This is calculated by summing the (average) ratings for items 1 through 6, and dividing by 6.

2. The second part measures **intelligence dissemination** (how well this intelligence is disseminated throughout the organisation). This is calculated by summing the (average) rating for items 7 through 11, and dividing by 5.

3. The third part measures **responsiveness** (how well the organisation responds to changes in the market and environment). This is calculated by summing the (average) ratings for items 12 through 20, and dividing by 9.

The three numbers you arrive at are the perceptions of the effectiveness of the organisation on the three dimensions of market orientation, namely **intelligence generation**, **intelligence dissemination** and **responsiveness**.

The lowest possible score which can be obtained on any dimension is 1, and the highest is 7 - it is unlikely that many organisations will be at these extremes. Obviously the nearer the score on the dimension to 7, the better the organisation is perceived to be performing on that dimension, and vice versa.

Source: Jaworski, Kohli and Kumar, Caruana and Pitt (1996)

## Appendix 3   MARKOR results per department and per question

*Figure A.1: Intelligence generation results per department/segment*
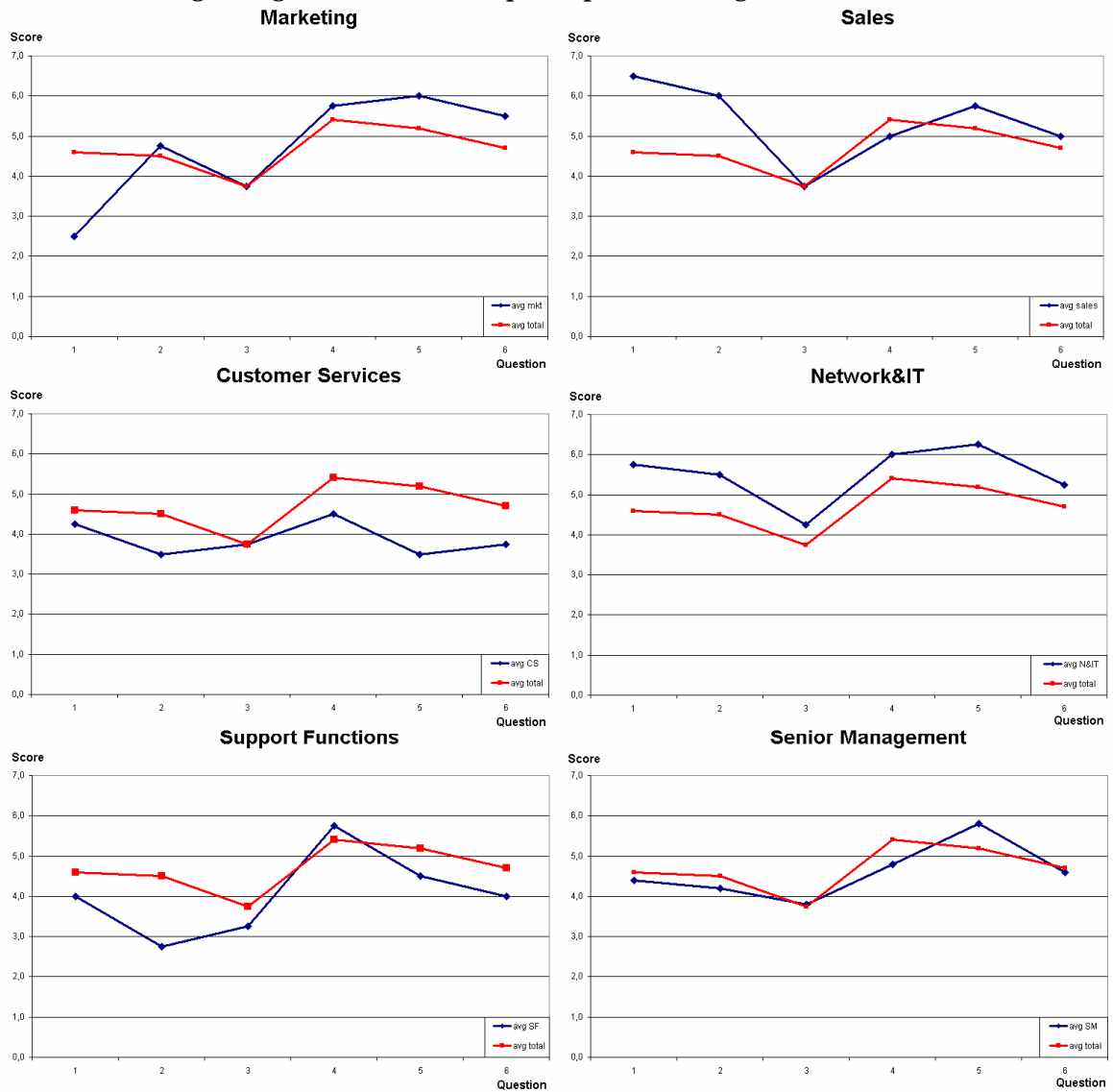
Figure A.2: Intelligence Dissemination results per department/segment
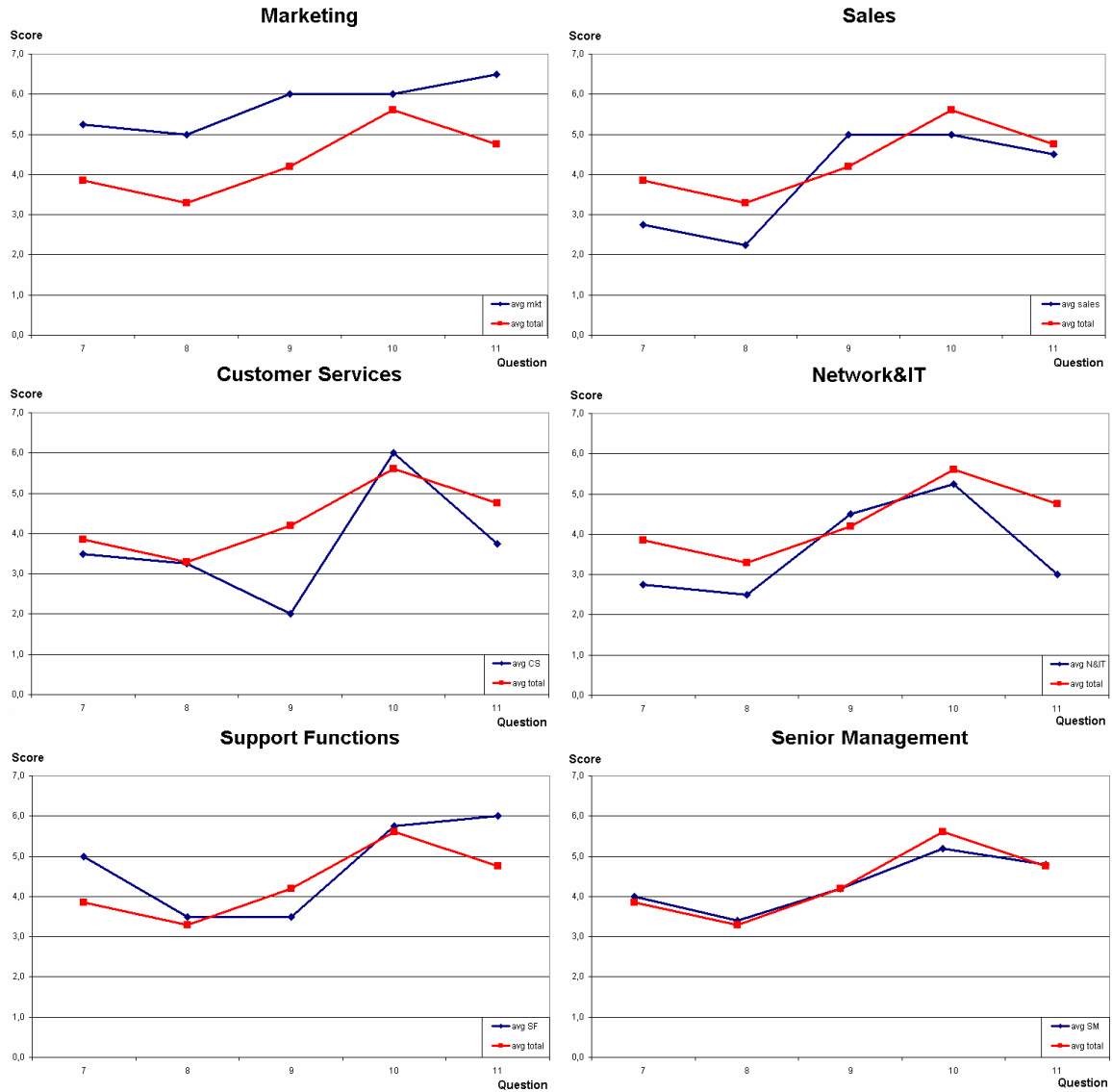
Figure A.3: Responsiveness results per department/segment
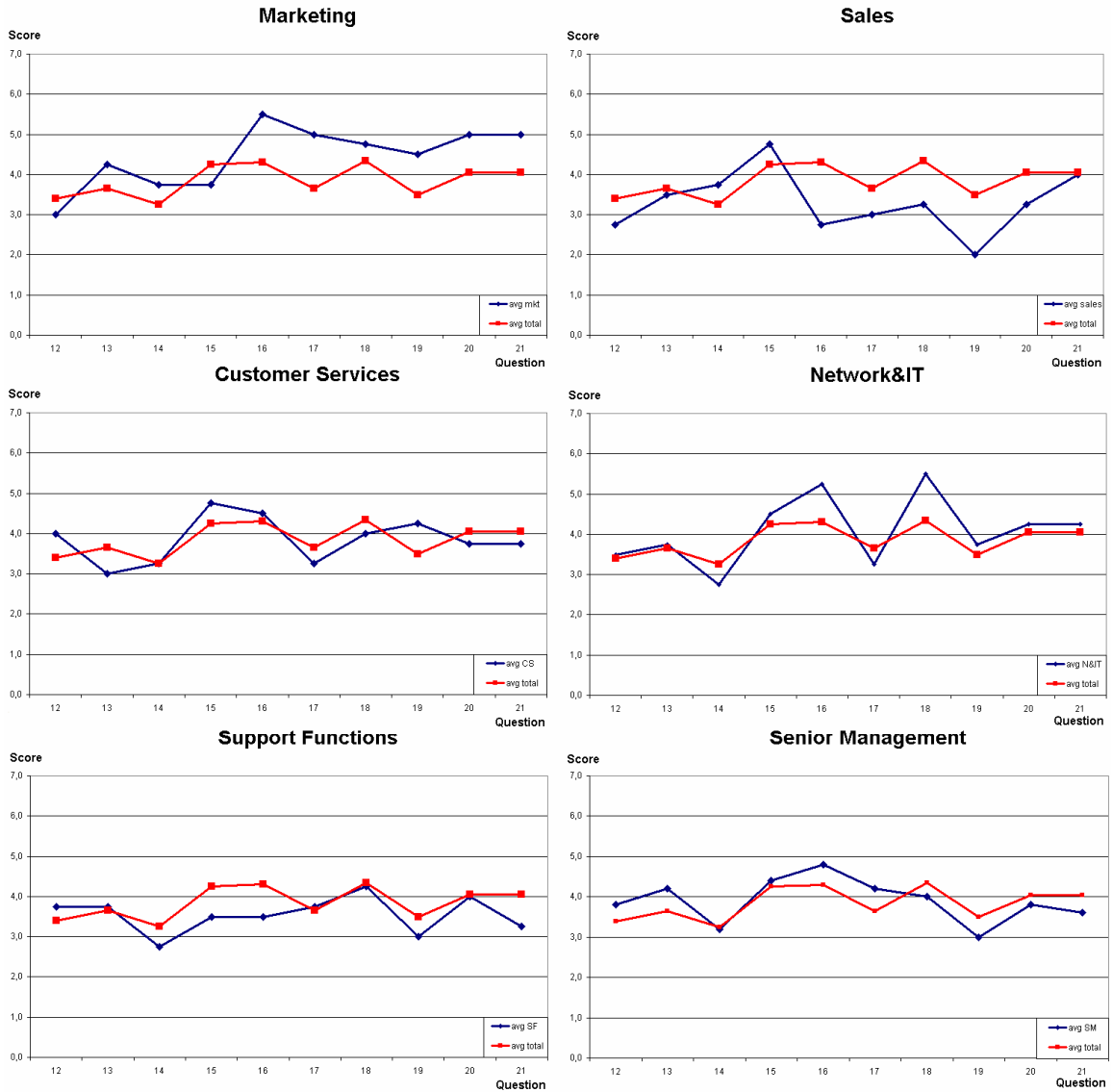
Appendix 4   MARKOR results per respondent

Figure A.4: MARKOR results per respondent

MARKOR questionnaire
scale 1-7

		Marketing					Sales					Customer Services				
	department	mkt	mkt	mkt	mkt	avg mkt	sales	sales	sales	sales	avg sales	CS	CS	CS	CS	avg CS
	initials	RB	FM	ML	HO		MK	SvdH	MvdB	LH		NE	SB	MF	AS	
intelligence generation	1	2	3	2	3	2,5	7	6	7	6	6,5	2	6	2	7	4,3
	2	5	4	5	5	4,8	6	6	6	6	6,0	2	5	2	5	3,5
	3	3	4	4	4	3,8	3	4	4	4	3,8	3	4	3	5	3,8
	4	3	7	6	7	5,8	3	7	3	7	5,0	4	5	4	5	4,5
	5	5	6	6	7	6,0	6	6	5	6	5,8	5	2	5	2	3,5
	6	4	6	6	6	5,5	3	6	4	7	5,0	4	4	4	3	3,8
		3,7	5,0	4,8	5,3	4,7	4,7	5,8	4,8	6,0	5,3	3,3	4,3	3,3	4,5	3,9
intelligence dissemination	7	3	6	6	6	5,3	2	3	3	3	2,8	6	1	6	1	3,5
	8	4	6	5	5	5,0	3	2	2	2	2,3	4	3	4	2	3,3
	9	4	7	6	7	6,0	4	6	5	5	5,0	3	1	3	1	2,0
	10	6	6	6	6	6,0	3	6	5	6	5,0	5	7	6	6	6,0
	11	6	7	6	7	6,5	6	4	4	4	4,5	4	3	4	4	3,8
		4,6	6,4	5,8	6,2	5,8	3,6	4,2	3,8	4,0	3,9	4,4	3,0	4,6	2,8	3,7
Responsiveness	12	3	3	3	3	3,0	5	2	2	2	2,8	5	3	5	3	4,0
	13	3	5	4	5	4,3	5	3	3	3	3,5	2	3	3	4	3,0
	14	3	4	4	4	3,8	4	3	5	3	3,8	3	4	3	3	3,3
	15	4	3	4	4	3,8	6	4	5	4	4,8	4	6	4	5	4,8
	16	4	6	6	6	5,5	5	2	2	2	2,8	5	4	5	4	4,5
	17	4	5	5	6	5,0	5	2	3	2	3,0	2	4	3	4	3,3
	18	4	5	5	5	4,8	4	3	4	2	3,3	1	7	1	7	4,0
	19	3	5	5	5	4,5	2	2	2	2	2,0	3	5	3	6	4,3
	20	5	5	5	5	5,0	4	3	3	3	3,3	2	6	2	5	3,8
	21	5	5	5	5	5,0	4	4	4	4	4,0	3	5	2	5	3,8
		3,8	4,6	4,6	4,8	4,5	4,4	2,8	3,3	2,7	3,3	3,0	4,7	3,1	4,6	3,9
	Average	4,0	5,3	5,1	5,4	5,0	4,2	4,3	4,0	4,2	4,2	3,6	4,0	3,7	4,0	3,8

		Network&IT					Support Functions					SM	
	department	netw	netw	IT	IT	avg N&IT	legal	finance	PR	strat	avg SF	avg SM	avg total
	initials	MH	JH	EN	RC		AH	MS	AvdE	JW		avg	avg
intelligence generation	1	5	6	6	6	5,8	4	4	7	1	4,0	4,4	4,6
	2	5	6	5	6	5,5	2	2	5	2	2,8	4,2	4,5
	3	3	5	4	5	4,3	4	2	5	2	3,3	3,8	3,8
	4	6	6	6	6	6,0	4	6	7	6	5,8	4,8	5,4
	5	7	4	7	7	6,3	4	6	6	2	4,5	5,8	5,2
	6	5	4	6	6	5,3	4	4	6	2	4,0	4,6	4,7
		5,2	5,2	5,7	6,0	5,5	3,7	4,0	6,0	2,5	4,0	4,6	4,7
intelligence dissemination	7	3	2	3	3	2,8	3	6	7	4	5,0	4,0	3,9
	8	3	2	2	3	2,5	2	4	5	3	3,5	3,4	3,3
	9	5	3	5	5	4,5	2	6	4	2	3,5	4,2	4,2
	10	6	3	5	7	5,3	4	6	7	6	5,8	5,2	5,6
	11	2	4	3	3	3,0	4	6	7	7	6,0	4,8	4,8
		3,8	2,8	3,6	4,2	3,6	3,0	5,6	6,0	4,4	4,8	4,3	4,3
Responsiveness	12	5	2	4	3	3,5	3	6	4	2	3,8	3,8	3,4
	13	2	5	3	5	3,8	3	6	3	3	3,8	4,2	3,7
	14	2	3	3	3	2,8	2	2	5	2	2,8	3,2	3,3
	15	5	4	4	5	4,5	3	3	6	2	3,5	4,4	4,3
	16	5	6	4	6	5,3	2	7	3	2	3,5	4,8	4,3
	17	2	4	3	4	3,3	3	5	5	2	3,8	4,2	3,7
	18	6	4	6	6	5,5	4	6	3	4	4,3	4,0	4,4
	19	3	4	4	4	3,8	1	6	4	1	3,0	3,0	3,5
	20	5	2	5	5	4,3	3	5	4	4	4,0	3,8	4,1
	21	4	5	3	5	4,3	2	4	5	2	3,3	3,6	4,1
		3,9	3,9	3,9	4,6	4,1	2,6	5,0	4,2	2,4	3,6	3,9	3,8
	Average	4,3	4,0	4,4	4,9	4,4	3,1	4,9	5,4	3,1	4,1	4,3	4,3

Appendix 5: Interdepartmental Dissent

Figure A.5 shows an overview of the high, low and average scores per question. Although the 3 areas and Market Orientation (M.O.) are mentioned on the x-axel, Figure A.5 cannot be read without the MARKOR questionnaire, shown in Appendix 2, as it refers to all questions individually by number. The Figure is used to identify questions with large dissent, which are specified and discussed in Chapter 5. The largest differences can be found in question one and nine.

Figure A.5: Interdepartmental Dissent
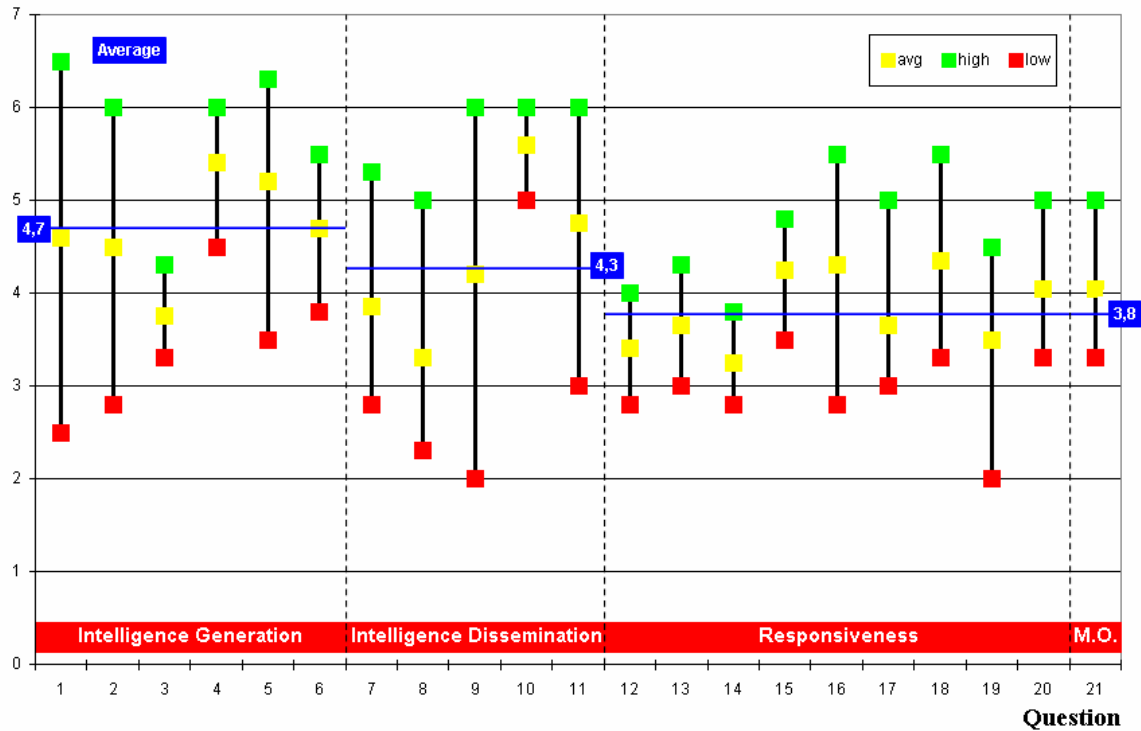
The difference in question one, regarding the frequency of customer meetings, has been created due to different interpretation by Sales and Marketing departments about what "meeting customers" means. Marketers refer to market research, while Sales employees refer to customer visits and talks.

Questions nine, regarding the dissemination of major customer or market developments in a timely fashion, shows high scores for Marketing and low scores for Customer Services. At Customer Services it is generally felt that they are the only department which takes care for customer complaints.

Overall the largest dissent is in Intelligence Dissemination with the highest differences between Marketing and the other departments.

Appendix 6　How Is Your Peripheral Vision? A Strategic Eye Exam

Whether your organization needs better peripheral vision depends on your current capability for it as well as your strategy, the nature of your business, and your industry environment. The exam on the following pages can help you assess your organization's need and capacity for peripheral vision:

- Ask each member of the senior management team to take the exam.

- Have them score each item from 1 to 7.

- Add up the totals for sections I, II, and III to arrive at a score for "need." Add up sections IV, V, VI, VII, and VIII to arrive at a score for "capability."

- Look for differences in scores among team members, and discuss why these might have occurred.

- Arrive at a consensus on the most accurate scores for "need" and "capability" for your organization.

- Using "The Peripheral Vision Scoring Tool," determine whether your organization is vulnerable, vigilant, focused, or neurotic.

- You can receive benchmarking data about how your scores compare with those of more than 150 other companies by taking the electronic version of this survey at www.thinkdsi.com.

Assess Your Need for Peripheral Vision

✎ I NATURE OF YOUR STRATEGY   (circle a number)

Ⓐ Focus of your strategy

Narrow (protected niche) 1 2 3 4 5 6 7 Broad (global)

Ⓑ Growth orientation

Modest 1 2 3 4 5 6 7 Aggressive

Ⓒ Number of businesses to integrate

Few 1 2 3 4 5 6 7 Many

Ⓓ Focus on reinvention

Minor 1 2 3 4 5 6 7 Major (50% of revenue must come from new products in three years)

Total (add numbers) ▭

✎ II COMPLEXITY OF YOUR ENVIRONMENT

Ⓐ Industry structure

Few, easily identifiable competitors 1 2 3 4 5 6 7 Many competitors from unexpected sources

Ⓑ Channel structure

Simple and direct 1 2 3 4 5 6 7 Long and complex

Ⓒ Market structure

Fixed boundaries and simple segmentation 1 2 3 4 5 6 7 Fuzzy boundaries and complex segmentation

Ⓓ Enabling technologies

Few and mature (simple systems) 1 2 3 4 5 6 7 Many converging (complex systems)

Ⓔ Regulations (federal, state, etc.)

Few or stable 1 2 3 4 5 6 7 Many or changing rapidly

Ⓕ Public visibility of industry

Largely ignored 1 2 3 4 5 6 7 Closely watched by media or special-interest groups

Ⓖ Dependence on government funding and political access

Low: operates largely independent of government 1 2 3 4 5 6 7 High: sensitive to politics and the funding climate

Ⓗ Dependence on global economy

Low: affected principally by domestic conditions 1 2 3 4 5 6 7 High: affected by global conditions

Total (add numbers) ▭

✎ III VOLATILITY OF YOUR ENVIRONMENT

Ⓐ Number of surprises by high-impact events in past three years

		1	2	3	4	5	6	7	
	None								Three or more

Ⓑ Accuracy of past forecasts

		1	2	3	4	5	6	7	
	High: small deviations from actual forecasts								Low: results differ greatly from forecasts

Ⓒ Market growth

		1	2	3	4	5	6	7	
	Slow and stable								Rapid and unstable

Ⓓ Growth opportunities

		1	2	3	4	5	6	7	
	Have decreased dramatically in past three years								Have increased dramatically in past three years

Ⓔ Speed and direction of technological change

		1	2	3	4	5	6	7	
	Very predictable								Highly unpredictable

Ⓕ Behavior of key competitors, suppliers, and partners

		1	2	3	4	5	6	7	
	Very predictable								Highly unpredictable

Ⓖ Posture of key rivals

		1	2	3	4	5	6	7	
	Live-and-let-live mentality								Hostile (aggressive)

Ⓗ Susceptibility to macroeconomic forces

		1	2	3	4	5	6	7	
	Low sensitivity to price changes, currencies, business cycles, tariffs, etc.								High sensitivity to price changes, currencies, business cycles, tariffs, etc.

Ⓘ Dependence on financial markets

		1	2	3	4	5	6	7	
	Low								High

Ⓙ Customer and channel power

		1	2	3	4	5	6	7	
	Low								High

Ⓚ Sensitivity to social changes (fashion and values)

		1	2	3	4	5	6	7	
	Low: mostly gradual change from the past								High: good chance of major disruptions and changes in business models

Ⓛ Potential for major disruptions in the next five years

		1	2	3	4	5	6	7	
	Low; few surprises expected mostly things we can handle								High: several significant business shocks are expected, without knowing which in particular

Total (add numbers) [ ]

Assess Your Capability for Peripheral Vision

✎ IV YOUR LEADERSHIP ORIENTATION

Ⓐ Importance of the periphery in the business leader's agenda

Low priority   1   2   3   4   5   6   7   High priority

Ⓑ Time horizon overall

Emphasis on short term   1   2   3   4   5   6   7   Emphasis on long term
(two years or less)   (more than five years)

Ⓒ Organization's attitude toward the periphery

Limited and myopic: 1   2   3   4   5   6   7   Active and curious: systematic
few people care   monitoring of periphery

Ⓓ Willingness to test and challenge basic assumptions

Mostly   1   2   3   4   5   6   7   Very willing to test critical premises
defensive   or widely held views

Total (add numbers)   ☐

✎ V YOUR KNOWLEDGE MANAGEMENT SYSTEMS (ESPECIALLY COMPETITIVE INTELLIGENCE AND CUSTOMER DATABASES)

Ⓐ Quality of data about events and trends at the periphery

Poor: limited coverage and   1   2   3   4   5   6   7   Excellent: broad coverage
often out-of-date   and timely

Ⓑ Access to data across organizational boundaries

Difficult: limited awareness of   1   2   3   4   5   6   7   Relatively easy: wide awareness
what is available   of what is available

Ⓒ Use of database for existing business

Limited   1   2   3   4   5   6   7   Extensive

Ⓓ Technologies for posing queries to databases

Old and difficult to use   1   2   3   4   5   6   7   State-of-the-art inquiry systems

Total (add numbers)   ☐

✎ VI YOUR STRATEGY MAKING

Ⓐ Experience with uncertainty-reducing strategies (e.g., real options)

Limited   1   2   3   4   5   6   7   Extensive

Ⓑ Use of scenario thinking to guide strategy process

Never   1   2   3   4   5   6   7   Frequent

Ⓒ Number of alliance partners

Few   1   2   3   4   5   6   7   Many

Ⓓ Flexibility of strategy process

Rigid, calendar driven   1   2   3   4   5   6   7   Flexible, issues oriented

Ⓔ Resources devoted to scanning the periphery

Negligible   1   2   3   4   5   6   7   Extensive

Ⓕ Integration of customer and competitor information into future technology platforms and new-product development plans

Poorly and sporadically integrated   1   2   3   4   5   6   7   Systematically and fully integrated

Total (add numbers) ☐

✎ VII YOUR ORGANIZATIONAL CONFIGURATION (STRUCTURE AND INCENTIVES)

Ⓐ Accountability for sensing and acting on weak signals

No one is responsible   1   2   3   4   5   6   7   Responsibility is clearly assigned to project team or dedicated group

Ⓑ Early warning systems and procedures

None   1   2   3   4   5   6   7   Extensive and effective

Ⓒ Incentives to encourage and reward wider vision

None   1   2   3   4   5   6   7   Recognition from senior management and direct rewards

Total (add numbers) ☐

✎ VIII YOUR CULTURE (VALUES, BELIEFS, AND BEHAVIORS)

Ⓐ Readiness to listen to reports from scouts on the periphery

Closed: listening discouraged   1   2   3   4   5   6   7   Open: listening encouraged

Ⓑ Willingness of customer-contact people to forward market information

Poor   1   2   3   4   5   6   7   Excellent

Ⓒ Sharing of information about the periphery across functions

Poor: information ignored or hoarded   1   2   3   4   5   6   7   Excellent: ongoing information-sharing at multiple levels

Total (add numbers) ☐

Calculate Your Totals Here

Need

Ⅰ [   ]

Ⅱ [   ]

Ⅲ [   ]

Total = [   ]

Capability

Ⅳ [   ]

Ⅴ [   ]

Ⅵ [   ]

Ⅶ [   ]

Ⅷ [   ]

Total = [   ]

The Peripheral Vision Scoring Tool
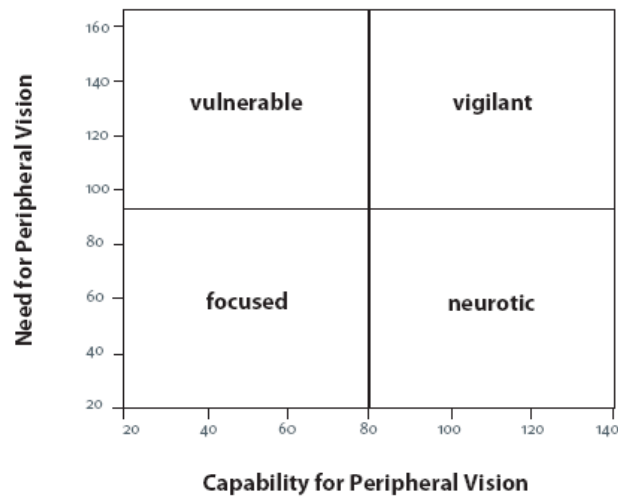
Need for Peripheral Vision (vertical axis: 20, 40, 60, 80, 100, 120, 140, 160)

Capability for Peripheral Vision (horizontal axis: 20, 40, 60, 80, 100, 120, 140)

Quadrants: vulnerable (upper left), vigilant (upper right), focused (lower left), neurotic (lower right)

Locate your total "need" score on the Scoring Tool's vertical axis; locate your total "capability" score on the horizontal axis. Plot a point in the quadrant where the need and capability scores intersect. For example, a "need" score of 130 and a "capability" score of 50 place a company at the center of the "vulnerable" quadrant. If your organization is vigilant or focused, you don't need to do anything different from what you're already doing, although you should stay alert for changes in the environment that may increase your need for peripheral vision. If your organization is neurotic, you should look for ways to narrow its focus. If it's vulnerable, you should actively cultivate better peripheral vision, beginning with the guiding questions outlined in this article.

Appendix 7   Detailed peripheral vision questionnaire results

Figure A.6: Peripheral vision results per participant

High / Low	CEO Guy Laurence	CFO Thomas Nowak	Director EBU Jeroen Hoencamp	Director CBU Graham millar	Director HR Paul Smits	Director SLR Anthony Hellegers	Head of PMO Angus Slater
Need							
Nature of Your Strategy	18	8	13	13	6	10	13
Complexity of your environment	43	34	40	40	38	37	40
Volatility of your environment	52	48	55	59	44	61	52
Capability							
Your leadership orientation	11	11	7	11	10	10	10
Your knowledge management systems	11	7	11	11	8	9	7
Your strategy making	15	14	16	19	12	9	12
Your organizational configuration	7	6	8	8	6	4	9
Your culture	11	10	10	9	8	6	11
Total Need	113	90	108	112	88	108	105
Total Capability	55	48	52	58	44	38	49

High / Low	Director CM Peter Doveren	Director OSU Harry Oldenhoven	Director IT & Network John Samarron	Head of Strategy Jan Wupperman	Strategy Manager Nadine Eyssen	Strategy Manager Klaas v/d Molen	Strategy Manager Melika Kasmi
Need							
Nature of Your Strategy	17	16	6	16	18	14	17
Complexity of your environment	28	41	43	39	42	38	35
Volatility of your environment	47	48	66	59	43	49	62
Capability							
Your leadership orientation	10	17	10	5	12	9	8
Your knowledge management systems	15	21	5	6	20	16	11
Your strategy making	19	24	9	8	15	18	16
Your organizational configuration	9	7	7	3	7	10	7
Your culture	14	15	4	11	11	11	12
Total Need	92	105	115	114	103	101	114
Total Capability	67	84	35	33	65	64	54

High / Low	Strategy Manager Willem Malherbe	R&D Hans Nelissen	Marketing insights EBU Ron Beek	Market insights CBU Danie Brommert	Marketing EBU Gabriel Pastoor	Marketing CBU Nico Eskens
Need						
Nature of Your Strategy	14	17	17	8	16	8
Complexity of your environment	49	42	34	40	28	49
Volatility of your environment	63	51	47	66	52	44
Capability						
Your leadership orientation	15	21	10	10	17	7
Your knowledge management systems	14	9	10	9	11	16
Your strategy making	13	20	13	16	13	13
Your organizational configuration	6	8	6	8	6	7
Your culture	12	18	15	10	8	12
Total Need	126	110	98	114	96	101
Total Capability	60	76	54	53	55	55

Figure A.7: Average peripheral vision results

Need	Number of questions	Average total	Average per question	Vilance Gap	Vigilance gap (%)
Nature of Your Strategy	4	13	3,31		
Complexity of your environment	8	39	4,88		
Volatility of your environment	12	53	4,45		
Capability					
Your leadership orientation	4	11	2,76	-1,64	-37,2%
Your knowledge management systems	4	11	2,84	-1,56	-35,5%
Your strategy making	6	15	2,45	-1,95	-44,3%
Your organizational configuration	3	7	2,32	-2,09	-47,4%
Your culture	3	11	3,63	-0,77	-17,5%
Total Need	24	106	4,40		
Total Capability	20	55	2,75	-1,65	-37,6%

Appendix 8   McKinsey 7S Model

Figure A.8: McKinsey 7S Model applied to Vodafone

		Current	Ideal	Recommendation
Hard	**Strategy**	Clearly communicated	Clear to all employees	Keep
	Structure	Matrix structure does not enable quick decision making	Flat empowered organization structure	Change organization to market need: flexible and quick
	Systems	Control focused	Enabler, helping the organisation	Empowerment, trust instead of control
Soft	**Shared values**	Clearly communicated and committed	Clearly communicated and committed	Keep
	Style	Not decisive, risk avoiding	Entrepreneurial, rewarding managed risk	Change style, empower employees
	Staff	Highly motivated and committed	Highly motivated and committed	Keep
	Skills	Highly skilled and trained, but lack of executing skills	Balance between knowledge and execution	Attract strong execution skills

Source: Adapted from Peters, Waterman (1982)

Appendix 9   Five Forces analysis of Vodafone

Figure A.9 Five Forces analysis of Vodafone

5 Forces	Driver	Influence on the mobile Industry	Impact on Vodafone	Priority	Opportunity (O) or Threat (T)
Competitive Rivalry	On Voice and SMS competition is very strong • There are 3 MNOs and 46 MVNOs • There is hardly any differentiation, except price • The market is saturated, revenue is under pressure • High fixed costs to entry and thus high exit barriers for existing MNOs, however low for MVNOs	High	High	High	T
	On data content competition is limited; Vodafone NL still benefits from its first mover advantage • No competition with content suppliers as Vodafone NL does not produce content but enables to make content mobile • Little competition from other MNO's as Vodafone NL is able to benefit from global scale and scope (best prices for handsets, latest technologies)	High	Medium	High	O
Threat of Entry	For MNO's barriers to entry are high due to high fixed costs (network) and scarce license	High	Low	Low	O
	For MVNO's barriers to entry are low as long as MNO's allow them to their network	High	High	High	T
Threat of Substitution	Alternative wireless access models (non-mobile): Wifi and Wimax	High	High	High	T
	Low cost fixed voice (VoIP: voice via cable)	Medium	Medium	Medium	T
	New still to be developed technologies incurring lower costs to entry	High	Medium	Medium	T
Power of Suppliers	There are only few suppliers for networks and billing systems which makes them powerful as MNOs become dependent on them due to high investments and costs to switch	High	Medium	Medium	T
	There are a lot of handset suppliers and the number is increasing due to Asian companies entering the market. Op top Vodafone Plc. negotiates on a global level using its purchasing power	High	Low	Low	O
Power of Buyers	Retailers (three main players) are concentrated and have alternative sources of supply (3 MNOs to choose from)	Medium	High	High	T
	Dealers are fragmented	Medium	Medium	Medium	O

Appendix 10 PESTEL analysis of Vodafone

Figure A.10 PESTEL analysis Vodafone

PESTEL	Driver	Influence on the Mobile Industry	Impact on Vodafone	Priority	Opportunity (O) or Threat (T)
Political	Center-left government pushing less liberalisation and more regulation than the old cabinet, with focus on stimulation of environment, economic growth, education, security and health.	Low	Low	Low	O
Economical	Slow economic growth resulting in weak growth in disposable income and household consumption; 'smart' shopping mentality and flat discretionary spend creates opportunity for no-frills companies, especially MVNO's as barriers to entry are low	High	High	High	T
Economical	The market is highly competitive with five networks (KPN (local incumbent), Vodafone, T-Mobile, Orange and Telfort and 14 MVNOs, having a negative effect on prices, cost of acquisition and churn	High	High	High	T
Economical	Market saturation and fierce competition leading to rapid price erosion, with as a result value destruction because basic mobile services such as voice and text become a commodity (no differentiation except price)	High	High	High	T
Economical	If current business model of handset subsidies remains and voice tariffs come under pressure and operators do not find new revenue sources in data, 1 or 2 smaller operators may decide to withdraw from the market	High	High	High	O
Economical	Gradual fixed-to-mobile substitution to continue in specific segments (e.g. students), driven by convenience and limited by perceived high mobility premium and entrenched fixed calling habits	Medium	Medium	Medium	O
Economical	As a consequence handset suppliers benefit from strong competition among network operators	Medium	Low	Low	T
Social	Gradual fixed-to-mobile substitution to continue in specific segments (e.g. students, driven by convenience and limited by price competition between fixed and cable (VoIP) operators, perceived high mobility premium and entrenched fixed calling habits	Medium	Low	Low	O
Social	Ageing population: mobile telecom spend in older segments shows room to increase; growing demand for simple offers and easy-of-use	Medium	Medium	Medium	O
Social	Increased mobility of people: need for more telecommunication (vs. face-to-face) and mobile as a new delivery channel for data/content services, like convenience, information and entertainment. Preference for full mobility solutions over fixed and portable, but customers only willing to pay a certain mobility premium	High	High	High	O
Social	Using mobile telephones is widely accepted and hardly prohibited, as a consequence becoming less aspirational and developing more towards a commodity	High	High	High	T
Social	Lifecycles of mobile phones are becoming shorter due to rapid technological innovation and image sensitiveness leading to high acquisition costs in current subsidised market and potentially increasing churn	High	High	High	T/O
Social	Consumers become more and more outspoken, have higher expectations about service and complain faster than in the past	Medium	Medium	Medium	T
Technological	Lifecycles of mobile platforms becoming shorter and shorter and substitute/alternative wireless access technologies (WiFi, WiMax) entering the market resulting in increased investment/fixed costs, first mover disadvantages (followers can easily wait and chose the latest technology) and potentially strategic drift	High	High	High	T
Technological	Gradual fixed-to-mobile call and more recently line substitution and VoIP	Medium	Low	Low	T/O
Technological	Growth in the wireline sector will mainly come from ADSL penetration and managed services. Dial-up Internet usage is rapidly replaced by unlimited broadband Internet.	Low	Low	Low	O
Technological	Growth in cable sector will mainly come from broadband Internet, through digital TV and voice which offer high upside potential.	Low	Low	Low	T
Technological	Future growth in mobile sector is from new data services, at a pace set by developments in devices, services, prices and 3G. Substitution of infotainment and IT spend will be significant, but mobilisation will also create net new revenues	High	High	High	O
Environmental	Both customers and local authorities become more and more reluctant about permitting antennas because of fear for radiation and negative visual impact	Medium	Medium	Medium	T
Legal	Tendency to over-regulate mobile telecom industry because of health, environment and prices because of perceived lack of competition resulting in pressure on EBITDA (lower revenues and higher costs)	High	High	High	T

Appendix 11 New Dutch Vodafone brand values